Full wwPDB NMR Structure Validation Report (i)

Jun 4, 2023 – 04:29 PM EDT

PDB ID	:	2LCT
BMRB ID	:	17632
Title	:	Solution structure of the Vav1 SH2 domain complexed with a Syk-derived doubly phosphorylated peptide
Authors	:	Chen, C.; Gorenstein, N.; Post, C.
Deposited on	:	2011-05-09

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

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

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

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

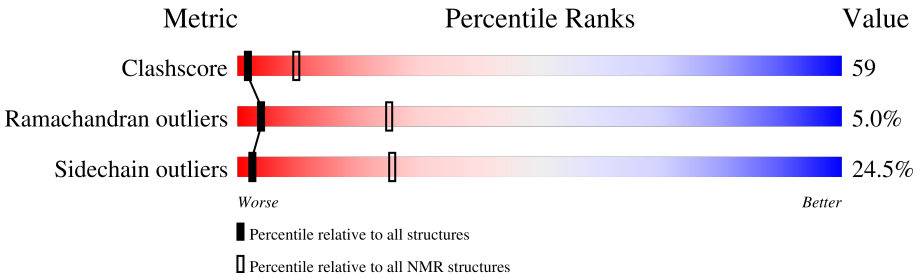
MolProbity	:	4.02b-467
Mogul	:	1.8.5 (274361), CSD as541be (2020)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
wwPDB-RCI	:	v_1n_11_5_13_A (Berjanski et al., 2005)
PANAV	:	Wang et al. (2010)
wwPDB-ShiftChecker	:	v1.2
BMRB Restraints Analysis	:	v1.2
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.33

1 Overall quality at a glance (i)

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

The overall completeness of chemical shifts assignment is 82%.

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	158937	12864
Ramachandran outliers	154571	11451
Sidechain outliers	154315	11428

The table below summarises the geometric issues observed across the polymeric chains and their fit to the experimental data. The red, orange, yellow and green segments indicate the fraction of residues that contain outliers for >=3, 2, 1 and 0 types of geometric quality criteria. A cyan segment indicates the fraction of residues that are not part of the well-defined cores, and a grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions <=5%

Mol	Chain	Length	Quality of chain
1	A	107	13% 57% 16% • 13%
2	B	13	100%

2 Ensemble composition and analysis

This entry contains 20 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:666-A:696, A:705-A:766 (93)	0.28	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 5 clusters and 1 single-model cluster was found.

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

3 Entry composition (i)

There are 2 unique types of molecules in this entry. The entry contains 1940 atoms, of which 957 are hydrogens and 0 are deuteriums.

- Molecule 1 is a protein called Proto-oncogene vav.

Mol	Chain	Residues	Atoms						Trace
1	A	107	Total	C	H	N	O	S	0
			1741	555	873	149	160	4	

There are 3 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	661	GLY	-	expression tag	UNP P15498
A	662	HIS	-	expression tag	UNP P15498
A	663	MET	-	expression tag	UNP P15498

- Molecule 2 is a protein called Tyrosine-protein kinase SYK.

Mol	Chain	Residues	Atoms						Trace
2	B	13	Total	C	H	N	O	P	0
			199	66	84	13	34	2	

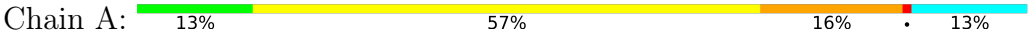
4 Residue-property plots

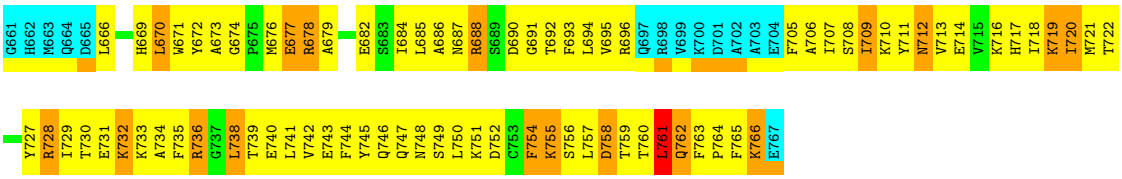
4.1 Average score per residue in the NMR ensemble

These plots are provided for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic is the same as shown in the summary in section 1 of this report. The second graphic shows the sequence where residues are colour-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. Stretches of 2 or more consecutive residues without any outliers are shown as green connectors. Residues which are classified as ill-defined in the NMR ensemble, are shown in cyan with an underline colour-coded according to the previous scheme. Residues which were present in the experimental sample, but not modelled in the final structure are shown in grey.

• Molecule 1: Proto-oncogene vav

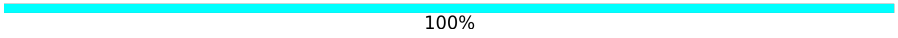
Chain A:

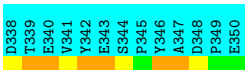




• Molecule 2: Tyrosine-protein kinase SYK

Chain B:





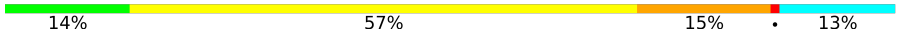
4.2 Scores per residue for each member of the ensemble

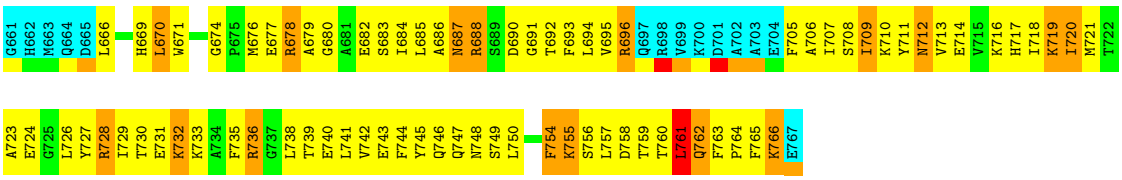
Colouring as in section 4.1 above.

4.2.1 Score per residue for model 1

• Molecule 1: Proto-oncogene vav

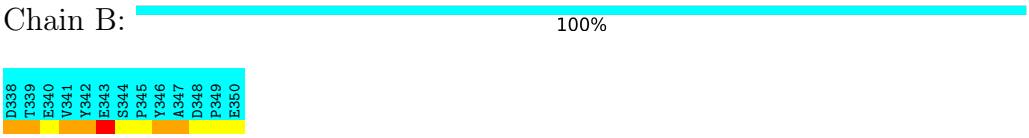
Chain A:





• Molecule 2: Tyrosine-protein kinase SYK

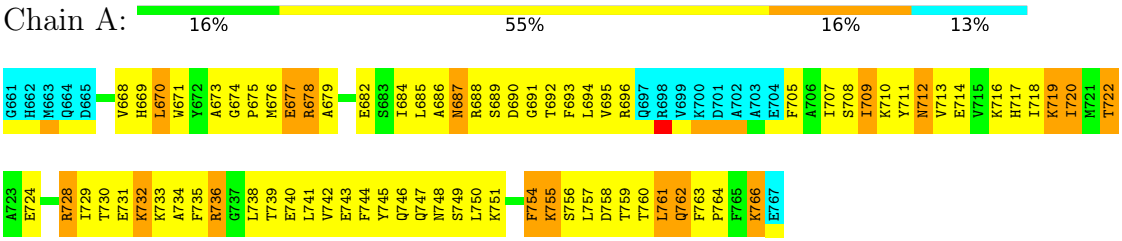
Chain B:



4.2.2 Score per residue for model 2 (medoid)

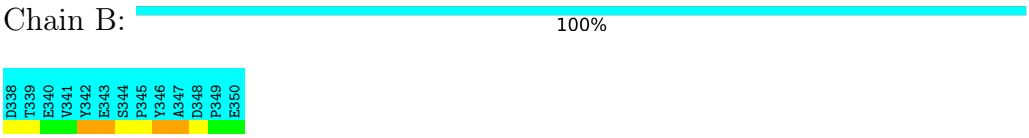
• Molecule 1: Proto-oncogene vav

Chain A:



• Molecule 2: Tyrosine-protein kinase SYK

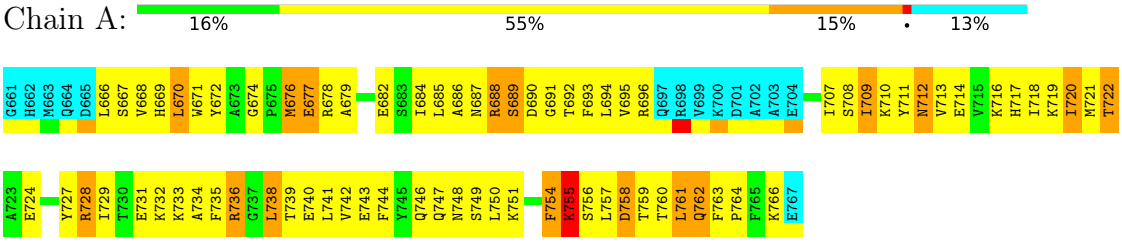
Chain B:



4.2.3 Score per residue for model 3

• Molecule 1: Proto-oncogene vav

Chain A:

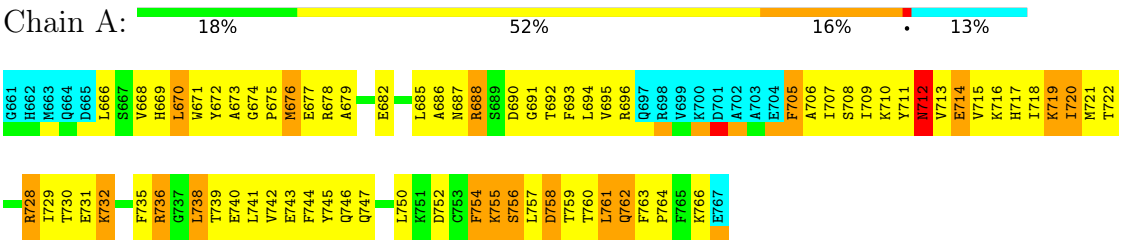


• Molecule 2: Tyrosine-protein kinase SYK

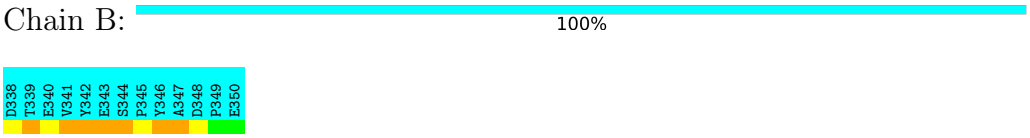
Chain B:

4.2.4 Score per residue for model 4

• Molecule 1: Proto-oncogene vav

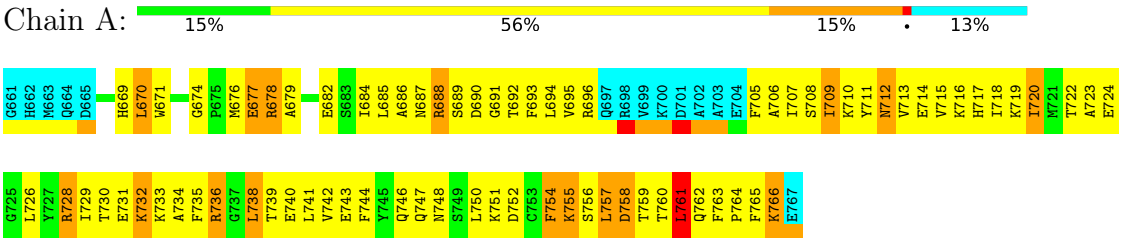


• Molecule 2: Tyrosine-protein kinase SYK

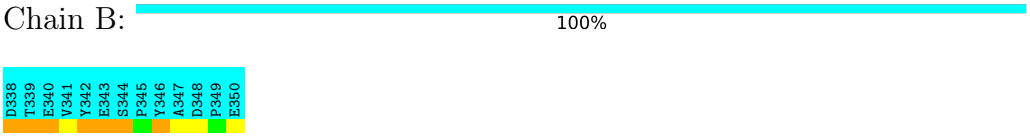


4.2.5 Score per residue for model 5

• Molecule 1: Proto-oncogene vav

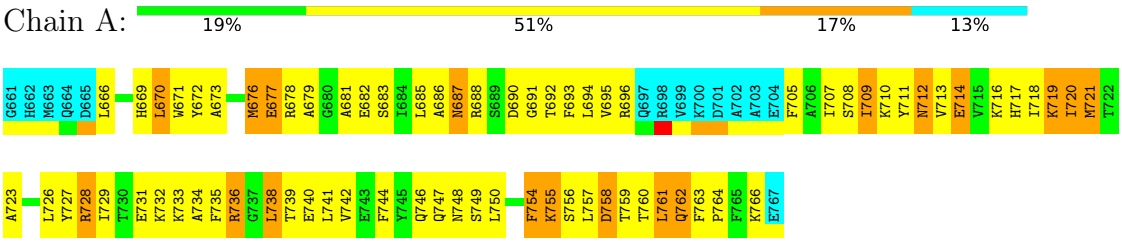


• Molecule 2: Tyrosine-protein kinase SYK



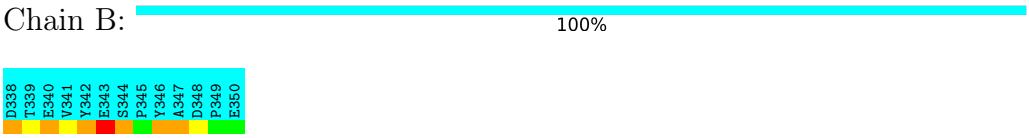
4.2.6 Score per residue for model 6

• Molecule 1: Proto-oncogene vav



• Molecule 2: Tyrosine-protein kinase SYK

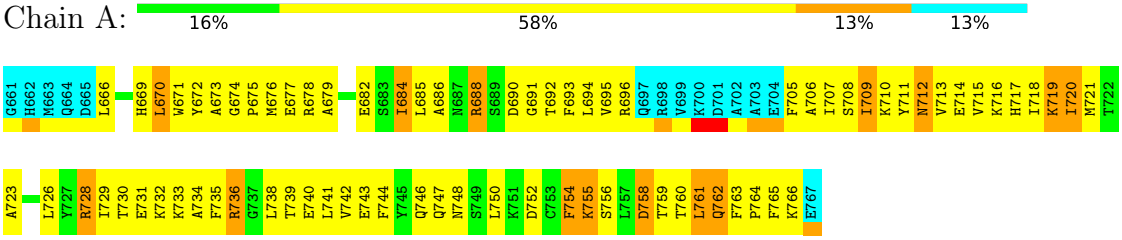
Chain B:



4.2.7 Score per residue for model 7

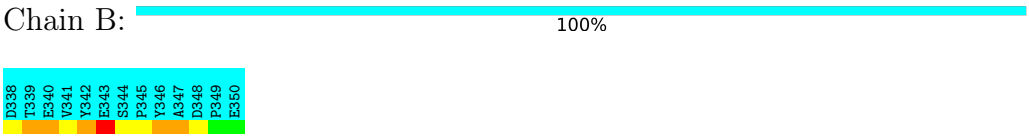
• Molecule 1: Proto-oncogene vav

Chain A:



• Molecule 2: Tyrosine-protein kinase SYK

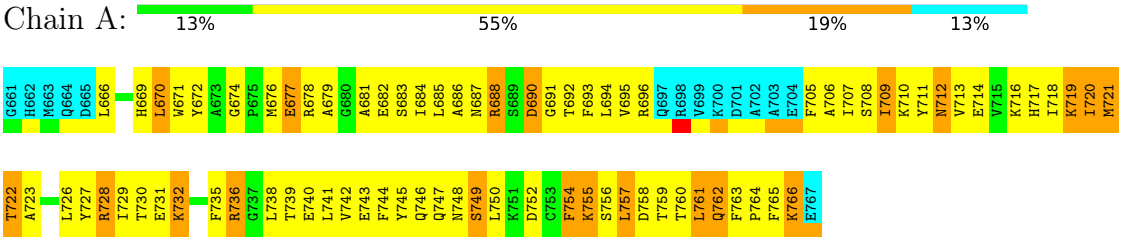
Chain B:



4.2.8 Score per residue for model 8

• Molecule 1: Proto-oncogene vav

Chain A:

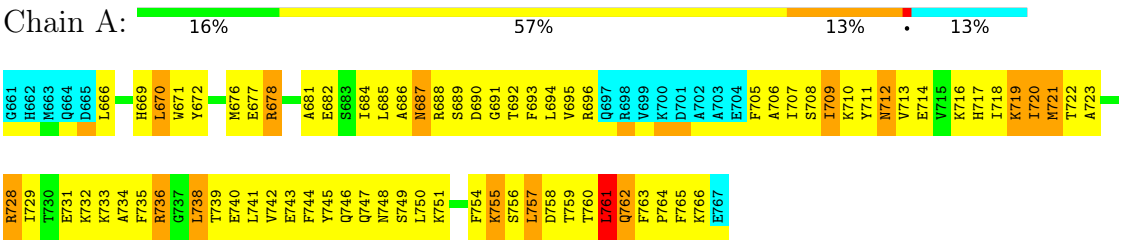


• Molecule 2: Tyrosine-protein kinase SYK

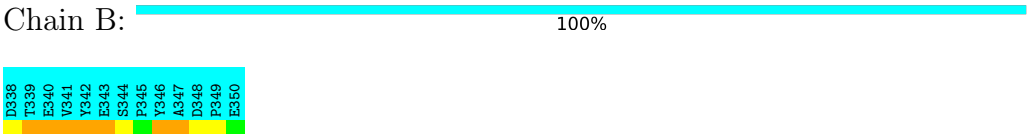
Chain B:

4.2.9 Score per residue for model 9

• Molecule 1: Proto-oncogene vav

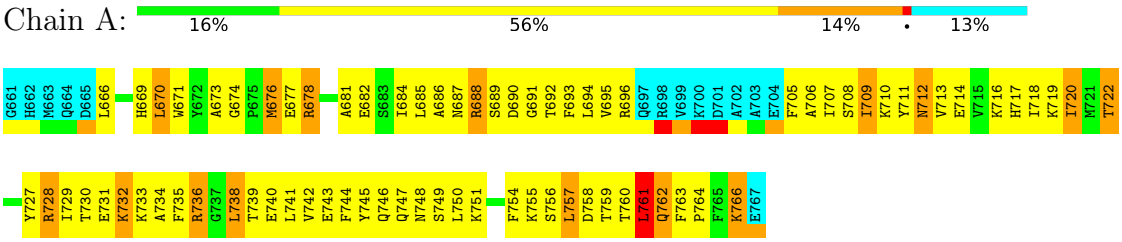


• Molecule 2: Tyrosine-protein kinase SYK

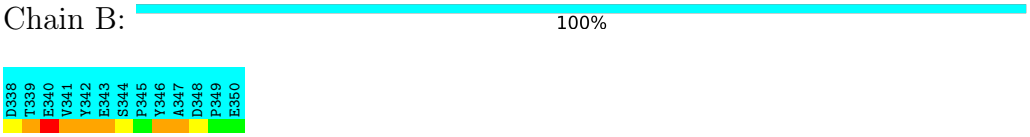


4.2.10 Score per residue for model 10

• Molecule 1: Proto-oncogene vav

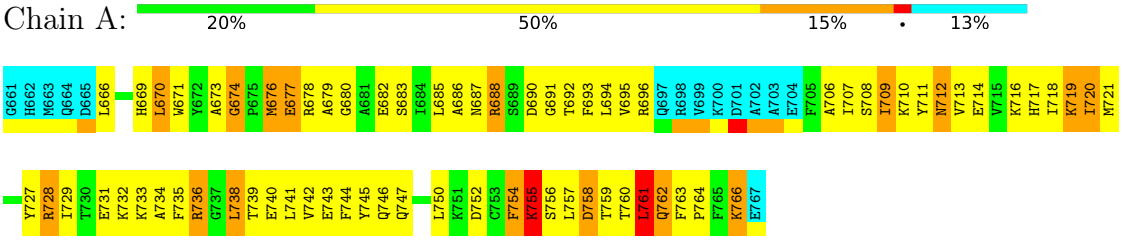


• Molecule 2: Tyrosine-protein kinase SYK



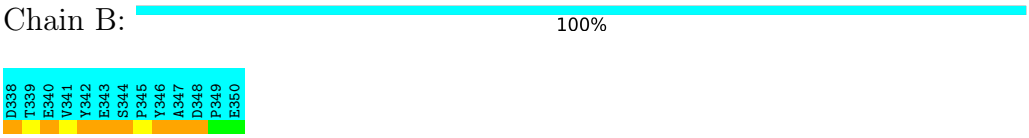
4.2.11 Score per residue for model 11

• Molecule 1: Proto-oncogene vav



• Molecule 2: Tyrosine-protein kinase SYK

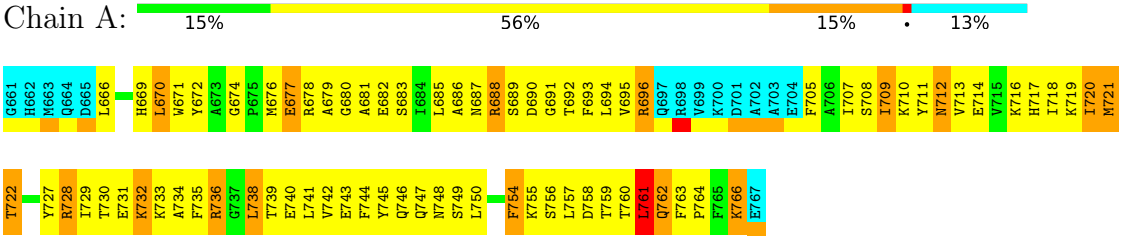
Chain B:



4.2.12 Score per residue for model 12

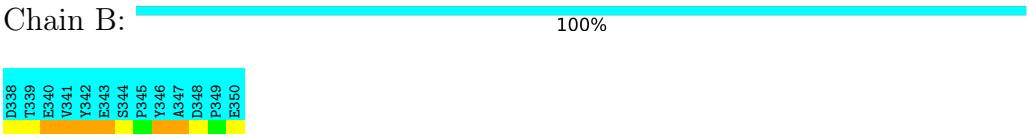
• Molecule 1: Proto-oncogene vav

Chain A:



• Molecule 2: Tyrosine-protein kinase SYK

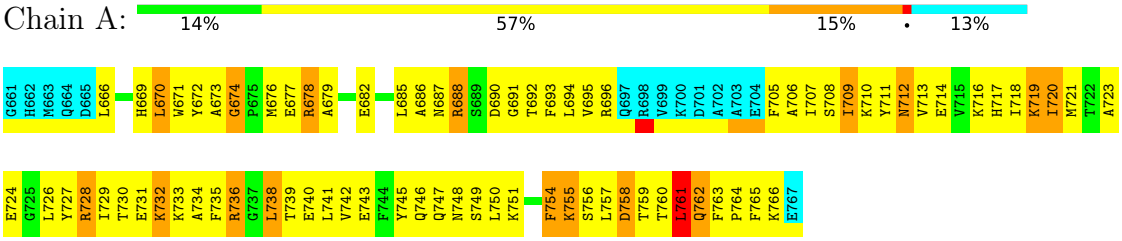
Chain B:



4.2.13 Score per residue for model 13

• Molecule 1: Proto-oncogene vav

Chain A:

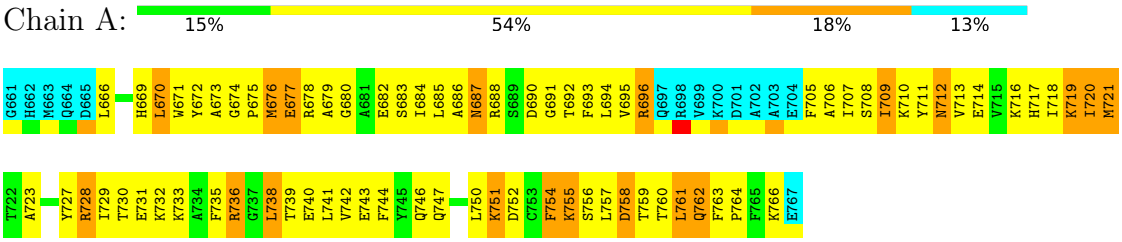


• Molecule 2: Tyrosine-protein kinase SYK

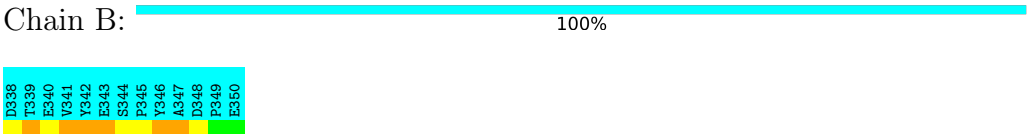
Chain B:

4.2.14 Score per residue for model 14

• Molecule 1: Proto-oncogene vav

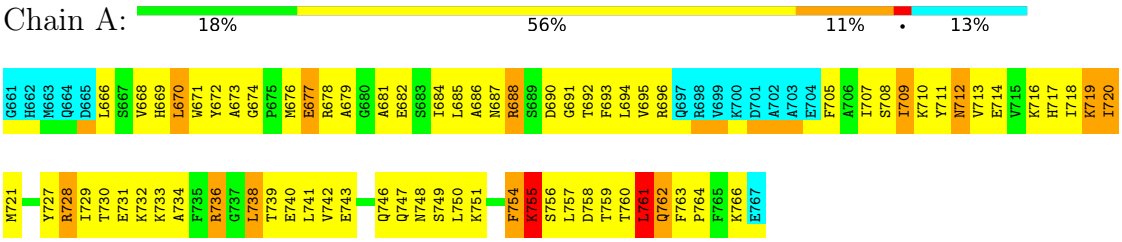


• Molecule 2: Tyrosine-protein kinase SYK

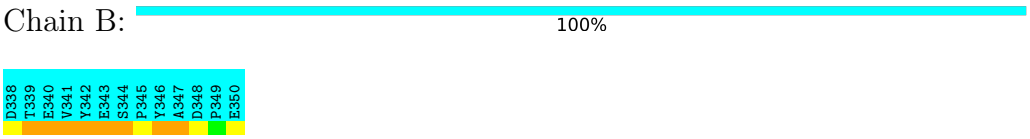


4.2.15 Score per residue for model 15

• Molecule 1: Proto-oncogene vav

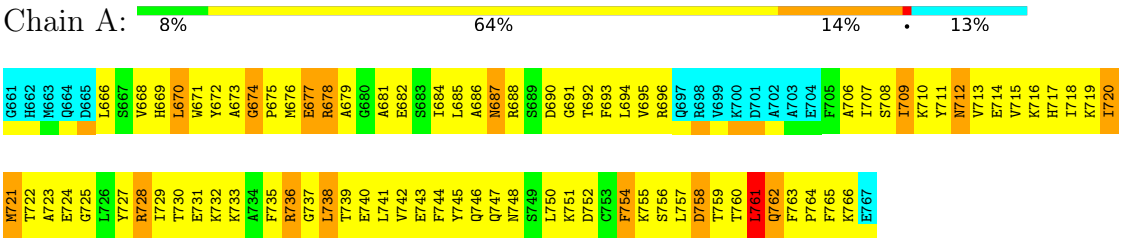


• Molecule 2: Tyrosine-protein kinase SYK



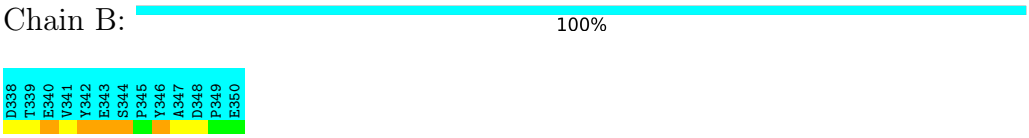
4.2.16 Score per residue for model 16

• Molecule 1: Proto-oncogene vav



• Molecule 2: Tyrosine-protein kinase SYK

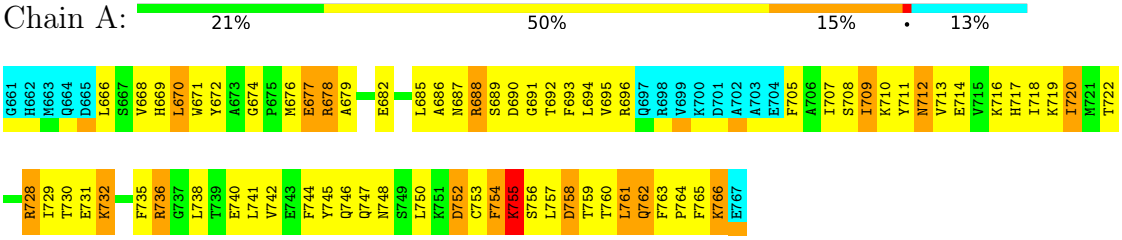
Chain B:



