



Full wwPDB NMR Structure Validation Report i

Jun 6, 2023 – 06:35 pm BST

PDB ID : 6XTT
BMRB ID : 34480
Title : Solution structure of Legionella pneumophila NttA
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Deposited on : 2020-01-16

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](#) ①) were used in the production of this report:

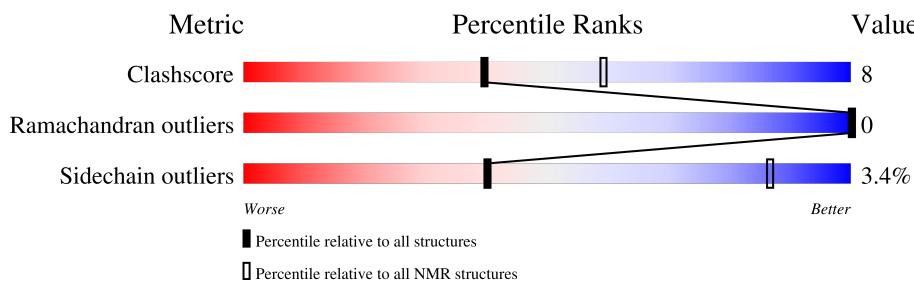
MolProbitiy : 4.02b-467
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
wwPDB-RCI : v_1n_11_5_13_A (Berjanski et al., 2005)
PANAV : Wang et al. (2010)
wwPDB-ShiftChecker : v1.2
BMRB Restraints Analysis : v1.2
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal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

1 Overall quality at a glance

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

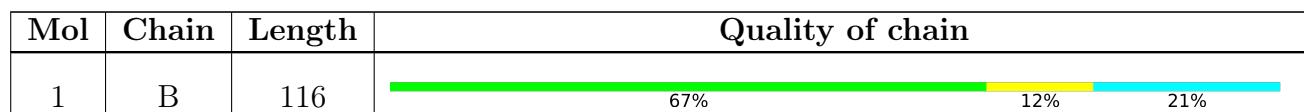
The overall completeness of chemical shifts assignment is 93%.

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 $\leq 5\%$



2 Ensemble composition and analysis i

This entry contains 10 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 | B:8-B:99 (92) | 0.41 | 2 |

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

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

NmrClust was unable to cluster the ensemble.

Error message: Inconsistent models

3 Entry composition (i)

There is only 1 type of molecule in this entry. The entry contains 1827 atoms, of which 898 are hydrogens and 0 are deuteriums.

- Molecule 1 is a protein called NttA.

| Mol | Chain | Residues | Atoms | | | | | | Trace |
|-----|-------|----------|-------|-----|-----|-----|-----|----|-------|
| | | | Total | C | H | N | O | S | |
| 1 | B | 116 | 1827 | 579 | 898 | 157 | 183 | 10 | 0 |

There are 15 discrepancies between the modelled and reference sequences:

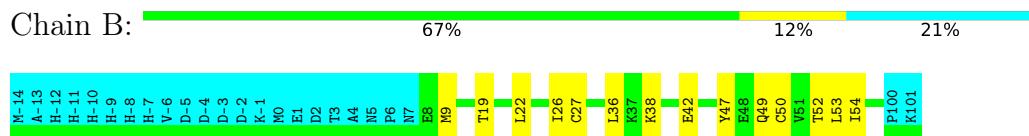
| Chain | Residue | Modelled | Actual | Comment | Reference |
|-------|---------|----------|--------|-----------------------|----------------|
| B | -14 | MET | - | initiating methionine | UNP A0A128USX4 |
| B | -13 | ALA | - | expression tag | UNP A0A128USX4 |
| B | -12 | HIS | - | expression tag | UNP A0A128USX4 |
| B | -11 | HIS | - | expression tag | UNP A0A128USX4 |
| B | -10 | HIS | - | expression tag | UNP A0A128USX4 |
| B | -9 | HIS | - | expression tag | UNP A0A128USX4 |
| B | -8 | HIS | - | expression tag | UNP A0A128USX4 |
| B | -7 | HIS | - | expression tag | UNP A0A128USX4 |
| B | -6 | VAL | - | expression tag | UNP A0A128USX4 |
| B | -5 | ASP | - | expression tag | UNP A0A128USX4 |
| B | -4 | ASP | - | expression tag | UNP A0A128USX4 |
| B | -3 | ASP | - | expression tag | UNP A0A128USX4 |
| B | -2 | ASP | - | expression tag | UNP A0A128USX4 |
| B | -1 | LYS | - | expression tag | UNP A0A128USX4 |
| B | 0 | MET | - | expression tag | UNP A0A128USX4 |

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: NttA

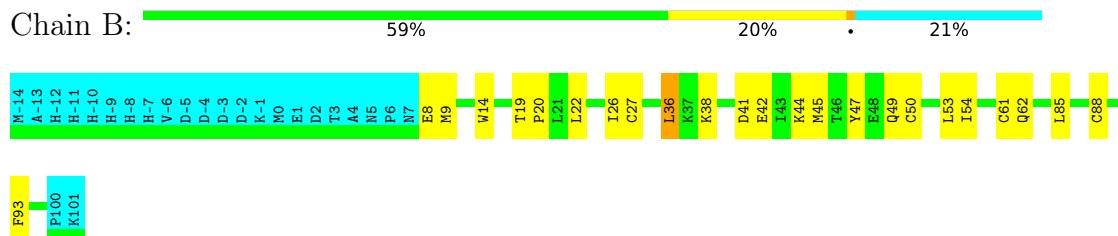


4.2 Scores per residue for each member of the ensemble

Colouring as in section 4.1 above.

4.2.1 Score per residue for model 1

- Molecule 1: NttA



4.2.2 Score per residue for model 2 (medoid)

- Molecule 1: NttA





4.2.3 Score per residue for model 3

- Molecule 1: NttA

Chain B: 63% 16% • 21%



4.2.4 Score per residue for model 4

- Molecule 1: NttA

Chain B: 62% 16% • 21%



4.2.5 Score per residue for model 5

- Molecule 1: NttA

Chain B: 66% 12% • 21%



4.2.6 Score per residue for model 6

- Molecule 1: NttA

Chain B: 66% 12% • 21%



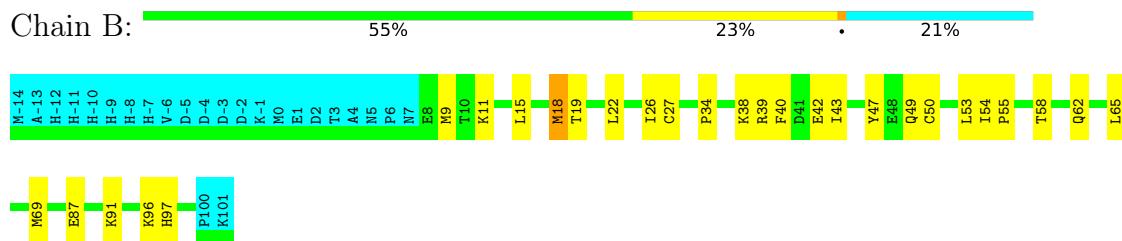
4.2.7 Score per residue for model 7

- Molecule 1: NttA



4.2.8 Score per residue for model 8

- Molecule 1: NttA



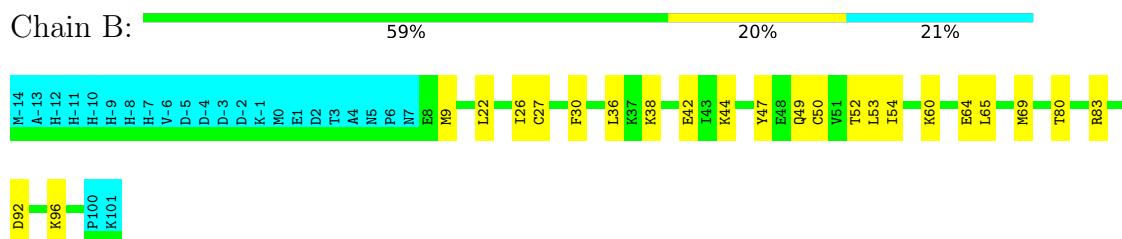
4.2.9 Score per residue for model 9

- Molecule 1: NttA



4.2.10 Score per residue for model 10

- Molecule 1: NttA



5 Refinement protocol and experimental data overview i

The models were refined using the following method: *molecular dynamics*.

Of the 20 calculated structures, 10 were deposited, based on the following criterion: *all calculated structures submitted*.

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

| Software name | Classification | Version |
|---------------|-----------------------|---------|
| CNS | refinement | |
| ARIA | structure calculation | |

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

| | |
|--|----------------|
| Chemical shift file(s) | working_cs.cif |
| Number of chemical shift lists | 1 |
| Total number of shifts | 1342 |
| Number of shifts mapped to atoms | 1342 |
| Number of unparsed shifts | 0 |
| Number of shifts with mapping errors | 0 |
| Number of shifts with mapping warnings | 0 |
| Assignment completeness (well-defined parts) | 93% |

6 Model quality [\(i\)](#)

6.1 Standard geometry [\(i\)](#)

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 [\(i\)](#)

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 | B | 731 | 726 | 727 | 11±2 |
| All | All | 7310 | 7260 | 7262 | 112 |

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 8.

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

| Atom-1 | Atom-2 | Clash(Å) | Distance(Å) | Models | |
|----------------|-----------------|----------|-------------|--------|-------|
| | | | | Worst | Total |
| 1:B:27:CYS:SG | 1:B:47:TYR:HA | 0.78 | 2.18 | 4 | 8 |
| 1:B:15:LEU:HA | 1:B:18:MET:SD | 0.74 | 2.22 | 8 | 1 |
| 1:B:49:GLN:O | 1:B:53:LEU:HG | 0.59 | 1.97 | 1 | 7 |
| 1:B:35:ASP:O | 1:B:38:LYS:HG3 | 0.59 | 1.98 | 7 | 2 |
| 1:B:38:LYS:O | 1:B:42:GLU:HG2 | 0.58 | 1.98 | 8 | 9 |
| 1:B:22:LEU:O | 1:B:26:ILE:HG12 | 0.55 | 2.02 | 7 | 10 |
| 1:B:49:GLN:O | 1:B:52:THR:HG22 | 0.55 | 2.01 | 2 | 6 |
| 1:B:50:CYS:O | 1:B:54:ILE:HG12 | 0.55 | 2.01 | 8 | 8 |
| 1:B:41:ASP:O | 1:B:44:LYS:HD2 | 0.52 | 2.04 | 1 | 1 |
| 1:B:61:CYS:SG | 1:B:85:LEU:HA | 0.52 | 2.45 | 1 | 1 |
| 1:B:45:MET:SD | 1:B:93:PHE:HZ | 0.51 | 2.28 | 9 | 2 |
| 1:B:61:CYS:SG | 1:B:88:CYS:CB | 0.51 | 2.99 | 1 | 1 |
| 1:B:55:PRO:HA | 1:B:58:THR:OG1 | 0.51 | 2.06 | 8 | 2 |
| 1:B:36:LEU:CD2 | 1:B:36:LEU:N | 0.50 | 2.74 | 6 | 6 |

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| Atom-1 | Atom-2 | Clash(Å) | Distance(Å) | Models | |
|-----------------|-----------------|----------|-------------|--------|-------|
| | | | | Worst | Total |
| 1:B:57:SER:OG | 1:B:89:ILE:HA | 0.49 | 2.07 | 2 | 1 |
| 1:B:80:THR:O | 1:B:83:ARG:HG2 | 0.48 | 2.08 | 2 | 2 |
| 1:B:9:MET:SD | 1:B:14:TRP:HD1 | 0.47 | 2.33 | 7 | 4 |
| 1:B:60:LYS:O | 1:B:64:GLU:HG2 | 0.46 | 2.11 | 9 | 2 |
| 1:B:87:GLU:O | 1:B:91:LYS:HG3 | 0.46 | 2.10 | 8 | 1 |
| 1:B:92:ASP:OD1 | 1:B:96:LYS:HE2 | 0.46 | 2.10 | 2 | 2 |
| 1:B:40:PHE:HE1 | 1:B:50:CYS:SG | 0.46 | 2.34 | 8 | 1 |
| 1:B:39:ARG:HD2 | 1:B:98:LEU:O | 0.45 | 2.10 | 2 | 1 |
| 1:B:53:LEU:HD13 | 1:B:97:HIS:CD2 | 0.45 | 2.46 | 2 | 1 |
| 1:B:30:PHE:CD1 | 1:B:36:LEU:HD12 | 0.45 | 2.47 | 6 | 2 |
| 1:B:65:LEU:O | 1:B:69:MET:HG3 | 0.45 | 2.12 | 9 | 5 |
| 1:B:11:LYS:O | 1:B:15:LEU:HG | 0.44 | 2.12 | 8 | 1 |
| 1:B:19:THR:OG1 | 1:B:20:PRO:HD3 | 0.43 | 2.14 | 4 | 5 |
| 1:B:11:LYS:HE2 | 1:B:66:TYR:CE2 | 0.43 | 2.48 | 4 | 1 |
| 1:B:96:LYS:CG | 1:B:97:HIS:N | 0.42 | 2.81 | 8 | 2 |
| 1:B:39:ARG:O | 1:B:43:ILE:HG12 | 0.42 | 2.13 | 8 | 3 |
| 1:B:91:LYS:O | 1:B:95:GLU:HG3 | 0.42 | 2.15 | 4 | 1 |
| 1:B:30:PHE:CD2 | 1:B:36:LEU:HD13 | 0.42 | 2.50 | 10 | 1 |
| 1:B:45:MET:SD | 1:B:93:PHE:CZ | 0.41 | 3.13 | 1 | 2 |
| 1:B:54:ILE:N | 1:B:55:PRO:CD | 0.41 | 2.83 | 8 | 5 |
| 1:B:34:PRO:O | 1:B:38:LYS:HG3 | 0.41 | 2.15 | 8 | 1 |
| 1:B:33:ASP:OD2 | 1:B:35:ASP:HB2 | 0.41 | 2.14 | 2 | 1 |
| 1:B:28:LYS:O | 1:B:32:GLN:HG3 | 0.40 | 2.16 | 7 | 1 |
| 1:B:79:GLY:O | 1:B:83:ARG:HG2 | 0.40 | 2.16 | 4 | 1 |
| 1:B:22:LEU:N | 1:B:23:PRO:CD | 0.40 | 2.84 | 9 | 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 | B | 92/116 (79%) | 91±1 (99±1%) | 1±1 (1±1%) | 0±0 (0±0%) | 100 100 |
| All | All | 920/1160 (79%) | 907 (99%) | 13 (1%) | 0 (0%) | 100 100 |

There are no Ramachandran outliers.

6.3.2 Protein sidechains [\(i\)](#)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all NMR entries. The Analysed column shows the number of residues for which the sidechain conformation was analysed and the total number of residues.

| Mol | Chain | Analysed | Rotameric | Outliers | Percentiles |
|-----|-------|----------------|--------------|------------|-------------|
| 1 | B | 83/105 (79%) | 80±1 (97±1%) | 3±1 (3±1%) | 40 87 |
| All | All | 830/1050 (79%) | 802 (97%) | 28 (3%) | 40 87 |

All 10 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 | B | 36 | LEU | 6 |
| 1 | B | 62 | GLN | 5 |
| 1 | B | 8 | GLU | 4 |
| 1 | B | 9 | MET | 4 |
| 1 | B | 19 | THR | 3 |
| 1 | B | 18 | MET | 2 |
| 1 | B | 64 | GLU | 1 |
| 1 | B | 63 | ASP | 1 |
| 1 | B | 38 | LYS | 1 |
| 1 | B | 44 | LYS | 1 |

6.3.3 RNA [\(i\)](#)

There are no RNA molecules in this entry.

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

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

6.5 Carbohydrates [\(i\)](#)

There are no 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 i

The completeness of assignment taking into account all chemical shift lists is 93% for the well-defined parts and 86% for the entire structure.

7.1 Chemical shift list 1

File name: working_cs.cif

Chemical shift list name: *assigned_chem_shift_list*

7.1.1 Bookkeeping i

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

| | |
|---|------|
| Total number of shifts | 1342 |
| Number of shifts mapped to atoms | 1342 |
| Number of unparsed shifts | 0 |
| Number of shifts with mapping errors | 0 |
| Number of shifts with mapping warnings | 0 |
| Number of shift outliers (ShiftChecker) | 2 |

7.1.2 Chemical shift referencing i

The following table shows the suggested chemical shift referencing corrections.

| Nucleus | # values | Correction \pm precision, ppm | Suggested action |
|------------------------|----------|---------------------------------|-------------------------|
| $^{13}\text{C}_\alpha$ | 109 | -0.50 \pm 0.10 | Should be checked |
| $^{13}\text{C}_\beta$ | 104 | 0.04 \pm 0.15 | None needed (< 0.5 ppm) |
| $^{13}\text{C}'$ | 106 | -0.32 \pm 0.17 | None needed (< 0.5 ppm) |
| ^{15}N | 101 | 0.60 \pm 0.29 | Should be applied |

7.1.3 Completeness of resonance assignments i

The following table shows the completeness of the chemical shift assignments for the well-defined regions of the structure. The overall completeness is 93%, i.e. 1164 atoms were assigned a chemical shift out of a possible 1245. 0 out of 10 assigned methyl groups (LEU and VAL) were assigned stereospecifically.

| | Total | ^1H | ^{13}C | ^{15}N |
|-----------|---------------|----------------|-----------------|-----------------|
| Backbone | 452/455 (99%) | 184/184 (100%) | 181/184 (98%) | 87/87 (100%) |
| Sidechain | 646/710 (91%) | 439/459 (96%) | 207/230 (90%) | 0/21 (0%) |

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| | Total | ¹ H | ¹³ C | ¹⁵ N |
|----------|-----------------|----------------|-----------------|-----------------|
| Aromatic | 66/80 (82%) | 34/39 (87%) | 30/37 (81%) | 2/4 (50%) |
| Overall | 1164/1245 (93%) | 657/682 (96%) | 418/451 (93%) | 89/112 (79%) |

The following table shows the completeness of the chemical shift assignments for the full structure. The overall completeness is 86%, i.e. 1342 atoms were assigned a chemical shift out of a possible 1556. 0 out of 11 assigned methyl groups (LEU and VAL) were assigned stereospecifically.

| | Total | ¹ H | ¹³ C | ¹⁵ N |
|-----------|-----------------|----------------|-----------------|-----------------|
| Backbone | 531/571 (93%) | 215/230 (93%) | 215/232 (93%) | 101/109 (93%) |
| Sidechain | 745/857 (87%) | 505/552 (91%) | 240/280 (86%) | 0/25 (0%) |
| Aromatic | 66/128 (52%) | 34/63 (54%) | 30/49 (61%) | 2/16 (12%) |
| Overall | 1342/1556 (86%) | 754/845 (89%) | 485/561 (86%) | 103/150 (69%) |

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

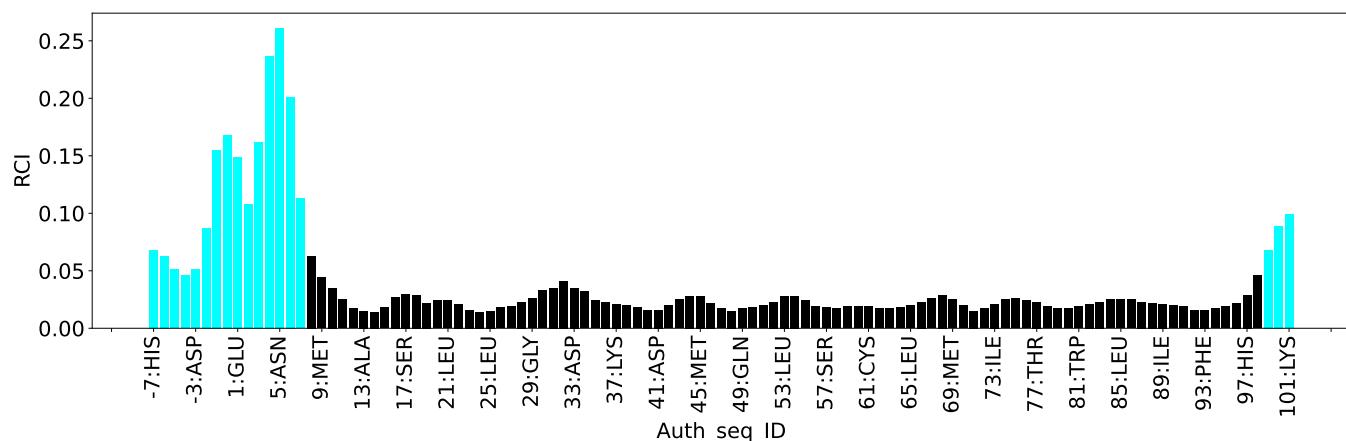
The following table lists the statistically unusual chemical shifts. These are statistical measures, and large deviations from the mean do not necessarily imply incorrect assignments. Molecules containing paramagnetic centres or hemes are expected to give rise to anomalous chemical shifts.