4.2.17 Score per residue for model 17

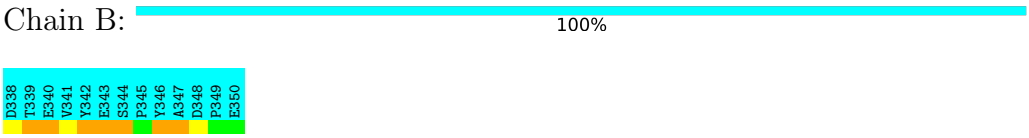
• Molecule 1: Proto-oncogene vav

Chain A:



• Molecule 2: Tyrosine-protein kinase SYK

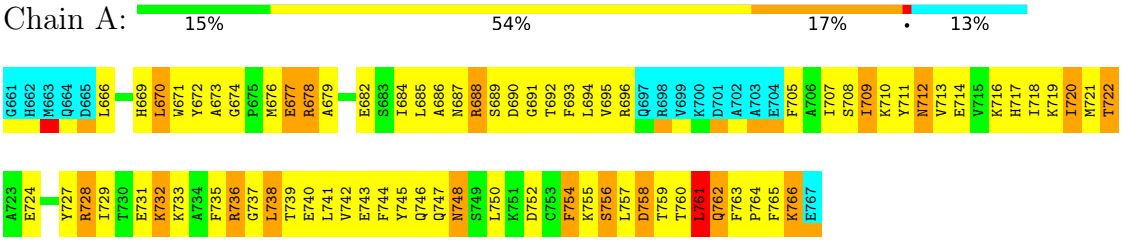
Chain B:



4.2.18 Score per residue for model 18

• Molecule 1: Proto-oncogene vav

Chain A:



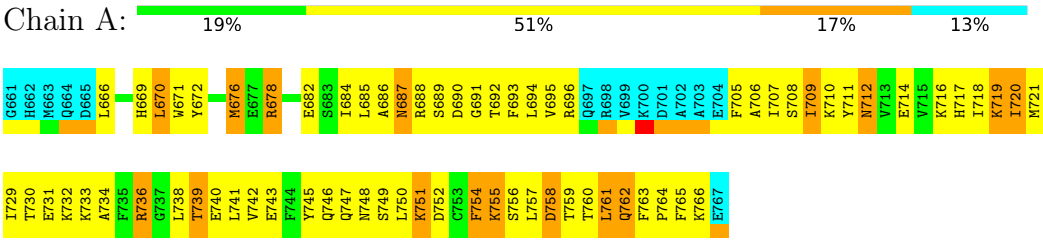
• Molecule 2: Tyrosine-protein kinase SYK

Chain B:

4.2.19 Score per residue for model 19

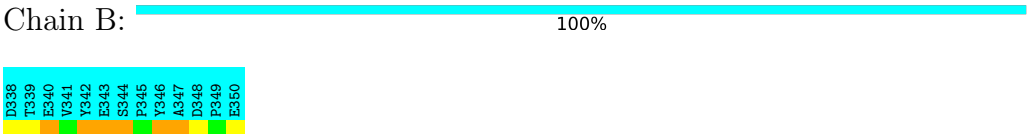
• Molecule 1: Proto-oncogene vav

Chain A:



• Molecule 2: Tyrosine-protein kinase SYK

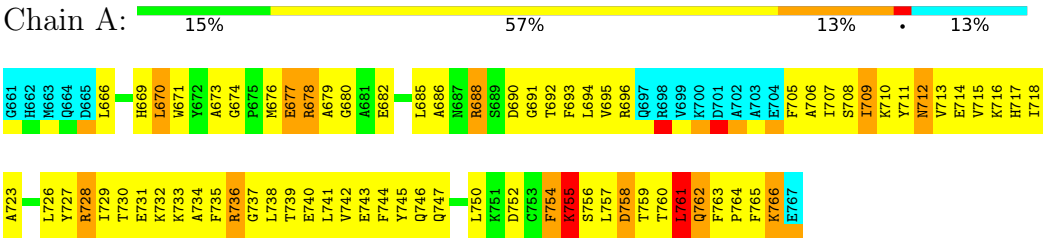
Chain B:



4.2.20 Score per residue for model 20

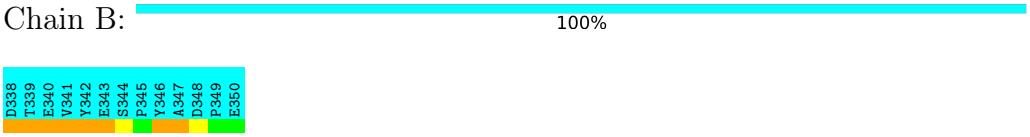
• Molecule 1: Proto-oncogene vav

Chain A:



• Molecule 2: Tyrosine-protein kinase SYK

Chain B:



5 Refinement protocol and experimental data overview

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

Of the 100 calculated structures, 20 were deposited, based on the following criterion: *structures with the least restraint violations*.

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

Software name	Classification	Version
CYANA	structure solution	
X-PLOR NIH	structure solution	
X-PLOR NIH	refinement	

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	1221
Number of shifts mapped to atoms	1221
Number of unparsed shifts	0
Number of shifts with mapping errors	0
Number of shifts with mapping warnings	0
Assignment completeness (well-defined parts)	82%

6 Model quality

6.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: PTR

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

There are no bond-length outliers.

There are no bond-angle outliers.

There are no chirality outliers.

There are no planarity outliers.

6.2 Too-close contacts

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in each chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes averaged over the ensemble.

Mol	Chain	Non-H	H(model)	H(added)	Clashes
1	A	756	770	768	90±6
2	B	0	0	0	0±0
All	All	15120	15400	15360	1795

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 59.

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

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
1:A:670:LEU:HD23	1:A:670:LEU:N	0.96	1.75	1	20
1:A:707:ILE:HD13	1:A:729:ILE:HG23	0.95	1.36	14	20
1:A:685:LEU:HD13	1:A:694:LEU:HD23	0.84	1.49	16	20
1:A:670:LEU:HD23	1:A:670:LEU:H	0.83	1.32	10	20
1:A:666:LEU:HD13	1:A:738:LEU:HD12	0.81	1.52	17	4
1:A:693:PHE:HB3	1:A:709:ILE:HG23	0.80	1.51	6	19
1:A:729:ILE:HG13	1:A:741:LEU:HD11	0.77	1.55	10	20
1:A:693:PHE:CD1	1:A:761:LEU:HD12	0.77	2.15	2	18
1:A:729:ILE:CG1	1:A:741:LEU:HD11	0.77	2.10	10	20
1:A:694:LEU:HD12	1:A:695:VAL:N	0.76	1.95	4	19
1:A:696:ARG:HG3	1:A:706:ALA:HB3	0.76	1.56	1	7

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
1:A:670:LEU:N	1:A:670:LEU:CD2	0.75	2.50	17	20
1:A:707:ILE:HD11	1:A:720:ILE:HG13	0.73	1.59	13	20
1:A:705:PHE:CD2	1:A:738:LEU:HD11	0.72	2.19	1	2
1:A:720:ILE:HD11	1:A:741:LEU:HD12	0.72	1.62	14	16
1:A:755:LYS:NZ	1:A:756:SER:OG	0.72	2.22	4	19
1:A:693:PHE:CD2	1:A:761:LEU:HD12	0.72	2.19	15	2
1:A:696:ARG:CG	1:A:706:ALA:HB3	0.72	2.15	10	8
1:A:739:THR:HG22	1:A:743:GLU:HG3	0.72	1.60	19	1
1:A:695:VAL:HG21	1:A:742:VAL:HG21	0.71	1.61	1	19
1:A:669:HIS:CD2	1:A:671:TRP:CZ2	0.71	2.78	7	20
1:A:688:ARG:O	1:A:710:LYS:NZ	0.71	2.24	2	20
1:A:685:LEU:CD1	1:A:694:LEU:HD23	0.70	2.16	4	14
1:A:676:MET:O	1:A:696:ARG:NE	0.69	2.25	11	16
1:A:693:PHE:N	1:A:763:PHE:O	0.69	2.25	20	20
1:A:677:GLU:OE1	1:A:679:ALA:HB3	0.69	1.87	13	15
1:A:669:HIS:NE2	1:A:739:THR:OG1	0.69	2.24	9	17
1:A:716:LYS:HD2	1:A:757:LEU:HD21	0.68	1.63	10	19
1:A:686:ALA:O	1:A:710:LYS:NZ	0.68	2.26	3	20
1:A:750:LEU:HD22	1:A:754:PHE:CZ	0.67	2.24	20	10
1:A:708:SER:OG	1:A:717:HIS:ND1	0.66	2.22	6	20
1:A:707:ILE:H	1:A:707:ILE:HD12	0.66	1.49	1	19
1:A:750:LEU:HD22	1:A:754:PHE:CE1	0.66	2.25	14	12
1:A:751:LYS:NZ	1:A:758:ASP:OD1	0.65	2.30	16	8
1:A:729:ILE:HD12	1:A:745:TYR:CD2	0.65	2.26	18	9
1:A:714:GLU:OE2	1:A:716:LYS:NZ	0.65	2.29	4	17
1:A:761:LEU:N	1:A:761:LEU:CD2	0.65	2.60	10	20
1:A:707:ILE:HD11	1:A:720:ILE:CG1	0.65	2.22	18	20
1:A:730:THR:HG23	1:A:732:LYS:H	0.65	1.52	4	13
1:A:750:LEU:HD13	1:A:754:PHE:CE2	0.65	2.27	10	5
1:A:705:PHE:CG	1:A:738:LEU:HD11	0.64	2.26	1	2
1:A:666:LEU:HD22	1:A:738:LEU:HB2	0.64	1.69	19	3
1:A:692:THR:O	1:A:710:LYS:N	0.64	2.27	20	20
1:A:733:LYS:NZ	1:A:734:ALA:O	0.64	2.31	7	13
1:A:695:VAL:HG11	1:A:738:LEU:HD11	0.63	1.70	3	9
1:A:760:THR:O	1:A:762:GLN:N	0.63	2.31	5	20
1:A:705:PHE:O	1:A:720:ILE:N	0.63	2.28	14	16
1:A:687:ASN:OD1	1:A:688:ARG:NH1	0.62	2.27	4	12
1:A:688:ARG:NH2	1:A:765:PHE:O	0.62	2.25	18	7
1:A:694:LEU:C	1:A:694:LEU:HD12	0.62	2.15	5	8
1:A:707:ILE:HD11	1:A:720:ILE:CD1	0.62	2.25	4	7
1:A:714:GLU:OE1	1:A:716:LYS:NZ	0.62	2.30	11	3

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
1:A:741:LEU:C	1:A:741:LEU:HD13	0.62	2.15	13	20
1:A:736:ARG:NH1	1:A:740:GLU:OE1	0.62	2.30	8	11
1:A:692:THR:HG23	1:A:764:PRO:O	0.61	1.96	20	9
1:A:694:LEU:HD12	1:A:694:LEU:C	0.61	2.16	16	10
1:A:759:THR:OG1	1:A:762:GLN:NE2	0.61	2.31	12	1
1:A:714:GLU:CD	1:A:716:LYS:NZ	0.61	2.54	19	3
1:A:728:ARG:NE	1:A:731:GLU:HA	0.61	2.11	7	20
1:A:682:GLU:OE1	1:A:717:HIS:NE2	0.61	2.34	11	20
1:A:729:ILE:HG21	1:A:754:PHE:CZ	0.59	2.32	9	6
1:A:719:LYS:NZ	1:A:731:GLU:OE2	0.59	2.33	20	9
1:A:676:MET:O	1:A:696:ARG:NH2	0.59	2.33	17	2
1:A:718:ILE:CD1	1:A:754:PHE:CE2	0.59	2.85	6	13
1:A:707:ILE:HD12	1:A:718:ILE:O	0.59	1.98	9	7
1:A:684:ILE:HG22	1:A:688:ARG:CD	0.59	2.28	18	2
1:A:685:LEU:O	1:A:710:LYS:NZ	0.58	2.30	20	20
1:A:750:LEU:O	1:A:754:PHE:N	0.58	2.35	10	16
1:A:676:MET:O	1:A:696:ARG:NH1	0.58	2.35	3	2
1:A:707:ILE:HD12	1:A:707:ILE:N	0.58	2.14	20	19
1:A:738:LEU:O	1:A:742:VAL:N	0.58	2.31	17	18
1:A:678:ARG:NH1	1:A:682:GLU:OE2	0.57	2.33	16	5
1:A:670:LEU:CD1	1:A:764:PRO:HG3	0.57	2.29	15	20
1:A:724:GLU:N	1:A:724:GLU:CD	0.57	2.55	2	6
1:A:728:ARG:NH2	1:A:731:GLU:OE1	0.57	2.31	13	14
1:A:707:ILE:N	1:A:718:ILE:O	0.57	2.35	10	10
1:A:728:ARG:CD	1:A:731:GLU:HA	0.57	2.30	1	20
1:A:750:LEU:HD22	1:A:754:PHE:CE2	0.56	2.35	12	4
1:A:693:PHE:CB	1:A:709:ILE:HG23	0.56	2.30	5	2
1:A:673:ALA:N	1:A:695:VAL:O	0.56	2.35	14	12
1:A:733:LYS:NZ	1:A:748:ASN:OD1	0.56	2.29	18	2
1:A:671:TRP:O	1:A:695:VAL:N	0.56	2.38	1	16
1:A:674:GLY:O	1:A:676:MET:N	0.56	2.34	14	16
1:A:761:LEU:HD22	1:A:761:LEU:N	0.56	2.15	7	2
1:A:677:GLU:OE2	1:A:679:ALA:HB3	0.56	2.00	17	2
1:A:678:ARG:NE	1:A:682:GLU:OE1	0.55	2.29	2	2
1:A:672:TYR:O	1:A:766:LYS:NZ	0.55	2.27	14	11
1:A:669:HIS:CD2	1:A:671:TRP:CH2	0.55	2.95	5	7
1:A:711:TYR:O	1:A:712:ASN:CB	0.54	2.55	20	20
1:A:691:GLY:CA	1:A:762:GLN:HB2	0.54	2.32	19	19
1:A:736:ARG:NH2	1:A:740:GLU:OE2	0.54	2.34	1	6
1:A:723:ALA:O	1:A:726:LEU:N	0.54	2.35	13	7
1:A:741:LEU:HD13	1:A:741:LEU:O	0.53	2.03	17	8

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
1:A:761:LEU:N	1:A:761:LEU:HD22	0.53	2.18	8	18
1:A:670:LEU:CB	1:A:766:LYS:HB2	0.53	2.33	17	7
1:A:666:LEU:HD13	1:A:738:LEU:CD1	0.53	2.29	17	3
1:A:677:GLU:O	1:A:681:ALA:N	0.53	2.34	10	6
1:A:707:ILE:HG22	1:A:708:SER:N	0.53	2.18	4	7
1:A:707:ILE:HG22	1:A:708:SER:H	0.53	1.62	14	7
1:A:711:TYR:O	1:A:712:ASN:HB3	0.53	2.04	1	16
1:A:684:ILE:HG22	1:A:688:ARG:NE	0.52	2.20	18	2
1:A:729:ILE:HG12	1:A:741:LEU:HD11	0.52	1.81	14	3
1:A:736:ARG:NH2	1:A:740:GLU:OE1	0.52	2.34	20	3
1:A:754:PHE:N	1:A:754:PHE:CD1	0.52	2.78	20	19
1:A:718:ILE:HG21	1:A:729:ILE:O	0.52	2.04	6	6
1:A:752:ASP:CG	1:A:753:CYS:N	0.52	2.63	17	1
1:A:755:LYS:HG2	1:A:756:SER:N	0.52	2.19	18	13
1:A:719:LYS:O	1:A:719:LYS:NZ	0.52	2.34	14	1
1:A:666:LEU:HA	1:A:669:HIS:CD2	0.51	2.41	1	11
1:A:691:GLY:N	1:A:710:LYS:O	0.51	2.32	19	5
1:A:666:LEU:HD13	1:A:738:LEU:HD13	0.51	1.82	13	2
1:A:707:ILE:HD11	1:A:720:ILE:HD12	0.51	1.81	4	4
1:A:759:THR:OG1	1:A:760:THR:N	0.51	2.44	8	18
1:A:709:ILE:N	1:A:709:ILE:HD12	0.51	2.20	7	4
1:A:708:SER:HA	1:A:716:LYS:O	0.51	2.06	12	11
1:A:677:GLU:HA	1:A:696:ARG:NH2	0.51	2.21	17	6
1:A:696:ARG:HH11	1:A:706:ALA:HB3	0.51	1.66	4	1
1:A:666:LEU:HB2	1:A:672:TYR:CD2	0.51	2.41	3	3
1:A:720:ILE:HD13	1:A:738:LEU:HG	0.51	1.82	13	1
1:A:739:THR:O	1:A:743:GLU:N	0.50	2.35	19	13
1:A:761:LEU:CD2	1:A:761:LEU:H	0.50	2.20	18	20
1:A:707:ILE:HD12	1:A:707:ILE:H	0.50	1.65	12	1
1:A:684:ILE:HD13	1:A:765:PHE:CD2	0.50	2.41	19	2
1:A:735:PHE:CE2	1:A:744:PHE:CG	0.50	3.00	17	2
1:A:711:TYR:CD2	1:A:757:LEU:HD13	0.50	2.41	10	4
1:A:761:LEU:HD23	1:A:761:LEU:H	0.50	1.66	10	2
1:A:693:PHE:CD2	1:A:763:PHE:O	0.50	2.65	1	18
1:A:669:HIS:O	1:A:766:LYS:NZ	0.50	2.29	10	6
1:A:751:LYS:NZ	1:A:758:ASP:CG	0.50	2.65	9	5
1:A:709:ILE:HD12	1:A:716:LYS:O	0.50	2.07	7	6
1:A:693:PHE:CD1	1:A:761:LEU:CD1	0.49	2.95	5	5
1:A:693:PHE:CD2	1:A:761:LEU:CD1	0.49	2.95	10	1
1:A:671:TRP:NE1	1:A:743:GLU:OE2	0.49	2.39	13	12
1:A:735:PHE:CZ	1:A:744:PHE:CG	0.49	3.01	16	15

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
1:A:711:TYR:CE1	1:A:759:THR:HB	0.49	2.42	1	9
1:A:718:ILE:HD11	1:A:754:PHE:CE2	0.49	2.41	3	7
1:A:750:LEU:HD13	1:A:754:PHE:CD2	0.49	2.43	10	2
1:A:695:VAL:HG22	1:A:707:ILE:HG23	0.48	1.85	13	4
1:A:761:LEU:H	1:A:761:LEU:HD23	0.48	1.68	13	4
1:A:672:TYR:CZ	1:A:674:GLY:CA	0.48	2.96	13	3
1:A:682:GLU:O	1:A:686:ALA:N	0.48	2.37	4	8
1:A:712:ASN:O	1:A:713:VAL:HG22	0.48	2.08	15	17
1:A:722:THR:O	1:A:722:THR:OG1	0.48	2.30	19	7
1:A:755:LYS:HZ3	1:A:756:SER:CB	0.48	2.21	11	3
1:A:724:GLU:N	1:A:724:GLU:OE2	0.48	2.47	16	1
1:A:755:LYS:O	1:A:756:SER:OG	0.47	2.32	9	1
1:A:721:MET:O	1:A:727:TYR:HA	0.47	2.10	16	7
1:A:751:LYS:CB	1:A:757:LEU:O	0.47	2.62	19	4
1:A:748:ASN:O	1:A:760:THR:HG22	0.47	2.09	5	2
1:A:682:GLU:HB3	1:A:717:HIS:CE1	0.47	2.44	13	4
1:A:666:LEU:HD22	1:A:738:LEU:HB3	0.47	1.87	13	4
1:A:671:TRP:CB	1:A:693:PHE:CE1	0.47	2.98	5	11
1:A:678:ARG:NH1	1:A:682:GLU:CD	0.47	2.68	16	1
1:A:670:LEU:HD12	1:A:764:PRO:CG	0.47	2.40	4	12
1:A:707:ILE:O	1:A:708:SER:OG	0.47	2.33	11	7
1:A:760:THR:OG1	1:A:762:GLN:NE2	0.47	2.45	5	1
1:A:741:LEU:CD2	1:A:745:TYR:CE1	0.46	2.98	18	2
1:A:695:VAL:HG11	1:A:738:LEU:CD1	0.46	2.41	5	3
1:A:721:MET:SD	1:A:723:ALA:N	0.46	2.88	8	4
1:A:677:GLU:HA	1:A:696:ARG:CZ	0.46	2.40	11	2
1:A:668:VAL:HG23	1:A:669:HIS:CE1	0.46	2.45	17	1
1:A:687:ASN:HD22	1:A:687:ASN:C	0.46	2.14	1	1
1:A:694:LEU:N	1:A:708:SER:O	0.46	2.47	17	10
1:A:682:GLU:O	1:A:686:ALA:CB	0.46	2.64	15	5
1:A:736:ARG:HE	1:A:740:GLU:CD	0.46	2.12	1	8
1:A:762:GLN:HB3	1:A:763:PHE:CD2	0.46	2.46	5	1
1:A:693:PHE:CD1	1:A:763:PHE:O	0.46	2.69	15	2
1:A:693:PHE:CG	1:A:761:LEU:HD12	0.46	2.46	19	5
1:A:727:TYR:CD2	1:A:738:LEU:N	0.46	2.84	10	4
1:A:686:ALA:C	1:A:710:LYS:NZ	0.45	2.69	14	17
1:A:689:SER:O	1:A:692:THR:OG1	0.45	2.26	5	7
1:A:679:ALA:O	1:A:683:SER:OG	0.45	2.25	8	2
1:A:688:ARG:NH1	1:A:765:PHE:O	0.45	2.49	7	1
1:A:709:ILE:HD12	1:A:709:ILE:N	0.45	2.27	8	2
1:A:682:GLU:HB3	1:A:715:VAL:HB	0.45	1.87	16	2