| List Id | Chain | Res | Type | Atom | Shift, ppm | Expected range, ppm | Z-score |
|---------|-------|-----|------|------|------------|---------------------|---------|
| 1 | B | 18 | MET | CE | 33.56 | 8.39 – 25.85 | 9.4 |
| 1 | B | 0 | MET | CE | 32.28 | 8.39 – 25.85 | 8.7 |

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 B:



8 NMR restraints analysis (i)

8.1 Conformationally restricting restraints (i)

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 | 3063 |
| Intra-residue ($ i-j =0$) | 953 |
| Sequential ($ i-j =1$) | 696 |
| Medium range ($ i-j >1$ and $ i-j <5$) | 784 |
| Long range ($ i-j \geq 5$) | 630 |
| Inter-chain | 0 |
| Hydrogen bond restraints | 0 |
| Disulfide bond restraints | 0 |
| Total dihedral-angle restraints | 0 |
| Number of unmapped restraints | 0 |
| Number of restraints per residue | 26.4 |
| Number of long range restraints per residue ¹ | 5.4 |

¹Long 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 (i)

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 (i)

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) | 40.6 | 0.2 |
| 0.2-0.5 (Medium) | 73.1 | 0.5 |
| >0.5 (Large) | 70.3 | 2.7 |

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)

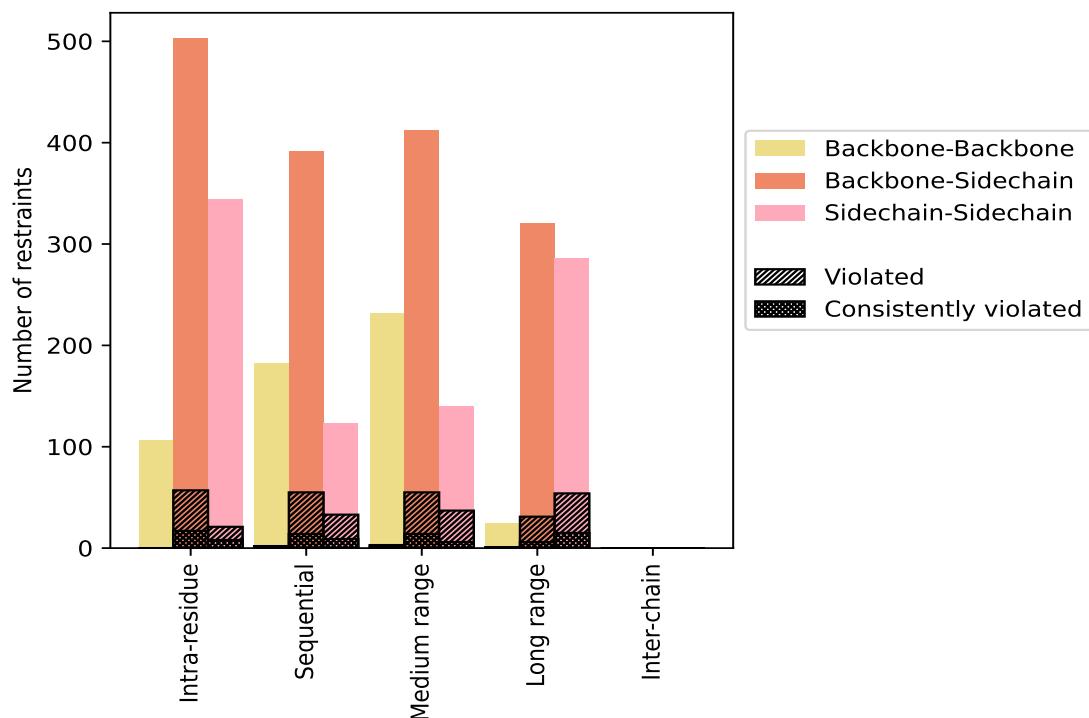
9.1 Summary of distance violations (i)

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$) | 953 | 31.1 | 78 | 8.2 | 2.5 | 25 | 2.6 | 0.8 |
| Backbone-Backbone | 106 | 3.5 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 |
| Backbone-Sidechain | 503 | 16.4 | 57 | 11.3 | 1.9 | 17 | 3.4 | 0.6 |
| Sidechain-Sidechain | 344 | 11.2 | 21 | 6.1 | 0.7 | 8 | 2.3 | 0.3 |
| Sequential ($ i-j =1$) | 696 | 22.7 | 90 | 12.9 | 2.9 | 23 | 3.3 | 0.8 |
| Backbone-Backbone | 182 | 5.9 | 2 | 1.1 | 0.1 | 0 | 0.0 | 0.0 |
| Backbone-Sidechain | 391 | 12.8 | 55 | 14.1 | 1.8 | 14 | 3.6 | 0.5 |
| Sidechain-Sidechain | 123 | 4.0 | 33 | 26.8 | 1.1 | 9 | 7.3 | 0.3 |
| Medium range ($ i-j >1 \text{ & } i-j <5$) | 784 | 25.6 | 95 | 12.1 | 3.1 | 22 | 2.8 | 0.7 |
| Backbone-Backbone | 232 | 7.6 | 3 | 1.3 | 0.1 | 2 | 0.9 | 0.1 |
| Backbone-Sidechain | 412 | 13.5 | 55 | 13.3 | 1.8 | 14 | 3.4 | 0.5 |
| Sidechain-Sidechain | 140 | 4.6 | 37 | 26.4 | 1.2 | 6 | 4.3 | 0.2 |
| Long range ($ i-j \geq 5$) | 630 | 20.6 | 86 | 13.7 | 2.8 | 21 | 3.3 | 0.7 |
| Backbone-Backbone | 24 | 0.8 | 1 | 4.2 | 0.0 | 0 | 0.0 | 0.0 |
| Backbone-Sidechain | 320 | 10.4 | 31 | 9.7 | 1.0 | 6 | 1.9 | 0.2 |
| Sidechain-Sidechain | 286 | 9.3 | 54 | 18.9 | 1.8 | 15 | 5.2 | 0.5 |
| Inter-chain | 0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 |
| Backbone-Backbone | 0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 |
| Backbone-Sidechain | 0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 |
| Sidechain-Sidechain | 0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 |
| Hydrogen bond | 0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 |
| Disulfide bond | 0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 |
| Total | 3063 | 100.0 | 349 | 11.4 | 11.4 | 91 | 3.0 | 3.0 |
| Backbone-Backbone | 544 | 17.8 | 6 | 1.1 | 0.2 | 2 | 0.4 | 0.1 |
| Backbone-Sidechain | 1626 | 53.1 | 198 | 12.2 | 6.5 | 51 | 3.1 | 1.7 |
| Sidechain-Sidechain | 893 | 29.2 | 145 | 16.2 | 4.7 | 38 | 4.3 | 1.2 |

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 [\(i\)](#)



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

9.2 Distance violation statistics for each model [\(i\)](#)

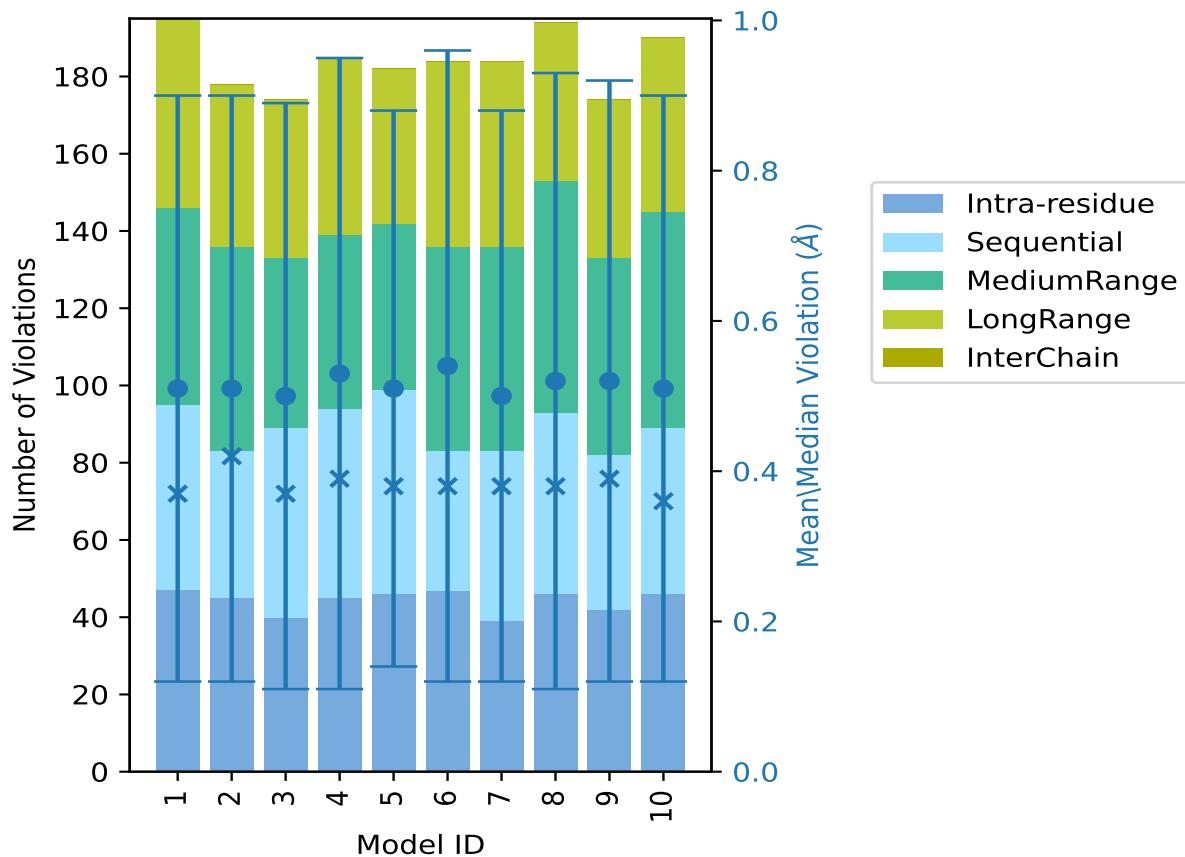
The following table provides the distance violation statistics for each model in the ensemble. Violations less than 0.1 Å are not included in the statistics.

| Model ID | Number of violations | | | | | | Mean (Å) | Max (Å) | SD ⁶ (Å) | Median (Å) |
|----------|----------------------|-----------------|-----------------|-----------------|-----------------|-------|----------|---------|---------------------|------------|
| | IR ¹ | SQ ² | MR ³ | LR ⁴ | IC ⁵ | Total | | | | |
| 1 | 47 | 48 | 51 | 49 | 0 | 195 | 0.51 | 2.66 | 0.39 | 0.37 |
| 2 | 45 | 38 | 53 | 42 | 0 | 178 | 0.51 | 2.51 | 0.39 | 0.42 |
| 3 | 40 | 49 | 44 | 41 | 0 | 174 | 0.5 | 2.7 | 0.39 | 0.37 |
| 4 | 45 | 49 | 45 | 46 | 0 | 185 | 0.53 | 2.68 | 0.42 | 0.39 |
| 5 | 46 | 53 | 43 | 40 | 0 | 182 | 0.51 | 2.42 | 0.37 | 0.38 |
| 6 | 47 | 36 | 53 | 48 | 0 | 184 | 0.54 | 2.36 | 0.42 | 0.38 |
| 7 | 39 | 44 | 53 | 48 | 0 | 184 | 0.5 | 2.51 | 0.38 | 0.38 |
| 8 | 46 | 47 | 60 | 41 | 0 | 194 | 0.52 | 2.65 | 0.41 | 0.38 |
| 9 | 42 | 40 | 51 | 41 | 0 | 174 | 0.52 | 2.68 | 0.4 | 0.39 |
| 10 | 46 | 43 | 56 | 45 | 0 | 190 | 0.51 | 2.61 | 0.39 | 0.36 |

¹Intra-residue restraints, ²Sequential restraints, ³Medium range restraints, ⁴Long range restraints,

⁵Inter-chain restraints, ⁶Standard deviation

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



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

9.3 Distance violation statistics for the ensemble [\(i\)](#)

Violation analysis may find that some restraints are violated in few models and some are violated in most of models. The following table provides this information as number of violated restraints for a given fraction of the ensemble. In total, 2714(IR:875, SQ:606, MR:689, LR:544, IC:0) restraints are not violated in the ensemble.

| IR ¹ | SQ ² | MR ³ | LR ⁴ | IC ⁵ | Total | Fraction of the ensemble | |
|-----------------|-----------------|-----------------|-----------------|-----------------|-------|--------------------------|------|
| | | | | | | Count ⁶ | % |
| 19 | 25 | 20 | 25 | 0 | 89 | 1 | 10.0 |
| 4 | 15 | 11 | 7 | 0 | 37 | 2 | 20.0 |
| 8 | 3 | 6 | 10 | 0 | 27 | 3 | 30.0 |
| 3 | 5 | 6 | 1 | 0 | 15 | 4 | 40.0 |

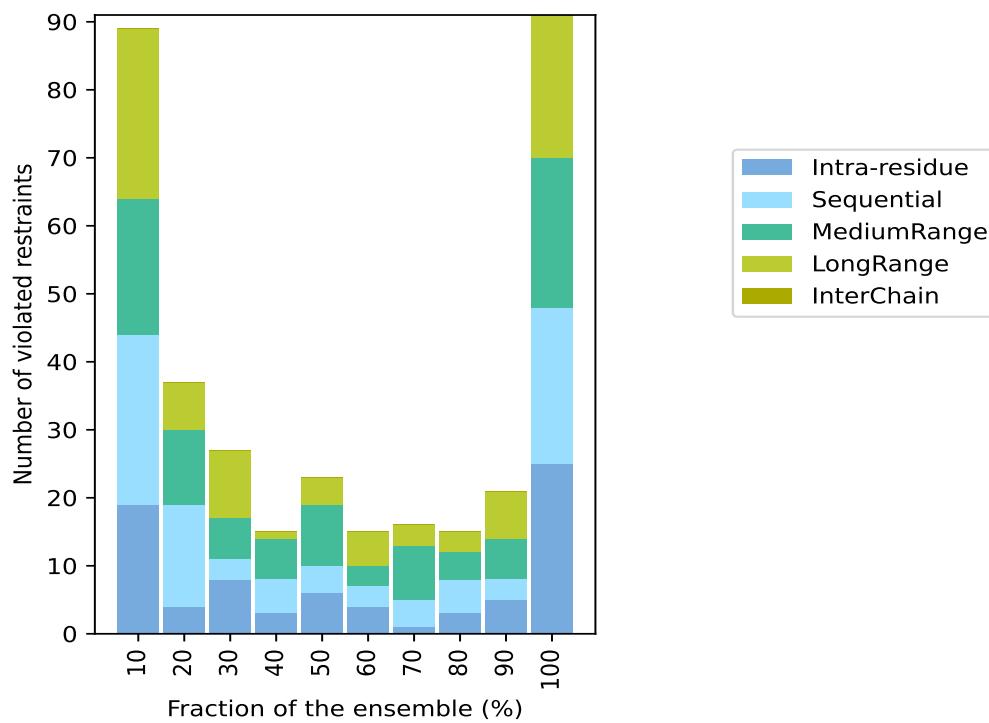
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| IR ¹ | Number of violated restraints | | | | | Fraction of the ensemble | |
|-----------------|-------------------------------|-----------------|-----------------|-----------------|-------|--------------------------|-------|
| | SQ ² | MR ³ | LR ⁴ | IC ⁵ | Total | Count ⁶ | % |
| 6 | 4 | 9 | 4 | 0 | 23 | 5 | 50.0 |
| 4 | 3 | 3 | 5 | 0 | 15 | 6 | 60.0 |
| 1 | 4 | 8 | 3 | 0 | 16 | 7 | 70.0 |
| 3 | 5 | 4 | 3 | 0 | 15 | 8 | 80.0 |
| 5 | 3 | 6 | 7 | 0 | 21 | 9 | 90.0 |
| 25 | 23 | 22 | 21 | 0 | 91 | 10 | 100.0 |

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

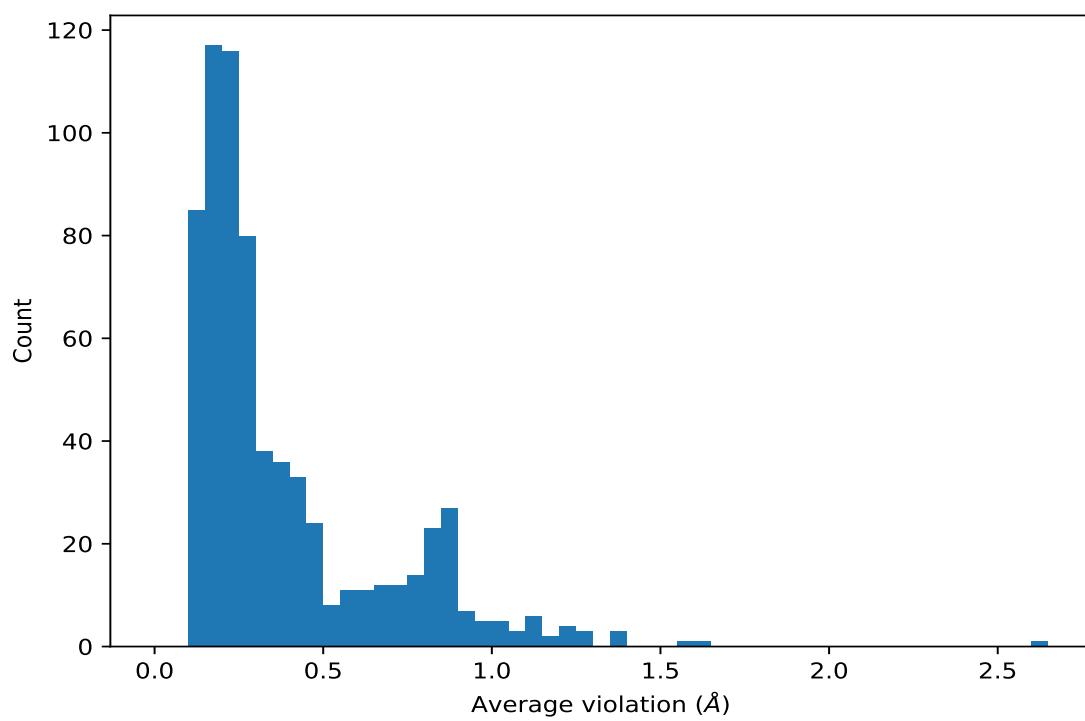
9.3.1 Bar graph : Distance violation statistics for the ensemble [\(i\)](#)



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

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

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



9.4.2 Table: Most violated distance restraints [\(i\)](#)

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

| Key | Atom-1 | Atom-2 | Models ¹ | Mean (Å) | SD ¹ (Å) | Median (Å) |
|----------|-----------------|-----------------|---------------------|----------|---------------------|------------|
| (1,784) | 1:B:70:PRO:HG3 | 1:B:72:LYS:HA | 10 | 1.64 | 0.04 | 1.64 |
| (1,702) | 1:B:85:LEU:HG | 1:B:82:GLY:HA3 | 10 | 1.59 | 0.13 | 1.63 |
| (2,129) | 1:B:40:PHE:HB2 | 1:B:41:ASP:HB3 | 10 | 1.36 | 0.11 | 1.38 |
| (2,129) | 1:B:88:CYS:HB2 | 1:B:91:LYS:HE2 | 10 | 1.36 | 0.11 | 1.38 |
| (1,498) | 1:B:47:TYR:HB2 | 1:B:48:GLU:HA | 10 | 1.26 | 0.03 | 1.28 |
| (2,418) | 1:B:65:LEU:HB2 | 1:B:81:TRP:HB2 | 10 | 1.25 | 0.05 | 1.25 |
| (2,418) | 1:B:69:MET:HG3 | 1:B:81:TRP:HB2 | 10 | 1.25 | 0.05 | 1.25 |
| (1,327) | 1:B:81:TRP:HB3 | 1:B:78:ALA:HA | 10 | 1.21 | 0.09 | 1.23 |
| (1,665) | 1:B:23:PRO:HG2 | 1:B:55:PRO:HD2 | 10 | 1.19 | 0.14 | 1.17 |
| (1,263) | 1:B:11:LYS:HB2 | 1:B:72:LYS:HA | 10 | 1.16 | 0.07 | 1.15 |
| (1,306) | 1:B:31:ILE:HG13 | 1:B:37:LYS:HD3 | 10 | 1.14 | 0.1 | 1.17 |
| (2,1138) | 1:B:38:LYS:HG2 | 1:B:36:LEU:HA | 10 | 1.12 | 0.55 | 1.52 |
| (2,1138) | 1:B:36:LEU:HA | 1:B:98:LEU:HB2 | 10 | 1.12 | 0.55 | 1.52 |
| (1,756) | 1:B:20:PRO:HD3 | 1:B:21:LEU:HB2 | 10 | 1.05 | 0.06 | 1.04 |
| (1,667) | 1:B:55:PRO:HD3 | 1:B:53:LEU:HA | 10 | 1.05 | 0.09 | 1.04 |
| (2,467) | 1:B:39:ARG:HG2 | 1:B:43:ILE:HG12 | 10 | 1.01 | 0.14 | 1.03 |

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| Key | Atom-1 | Atom-2 | Models ¹ | Mean (Å) | SD ¹ (Å) | Median (Å) |
|----------|-----------------|-----------------|---------------------|----------|---------------------|------------|
| (2,467) | 1:B:39:ARG:HG2 | 1:B:98:LEU:HB2 | 10 | 1.01 | 0.14 | 1.03 |
| (1,253) | 1:B:23:PRO:HB3 | 1:B:55:PRO:HD2 | 10 | 0.97 | 0.21 | 0.89 |
| (1,119) | 1:B:47:TYR:HB3 | 1:B:31:ILE:HD12 | 10 | 0.91 | 0.2 | 0.81 |
| (1,119) | 1:B:47:TYR:HB3 | 1:B:31:ILE:HD11 | 10 | 0.91 | 0.2 | 0.81 |
| (1,119) | 1:B:47:TYR:HB3 | 1:B:31:ILE:HD13 | 10 | 0.91 | 0.2 | 0.81 |
| (1,373) | 1:B:92:ASP:HB2 | 1:B:57:SER:HB3 | 10 | 0.9 | 0.6 | 0.88 |
| (1,294) | 1:B:48:GLU:HB3 | 1:B:46:THR:HB | 10 | 0.87 | 0.24 | 0.91 |
| (2,1004) | 1:B:20:PRO:HB2 | 1:B:19:THR:HG22 | 10 | 0.87 | 0.05 | 0.9 |
| (2,1004) | 1:B:20:PRO:HB2 | 1:B:19:THR:HG21 | 10 | 0.87 | 0.05 | 0.9 |
| (2,1004) | 1:B:20:PRO:HB2 | 1:B:19:THR:HG23 | 10 | 0.87 | 0.05 | 0.9 |
| (2,1004) | 1:B:58:THR:HG22 | 1:B:20:PRO:HB2 | 10 | 0.87 | 0.05 | 0.9 |
| (2,1004) | 1:B:58:THR:HG23 | 1:B:20:PRO:HB2 | 10 | 0.87 | 0.05 | 0.9 |
| (2,1004) | 1:B:58:THR:HG21 | 1:B:20:PRO:HB2 | 10 | 0.87 | 0.05 | 0.9 |
| (1,318) | 1:B:30:PHE:HB3 | 1:B:31:ILE:HG12 | 10 | 0.87 | 0.12 | 0.81 |
| (1,439) | 1:B:64:GLU:HB3 | 1:B:65:LEU:HD11 | 10 | 0.86 | 0.23 | 0.91 |
| (1,439) | 1:B:64:GLU:HB3 | 1:B:65:LEU:HD12 | 10 | 0.86 | 0.23 | 0.91 |
| (1,439) | 1:B:64:GLU:HB3 | 1:B:65:LEU:HD13 | 10 | 0.86 | 0.23 | 0.91 |
| (1,1295) | 1:B:97:HIS:H | 1:B:98:LEU:HB3 | 10 | 0.85 | 0.03 | 0.84 |
| (1,628) | 1:B:98:LEU:HB3 | 1:B:94:ALA:HA | 10 | 0.85 | 0.09 | 0.85 |
| (1,721) | 1:B:90:GLY:HA3 | 1:B:93:PHE:HD2 | 10 | 0.84 | 0.29 | 0.75 |
| (1,721) | 1:B:90:GLY:HA3 | 1:B:93:PHE:HD1 | 10 | 0.84 | 0.29 | 0.75 |
| (2,974) | 1:B:53:LEU:HB2 | 1:B:56:GLU:HG3 | 10 | 0.83 | 0.13 | 0.81 |
| (2,974) | 1:B:55:PRO:HB2 | 1:B:56:GLU:HG3 | 10 | 0.83 | 0.13 | 0.81 |
| (2,974) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HB | 10 | 0.83 | 0.13 | 0.81 |
| (2,130) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HG3 | 10 | 0.83 | 0.06 | 0.83 |
| (2,130) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HG2 | 10 | 0.83 | 0.06 | 0.83 |
| (2,130) | 1:B:88:CYS:HB2 | 1:B:91:LYS:HG3 | 10 | 0.83 | 0.06 | 0.83 |
| (1,214) | 1:B:34:PRO:HB3 | 1:B:34:PRO:HD2 | 10 | 0.82 | 0.02 | 0.82 |
| (2,155) | 1:B:87:GLU:HG3 | 1:B:65:LEU:HD11 | 10 | 0.82 | 0.35 | 0.8 |
| (2,155) | 1:B:87:GLU:HG3 | 1:B:65:LEU:HD12 | 10 | 0.82 | 0.35 | 0.8 |
| (2,155) | 1:B:87:GLU:HG3 | 1:B:65:LEU:HD13 | 10 | 0.82 | 0.35 | 0.8 |
| (2,155) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HG12 | 10 | 0.82 | 0.35 | 0.8 |
| (1,197) | 1:B:61:CYS:H | 1:B:60:LYS:HB2 | 10 | 0.81 | 0.09 | 0.84 |
| (1,321) | 1:B:81:TRP:HB2 | 1:B:81:TRP:HE3 | 10 | 0.8 | 0.02 | 0.8 |
| (1,58) | 1:B:36:LEU:HB2 | 1:B:30:PHE:HB2 | 10 | 0.8 | 0.13 | 0.8 |
| (2,882) | 1:B:93:PHE:HB3 | 1:B:90:GLY:HA3 | 10 | 0.79 | 0.23 | 0.71 |
| (2,882) | 1:B:93:PHE:HB2 | 1:B:90:GLY:HA3 | 10 | 0.79 | 0.23 | 0.71 |
| (1,272) | 1:B:64:GLU:H | 1:B:64:GLU:HB3 | 10 | 0.75 | 0.17 | 0.8 |
| (1,569) | 1:B:89:ILE:HG23 | 1:B:90:GLY:HA3 | 10 | 0.75 | 0.09 | 0.74 |
| (1,569) | 1:B:89:ILE:HG21 | 1:B:90:GLY:HA3 | 10 | 0.75 | 0.09 | 0.74 |
| (1,569) | 1:B:89:ILE:HG22 | 1:B:90:GLY:HA3 | 10 | 0.75 | 0.09 | 0.74 |
| (2,256) | 1:B:19:THR:HB | 1:B:20:PRO:HB2 | 10 | 0.75 | 0.08 | 0.77 |

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| Key | Atom-1 | Atom-2 | Models ¹ | Mean (Å) | SD ¹ (Å) | Median (Å) |
|----------|-----------------|-----------------|---------------------|----------|---------------------|------------|
| (2,256) | 1:B:19:THR:HB | 1:B:23:PRO:HG3 | 10 | 0.75 | 0.08 | 0.77 |
| (2,256) | 1:B:52:THR:HB | 1:B:49:GLN:HG3 | 10 | 0.75 | 0.08 | 0.77 |
| (2,564) | 1:B:36:LEU:HD21 | 1:B:30:PHE:HA | 10 | 0.74 | 0.22 | 0.69 |
| (2,564) | 1:B:36:LEU:HD23 | 1:B:30:PHE:HA | 10 | 0.74 | 0.22 | 0.69 |
| (2,564) | 1:B:36:LEU:HD22 | 1:B:30:PHE:HA | 10 | 0.74 | 0.22 | 0.69 |
| (2,564) | 1:B:85:LEU:HD11 | 1:B:82:GLY:HA3 | 10 | 0.74 | 0.22 | 0.69 |
| (2,564) | 1:B:85:LEU:HD12 | 1:B:82:GLY:HA3 | 10 | 0.74 | 0.22 | 0.69 |
| (2,564) | 1:B:85:LEU:HD13 | 1:B:82:GLY:HA3 | 10 | 0.74 | 0.22 | 0.69 |
| (1,1229) | 1:B:96:LYS:H | 1:B:98:LEU:HB3 | 10 | 0.73 | 0.15 | 0.68 |
| (1,97) | 1:B:66:TYR:HB2 | 1:B:67:ALA:HB1 | 10 | 0.72 | 0.04 | 0.72 |
| (1,97) | 1:B:66:TYR:HB2 | 1:B:67:ALA:HB2 | 10 | 0.72 | 0.04 | 0.72 |
| (1,97) | 1:B:66:TYR:HB2 | 1:B:67:ALA:HB3 | 10 | 0.72 | 0.04 | 0.72 |
| (1,1088) | 1:B:49:GLN:H | 1:B:48:GLU:HB3 | 10 | 0.67 | 0.14 | 0.67 |
| (1,718) | 1:B:90:GLY:HA3 | 1:B:94:ALA:H | 10 | 0.66 | 0.15 | 0.63 |
| (1,137) | 1:B:41:ASP:H | 1:B:40:PHE:HB2 | 10 | 0.64 | 0.03 | 0.64 |
| (1,1349) | 1:B:15:LEU:H | 1:B:11:LYS:HB3 | 10 | 0.62 | 0.14 | 0.6 |
| (1,120) | 1:B:48:GLU:H | 1:B:47:TYR:HB2 | 10 | 0.62 | 0.08 | 0.64 |
| (2,412) | 1:B:26:ILE:HG13 | 1:B:86:GLY:HA2 | 10 | 0.61 | 0.09 | 0.58 |
| (2,412) | 1:B:31:ILE:HG12 | 1:B:28:LYS:HA | 10 | 0.61 | 0.09 | 0.58 |
| (1,672) | 1:B:21:LEU:H | 1:B:20:PRO:HD3 | 10 | 0.59 | 0.02 | 0.59 |
| (1,92) | 1:B:30:PHE:HB2 | 1:B:40:PHE:HB3 | 10 | 0.57 | 0.22 | 0.57 |
| (2,592) | 1:B:44:LYS:HG3 | 1:B:42:GLU:HA | 10 | 0.57 | 0.12 | 0.6 |
| (2,592) | 1:B:72:LYS:HG2 | 1:B:71:ASP:HA | 10 | 0.57 | 0.12 | 0.6 |
| (1,262) | 1:B:11:LYS:H | 1:B:11:LYS:HB2 | 10 | 0.56 | 0.01 | 0.56 |
| (1,307) | 1:B:48:GLU:H | 1:B:48:GLU:HB3 | 10 | 0.53 | 0.01 | 0.54 |
| (1,1062) | 1:B:11:LYS:H | 1:B:72:LYS:HG3 | 10 | 0.52 | 0.14 | 0.51 |
| (2,643) | 1:B:45:MET:HB2 | 1:B:40:PHE:HA | 10 | 0.51 | 0.23 | 0.5 |
| (2,643) | 1:B:96:LYS:HB3 | 1:B:93:PHE:HA | 10 | 0.51 | 0.23 | 0.5 |
| (1,88) | 1:B:30:PHE:H | 1:B:30:PHE:HB3 | 10 | 0.51 | 0.01 | 0.51 |
| (1,822) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HA | 10 | 0.47 | 0.06 | 0.48 |
| (1,317) | 1:B:31:ILE:H | 1:B:31:ILE:HG12 | 10 | 0.47 | 0.05 | 0.48 |
| (1,937) | 1:B:73:ILE:H | 1:B:72:LYS:HG3 | 10 | 0.47 | 0.04 | 0.46 |
| (2,228) | 1:B:21:LEU:H | 1:B:20:PRO:HB3 | 10 | 0.45 | 0.01 | 0.46 |
| (2,228) | 1:B:38:LYS:H | 1:B:37:LYS:HB2 | 10 | 0.45 | 0.01 | 0.46 |
| (1,194) | 1:B:60:LYS:HB3 | 1:B:60:LYS:HA | 10 | 0.45 | 0.01 | 0.45 |
| (1,565) | 1:B:71:ASP:HA | 1:B:11:LYS:HD3 | 10 | 0.45 | 0.16 | 0.4 |
| (1,1068) | 1:B:30:PHE:H | 1:B:31:ILE:HG12 | 10 | 0.44 | 0.13 | 0.48 |
| (1,736) | 1:B:11:LYS:HD2 | 1:B:66:TYR:HE1 | 10 | 0.44 | 0.11 | 0.42 |
| (1,736) | 1:B:11:LYS:HD2 | 1:B:66:TYR:HE2 | 10 | 0.44 | 0.11 | 0.42 |
| (1,697) | 1:B:85:LEU:H | 1:B:82:GLY:HA3 | 10 | 0.41 | 0.06 | 0.42 |
| (1,270) | 1:B:11:LYS:HB2 | 1:B:11:LYS:HD3 | 10 | 0.4 | 0.02 | 0.4 |
| (2,824) | 1:B:73:ILE:HG22 | 1:B:11:LYS:HB3 | 10 | 0.4 | 0.02 | 0.39 |

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| Key | Atom-1 | Atom-2 | Models ¹ | Mean (Å) | SD ¹ (Å) | Median (Å) |
|----------|-----------------|-----------------|---------------------|----------|---------------------|------------|
| (2,824) | 1:B:73:ILE:HG21 | 1:B:11:LYS:HB3 | 10 | 0.4 | 0.02 | 0.39 |
| (2,824) | 1:B:73:ILE:HG23 | 1:B:11:LYS:HB3 | 10 | 0.4 | 0.02 | 0.39 |
| (2,824) | 1:B:73:ILE:HG22 | 1:B:70:PRO:HG3 | 10 | 0.4 | 0.02 | 0.39 |
| (2,824) | 1:B:73:ILE:HG21 | 1:B:70:PRO:HG3 | 10 | 0.4 | 0.02 | 0.39 |
| (2,824) | 1:B:73:ILE:HG23 | 1:B:70:PRO:HG3 | 10 | 0.4 | 0.02 | 0.39 |
| (2,140) | 1:B:64:GLU:HG2 | 1:B:60:LYS:HG3 | 10 | 0.39 | 0.14 | 0.38 |
| (2,140) | 1:B:64:GLU:HG3 | 1:B:60:LYS:HG3 | 10 | 0.39 | 0.14 | 0.38 |
| (2,140) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB1 | 10 | 0.39 | 0.14 | 0.38 |
| (2,140) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB3 | 10 | 0.39 | 0.14 | 0.38 |
| (2,140) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB2 | 10 | 0.39 | 0.14 | 0.38 |
| (1,155) | 1:B:95:GLU:H | 1:B:95:GLU:HG2 | 10 | 0.34 | 0.02 | 0.34 |
| (1,448) | 1:B:72:LYS:H | 1:B:72:LYS:HG2 | 10 | 0.34 | 0.07 | 0.36 |
| (2,601) | 1:B:72:LYS:HG3 | 1:B:10:THR:HG22 | 10 | 0.34 | 0.03 | 0.35 |
| (2,601) | 1:B:72:LYS:HG3 | 1:B:10:THR:HG21 | 10 | 0.34 | 0.03 | 0.35 |
| (2,601) | 1:B:72:LYS:HG3 | 1:B:10:THR:HG23 | 10 | 0.34 | 0.03 | 0.35 |
| (2,601) | 1:B:72:LYS:HB3 | 1:B:72:LYS:HG3 | 10 | 0.34 | 0.03 | 0.35 |
| (1,497) | 1:B:48:GLU:HB2 | 1:B:48:GLU:HA | 10 | 0.34 | 0.0 | 0.34 |
| (1,1307) | 1:B:31:ILE:H | 1:B:30:PHE:HB3 | 10 | 0.33 | 0.08 | 0.34 |
| (1,213) | 1:B:35:ASP:H | 1:B:34:PRO:HB3 | 10 | 0.32 | 0.05 | 0.32 |
| (1,160) | 1:B:95:GLU:HG3 | 1:B:95:GLU:HA | 10 | 0.31 | 0.03 | 0.3 |
| (1,38) | 1:B:98:LEU:H | 1:B:98:LEU:HB3 | 10 | 0.31 | 0.01 | 0.31 |
| (1,215) | 1:B:6:PRO:HB2 | 1:B:6:PRO:HA | 10 | 0.31 | 0.1 | 0.26 |
| (1,382) | 1:B:39:ARG:HG2 | 1:B:39:ARG:HA | 10 | 0.3 | 0.03 | 0.3 |
| (2,638) | 1:B:98:LEU:HB2 | 1:B:98:LEU:HD21 | 10 | 0.29 | 0.07 | 0.3 |
| (2,638) | 1:B:98:LEU:HB2 | 1:B:98:LEU:HD22 | 10 | 0.29 | 0.07 | 0.3 |
| (2,638) | 1:B:98:LEU:HB2 | 1:B:98:LEU:HD23 | 10 | 0.29 | 0.07 | 0.3 |
| (2,638) | 1:B:43:ILE:HG12 | 1:B:98:LEU:HD21 | 10 | 0.29 | 0.07 | 0.3 |
| (2,638) | 1:B:43:ILE:HG12 | 1:B:98:LEU:HD22 | 10 | 0.29 | 0.07 | 0.3 |
| (2,638) | 1:B:43:ILE:HG12 | 1:B:98:LEU:HD23 | 10 | 0.29 | 0.07 | 0.3 |
| (1,206) | 1:B:45:MET:HB3 | 1:B:45:MET:HG3 | 10 | 0.29 | 0.01 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD12 | 1:B:23:PRO:HD3 | 10 | 0.29 | 0.02 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD11 | 1:B:23:PRO:HD3 | 10 | 0.29 | 0.02 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD13 | 1:B:23:PRO:HD3 | 10 | 0.29 | 0.02 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD12 | 1:B:55:PRO:HD2 | 10 | 0.29 | 0.02 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD11 | 1:B:55:PRO:HD2 | 10 | 0.29 | 0.02 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD13 | 1:B:55:PRO:HD2 | 10 | 0.29 | 0.02 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD12 | 1:B:94:ALA:HA | 10 | 0.29 | 0.02 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD11 | 1:B:94:ALA:HA | 10 | 0.29 | 0.02 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD13 | 1:B:94:ALA:HA | 10 | 0.29 | 0.02 | 0.29 |
| (1,151) | 1:B:48:GLU:HG2 | 1:B:48:GLU:HB2 | 10 | 0.28 | 0.0 | 0.28 |
| (1,387) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD11 | 10 | 0.28 | 0.08 | 0.26 |
| (1,387) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD13 | 10 | 0.28 | 0.08 | 0.26 |