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
1:A:709:ILE:N	1:A:716:LYS:O	0.45	2.45	20	1
1:A:670:LEU:O	1:A:766:LYS:HG3	0.45	2.12	5	8
1:A:751:LYS:NZ	1:A:751:LYS:CB	0.45	2.77	14	2
1:A:712:ASN:O	1:A:713:VAL:CG2	0.45	2.64	10	19
1:A:709:ILE:O	1:A:716:LYS:N	0.45	2.45	20	1
1:A:718:ILE:CD1	1:A:754:PHE:CZ	0.45	3.00	3	1
1:A:733:LYS:O	1:A:745:TYR:OH	0.45	2.31	16	2
1:A:736:ARG:NE	1:A:740:GLU:OE1	0.45	2.32	13	4
1:A:695:VAL:HG21	1:A:742:VAL:CG2	0.44	2.39	1	2
1:A:682:GLU:CB	1:A:715:VAL:HB	0.44	2.42	5	2
1:A:680:GLY:O	1:A:683:SER:OG	0.44	2.29	12	4
1:A:712:ASN:O	1:A:712:ASN:ND2	0.44	2.45	4	1
1:A:739:THR:O	1:A:743:GLU:CG	0.44	2.65	19	1
1:A:694:LEU:C	1:A:694:LEU:CD1	0.44	2.84	7	4
1:A:737:GLY:O	1:A:741:LEU:HB2	0.44	2.13	18	2
1:A:676:MET:HG3	1:A:677:GLU:N	0.44	2.28	2	1
1:A:720:ILE:HD11	1:A:741:LEU:CD1	0.44	2.43	13	2
1:A:678:ARG:HG3	1:A:717:HIS:CD2	0.44	2.48	7	1
1:A:754:PHE:CD2	1:A:757:LEU:HG	0.44	2.47	15	2
1:A:678:ARG:HG2	1:A:717:HIS:CD2	0.43	2.48	19	2
1:A:678:ARG:HH12	1:A:682:GLU:CD	0.43	2.13	16	1
1:A:694:LEU:O	1:A:708:SER:N	0.43	2.43	13	2
1:A:688:ARG:HH11	1:A:688:ARG:N	0.43	2.11	3	1
1:A:671:TRP:CB	1:A:693:PHE:CE2	0.43	3.01	10	2
1:A:686:ALA:C	1:A:710:LYS:HZ1	0.43	2.13	11	1
1:A:695:VAL:CG2	1:A:742:VAL:HG21	0.43	2.42	5	2
1:A:754:PHE:N	1:A:754:PHE:HD1	0.43	2.11	9	1
1:A:696:ARG:O	1:A:706:ALA:N	0.43	2.39	4	4
1:A:709:ILE:O	1:A:715:VAL:HA	0.43	2.12	5	3
1:A:685:LEU:HD21	1:A:693:PHE:HA	0.43	1.90	11	1
1:A:685:LEU:HD11	1:A:765:PHE:HB3	0.43	1.90	20	1
1:A:755:LYS:C	1:A:757:LEU:H	0.43	2.16	12	3
1:A:671:TRP:CZ3	1:A:738:LEU:HD22	0.43	2.48	13	1
1:A:707:ILE:O	1:A:717:HIS:HA	0.43	2.13	2	3
1:A:745:TYR:O	1:A:760:THR:HB	0.43	2.13	11	6
1:A:694:LEU:HB2	1:A:765:PHE:CD1	0.43	2.49	9	3
1:A:721:MET:SD	1:A:728:ARG:CZ	0.43	3.07	9	1
1:A:707:ILE:N	1:A:707:ILE:HD12	0.43	2.29	18	1
1:A:722:THR:O	1:A:722:THR:HG23	0.42	2.12	5	2
1:A:666:LEU:HD22	1:A:738:LEU:CB	0.42	2.44	6	1
1:A:720:ILE:HD13	1:A:738:LEU:CD2	0.42	2.45	19	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
1:A:676:MET:CG	1:A:677:GLU:N	0.42	2.83	17	2
1:A:678:ARG:O	1:A:682:GLU:HG2	0.42	2.14	8	1
1:A:751:LYS:HE2	1:A:758:ASP:CG	0.42	2.35	14	1
1:A:735:PHE:CZ	1:A:744:PHE:CD1	0.42	3.08	16	1
1:A:670:LEU:CD1	1:A:764:PRO:CG	0.42	2.98	16	4
1:A:750:LEU:HD12	1:A:759:THR:HG23	0.42	1.92	16	1
1:A:666:LEU:C	1:A:668:VAL:H	0.42	2.18	4	1
1:A:749:SER:OG	1:A:752:ASP:OD2	0.42	2.31	8	1
1:A:759:THR:O	1:A:760:THR:CG2	0.42	2.67	7	2
1:A:671:TRP:O	1:A:694:LEU:HA	0.42	2.15	20	1
1:A:676:MET:C	1:A:696:ARG:HE	0.42	2.15	6	1
1:A:717:HIS:C	1:A:718:ILE:HG13	0.41	2.36	13	2
1:A:741:LEU:HD21	1:A:745:TYR:CE1	0.41	2.50	18	1
1:A:666:LEU:HB3	1:A:672:TYR:CG	0.41	2.50	18	1
1:A:759:THR:O	1:A:760:THR:HG23	0.41	2.15	1	2
1:A:669:HIS:CE1	1:A:739:THR:HG23	0.41	2.51	14	1
1:A:707:ILE:CD1	1:A:729:ILE:HG23	0.41	2.27	19	1
1:A:692:THR:CG2	1:A:764:PRO:O	0.41	2.68	17	2
1:A:730:THR:C	1:A:731:GLU:CG	0.41	2.89	8	1
1:A:695:VAL:HA	1:A:706:ALA:O	0.41	2.15	20	1
1:A:719:LYS:NZ	1:A:719:LYS:O	0.41	2.35	2	1
1:A:669:HIS:CE1	1:A:739:THR:CG2	0.41	3.04	6	1
1:A:733:LYS:HE2	1:A:735:PHE:CE2	0.41	2.50	14	1
1:A:705:PHE:H	1:A:720:ILE:HG22	0.41	1.74	20	1
1:A:682:GLU:HB2	1:A:715:VAL:HG21	0.41	1.92	4	1
1:A:750:LEU:HG	1:A:760:THR:HA	0.41	1.93	5	1
1:A:693:PHE:CG	1:A:761:LEU:CD1	0.41	3.03	8	1
1:A:726:LEU:HA	1:A:735:PHE:O	0.41	2.14	13	1
1:A:724:GLU:OE2	1:A:724:GLU:N	0.41	2.54	3	1
1:A:691:GLY:O	1:A:762:GLN:HB2	0.41	2.15	5	1
1:A:723:ALA:HB2	1:A:728:ARG:NH1	0.41	2.31	16	1
1:A:676:MET:O	1:A:696:ARG:HD2	0.41	2.16	12	1
1:A:728:ARG:NH2	1:A:731:GLU:HB3	0.40	2.31	1	1
1:A:727:TYR:O	1:A:735:PHE:N	0.40	2.52	13	1
1:A:723:ALA:C	1:A:725:GLY:N	0.40	2.75	16	1
1:A:666:LEU:C	1:A:668:VAL:N	0.40	2.74	4	1
1:A:765:PHE:CZ	1:A:766:LYS:HG2	0.40	2.51	5	2
1:A:671:TRP:CZ2	1:A:739:THR:HA	0.40	2.51	7	1
1:A:720:ILE:HG23	1:A:721:MET:N	0.40	2.31	4	1
1:A:687:ASN:ND2	1:A:687:ASN:C	0.40	2.75	14	1
1:A:677:GLU:CD	1:A:680:GLY:H	0.40	2.19	20	1

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Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
1:A:730:THR:C	1:A:732:LYS:H	0.40	2.20	5	1
1:A:681:ALA:HB1	1:A:694:LEU:HD21	0.40	1.93	12	1
1:A:751:LYS:NZ	1:A:751:LYS:HB2	0.40	2.32	14	1
1:A:727:TYR:N	1:A:727:TYR:CD1	0.40	2.88	15	1
1:A:695:VAL:HG11	1:A:738:LEU:HD21	0.40	1.94	20	1
1:A:690:ASP:OD2	1:A:712:ASN:N	0.40	2.37	8	1
1:A:737:GLY:O	1:A:741:LEU:CB	0.40	2.70	16	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	93/107 (87%)	76±2 (81±2%)	13±2 (14±2%)	5±1 (5±1%)	4 25
2	B	0	-	-	-	-
All	All	1860/2400 (78%)	1512 (81%)	255 (14%)	93 (5%)	4 25

All 8 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	712	ASN	20
1	A	761	LEU	20
1	A	754	PHE	18
1	A	755	LYS	15
1	A	758	ASP	11
1	A	675	PRO	5
1	A	674	GLY	3
1	A	705	PHE	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	81/92 (88%)	61±2 (75±2%)	20±2 (25±2%)	2 25
2	B	0	-	-	-
All	All	1620/2040 (79%)	1223 (75%)	397 (25%)	2 25

All 37 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	670	LEU	20
1	A	690	ASP	20
1	A	720	ILE	20
1	A	728	ARG	20
1	A	736	ARG	20
1	A	746	GLN	20
1	A	747	GLN	20
1	A	709	ILE	19
1	A	762	GLN	19
1	A	738	LEU	15
1	A	688	ARG	14
1	A	719	LYS	14
1	A	758	ASP	14
1	A	677	GLU	13
1	A	748	ASN	13
1	A	687	ASN	12
1	A	678	ARG	11
1	A	749	SER	11
1	A	761	LEU	11
1	A	684	ILE	10
1	A	732	LYS	10
1	A	766	LYS	10
1	A	722	THR	10
1	A	752	ASP	10
1	A	721	MET	8
1	A	676	MET	7
1	A	755	LYS	6
1	A	757	LEU	4
1	A	696	ARG	3
1	A	689	SER	3
1	A	714	GLU	2
1	A	756	SER	2
1	A	751	LYS	2

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Mol	Chain	Res	Type	Models (Total)
1	A	667	SER	1
1	A	712	ASN	1
1	A	730	THR	1
1	A	739	THR	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)

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

In the following table, the Counts columns list the number of bonds for which Mogul statistics could be retrieved, the number of bonds that are observed in the model and the number of bonds that are defined in the chemical component dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length is the number of standard deviations the observed value is removed from the expected value. A bond length with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the average root-mean-square of all Z scores of the bond lengths.

Mol	Type	Chain	Res	Link	Bond lengths		
					Counts	RMSZ	#Z>2
2	PTR	B	342	2	15,16,17	1.05±0.05	1±0 (6±0%)
2	PTR	B	346	2	15,16,17	1.09±0.05	1±0 (6±0%)

In the following table, the Counts columns list the number of angles for which Mogul statistics could be retrieved, the number of angles that are observed in the model and the number of angles that are defined in the chemical component dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond angle is the number of standard deviations the observed value is removed from the expected value. A bond angle with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the average root-mean-square of all Z scores of the bond angles.

Mol	Type	Chain	Res	Link	Bond angles		
					Counts	RMSZ	#Z>2
2	PTR	B	342	2	19,22,24	0.93±0.05	1±1 (4±2%)
2	PTR	B	346	2	19,22,24	0.95±0.04	1±0 (4±2%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the chemical

component dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
2	PTR	B	346	2	-	0±0,10,11,13	0±0,1,1,1
2	PTR	B	342	2	-	0±0,10,11,13	0±0,1,1,1

All unique bond 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(Å)	Ideal(Å)	Models	
								Worst	Total
2	B	346	PTR	P-OH	3.93	1.65	1.59	9	20
2	B	342	PTR	P-OH	3.57	1.64	1.59	12	20

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
2	B	346	PTR	CG-CB-CA	2.81	108.41	114.10	15	17
2	B	342	PTR	CG-CB-CA	2.77	108.48	114.10	14	14
2	B	342	PTR	P-OH-CZ	2.16	116.81	123.75	18	2
2	B	346	PTR	O3P-P-OH	2.08	111.74	105.24	10	1

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

6.5 Carbohydrates (i)

There are no monosaccharides 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

The completeness of assignment taking into account all chemical shift lists is 82% for the well-defined parts and 74% for the entire structure.

7.1 Chemical shift list 1

File name: working_cs.cif

Chemical shift list name: *assigned_chem_shift_list_1*

7.1.1 Bookkeeping

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

Total number of shifts	1221
Number of shifts mapped to atoms	1221
Number of unparsed shifts	0
Number of shifts with mapping errors	0
Number of shifts with mapping warnings	0
Number of shift outliers (ShiftChecker)	4

7.1.2 Chemical shift referencing

The following table shows the suggested chemical shift referencing corrections.

Nucleus	# values	Correction ± precision, *ppm*	Suggested action
$^{13}C_{\alpha}$	98	-0.03 ± 0.10	None needed (< 0.5 ppm)
$^{13}C_{\beta}$	93	-0.02 ± 0.11	None needed (< 0.5 ppm)
$^{13}C'$	0	—	None (insufficient data)
^{15}N	95	0.59 ± 0.35	None needed (imprecise)

7.1.3 Completeness of resonance assignments

The following table shows the completeness of the chemical shift assignments for the well-defined regions of the structure. The overall completeness is 82%, i.e. 1087 atoms were assigned a chemical shift out of a possible 1329. 0 out of 15 assigned methyl groups (LEU and VAL) were assigned stereospecifically.

	Total	^{1}H	^{13}C	^{15}N
Backbone	369/466 (79%)	187/189 (99%)	92/186 (49%)	90/91 (99%)
Sidechain	622/729 (85%)	424/475 (89%)	198/225 (88%)	0/29 (0%)

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	Total	^{1}H	^{13}C	^{15}N
Aromatic	96/134 (72%)	49/65 (75%)	47/64 (73%)	0/5 (0%)
Overall	1087/1329 (82%)	660/729 (91%)	337/475 (71%)	90/125 (72%)

The following table shows the completeness of the chemical shift assignments for the full structure. The overall completeness is 74%, i.e. 1204 atoms were assigned a chemical shift out of a possible 1633. 0 out of 17 assigned methyl groups (LEU and VAL) were assigned stereospecifically.

	Total	^{1}H	^{13}C	^{15}N
Backbone	410/588 (70%)	217/238 (91%)	98/236 (42%)	95/114 (83%)
Sidechain	694/903 (77%)	486/584 (83%)	208/284 (73%)	0/35 (0%)
Aromatic	100/142 (70%)	51/69 (74%)	49/66 (74%)	0/7 (0%)
Overall	1204/1633 (74%)	754/891 (85%)	355/586 (61%)	95/156 (61%)

7.1.4 Statistically unusual chemical shifts (i)

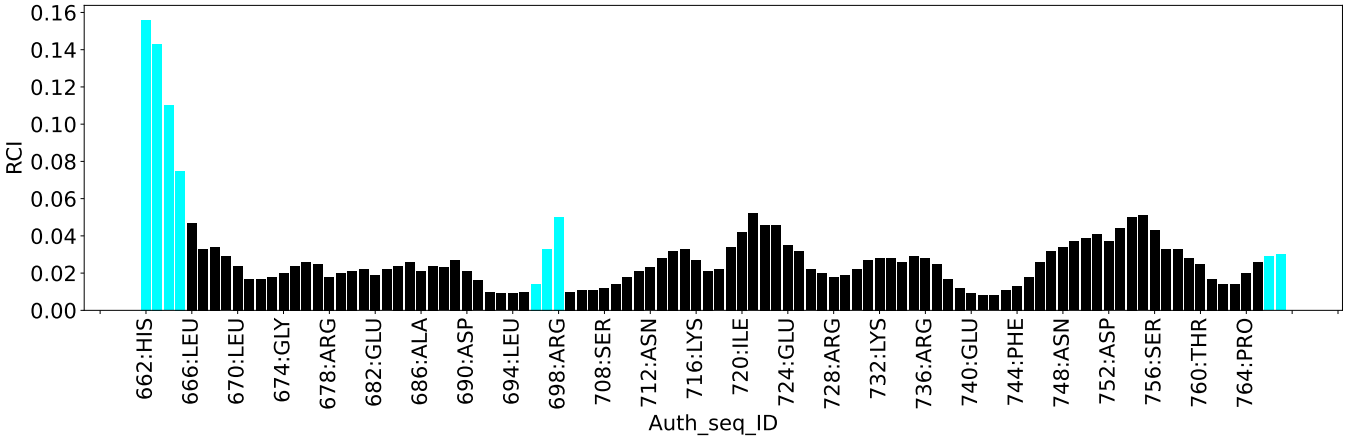
The following table lists the statistically unusual chemical shifts. These are statistical measures, and large deviations from the mean do not necessarily imply incorrect assignments. Molecules containing paramagnetic centres or hemes are expected to give rise to anomalous chemical shifts.

List Id	Chain	Res	Type	Atom	Shift, *ppm*	Expected range, *ppm*	Z-score
1	A	669	HIS	HB3	0.79	1.18 – 4.91	-6.0
1	A	766	LYS	HG3	-0.15	0.04 – 2.67	-5.7
1	A	674	GLY	H	5.18	5.23 – 11.42	-5.1
1	A	741	LEU	HA	2.03	2.04 – 6.55	-5.0

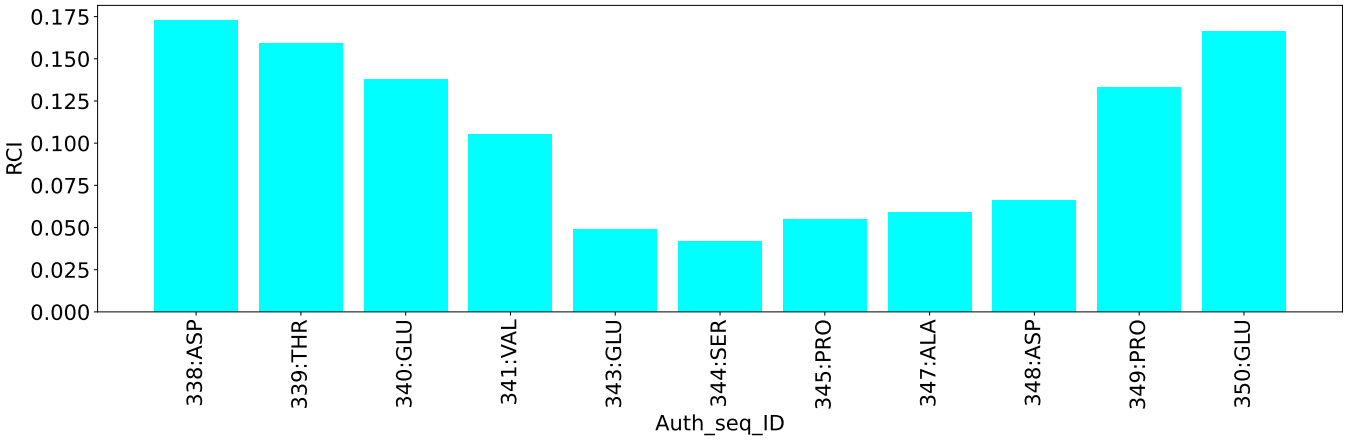
7.1.5 Random Coil Index (RCI) plots (i)

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:



Random coil index (RCI) for chain B:



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	2999
Intra-residue (|i-j|=0)	549
Sequential (|i-j|=1)	730
Medium range (|i-j|>1 and |i-j|<5)	559
Long range (|i-j|≥5)	1105
Inter-chain	56
Hydrogen bond restraints	0
Disulfide bond restraints	0
Total dihedral-angle restraints	0
Number of unmapped restraints	0
Number of restraints per residue	25.0
Number of long range restraints per residue[1]	9.2

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

8.2 Residual restraint violations

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

8.2.1 Average number of distance violations per model

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

Bins (Å)	Average number of violations per model	Max (Å)
0.1-0.2 (Small)	22.2	0.2
0.2-0.5 (Medium)	1.4	0.3
>0.5 (Large)	None	None

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

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

9 Distance violation analysis (i)

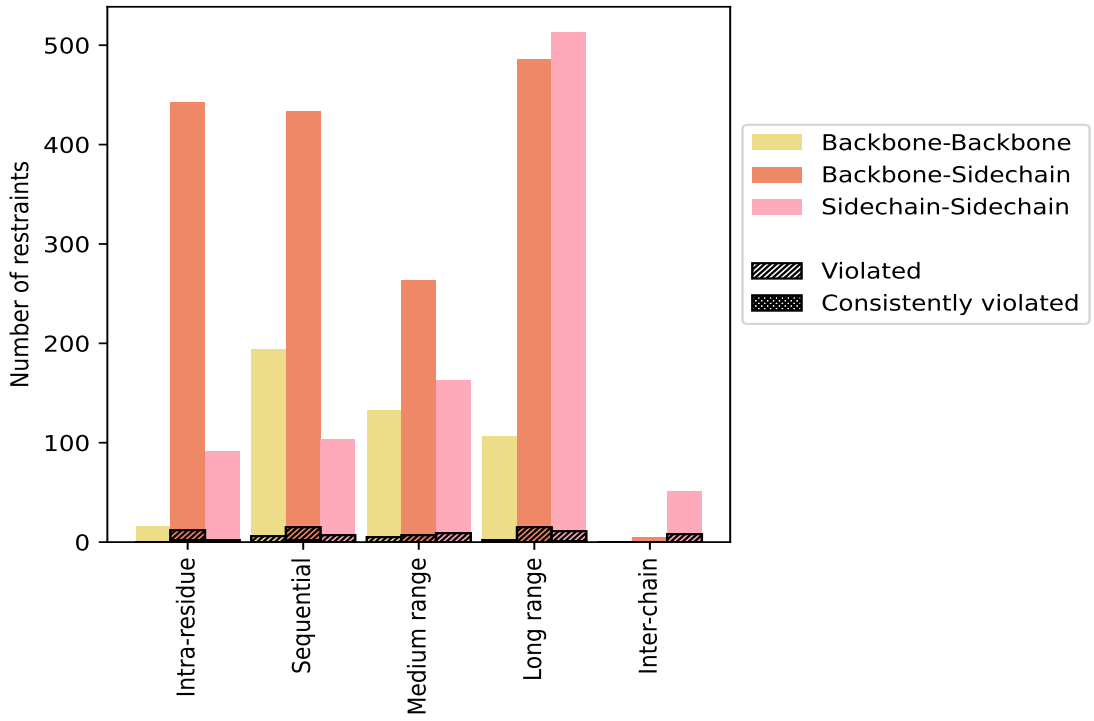
9.1 Summary of distance violations (i)

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

Restraints type	Count	%[1]	Violated[3]			Consistently Violated[4]		
			Count	%[2]	%[1]	Count	%[2]	%[1]
Intra-residue (|i-j|=0)	549	18.3	14	2.6	0.5	2	0.4	0.1
Backbone-Backbone	16	0.5	0	0.0	0.0	0	0.0	0.0
Backbone-Sidechain	442	14.7	12	2.7	0.4	2	0.5	0.1
Sidechain-Sidechain	91	3.0	2	2.2	0.1	0	0.0	0.0
Sequential (|i-j|=1)	730	24.3	28	3.8	0.9	2	0.3	0.1
Backbone-Backbone	194	6.5	6	3.1	0.2	0	0.0	0.0
Backbone-Sidechain	433	14.4	15	3.5	0.5	2	0.5	0.1
Sidechain-Sidechain	103	3.4	7	6.8	0.2	0	0.0	0.0
Medium range (|i-j|>1 & |i-j|<5)	559	18.6	21	3.8	0.7	0	0.0	0.0
Backbone-Backbone	133	4.4	5	3.8	0.2	0	0.0	0.0
Backbone-Sidechain	263	8.8	7	2.7	0.2	0	0.0	0.0
Sidechain-Sidechain	163	5.4	9	5.5	0.3	0	0.0	0.0
Long range (|i-j|≥5)	1105	36.8	28	2.5	0.9	1	0.1	0.0
Backbone-Backbone	106	3.5	2	1.9	0.1	0	0.0	0.0
Backbone-Sidechain	486	16.2	15	3.1	0.5	0	0.0	0.0
Sidechain-Sidechain	513	17.1	11	2.1	0.4	1	0.2	0.0
Inter-chain	56	1.9	8	14.3	0.3	0	0.0	0.0
Backbone-Backbone	0	0.0	0	0.0	0.0	0	0.0	0.0
Backbone-Sidechain	5	0.2	0	0.0	0.0	0	0.0	0.0
Sidechain-Sidechain	51	1.7	8	15.7	0.3	0	0.0	0.0
Hydrogen bond	0	0.0	0	0.0	0.0	0	0.0	0.0
Disulfide bond	0	0.0	0	0.0	0.0	0	0.0	0.0
Total	2999	100.0	99	3.3	3.3	5	0.2	0.2
Backbone-Backbone	449	15.0	13	2.9	0.4	0	0.0	0.0
Backbone-Sidechain	1629	54.3	49	3.0	1.6	4	0.2	0.1
Sidechain-Sidechain	921	30.7	37	4.0	1.2	1	0.1	0.0

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

9.1.1 Bar chart : Distribution of distance restraints and violations



Violated and consistently violated restraints are shown using different hatch patterns in their respective categories. The hydrogen bonds and disulfied bonds are counted in their appropriate category on the x-axis

9.2 Distance violation statistics for each model

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

Model ID	Number of violations						Mean (Å)	Max (Å)	SD[6] (Å)	Median (Å)
	IR[1]	SQ[2]	MR[3]	LR[4]	IC[5]	Total				
1	6	9	4	7	0	26	0.15	0.29	0.04	0.13
2	5	5	3	8	0	21	0.14	0.21	0.03	0.13
3	3	5	6	7	2	23	0.15	0.23	0.03	0.14
4	6	5	3	13	1	28	0.14	0.2	0.03	0.13
5	5	9	3	11	3	31	0.15	0.26	0.04	0.13
6	4	4	1	7	0	16	0.15	0.21	0.03	0.15
7	7	5	5	9	0	26	0.14	0.29	0.04	0.14
8	5	8	5	10	0	28	0.15	0.29	0.04	0.14
9	4	4	3	10	0	21	0.15	0.22	0.03	0.14
10	5	4	1	7	1	18	0.15	0.29	0.05	0.13
11	4	7	4	7	1	23	0.14	0.23	0.03	0.14

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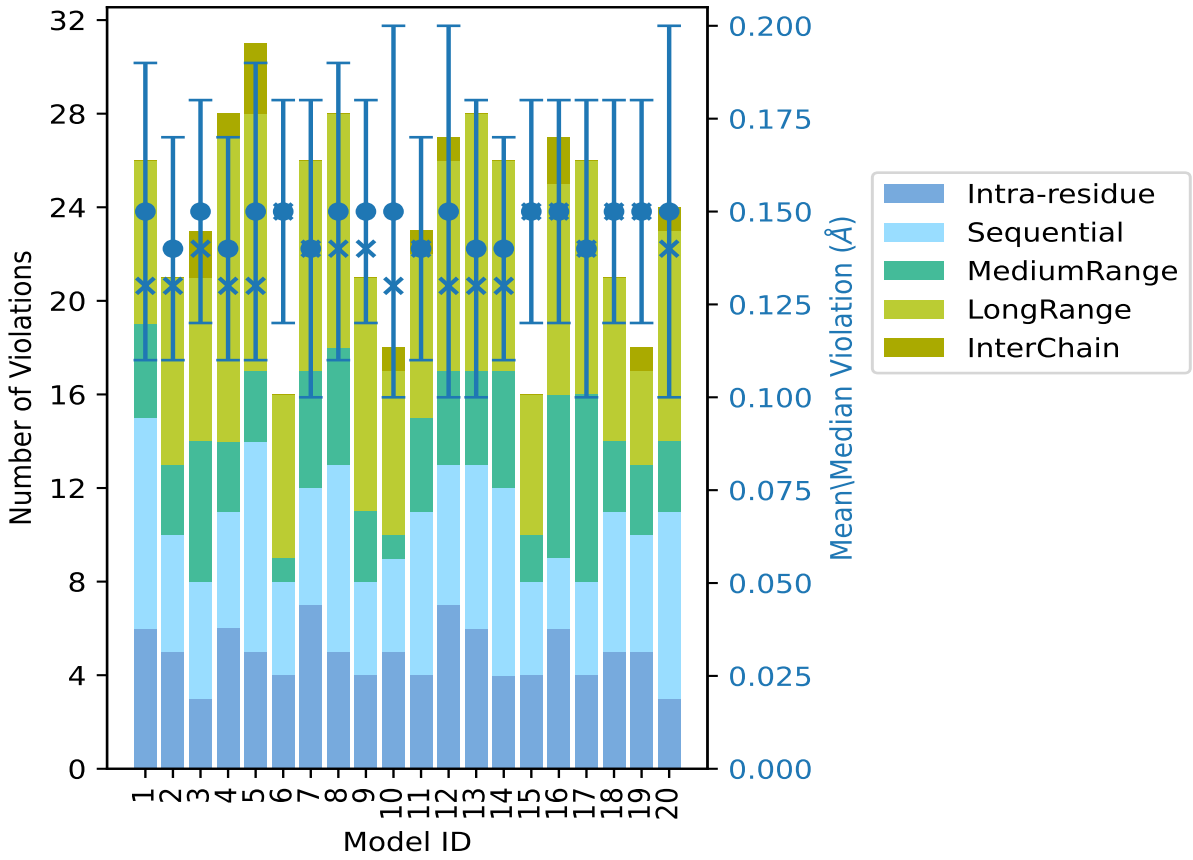
Model ID	Number of violations						Mean (Å)	Max (Å)	SD[6] (Å)	Median (Å)
	IR[1]	SQ[2]	MR[3]	LR[4]	IC[5]	Total				
12	7	6	4	9	1	27	0.15	0.3	0.05	0.13
13	6	7	4	11	0	28	0.14	0.28	0.04	0.13
14	4	8	5	9	0	26	0.14	0.2	0.03	0.13
15	4	4	2	6	0	16	0.15	0.22	0.03	0.15
16	6	3	7	9	2	27	0.15	0.22	0.03	0.15
17	4	4	8	10	0	26	0.14	0.28	0.04	0.14
18	5	6	3	7	0	21	0.15	0.2	0.03	0.15
19	5	5	3	4	1	18	0.15	0.21	0.03	0.15
20	3	8	3	9	1	24	0.15	0.29	0.05	0.14

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

9.2.1 Bar graph : Distance Violation statistics for each model



The mean(dot),median(x) and the standard deviation are shown in blue with respect to the y axis on the right

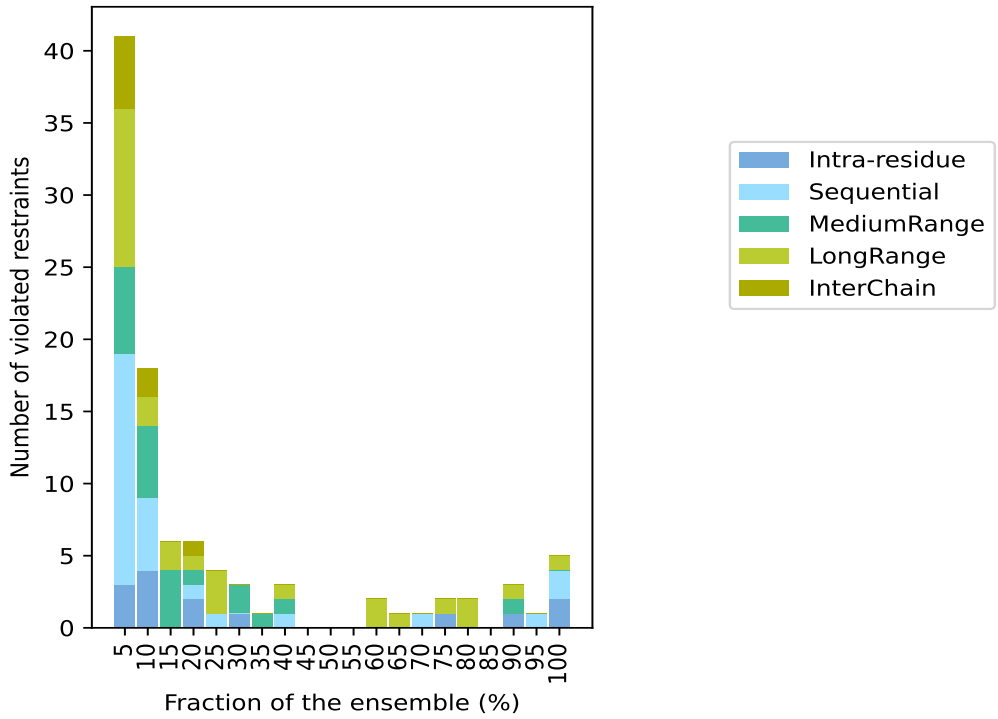
9.3 Distance violation statistics for the ensemble (i)

Violation analysis may find that some restraints are violated in few models and some are violated in most of models. The following table provides this information as number of violated restraints for a given fraction of the ensemble. In total, 2900(IR:535, SQ:702, MR:538, LR:1077, IC:48) restraints are not violated in the ensemble.