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| Key | Atom-1 | Atom-2 | Models ¹ | Mean (Å) | SD ¹ (Å) | Median (Å) |
|----------|-----------------|-----------------|---------------------|----------|---------------------|------------|
| (1,387) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD12 | 10 | 0.28 | 0.08 | 0.26 |
| (2,360) | 1:B:21:LEU:H | 1:B:23:PRO:HG3 | 10 | 0.28 | 0.03 | 0.28 |
| (2,360) | 1:B:22:LEU:H | 1:B:23:PRO:HG3 | 10 | 0.28 | 0.03 | 0.28 |
| (2,360) | 1:B:55:PRO:HG3 | 1:B:52:THR:H | 10 | 0.28 | 0.03 | 0.28 |
| (1,324) | 1:B:81:TRP:H | 1:B:81:TRP:HB3 | 10 | 0.26 | 0.02 | 0.26 |
| (1,166) | 1:B:54:ILE:HB | 1:B:55:PRO:HD2 | 10 | 0.26 | 0.03 | 0.26 |
| (2,1122) | 1:B:51:VAL:HG13 | 1:B:23:PRO:HD3 | 10 | 0.25 | 0.05 | 0.24 |
| (2,1122) | 1:B:51:VAL:HG11 | 1:B:23:PRO:HD3 | 10 | 0.25 | 0.05 | 0.24 |
| (2,1122) | 1:B:51:VAL:HG12 | 1:B:23:PRO:HD3 | 10 | 0.25 | 0.05 | 0.24 |
| (2,1122) | 1:B:51:VAL:HG13 | 1:B:55:PRO:HD2 | 10 | 0.25 | 0.05 | 0.24 |
| (2,1122) | 1:B:51:VAL:HG11 | 1:B:55:PRO:HD2 | 10 | 0.25 | 0.05 | 0.24 |
| (2,1122) | 1:B:51:VAL:HG12 | 1:B:55:PRO:HD2 | 10 | 0.25 | 0.05 | 0.24 |
| (2,1122) | 1:B:51:VAL:HG21 | 1:B:55:PRO:HD2 | 10 | 0.25 | 0.05 | 0.24 |
| (2,1122) | 1:B:51:VAL:HG23 | 1:B:55:PRO:HD2 | 10 | 0.25 | 0.05 | 0.24 |
| (2,1122) | 1:B:51:VAL:HG22 | 1:B:55:PRO:HD2 | 10 | 0.25 | 0.05 | 0.24 |
| (2,839) | 1:B:23:PRO:HB3 | 1:B:55:PRO:HD2 | 10 | 0.24 | 0.04 | 0.24 |
| (2,839) | 1:B:20:PRO:HB2 | 1:B:20:PRO:HD2 | 10 | 0.24 | 0.04 | 0.24 |
| (2,1055) | 1:B:30:PHE:H | 1:B:31:ILE:HG12 | 10 | 0.24 | 0.05 | 0.26 |
| (2,1055) | 1:B:32:GLN:H | 1:B:31:ILE:HG12 | 10 | 0.24 | 0.05 | 0.26 |
| (1,147) | 1:B:48:GLU:HG3 | 1:B:48:GLU:HB3 | 10 | 0.23 | 0.0 | 0.23 |
| (2,490) | 1:B:39:ARG:HG3 | 1:B:39:ARG:H | 10 | 0.22 | 0.04 | 0.2 |
| (2,490) | 1:B:99:ILE:H | 1:B:39:ARG:HG3 | 10 | 0.22 | 0.04 | 0.2 |
| (2,490) | 1:B:72:LYS:H | 1:B:70:PRO:HG3 | 10 | 0.22 | 0.04 | 0.2 |
| (2,490) | 1:B:70:PRO:HG3 | 1:B:81:TRP:HZ2 | 10 | 0.22 | 0.04 | 0.2 |
| (2,490) | 1:B:81:TRP:HE3 | 1:B:85:LEU:HG | 10 | 0.22 | 0.04 | 0.2 |
| (2,841) | 1:B:20:PRO:HD3 | 1:B:18:MET:HA | 10 | 0.22 | 0.01 | 0.22 |
| (2,841) | 1:B:20:PRO:HD3 | 1:B:20:PRO:HA | 10 | 0.22 | 0.01 | 0.22 |
| (1,360) | 1:B:20:PRO:HB2 | 1:B:20:PRO:HA | 10 | 0.19 | 0.0 | 0.19 |
| (1,742) | 1:B:72:LYS:HG2 | 1:B:71:ASP:HB3 | 10 | 0.18 | 0.02 | 0.18 |
| (1,319) | 1:B:31:ILE:HB | 1:B:31:ILE:HG12 | 10 | 0.18 | 0.0 | 0.18 |
| (1,488) | 1:B:81:TRP:HB2 | 1:B:81:TRP:HA | 10 | 0.14 | 0.0 | 0.14 |
| (1,701) | 1:B:85:LEU:HB3 | 1:B:82:GLY:HA3 | 9 | 2.6 | 0.09 | 2.65 |
| (1,252) | 1:B:45:MET:HB2 | 1:B:40:PHE:HA | 9 | 1.03 | 0.28 | 1.18 |
| (1,489) | 1:B:64:GLU:HB3 | 1:B:61:CYS:HA | 9 | 1.01 | 0.08 | 0.99 |
| (1,797) | 1:B:81:TRP:HB2 | 1:B:85:LEU:HD23 | 9 | 0.99 | 0.12 | 0.92 |
| (1,797) | 1:B:81:TRP:HB2 | 1:B:85:LEU:HD21 | 9 | 0.99 | 0.12 | 0.92 |
| (1,797) | 1:B:81:TRP:HB2 | 1:B:85:LEU:HD22 | 9 | 0.99 | 0.12 | 0.92 |
| (1,1022) | 1:B:40:PHE:H | 1:B:45:MET:HB2 | 9 | 0.97 | 0.29 | 1.12 |
| (1,500) | 1:B:36:LEU:HD12 | 1:B:36:LEU:HA | 9 | 0.77 | 0.69 | 0.18 |
| (1,500) | 1:B:36:LEU:HD11 | 1:B:36:LEU:HA | 9 | 0.77 | 0.69 | 0.18 |
| (1,500) | 1:B:36:LEU:HD13 | 1:B:36:LEU:HA | 9 | 0.77 | 0.69 | 0.18 |
| (1,36) | 1:B:85:LEU:H | 1:B:85:LEU:HB3 | 9 | 0.74 | 0.0 | 0.74 |

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| Key | Atom-1 | Atom-2 | Models ¹ | Mean (Å) | SD ¹ (Å) | Median (Å) |
|----------|-----------------|-----------------|---------------------|----------|---------------------|------------|
| (1,447) | 1:B:60:LYS:HG3 | 1:B:61:CYS:HA | 9 | 0.69 | 0.19 | 0.65 |
| (1,459) | 1:B:85:LEU:HB2 | 1:B:85:LEU:HD23 | 9 | 0.66 | 0.01 | 0.66 |
| (1,459) | 1:B:85:LEU:HB2 | 1:B:85:LEU:HD21 | 9 | 0.66 | 0.01 | 0.66 |
| (1,459) | 1:B:85:LEU:HB2 | 1:B:85:LEU:HD22 | 9 | 0.66 | 0.01 | 0.66 |
| (2,286) | 1:B:42:GLU:HB2 | 1:B:39:ARG:HG2 | 9 | 0.61 | 0.07 | 0.6 |
| (2,286) | 1:B:65:LEU:HB2 | 1:B:64:GLU:HB3 | 9 | 0.61 | 0.07 | 0.6 |
| (1,278) | 1:B:64:GLU:HB3 | 1:B:61:CYS:HB3 | 9 | 0.56 | 0.39 | 0.44 |
| (1,1269) | 1:B:10:THR:H | 1:B:72:LYS:HG3 | 9 | 0.38 | 0.1 | 0.4 |
| (1,329) | 1:B:44:LYS:HB2 | 1:B:44:LYS:HA | 9 | 0.35 | 0.0 | 0.35 |
| (2,959) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HB3 | 9 | 0.34 | 0.09 | 0.34 |
| (2,959) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HD3 | 9 | 0.34 | 0.09 | 0.34 |
| (2,959) | 1:B:88:CYS:HB2 | 1:B:89:ILE:HG13 | 9 | 0.34 | 0.09 | 0.34 |
| (1,362) | 1:B:34:PRO:HB2 | 1:B:34:PRO:HA | 9 | 0.33 | 0.01 | 0.33 |
| (2,1502) | 1:B:38:LYS:H | 1:B:37:LYS:HB2 | 9 | 0.31 | 0.07 | 0.3 |
| (2,1502) | 1:B:38:LYS:H | 1:B:38:LYS:HD2 | 9 | 0.31 | 0.07 | 0.3 |
| (2,1567) | 1:B:71:ASP:H | 1:B:11:LYS:HD3 | 9 | 0.3 | 0.06 | 0.29 |
| (2,1567) | 1:B:71:ASP:H | 1:B:72:LYS:HG2 | 9 | 0.3 | 0.06 | 0.29 |
| (1,380) | 1:B:81:TRP:HE1 | 1:B:70:PRO:HG2 | 9 | 0.29 | 0.21 | 0.19 |
| (2,652) | 1:B:86:GLY:H | 1:B:22:LEU:HD11 | 9 | 0.27 | 0.08 | 0.26 |
| (2,652) | 1:B:86:GLY:H | 1:B:22:LEU:HD12 | 9 | 0.27 | 0.08 | 0.26 |
| (2,652) | 1:B:86:GLY:H | 1:B:22:LEU:HD13 | 9 | 0.27 | 0.08 | 0.26 |
| (2,652) | 1:B:36:LEU:H | 1:B:36:LEU:HD12 | 9 | 0.27 | 0.08 | 0.26 |
| (2,652) | 1:B:36:LEU:H | 1:B:36:LEU:HD11 | 9 | 0.27 | 0.08 | 0.26 |
| (2,652) | 1:B:36:LEU:H | 1:B:36:LEU:HD13 | 9 | 0.27 | 0.08 | 0.26 |
| (2,1523) | 1:B:56:GLU:H | 1:B:23:PRO:HG2 | 9 | 0.26 | 0.08 | 0.26 |
| (2,1523) | 1:B:56:GLU:H | 1:B:59:LYS:HD3 | 9 | 0.26 | 0.08 | 0.26 |
| (2,1523) | 1:B:56:GLU:H | 1:B:60:LYS:HD3 | 9 | 0.26 | 0.08 | 0.26 |
| (1,1154) | 1:B:93:PHE:H | 1:B:92:ASP:HB2 | 9 | 0.18 | 0.04 | 0.17 |
| (1,282) | 1:B:60:LYS:HD3 | 1:B:57:SER:HA | 8 | 0.61 | 0.23 | 0.57 |
| (1,185) | 1:B:101:LYS:H | 1:B:101:LYS:HB3 | 8 | 0.57 | 0.04 | 0.56 |
| (1,1012) | 1:B:50:CYS:H | 1:B:27:CYS:HB3 | 8 | 0.54 | 0.09 | 0.56 |
| (1,1169) | 1:B:51:VAL:H | 1:B:27:CYS:HB3 | 8 | 0.5 | 0.16 | 0.52 |
| (2,1143) | 1:B:4:ALA:HB1 | 1:B:5:ASN:HB3 | 8 | 0.47 | 0.21 | 0.4 |
| (2,1143) | 1:B:4:ALA:HB2 | 1:B:5:ASN:HB3 | 8 | 0.47 | 0.21 | 0.4 |
| (2,1143) | 1:B:4:ALA:HB3 | 1:B:5:ASN:HB3 | 8 | 0.47 | 0.21 | 0.4 |
| (2,1143) | 1:B:78:ALA:HB1 | 1:B:74:ASN:HB2 | 8 | 0.47 | 0.21 | 0.4 |
| (2,1143) | 1:B:78:ALA:HB2 | 1:B:74:ASN:HB2 | 8 | 0.47 | 0.21 | 0.4 |
| (2,1143) | 1:B:78:ALA:HB3 | 1:B:74:ASN:HB2 | 8 | 0.47 | 0.21 | 0.4 |
| (2,1143) | 1:B:78:ALA:HB1 | 1:B:81:TRP:HB3 | 8 | 0.47 | 0.21 | 0.4 |
| (2,1143) | 1:B:78:ALA:HB2 | 1:B:81:TRP:HB3 | 8 | 0.47 | 0.21 | 0.4 |
| (2,1143) | 1:B:78:ALA:HB3 | 1:B:81:TRP:HB3 | 8 | 0.47 | 0.21 | 0.4 |
| (1,598) | 1:B:26:ILE:HG21 | 1:B:90:GLY:HA3 | 8 | 0.3 | 0.06 | 0.32 |

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| Key | Atom-1 | Atom-2 | Models ¹ | Mean (Å) | SD ¹ (Å) | Median (Å) |
|----------|-----------------|-----------------|---------------------|----------|---------------------|------------|
| (1,598) | 1:B:26:ILE:HG22 | 1:B:90:GLY:HA3 | 8 | 0.3 | 0.06 | 0.32 |
| (1,598) | 1:B:26:ILE:HG23 | 1:B:90:GLY:HA3 | 8 | 0.3 | 0.06 | 0.32 |
| (2,1385) | 1:B:64:GLU:H | 1:B:60:LYS:HD2 | 8 | 0.3 | 0.21 | 0.26 |
| (2,1385) | 1:B:64:GLU:H | 1:B:60:LYS:HG3 | 8 | 0.3 | 0.21 | 0.26 |
| (2,119) | 1:B:47:TYR:HB2 | 1:B:46:THR:HA | 8 | 0.24 | 0.04 | 0.24 |
| (2,119) | 1:B:47:TYR:HB2 | 1:B:46:THR:HB | 8 | 0.24 | 0.04 | 0.24 |
| (2,1414) | 1:B:41:ASP:H | 1:B:42:GLU:HG3 | 8 | 0.22 | 0.05 | 0.2 |
| (2,1414) | 1:B:41:ASP:H | 1:B:30:PHE:HB2 | 8 | 0.22 | 0.05 | 0.2 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:43:ILE:HG23 | 8 | 0.22 | 0.03 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:43:ILE:HG21 | 8 | 0.22 | 0.03 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:43:ILE:HG22 | 8 | 0.22 | 0.03 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:45:MET:HE2 | 8 | 0.22 | 0.03 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:45:MET:HE1 | 8 | 0.22 | 0.03 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:45:MET:HE3 | 8 | 0.22 | 0.03 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:98:LEU:HD13 | 8 | 0.22 | 0.03 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:98:LEU:HD11 | 8 | 0.22 | 0.03 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:98:LEU:HD12 | 8 | 0.22 | 0.03 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:15:LEU:HD23 | 8 | 0.22 | 0.03 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:15:LEU:HD21 | 8 | 0.22 | 0.03 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:15:LEU:HD22 | 8 | 0.22 | 0.03 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:85:LEU:HD11 | 8 | 0.22 | 0.03 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:85:LEU:HD12 | 8 | 0.22 | 0.03 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:85:LEU:HD13 | 8 | 0.22 | 0.03 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:89:ILE:HD11 | 8 | 0.22 | 0.03 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:89:ILE:HD13 | 8 | 0.22 | 0.03 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:89:ILE:HD12 | 8 | 0.22 | 0.03 | 0.21 |
| (1,558) | 1:B:101:LYS:HB2 | 1:B:101:LYS:HA | 8 | 0.21 | 0.0 | 0.21 |
| (1,1035) | 1:B:42:GLU:H | 1:B:41:ASP:HB2 | 8 | 0.19 | 0.06 | 0.18 |
| (2,189) | 1:B:60:LYS:HB3 | 1:B:60:LYS:HD3 | 8 | 0.19 | 0.01 | 0.19 |
| (2,189) | 1:B:60:LYS:HB3 | 1:B:60:LYS:HG3 | 8 | 0.19 | 0.01 | 0.19 |
| (2,211) | 1:B:34:PRO:HB2 | 1:B:37:LYS:H | 8 | 0.16 | 0.03 | 0.15 |
| (2,211) | 1:B:38:LYS:HB3 | 1:B:37:LYS:H | 8 | 0.16 | 0.03 | 0.15 |
| (2,211) | 1:B:67:ALA:H | 1:B:69:MET:HG3 | 8 | 0.16 | 0.03 | 0.15 |
| (2,211) | 1:B:93:PHE:H | 1:B:91:LYS:HB2 | 8 | 0.16 | 0.03 | 0.15 |
| (2,211) | 1:B:93:PHE:H | 1:B:91:LYS:HB3 | 8 | 0.16 | 0.03 | 0.15 |
| (2,1013) | 1:B:18:MET:HG2 | 1:B:15:LEU:HA | 8 | 0.14 | 0.03 | 0.13 |
| (2,1013) | 1:B:18:MET:HG2 | 1:B:20:PRO:HD3 | 8 | 0.14 | 0.03 | 0.13 |
| (1,426) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD21 | 7 | 1.24 | 0.81 | 1.9 |
| (1,426) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD23 | 7 | 1.24 | 0.81 | 1.9 |
| (1,426) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD22 | 7 | 1.24 | 0.81 | 1.9 |
| (1,754) | 1:B:37:LYS:H | 1:B:33:ASP:HB2 | 7 | 0.89 | 0.06 | 0.9 |
| (1,15) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HB2 | 7 | 0.73 | 0.06 | 0.75 |

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| Key | Atom-1 | Atom-2 | Models ¹ | Mean (Å) | SD ¹ (Å) | Median (Å) |
|---------|-----------------|-----------------|---------------------|----------|---------------------|------------|
| (1,814) | 1:B:33:ASP:HB2 | 1:B:30:PHE:HA | 7 | 0.58 | 0.22 | 0.64 |
| (1,24) | 1:B:36:LEU:H | 1:B:33:ASP:HB2 | 7 | 0.49 | 0.04 | 0.48 |
| (2,144) | 1:B:56:GLU:HG3 | 1:B:53:LEU:HG | 7 | 0.39 | 0.12 | 0.37 |
| (2,144) | 1:B:87:GLU:HG3 | 1:B:83:ARG:HG3 | 7 | 0.39 | 0.12 | 0.37 |
| (2,144) | 1:B:87:GLU:HG3 | 1:B:85:LEU:HG | 7 | 0.39 | 0.12 | 0.37 |
| (2,144) | 1:B:87:GLU:HG3 | 1:B:91:LYS:HD3 | 7 | 0.39 | 0.12 | 0.37 |
| (2,144) | 1:B:87:GLU:HG3 | 1:B:91:LYS:HD2 | 7 | 0.39 | 0.12 | 0.37 |
| (2,144) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HB | 7 | 0.39 | 0.12 | 0.37 |
| (2,4) | 1:B:53:LEU:HB2 | 1:B:49:GLN:HG3 | 7 | 0.28 | 0.12 | 0.22 |
| (2,4) | 1:B:53:LEU:HB2 | 1:B:56:GLU:HG3 | 7 | 0.28 | 0.12 | 0.22 |
| (2,4) | 1:B:65:LEU:HB2 | 1:B:64:GLU:HB3 | 7 | 0.28 | 0.12 | 0.22 |
| (2,154) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HG13 | 7 | 0.26 | 0.1 | 0.25 |
| (2,154) | 1:B:56:GLU:HG3 | 1:B:53:LEU:HB3 | 7 | 0.26 | 0.1 | 0.25 |
| (2,154) | 1:B:56:GLU:HG3 | 1:B:96:LYS:HD2 | 7 | 0.26 | 0.1 | 0.25 |
| (1,753) | 1:B:54:ILE:HA | 1:B:53:LEU:HB3 | 7 | 0.26 | 0.12 | 0.2 |
| (1,699) | 1:B:82:GLY:HA3 | 1:B:14:TRP:HH2 | 7 | 0.25 | 0.15 | 0.14 |
| (1,93) | 1:B:30:PHE:HB2 | 1:B:36:LEU:HB3 | 7 | 0.2 | 0.07 | 0.21 |
| (1,37) | 1:B:86:GLY:H | 1:B:85:LEU:HB3 | 7 | 0.18 | 0.04 | 0.17 |
| (2,667) | 1:B:22:LEU:HD11 | 1:B:14:TRP:HZ2 | 7 | 0.17 | 0.06 | 0.16 |
| (2,667) | 1:B:22:LEU:HD12 | 1:B:14:TRP:HZ2 | 7 | 0.17 | 0.06 | 0.16 |
| (2,667) | 1:B:22:LEU:HD13 | 1:B:14:TRP:HZ2 | 7 | 0.17 | 0.06 | 0.16 |
| (2,667) | 1:B:25:LEU:H | 1:B:22:LEU:HD11 | 7 | 0.17 | 0.06 | 0.16 |
| (2,667) | 1:B:25:LEU:H | 1:B:22:LEU:HD12 | 7 | 0.17 | 0.06 | 0.16 |
| (2,667) | 1:B:25:LEU:H | 1:B:22:LEU:HD13 | 7 | 0.17 | 0.06 | 0.16 |
| (2,667) | 1:B:36:LEU:HD12 | 1:B:39:ARG:H | 7 | 0.17 | 0.06 | 0.16 |
| (2,667) | 1:B:36:LEU:HD11 | 1:B:39:ARG:H | 7 | 0.17 | 0.06 | 0.16 |
| (2,667) | 1:B:36:LEU:HD13 | 1:B:39:ARG:H | 7 | 0.17 | 0.06 | 0.16 |
| (2,667) | 1:B:98:LEU:HD13 | 1:B:39:ARG:H | 7 | 0.17 | 0.06 | 0.16 |
| (2,667) | 1:B:98:LEU:HD11 | 1:B:39:ARG:H | 7 | 0.17 | 0.06 | 0.16 |
| (2,667) | 1:B:98:LEU:HD12 | 1:B:39:ARG:H | 7 | 0.17 | 0.06 | 0.16 |
| (2,667) | 1:B:99:ILE:H | 1:B:98:LEU:HD13 | 7 | 0.17 | 0.06 | 0.16 |
| (2,667) | 1:B:99:ILE:H | 1:B:98:LEU:HD11 | 7 | 0.17 | 0.06 | 0.16 |
| (2,667) | 1:B:99:ILE:H | 1:B:98:LEU:HD12 | 7 | 0.17 | 0.06 | 0.16 |
| (2,124) | 1:B:39:ARG:H | 1:B:40:PHE:HB3 | 7 | 0.17 | 0.04 | 0.18 |
| (2,124) | 1:B:43:ILE:H | 1:B:40:PHE:HB3 | 7 | 0.17 | 0.04 | 0.18 |
| (2,759) | 1:B:12:ASP:H | 1:B:13:ALA:HB1 | 7 | 0.14 | 0.01 | 0.14 |
| (2,759) | 1:B:12:ASP:H | 1:B:13:ALA:HB2 | 7 | 0.14 | 0.01 | 0.14 |
| (2,759) | 1:B:12:ASP:H | 1:B:13:ALA:HB3 | 7 | 0.14 | 0.01 | 0.14 |
| (2,759) | 1:B:13:ALA:HB1 | 1:B:16:ASN:H | 7 | 0.14 | 0.01 | 0.14 |
| (2,759) | 1:B:13:ALA:HB2 | 1:B:16:ASN:H | 7 | 0.14 | 0.01 | 0.14 |
| (2,759) | 1:B:13:ALA:HB3 | 1:B:16:ASN:H | 7 | 0.14 | 0.01 | 0.14 |
| (1,430) | 1:B:47:TYR:HB3 | 1:B:47:TYR:HA | 7 | 0.11 | 0.0 | 0.11 |

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| Key | Atom-1 | Atom-2 | Models ¹ | Mean (Å) | SD ¹ (Å) | Median (Å) |
|----------|-----------------|-----------------|---------------------|----------|---------------------|------------|
| (1,102) | 1:B:5:ASN:HB2 | 1:B:6:PRO:HD2 | 6 | 0.83 | 0.28 | 0.92 |
| (1,759) | 1:B:35:ASP:HB2 | 1:B:36:LEU:HG | 6 | 0.61 | 0.65 | 0.32 |
| (1,188) | 1:B:96:LYS:H | 1:B:96:LYS:HB3 | 6 | 0.52 | 0.04 | 0.52 |
| (2,87) | 1:B:74:ASN:HB3 | 1:B:8:GLU:HB2 | 6 | 0.47 | 0.13 | 0.49 |
| (2,87) | 1:B:74:ASN:HB3 | 1:B:8:GLU:HB3 | 6 | 0.47 | 0.13 | 0.49 |
| (2,87) | 1:B:93:PHE:HB3 | 1:B:53:LEU:HB2 | 6 | 0.47 | 0.13 | 0.49 |
| (2,87) | 1:B:93:PHE:HB2 | 1:B:53:LEU:HB2 | 6 | 0.47 | 0.13 | 0.49 |
| (2,1030) | 1:B:44:LYS:HD3 | 1:B:41:ASP:HB2 | 6 | 0.44 | 0.21 | 0.42 |
| (2,1030) | 1:B:44:LYS:HD2 | 1:B:41:ASP:HB2 | 6 | 0.44 | 0.21 | 0.42 |
| (2,1030) | 1:B:54:ILE:HG12 | 1:B:27:CYS:HB3 | 6 | 0.44 | 0.21 | 0.42 |
| (1,365) | 1:B:36:LEU:H | 1:B:36:LEU:HG | 6 | 0.42 | 0.02 | 0.42 |
| (1,660) | 1:B:74:ASN:HB3 | 1:B:74:ASN:HA | 6 | 0.32 | 0.01 | 0.32 |
| (2,1422) | 1:B:41:ASP:H | 1:B:44:LYS:HG3 | 6 | 0.24 | 0.07 | 0.26 |
| (2,1422) | 1:B:41:ASP:H | 1:B:45:MET:HB2 | 6 | 0.24 | 0.07 | 0.26 |
| (1,1152) | 1:B:93:PHE:H | 1:B:90:GLY:HA3 | 6 | 0.21 | 0.07 | 0.22 |
| (2,1517) | 1:B:61:CYS:H | 1:B:60:LYS:HD3 | 6 | 0.18 | 0.08 | 0.15 |
| (2,1517) | 1:B:61:CYS:H | 1:B:60:LYS:HG3 | 6 | 0.18 | 0.08 | 0.15 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:65:LEU:HB2 | 6 | 0.17 | 0.02 | 0.18 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:65:LEU:HB2 | 6 | 0.17 | 0.02 | 0.18 |
| (2,682) | 1:B:80:THR:HG21 | 1:B:65:LEU:HB2 | 6 | 0.17 | 0.02 | 0.18 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:69:MET:HG3 | 6 | 0.17 | 0.02 | 0.18 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:69:MET:HG3 | 6 | 0.17 | 0.02 | 0.18 |
| (2,682) | 1:B:80:THR:HG21 | 1:B:69:MET:HG3 | 6 | 0.17 | 0.02 | 0.18 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:70:PRO:HG2 | 6 | 0.17 | 0.02 | 0.18 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:70:PRO:HG2 | 6 | 0.17 | 0.02 | 0.18 |
| (2,682) | 1:B:80:THR:HG21 | 1:B:70:PRO:HG2 | 6 | 0.17 | 0.02 | 0.18 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:83:ARG:HB2 | 6 | 0.17 | 0.02 | 0.18 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:83:ARG:HB2 | 6 | 0.17 | 0.02 | 0.18 |
| (2,682) | 1:B:80:THR:HG21 | 1:B:83:ARG:HB2 | 6 | 0.17 | 0.02 | 0.18 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:83:ARG:HB3 | 6 | 0.17 | 0.02 | 0.18 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:83:ARG:HB3 | 6 | 0.17 | 0.02 | 0.18 |
| (2,682) | 1:B:80:THR:HG21 | 1:B:83:ARG:HB3 | 6 | 0.17 | 0.02 | 0.18 |
| (2,44) | 1:B:61:CYS:HB3 | 1:B:88:CYS:HB2 | 6 | 0.16 | 0.02 | 0.16 |
| (2,44) | 1:B:92:ASP:HB2 | 1:B:93:PHE:HB3 | 6 | 0.16 | 0.02 | 0.16 |
| (2,44) | 1:B:92:ASP:HB2 | 1:B:93:PHE:HB2 | 6 | 0.16 | 0.02 | 0.16 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:85:LEU:HD23 | 6 | 0.16 | 0.03 | 0.16 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:85:LEU:HD21 | 6 | 0.16 | 0.03 | 0.16 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:85:LEU:HD22 | 6 | 0.16 | 0.03 | 0.16 |
| (2,282) | 1:B:60:LYS:HD3 | 1:B:89:ILE:HG23 | 6 | 0.16 | 0.03 | 0.16 |
| (2,282) | 1:B:60:LYS:HD3 | 1:B:89:ILE:HG21 | 6 | 0.16 | 0.03 | 0.16 |
| (2,282) | 1:B:60:LYS:HD3 | 1:B:89:ILE:HG22 | 6 | 0.16 | 0.03 | 0.16 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:21:LEU:HD11 | 6 | 0.16 | 0.03 | 0.16 |

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| Key | Atom-1 | Atom-2 | Models ¹ | Mean (Å) | SD ¹ (Å) | Median (Å) |
|----------|-----------------|-----------------|---------------------|----------|---------------------|------------|
| (2,282) | 1:B:18:MET:HG2 | 1:B:21:LEU:HD13 | 6 | 0.16 | 0.03 | 0.16 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:21:LEU:HD12 | 6 | 0.16 | 0.03 | 0.16 |
| (2,266) | 1:B:11:LYS:HB3 | 1:B:66:TYR:HD1 | 6 | 0.15 | 0.03 | 0.14 |
| (2,266) | 1:B:11:LYS:HB3 | 1:B:66:TYR:HD2 | 6 | 0.15 | 0.03 | 0.14 |
| (2,266) | 1:B:45:MET:HG3 | 1:B:40:PHE:HE1 | 6 | 0.15 | 0.03 | 0.14 |
| (2,266) | 1:B:45:MET:HG3 | 1:B:40:PHE:HE2 | 6 | 0.15 | 0.03 | 0.14 |
| (2,266) | 1:B:45:MET:HG3 | 1:B:93:PHE:HE2 | 6 | 0.15 | 0.03 | 0.14 |
| (2,266) | 1:B:45:MET:HG3 | 1:B:93:PHE:HE1 | 6 | 0.15 | 0.03 | 0.14 |
| (1,674) | 1:B:5:ASN:HA | 1:B:5:ASN:HB2 | 6 | 0.12 | 0.0 | 0.12 |
| (1,969) | 1:B:14:TRP:HZ3 | 1:B:62:GLN:HG3 | 5 | 1.01 | 0.24 | 1.09 |
| (2,998) | 1:B:74:ASN:HB3 | 1:B:8:GLU:HB2 | 5 | 0.79 | 0.3 | 0.84 |
| (2,998) | 1:B:74:ASN:HB3 | 1:B:8:GLU:HB3 | 5 | 0.79 | 0.3 | 0.84 |
| (1,463) | 1:B:96:LYS:HB3 | 1:B:93:PHE:HA | 5 | 0.56 | 0.2 | 0.45 |
| (1,391) | 1:B:99:ILE:HG12 | 1:B:94:ALA:HB1 | 5 | 0.44 | 0.15 | 0.5 |
| (1,391) | 1:B:99:ILE:HG12 | 1:B:94:ALA:HB3 | 5 | 0.44 | 0.15 | 0.5 |
| (1,391) | 1:B:99:ILE:HG12 | 1:B:94:ALA:HB2 | 5 | 0.44 | 0.15 | 0.5 |
| (1,392) | 1:B:99:ILE:H | 1:B:99:ILE:HG12 | 5 | 0.4 | 0.03 | 0.39 |
| (1,175) | 1:B:62:GLN:HG3 | 1:B:62:GLN:HA | 5 | 0.38 | 0.07 | 0.41 |
| (2,39) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD21 | 5 | 0.33 | 0.12 | 0.35 |
| (2,39) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD23 | 5 | 0.33 | 0.12 | 0.35 |
| (2,39) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD22 | 5 | 0.33 | 0.12 | 0.35 |
| (2,39) | 1:B:61:CYS:HB2 | 1:B:89:ILE:HD11 | 5 | 0.33 | 0.12 | 0.35 |
| (2,39) | 1:B:61:CYS:HB2 | 1:B:89:ILE:HD13 | 5 | 0.33 | 0.12 | 0.35 |
| (2,39) | 1:B:61:CYS:HB2 | 1:B:89:ILE:HD12 | 5 | 0.33 | 0.12 | 0.35 |
| (1,785) | 1:B:57:SER:HB3 | 1:B:93:PHE:H | 5 | 0.32 | 0.1 | 0.37 |
| (1,377) | 1:B:58:THR:H | 1:B:57:SER:HB2 | 5 | 0.31 | 0.03 | 0.29 |
| (1,394) | 1:B:99:ILE:HG12 | 1:B:95:GLU:HA | 5 | 0.29 | 0.09 | 0.32 |
| (2,65) | 1:B:72:LYS:HE3 | 1:B:72:LYS:HG3 | 5 | 0.24 | 0.15 | 0.18 |
| (2,65) | 1:B:72:LYS:HE2 | 1:B:72:LYS:HG3 | 5 | 0.24 | 0.15 | 0.18 |
| (2,1128) | 1:B:99:ILE:HA | 1:B:99:ILE:HG13 | 5 | 0.23 | 0.08 | 0.19 |
| (2,1128) | 1:B:99:ILE:HA | 1:B:101:LYS:HG3 | 5 | 0.23 | 0.08 | 0.19 |
| (2,943) | 1:B:-2:ASP:HB3 | 1:B:-1:LYS:HD3 | 5 | 0.23 | 0.07 | 0.24 |
| (2,943) | 1:B:13:ALA:HB1 | 1:B:12:ASP:HB2 | 5 | 0.23 | 0.07 | 0.24 |
| (2,943) | 1:B:13:ALA:HB2 | 1:B:12:ASP:HB2 | 5 | 0.23 | 0.07 | 0.24 |
| (2,943) | 1:B:13:ALA:HB3 | 1:B:12:ASP:HB2 | 5 | 0.23 | 0.07 | 0.24 |
| (2,943) | 1:B:27:CYS:HB3 | 1:B:26:ILE:HG12 | 5 | 0.23 | 0.07 | 0.24 |
| (2,943) | 1:B:27:CYS:HB3 | 1:B:28:LYS:HD2 | 5 | 0.23 | 0.07 | 0.24 |
| (2,943) | 1:B:27:CYS:HB3 | 1:B:28:LYS:HD3 | 5 | 0.23 | 0.07 | 0.24 |
| (2,943) | 1:B:27:CYS:HB3 | 1:B:45:MET:HG2 | 5 | 0.23 | 0.07 | 0.24 |
| (2,943) | 1:B:35:ASP:HB3 | 1:B:38:LYS:HG2 | 5 | 0.23 | 0.07 | 0.24 |
| (2,943) | 1:B:71:ASP:HB2 | 1:B:72:LYS:HB2 | 5 | 0.23 | 0.07 | 0.24 |
| (2,943) | 1:B:71:ASP:HB2 | 1:B:72:LYS:HD2 | 5 | 0.23 | 0.07 | 0.24 |

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| Key | Atom-1 | Atom-2 | Models ¹ | Mean (Å) | SD ¹ (Å) | Median (Å) |
|----------|----------------|-----------------|---------------------|----------|---------------------|------------|
| (2,943) | 1:B:71:ASP:HB2 | 1:B:72:LYS:HD3 | 5 | 0.23 | 0.07 | 0.24 |
| (1,747) | 1:B:37:LYS:HB2 | 1:B:34:PRO:HA | 5 | 0.22 | 0.08 | 0.2 |
| (2,174) | 1:B:52:THR:H | 1:B:49:GLN:HG3 | 5 | 0.2 | 0.07 | 0.22 |
| (2,174) | 1:B:52:THR:H | 1:B:49:GLN:HG2 | 5 | 0.2 | 0.07 | 0.22 |
| (2,174) | 1:B:62:GLN:HG3 | 1:B:14:TRP:HE3 | 5 | 0.2 | 0.07 | 0.22 |
| (2,1290) | 1:B:91:LYS:H | 1:B:87:GLU:HG2 | 5 | 0.18 | 0.05 | 0.21 |
| (2,1290) | 1:B:91:LYS:H | 1:B:95:GLU:HG2 | 5 | 0.18 | 0.05 | 0.21 |
| (1,399) | 1:B:55:PRO:HG3 | 1:B:52:THR:HA | 5 | 0.18 | 0.03 | 0.19 |
| (1,398) | 1:B:52:THR:HA | 1:B:55:PRO:HD3 | 5 | 0.17 | 0.03 | 0.16 |
| (2,58) | 1:B:85:LEU:HB2 | 1:B:88:CYS:H | 5 | 0.16 | 0.03 | 0.15 |
| (2,58) | 1:B:83:ARG:H | 1:B:85:LEU:HB3 | 5 | 0.16 | 0.03 | 0.15 |
| (2,58) | 1:B:85:LEU:HB3 | 1:B:88:CYS:H | 5 | 0.16 | 0.03 | 0.15 |
| (2,964) | 1:B:7:ASN:HB3 | 1:B:8:GLU:HG2 | 5 | 0.16 | 0.03 | 0.16 |
| (2,964) | 1:B:7:ASN:HB3 | 1:B:8:GLU:HG3 | 5 | 0.16 | 0.03 | 0.16 |
| (2,964) | 1:B:16:ASN:HB2 | 1:B:15:LEU:HB3 | 5 | 0.16 | 0.03 | 0.16 |
| (2,964) | 1:B:15:LEU:HG | 1:B:16:ASN:HB2 | 5 | 0.16 | 0.03 | 0.16 |
| (2,990) | 1:B:38:LYS:HB2 | 1:B:39:ARG:HD3 | 5 | 0.14 | 0.03 | 0.13 |
| (2,990) | 1:B:38:LYS:HB3 | 1:B:39:ARG:HD3 | 5 | 0.14 | 0.03 | 0.13 |
| (2,990) | 1:B:89:ILE:HA | 1:B:91:LYS:HB2 | 5 | 0.14 | 0.03 | 0.13 |
| (2,990) | 1:B:91:LYS:HB3 | 1:B:88:CYS:HB3 | 5 | 0.14 | 0.03 | 0.13 |
| (2,990) | 1:B:89:ILE:HA | 1:B:91:LYS:HB3 | 5 | 0.14 | 0.03 | 0.13 |
| (1,191) | 1:B:96:LYS:HB2 | 1:B:96:LYS:HA | 5 | 0.13 | 0.02 | 0.14 |
| (2,849) | 1:B:6:PRO:HB2 | 1:B:6:PRO:HD3 | 5 | 0.11 | 0.0 | 0.11 |
| (2,849) | 1:B:6:PRO:HB2 | 1:B:6:PRO:HD2 | 5 | 0.11 | 0.0 | 0.11 |
| (2,849) | 1:B:20:PRO:HB2 | 1:B:20:PRO:HD2 | 5 | 0.11 | 0.0 | 0.11 |
| (1,427) | 1:B:33:ASP:HB3 | 1:B:36:LEU:HD21 | 4 | 0.87 | 0.04 | 0.88 |
| (1,427) | 1:B:33:ASP:HB3 | 1:B:36:LEU:HD23 | 4 | 0.87 | 0.04 | 0.88 |
| (1,427) | 1:B:33:ASP:HB3 | 1:B:36:LEU:HD22 | 4 | 0.87 | 0.04 | 0.88 |
| (1,677) | 1:B:5:ASN:HA | 1:B:6:PRO:HD2 | 4 | 0.6 | 0.11 | 0.56 |
| (1,60) | 1:B:36:LEU:HB2 | 1:B:36:LEU:HD21 | 4 | 0.48 | 0.0 | 0.48 |
| (1,60) | 1:B:36:LEU:HB2 | 1:B:36:LEU:HD23 | 4 | 0.48 | 0.0 | 0.48 |
| (1,60) | 1:B:36:LEU:HB2 | 1:B:36:LEU:HD22 | 4 | 0.48 | 0.0 | 0.48 |
| (2,955) | 1:B:6:PRO:HB3 | 1:B:7:ASN:HB3 | 4 | 0.44 | 0.08 | 0.41 |
| (2,955) | 1:B:8:GLU:HB2 | 1:B:7:ASN:HB3 | 4 | 0.44 | 0.08 | 0.41 |
| (2,955) | 1:B:8:GLU:HB3 | 1:B:7:ASN:HB3 | 4 | 0.44 | 0.08 | 0.41 |
| (2,409) | 1:B:56:GLU:HG2 | 1:B:96:LYS:HD3 | 4 | 0.41 | 0.28 | 0.37 |
| (2,409) | 1:B:97:HIS:HB3 | 1:B:96:LYS:HD3 | 4 | 0.41 | 0.28 | 0.37 |
| (2,409) | 1:B:56:GLU:HG2 | 1:B:96:LYS:HD2 | 4 | 0.41 | 0.28 | 0.37 |
| (2,409) | 1:B:97:HIS:HB3 | 1:B:96:LYS:HD2 | 4 | 0.41 | 0.28 | 0.37 |
| (1,379) | 1:B:57:SER:HB2 | 1:B:54:ILE:HD12 | 4 | 0.39 | 0.14 | 0.4 |
| (1,379) | 1:B:57:SER:HB2 | 1:B:54:ILE:HD11 | 4 | 0.39 | 0.14 | 0.4 |
| (1,379) | 1:B:57:SER:HB2 | 1:B:54:ILE:HD13 | 4 | 0.39 | 0.14 | 0.4 |

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| Key | Atom-1 | Atom-2 | Models ¹ | Mean (Å) | SD ¹ (Å) | Median (Å) |
|----------|-----------------|-----------------|---------------------|----------|---------------------|------------|
| (2,534) | 1:B:96:LYS:HG2 | 1:B:96:LYS:HE3 | 4 | 0.24 | 0.08 | 0.2 |
| (2,534) | 1:B:96:LYS:HG2 | 1:B:96:LYS:HE2 | 4 | 0.24 | 0.08 | 0.2 |
| (2,827) | 1:B:73:ILE:HG22 | 1:B:74:ASN:HB2 | 4 | 0.22 | 0.08 | 0.19 |
| (2,827) | 1:B:73:ILE:HG21 | 1:B:74:ASN:HB2 | 4 | 0.22 | 0.08 | 0.19 |
| (2,827) | 1:B:73:ILE:HG23 | 1:B:74:ASN:HB2 | 4 | 0.22 | 0.08 | 0.19 |
| (2,827) | 1:B:73:ILE:HG22 | 1:B:81:TRP:HB3 | 4 | 0.22 | 0.08 | 0.19 |
| (2,827) | 1:B:73:ILE:HG21 | 1:B:81:TRP:HB3 | 4 | 0.22 | 0.08 | 0.19 |
| (2,827) | 1:B:73:ILE:HG23 | 1:B:81:TRP:HB3 | 4 | 0.22 | 0.08 | 0.19 |
| (2,146) | 1:B:8:GLU:HG2 | 1:B:8:GLU:HA | 4 | 0.21 | 0.0 | 0.21 |
| (2,146) | 1:B:8:GLU:HG3 | 1:B:8:GLU:HA | 4 | 0.21 | 0.0 | 0.21 |
| (1,1318) | 1:B:43:ILE:H | 1:B:39:ARG:HG2 | 4 | 0.2 | 0.06 | 0.19 |
| (1,187) | 1:B:97:HIS:H | 1:B:96:LYS:HB3 | 4 | 0.15 | 0.02 | 0.14 |
| (1,1013) | 1:B:50:CYS:H | 1:B:53:LEU:HD22 | 4 | 0.14 | 0.04 | 0.12 |
| (1,1013) | 1:B:50:CYS:H | 1:B:53:LEU:HD21 | 4 | 0.14 | 0.04 | 0.12 |
| (1,1013) | 1:B:50:CYS:H | 1:B:53:LEU:HD23 | 4 | 0.14 | 0.04 | 0.12 |
| (2,1051) | 1:B:51:VAL:HG13 | 1:B:48:GLU:HB2 | 4 | 0.13 | 0.02 | 0.12 |
| (2,1051) | 1:B:51:VAL:HG11 | 1:B:48:GLU:HB2 | 4 | 0.13 | 0.02 | 0.12 |
| (2,1051) | 1:B:51:VAL:HG12 | 1:B:48:GLU:HB2 | 4 | 0.13 | 0.02 | 0.12 |
| (2,1051) | 1:B:51:VAL:HG21 | 1:B:48:GLU:HB2 | 4 | 0.13 | 0.02 | 0.12 |
| (2,1051) | 1:B:51:VAL:HG23 | 1:B:48:GLU:HB2 | 4 | 0.13 | 0.02 | 0.12 |
| (2,1051) | 1:B:51:VAL:HG22 | 1:B:48:GLU:HB2 | 4 | 0.13 | 0.02 | 0.12 |
| (2,1051) | 1:B:51:VAL:HG21 | 1:B:55:PRO:HG2 | 4 | 0.13 | 0.02 | 0.12 |
| (2,1051) | 1:B:51:VAL:HG23 | 1:B:55:PRO:HG2 | 4 | 0.13 | 0.02 | 0.12 |
| (2,1051) | 1:B:51:VAL:HG22 | 1:B:55:PRO:HG2 | 4 | 0.13 | 0.02 | 0.12 |
| (2,1273) | 1:B:62:GLN:H | 1:B:59:LYS:HB2 | 4 | 0.12 | 0.01 | 0.12 |
| (2,1273) | 1:B:62:GLN:H | 1:B:59:LYS:HB3 | 4 | 0.12 | 0.01 | 0.12 |
| (2,1273) | 1:B:62:GLN:H | 1:B:60:LYS:HB2 | 4 | 0.12 | 0.01 | 0.12 |
| (1,1130) | 1:B:39:ARG:H | 1:B:38:LYS:HG2 | 4 | 0.12 | 0.01 | 0.12 |
| (2,967) | 1:B:56:GLU:HG2 | 1:B:96:LYS:HE3 | 3 | 0.66 | 0.31 | 0.48 |
| (2,967) | 1:B:56:GLU:HG2 | 1:B:96:LYS:HE2 | 3 | 0.66 | 0.31 | 0.48 |
| (2,967) | 1:B:64:GLU:HG3 | 1:B:63:ASP:HB3 | 3 | 0.66 | 0.31 | 0.48 |
| (2,552) | 1:B:64:GLU:HG2 | 1:B:60:LYS:HG3 | 3 | 0.57 | 0.2 | 0.58 |
| (2,552) | 1:B:64:GLU:HG3 | 1:B:60:LYS:HG3 | 3 | 0.57 | 0.2 | 0.58 |
| (2,27) | 1:B:33:ASP:HB3 | 1:B:36:LEU:HD21 | 3 | 0.42 | 0.05 | 0.41 |
| (2,27) | 1:B:33:ASP:HB3 | 1:B:36:LEU:HD23 | 3 | 0.42 | 0.05 | 0.41 |
| (2,27) | 1:B:33:ASP:HB3 | 1:B:36:LEU:HD22 | 3 | 0.42 | 0.05 | 0.41 |
| (2,27) | 1:B:24:ASP:HB3 | 1:B:25:LEU:HD12 | 3 | 0.42 | 0.05 | 0.41 |
| (2,27) | 1:B:24:ASP:HB3 | 1:B:25:LEU:HD11 | 3 | 0.42 | 0.05 | 0.41 |
| (2,27) | 1:B:24:ASP:HB3 | 1:B:25:LEU:HD13 | 3 | 0.42 | 0.05 | 0.41 |
| (1,866) | 1:B:101:LYS:H | 1:B:101:LYS:HG3 | 3 | 0.38 | 0.02 | 0.37 |
| (2,902) | 1:B:81:TRP:HB3 | 1:B:69:MET:HE1 | 3 | 0.35 | 0.01 | 0.36 |
| (2,902) | 1:B:81:TRP:HB3 | 1:B:69:MET:HE2 | 3 | 0.35 | 0.01 | 0.36 |