Number of violated restraints						Fraction of the ensemble	
IR[1]	SQ[2]	MR[3]	LR[4]	IC[5]	Total	Count[6]	%
3	16	6	11	5	41	1	5.0
4	5	5	2	2	18	2	10.0
0	0	4	2	0	6	3	15.0
2	1	1	1	1	6	4	20.0
0	1	0	3	0	4	5	25.0
1	0	2	0	0	3	6	30.0
0	0	1	0	0	1	7	35.0
0	1	1	1	0	3	8	40.0
0	0	0	0	0	0	9	45.0
0	0	0	0	0	0	10	50.0
0	0	0	0	0	0	11	55.0
0	0	0	2	0	2	12	60.0
0	0	0	1	0	1	13	65.0
0	1	0	0	0	1	14	70.0
1	0	0	1	0	2	15	75.0
0	0	0	2	0	2	16	80.0
0	0	0	0	0	0	17	85.0
1	0	1	1	0	3	18	90.0
0	1	0	0	0	1	19	95.0
2	2	0	1	0	5	20	100.0

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

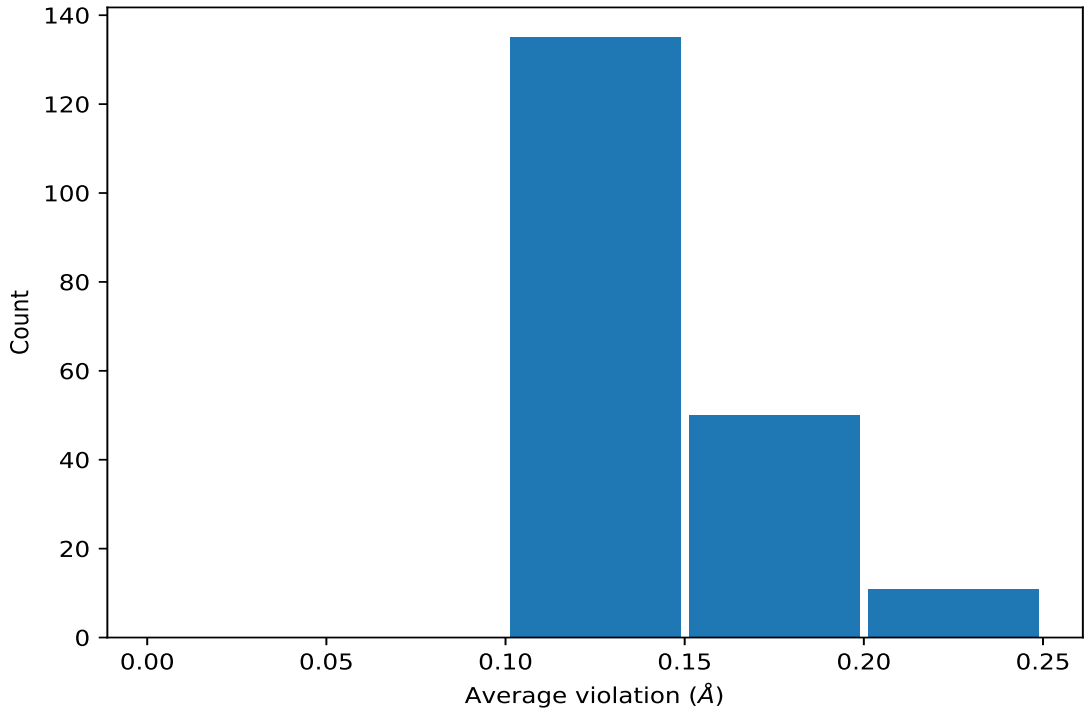
9.3.1 Bar graph : Distance violation statistics for the ensemble



9.4 Most violated distance restraints in the ensemble

9.4.1 Histogram : Distribution of mean distance violations

The following histogram shows the distribution of the average value of the violation. The average is calculated for each restraint that is violated in more than one model over all the violated models in the ensemble



9.4.2 Table: Most violated distance restraints

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

Key	Atom-1	Atom-2	Models[1]	Mean (Å)	SD[1] (Å)	Median (Å)
(1,2424)	1:A:670:LEU:HD11	1:A:671:TRP:HA	20	0.2	0.06	0.17
(1,2424)	1:A:670:LEU:HD12	1:A:671:TRP:HA	20	0.2	0.06	0.17
(1,2424)	1:A:670:LEU:HD13	1:A:671:TRP:HA	20	0.2	0.06	0.17
(1,2424)	1:A:670:LEU:HD21	1:A:671:TRP:HA	20	0.2	0.06	0.17
(1,2424)	1:A:670:LEU:HD22	1:A:671:TRP:HA	20	0.2	0.06	0.17
(1,2424)	1:A:670:LEU:HD23	1:A:671:TRP:HA	20	0.2	0.06	0.17
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD11	20	0.2	0.05	0.2
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD12	20	0.2	0.05	0.2
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD13	20	0.2	0.05	0.2
(1,332)	1:A:686:ALA:HB1	1:A:710:LYS:HD3	20	0.18	0.01	0.18
(1,332)	1:A:686:ALA:HB2	1:A:710:LYS:HD3	20	0.18	0.01	0.18
(1,332)	1:A:686:ALA:HB3	1:A:710:LYS:HD3	20	0.18	0.01	0.18
(1,92)	1:A:670:LEU:HB3	1:A:671:TRP:HA	20	0.16	0.02	0.17
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD21	20	0.13	0.01	0.13
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD22	20	0.13	0.01	0.13
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD23	20	0.13	0.01	0.13

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Key	Atom-1	Atom-2	Models[1]	Mean (Å)	SD[1] (Å)	Median (Å)
(1,606)	1:A:730:THR:HB	1:A:731:GLU:HG3	19	0.19	0.04	0.21
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD11	18	0.15	0.02	0.15
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD12	18	0.15	0.02	0.15
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD13	18	0.15	0.02	0.15
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD21	18	0.15	0.02	0.15
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD22	18	0.15	0.02	0.15
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD23	18	0.15	0.02	0.15
(1,1944)	1:A:738:LEU:H	1:A:740:GLU:H	18	0.14	0.03	0.14
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD21	18	0.12	0.01	0.11
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD22	18	0.12	0.01	0.11
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD23	18	0.12	0.01	0.11
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD11	16	0.16	0.02	0.16
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD12	16	0.16	0.02	0.16
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD13	16	0.16	0.02	0.16
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD21	16	0.16	0.02	0.16
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD22	16	0.16	0.02	0.16
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD23	16	0.16	0.02	0.16
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD11	16	0.16	0.02	0.16
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD12	16	0.16	0.02	0.16
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD13	16	0.16	0.02	0.16
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD21	16	0.16	0.02	0.16
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD22	16	0.16	0.02	0.16
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD23	16	0.16	0.02	0.16
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD11	16	0.16	0.02	0.16
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD12	16	0.16	0.02	0.16
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD13	16	0.16	0.02	0.16
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD21	16	0.16	0.02	0.16
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD22	16	0.16	0.02	0.16
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD23	16	0.16	0.02	0.16
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD11	16	0.16	0.02	0.16
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD12	16	0.16	0.02	0.16
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD13	16	0.16	0.02	0.16
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD21	16	0.16	0.02	0.16
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD22	16	0.16	0.02	0.16
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD23	16	0.16	0.02	0.16
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD11	16	0.16	0.02	0.16
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD12	16	0.16	0.02	0.16
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD13	16	0.16	0.02	0.16
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD21	16	0.16	0.02	0.16
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD22	16	0.16	0.02	0.16
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD23	16	0.16	0.02	0.16
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD11	16	0.16	0.02	0.16

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Key	Atom-1	Atom-2	Models[1]	Mean (Å)	SD[1] (Å)	Median (Å)
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD12	16	0.16	0.02	0.16
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD13	16	0.16	0.02	0.16
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD21	16	0.16	0.02	0.16
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD22	16	0.16	0.02	0.16
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD23	16	0.16	0.02	0.16
(1,2082)	1:A:745:TYR:HD1	1:A:754:PHE:H	16	0.14	0.02	0.15
(1,2082)	1:A:745:TYR:HD2	1:A:754:PHE:H	16	0.14	0.02	0.15
(1,1116)	1:A:755:LYS:HA	1:A:755:LYS:HD2	15	0.16	0.04	0.15
(1,1116)	1:A:755:LYS:HA	1:A:755:LYS:HD3	15	0.16	0.04	0.15
(1,2213)	1:A:670:LEU:HB3	1:A:767:GLU:H	15	0.14	0.03	0.14
(1,1121)	1:A:755:LYS:HA	1:A:756:SER:HA	14	0.12	0.01	0.12
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD11	13	0.13	0.01	0.12
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD12	13	0.13	0.01	0.12
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD13	13	0.13	0.01	0.12
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD11	12	0.14	0.03	0.14
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD12	12	0.14	0.03	0.14
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD13	12	0.14	0.03	0.14
(1,797)	1:A:716:LYS:HD2	1:A:757:LEU:HG	12	0.12	0.01	0.12
(1,797)	1:A:716:LYS:HD3	1:A:757:LEU:HG	12	0.12	0.01	0.12
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD11	8	0.14	0.02	0.14
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD12	8	0.14	0.02	0.14
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD13	8	0.14	0.02	0.14
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD21	8	0.14	0.02	0.14
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD22	8	0.14	0.02	0.14
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD23	8	0.14	0.02	0.14
(1,1532)	1:A:765:PHE:H	1:A:766:LYS:HD2	8	0.13	0.01	0.13
(1,1532)	1:A:765:PHE:H	1:A:766:LYS:HD3	8	0.13	0.01	0.13
(1,2768)	1:A:728:ARG:HD2	1:A:730:THR:H	8	0.12	0.01	0.12
(1,2768)	1:A:728:ARG:HD3	1:A:730:THR:H	8	0.12	0.01	0.12
(1,1212)	1:A:765:PHE:HA	1:A:767:GLU:H	7	0.13	0.01	0.13
(1,336)	1:A:688:ARG:HA	1:A:688:ARG:HD3	6	0.18	0.01	0.18
(1,2071)	1:A:754:PHE:H	1:A:757:LEU:HD11	6	0.14	0.01	0.14
(1,2071)	1:A:754:PHE:H	1:A:757:LEU:HD12	6	0.14	0.01	0.14
(1,2071)	1:A:754:PHE:H	1:A:757:LEU:HD13	6	0.14	0.01	0.14
(1,307)	1:A:685:LEU:HA	1:A:688:ARG:HD2	6	0.14	0.02	0.13
(1,851)	1:A:670:LEU:HG	1:A:767:GLU:HA	5	0.16	0.01	0.16
(1,1627)	1:A:707:ILE:H	1:A:718:ILE:HD11	5	0.13	0.01	0.12
(1,1627)	1:A:707:ILE:H	1:A:718:ILE:HD12	5	0.13	0.01	0.12
(1,1627)	1:A:707:ILE:H	1:A:718:ILE:HD13	5	0.13	0.01	0.12
(1,654)	1:A:706:ALA:HB1	1:A:717:HIS:HA	5	0.13	0.01	0.13
(1,654)	1:A:706:ALA:HB2	1:A:717:HIS:HA	5	0.13	0.01	0.13
(1,654)	1:A:706:ALA:HB3	1:A:717:HIS:HA	5	0.13	0.01	0.13

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Key	Atom-1	Atom-2	Models[1]	Mean (Å)	SD[1] (Å)	Median (Å)
(1,257)	1:A:682:GLU:HA	1:A:683:SER:HA	5	0.11	0.0	0.11
(1,2979)	1:A:678:ARG:HB2	2:B:340:GLU:HG2	4	0.18	0.04	0.2
(1,2979)	1:A:678:ARG:HB2	2:B:340:GLU:HG3	4	0.18	0.04	0.2
(1,2979)	1:A:678:ARG:HB3	2:B:340:GLU:HG2	4	0.18	0.04	0.2
(1,2979)	1:A:678:ARG:HB3	2:B:340:GLU:HG3	4	0.18	0.04	0.2
(1,2376)	1:A:664:GLN:HB2	1:A:666:LEU:HD11	4	0.15	0.02	0.14
(1,2376)	1:A:664:GLN:HB2	1:A:666:LEU:HD12	4	0.15	0.02	0.14
(1,2376)	1:A:664:GLN:HB2	1:A:666:LEU:HD13	4	0.15	0.02	0.14
(1,2376)	1:A:664:GLN:HB2	1:A:666:LEU:HD21	4	0.15	0.02	0.14
(1,2376)	1:A:664:GLN:HB2	1:A:666:LEU:HD22	4	0.15	0.02	0.14
(1,2376)	1:A:664:GLN:HB2	1:A:666:LEU:HD23	4	0.15	0.02	0.14
(1,2376)	1:A:664:GLN:HB3	1:A:666:LEU:HD11	4	0.15	0.02	0.14
(1,2376)	1:A:664:GLN:HB3	1:A:666:LEU:HD12	4	0.15	0.02	0.14
(1,2376)	1:A:664:GLN:HB3	1:A:666:LEU:HD13	4	0.15	0.02	0.14
(1,2376)	1:A:664:GLN:HB3	1:A:666:LEU:HD21	4	0.15	0.02	0.14
(1,2376)	1:A:664:GLN:HB3	1:A:666:LEU:HD22	4	0.15	0.02	0.14
(1,2376)	1:A:664:GLN:HB3	1:A:666:LEU:HD23	4	0.15	0.02	0.14
(1,916)	1:A:736:ARG:HA	1:A:736:ARG:HD2	4	0.14	0.01	0.14
(1,2227)	1:A:727:TYR:HE1	1:A:738:LEU:HD21	4	0.13	0.02	0.12
(1,2227)	1:A:727:TYR:HE1	1:A:738:LEU:HD22	4	0.13	0.02	0.12
(1,2227)	1:A:727:TYR:HE1	1:A:738:LEU:HD23	4	0.13	0.02	0.12
(1,2227)	1:A:727:TYR:HE2	1:A:738:LEU:HD21	4	0.13	0.02	0.12
(1,2227)	1:A:727:TYR:HE2	1:A:738:LEU:HD22	4	0.13	0.02	0.12
(1,2227)	1:A:727:TYR:HE2	1:A:738:LEU:HD23	4	0.13	0.02	0.12
(1,2207)	1:A:767:GLU:H	1:A:767:GLU:HG2	4	0.13	0.02	0.13
(1,1723)	1:A:717:HIS:H	1:A:718:ILE:H	4	0.11	0.0	0.11
(1,499)	1:A:709:ILE:HD11	1:A:711:TYR:HD1	3	0.15	0.02	0.14
(1,499)	1:A:709:ILE:HD11	1:A:711:TYR:HD2	3	0.15	0.02	0.14
(1,499)	1:A:709:ILE:HD12	1:A:711:TYR:HD1	3	0.15	0.02	0.14
(1,499)	1:A:709:ILE:HD12	1:A:711:TYR:HD2	3	0.15	0.02	0.14
(1,499)	1:A:709:ILE:HD13	1:A:711:TYR:HD1	3	0.15	0.02	0.14
(1,499)	1:A:709:ILE:HD13	1:A:711:TYR:HD2	3	0.15	0.02	0.14
(1,220)	1:A:677:GLU:HB2	1:A:679:ALA:HB1	3	0.14	0.02	0.15
(1,220)	1:A:677:GLU:HB2	1:A:679:ALA:HB2	3	0.14	0.02	0.15
(1,220)	1:A:677:GLU:HB2	1:A:679:ALA:HB3	3	0.14	0.02	0.15
(1,2790)	1:A:736:ARG:HD2	1:A:740:GLU:HG2	3	0.13	0.02	0.14
(1,2790)	1:A:736:ARG:HD2	1:A:740:GLU:HG3	3	0.13	0.02	0.14
(1,2790)	1:A:736:ARG:HD3	1:A:740:GLU:HG2	3	0.13	0.02	0.14
(1,2790)	1:A:736:ARG:HD3	1:A:740:GLU:HG3	3	0.13	0.02	0.14
(1,825)	1:A:729:ILE:HG21	1:A:754:PHE:HA	3	0.12	0.01	0.12
(1,825)	1:A:729:ILE:HG22	1:A:754:PHE:HA	3	0.12	0.01	0.12
(1,825)	1:A:729:ILE:HG23	1:A:754:PHE:HA	3	0.12	0.01	0.12

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Key	Atom-1	Atom-2	Models[1]	Mean (Å)	SD[1] (Å)	Median (Å)
(1,2426)	1:A:670:LEU:HD11	1:A:672:TYR:H	3	0.12	0.01	0.12
(1,2426)	1:A:670:LEU:HD12	1:A:672:TYR:H	3	0.12	0.01	0.12
(1,2426)	1:A:670:LEU:HD13	1:A:672:TYR:H	3	0.12	0.01	0.12
(1,2426)	1:A:670:LEU:HD21	1:A:672:TYR:H	3	0.12	0.01	0.12
(1,2426)	1:A:670:LEU:HD22	1:A:672:TYR:H	3	0.12	0.01	0.12
(1,2426)	1:A:670:LEU:HD23	1:A:672:TYR:H	3	0.12	0.01	0.12
(1,2575)	1:A:690:ASP:HB2	1:A:762:GLN:HG2	3	0.11	0.0	0.11
(1,2575)	1:A:690:ASP:HB2	1:A:762:GLN:HG3	3	0.11	0.0	0.11
(1,2575)	1:A:690:ASP:HB3	1:A:762:GLN:HG2	3	0.11	0.0	0.11
(1,2575)	1:A:690:ASP:HB3	1:A:762:GLN:HG3	3	0.11	0.0	0.11
(1,556)	1:A:751:LYS:HG3	1:A:751:LYS:HE2	2	0.2	0.01	0.2
(1,556)	1:A:751:LYS:HG3	1:A:751:LYS:HE3	2	0.2	0.01	0.2
(1,1484)	1:A:688:ARG:H	1:A:688:ARG:HD3	2	0.18	0.02	0.18
(1,2974)	1:A:718:ILE:HD11	2:B:347:ALA:HB1	2	0.15	0.04	0.15
(1,2974)	1:A:718:ILE:HD11	2:B:347:ALA:HB2	2	0.15	0.04	0.15
(1,2974)	1:A:718:ILE:HD11	2:B:347:ALA:HB3	2	0.15	0.04	0.15
(1,2974)	1:A:718:ILE:HD12	2:B:347:ALA:HB1	2	0.15	0.04	0.15
(1,2974)	1:A:718:ILE:HD12	2:B:347:ALA:HB2	2	0.15	0.04	0.15
(1,2974)	1:A:718:ILE:HD12	2:B:347:ALA:HB3	2	0.15	0.04	0.15
(1,2974)	1:A:718:ILE:HD13	2:B:347:ALA:HB1	2	0.15	0.04	0.15
(1,2974)	1:A:718:ILE:HD13	2:B:347:ALA:HB2	2	0.15	0.04	0.15
(1,2974)	1:A:718:ILE:HD13	2:B:347:ALA:HB3	2	0.15	0.04	0.15
(1,2981)	1:A:716:LYS:HG2	2:B:345:PRO:HG2	2	0.15	0.04	0.15
(1,2981)	1:A:716:LYS:HG2	2:B:345:PRO:HG3	2	0.15	0.04	0.15
(1,2981)	1:A:716:LYS:HG3	2:B:345:PRO:HG2	2	0.15	0.04	0.15
(1,2981)	1:A:716:LYS:HG3	2:B:345:PRO:HG3	2	0.15	0.04	0.15
(1,2076)	1:A:752:ASP:HB2	1:A:754:PHE:H	2	0.15	0.03	0.15
(1,2076)	1:A:752:ASP:HB3	1:A:754:PHE:H	2	0.15	0.03	0.15
(1,2470)	1:A:678:ARG:HG2	1:A:679:ALA:HA	2	0.14	0.02	0.14
(1,2470)	1:A:678:ARG:HG3	1:A:679:ALA:HA	2	0.14	0.02	0.14
(1,2778)	1:A:732:LYS:HB3	1:A:732:LYS:HE2	2	0.14	0.01	0.14
(1,2778)	1:A:732:LYS:HB3	1:A:732:LYS:HE3	2	0.14	0.01	0.14
(1,1262)	1:A:668:VAL:H	1:A:669:HIS:HD2	2	0.14	0.01	0.14
(1,2498)	1:A:682:GLU:HG2	1:A:715:VAL:H	2	0.14	0.02	0.14
(1,2498)	1:A:682:GLU:HG3	1:A:715:VAL:H	2	0.14	0.02	0.14
(1,2469)	1:A:678:ARG:HG2	1:A:679:ALA:H	2	0.13	0.01	0.13
(1,2469)	1:A:678:ARG:HG3	1:A:679:ALA:H	2	0.13	0.01	0.13
(1,2425)	1:A:670:LEU:HD11	1:A:671:TRP:HZ2	2	0.12	0.02	0.12
(1,2425)	1:A:670:LEU:HD12	1:A:671:TRP:HZ2	2	0.12	0.02	0.12
(1,2425)	1:A:670:LEU:HD13	1:A:671:TRP:HZ2	2	0.12	0.02	0.12
(1,2425)	1:A:670:LEU:HD21	1:A:671:TRP:HZ2	2	0.12	0.02	0.12
(1,2425)	1:A:670:LEU:HD22	1:A:671:TRP:HZ2	2	0.12	0.02	0.12

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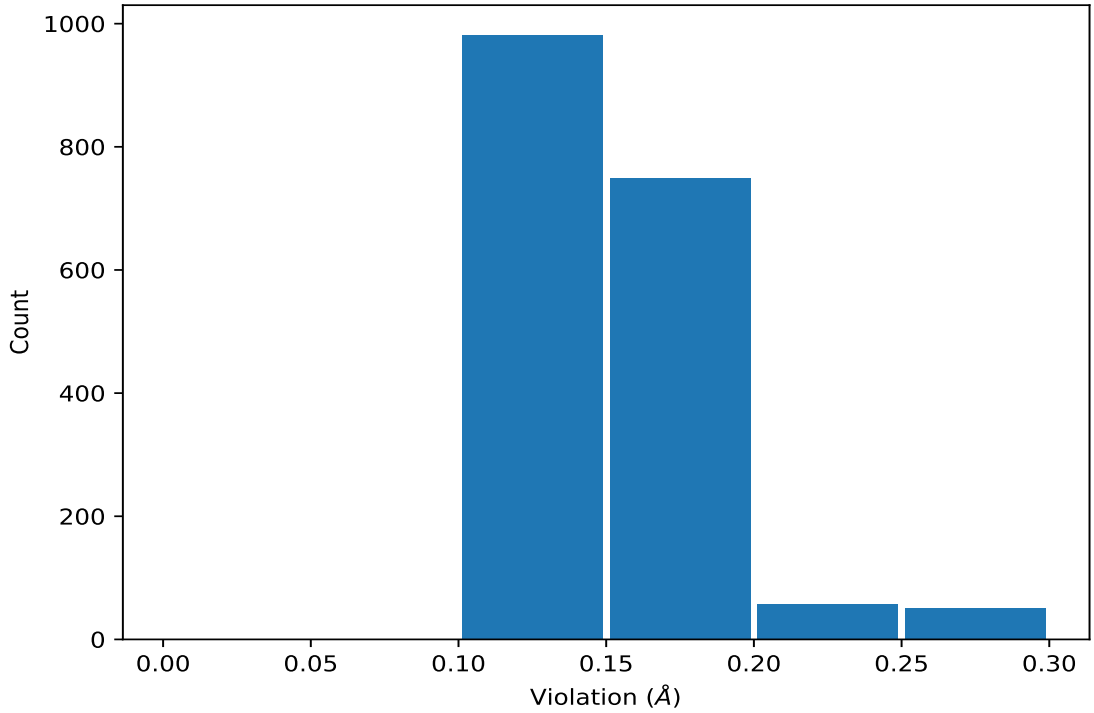
Key	Atom-1	Atom-2	Models[1]	Mean (Å)	SD[1] (Å)	Median (Å)
(1,2425)	1:A:670:LEU:HD23	1:A:671:TRP:HZ2	2	0.12	0.02	0.12
(1,170)	1:A:676:MET:HG2	1:A:680:GLY:H	2	0.12	0.01	0.12
(1,1268)	1:A:668:VAL:HA	1:A:669:HIS:H	2	0.12	0.0	0.12
(1,157)	1:A:764:PRO:HG3	1:A:766:LYS:H	2	0.12	0.0	0.12
(1,867)	1:A:714:GLU:HB2	1:A:716:LYS:HD2	2	0.12	0.0	0.12
(1,867)	1:A:714:GLU:HB2	1:A:716:LYS:HD3	2	0.12	0.0	0.12
(1,1408)	1:A:678:ARG:HA	1:A:680:GLY:H	2	0.12	0.0	0.12
(1,1222)	1:A:766:LYS:HA	1:A:766:LYS:HD2	2	0.11	0.0	0.11
(1,1222)	1:A:766:LYS:HA	1:A:766:LYS:HD3	2	0.11	0.0	0.11
(1,1614)	1:A:706:ALA:H	1:A:720:ILE:HD11	2	0.11	0.0	0.11
(1,1614)	1:A:706:ALA:H	1:A:720:ILE:HD12	2	0.11	0.0	0.11
(1,1614)	1:A:706:ALA:H	1:A:720:ILE:HD13	2	0.11	0.0	0.11