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| Key | Atom-1 | Atom-2 | Models ¹ | Mean (Å) | SD ¹ (Å) | Median (Å) |
|----------|-----------------|-----------------|---------------------|----------|---------------------|------------|
| (2,902) | 1:B:81:TRP:HB3 | 1:B:69:MET:HE3 | 3 | 0.35 | 0.01 | 0.36 |
| (2,902) | 1:B:81:TRP:HB3 | 1:B:73:ILE:HD11 | 3 | 0.35 | 0.01 | 0.36 |
| (2,902) | 1:B:81:TRP:HB3 | 1:B:73:ILE:HD13 | 3 | 0.35 | 0.01 | 0.36 |
| (2,902) | 1:B:81:TRP:HB3 | 1:B:73:ILE:HD12 | 3 | 0.35 | 0.01 | 0.36 |
| (2,932) | 1:B:-1:LYS:HE2 | 1:B:-1:LYS:HB2 | 3 | 0.35 | 0.15 | 0.34 |
| (2,932) | 1:B:44:LYS:HE3 | 1:B:44:LYS:HB2 | 3 | 0.35 | 0.15 | 0.34 |
| (2,932) | 1:B:44:LYS:HE2 | 1:B:44:LYS:HB2 | 3 | 0.35 | 0.15 | 0.34 |
| (2,932) | 1:B:60:LYS:HE3 | 1:B:60:LYS:HB2 | 3 | 0.35 | 0.15 | 0.34 |
| (1,485) | 1:B:98:LEU:HD21 | 1:B:40:PHE:HB3 | 3 | 0.31 | 0.12 | 0.33 |
| (1,485) | 1:B:98:LEU:HD22 | 1:B:40:PHE:HB3 | 3 | 0.31 | 0.12 | 0.33 |
| (1,485) | 1:B:98:LEU:HD23 | 1:B:40:PHE:HB3 | 3 | 0.31 | 0.12 | 0.33 |
| (1,52) | 1:B:11:LYS:HE2 | 1:B:69:MET:HB3 | 3 | 0.29 | 0.06 | 0.3 |
| (1,1006) | 1:B:94:ALA:H | 1:B:96:LYS:HB3 | 3 | 0.27 | 0.04 | 0.28 |
| (1,1137) | 1:B:60:LYS:H | 1:B:60:LYS:HE3 | 3 | 0.27 | 0.03 | 0.25 |
| (1,895) | 1:B:33:ASP:H | 1:B:33:ASP:HB3 | 3 | 0.26 | 0.01 | 0.25 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:36:LEU:HD12 | 3 | 0.22 | 0.02 | 0.23 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:36:LEU:HD11 | 3 | 0.22 | 0.02 | 0.23 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:36:LEU:HD13 | 3 | 0.22 | 0.02 | 0.23 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:36:LEU:HD21 | 3 | 0.22 | 0.02 | 0.23 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:36:LEU:HD23 | 3 | 0.22 | 0.02 | 0.23 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:36:LEU:HD22 | 3 | 0.22 | 0.02 | 0.23 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:98:LEU:HD13 | 3 | 0.22 | 0.02 | 0.23 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:98:LEU:HD11 | 3 | 0.22 | 0.02 | 0.23 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:98:LEU:HD12 | 3 | 0.22 | 0.02 | 0.23 |
| (2,900) | 1:B:11:LYS:HB3 | 1:B:69:MET:HE1 | 3 | 0.21 | 0.05 | 0.22 |
| (2,900) | 1:B:11:LYS:HB3 | 1:B:69:MET:HE2 | 3 | 0.21 | 0.05 | 0.22 |
| (2,900) | 1:B:11:LYS:HB3 | 1:B:69:MET:HE3 | 3 | 0.21 | 0.05 | 0.22 |
| (2,900) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD11 | 3 | 0.21 | 0.05 | 0.22 |
| (2,900) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD13 | 3 | 0.21 | 0.05 | 0.22 |
| (2,900) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD12 | 3 | 0.21 | 0.05 | 0.22 |
| (2,1062) | 1:B:60:LYS:HB2 | 1:B:57:SER:HB3 | 3 | 0.21 | 0.07 | 0.19 |
| (2,1062) | 1:B:57:SER:HB3 | 1:B:89:ILE:HB | 3 | 0.21 | 0.07 | 0.19 |
| (2,565) | 1:B:15:LEU:HD23 | 1:B:62:GLN:HA | 3 | 0.2 | 0.04 | 0.18 |
| (2,565) | 1:B:15:LEU:HD21 | 1:B:62:GLN:HA | 3 | 0.2 | 0.04 | 0.18 |
| (2,565) | 1:B:15:LEU:HD22 | 1:B:62:GLN:HA | 3 | 0.2 | 0.04 | 0.18 |
| (2,565) | 1:B:19:THR:HA | 1:B:22:LEU:HD23 | 3 | 0.2 | 0.04 | 0.18 |
| (2,565) | 1:B:19:THR:HA | 1:B:22:LEU:HD21 | 3 | 0.2 | 0.04 | 0.18 |
| (2,565) | 1:B:19:THR:HA | 1:B:22:LEU:HD22 | 3 | 0.2 | 0.04 | 0.18 |
| (2,565) | 1:B:36:LEU:HD21 | 1:B:29:GLY:HA3 | 3 | 0.2 | 0.04 | 0.18 |
| (2,565) | 1:B:36:LEU:HD23 | 1:B:29:GLY:HA3 | 3 | 0.2 | 0.04 | 0.18 |
| (2,565) | 1:B:36:LEU:HD22 | 1:B:29:GLY:HA3 | 3 | 0.2 | 0.04 | 0.18 |
| (2,565) | 1:B:85:LEU:HD11 | 1:B:62:GLN:HA | 3 | 0.2 | 0.04 | 0.18 |

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| Key | Atom-1 | Atom-2 | Models ¹ | Mean (Å) | SD ¹ (Å) | Median (Å) |
|----------|-----------------|-----------------|---------------------|----------|---------------------|------------|
| (2,565) | 1:B:85:LEU:HD12 | 1:B:62:GLN:HA | 3 | 0.2 | 0.04 | 0.18 |
| (2,565) | 1:B:85:LEU:HD13 | 1:B:62:GLN:HA | 3 | 0.2 | 0.04 | 0.18 |
| (2,272) | 1:B:19:THR:HA | 1:B:20:PRO:HG2 | 3 | 0.17 | 0.03 | 0.16 |
| (2,272) | 1:B:19:THR:HA | 1:B:20:PRO:HG3 | 3 | 0.17 | 0.03 | 0.16 |
| (2,272) | 1:B:21:LEU:HB2 | 1:B:19:THR:HA | 3 | 0.17 | 0.03 | 0.16 |
| (2,272) | 1:B:19:THR:HA | 1:B:55:PRO:HG2 | 3 | 0.17 | 0.03 | 0.16 |
| (2,272) | 1:B:85:LEU:HB3 | 1:B:19:THR:HA | 3 | 0.17 | 0.03 | 0.16 |
| (2,272) | 1:B:85:LEU:HB2 | 1:B:19:THR:HA | 3 | 0.17 | 0.03 | 0.16 |
| (2,272) | 1:B:80:THR:HB | 1:B:70:PRO:HG2 | 3 | 0.17 | 0.03 | 0.16 |
| (2,416) | 1:B:81:TRP:HB2 | 1:B:80:THR:HB | 3 | 0.17 | 0.05 | 0.15 |
| (2,416) | 1:B:81:TRP:HB2 | 1:B:84:SER:HB2 | 3 | 0.17 | 0.05 | 0.15 |
| (2,416) | 1:B:81:TRP:HB2 | 1:B:84:SER:HB3 | 3 | 0.17 | 0.05 | 0.15 |
| (2,101) | 1:B:41:ASP:HB2 | 1:B:42:GLU:HA | 3 | 0.15 | 0.01 | 0.16 |
| (2,101) | 1:B:63:ASP:HB2 | 1:B:60:LYS:HA | 3 | 0.15 | 0.01 | 0.16 |
| (2,101) | 1:B:74:ASN:HB2 | 1:B:75:SER:HA | 3 | 0.15 | 0.01 | 0.16 |
| (2,1214) | 1:B:36:LEU:H | 1:B:38:LYS:HB2 | 3 | 0.15 | 0.02 | 0.16 |
| (2,1214) | 1:B:36:LEU:H | 1:B:38:LYS:HB3 | 3 | 0.15 | 0.02 | 0.16 |
| (2,968) | 1:B:9:MET:HB3 | 1:B:14:TRP:HB2 | 3 | 0.15 | 0.04 | 0.13 |
| (2,968) | 1:B:87:GLU:HG3 | 1:B:91:LYS:HE2 | 3 | 0.15 | 0.04 | 0.13 |
| (1,400) | 1:B:28:LYS:HG3 | 1:B:28:LYS:HA | 3 | 0.14 | 0.02 | 0.15 |
| (2,281) | 1:B:18:MET:HG2 | 1:B:18:MET:HA | 3 | 0.13 | 0.01 | 0.12 |
| (2,281) | 1:B:18:MET:HG2 | 1:B:82:GLY:HA3 | 3 | 0.13 | 0.01 | 0.12 |
| (2,434) | 1:B:51:VAL:HA | 1:B:24:ASP:HA | 3 | 0.13 | 0.02 | 0.12 |
| (2,434) | 1:B:51:VAL:HA | 1:B:52:THR:HB | 3 | 0.13 | 0.02 | 0.12 |
| (2,434) | 1:B:51:VAL:HA | 1:B:54:ILE:HA | 3 | 0.13 | 0.02 | 0.12 |
| (2,548) | 1:B:49:GLN:HB2 | 1:B:47:TYR:HA | 3 | 0.13 | 0.01 | 0.12 |
| (2,548) | 1:B:49:GLN:HB3 | 1:B:47:TYR:HA | 3 | 0.13 | 0.01 | 0.12 |
| (2,548) | 1:B:11:LYS:HE3 | 1:B:66:TYR:HA | 3 | 0.13 | 0.01 | 0.12 |
| (2,548) | 1:B:15:LEU:HG | 1:B:66:TYR:HA | 3 | 0.13 | 0.01 | 0.12 |
| (2,548) | 1:B:65:LEU:HG | 1:B:84:SER:HB2 | 3 | 0.13 | 0.01 | 0.12 |
| (2,548) | 1:B:65:LEU:HG | 1:B:84:SER:HB3 | 3 | 0.13 | 0.01 | 0.12 |
| (1,406) | 1:B:53:LEU:HG | 1:B:53:LEU:HA | 3 | 0.12 | 0.02 | 0.11 |
| (2,341) | 1:B:91:LYS:HD3 | 1:B:91:LYS:HA | 3 | 0.12 | 0.01 | 0.12 |
| (2,341) | 1:B:91:LYS:HD2 | 1:B:91:LYS:HA | 3 | 0.12 | 0.01 | 0.12 |
| (2,341) | 1:B:38:LYS:HD3 | 1:B:38:LYS:HA | 3 | 0.12 | 0.01 | 0.12 |
| (2,341) | 1:B:38:LYS:HD2 | 1:B:38:LYS:HA | 3 | 0.12 | 0.01 | 0.12 |
| (2,676) | 1:B:28:LYS:HA | 1:B:47:TYR:HD1 | 3 | 0.12 | 0.0 | 0.12 |
| (2,676) | 1:B:28:LYS:HA | 1:B:47:TYR:HD2 | 3 | 0.12 | 0.0 | 0.12 |
| (2,676) | 1:B:28:LYS:HA | 1:B:47:TYR:HE1 | 3 | 0.12 | 0.0 | 0.12 |
| (2,676) | 1:B:28:LYS:HA | 1:B:47:TYR:HE2 | 3 | 0.12 | 0.0 | 0.12 |
| (1,75) | 1:B:27:CYS:HB2 | 1:B:50:CYS:HB2 | 2 | 1.37 | 0.01 | 1.37 |
| (1,249) | 1:B:52:THR:HB | 1:B:53:LEU:HD22 | 2 | 1.13 | 1.0 | 1.13 |

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| Key | Atom-1 | Atom-2 | Models ¹ | Mean (Å) | SD ¹ (Å) | Median (Å) |
|----------|-----------------|-----------------|---------------------|----------|---------------------|------------|
| (1,249) | 1:B:52:THR:HB | 1:B:53:LEU:HD21 | 2 | 1.13 | 1.0 | 1.13 |
| (1,249) | 1:B:52:THR:HB | 1:B:53:LEU:HD23 | 2 | 1.13 | 1.0 | 1.13 |
| (1,975) | 1:B:62:GLN:H | 1:B:63:ASP:HB3 | 2 | 1.05 | 0.05 | 1.05 |
| (1,703) | 1:B:85:LEU:HD11 | 1:B:82:GLY:HA3 | 2 | 0.94 | 0.8 | 0.94 |
| (1,703) | 1:B:85:LEU:HD12 | 1:B:82:GLY:HA3 | 2 | 0.94 | 0.8 | 0.94 |
| (1,703) | 1:B:85:LEU:HD13 | 1:B:82:GLY:HA3 | 2 | 0.94 | 0.8 | 0.94 |
| (2,714) | 1:B:50:CYS:HB2 | 1:B:51:VAL:HG13 | 2 | 0.88 | 0.01 | 0.88 |
| (2,714) | 1:B:50:CYS:HB2 | 1:B:51:VAL:HG11 | 2 | 0.88 | 0.01 | 0.88 |
| (2,714) | 1:B:50:CYS:HB2 | 1:B:51:VAL:HG12 | 2 | 0.88 | 0.01 | 0.88 |
| (2,714) | 1:B:50:CYS:HB2 | 1:B:51:VAL:HG21 | 2 | 0.88 | 0.01 | 0.88 |
| (2,714) | 1:B:50:CYS:HB2 | 1:B:51:VAL:HG23 | 2 | 0.88 | 0.01 | 0.88 |
| (2,714) | 1:B:50:CYS:HB2 | 1:B:51:VAL:HG22 | 2 | 0.88 | 0.01 | 0.88 |
| (1,114) | 1:B:50:CYS:HB2 | 1:B:51:VAL:HG13 | 2 | 0.87 | 0.0 | 0.87 |
| (1,114) | 1:B:50:CYS:HB2 | 1:B:51:VAL:HG11 | 2 | 0.87 | 0.0 | 0.87 |
| (1,114) | 1:B:50:CYS:HB2 | 1:B:51:VAL:HG12 | 2 | 0.87 | 0.0 | 0.87 |
| (1,87) | 1:B:63:ASP:H | 1:B:63:ASP:HB3 | 2 | 0.85 | 0.03 | 0.85 |
| (2,1083) | 1:B:45:MET:HB3 | 1:B:53:LEU:HD11 | 2 | 0.84 | 0.65 | 0.84 |
| (2,1083) | 1:B:45:MET:HB3 | 1:B:53:LEU:HD12 | 2 | 0.84 | 0.65 | 0.84 |
| (2,1083) | 1:B:45:MET:HB3 | 1:B:53:LEU:HD13 | 2 | 0.84 | 0.65 | 0.84 |
| (2,1083) | 1:B:45:MET:HG2 | 1:B:53:LEU:HD11 | 2 | 0.84 | 0.65 | 0.84 |
| (2,1083) | 1:B:45:MET:HG2 | 1:B:53:LEU:HD12 | 2 | 0.84 | 0.65 | 0.84 |
| (2,1083) | 1:B:45:MET:HG2 | 1:B:53:LEU:HD13 | 2 | 0.84 | 0.65 | 0.84 |
| (2,30) | 1:B:25:LEU:HB2 | 1:B:26:ILE:HA | 2 | 0.68 | 0.04 | 0.68 |
| (2,30) | 1:B:25:LEU:HB2 | 1:B:86:GLY:HA3 | 2 | 0.68 | 0.04 | 0.68 |
| (1,28) | 1:B:26:ILE:H | 1:B:25:LEU:HB2 | 2 | 0.67 | 0.02 | 0.67 |
| (1,111) | 1:B:51:VAL:H | 1:B:50:CYS:HB2 | 2 | 0.63 | 0.01 | 0.63 |
| (1,549) | 1:B:25:LEU:HB3 | 1:B:25:LEU:HA | 2 | 0.43 | 0.0 | 0.43 |
| (2,29) | 1:B:65:LEU:HB3 | 1:B:68:SER:HB2 | 2 | 0.38 | 0.03 | 0.38 |
| (2,29) | 1:B:25:LEU:HB2 | 1:B:22:LEU:HA | 2 | 0.38 | 0.03 | 0.38 |
| (2,1103) | 1:B:36:LEU:HD12 | 1:B:35:ASP:HB2 | 2 | 0.37 | 0.1 | 0.37 |
| (2,1103) | 1:B:36:LEU:HD11 | 1:B:35:ASP:HB2 | 2 | 0.37 | 0.1 | 0.37 |
| (2,1103) | 1:B:36:LEU:HD13 | 1:B:35:ASP:HB2 | 2 | 0.37 | 0.1 | 0.37 |
| (2,1103) | 1:B:24:ASP:HB2 | 1:B:21:LEU:HD23 | 2 | 0.37 | 0.1 | 0.37 |
| (2,1103) | 1:B:24:ASP:HB2 | 1:B:21:LEU:HD21 | 2 | 0.37 | 0.1 | 0.37 |
| (2,1103) | 1:B:24:ASP:HB2 | 1:B:21:LEU:HD22 | 2 | 0.37 | 0.1 | 0.37 |
| (2,393) | 1:B:44:LYS:HB2 | 1:B:40:PHE:HE1 | 2 | 0.26 | 0.01 | 0.26 |
| (2,393) | 1:B:44:LYS:HB2 | 1:B:40:PHE:HE2 | 2 | 0.26 | 0.01 | 0.26 |
| (2,393) | 1:B:48:GLU:HB2 | 1:B:47:TYR:HD1 | 2 | 0.26 | 0.01 | 0.26 |
| (2,393) | 1:B:48:GLU:HB2 | 1:B:47:TYR:HD2 | 2 | 0.26 | 0.01 | 0.26 |
| (2,393) | 1:B:48:GLU:HB2 | 1:B:47:TYR:HE1 | 2 | 0.26 | 0.01 | 0.26 |
| (2,393) | 1:B:48:GLU:HB2 | 1:B:47:TYR:HE2 | 2 | 0.26 | 0.01 | 0.26 |
| (2,393) | 1:B:83:ARG:HB2 | 1:B:14:TRP:HH2 | 2 | 0.26 | 0.01 | 0.26 |