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

9.5 All violated distance restraints (i)

9.5.1 Histogram : Distribution of distance violations (i)

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



9.5.2 Table : All distance violations (i)

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

Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD11	12	0.3
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD12	12	0.3
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD13	12	0.3
(1,2424)	1:A:670:LEU:HD11	1:A:671:TRP:HA	1	0.29
(1,2424)	1:A:670:LEU:HD12	1:A:671:TRP:HA	1	0.29
(1,2424)	1:A:670:LEU:HD13	1:A:671:TRP:HA	1	0.29
(1,2424)	1:A:670:LEU:HD21	1:A:671:TRP:HA	1	0.29
(1,2424)	1:A:670:LEU:HD22	1:A:671:TRP:HA	1	0.29
(1,2424)	1:A:670:LEU:HD23	1:A:671:TRP:HA	1	0.29
(1,2424)	1:A:670:LEU:HD11	1:A:671:TRP:HA	7	0.29
(1,2424)	1:A:670:LEU:HD12	1:A:671:TRP:HA	7	0.29
(1,2424)	1:A:670:LEU:HD13	1:A:671:TRP:HA	7	0.29
(1,2424)	1:A:670:LEU:HD21	1:A:671:TRP:HA	7	0.29
(1,2424)	1:A:670:LEU:HD22	1:A:671:TRP:HA	7	0.29
(1,2424)	1:A:670:LEU:HD23	1:A:671:TRP:HA	7	0.29
(1,2424)	1:A:670:LEU:HD11	1:A:671:TRP:HA	8	0.29
(1,2424)	1:A:670:LEU:HD12	1:A:671:TRP:HA	8	0.29
(1,2424)	1:A:670:LEU:HD13	1:A:671:TRP:HA	8	0.29
(1,2424)	1:A:670:LEU:HD21	1:A:671:TRP:HA	8	0.29
(1,2424)	1:A:670:LEU:HD22	1:A:671:TRP:HA	8	0.29
(1,2424)	1:A:670:LEU:HD23	1:A:671:TRP:HA	8	0.29
(1,2424)	1:A:670:LEU:HD11	1:A:671:TRP:HA	20	0.29
(1,2424)	1:A:670:LEU:HD12	1:A:671:TRP:HA	20	0.29
(1,2424)	1:A:670:LEU:HD13	1:A:671:TRP:HA	20	0.29
(1,2424)	1:A:670:LEU:HD21	1:A:671:TRP:HA	20	0.29
(1,2424)	1:A:670:LEU:HD22	1:A:671:TRP:HA	20	0.29
(1,2424)	1:A:670:LEU:HD23	1:A:671:TRP:HA	20	0.29
(1,1116)	1:A:755:LYS:HA	1:A:755:LYS:HD2	10	0.29
(1,1116)	1:A:755:LYS:HA	1:A:755:LYS:HD3	10	0.29
(1,2424)	1:A:670:LEU:HD11	1:A:671:TRP:HA	17	0.28
(1,2424)	1:A:670:LEU:HD12	1:A:671:TRP:HA	17	0.28
(1,2424)	1:A:670:LEU:HD13	1:A:671:TRP:HA	17	0.28
(1,2424)	1:A:670:LEU:HD21	1:A:671:TRP:HA	17	0.28
(1,2424)	1:A:670:LEU:HD22	1:A:671:TRP:HA	17	0.28
(1,2424)	1:A:670:LEU:HD23	1:A:671:TRP:HA	17	0.28
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD11	10	0.28
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD12	10	0.28

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD13	10	0.28
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD11	13	0.28
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD12	13	0.28
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD13	13	0.28
(1,2424)	1:A:670:LEU:HD11	1:A:671:TRP:HA	12	0.26
(1,2424)	1:A:670:LEU:HD12	1:A:671:TRP:HA	12	0.26
(1,2424)	1:A:670:LEU:HD13	1:A:671:TRP:HA	12	0.26
(1,2424)	1:A:670:LEU:HD21	1:A:671:TRP:HA	12	0.26
(1,2424)	1:A:670:LEU:HD22	1:A:671:TRP:HA	12	0.26
(1,2424)	1:A:670:LEU:HD23	1:A:671:TRP:HA	12	0.26
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD11	5	0.26
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD12	5	0.26
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD13	5	0.26
(1,606)	1:A:730:THR:HB	1:A:731:GLU:HG3	20	0.25
(1,606)	1:A:730:THR:HB	1:A:731:GLU:HG3	1	0.24
(1,2424)	1:A:670:LEU:HD11	1:A:671:TRP:HA	5	0.24
(1,2424)	1:A:670:LEU:HD12	1:A:671:TRP:HA	5	0.24
(1,2424)	1:A:670:LEU:HD13	1:A:671:TRP:HA	5	0.24
(1,2424)	1:A:670:LEU:HD21	1:A:671:TRP:HA	5	0.24
(1,2424)	1:A:670:LEU:HD22	1:A:671:TRP:HA	5	0.24
(1,2424)	1:A:670:LEU:HD23	1:A:671:TRP:HA	5	0.24
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD11	20	0.24
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD12	20	0.24
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD13	20	0.24
(1,606)	1:A:730:THR:HB	1:A:731:GLU:HG3	11	0.23
(1,2979)	1:A:678:ARG:HB2	2:B:340:GLU:HG2	3	0.23
(1,2979)	1:A:678:ARG:HB2	2:B:340:GLU:HG3	3	0.23
(1,2979)	1:A:678:ARG:HB3	2:B:340:GLU:HG2	3	0.23
(1,2979)	1:A:678:ARG:HB3	2:B:340:GLU:HG3	3	0.23
(1,606)	1:A:730:THR:HB	1:A:731:GLU:HG3	9	0.22
(1,606)	1:A:730:THR:HB	1:A:731:GLU:HG3	16	0.22
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD11	1	0.22
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD12	1	0.22
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD13	1	0.22
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD11	9	0.22
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD12	9	0.22
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD13	9	0.22
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD11	15	0.22
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD12	15	0.22
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD13	15	0.22
(1,606)	1:A:730:THR:HB	1:A:731:GLU:HG3	2	0.21
(1,606)	1:A:730:THR:HB	1:A:731:GLU:HG3	6	0.21

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,606)	1:A:730:THR:HB	1:A:731:GLU:HG3	12	0.21
(1,606)	1:A:730:THR:HB	1:A:731:GLU:HG3	13	0.21
(1,606)	1:A:730:THR:HB	1:A:731:GLU:HG3	19	0.21
(1,2213)	1:A:670:LEU:HB3	1:A:767:GLU:H	5	0.21
(1,1944)	1:A:738:LEU:H	1:A:740:GLU:H	13	0.21
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD11	4	0.2
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD12	4	0.2
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD13	4	0.2
(1,606)	1:A:730:THR:HB	1:A:731:GLU:HG3	3	0.2
(1,606)	1:A:730:THR:HB	1:A:731:GLU:HG3	14	0.2
(1,606)	1:A:730:THR:HB	1:A:731:GLU:HG3	18	0.2
(1,556)	1:A:751:LYS:HG3	1:A:751:LYS:HE2	14	0.2
(1,556)	1:A:751:LYS:HG3	1:A:751:LYS:HE3	14	0.2
(1,332)	1:A:686:ALA:HB1	1:A:710:LYS:HD3	6	0.2
(1,332)	1:A:686:ALA:HB2	1:A:710:LYS:HD3	6	0.2
(1,332)	1:A:686:ALA:HB3	1:A:710:LYS:HD3	6	0.2
(1,332)	1:A:686:ALA:HB1	1:A:710:LYS:HD3	14	0.2
(1,332)	1:A:686:ALA:HB2	1:A:710:LYS:HD3	14	0.2
(1,332)	1:A:686:ALA:HB3	1:A:710:LYS:HD3	14	0.2
(1,2979)	1:A:678:ARG:HB2	2:B:340:GLU:HG2	16	0.2
(1,2979)	1:A:678:ARG:HB2	2:B:340:GLU:HG3	16	0.2
(1,2979)	1:A:678:ARG:HB3	2:B:340:GLU:HG2	16	0.2
(1,2979)	1:A:678:ARG:HB3	2:B:340:GLU:HG3	16	0.2
(1,2213)	1:A:670:LEU:HB3	1:A:767:GLU:H	8	0.2
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD11	11	0.2
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD12	11	0.2
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD13	11	0.2
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD11	16	0.2
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD12	16	0.2
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD13	16	0.2
(1,92)	1:A:670:LEU:HB3	1:A:671:TRP:HA	18	0.19
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD11	19	0.19
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD12	19	0.19
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD13	19	0.19
(1,556)	1:A:751:LYS:HG3	1:A:751:LYS:HE2	19	0.19
(1,556)	1:A:751:LYS:HG3	1:A:751:LYS:HE3	19	0.19
(1,336)	1:A:688:ARG:HA	1:A:688:ARG:HD3	15	0.19
(1,332)	1:A:686:ALA:HB1	1:A:710:LYS:HD3	2	0.19
(1,332)	1:A:686:ALA:HB2	1:A:710:LYS:HD3	2	0.19
(1,332)	1:A:686:ALA:HB3	1:A:710:LYS:HD3	2	0.19
(1,332)	1:A:686:ALA:HB1	1:A:710:LYS:HD3	3	0.19
(1,332)	1:A:686:ALA:HB2	1:A:710:LYS:HD3	3	0.19

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,332)	1:A:686:ALA:HB3	1:A:710:LYS:HD3	3	0.19
(1,332)	1:A:686:ALA:HB1	1:A:710:LYS:HD3	7	0.19
(1,332)	1:A:686:ALA:HB2	1:A:710:LYS:HD3	7	0.19
(1,332)	1:A:686:ALA:HB3	1:A:710:LYS:HD3	7	0.19
(1,332)	1:A:686:ALA:HB1	1:A:710:LYS:HD3	11	0.19
(1,332)	1:A:686:ALA:HB2	1:A:710:LYS:HD3	11	0.19
(1,332)	1:A:686:ALA:HB3	1:A:710:LYS:HD3	11	0.19
(1,332)	1:A:686:ALA:HB1	1:A:710:LYS:HD3	13	0.19
(1,332)	1:A:686:ALA:HB2	1:A:710:LYS:HD3	13	0.19
(1,332)	1:A:686:ALA:HB3	1:A:710:LYS:HD3	13	0.19
(1,332)	1:A:686:ALA:HB1	1:A:710:LYS:HD3	15	0.19
(1,332)	1:A:686:ALA:HB2	1:A:710:LYS:HD3	15	0.19
(1,332)	1:A:686:ALA:HB3	1:A:710:LYS:HD3	15	0.19
(1,2981)	1:A:716:LYS:HG2	2:B:345:PRO:HG2	5	0.19
(1,2981)	1:A:716:LYS:HG2	2:B:345:PRO:HG3	5	0.19
(1,2981)	1:A:716:LYS:HG3	2:B:345:PRO:HG2	5	0.19
(1,2981)	1:A:716:LYS:HG3	2:B:345:PRO:HG3	5	0.19
(1,2979)	1:A:678:ARG:HB2	2:B:340:GLU:HG2	20	0.19
(1,2979)	1:A:678:ARG:HB2	2:B:340:GLU:HG3	20	0.19
(1,2979)	1:A:678:ARG:HB3	2:B:340:GLU:HG2	20	0.19
(1,2979)	1:A:678:ARG:HB3	2:B:340:GLU:HG3	20	0.19
(1,2974)	1:A:718:ILE:HD11	2:B:347:ALA:HB1	4	0.19
(1,2974)	1:A:718:ILE:HD11	2:B:347:ALA:HB2	4	0.19
(1,2974)	1:A:718:ILE:HD11	2:B:347:ALA:HB3	4	0.19
(1,2974)	1:A:718:ILE:HD12	2:B:347:ALA:HB1	4	0.19
(1,2974)	1:A:718:ILE:HD12	2:B:347:ALA:HB2	4	0.19
(1,2974)	1:A:718:ILE:HD12	2:B:347:ALA:HB3	4	0.19
(1,2974)	1:A:718:ILE:HD13	2:B:347:ALA:HB1	4	0.19
(1,2974)	1:A:718:ILE:HD13	2:B:347:ALA:HB2	4	0.19
(1,2974)	1:A:718:ILE:HD13	2:B:347:ALA:HB3	4	0.19
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD11	6	0.19
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD12	6	0.19
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD13	6	0.19
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD21	6	0.19
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD22	6	0.19
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD23	6	0.19
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD11	8	0.19
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD12	8	0.19
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD13	8	0.19
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD21	8	0.19
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD22	8	0.19
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD23	8	0.19

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD11	14	0.19
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD12	14	0.19
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD13	14	0.19
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD21	14	0.19
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD22	14	0.19
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD23	14	0.19
(1,2376)	1:A:664:GLN:HB2	1:A:666:LEU:HD11	9	0.19
(1,2376)	1:A:664:GLN:HB2	1:A:666:LEU:HD12	9	0.19
(1,2376)	1:A:664:GLN:HB2	1:A:666:LEU:HD13	9	0.19
(1,2376)	1:A:664:GLN:HB2	1:A:666:LEU:HD21	9	0.19
(1,2376)	1:A:664:GLN:HB2	1:A:666:LEU:HD22	9	0.19
(1,2376)	1:A:664:GLN:HB2	1:A:666:LEU:HD23	9	0.19
(1,2376)	1:A:664:GLN:HB3	1:A:666:LEU:HD11	9	0.19
(1,2376)	1:A:664:GLN:HB3	1:A:666:LEU:HD12	9	0.19
(1,2376)	1:A:664:GLN:HB3	1:A:666:LEU:HD13	9	0.19
(1,2376)	1:A:664:GLN:HB3	1:A:666:LEU:HD21	9	0.19
(1,2376)	1:A:664:GLN:HB3	1:A:666:LEU:HD22	9	0.19
(1,2376)	1:A:664:GLN:HB3	1:A:666:LEU:HD23	9	0.19
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD11	8	0.19
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD12	8	0.19
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD13	8	0.19
(1,2082)	1:A:745:TYR:HD1	1:A:754:PHE:H	14	0.19
(1,2082)	1:A:745:TYR:HD2	1:A:754:PHE:H	14	0.19
(1,1484)	1:A:688:ARG:H	1:A:688:ARG:HD3	12	0.19
(1,92)	1:A:670:LEU:HB3	1:A:671:TRP:HA	2	0.18
(1,92)	1:A:670:LEU:HB3	1:A:671:TRP:HA	10	0.18
(1,92)	1:A:670:LEU:HB3	1:A:671:TRP:HA	16	0.18
(1,92)	1:A:670:LEU:HB3	1:A:671:TRP:HA	19	0.18
(1,851)	1:A:670:LEU:HG	1:A:767:GLU:HA	5	0.18
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD11	17	0.18
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD12	17	0.18
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD13	17	0.18
(1,606)	1:A:730:THR:HB	1:A:731:GLU:HG3	5	0.18
(1,606)	1:A:730:THR:HB	1:A:731:GLU:HG3	7	0.18
(1,499)	1:A:709:ILE:HD11	1:A:711:TYR:HD1	8	0.18
(1,499)	1:A:709:ILE:HD11	1:A:711:TYR:HD2	8	0.18
(1,499)	1:A:709:ILE:HD12	1:A:711:TYR:HD1	8	0.18
(1,499)	1:A:709:ILE:HD12	1:A:711:TYR:HD2	8	0.18
(1,499)	1:A:709:ILE:HD13	1:A:711:TYR:HD1	8	0.18
(1,499)	1:A:709:ILE:HD13	1:A:711:TYR:HD2	8	0.18
(1,336)	1:A:688:ARG:HA	1:A:688:ARG:HD3	3	0.18
(1,336)	1:A:688:ARG:HA	1:A:688:ARG:HD3	4	0.18

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,336)	1:A:688:ARG:HA	1:A:688:ARG:HD3	13	0.18
(1,332)	1:A:686:ALA:HB1	1:A:710:LYS:HD3	4	0.18
(1,332)	1:A:686:ALA:HB2	1:A:710:LYS:HD3	4	0.18
(1,332)	1:A:686:ALA:HB3	1:A:710:LYS:HD3	4	0.18
(1,332)	1:A:686:ALA:HB1	1:A:710:LYS:HD3	9	0.18
(1,332)	1:A:686:ALA:HB2	1:A:710:LYS:HD3	9	0.18
(1,332)	1:A:686:ALA:HB3	1:A:710:LYS:HD3	9	0.18
(1,332)	1:A:686:ALA:HB1	1:A:710:LYS:HD3	17	0.18
(1,332)	1:A:686:ALA:HB2	1:A:710:LYS:HD3	17	0.18
(1,332)	1:A:686:ALA:HB3	1:A:710:LYS:HD3	17	0.18
(1,332)	1:A:686:ALA:HB1	1:A:710:LYS:HD3	19	0.18
(1,332)	1:A:686:ALA:HB2	1:A:710:LYS:HD3	19	0.18
(1,332)	1:A:686:ALA:HB3	1:A:710:LYS:HD3	19	0.18
(1,332)	1:A:686:ALA:HB1	1:A:710:LYS:HD3	20	0.18
(1,332)	1:A:686:ALA:HB2	1:A:710:LYS:HD3	20	0.18
(1,332)	1:A:686:ALA:HB3	1:A:710:LYS:HD3	20	0.18
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD11	3	0.18
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD12	3	0.18
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD13	3	0.18
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD21	3	0.18
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD22	3	0.18
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD23	3	0.18
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD11	4	0.18
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD12	4	0.18
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD13	4	0.18
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD21	4	0.18
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD22	4	0.18
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD23	4	0.18
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD11	4	0.18
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD12	4	0.18
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD13	4	0.18
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD21	4	0.18
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD22	4	0.18
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD23	4	0.18
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD11	4	0.18
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD12	4	0.18
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD13	4	0.18
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD21	4	0.18
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD22	4	0.18
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD23	4	0.18
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD11	4	0.18
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD12	4	0.18

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD13	4	0.18
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD21	4	0.18
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD22	4	0.18
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD23	4	0.18
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD11	4	0.18
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD12	4	0.18
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD13	4	0.18
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD21	4	0.18
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD22	4	0.18
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD23	4	0.18
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD11	4	0.18
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD12	4	0.18
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD13	4	0.18
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD21	4	0.18
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD22	4	0.18
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD23	4	0.18
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD11	5	0.18
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD12	5	0.18
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD13	5	0.18
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD21	5	0.18
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD22	5	0.18
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD23	5	0.18
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD11	5	0.18
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD12	5	0.18
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD13	5	0.18
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD21	5	0.18
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD22	5	0.18
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD23	5	0.18
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD11	5	0.18
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD12	5	0.18
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD13	5	0.18
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD21	5	0.18
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD22	5	0.18
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD23	5	0.18
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD11	5	0.18
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD12	5	0.18
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD13	5	0.18
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD21	5	0.18
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD22	5	0.18
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD23	5	0.18
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD11	5	0.18
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD12	5	0.18

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD13	5	0.18
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD21	5	0.18
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD22	5	0.18
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD23	5	0.18
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD11	5	0.18
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD12	5	0.18
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD13	5	0.18
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD21	5	0.18
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD22	5	0.18
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD23	5	0.18
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD11	15	0.18
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD12	15	0.18
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD13	15	0.18
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD21	15	0.18
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD22	15	0.18
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD23	15	0.18
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD11	15	0.18
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD12	15	0.18
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD13	15	0.18
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD21	15	0.18
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD22	15	0.18
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD23	15	0.18
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD11	15	0.18
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD12	15	0.18
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD13	15	0.18
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD21	15	0.18
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD22	15	0.18
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD23	15	0.18
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD11	15	0.18
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD12	15	0.18
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD13	15	0.18
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD21	15	0.18
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD22	15	0.18
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD23	15	0.18
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD11	15	0.18
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD12	15	0.18
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD13	15	0.18
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD21	15	0.18
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD22	15	0.18
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD23	15	0.18
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD11	15	0.18
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD12	15	0.18

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD13	15	0.18
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD21	15	0.18
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD22	15	0.18
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD23	15	0.18
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD11	16	0.18
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD12	16	0.18
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD13	16	0.18
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD21	16	0.18
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD22	16	0.18
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD23	16	0.18
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD11	16	0.18
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD12	16	0.18
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD13	16	0.18
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD21	16	0.18
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD22	16	0.18
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD23	16	0.18
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD11	16	0.18
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD12	16	0.18
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD13	16	0.18
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD21	16	0.18
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD22	16	0.18
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD23	16	0.18
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD11	16	0.18
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD12	16	0.18
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD13	16	0.18
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD21	16	0.18
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD22	16	0.18
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD23	16	0.18
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD11	16	0.18
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD12	16	0.18
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD13	16	0.18
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD21	16	0.18
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD22	16	0.18
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD23	16	0.18
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD11	16	0.18
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD12	16	0.18
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD13	16	0.18
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD21	16	0.18
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD22	16	0.18
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD23	16	0.18
(1,2424)	1:A:670:LEU:HD11	1:A:671:TRP:HA	2	0.18
(1,2424)	1:A:670:LEU:HD12	1:A:671:TRP:HA	2	0.18

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2424)	1:A:670:LEU:HD13	1:A:671:TRP:HA	2	0.18
(1,2424)	1:A:670:LEU:HD21	1:A:671:TRP:HA	2	0.18
(1,2424)	1:A:670:LEU:HD22	1:A:671:TRP:HA	2	0.18
(1,2424)	1:A:670:LEU:HD23	1:A:671:TRP:HA	2	0.18
(1,2424)	1:A:670:LEU:HD11	1:A:671:TRP:HA	18	0.18
(1,2424)	1:A:670:LEU:HD12	1:A:671:TRP:HA	18	0.18
(1,2424)	1:A:670:LEU:HD13	1:A:671:TRP:HA	18	0.18
(1,2424)	1:A:670:LEU:HD21	1:A:671:TRP:HA	18	0.18
(1,2424)	1:A:670:LEU:HD22	1:A:671:TRP:HA	18	0.18
(1,2424)	1:A:670:LEU:HD23	1:A:671:TRP:HA	18	0.18
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD11	6	0.18
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD12	6	0.18
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD13	6	0.18
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD11	18	0.18
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD12	18	0.18
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD13	18	0.18
(1,2082)	1:A:745:TYR:HD1	1:A:754:PHE:H	1	0.18
(1,2082)	1:A:745:TYR:HD2	1:A:754:PHE:H	1	0.18
(1,1944)	1:A:738:LEU:H	1:A:740:GLU:H	16	0.18
(1,92)	1:A:670:LEU:HB3	1:A:671:TRP:HA	4	0.17
(1,92)	1:A:670:LEU:HB3	1:A:671:TRP:HA	9	0.17
(1,92)	1:A:670:LEU:HB3	1:A:671:TRP:HA	11	0.17
(1,92)	1:A:670:LEU:HB3	1:A:671:TRP:HA	13	0.17
(1,92)	1:A:670:LEU:HB3	1:A:671:TRP:HA	14	0.17
(1,92)	1:A:670:LEU:HB3	1:A:671:TRP:HA	15	0.17
(1,336)	1:A:688:ARG:HA	1:A:688:ARG:HD3	10	0.17
(1,336)	1:A:688:ARG:HA	1:A:688:ARG:HD3	11	0.17
(1,332)	1:A:686:ALA:HB1	1:A:710:LYS:HD3	1	0.17
(1,332)	1:A:686:ALA:HB2	1:A:710:LYS:HD3	1	0.17
(1,332)	1:A:686:ALA:HB3	1:A:710:LYS:HD3	1	0.17
(1,332)	1:A:686:ALA:HB1	1:A:710:LYS:HD3	8	0.17
(1,332)	1:A:686:ALA:HB2	1:A:710:LYS:HD3	8	0.17
(1,332)	1:A:686:ALA:HB3	1:A:710:LYS:HD3	8	0.17
(1,332)	1:A:686:ALA:HB1	1:A:710:LYS:HD3	10	0.17
(1,332)	1:A:686:ALA:HB2	1:A:710:LYS:HD3	10	0.17
(1,332)	1:A:686:ALA:HB3	1:A:710:LYS:HD3	10	0.17
(1,332)	1:A:686:ALA:HB1	1:A:710:LYS:HD3	18	0.17
(1,332)	1:A:686:ALA:HB2	1:A:710:LYS:HD3	18	0.17
(1,332)	1:A:686:ALA:HB3	1:A:710:LYS:HD3	18	0.17
(1,307)	1:A:685:LEU:HA	1:A:688:ARG:HD2	5	0.17
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD11	1	0.17
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD12	1	0.17

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD13	1	0.17
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD21	1	0.17
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD22	1	0.17
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD23	1	0.17
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD11	2	0.17
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD12	2	0.17
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD13	2	0.17
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD21	2	0.17
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD22	2	0.17
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD23	2	0.17
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD11	5	0.17
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD12	5	0.17
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD13	5	0.17
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD21	5	0.17
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD22	5	0.17
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD23	5	0.17
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD11	16	0.17
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD12	16	0.17
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD13	16	0.17
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD21	16	0.17
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD22	16	0.17
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD23	16	0.17
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD11	3	0.17
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD12	3	0.17
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD13	3	0.17
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD21	3	0.17
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD22	3	0.17
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD23	3	0.17
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD11	3	0.17
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD12	3	0.17
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD13	3	0.17
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD21	3	0.17
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD22	3	0.17
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD23	3	0.17
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD11	3	0.17
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD12	3	0.17
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD13	3	0.17
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD21	3	0.17
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD22	3	0.17
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD23	3	0.17
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD11	3	0.17
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD12	3	0.17

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD13	3	0.17
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD21	3	0.17
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD22	3	0.17
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD23	3	0.17
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD11	3	0.17
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD12	3	0.17
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD13	3	0.17
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD21	3	0.17
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD22	3	0.17
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD23	3	0.17
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD11	3	0.17
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD12	3	0.17
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD13	3	0.17
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD21	3	0.17
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD22	3	0.17
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD23	3	0.17
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD11	12	0.17
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD12	12	0.17
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD13	12	0.17
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD21	12	0.17
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD22	12	0.17
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD23	12	0.17
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD11	12	0.17
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD12	12	0.17
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD13	12	0.17
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD21	12	0.17
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD22	12	0.17
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD23	12	0.17
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD11	12	0.17
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD12	12	0.17
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD13	12	0.17
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD21	12	0.17
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD22	12	0.17
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD23	12	0.17
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD11	12	0.17
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD12	12	0.17
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD13	12	0.17
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD21	12	0.17
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD22	12	0.17
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD23	12	0.17
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD11	12	0.17
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD12	12	0.17