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| Key | Atom-1 | Atom-2 | Models ¹ | Mean (Å) | SD ¹ (Å) | Median (Å) |
|----------|-----------------|-----------------|---------------------|----------|---------------------|------------|
| (2,715) | 1:B:51:VAL:HG13 | 1:B:24:ASP:HB3 | 2 | 0.26 | 0.08 | 0.26 |
| (2,715) | 1:B:51:VAL:HG11 | 1:B:24:ASP:HB3 | 2 | 0.26 | 0.08 | 0.26 |
| (2,715) | 1:B:51:VAL:HG12 | 1:B:24:ASP:HB3 | 2 | 0.26 | 0.08 | 0.26 |
| (2,715) | 1:B:51:VAL:HG13 | 1:B:27:CYS:HB3 | 2 | 0.26 | 0.08 | 0.26 |
| (2,715) | 1:B:51:VAL:HG11 | 1:B:27:CYS:HB3 | 2 | 0.26 | 0.08 | 0.26 |
| (2,715) | 1:B:51:VAL:HG12 | 1:B:27:CYS:HB3 | 2 | 0.26 | 0.08 | 0.26 |
| (2,715) | 1:B:51:VAL:HG21 | 1:B:48:GLU:HG3 | 2 | 0.26 | 0.08 | 0.26 |
| (2,715) | 1:B:51:VAL:HG23 | 1:B:48:GLU:HG3 | 2 | 0.26 | 0.08 | 0.26 |
| (2,715) | 1:B:51:VAL:HG22 | 1:B:48:GLU:HG3 | 2 | 0.26 | 0.08 | 0.26 |
| (1,1072) | 1:B:64:GLU:H | 1:B:63:ASP:HB3 | 2 | 0.26 | 0.02 | 0.26 |
| (2,1211) | 1:B:33:ASP:H | 1:B:31:ILE:HG21 | 2 | 0.26 | 0.0 | 0.26 |
| (2,1211) | 1:B:33:ASP:H | 1:B:31:ILE:HG22 | 2 | 0.26 | 0.0 | 0.26 |
| (2,1211) | 1:B:33:ASP:H | 1:B:31:ILE:HG23 | 2 | 0.26 | 0.0 | 0.26 |
| (2,1211) | 1:B:33:ASP:H | 1:B:36:LEU:HD21 | 2 | 0.26 | 0.0 | 0.26 |
| (2,1211) | 1:B:33:ASP:H | 1:B:36:LEU:HD23 | 2 | 0.26 | 0.0 | 0.26 |
| (2,1211) | 1:B:33:ASP:H | 1:B:36:LEU:HD22 | 2 | 0.26 | 0.0 | 0.26 |
| (2,268) | 1:B:45:MET:HG2 | 1:B:53:LEU:HD11 | 2 | 0.24 | 0.03 | 0.24 |
| (2,268) | 1:B:45:MET:HG2 | 1:B:53:LEU:HD12 | 2 | 0.24 | 0.03 | 0.24 |
| (2,268) | 1:B:45:MET:HG2 | 1:B:53:LEU:HD13 | 2 | 0.24 | 0.03 | 0.24 |
| (2,268) | 1:B:45:MET:HG2 | 1:B:98:LEU:HD21 | 2 | 0.24 | 0.03 | 0.24 |
| (2,268) | 1:B:45:MET:HG2 | 1:B:98:LEU:HD22 | 2 | 0.24 | 0.03 | 0.24 |
| (2,268) | 1:B:45:MET:HG2 | 1:B:98:LEU:HD23 | 2 | 0.24 | 0.03 | 0.24 |
| (2,566) | 1:B:36:LEU:HB2 | 1:B:36:LEU:HD21 | 2 | 0.24 | 0.03 | 0.24 |
| (2,566) | 1:B:36:LEU:HB2 | 1:B:36:LEU:HD23 | 2 | 0.24 | 0.03 | 0.24 |
| (2,566) | 1:B:36:LEU:HB2 | 1:B:36:LEU:HD22 | 2 | 0.24 | 0.03 | 0.24 |
| (2,566) | 1:B:43:ILE:HB | 1:B:45:MET:HE2 | 2 | 0.24 | 0.03 | 0.24 |
| (2,566) | 1:B:43:ILE:HB | 1:B:45:MET:HE1 | 2 | 0.24 | 0.03 | 0.24 |
| (2,566) | 1:B:43:ILE:HB | 1:B:45:MET:HE3 | 2 | 0.24 | 0.03 | 0.24 |
| (1,771) | 1:B:43:ILE:H | 1:B:45:MET:HB3 | 2 | 0.22 | 0.08 | 0.22 |
| (2,1474) | 1:B:65:LEU:H | 1:B:60:LYS:HG3 | 2 | 0.2 | 0.0 | 0.2 |
| (2,1474) | 1:B:63:ASP:H | 1:B:59:LYS:HD3 | 2 | 0.2 | 0.0 | 0.2 |
| (2,1474) | 1:B:63:ASP:H | 1:B:60:LYS:HD3 | 2 | 0.2 | 0.0 | 0.2 |
| (2,1474) | 1:B:63:ASP:H | 1:B:60:LYS:HG3 | 2 | 0.2 | 0.0 | 0.2 |
| (2,947) | 1:B:41:ASP:HB3 | 1:B:37:LYS:HD2 | 2 | 0.19 | 0.03 | 0.19 |
| (2,947) | 1:B:37:LYS:HG3 | 1:B:41:ASP:HB3 | 2 | 0.19 | 0.03 | 0.19 |
| (2,947) | 1:B:37:LYS:HG2 | 1:B:41:ASP:HB3 | 2 | 0.19 | 0.03 | 0.19 |
| (1,568) | 1:B:89:ILE:HG23 | 1:B:57:SER:HB2 | 2 | 0.18 | 0.02 | 0.18 |
| (1,568) | 1:B:89:ILE:HG21 | 1:B:57:SER:HB2 | 2 | 0.18 | 0.02 | 0.18 |
| (1,568) | 1:B:89:ILE:HG22 | 1:B:57:SER:HB2 | 2 | 0.18 | 0.02 | 0.18 |
| (2,486) | 1:B:57:SER:HB2 | 1:B:54:ILE:HG21 | 2 | 0.18 | 0.02 | 0.18 |
| (2,486) | 1:B:57:SER:HB2 | 1:B:54:ILE:HG22 | 2 | 0.18 | 0.02 | 0.18 |
| (2,486) | 1:B:57:SER:HB2 | 1:B:54:ILE:HG23 | 2 | 0.18 | 0.02 | 0.18 |

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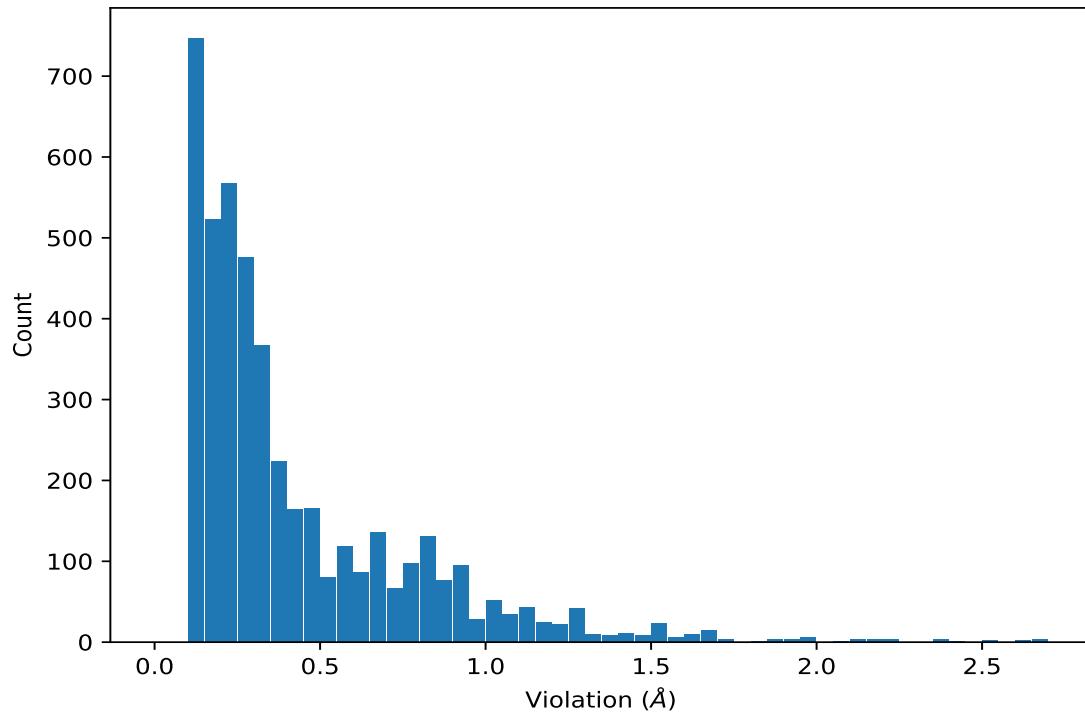
| Key | Atom-1 | Atom-2 | Models ¹ | Mean (Å) | SD ¹ (Å) | Median (Å) |
|----------|-----------------|-----------------|---------------------|----------|---------------------|------------|
| (2,486) | 1:B:57:SER:HB2 | 1:B:89:ILE:HD11 | 2 | 0.18 | 0.02 | 0.18 |
| (2,486) | 1:B:57:SER:HB2 | 1:B:89:ILE:HD13 | 2 | 0.18 | 0.02 | 0.18 |
| (2,486) | 1:B:57:SER:HB2 | 1:B:89:ILE:HD12 | 2 | 0.18 | 0.02 | 0.18 |
| (2,874) | 1:B:26:ILE:HD13 | 1:B:23:PRO:HA | 2 | 0.16 | 0.02 | 0.16 |
| (2,874) | 1:B:26:ILE:HD11 | 1:B:23:PRO:HA | 2 | 0.16 | 0.02 | 0.16 |
| (2,874) | 1:B:26:ILE:HD12 | 1:B:23:PRO:HA | 2 | 0.16 | 0.02 | 0.16 |
| (2,874) | 1:B:26:ILE:HD13 | 1:B:90:GLY:HA3 | 2 | 0.16 | 0.02 | 0.16 |
| (2,874) | 1:B:26:ILE:HD11 | 1:B:90:GLY:HA3 | 2 | 0.16 | 0.02 | 0.16 |
| (2,874) | 1:B:26:ILE:HD12 | 1:B:90:GLY:HA3 | 2 | 0.16 | 0.02 | 0.16 |
| (1,834) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB1 | 2 | 0.15 | 0.02 | 0.15 |
| (1,834) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB3 | 2 | 0.15 | 0.02 | 0.15 |
| (1,834) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB2 | 2 | 0.15 | 0.02 | 0.15 |
| (2,188) | 1:B:0:MET:HB3 | 1:B:-1:LYS:H | 2 | 0.15 | 0.02 | 0.15 |
| (2,188) | 1:B:0:MET:HB2 | 1:B:-1:LYS:H | 2 | 0.15 | 0.02 | 0.15 |
| (2,392) | 1:B:48:GLU:HB3 | 1:B:47:TYR:H | 2 | 0.14 | 0.02 | 0.14 |
| (2,392) | 1:B:49:GLN:HB2 | 1:B:47:TYR:H | 2 | 0.14 | 0.02 | 0.14 |
| (2,392) | 1:B:49:GLN:HB3 | 1:B:47:TYR:H | 2 | 0.14 | 0.02 | 0.14 |
| (2,1048) | 1:B:31:ILE:HG12 | 1:B:30:PHE:HA | 2 | 0.12 | 0.01 | 0.12 |
| (2,1048) | 1:B:96:LYS:HD3 | 1:B:53:LEU:HA | 2 | 0.12 | 0.01 | 0.12 |
| (2,1048) | 1:B:96:LYS:HD3 | 1:B:92:ASP:HA | 2 | 0.12 | 0.01 | 0.12 |
| (2,1048) | 1:B:53:LEU:HA | 1:B:96:LYS:HD2 | 2 | 0.12 | 0.01 | 0.12 |
| (2,883) | 1:B:83:ARG:HG3 | 1:B:79:GLY:HA2 | 2 | 0.12 | 0.0 | 0.12 |
| (2,883) | 1:B:90:GLY:HA3 | 1:B:89:ILE:HB | 2 | 0.12 | 0.0 | 0.12 |
| (2,1140) | 1:B:54:ILE:H | 1:B:89:ILE:HG23 | 2 | 0.12 | 0.01 | 0.12 |
| (2,1140) | 1:B:54:ILE:H | 1:B:89:ILE:HG21 | 2 | 0.12 | 0.01 | 0.12 |
| (2,1140) | 1:B:54:ILE:H | 1:B:89:ILE:HG22 | 2 | 0.12 | 0.01 | 0.12 |
| (2,1140) | 1:B:89:ILE:HG23 | 1:B:56:GLU:H | 2 | 0.12 | 0.01 | 0.12 |
| (2,1140) | 1:B:89:ILE:HG21 | 1:B:56:GLU:H | 2 | 0.12 | 0.01 | 0.12 |
| (2,1140) | 1:B:89:ILE:HG22 | 1:B:56:GLU:H | 2 | 0.12 | 0.01 | 0.12 |
| (2,1140) | 1:B:57:SER:H | 1:B:89:ILE:HG23 | 2 | 0.12 | 0.01 | 0.12 |
| (2,1140) | 1:B:57:SER:H | 1:B:89:ILE:HG21 | 2 | 0.12 | 0.01 | 0.12 |
| (2,1140) | 1:B:57:SER:H | 1:B:89:ILE:HG22 | 2 | 0.12 | 0.01 | 0.12 |
| (1,846) | 1:B:96:LYS:HB2 | 1:B:97:HIS:HA | 2 | 0.12 | 0.0 | 0.12 |
| (2,45) | 1:B:61:CYS:HB3 | 1:B:65:LEU:HG | 2 | 0.12 | 0.0 | 0.12 |
| (2,45) | 1:B:61:CYS:HB3 | 1:B:89:ILE:HG13 | 2 | 0.12 | 0.0 | 0.12 |
| (2,45) | 1:B:92:ASP:HB3 | 1:B:95:GLU:HB2 | 2 | 0.12 | 0.0 | 0.12 |
| (2,80) | 1:B:12:ASP:HB2 | 1:B:10:THR:HB | 2 | 0.12 | 0.0 | 0.12 |
| (2,80) | 1:B:71:ASP:HB2 | 1:B:72:LYS:HA | 2 | 0.12 | 0.0 | 0.12 |
| (2,171) | 1:B:32:GLN:HG2 | 1:B:33:ASP:H | 2 | 0.12 | 0.0 | 0.12 |
| (2,171) | 1:B:62:GLN:HG2 | 1:B:14:TRP:HE3 | 2 | 0.12 | 0.0 | 0.12 |
| (2,171) | 1:B:62:GLN:HG3 | 1:B:14:TRP:HE3 | 2 | 0.12 | 0.0 | 0.12 |
| (1,325) | 1:B:81:TRP:HB3 | 1:B:81:TRP:HD1 | 2 | 0.11 | 0.0 | 0.11 |