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD13	12	0.17
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD21	12	0.17
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD22	12	0.17
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD23	12	0.17
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD11	12	0.17
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD12	12	0.17
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD13	12	0.17
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD21	12	0.17
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD22	12	0.17
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD23	12	0.17
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD11	14	0.17
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD12	14	0.17
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD13	14	0.17
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD21	14	0.17
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD22	14	0.17
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD23	14	0.17
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD11	14	0.17
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD12	14	0.17
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD13	14	0.17
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD21	14	0.17
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD22	14	0.17
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD23	14	0.17
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD11	14	0.17
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD12	14	0.17
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD13	14	0.17
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD21	14	0.17
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD22	14	0.17
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD23	14	0.17
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD11	14	0.17
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD12	14	0.17
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD13	14	0.17
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD21	14	0.17
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD22	14	0.17
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD23	14	0.17
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD11	14	0.17
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD12	14	0.17
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD13	14	0.17
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD21	14	0.17
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD22	14	0.17
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD23	14	0.17
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD11	14	0.17
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD12	14	0.17

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD13	14	0.17
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD21	14	0.17
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD22	14	0.17
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD23	14	0.17
(1,2424)	1:A:670:LEU:HD11	1:A:671:TRP:HA	4	0.17
(1,2424)	1:A:670:LEU:HD12	1:A:671:TRP:HA	4	0.17
(1,2424)	1:A:670:LEU:HD13	1:A:671:TRP:HA	4	0.17
(1,2424)	1:A:670:LEU:HD21	1:A:671:TRP:HA	4	0.17
(1,2424)	1:A:670:LEU:HD22	1:A:671:TRP:HA	4	0.17
(1,2424)	1:A:670:LEU:HD23	1:A:671:TRP:HA	4	0.17
(1,2424)	1:A:670:LEU:HD11	1:A:671:TRP:HA	6	0.17
(1,2424)	1:A:670:LEU:HD12	1:A:671:TRP:HA	6	0.17
(1,2424)	1:A:670:LEU:HD13	1:A:671:TRP:HA	6	0.17
(1,2424)	1:A:670:LEU:HD21	1:A:671:TRP:HA	6	0.17
(1,2424)	1:A:670:LEU:HD22	1:A:671:TRP:HA	6	0.17
(1,2424)	1:A:670:LEU:HD23	1:A:671:TRP:HA	6	0.17
(1,2424)	1:A:670:LEU:HD11	1:A:671:TRP:HA	11	0.17
(1,2424)	1:A:670:LEU:HD12	1:A:671:TRP:HA	11	0.17
(1,2424)	1:A:670:LEU:HD13	1:A:671:TRP:HA	11	0.17
(1,2424)	1:A:670:LEU:HD21	1:A:671:TRP:HA	11	0.17
(1,2424)	1:A:670:LEU:HD22	1:A:671:TRP:HA	11	0.17
(1,2424)	1:A:670:LEU:HD23	1:A:671:TRP:HA	11	0.17
(1,2424)	1:A:670:LEU:HD11	1:A:671:TRP:HA	14	0.17
(1,2424)	1:A:670:LEU:HD12	1:A:671:TRP:HA	14	0.17
(1,2424)	1:A:670:LEU:HD13	1:A:671:TRP:HA	14	0.17
(1,2424)	1:A:670:LEU:HD21	1:A:671:TRP:HA	14	0.17
(1,2424)	1:A:670:LEU:HD22	1:A:671:TRP:HA	14	0.17
(1,2424)	1:A:670:LEU:HD23	1:A:671:TRP:HA	14	0.17
(1,2424)	1:A:670:LEU:HD11	1:A:671:TRP:HA	15	0.17
(1,2424)	1:A:670:LEU:HD12	1:A:671:TRP:HA	15	0.17
(1,2424)	1:A:670:LEU:HD13	1:A:671:TRP:HA	15	0.17
(1,2424)	1:A:670:LEU:HD21	1:A:671:TRP:HA	15	0.17
(1,2424)	1:A:670:LEU:HD22	1:A:671:TRP:HA	15	0.17
(1,2424)	1:A:670:LEU:HD23	1:A:671:TRP:HA	15	0.17
(1,2424)	1:A:670:LEU:HD11	1:A:671:TRP:HA	16	0.17
(1,2424)	1:A:670:LEU:HD12	1:A:671:TRP:HA	16	0.17
(1,2424)	1:A:670:LEU:HD13	1:A:671:TRP:HA	16	0.17
(1,2424)	1:A:670:LEU:HD21	1:A:671:TRP:HA	16	0.17
(1,2424)	1:A:670:LEU:HD22	1:A:671:TRP:HA	16	0.17
(1,2424)	1:A:670:LEU:HD23	1:A:671:TRP:HA	16	0.17
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD11	2	0.17
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD12	2	0.17

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD13	2	0.17
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD11	3	0.17
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD12	3	0.17
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD13	3	0.17
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD11	17	0.17
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD12	17	0.17
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD13	17	0.17
(1,2082)	1:A:745:TYR:HD1	1:A:754:PHE:H	18	0.17
(1,2082)	1:A:745:TYR:HD2	1:A:754:PHE:H	18	0.17
(1,2076)	1:A:752:ASP:HB2	1:A:754:PHE:H	17	0.17
(1,2076)	1:A:752:ASP:HB3	1:A:754:PHE:H	17	0.17
(1,1944)	1:A:738:LEU:H	1:A:740:GLU:H	3	0.17
(1,1944)	1:A:738:LEU:H	1:A:740:GLU:H	14	0.17
(1,1116)	1:A:755:LYS:HA	1:A:755:LYS:HD2	6	0.17
(1,1116)	1:A:755:LYS:HA	1:A:755:LYS:HD3	6	0.17
(1,92)	1:A:670:LEU:HB3	1:A:671:TRP:HA	3	0.16
(1,92)	1:A:670:LEU:HB3	1:A:671:TRP:HA	6	0.16
(1,916)	1:A:736:ARG:HA	1:A:736:ARG:HD2	16	0.16
(1,851)	1:A:670:LEU:HG	1:A:767:GLU:HA	8	0.16
(1,851)	1:A:670:LEU:HG	1:A:767:GLU:HA	20	0.16
(1,797)	1:A:716:LYS:HD2	1:A:757:LEU:HG	16	0.16
(1,797)	1:A:716:LYS:HD3	1:A:757:LEU:HG	16	0.16
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD11	7	0.16
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD12	7	0.16
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD13	7	0.16
(1,332)	1:A:686:ALA:HB1	1:A:710:LYS:HD3	16	0.16
(1,332)	1:A:686:ALA:HB2	1:A:710:LYS:HD3	16	0.16
(1,332)	1:A:686:ALA:HB3	1:A:710:LYS:HD3	16	0.16
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD11	7	0.16
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD12	7	0.16
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD13	7	0.16
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD21	7	0.16
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD22	7	0.16
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD23	7	0.16
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD11	15	0.16
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD12	15	0.16
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD13	15	0.16
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD21	15	0.16
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD22	15	0.16
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD23	15	0.16
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD11	11	0.16
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD12	11	0.16

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD13	11	0.16
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD21	11	0.16
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD22	11	0.16
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD23	11	0.16
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD11	11	0.16
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD12	11	0.16
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD13	11	0.16
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD21	11	0.16
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD22	11	0.16
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD23	11	0.16
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD11	11	0.16
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD12	11	0.16
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD13	11	0.16
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD21	11	0.16
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD22	11	0.16
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD23	11	0.16
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD11	11	0.16
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD12	11	0.16
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD13	11	0.16
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD21	11	0.16
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD22	11	0.16
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD23	11	0.16
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD11	11	0.16
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD12	11	0.16
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD13	11	0.16
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD21	11	0.16
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD22	11	0.16
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD23	11	0.16
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD11	11	0.16
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD12	11	0.16
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD13	11	0.16
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD21	11	0.16
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD22	11	0.16
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD23	11	0.16
(1,2498)	1:A:682:GLU:HG2	1:A:715:VAL:H	13	0.16
(1,2498)	1:A:682:GLU:HG3	1:A:715:VAL:H	13	0.16
(1,2470)	1:A:678:ARG:HG2	1:A:679:ALA:HA	20	0.16
(1,2470)	1:A:678:ARG:HG3	1:A:679:ALA:HA	20	0.16
(1,2227)	1:A:727:TYR:HE1	1:A:738:LEU:HD21	9	0.16
(1,2227)	1:A:727:TYR:HE1	1:A:738:LEU:HD22	9	0.16
(1,2227)	1:A:727:TYR:HE1	1:A:738:LEU:HD23	9	0.16
(1,2227)	1:A:727:TYR:HE2	1:A:738:LEU:HD21	9	0.16

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2227)	1:A:727:TYR:HE2	1:A:738:LEU:HD22	9	0.16
(1,2227)	1:A:727:TYR:HE2	1:A:738:LEU:HD23	9	0.16
(1,2213)	1:A:670:LEU:HB3	1:A:767:GLU:H	17	0.16
(1,220)	1:A:677:GLU:HB2	1:A:679:ALA:HB1	16	0.16
(1,220)	1:A:677:GLU:HB2	1:A:679:ALA:HB2	16	0.16
(1,220)	1:A:677:GLU:HB2	1:A:679:ALA:HB3	16	0.16
(1,2082)	1:A:745:TYR:HD1	1:A:754:PHE:H	2	0.16
(1,2082)	1:A:745:TYR:HD2	1:A:754:PHE:H	2	0.16
(1,2082)	1:A:745:TYR:HD1	1:A:754:PHE:H	7	0.16
(1,2082)	1:A:745:TYR:HD2	1:A:754:PHE:H	7	0.16
(1,2071)	1:A:754:PHE:H	1:A:757:LEU:HD11	11	0.16
(1,2071)	1:A:754:PHE:H	1:A:757:LEU:HD12	11	0.16
(1,2071)	1:A:754:PHE:H	1:A:757:LEU:HD13	11	0.16
(1,1944)	1:A:738:LEU:H	1:A:740:GLU:H	6	0.16
(1,1944)	1:A:738:LEU:H	1:A:740:GLU:H	18	0.16
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD11	18	0.16
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD12	18	0.16
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD13	18	0.16
(1,1610)	1:A:698:ARG:H	1:A:706:ALA:HB1	7	0.16
(1,1610)	1:A:698:ARG:H	1:A:706:ALA:HB2	7	0.16
(1,1610)	1:A:698:ARG:H	1:A:706:ALA:HB3	7	0.16
(1,1484)	1:A:688:ARG:H	1:A:688:ARG:HD3	7	0.16
(1,1116)	1:A:755:LYS:HA	1:A:755:LYS:HD2	7	0.16
(1,1116)	1:A:755:LYS:HA	1:A:755:LYS:HD3	7	0.16
(1,1116)	1:A:755:LYS:HA	1:A:755:LYS:HD2	14	0.16
(1,1116)	1:A:755:LYS:HA	1:A:755:LYS:HD3	14	0.16
(1,1116)	1:A:755:LYS:HA	1:A:755:LYS:HD2	16	0.16
(1,1116)	1:A:755:LYS:HA	1:A:755:LYS:HD3	16	0.16
(1,851)	1:A:670:LEU:HG	1:A:767:GLU:HA	1	0.15
(1,851)	1:A:670:LEU:HG	1:A:767:GLU:HA	17	0.15
(1,606)	1:A:730:THR:HB	1:A:731:GLU:HG3	4	0.15
(1,332)	1:A:686:ALA:HB1	1:A:710:LYS:HD3	5	0.15
(1,332)	1:A:686:ALA:HB2	1:A:710:LYS:HD3	5	0.15
(1,332)	1:A:686:ALA:HB3	1:A:710:LYS:HD3	5	0.15
(1,332)	1:A:686:ALA:HB1	1:A:710:LYS:HD3	12	0.15
(1,332)	1:A:686:ALA:HB2	1:A:710:LYS:HD3	12	0.15
(1,332)	1:A:686:ALA:HB3	1:A:710:LYS:HD3	12	0.15
(1,307)	1:A:685:LEU:HA	1:A:688:ARG:HD2	8	0.15
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD11	19	0.15
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD12	19	0.15
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD13	19	0.15
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD21	19	0.15

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD22	19	0.15
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD23	19	0.15
(1,2790)	1:A:736:ARG:HD2	1:A:740:GLU:HG2	18	0.15
(1,2790)	1:A:736:ARG:HD2	1:A:740:GLU:HG3	18	0.15
(1,2790)	1:A:736:ARG:HD3	1:A:740:GLU:HG2	18	0.15
(1,2790)	1:A:736:ARG:HD3	1:A:740:GLU:HG3	18	0.15
(1,2778)	1:A:732:LYS:HB3	1:A:732:LYS:HE2	1	0.15
(1,2778)	1:A:732:LYS:HB3	1:A:732:LYS:HE3	1	0.15
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD11	18	0.15
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD12	18	0.15
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD13	18	0.15
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD21	18	0.15
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD22	18	0.15
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD23	18	0.15
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD11	2	0.15
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD12	2	0.15
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD13	2	0.15
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD21	2	0.15
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD22	2	0.15
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD23	2	0.15
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD11	2	0.15
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD12	2	0.15
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD13	2	0.15
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD21	2	0.15
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD22	2	0.15
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD23	2	0.15
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD11	2	0.15
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD12	2	0.15
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD13	2	0.15
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD21	2	0.15
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD22	2	0.15
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD23	2	0.15
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD11	2	0.15
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD12	2	0.15
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD13	2	0.15
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD21	2	0.15
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD22	2	0.15
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD23	2	0.15
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD11	2	0.15
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD12	2	0.15
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD13	2	0.15
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD21	2	0.15

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD22	2	0.15
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD23	2	0.15
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD11	2	0.15
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD12	2	0.15
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD13	2	0.15
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD21	2	0.15
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD22	2	0.15
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD23	2	0.15
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD11	10	0.15
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD12	10	0.15
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD13	10	0.15
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD21	10	0.15
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD22	10	0.15
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD23	10	0.15
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD11	10	0.15
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD12	10	0.15
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD13	10	0.15
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD21	10	0.15
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD22	10	0.15
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD23	10	0.15
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD11	10	0.15
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD12	10	0.15
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD13	10	0.15
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD21	10	0.15
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD22	10	0.15
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD23	10	0.15
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD11	10	0.15
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD12	10	0.15
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD13	10	0.15
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD21	10	0.15
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD22	10	0.15
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD23	10	0.15
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD11	10	0.15
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD12	10	0.15
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD13	10	0.15
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD21	10	0.15
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD22	10	0.15
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD23	10	0.15
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD11	10	0.15
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD12	10	0.15
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD13	10	0.15
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD21	10	0.15

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD22	10	0.15
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD23	10	0.15
(1,2424)	1:A:670:LEU:HD11	1:A:671:TRP:HA	9	0.15
(1,2424)	1:A:670:LEU:HD12	1:A:671:TRP:HA	9	0.15
(1,2424)	1:A:670:LEU:HD13	1:A:671:TRP:HA	9	0.15
(1,2424)	1:A:670:LEU:HD21	1:A:671:TRP:HA	9	0.15
(1,2424)	1:A:670:LEU:HD22	1:A:671:TRP:HA	9	0.15
(1,2424)	1:A:670:LEU:HD23	1:A:671:TRP:HA	9	0.15
(1,2424)	1:A:670:LEU:HD11	1:A:671:TRP:HA	10	0.15
(1,2424)	1:A:670:LEU:HD12	1:A:671:TRP:HA	10	0.15
(1,2424)	1:A:670:LEU:HD13	1:A:671:TRP:HA	10	0.15
(1,2424)	1:A:670:LEU:HD21	1:A:671:TRP:HA	10	0.15
(1,2424)	1:A:670:LEU:HD22	1:A:671:TRP:HA	10	0.15
(1,2424)	1:A:670:LEU:HD23	1:A:671:TRP:HA	10	0.15
(1,2213)	1:A:670:LEU:HB3	1:A:767:GLU:H	1	0.15
(1,2213)	1:A:670:LEU:HB3	1:A:767:GLU:H	12	0.15
(1,2213)	1:A:670:LEU:HB3	1:A:767:GLU:H	20	0.15
(1,2207)	1:A:767:GLU:H	1:A:767:GLU:HG2	7	0.15
(1,220)	1:A:677:GLU:HB2	1:A:679:ALA:HB1	3	0.15
(1,220)	1:A:677:GLU:HB2	1:A:679:ALA:HB2	3	0.15
(1,220)	1:A:677:GLU:HB2	1:A:679:ALA:HB3	3	0.15
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD21	11	0.15
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD22	11	0.15
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD23	11	0.15
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD21	15	0.15
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD22	15	0.15
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD23	15	0.15
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD21	18	0.15
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD22	18	0.15
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD23	18	0.15
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD21	20	0.15
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD22	20	0.15
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD23	20	0.15
(1,2082)	1:A:745:TYR:HD1	1:A:754:PHE:H	5	0.15
(1,2082)	1:A:745:TYR:HD2	1:A:754:PHE:H	5	0.15
(1,2082)	1:A:745:TYR:HD1	1:A:754:PHE:H	8	0.15
(1,2082)	1:A:745:TYR:HD2	1:A:754:PHE:H	8	0.15
(1,2082)	1:A:745:TYR:HD1	1:A:754:PHE:H	11	0.15
(1,2082)	1:A:745:TYR:HD2	1:A:754:PHE:H	11	0.15
(1,2082)	1:A:745:TYR:HD1	1:A:754:PHE:H	16	0.15
(1,2082)	1:A:745:TYR:HD2	1:A:754:PHE:H	16	0.15
(1,2071)	1:A:754:PHE:H	1:A:757:LEU:HD11	19	0.15

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2071)	1:A:754:PHE:H	1:A:757:LEU:HD12	19	0.15
(1,2071)	1:A:754:PHE:H	1:A:757:LEU:HD13	19	0.15
(1,1944)	1:A:738:LEU:H	1:A:740:GLU:H	12	0.15
(1,1944)	1:A:738:LEU:H	1:A:740:GLU:H	19	0.15
(1,1864)	1:A:733:LYS:HE2	1:A:734:ALA:H	18	0.15
(1,1864)	1:A:733:LYS:HE3	1:A:734:ALA:H	18	0.15
(1,1627)	1:A:707:ILE:H	1:A:718:ILE:HD11	4	0.15
(1,1627)	1:A:707:ILE:H	1:A:718:ILE:HD12	4	0.15
(1,1627)	1:A:707:ILE:H	1:A:718:ILE:HD13	4	0.15
(1,1212)	1:A:765:PHE:HA	1:A:767:GLU:H	3	0.15
(1,1116)	1:A:755:LYS:HA	1:A:755:LYS:HD2	1	0.15
(1,1116)	1:A:755:LYS:HA	1:A:755:LYS:HD3	1	0.15
(1,1116)	1:A:755:LYS:HA	1:A:755:LYS:HD2	2	0.15
(1,1116)	1:A:755:LYS:HA	1:A:755:LYS:HD3	2	0.15
(1,1116)	1:A:755:LYS:HA	1:A:755:LYS:HD2	8	0.15
(1,1116)	1:A:755:LYS:HA	1:A:755:LYS:HD3	8	0.15
(1,1116)	1:A:755:LYS:HA	1:A:755:LYS:HD2	9	0.15
(1,1116)	1:A:755:LYS:HA	1:A:755:LYS:HD3	9	0.15
(1,1116)	1:A:755:LYS:HA	1:A:755:LYS:HD2	13	0.15
(1,1116)	1:A:755:LYS:HA	1:A:755:LYS:HD3	13	0.15
(1,1116)	1:A:755:LYS:HA	1:A:755:LYS:HD2	18	0.15
(1,1116)	1:A:755:LYS:HA	1:A:755:LYS:HD3	18	0.15
(1,1116)	1:A:755:LYS:HA	1:A:755:LYS:HD2	19	0.15
(1,1116)	1:A:755:LYS:HA	1:A:755:LYS:HD3	19	0.15
(1,92)	1:A:670:LEU:HB3	1:A:671:TRP:HA	1	0.14
(1,92)	1:A:670:LEU:HB3	1:A:671:TRP:HA	5	0.14
(1,92)	1:A:670:LEU:HB3	1:A:671:TRP:HA	7	0.14
(1,92)	1:A:670:LEU:HB3	1:A:671:TRP:HA	8	0.14
(1,92)	1:A:670:LEU:HB3	1:A:671:TRP:HA	12	0.14
(1,92)	1:A:670:LEU:HB3	1:A:671:TRP:HA	17	0.14
(1,92)	1:A:670:LEU:HB3	1:A:671:TRP:HA	20	0.14
(1,916)	1:A:736:ARG:HA	1:A:736:ARG:HD2	17	0.14
(1,797)	1:A:716:LYS:HD2	1:A:757:LEU:HG	9	0.14
(1,797)	1:A:716:LYS:HD3	1:A:757:LEU:HG	9	0.14
(1,797)	1:A:716:LYS:HD2	1:A:757:LEU:HG	13	0.14
(1,797)	1:A:716:LYS:HD3	1:A:757:LEU:HG	13	0.14
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD11	3	0.14
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD12	3	0.14
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD13	3	0.14
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD11	12	0.14
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD12	12	0.14
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD13	12	0.14

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,654)	1:A:706:ALA:HB1	1:A:717:HIS:HA	7	0.14
(1,654)	1:A:706:ALA:HB2	1:A:717:HIS:HA	7	0.14
(1,654)	1:A:706:ALA:HB3	1:A:717:HIS:HA	7	0.14
(1,606)	1:A:730:THR:HB	1:A:731:GLU:HG3	17	0.14
(1,499)	1:A:709:ILE:HD11	1:A:711:TYR:HD1	7	0.14
(1,499)	1:A:709:ILE:HD11	1:A:711:TYR:HD2	7	0.14
(1,499)	1:A:709:ILE:HD12	1:A:711:TYR:HD1	7	0.14
(1,499)	1:A:709:ILE:HD12	1:A:711:TYR:HD2	7	0.14
(1,499)	1:A:709:ILE:HD13	1:A:711:TYR:HD1	7	0.14
(1,499)	1:A:709:ILE:HD13	1:A:711:TYR:HD2	7	0.14
(1,307)	1:A:685:LEU:HA	1:A:688:ARG:HD2	20	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD11	4	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD12	4	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD13	4	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD21	4	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD22	4	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD23	4	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD11	9	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD12	9	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD13	9	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD21	9	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD22	9	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD23	9	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD11	11	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD12	11	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD13	11	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD21	11	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD22	11	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD23	11	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD11	13	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD12	13	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD13	13	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD21	13	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD22	13	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD23	13	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD11	16	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD12	16	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD13	16	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD21	16	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD22	16	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD23	16	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD11	17	0.14

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD12	17	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD13	17	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD21	17	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD22	17	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD23	17	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD11	20	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD12	20	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD13	20	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD21	20	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD22	20	0.14
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD23	20	0.14
(1,2790)	1:A:736:ARG:HD2	1:A:740:GLU:HG2	20	0.14
(1,2790)	1:A:736:ARG:HD2	1:A:740:GLU:HG3	20	0.14
(1,2790)	1:A:736:ARG:HD3	1:A:740:GLU:HG2	20	0.14
(1,2790)	1:A:736:ARG:HD3	1:A:740:GLU:HG3	20	0.14
(1,2768)	1:A:728:ARG:HD2	1:A:730:THR:H	1	0.14
(1,2768)	1:A:728:ARG:HD3	1:A:730:THR:H	1	0.14
(1,2768)	1:A:728:ARG:HD2	1:A:730:THR:H	17	0.14
(1,2768)	1:A:728:ARG:HD3	1:A:730:THR:H	17	0.14
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD11	8	0.14
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD12	8	0.14
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD13	8	0.14
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD21	8	0.14
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD22	8	0.14
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD23	8	0.14
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD11	6	0.14
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD12	6	0.14
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD13	6	0.14
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD21	6	0.14
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD22	6	0.14
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD23	6	0.14
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD11	6	0.14
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD12	6	0.14
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD13	6	0.14
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD21	6	0.14
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD22	6	0.14
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD23	6	0.14
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD11	6	0.14
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD12	6	0.14
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD13	6	0.14
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD21	6	0.14
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD22	6	0.14

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD23	6	0.14
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD11	6	0.14
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD12	6	0.14
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD13	6	0.14
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD21	6	0.14
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD22	6	0.14
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD23	6	0.14
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD11	6	0.14
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD12	6	0.14
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD13	6	0.14
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD21	6	0.14
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD22	6	0.14
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD23	6	0.14
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD11	6	0.14
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD12	6	0.14
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD13	6	0.14
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD21	6	0.14
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD22	6	0.14
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD23	6	0.14
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD11	8	0.14
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD12	8	0.14
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD13	8	0.14
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD21	8	0.14
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD22	8	0.14
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD23	8	0.14
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD11	8	0.14
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD12	8	0.14
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD13	8	0.14
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD21	8	0.14
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD22	8	0.14
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD23	8	0.14
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD11	8	0.14
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD12	8	0.14
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD13	8	0.14
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD21	8	0.14
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD22	8	0.14
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD23	8	0.14
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD11	8	0.14
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD12	8	0.14
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD13	8	0.14
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD21	8	0.14
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD22	8	0.14

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD23	8	0.14
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD11	8	0.14
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD12	8	0.14
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD13	8	0.14
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD21	8	0.14
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD22	8	0.14
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD23	8	0.14
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD11	8	0.14
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD12	8	0.14
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD13	8	0.14
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD21	8	0.14
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD22	8	0.14
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD23	8	0.14
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD11	9	0.14
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD12	9	0.14
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD13	9	0.14
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD21	9	0.14
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD22	9	0.14
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD23	9	0.14
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD11	9	0.14
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD12	9	0.14
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD13	9	0.14
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD21	9	0.14
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD22	9	0.14
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD23	9	0.14
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD11	9	0.14
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD12	9	0.14
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD13	9	0.14
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD21	9	0.14
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD22	9	0.14
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD23	9	0.14
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD11	9	0.14
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD12	9	0.14
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD13	9	0.14
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD21	9	0.14
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD22	9	0.14
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD23	9	0.14
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD11	9	0.14
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD12	9	0.14
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD13	9	0.14
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD21	9	0.14
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD22	9	0.14

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD23	9	0.14
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD11	9	0.14
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD12	9	0.14
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD13	9	0.14
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD21	9	0.14
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD22	9	0.14
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD23	9	0.14
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD11	13	0.14
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD12	13	0.14
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD13	13	0.14
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD21	13	0.14
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD22	13	0.14
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD23	13	0.14
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD11	13	0.14
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD12	13	0.14
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD13	13	0.14
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD21	13	0.14
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD22	13	0.14
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD23	13	0.14
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD11	13	0.14
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD12	13	0.14
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD13	13	0.14
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD21	13	0.14
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD22	13	0.14
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD23	13	0.14
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD11	13	0.14
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD12	13	0.14
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD13	13	0.14
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD21	13	0.14
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD22	13	0.14
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD23	13	0.14
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD11	13	0.14
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD12	13	0.14
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD13	13	0.14
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD21	13	0.14
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD22	13	0.14
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD23	13	0.14
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD11	13	0.14
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD12	13	0.14
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD13	13	0.14
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD21	13	0.14
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD22	13	0.14

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD23	13	0.14
(1,2469)	1:A:678:ARG:HG2	1:A:679:ALA:H	20	0.14
(1,2469)	1:A:678:ARG:HG3	1:A:679:ALA:H	20	0.14
(1,2425)	1:A:670:LEU:HD11	1:A:671:TRP:HZ2	8	0.14
(1,2425)	1:A:670:LEU:HD12	1:A:671:TRP:HZ2	8	0.14
(1,2425)	1:A:670:LEU:HD13	1:A:671:TRP:HZ2	8	0.14
(1,2425)	1:A:670:LEU:HD21	1:A:671:TRP:HZ2	8	0.14
(1,2425)	1:A:670:LEU:HD22	1:A:671:TRP:HZ2	8	0.14
(1,2425)	1:A:670:LEU:HD23	1:A:671:TRP:HZ2	8	0.14
(1,2424)	1:A:670:LEU:HD11	1:A:671:TRP:HA	13	0.14
(1,2424)	1:A:670:LEU:HD12	1:A:671:TRP:HA	13	0.14
(1,2424)	1:A:670:LEU:HD13	1:A:671:TRP:HA	13	0.14
(1,2424)	1:A:670:LEU:HD21	1:A:671:TRP:HA	13	0.14
(1,2424)	1:A:670:LEU:HD22	1:A:671:TRP:HA	13	0.14
(1,2424)	1:A:670:LEU:HD23	1:A:671:TRP:HA	13	0.14
(1,2377)	1:A:664:GLN:HG2	1:A:666:LEU:HD11	12	0.14
(1,2377)	1:A:664:GLN:HG2	1:A:666:LEU:HD12	12	0.14
(1,2377)	1:A:664:GLN:HG2	1:A:666:LEU:HD13	12	0.14
(1,2377)	1:A:664:GLN:HG2	1:A:666:LEU:HD21	12	0.14
(1,2377)	1:A:664:GLN:HG2	1:A:666:LEU:HD22	12	0.14
(1,2377)	1:A:664:GLN:HG2	1:A:666:LEU:HD23	12	0.14
(1,2377)	1:A:664:GLN:HG3	1:A:666:LEU:HD11	12	0.14
(1,2377)	1:A:664:GLN:HG3	1:A:666:LEU:HD12	12	0.14
(1,2377)	1:A:664:GLN:HG3	1:A:666:LEU:HD13	12	0.14
(1,2377)	1:A:664:GLN:HG3	1:A:666:LEU:HD21	12	0.14
(1,2377)	1:A:664:GLN:HG3	1:A:666:LEU:HD22	12	0.14
(1,2377)	1:A:664:GLN:HG3	1:A:666:LEU:HD23	12	0.14
(1,2376)	1:A:664:GLN:HB2	1:A:666:LEU:HD11	8	0.14
(1,2376)	1:A:664:GLN:HB2	1:A:666:LEU:HD12	8	0.14
(1,2376)	1:A:664:GLN:HB2	1:A:666:LEU:HD13	8	0.14
(1,2376)	1:A:664:GLN:HB2	1:A:666:LEU:HD21	8	0.14
(1,2376)	1:A:664:GLN:HB2	1:A:666:LEU:HD22	8	0.14
(1,2376)	1:A:664:GLN:HB2	1:A:666:LEU:HD23	8	0.14
(1,2376)	1:A:664:GLN:HB3	1:A:666:LEU:HD11	8	0.14
(1,2376)	1:A:664:GLN:HB3	1:A:666:LEU:HD12	8	0.14
(1,2376)	1:A:664:GLN:HB3	1:A:666:LEU:HD13	8	0.14
(1,2376)	1:A:664:GLN:HB3	1:A:666:LEU:HD21	8	0.14
(1,2376)	1:A:664:GLN:HB3	1:A:666:LEU:HD22	8	0.14
(1,2376)	1:A:664:GLN:HB3	1:A:666:LEU:HD23	8	0.14
(1,2376)	1:A:664:GLN:HB2	1:A:666:LEU:HD11	20	0.14
(1,2376)	1:A:664:GLN:HB2	1:A:666:LEU:HD12	20	0.14
(1,2376)	1:A:664:GLN:HB2	1:A:666:LEU:HD13	20	0.14

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2376)	1:A:664:GLN:HB2	1:A:666:LEU:HD21	20	0.14
(1,2376)	1:A:664:GLN:HB2	1:A:666:LEU:HD22	20	0.14
(1,2376)	1:A:664:GLN:HB2	1:A:666:LEU:HD23	20	0.14
(1,2376)	1:A:664:GLN:HB3	1:A:666:LEU:HD11	20	0.14
(1,2376)	1:A:664:GLN:HB3	1:A:666:LEU:HD12	20	0.14
(1,2376)	1:A:664:GLN:HB3	1:A:666:LEU:HD13	20	0.14
(1,2376)	1:A:664:GLN:HB3	1:A:666:LEU:HD21	20	0.14
(1,2376)	1:A:664:GLN:HB3	1:A:666:LEU:HD22	20	0.14
(1,2376)	1:A:664:GLN:HB3	1:A:666:LEU:HD23	20	0.14
(1,2213)	1:A:670:LEU:HB3	1:A:767:GLU:H	7	0.14
(1,2213)	1:A:670:LEU:HB3	1:A:767:GLU:H	9	0.14
(1,2207)	1:A:767:GLU:H	1:A:767:GLU:HG2	5	0.14
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD21	1	0.14
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD22	1	0.14
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD23	1	0.14
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD21	9	0.14
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD22	9	0.14
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD23	9	0.14
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD21	10	0.14
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD22	10	0.14
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD23	10	0.14
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD21	13	0.14
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD22	13	0.14
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD23	13	0.14
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD21	16	0.14
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD22	16	0.14
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD23	16	0.14
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD11	19	0.14
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD12	19	0.14
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD13	19	0.14
(1,2082)	1:A:745:TYR:HD1	1:A:754:PHE:H	6	0.14
(1,2082)	1:A:745:TYR:HD2	1:A:754:PHE:H	6	0.14
(1,2071)	1:A:754:PHE:H	1:A:757:LEU:HD11	14	0.14
(1,2071)	1:A:754:PHE:H	1:A:757:LEU:HD12	14	0.14
(1,2071)	1:A:754:PHE:H	1:A:757:LEU:HD13	14	0.14
(1,2046)	1:A:750:LEU:H	1:A:751:LYS:HG2	14	0.14
(1,1944)	1:A:738:LEU:H	1:A:740:GLU:H	4	0.14
(1,1944)	1:A:738:LEU:H	1:A:740:GLU:H	5	0.14
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD11	8	0.14
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD12	8	0.14
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD13	8	0.14
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD11	12	0.14

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD12	12	0.14
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD13	12	0.14
(1,1627)	1:A:707:ILE:H	1:A:718:ILE:HD11	15	0.14
(1,1627)	1:A:707:ILE:H	1:A:718:ILE:HD12	15	0.14
(1,1627)	1:A:707:ILE:H	1:A:718:ILE:HD13	15	0.14
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD21	8	0.14
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD22	8	0.14
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD23	8	0.14
(1,1262)	1:A:668:VAL:H	1:A:669:HIS:HD2	18	0.14
(1,1187)	1:A:761:LEU:HA	1:A:762:GLN:HB3	5	0.14
(1,1121)	1:A:755:LYS:HA	1:A:756:SER:HA	11	0.14
(1,1121)	1:A:755:LYS:HA	1:A:756:SER:HA	17	0.14
(1,1116)	1:A:755:LYS:HA	1:A:755:LYS:HD2	12	0.14
(1,1116)	1:A:755:LYS:HA	1:A:755:LYS:HD3	12	0.14
(1,916)	1:A:736:ARG:HA	1:A:736:ARG:HD2	7	0.13
(1,916)	1:A:736:ARG:HA	1:A:736:ARG:HD2	13	0.13
(1,825)	1:A:729:ILE:HG21	1:A:754:PHE:HA	2	0.13
(1,825)	1:A:729:ILE:HG22	1:A:754:PHE:HA	2	0.13
(1,825)	1:A:729:ILE:HG23	1:A:754:PHE:HA	2	0.13
(1,797)	1:A:716:LYS:HD2	1:A:757:LEU:HG	10	0.13
(1,797)	1:A:716:LYS:HD3	1:A:757:LEU:HG	10	0.13
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD11	8	0.13
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD12	8	0.13
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD13	8	0.13
(1,66)	1:A:679:ALA:HB1	1:A:683:SER:HB2	16	0.13
(1,66)	1:A:679:ALA:HB1	1:A:683:SER:HB3	16	0.13
(1,66)	1:A:679:ALA:HB2	1:A:683:SER:HB2	16	0.13
(1,66)	1:A:679:ALA:HB2	1:A:683:SER:HB3	16	0.13
(1,66)	1:A:679:ALA:HB3	1:A:683:SER:HB2	16	0.13
(1,66)	1:A:679:ALA:HB3	1:A:683:SER:HB3	16	0.13
(1,654)	1:A:706:ALA:HB1	1:A:717:HIS:HA	12	0.13
(1,654)	1:A:706:ALA:HB2	1:A:717:HIS:HA	12	0.13
(1,654)	1:A:706:ALA:HB3	1:A:717:HIS:HA	12	0.13
(1,654)	1:A:706:ALA:HB1	1:A:717:HIS:HA	17	0.13
(1,654)	1:A:706:ALA:HB2	1:A:717:HIS:HA	17	0.13
(1,654)	1:A:706:ALA:HB3	1:A:717:HIS:HA	17	0.13
(1,2976)	1:A:716:LYS:HB2	2:B:345:PRO:HB2	5	0.13
(1,2976)	1:A:716:LYS:HB2	2:B:345:PRO:HB3	5	0.13
(1,2955)	1:A:706:ALA:HB1	2:B:342:PTR:HD1	19	0.13
(1,2955)	1:A:706:ALA:HB1	2:B:342:PTR:HD2	19	0.13
(1,2955)	1:A:706:ALA:HB2	2:B:342:PTR:HD1	19	0.13
(1,2955)	1:A:706:ALA:HB2	2:B:342:PTR:HD2	19	0.13

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2955)	1:A:706:ALA:HB3	2:B:342:PTR:HD1	19	0.13
(1,2955)	1:A:706:ALA:HB3	2:B:342:PTR:HD2	19	0.13
(1,2945)	1:A:679:ALA:HB1	2:B:340:GLU:HB2	16	0.13
(1,2945)	1:A:679:ALA:HB1	2:B:340:GLU:HB3	16	0.13
(1,2945)	1:A:679:ALA:HB2	2:B:340:GLU:HB2	16	0.13
(1,2945)	1:A:679:ALA:HB2	2:B:340:GLU:HB3	16	0.13
(1,2945)	1:A:679:ALA:HB3	2:B:340:GLU:HB2	16	0.13
(1,2945)	1:A:679:ALA:HB3	2:B:340:GLU:HB3	16	0.13
(1,2778)	1:A:732:LYS:HB3	1:A:732:LYS:HE2	2	0.13
(1,2778)	1:A:732:LYS:HB3	1:A:732:LYS:HE3	2	0.13
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD11	12	0.13
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD12	12	0.13
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD13	12	0.13
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD21	12	0.13
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD22	12	0.13
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD23	12	0.13
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD11	20	0.13
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD12	20	0.13
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD13	20	0.13
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD21	20	0.13
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD22	20	0.13
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD23	20	0.13
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD11	18	0.13
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD12	18	0.13
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD13	18	0.13
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD21	18	0.13
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD22	18	0.13
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD23	18	0.13
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD11	18	0.13
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD12	18	0.13
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD13	18	0.13
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD21	18	0.13
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD22	18	0.13
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD23	18	0.13
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD11	18	0.13
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD12	18	0.13
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD13	18	0.13
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD21	18	0.13
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD22	18	0.13
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD23	18	0.13
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD11	18	0.13
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD12	18	0.13

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD13	18	0.13
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD21	18	0.13
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD22	18	0.13
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD23	18	0.13
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD11	18	0.13
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD12	18	0.13
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD13	18	0.13
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD21	18	0.13
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD22	18	0.13
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD23	18	0.13
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD11	18	0.13
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD12	18	0.13
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD13	18	0.13
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD21	18	0.13
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD22	18	0.13
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD23	18	0.13
(1,2426)	1:A:670:LEU:HD11	1:A:672:TYR:H	7	0.13
(1,2426)	1:A:670:LEU:HD12	1:A:672:TYR:H	7	0.13
(1,2426)	1:A:670:LEU:HD13	1:A:672:TYR:H	7	0.13
(1,2426)	1:A:670:LEU:HD21	1:A:672:TYR:H	7	0.13
(1,2426)	1:A:670:LEU:HD22	1:A:672:TYR:H	7	0.13
(1,2426)	1:A:670:LEU:HD23	1:A:672:TYR:H	7	0.13
(1,2424)	1:A:670:LEU:HD11	1:A:671:TRP:HA	3	0.13
(1,2424)	1:A:670:LEU:HD12	1:A:671:TRP:HA	3	0.13
(1,2424)	1:A:670:LEU:HD13	1:A:671:TRP:HA	3	0.13
(1,2424)	1:A:670:LEU:HD21	1:A:671:TRP:HA	3	0.13
(1,2424)	1:A:670:LEU:HD22	1:A:671:TRP:HA	3	0.13
(1,2424)	1:A:670:LEU:HD23	1:A:671:TRP:HA	3	0.13
(1,2376)	1:A:664:GLN:HB2	1:A:666:LEU:HD11	3	0.13
(1,2376)	1:A:664:GLN:HB2	1:A:666:LEU:HD12	3	0.13
(1,2376)	1:A:664:GLN:HB2	1:A:666:LEU:HD13	3	0.13
(1,2376)	1:A:664:GLN:HB2	1:A:666:LEU:HD21	3	0.13
(1,2376)	1:A:664:GLN:HB2	1:A:666:LEU:HD22	3	0.13
(1,2376)	1:A:664:GLN:HB2	1:A:666:LEU:HD23	3	0.13
(1,2376)	1:A:664:GLN:HB3	1:A:666:LEU:HD11	3	0.13
(1,2376)	1:A:664:GLN:HB3	1:A:666:LEU:HD12	3	0.13
(1,2376)	1:A:664:GLN:HB3	1:A:666:LEU:HD13	3	0.13
(1,2376)	1:A:664:GLN:HB3	1:A:666:LEU:HD21	3	0.13
(1,2376)	1:A:664:GLN:HB3	1:A:666:LEU:HD22	3	0.13
(1,2376)	1:A:664:GLN:HB3	1:A:666:LEU:HD23	3	0.13
(1,2227)	1:A:727:TYR:HE1	1:A:738:LEU:HD21	14	0.13
(1,2227)	1:A:727:TYR:HE1	1:A:738:LEU:HD22	14	0.13

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2227)	1:A:727:TYR:HE1	1:A:738:LEU:HD23	14	0.13
(1,2227)	1:A:727:TYR:HE2	1:A:738:LEU:HD21	14	0.13
(1,2227)	1:A:727:TYR:HE2	1:A:738:LEU:HD22	14	0.13
(1,2227)	1:A:727:TYR:HE2	1:A:738:LEU:HD23	14	0.13
(1,2213)	1:A:670:LEU:HB3	1:A:767:GLU:H	6	0.13
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD21	2	0.13
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD22	2	0.13
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD23	2	0.13
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD21	3	0.13
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD22	3	0.13
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD23	3	0.13
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD21	4	0.13
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD22	4	0.13
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD23	4	0.13
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD21	5	0.13
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD22	5	0.13
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD23	5	0.13
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD21	6	0.13
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD22	6	0.13
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD23	6	0.13
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD21	8	0.13
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD22	8	0.13
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD23	8	0.13
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD21	12	0.13
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD22	12	0.13
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD23	12	0.13
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD21	14	0.13
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD22	14	0.13
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD23	14	0.13
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD11	14	0.13
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD12	14	0.13
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD13	14	0.13
(1,2082)	1:A:745:TYR:HD1	1:A:754:PHE:H	17	0.13
(1,2082)	1:A:745:TYR:HD2	1:A:754:PHE:H	17	0.13
(1,2071)	1:A:754:PHE:H	1:A:757:LEU:HD11	16	0.13
(1,2071)	1:A:754:PHE:H	1:A:757:LEU:HD12	16	0.13
(1,2071)	1:A:754:PHE:H	1:A:757:LEU:HD13	16	0.13
(1,1987)	1:A:729:ILE:HD11	1:A:744:PHE:H	4	0.13
(1,1987)	1:A:729:ILE:HD12	1:A:744:PHE:H	4	0.13
(1,1987)	1:A:729:ILE:HD13	1:A:744:PHE:H	4	0.13
(1,1944)	1:A:738:LEU:H	1:A:740:GLU:H	2	0.13
(1,1944)	1:A:738:LEU:H	1:A:740:GLU:H	9	0.13

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1944)	1:A:738:LEU:H	1:A:740:GLU:H	10	0.13
(1,1944)	1:A:738:LEU:H	1:A:740:GLU:H	15	0.13
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD11	3	0.13
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD12	3	0.13
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD13	3	0.13
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD11	5	0.13
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD12	5	0.13
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD13	5	0.13
(1,170)	1:A:676:MET:HG2	1:A:680:GLY:H	2	0.13
(1,1532)	1:A:765:PHE:H	1:A:766:LYS:HD2	2	0.13
(1,1532)	1:A:765:PHE:H	1:A:766:LYS:HD3	2	0.13
(1,1532)	1:A:765:PHE:H	1:A:766:LYS:HD2	5	0.13
(1,1532)	1:A:765:PHE:H	1:A:766:LYS:HD3	5	0.13
(1,1532)	1:A:765:PHE:H	1:A:766:LYS:HD2	8	0.13
(1,1532)	1:A:765:PHE:H	1:A:766:LYS:HD3	8	0.13
(1,1532)	1:A:765:PHE:H	1:A:766:LYS:HD2	11	0.13
(1,1532)	1:A:765:PHE:H	1:A:766:LYS:HD3	11	0.13
(1,1532)	1:A:765:PHE:H	1:A:766:LYS:HD2	14	0.13
(1,1532)	1:A:765:PHE:H	1:A:766:LYS:HD3	14	0.13
(1,1532)	1:A:765:PHE:H	1:A:766:LYS:HD2	18	0.13
(1,1532)	1:A:765:PHE:H	1:A:766:LYS:HD3	18	0.13
(1,1414)	1:A:676:MET:HA	1:A:681:ALA:H	13	0.13
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD21	5	0.13
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD22	5	0.13
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD23	5	0.13
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD21	10	0.13
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD22	10	0.13
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD23	10	0.13
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD21	19	0.13
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD22	19	0.13
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD23	19	0.13
(1,1262)	1:A:668:VAL:H	1:A:669:HIS:HD2	20	0.13
(1,1212)	1:A:765:PHE:HA	1:A:767:GLU:H	4	0.13
(1,1212)	1:A:765:PHE:HA	1:A:767:GLU:H	9	0.13
(1,1212)	1:A:765:PHE:HA	1:A:767:GLU:H	13	0.13
(1,1212)	1:A:765:PHE:HA	1:A:767:GLU:H	15	0.13
(1,1121)	1:A:755:LYS:HA	1:A:756:SER:HA	3	0.13
(1,1121)	1:A:755:LYS:HA	1:A:756:SER:HA	15	0.13
(1,1116)	1:A:755:LYS:HA	1:A:755:LYS:HD2	4	0.13
(1,1116)	1:A:755:LYS:HA	1:A:755:LYS:HD3	4	0.13
(1,1116)	1:A:755:LYS:HA	1:A:755:LYS:HD2	5	0.13
(1,1116)	1:A:755:LYS:HA	1:A:755:LYS:HD3	5	0.13

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,867)	1:A:714:GLU:HB2	1:A:716:LYS:HD2	16	0.12
(1,867)	1:A:714:GLU:HB2	1:A:716:LYS:HD3	16	0.12
(1,825)	1:A:729:ILE:HG21	1:A:754:PHE:HA	10	0.12
(1,825)	1:A:729:ILE:HG22	1:A:754:PHE:HA	10	0.12
(1,825)	1:A:729:ILE:HG23	1:A:754:PHE:HA	10	0.12
(1,797)	1:A:716:LYS:HD2	1:A:757:LEU:HG	4	0.12
(1,797)	1:A:716:LYS:HD3	1:A:757:LEU:HG	4	0.12
(1,797)	1:A:716:LYS:HD2	1:A:757:LEU:HG	5	0.12
(1,797)	1:A:716:LYS:HD3	1:A:757:LEU:HG	5	0.12
(1,797)	1:A:716:LYS:HD2	1:A:757:LEU:HG	14	0.12
(1,797)	1:A:716:LYS:HD3	1:A:757:LEU:HG	14	0.12
(1,797)	1:A:716:LYS:HD2	1:A:757:LEU:HG	17	0.12
(1,797)	1:A:716:LYS:HD3	1:A:757:LEU:HG	17	0.12
(1,744)	1:A:721:MET:HA	1:A:722:THR:HG21	5	0.12
(1,744)	1:A:721:MET:HA	1:A:722:THR:HG22	5	0.12
(1,744)	1:A:721:MET:HA	1:A:722:THR:HG23	5	0.12
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD11	11	0.12
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD12	11	0.12
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD13	11	0.12
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD11	20	0.12
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD12	20	0.12
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD13	20	0.12
(1,683)	1:A:718:ILE:HG21	1:A:729:ILE:HB	4	0.12
(1,683)	1:A:718:ILE:HG22	1:A:729:ILE:HB	4	0.12
(1,683)	1:A:718:ILE:HG23	1:A:729:ILE:HB	4	0.12
(1,654)	1:A:706:ALA:HB1	1:A:717:HIS:HA	20	0.12
(1,654)	1:A:706:ALA:HB2	1:A:717:HIS:HA	20	0.12
(1,654)	1:A:706:ALA:HB3	1:A:717:HIS:HA	20	0.12
(1,606)	1:A:730:THR:HB	1:A:731:GLU:HG3	15	0.12
(1,54)	1:A:666:LEU:H	1:A:667:SER:HA	12	0.12
(1,499)	1:A:709:ILE:HD11	1:A:711:TYR:HD1	13	0.12
(1,499)	1:A:709:ILE:HD11	1:A:711:TYR:HD2	13	0.12
(1,499)	1:A:709:ILE:HD12	1:A:711:TYR:HD1	13	0.12
(1,499)	1:A:709:ILE:HD12	1:A:711:TYR:HD2	13	0.12
(1,499)	1:A:709:ILE:HD13	1:A:711:TYR:HD1	13	0.12
(1,499)	1:A:709:ILE:HD13	1:A:711:TYR:HD2	13	0.12
(1,307)	1:A:685:LEU:HA	1:A:688:ARG:HD2	1	0.12
(1,307)	1:A:685:LEU:HA	1:A:688:ARG:HD2	12	0.12
(1,2979)	1:A:678:ARG:HB2	2:B:340:GLU:HG2	12	0.12
(1,2979)	1:A:678:ARG:HB2	2:B:340:GLU:HG3	12	0.12
(1,2979)	1:A:678:ARG:HB3	2:B:340:GLU:HG2	12	0.12
(1,2979)	1:A:678:ARG:HB3	2:B:340:GLU:HG3	12	0.12

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2957)	1:A:681:ALA:HB1	2:B:342:PTR:HE1	10	0.12
(1,2957)	1:A:681:ALA:HB1	2:B:342:PTR:HE2	10	0.12
(1,2957)	1:A:681:ALA:HB2	2:B:342:PTR:HE1	10	0.12
(1,2957)	1:A:681:ALA:HB2	2:B:342:PTR:HE2	10	0.12
(1,2957)	1:A:681:ALA:HB3	2:B:342:PTR:HE1	10	0.12
(1,2957)	1:A:681:ALA:HB3	2:B:342:PTR:HE2	10	0.12
(1,2768)	1:A:728:ARG:HD2	1:A:730:THR:H	2	0.12
(1,2768)	1:A:728:ARG:HD3	1:A:730:THR:H	2	0.12
(1,2768)	1:A:728:ARG:HD2	1:A:730:THR:H	4	0.12
(1,2768)	1:A:728:ARG:HD3	1:A:730:THR:H	4	0.12
(1,2768)	1:A:728:ARG:HD2	1:A:730:THR:H	19	0.12
(1,2768)	1:A:728:ARG:HD3	1:A:730:THR:H	19	0.12
(1,2764)	1:A:728:ARG:H	1:A:738:LEU:HD11	18	0.12
(1,2764)	1:A:728:ARG:H	1:A:738:LEU:HD12	18	0.12
(1,2764)	1:A:728:ARG:H	1:A:738:LEU:HD13	18	0.12
(1,2764)	1:A:728:ARG:H	1:A:738:LEU:HD21	18	0.12
(1,2764)	1:A:728:ARG:H	1:A:738:LEU:HD22	18	0.12
(1,2764)	1:A:728:ARG:H	1:A:738:LEU:HD23	18	0.12
(1,2575)	1:A:690:ASP:HB2	1:A:762:GLN:HG2	11	0.12
(1,2575)	1:A:690:ASP:HB2	1:A:762:GLN:HG3	11	0.12
(1,2575)	1:A:690:ASP:HB3	1:A:762:GLN:HG2	11	0.12
(1,2575)	1:A:690:ASP:HB3	1:A:762:GLN:HG3	11	0.12
(1,2497)	1:A:682:GLU:HG2	1:A:683:SER:HB2	4	0.12
(1,2497)	1:A:682:GLU:HG2	1:A:683:SER:HB3	4	0.12
(1,2497)	1:A:682:GLU:HG3	1:A:683:SER:HB2	4	0.12
(1,2497)	1:A:682:GLU:HG3	1:A:683:SER:HB3	4	0.12
(1,2470)	1:A:678:ARG:HG2	1:A:679:ALA:HA	13	0.12
(1,2470)	1:A:678:ARG:HG3	1:A:679:ALA:HA	13	0.12
(1,2469)	1:A:678:ARG:HG2	1:A:679:ALA:H	13	0.12
(1,2469)	1:A:678:ARG:HG3	1:A:679:ALA:H	13	0.12
(1,2426)	1:A:670:LEU:HD11	1:A:672:TYR:H	17	0.12
(1,2426)	1:A:670:LEU:HD12	1:A:672:TYR:H	17	0.12
(1,2426)	1:A:670:LEU:HD13	1:A:672:TYR:H	17	0.12
(1,2426)	1:A:670:LEU:HD21	1:A:672:TYR:H	17	0.12
(1,2426)	1:A:670:LEU:HD22	1:A:672:TYR:H	17	0.12
(1,2426)	1:A:670:LEU:HD23	1:A:672:TYR:H	17	0.12
(1,2424)	1:A:670:LEU:HD11	1:A:671:TRP:HA	19	0.12
(1,2424)	1:A:670:LEU:HD12	1:A:671:TRP:HA	19	0.12
(1,2424)	1:A:670:LEU:HD13	1:A:671:TRP:HA	19	0.12
(1,2424)	1:A:670:LEU:HD21	1:A:671:TRP:HA	19	0.12
(1,2424)	1:A:670:LEU:HD22	1:A:671:TRP:HA	19	0.12
(1,2424)	1:A:670:LEU:HD23	1:A:671:TRP:HA	19	0.12

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2227)	1:A:727:TYR:HE1	1:A:738:LEU:HD21	4	0.12
(1,2227)	1:A:727:TYR:HE1	1:A:738:LEU:HD22	4	0.12
(1,2227)	1:A:727:TYR:HE1	1:A:738:LEU:HD23	4	0.12
(1,2227)	1:A:727:TYR:HE2	1:A:738:LEU:HD21	4	0.12
(1,2227)	1:A:727:TYR:HE2	1:A:738:LEU:HD22	4	0.12
(1,2227)	1:A:727:TYR:HE2	1:A:738:LEU:HD23	4	0.12
(1,2227)	1:A:727:TYR:HE1	1:A:738:LEU:HD21	5	0.12
(1,2227)	1:A:727:TYR:HE1	1:A:738:LEU:HD22	5	0.12
(1,2227)	1:A:727:TYR:HE1	1:A:738:LEU:HD23	5	0.12
(1,2227)	1:A:727:TYR:HE2	1:A:738:LEU:HD21	5	0.12
(1,2227)	1:A:727:TYR:HE2	1:A:738:LEU:HD22	5	0.12
(1,2227)	1:A:727:TYR:HE2	1:A:738:LEU:HD23	5	0.12
(1,2213)	1:A:670:LEU:HB3	1:A:767:GLU:H	3	0.12
(1,2213)	1:A:670:LEU:HB3	1:A:767:GLU:H	13	0.12
(1,2207)	1:A:767:GLU:H	1:A:767:GLU:HG2	1	0.12
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD21	7	0.12
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD22	7	0.12
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD23	7	0.12
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD21	19	0.12
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD22	19	0.12
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD23	19	0.12
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD11	7	0.12
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD12	7	0.12
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD13	7	0.12
(1,2082)	1:A:745:TYR:HD1	1:A:754:PHE:H	13	0.12
(1,2082)	1:A:745:TYR:HD2	1:A:754:PHE:H	13	0.12
(1,2082)	1:A:745:TYR:HD1	1:A:754:PHE:H	20	0.12
(1,2082)	1:A:745:TYR:HD2	1:A:754:PHE:H	20	0.12
(1,2076)	1:A:752:ASP:HB2	1:A:754:PHE:H	14	0.12
(1,2076)	1:A:752:ASP:HB3	1:A:754:PHE:H	14	0.12
(1,2071)	1:A:754:PHE:H	1:A:757:LEU:HD11	3	0.12
(1,2071)	1:A:754:PHE:H	1:A:757:LEU:HD12	3	0.12
(1,2071)	1:A:754:PHE:H	1:A:757:LEU:HD13	3	0.12
(1,2071)	1:A:754:PHE:H	1:A:757:LEU:HD11	17	0.12
(1,2071)	1:A:754:PHE:H	1:A:757:LEU:HD12	17	0.12
(1,2071)	1:A:754:PHE:H	1:A:757:LEU:HD13	17	0.12
(1,1944)	1:A:738:LEU:H	1:A:740:GLU:H	7	0.12
(1,1944)	1:A:738:LEU:H	1:A:740:GLU:H	11	0.12
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD11	1	0.12
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD12	1	0.12
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD13	1	0.12
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD11	4	0.12

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD12	4	0.12
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD13	4	0.12
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD11	9	0.12
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD12	9	0.12
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD13	9	0.12
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD11	10	0.12
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD12	10	0.12
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD13	10	0.12
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD11	13	0.12
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD12	13	0.12
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD13	13	0.12
(1,1627)	1:A:707:ILE:H	1:A:718:ILE:HD11	6	0.12
(1,1627)	1:A:707:ILE:H	1:A:718:ILE:HD12	6	0.12
(1,1627)	1:A:707:ILE:H	1:A:718:ILE:HD13	6	0.12
(1,1627)	1:A:707:ILE:H	1:A:718:ILE:HD11	13	0.12
(1,1627)	1:A:707:ILE:H	1:A:718:ILE:HD12	13	0.12
(1,1627)	1:A:707:ILE:H	1:A:718:ILE:HD13	13	0.12
(1,1627)	1:A:707:ILE:H	1:A:718:ILE:HD11	14	0.12
(1,1627)	1:A:707:ILE:H	1:A:718:ILE:HD12	14	0.12
(1,1627)	1:A:707:ILE:H	1:A:718:ILE:HD13	14	0.12
(1,1584)	1:A:696:ARG:H	1:A:697:GLN:HB2	13	0.12
(1,1584)	1:A:696:ARG:H	1:A:697:GLN:HB3	13	0.12
(1,157)	1:A:764:PRO:HG3	1:A:766:LYS:H	1	0.12
(1,1532)	1:A:765:PHE:H	1:A:766:LYS:HD2	10	0.12
(1,1532)	1:A:765:PHE:H	1:A:766:LYS:HD3	10	0.12
(1,1427)	1:A:682:GLU:H	1:A:682:GLU:HG3	8	0.12
(1,1408)	1:A:678:ARG:HA	1:A:680:GLY:H	3	0.12
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD21	1	0.12
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD22	1	0.12
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD23	1	0.12
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD21	2	0.12
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD22	2	0.12
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD23	2	0.12
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD21	12	0.12
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD22	12	0.12
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD23	12	0.12
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD21	17	0.12
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD22	17	0.12
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD23	17	0.12
(1,1268)	1:A:668:VAL:HA	1:A:669:HIS:H	1	0.12
(1,1268)	1:A:668:VAL:HA	1:A:669:HIS:H	4	0.12
(1,1212)	1:A:765:PHE:HA	1:A:767:GLU:H	14	0.12

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1121)	1:A:755:LYS:HA	1:A:756:SER:HA	1	0.12
(1,1121)	1:A:755:LYS:HA	1:A:756:SER:HA	2	0.12
(1,1121)	1:A:755:LYS:HA	1:A:756:SER:HA	6	0.12
(1,1121)	1:A:755:LYS:HA	1:A:756:SER:HA	7	0.12
(1,1121)	1:A:755:LYS:HA	1:A:756:SER:HA	13	0.12
(1,959)	1:A:740:GLU:HA	1:A:742:VAL:H	16	0.11
(1,877)	1:A:730:THR:HB	1:A:733:LYS:HB2	7	0.11
(1,877)	1:A:730:THR:HB	1:A:733:LYS:HB3	7	0.11
(1,867)	1:A:714:GLU:HB2	1:A:716:LYS:HD2	5	0.11
(1,867)	1:A:714:GLU:HB2	1:A:716:LYS:HD3	5	0.11
(1,825)	1:A:729:ILE:HG21	1:A:754:PHE:HA	9	0.11
(1,825)	1:A:729:ILE:HG22	1:A:754:PHE:HA	9	0.11
(1,825)	1:A:729:ILE:HG23	1:A:754:PHE:HA	9	0.11
(1,797)	1:A:716:LYS:HD2	1:A:757:LEU:HG	2	0.11
(1,797)	1:A:716:LYS:HD3	1:A:757:LEU:HG	2	0.11
(1,797)	1:A:716:LYS:HD2	1:A:757:LEU:HG	12	0.11
(1,797)	1:A:716:LYS:HD3	1:A:757:LEU:HG	12	0.11
(1,797)	1:A:716:LYS:HD2	1:A:757:LEU:HG	15	0.11
(1,797)	1:A:716:LYS:HD3	1:A:757:LEU:HG	15	0.11
(1,797)	1:A:716:LYS:HD2	1:A:757:LEU:HG	19	0.11
(1,797)	1:A:716:LYS:HD3	1:A:757:LEU:HG	19	0.11
(1,735)	1:A:720:ILE:HG12	1:A:721:MET:HB2	1	0.11
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD11	6	0.11
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD12	6	0.11
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD13	6	0.11
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD11	13	0.11
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD12	13	0.11
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD13	13	0.11
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD11	14	0.11
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD12	14	0.11
(1,695)	1:A:720:ILE:HA	1:A:729:ILE:HD13	14	0.11
(1,654)	1:A:706:ALA:HB1	1:A:717:HIS:HA	1	0.11
(1,654)	1:A:706:ALA:HB2	1:A:717:HIS:HA	1	0.11
(1,654)	1:A:706:ALA:HB3	1:A:717:HIS:HA	1	0.11
(1,606)	1:A:730:THR:HB	1:A:731:GLU:HG3	8	0.11
(1,437)	1:A:729:ILE:HA	1:A:730:THR:HG21	5	0.11
(1,437)	1:A:729:ILE:HA	1:A:730:THR:HG22	5	0.11
(1,437)	1:A:729:ILE:HA	1:A:730:THR:HG23	5	0.11
(1,307)	1:A:685:LEU:HA	1:A:688:ARG:HD2	17	0.11
(1,2981)	1:A:716:LYS:HG2	2:B:345:PRO:HG2	11	0.11
(1,2981)	1:A:716:LYS:HG2	2:B:345:PRO:HG3	11	0.11
(1,2981)	1:A:716:LYS:HG3	2:B:345:PRO:HG2	11	0.11

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2981)	1:A:716:LYS:HG3	2:B:345:PRO:HG3	11	0.11
(1,2974)	1:A:718:ILE:HD11	2:B:347:ALA:HB1	3	0.11
(1,2974)	1:A:718:ILE:HD11	2:B:347:ALA:HB2	3	0.11
(1,2974)	1:A:718:ILE:HD11	2:B:347:ALA:HB3	3	0.11
(1,2974)	1:A:718:ILE:HD12	2:B:347:ALA:HB1	3	0.11
(1,2974)	1:A:718:ILE:HD12	2:B:347:ALA:HB2	3	0.11
(1,2974)	1:A:718:ILE:HD12	2:B:347:ALA:HB3	3	0.11
(1,2974)	1:A:718:ILE:HD13	2:B:347:ALA:HB1	3	0.11
(1,2974)	1:A:718:ILE:HD13	2:B:347:ALA:HB2	3	0.11
(1,2974)	1:A:718:ILE:HD13	2:B:347:ALA:HB3	3	0.11
(1,2968)	1:A:729:ILE:HD11	2:B:346:PTR:HD1	5	0.11
(1,2968)	1:A:729:ILE:HD11	2:B:346:PTR:HD2	5	0.11
(1,2968)	1:A:729:ILE:HD12	2:B:346:PTR:HD1	5	0.11
(1,2968)	1:A:729:ILE:HD12	2:B:346:PTR:HD2	5	0.11
(1,2968)	1:A:729:ILE:HD13	2:B:346:PTR:HD1	5	0.11
(1,2968)	1:A:729:ILE:HD13	2:B:346:PTR:HD2	5	0.11
(1,2829)	1:A:742:VAL:HG11	1:A:743:GLU:HG2	7	0.11
(1,2829)	1:A:742:VAL:HG11	1:A:743:GLU:HG3	7	0.11
(1,2829)	1:A:742:VAL:HG12	1:A:743:GLU:HG2	7	0.11
(1,2829)	1:A:742:VAL:HG12	1:A:743:GLU:HG3	7	0.11
(1,2829)	1:A:742:VAL:HG13	1:A:743:GLU:HG2	7	0.11
(1,2829)	1:A:742:VAL:HG13	1:A:743:GLU:HG3	7	0.11
(1,2829)	1:A:742:VAL:HG21	1:A:743:GLU:HG2	7	0.11
(1,2829)	1:A:742:VAL:HG21	1:A:743:GLU:HG3	7	0.11
(1,2829)	1:A:742:VAL:HG22	1:A:743:GLU:HG2	7	0.11
(1,2829)	1:A:742:VAL:HG22	1:A:743:GLU:HG3	7	0.11
(1,2829)	1:A:742:VAL:HG23	1:A:743:GLU:HG2	7	0.11
(1,2829)	1:A:742:VAL:HG23	1:A:743:GLU:HG3	7	0.11
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD11	10	0.11
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD12	10	0.11
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD13	10	0.11
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD21	10	0.11
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD22	10	0.11
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD23	10	0.11
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD11	18	0.11
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD12	18	0.11
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD13	18	0.11
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD21	18	0.11
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD22	18	0.11
(1,2826)	1:A:742:VAL:HB	1:A:761:LEU:HD23	18	0.11
(1,2790)	1:A:736:ARG:HD2	1:A:740:GLU:HG2	11	0.11
(1,2790)	1:A:736:ARG:HD2	1:A:740:GLU:HG3	11	0.11

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2790)	1:A:736:ARG:HD3	1:A:740:GLU:HG2	11	0.11
(1,2790)	1:A:736:ARG:HD3	1:A:740:GLU:HG3	11	0.11
(1,2768)	1:A:728:ARG:HD2	1:A:730:THR:H	8	0.11
(1,2768)	1:A:728:ARG:HD3	1:A:730:THR:H	8	0.11
(1,2768)	1:A:728:ARG:HD2	1:A:730:THR:H	13	0.11
(1,2768)	1:A:728:ARG:HD3	1:A:730:THR:H	13	0.11
(1,2768)	1:A:728:ARG:HD2	1:A:730:THR:H	14	0.11
(1,2768)	1:A:728:ARG:HD3	1:A:730:THR:H	14	0.11
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD11	9	0.11
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD12	9	0.11
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD13	9	0.11
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD21	9	0.11
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD22	9	0.11
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD23	9	0.11
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD11	10	0.11
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD12	10	0.11
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD13	10	0.11
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD21	10	0.11
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD22	10	0.11
(1,2715)	1:A:716:LYS:HB3	1:A:757:LEU:HD23	10	0.11
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD11	20	0.11
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD12	20	0.11
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD13	20	0.11
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD21	20	0.11
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD22	20	0.11
(1,2618)	1:A:695:VAL:HG11	1:A:738:LEU:HD23	20	0.11
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD11	20	0.11
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD12	20	0.11
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD13	20	0.11
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD21	20	0.11
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD22	20	0.11
(1,2618)	1:A:695:VAL:HG12	1:A:738:LEU:HD23	20	0.11
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD11	20	0.11
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD12	20	0.11
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD13	20	0.11
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD21	20	0.11
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD22	20	0.11
(1,2618)	1:A:695:VAL:HG13	1:A:738:LEU:HD23	20	0.11
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD11	20	0.11
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD12	20	0.11
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD13	20	0.11
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD21	20	0.11

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD22	20	0.11
(1,2618)	1:A:695:VAL:HG21	1:A:738:LEU:HD23	20	0.11
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD11	20	0.11
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD12	20	0.11
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD13	20	0.11
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD21	20	0.11
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD22	20	0.11
(1,2618)	1:A:695:VAL:HG22	1:A:738:LEU:HD23	20	0.11
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD11	20	0.11
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD12	20	0.11
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD13	20	0.11
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD21	20	0.11
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD22	20	0.11
(1,2618)	1:A:695:VAL:HG23	1:A:738:LEU:HD23	20	0.11
(1,2595)	1:A:694:LEU:HD11	1:A:696:ARG:HD2	12	0.11
(1,2595)	1:A:694:LEU:HD11	1:A:696:ARG:HD3	12	0.11
(1,2595)	1:A:694:LEU:HD12	1:A:696:ARG:HD2	12	0.11
(1,2595)	1:A:694:LEU:HD12	1:A:696:ARG:HD3	12	0.11
(1,2595)	1:A:694:LEU:HD13	1:A:696:ARG:HD2	12	0.11
(1,2595)	1:A:694:LEU:HD13	1:A:696:ARG:HD3	12	0.11
(1,2595)	1:A:694:LEU:HD21	1:A:696:ARG:HD2	12	0.11
(1,2595)	1:A:694:LEU:HD21	1:A:696:ARG:HD3	12	0.11
(1,2595)	1:A:694:LEU:HD22	1:A:696:ARG:HD2	12	0.11
(1,2595)	1:A:694:LEU:HD22	1:A:696:ARG:HD3	12	0.11
(1,2595)	1:A:694:LEU:HD23	1:A:696:ARG:HD2	12	0.11
(1,2595)	1:A:694:LEU:HD23	1:A:696:ARG:HD3	12	0.11
(1,2575)	1:A:690:ASP:HB2	1:A:762:GLN:HG2	4	0.11
(1,2575)	1:A:690:ASP:HB2	1:A:762:GLN:HG3	4	0.11
(1,2575)	1:A:690:ASP:HB3	1:A:762:GLN:HG2	4	0.11
(1,2575)	1:A:690:ASP:HB3	1:A:762:GLN:HG3	4	0.11
(1,2575)	1:A:690:ASP:HB2	1:A:762:GLN:HG2	7	0.11
(1,2575)	1:A:690:ASP:HB2	1:A:762:GLN:HG3	7	0.11
(1,2575)	1:A:690:ASP:HB3	1:A:762:GLN:HG2	7	0.11
(1,2575)	1:A:690:ASP:HB3	1:A:762:GLN:HG3	7	0.11
(1,257)	1:A:682:GLU:HA	1:A:683:SER:HA	1	0.11
(1,257)	1:A:682:GLU:HA	1:A:683:SER:HA	3	0.11
(1,257)	1:A:682:GLU:HA	1:A:683:SER:HA	10	0.11
(1,257)	1:A:682:GLU:HA	1:A:683:SER:HA	11	0.11
(1,257)	1:A:682:GLU:HA	1:A:683:SER:HA	14	0.11
(1,2498)	1:A:682:GLU:HG2	1:A:715:VAL:H	11	0.11
(1,2498)	1:A:682:GLU:HG3	1:A:715:VAL:H	11	0.11
(1,2426)	1:A:670:LEU:HD11	1:A:672:TYR:H	11	0.11

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2426)	1:A:670:LEU:HD12	1:A:672:TYR:H	11	0.11
(1,2426)	1:A:670:LEU:HD13	1:A:672:TYR:H	11	0.11
(1,2426)	1:A:670:LEU:HD21	1:A:672:TYR:H	11	0.11
(1,2426)	1:A:670:LEU:HD22	1:A:672:TYR:H	11	0.11
(1,2426)	1:A:670:LEU:HD23	1:A:672:TYR:H	11	0.11
(1,2425)	1:A:670:LEU:HD11	1:A:671:TRP:HZ2	5	0.11
(1,2425)	1:A:670:LEU:HD12	1:A:671:TRP:HZ2	5	0.11
(1,2425)	1:A:670:LEU:HD13	1:A:671:TRP:HZ2	5	0.11
(1,2425)	1:A:670:LEU:HD21	1:A:671:TRP:HZ2	5	0.11
(1,2425)	1:A:670:LEU:HD22	1:A:671:TRP:HZ2	5	0.11
(1,2425)	1:A:670:LEU:HD23	1:A:671:TRP:HZ2	5	0.11
(1,2378)	1:A:665:ASP:HA	1:A:666:LEU:HD11	1	0.11
(1,2378)	1:A:665:ASP:HA	1:A:666:LEU:HD12	1	0.11
(1,2378)	1:A:665:ASP:HA	1:A:666:LEU:HD13	1	0.11
(1,2378)	1:A:665:ASP:HA	1:A:666:LEU:HD21	1	0.11
(1,2378)	1:A:665:ASP:HA	1:A:666:LEU:HD22	1	0.11
(1,2378)	1:A:665:ASP:HA	1:A:666:LEU:HD23	1	0.11
(1,2322)	1:A:711:TYR:HD1	1:A:712:ASN:HB2	8	0.11
(1,2322)	1:A:711:TYR:HD2	1:A:712:ASN:HB2	8	0.11
(1,2303)	1:A:716:LYS:HB3	1:A:754:PHE:HD1	5	0.11
(1,2303)	1:A:716:LYS:HB3	1:A:754:PHE:HD2	5	0.11
(1,2236)	1:A:711:TYR:HE1	1:A:757:LEU:HG	2	0.11
(1,2236)	1:A:711:TYR:HE2	1:A:757:LEU:HG	2	0.11
(1,2217)	1:A:671:TRP:HZ2	1:A:739:THR:HB	9	0.11
(1,2213)	1:A:670:LEU:HB3	1:A:767:GLU:H	4	0.11
(1,2213)	1:A:670:LEU:HB3	1:A:767:GLU:H	14	0.11
(1,2213)	1:A:670:LEU:HB3	1:A:767:GLU:H	15	0.11
(1,2213)	1:A:670:LEU:HB3	1:A:767:GLU:H	16	0.11
(1,2207)	1:A:767:GLU:H	1:A:767:GLU:HG2	12	0.11
(1,220)	1:A:677:GLU:HB2	1:A:679:ALA:HB1	8	0.11
(1,220)	1:A:677:GLU:HB2	1:A:679:ALA:HB2	8	0.11
(1,220)	1:A:677:GLU:HB2	1:A:679:ALA:HB3	8	0.11
(1,2195)	1:A:670:LEU:HG	1:A:766:LYS:H	5	0.11
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD21	17	0.11
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD22	17	0.11
(1,2147)	1:A:761:LEU:H	1:A:761:LEU:HD23	17	0.11
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD11	4	0.11
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD12	4	0.11
(1,2144)	1:A:761:LEU:H	1:A:761:LEU:HD13	4	0.11
(1,2093)	1:A:755:LYS:HB3	1:A:756:SER:H	20	0.11
(1,2082)	1:A:745:TYR:HD1	1:A:754:PHE:H	3	0.11
(1,2082)	1:A:745:TYR:HD2	1:A:754:PHE:H	3	0.11

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,2082)	1:A:745:TYR:HD1	1:A:754:PHE:H	4	0.11
(1,2082)	1:A:745:TYR:HD2	1:A:754:PHE:H	4	0.11
(1,2082)	1:A:745:TYR:HD1	1:A:754:PHE:H	12	0.11
(1,2082)	1:A:745:TYR:HD2	1:A:754:PHE:H	12	0.11
(1,2002)	1:A:743:GLU:HA	1:A:745:TYR:H	18	0.11
(1,1944)	1:A:738:LEU:H	1:A:740:GLU:H	1	0.11
(1,1944)	1:A:738:LEU:H	1:A:740:GLU:H	17	0.11
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD11	2	0.11
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD12	2	0.11
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD13	2	0.11
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD11	16	0.11
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD12	16	0.11
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD13	16	0.11
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD11	17	0.11
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD12	17	0.11
(1,1777)	1:A:727:TYR:H	1:A:741:LEU:HD13	17	0.11
(1,1723)	1:A:717:HIS:H	1:A:718:ILE:H	1	0.11
(1,1723)	1:A:717:HIS:H	1:A:718:ILE:H	11	0.11
(1,1723)	1:A:717:HIS:H	1:A:718:ILE:H	14	0.11
(1,1723)	1:A:717:HIS:H	1:A:718:ILE:H	19	0.11
(1,170)	1:A:676:MET:HG2	1:A:680:GLY:H	17	0.11
(1,1614)	1:A:706:ALA:H	1:A:720:ILE:HD11	7	0.11
(1,1614)	1:A:706:ALA:H	1:A:720:ILE:HD12	7	0.11
(1,1614)	1:A:706:ALA:H	1:A:720:ILE:HD13	7	0.11
(1,1614)	1:A:706:ALA:H	1:A:720:ILE:HD11	17	0.11
(1,1614)	1:A:706:ALA:H	1:A:720:ILE:HD12	17	0.11
(1,1614)	1:A:706:ALA:H	1:A:720:ILE:HD13	17	0.11
(1,157)	1:A:764:PRO:HG3	1:A:766:LYS:H	17	0.11
(1,1532)	1:A:765:PHE:H	1:A:766:LYS:HD2	12	0.11
(1,1532)	1:A:765:PHE:H	1:A:766:LYS:HD3	12	0.11
(1,1500)	1:A:691:GLY:H	1:A:692:THR:HG21	12	0.11
(1,1500)	1:A:691:GLY:H	1:A:692:THR:HG22	12	0.11
(1,1500)	1:A:691:GLY:H	1:A:692:THR:HG23	12	0.11
(1,1458)	1:A:685:LEU:H	1:A:692:THR:HB	16	0.11
(1,1408)	1:A:678:ARG:HA	1:A:680:GLY:H	7	0.11
(1,1368)	1:A:677:GLU:H	1:A:677:GLU:HB3	12	0.11
(1,1300)	1:A:667:SER:HA	1:A:672:TYR:H	8	0.11
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD21	4	0.11
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD22	4	0.11
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD23	4	0.11
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD21	6	0.11
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD22	6	0.11

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Key	Atom-1	Atom-2	Model ID	Violation (Å)
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD23	6	0.11
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD21	7	0.11
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD22	7	0.11
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD23	7	0.11
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD21	9	0.11
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD22	9	0.11
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD23	9	0.11
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD21	11	0.11
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD22	11	0.11
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD23	11	0.11
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD21	13	0.11
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD22	13	0.11
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD23	13	0.11
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD21	15	0.11
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD22	15	0.11
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD23	15	0.11
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD21	16	0.11
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD22	16	0.11
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD23	16	0.11
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD21	18	0.11
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD22	18	0.11
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD23	18	0.11
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD21	20	0.11
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD22	20	0.11
(1,1275)	1:A:670:LEU:H	1:A:670:LEU:HD23	20	0.11
(1,1222)	1:A:766:LYS:HA	1:A:766:LYS:HD2	4	0.11
(1,1222)	1:A:766:LYS:HA	1:A:766:LYS:HD3	4	0.11
(1,1222)	1:A:766:LYS:HA	1:A:766:LYS:HD2	16	0.11
(1,1222)	1:A:766:LYS:HA	1:A:766:LYS:HD3	16	0.11
(1,1212)	1:A:765:PHE:HA	1:A:767:GLU:H	16	0.11
(1,1121)	1:A:755:LYS:HA	1:A:756:SER:HA	5	0.11
(1,1121)	1:A:755:LYS:HA	1:A:756:SER:HA	8	0.11
(1,1121)	1:A:755:LYS:HA	1:A:756:SER:HA	14	0.11
(1,1121)	1:A:755:LYS:HA	1:A:756:SER:HA	19	0.11
(1,1121)	1:A:755:LYS:HA	1:A:756:SER:HA	20	0.11
(1,1072)	1:A:749:SER:H	1:A:750:LEU:HA	9	0.11
(1,1017)	1:A:667:SER:HB2	1:A:668:VAL:HB	8	0.11
(1,1017)	1:A:667:SER:HB3	1:A:668:VAL:HB	8	0.11
(1,1)	1:A:662:HIS:HA	1:A:662:HIS:HD2	18	0.11

10 Dihedral-angle violation analysis (i)

No dihedral-angle restraints found