¹Number of violated models, ²Standard 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) |
|---------|----------------|----------------|----------|---------------|
| (1,701) | 1:B:85:LEU:HB3 | 1:B:82:GLY:HA3 | 3 | 2.7 |
| (1,701) | 1:B:85:LEU:HB3 | 1:B:82:GLY:HA3 | 4 | 2.68 |
| (1,701) | 1:B:85:LEU:HB3 | 1:B:82:GLY:HA3 | 9 | 2.68 |
| (1,701) | 1:B:85:LEU:HB3 | 1:B:82:GLY:HA3 | 1 | 2.66 |
| (1,701) | 1:B:85:LEU:HB3 | 1:B:82:GLY:HA3 | 8 | 2.65 |
| (1,701) | 1:B:85:LEU:HB3 | 1:B:82:GLY:HA3 | 10 | 2.61 |
| (1,701) | 1:B:85:LEU:HB3 | 1:B:82:GLY:HA3 | 2 | 2.51 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|-----------------|-----------------|----------|---------------|
| (1,701) | 1:B:85:LEU:HB3 | 1:B:82:GLY:HA3 | 7 | 2.51 |
| (1,701) | 1:B:85:LEU:HB3 | 1:B:82:GLY:HA3 | 5 | 2.42 |
| (1,458) | 1:B:61:CYS:HB3 | 1:B:85:LEU:HD23 | 6 | 2.36 |
| (1,458) | 1:B:61:CYS:HB3 | 1:B:85:LEU:HD21 | 6 | 2.36 |
| (1,458) | 1:B:61:CYS:HB3 | 1:B:85:LEU:HD22 | 6 | 2.36 |
| (1,405) | 1:B:18:MET:HG2 | 1:B:85:LEU:HD11 | 6 | 2.2 |
| (1,405) | 1:B:18:MET:HG2 | 1:B:85:LEU:HD12 | 6 | 2.2 |
| (1,405) | 1:B:18:MET:HG2 | 1:B:85:LEU:HD13 | 6 | 2.2 |
| (1,798) | 1:B:85:LEU:HD23 | 1:B:64:GLU:H | 6 | 2.16 |
| (1,798) | 1:B:85:LEU:HD21 | 1:B:64:GLU:H | 6 | 2.16 |
| (1,798) | 1:B:85:LEU:HD22 | 1:B:64:GLU:H | 6 | 2.16 |
| (1,249) | 1:B:52:THR:HB | 1:B:53:LEU:HD22 | 4 | 2.13 |
| (1,249) | 1:B:52:THR:HB | 1:B:53:LEU:HD21 | 4 | 2.13 |
| (1,249) | 1:B:52:THR:HB | 1:B:53:LEU:HD23 | 4 | 2.13 |
| (1,759) | 1:B:35:ASP:HB2 | 1:B:36:LEU:HG | 7 | 2.06 |
| (1,426) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD21 | 2 | 1.98 |
| (1,426) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD23 | 2 | 1.98 |
| (1,426) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD22 | 2 | 1.98 |
| (1,426) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD21 | 9 | 1.97 |
| (1,426) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD23 | 9 | 1.97 |
| (1,426) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD22 | 9 | 1.97 |
| (1,426) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD21 | 10 | 1.93 |
| (1,426) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD23 | 10 | 1.93 |
| (1,426) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD22 | 10 | 1.93 |
| (1,426) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD21 | 8 | 1.9 |
| (1,426) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD23 | 8 | 1.9 |
| (1,426) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD22 | 8 | 1.9 |
| (1,702) | 1:B:85:LEU:HG | 1:B:82:GLY:HA3 | 6 | 1.8 |
| (1,703) | 1:B:85:LEU:HD11 | 1:B:82:GLY:HA3 | 6 | 1.74 |
| (1,703) | 1:B:85:LEU:HD12 | 1:B:82:GLY:HA3 | 6 | 1.74 |
| (1,703) | 1:B:85:LEU:HD13 | 1:B:82:GLY:HA3 | 6 | 1.74 |
| (1,373) | 1:B:92:ASP:HB2 | 1:B:57:SER:HB3 | 10 | 1.73 |
| (2,607) | 1:B:61:CYS:H | 1:B:85:LEU:HD23 | 6 | 1.69 |
| (2,607) | 1:B:61:CYS:H | 1:B:85:LEU:HD21 | 6 | 1.69 |
| (2,607) | 1:B:61:CYS:H | 1:B:85:LEU:HD22 | 6 | 1.69 |
| (2,607) | 1:B:63:ASP:H | 1:B:85:LEU:HD23 | 6 | 1.69 |
| (2,607) | 1:B:63:ASP:H | 1:B:85:LEU:HD21 | 6 | 1.69 |
| (2,607) | 1:B:63:ASP:H | 1:B:85:LEU:HD22 | 6 | 1.69 |
| (2,607) | 1:B:65:LEU:H | 1:B:85:LEU:HD23 | 6 | 1.69 |
| (2,607) | 1:B:65:LEU:H | 1:B:85:LEU:HD21 | 6 | 1.69 |
| (2,607) | 1:B:65:LEU:H | 1:B:85:LEU:HD22 | 6 | 1.69 |
| (1,784) | 1:B:70:PRO:HG3 | 1:B:72:LYS:HA | 9 | 1.69 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|----------------|----------|---------------|
| (1,784) | 1:B:70:PRO:HG3 | 1:B:72:LYS:HA | 4 | 1.68 |
| (1,702) | 1:B:85:LEU:HG | 1:B:82:GLY:HA3 | 7 | 1.67 |
| (1,784) | 1:B:70:PRO:HG3 | 1:B:72:LYS:HA | 3 | 1.66 |
| (1,702) | 1:B:85:LEU:HG | 1:B:82:GLY:HA3 | 4 | 1.66 |
| (1,702) | 1:B:85:LEU:HG | 1:B:82:GLY:HA3 | 10 | 1.66 |
| (1,784) | 1:B:70:PRO:HG3 | 1:B:72:LYS:HA | 5 | 1.65 |
| (1,784) | 1:B:70:PRO:HG3 | 1:B:72:LYS:HA | 8 | 1.65 |
| (1,784) | 1:B:70:PRO:HG3 | 1:B:72:LYS:HA | 7 | 1.64 |
| (1,784) | 1:B:70:PRO:HG3 | 1:B:72:LYS:HA | 10 | 1.64 |
| (1,702) | 1:B:85:LEU:HG | 1:B:82:GLY:HA3 | 3 | 1.64 |
| (1,784) | 1:B:70:PRO:HG3 | 1:B:72:LYS:HA | 1 | 1.63 |
| (1,784) | 1:B:70:PRO:HG3 | 1:B:72:LYS:HA | 6 | 1.63 |
| (1,702) | 1:B:85:LEU:HG | 1:B:82:GLY:HA3 | 8 | 1.63 |
| (1,702) | 1:B:85:LEU:HG | 1:B:82:GLY:HA3 | 9 | 1.63 |
| (1,278) | 1:B:64:GLU:HB3 | 1:B:61:CYS:HB3 | 1 | 1.61 |
| (1,373) | 1:B:92:ASP:HB2 | 1:B:57:SER:HB3 | 8 | 1.59 |
| (2,1138) | 1:B:38:LYS:HG2 | 1:B:36:LEU:HA | 1 | 1.57 |
| (2,1138) | 1:B:36:LEU:HA | 1:B:98:LEU:HB2 | 1 | 1.57 |
| (1,500) | 1:B:36:LEU:HD12 | 1:B:36:LEU:HA | 8 | 1.55 |
| (1,500) | 1:B:36:LEU:HD11 | 1:B:36:LEU:HA | 8 | 1.55 |
| (1,500) | 1:B:36:LEU:HD13 | 1:B:36:LEU:HA | 8 | 1.55 |
| (2,1138) | 1:B:38:LYS:HG2 | 1:B:36:LEU:HA | 2 | 1.54 |
| (2,1138) | 1:B:36:LEU:HA | 1:B:98:LEU:HB2 | 2 | 1.54 |
| (1,784) | 1:B:70:PRO:HG3 | 1:B:72:LYS:HA | 2 | 1.54 |
| (1,500) | 1:B:36:LEU:HD12 | 1:B:36:LEU:HA | 10 | 1.54 |
| (1,500) | 1:B:36:LEU:HD11 | 1:B:36:LEU:HA | 10 | 1.54 |
| (1,500) | 1:B:36:LEU:HD13 | 1:B:36:LEU:HA | 10 | 1.54 |
| (2,129) | 1:B:40:PHE:HB2 | 1:B:41:ASP:HB3 | 4 | 1.53 |
| (2,129) | 1:B:88:CYS:HB2 | 1:B:91:LYS:HE2 | 4 | 1.53 |
| (2,1138) | 1:B:38:LYS:HG2 | 1:B:36:LEU:HA | 3 | 1.53 |
| (2,1138) | 1:B:36:LEU:HA | 1:B:98:LEU:HB2 | 3 | 1.53 |
| (2,1138) | 1:B:38:LYS:HG2 | 1:B:36:LEU:HA | 8 | 1.53 |
| (2,1138) | 1:B:36:LEU:HA | 1:B:98:LEU:HB2 | 8 | 1.53 |
| (1,500) | 1:B:36:LEU:HD12 | 1:B:36:LEU:HA | 2 | 1.53 |
| (1,500) | 1:B:36:LEU:HD11 | 1:B:36:LEU:HA | 2 | 1.53 |
| (1,500) | 1:B:36:LEU:HD13 | 1:B:36:LEU:HA | 2 | 1.53 |
| (2,1138) | 1:B:38:LYS:HG2 | 1:B:36:LEU:HA | 5 | 1.52 |
| (2,1138) | 1:B:36:LEU:HA | 1:B:98:LEU:HB2 | 5 | 1.52 |
| (1,539) | 1:B:88:CYS:HB3 | 1:B:85:LEU:HA | 1 | 1.52 |
| (1,500) | 1:B:36:LEU:HD12 | 1:B:36:LEU:HA | 9 | 1.52 |
| (1,500) | 1:B:36:LEU:HD11 | 1:B:36:LEU:HA | 9 | 1.52 |
| (1,500) | 1:B:36:LEU:HD13 | 1:B:36:LEU:HA | 9 | 1.52 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|----------------|-----------------|----------|---------------|
| (2,1138) | 1:B:38:LYS:HG2 | 1:B:36:LEU:HA | 4 | 1.51 |
| (2,1138) | 1:B:36:LEU:HA | 1:B:98:LEU:HB2 | 4 | 1.51 |
| (2,1083) | 1:B:45:MET:HB3 | 1:B:53:LEU:HD11 | 4 | 1.49 |
| (2,1083) | 1:B:45:MET:HB3 | 1:B:53:LEU:HD12 | 4 | 1.49 |
| (2,1083) | 1:B:45:MET:HB3 | 1:B:53:LEU:HD13 | 4 | 1.49 |
| (2,1083) | 1:B:45:MET:HG2 | 1:B:53:LEU:HD11 | 4 | 1.49 |
| (2,1083) | 1:B:45:MET:HG2 | 1:B:53:LEU:HD12 | 4 | 1.49 |
| (2,1083) | 1:B:45:MET:HG2 | 1:B:53:LEU:HD13 | 4 | 1.49 |
| (1,665) | 1:B:23:PRO:HG2 | 1:B:55:PRO:HD2 | 8 | 1.48 |
| (2,129) | 1:B:40:PHE:HB2 | 1:B:41:ASP:HB3 | 1 | 1.46 |
| (2,129) | 1:B:88:CYS:HB2 | 1:B:91:LYS:HE2 | 1 | 1.46 |
| (1,373) | 1:B:92:ASP:HB2 | 1:B:57:SER:HB3 | 1 | 1.45 |
| (1,702) | 1:B:85:LEU:HG | 1:B:82:GLY:HA3 | 2 | 1.43 |
| (1,702) | 1:B:85:LEU:HG | 1:B:82:GLY:HA3 | 5 | 1.43 |
| (2,129) | 1:B:40:PHE:HB2 | 1:B:41:ASP:HB3 | 3 | 1.42 |
| (2,129) | 1:B:88:CYS:HB2 | 1:B:91:LYS:HE2 | 3 | 1.42 |
| (1,665) | 1:B:23:PRO:HG2 | 1:B:55:PRO:HD2 | 9 | 1.42 |
| (2,129) | 1:B:40:PHE:HB2 | 1:B:41:ASP:HB3 | 6 | 1.41 |
| (2,129) | 1:B:88:CYS:HB2 | 1:B:91:LYS:HE2 | 6 | 1.41 |
| (1,119) | 1:B:47:TYR:HB3 | 1:B:31:ILE:HD12 | 1 | 1.41 |
| (1,119) | 1:B:47:TYR:HB3 | 1:B:31:ILE:HD11 | 1 | 1.41 |
| (1,119) | 1:B:47:TYR:HB3 | 1:B:31:ILE:HD13 | 1 | 1.41 |
| (1,253) | 1:B:23:PRO:HB3 | 1:B:55:PRO:HD2 | 8 | 1.4 |
| (2,129) | 1:B:40:PHE:HB2 | 1:B:41:ASP:HB3 | 9 | 1.39 |
| (2,129) | 1:B:88:CYS:HB2 | 1:B:91:LYS:HE2 | 9 | 1.39 |
| (2,129) | 1:B:40:PHE:HB2 | 1:B:41:ASP:HB3 | 5 | 1.37 |
| (2,129) | 1:B:88:CYS:HB2 | 1:B:91:LYS:HE2 | 5 | 1.37 |
| (1,75) | 1:B:27:CYS:HB2 | 1:B:50:CYS:HB2 | 5 | 1.37 |
| (1,75) | 1:B:27:CYS:HB2 | 1:B:50:CYS:HB2 | 3 | 1.36 |
| (1,702) | 1:B:85:LEU:HG | 1:B:82:GLY:HA3 | 1 | 1.35 |
| (1,373) | 1:B:92:ASP:HB2 | 1:B:57:SER:HB3 | 2 | 1.35 |
| (2,129) | 1:B:40:PHE:HB2 | 1:B:41:ASP:HB3 | 8 | 1.34 |
| (2,129) | 1:B:88:CYS:HB2 | 1:B:91:LYS:HE2 | 8 | 1.34 |
| (1,327) | 1:B:81:TRP:HB3 | 1:B:78:ALA:HA | 3 | 1.33 |
| (2,129) | 1:B:40:PHE:HB2 | 1:B:41:ASP:HB3 | 10 | 1.32 |
| (2,129) | 1:B:88:CYS:HB2 | 1:B:91:LYS:HE2 | 10 | 1.32 |
| (1,252) | 1:B:45:MET:HB2 | 1:B:40:PHE:HA | 4 | 1.32 |
| (2,418) | 1:B:65:LEU:HB2 | 1:B:81:TRP:HB2 | 5 | 1.31 |
| (2,418) | 1:B:69:MET:HG3 | 1:B:81:TRP:HB2 | 5 | 1.31 |
| (1,373) | 1:B:92:ASP:HB2 | 1:B:57:SER:HB3 | 9 | 1.31 |
| (1,327) | 1:B:81:TRP:HB3 | 1:B:78:ALA:HA | 4 | 1.3 |
| (2,418) | 1:B:65:LEU:HB2 | 1:B:81:TRP:HB2 | 6 | 1.29 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,418) | 1:B:69:MET:HG3 | 1:B:81:TRP:HB2 | 6 | 1.29 |
| (1,498) | 1:B:47:TYR:HB2 | 1:B:48:GLU:HA | 3 | 1.29 |
| (1,498) | 1:B:47:TYR:HB2 | 1:B:48:GLU:HA | 6 | 1.29 |
| (1,327) | 1:B:81:TRP:HB3 | 1:B:78:ALA:HA | 10 | 1.29 |
| (2,418) | 1:B:65:LEU:HB2 | 1:B:81:TRP:HB2 | 9 | 1.28 |
| (2,418) | 1:B:69:MET:HG3 | 1:B:81:TRP:HB2 | 9 | 1.28 |
| (2,155) | 1:B:87:GLU:HG3 | 1:B:65:LEU:HD11 | 2 | 1.28 |
| (2,155) | 1:B:87:GLU:HG3 | 1:B:65:LEU:HD12 | 2 | 1.28 |
| (2,155) | 1:B:87:GLU:HG3 | 1:B:65:LEU:HD13 | 2 | 1.28 |
| (2,155) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HG12 | 2 | 1.28 |
| (1,498) | 1:B:47:TYR:HB2 | 1:B:48:GLU:HA | 2 | 1.28 |
| (1,498) | 1:B:47:TYR:HB2 | 1:B:48:GLU:HA | 5 | 1.28 |
| (1,498) | 1:B:47:TYR:HB2 | 1:B:48:GLU:HA | 8 | 1.28 |
| (1,498) | 1:B:47:TYR:HB2 | 1:B:48:GLU:HA | 10 | 1.28 |
| (1,327) | 1:B:81:TRP:HB3 | 1:B:78:ALA:HA | 5 | 1.28 |
| (1,294) | 1:B:48:GLU:HB3 | 1:B:46:THR:HB | 4 | 1.28 |
| (1,263) | 1:B:11:LYS:HB2 | 1:B:72:LYS:HA | 4 | 1.28 |
| (1,263) | 1:B:11:LYS:HB2 | 1:B:72:LYS:HA | 7 | 1.28 |
| (1,252) | 1:B:45:MET:HB2 | 1:B:40:PHE:HA | 5 | 1.28 |
| (1,252) | 1:B:45:MET:HB2 | 1:B:40:PHE:HA | 8 | 1.28 |
| (1,456) | 1:B:85:LEU:HD23 | 1:B:85:LEU:HA | 6 | 1.27 |
| (1,456) | 1:B:85:LEU:HD21 | 1:B:85:LEU:HA | 6 | 1.27 |
| (1,456) | 1:B:85:LEU:HD22 | 1:B:85:LEU:HA | 6 | 1.27 |
| (1,1022) | 1:B:40:PHE:H | 1:B:45:MET:HB2 | 4 | 1.27 |
| (2,564) | 1:B:36:LEU:HD21 | 1:B:30:PHE:HA | 6 | 1.26 |
| (2,564) | 1:B:36:LEU:HD23 | 1:B:30:PHE:HA | 6 | 1.26 |
| (2,564) | 1:B:36:LEU:HD22 | 1:B:30:PHE:HA | 6 | 1.26 |
| (2,564) | 1:B:85:LEU:HD11 | 1:B:82:GLY:HA3 | 6 | 1.26 |
| (2,564) | 1:B:85:LEU:HD12 | 1:B:82:GLY:HA3 | 6 | 1.26 |
| (2,564) | 1:B:85:LEU:HD13 | 1:B:82:GLY:HA3 | 6 | 1.26 |
| (2,418) | 1:B:65:LEU:HB2 | 1:B:81:TRP:HB2 | 4 | 1.26 |
| (2,418) | 1:B:69:MET:HG3 | 1:B:81:TRP:HB2 | 4 | 1.26 |
| (2,418) | 1:B:65:LEU:HB2 | 1:B:81:TRP:HB2 | 1 | 1.25 |
| (2,418) | 1:B:69:MET:HG3 | 1:B:81:TRP:HB2 | 1 | 1.25 |
| (2,418) | 1:B:65:LEU:HB2 | 1:B:81:TRP:HB2 | 2 | 1.25 |
| (2,418) | 1:B:69:MET:HG3 | 1:B:81:TRP:HB2 | 2 | 1.25 |
| (2,418) | 1:B:65:LEU:HB2 | 1:B:81:TRP:HB2 | 8 | 1.25 |
| (2,418) | 1:B:69:MET:HG3 | 1:B:81:TRP:HB2 | 8 | 1.25 |
| (1,498) | 1:B:47:TYR:HB2 | 1:B:48:GLU:HA | 9 | 1.25 |
| (1,327) | 1:B:81:TRP:HB3 | 1:B:78:ALA:HA | 2 | 1.25 |
| (1,253) | 1:B:23:PRO:HB3 | 1:B:55:PRO:HD2 | 9 | 1.25 |
| (2,418) | 1:B:65:LEU:HB2 | 1:B:81:TRP:HB2 | 10 | 1.24 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,418) | 1:B:69:MET:HG3 | 1:B:81:TRP:HB2 | 10 | 1.24 |
| (2,129) | 1:B:40:PHE:HB2 | 1:B:41:ASP:HB3 | 7 | 1.24 |
| (2,129) | 1:B:88:CYS:HB2 | 1:B:91:LYS:HE2 | 7 | 1.24 |
| (1,665) | 1:B:23:PRO:HG2 | 1:B:55:PRO:HD2 | 3 | 1.24 |
| (1,498) | 1:B:47:TYR:HB2 | 1:B:48:GLU:HA | 1 | 1.24 |
| (1,498) | 1:B:47:TYR:HB2 | 1:B:48:GLU:HA | 7 | 1.24 |
| (1,306) | 1:B:31:ILE:HG13 | 1:B:37:LYS:HD3 | 1 | 1.24 |
| (2,418) | 1:B:65:LEU:HB2 | 1:B:81:TRP:HB2 | 3 | 1.23 |
| (2,418) | 1:B:69:MET:HG3 | 1:B:81:TRP:HB2 | 3 | 1.23 |
| (2,155) | 1:B:87:GLU:HG3 | 1:B:65:LEU:HD11 | 6 | 1.22 |
| (2,155) | 1:B:87:GLU:HG3 | 1:B:65:LEU:HD12 | 6 | 1.22 |
| (2,155) | 1:B:87:GLU:HG3 | 1:B:65:LEU:HD13 | 6 | 1.22 |
| (2,155) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HG12 | 6 | 1.22 |
| (1,969) | 1:B:14:TRP:HZ3 | 1:B:62:GLN:HG3 | 2 | 1.22 |
| (1,1022) | 1:B:40:PHE:H | 1:B:45:MET:HB2 | 5 | 1.22 |
| (1,721) | 1:B:90:GLY:HA3 | 1:B:93:PHE:HD2 | 4 | 1.21 |
| (1,721) | 1:B:90:GLY:HA3 | 1:B:93:PHE:HD1 | 4 | 1.21 |
| (1,667) | 1:B:55:PRO:HD3 | 1:B:53:LEU:HA | 10 | 1.21 |
| (1,327) | 1:B:81:TRP:HB3 | 1:B:78:ALA:HA | 6 | 1.21 |
| (1,306) | 1:B:31:ILE:HG13 | 1:B:37:LYS:HD3 | 9 | 1.21 |
| (1,263) | 1:B:11:LYS:HB2 | 1:B:72:LYS:HA | 10 | 1.21 |
| (2,467) | 1:B:39:ARG:HG2 | 1:B:43:ILE:HG12 | 7 | 1.2 |
| (2,467) | 1:B:39:ARG:HG2 | 1:B:98:LEU:HB2 | 7 | 1.2 |
| (1,797) | 1:B:81:TRP:HB2 | 1:B:85:LEU:HD23 | 7 | 1.2 |
| (1,797) | 1:B:81:TRP:HB2 | 1:B:85:LEU:HD21 | 7 | 1.2 |
| (1,797) | 1:B:81:TRP:HB2 | 1:B:85:LEU:HD22 | 7 | 1.2 |
| (1,721) | 1:B:90:GLY:HA3 | 1:B:93:PHE:HD2 | 3 | 1.2 |
| (1,721) | 1:B:90:GLY:HA3 | 1:B:93:PHE:HD1 | 3 | 1.2 |
| (1,498) | 1:B:47:TYR:HB2 | 1:B:48:GLU:HA | 4 | 1.2 |
| (1,306) | 1:B:31:ILE:HG13 | 1:B:37:LYS:HD3 | 2 | 1.2 |
| (1,306) | 1:B:31:ILE:HG13 | 1:B:37:LYS:HD3 | 4 | 1.2 |
| (1,306) | 1:B:31:ILE:HG13 | 1:B:37:LYS:HD3 | 6 | 1.2 |
| (1,969) | 1:B:14:TRP:HZ3 | 1:B:62:GLN:HG3 | 1 | 1.19 |
| (1,1022) | 1:B:40:PHE:H | 1:B:45:MET:HB2 | 8 | 1.19 |
| (1,665) | 1:B:23:PRO:HG2 | 1:B:55:PRO:HD2 | 2 | 1.18 |
| (1,665) | 1:B:23:PRO:HG2 | 1:B:55:PRO:HD2 | 4 | 1.18 |
| (1,327) | 1:B:81:TRP:HB3 | 1:B:78:ALA:HA | 9 | 1.18 |
| (1,263) | 1:B:11:LYS:HB2 | 1:B:72:LYS:HA | 5 | 1.18 |
| (1,252) | 1:B:45:MET:HB2 | 1:B:40:PHE:HA | 6 | 1.18 |
| (1,252) | 1:B:45:MET:HB2 | 1:B:40:PHE:HA | 7 | 1.18 |
| (2,998) | 1:B:74:ASN:HB3 | 1:B:8:GLU:HB2 | 10 | 1.16 |
| (2,998) | 1:B:74:ASN:HB3 | 1:B:8:GLU:HB3 | 10 | 1.16 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,756) | 1:B:20:PRO:HD3 | 1:B:21:LEU:HB2 | 3 | 1.16 |
| (1,756) | 1:B:20:PRO:HD3 | 1:B:21:LEU:HB2 | 10 | 1.16 |
| (1,665) | 1:B:23:PRO:HG2 | 1:B:55:PRO:HD2 | 1 | 1.16 |
| (1,263) | 1:B:11:LYS:HB2 | 1:B:72:LYS:HA | 2 | 1.16 |
| (2,467) | 1:B:39:ARG:HG2 | 1:B:43:ILE:HG12 | 6 | 1.15 |
| (2,467) | 1:B:39:ARG:HG2 | 1:B:98:LEU:HB2 | 6 | 1.15 |
| (2,155) | 1:B:87:GLU:HG3 | 1:B:65:LEU:HD11 | 5 | 1.15 |
| (2,155) | 1:B:87:GLU:HG3 | 1:B:65:LEU:HD12 | 5 | 1.15 |
| (2,155) | 1:B:87:GLU:HG3 | 1:B:65:LEU:HD13 | 5 | 1.15 |
| (2,155) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HG12 | 5 | 1.15 |
| (1,721) | 1:B:90:GLY:HA3 | 1:B:93:PHE:HD2 | 1 | 1.15 |
| (1,721) | 1:B:90:GLY:HA3 | 1:B:93:PHE:HD1 | 1 | 1.15 |
| (1,665) | 1:B:23:PRO:HG2 | 1:B:55:PRO:HD2 | 5 | 1.15 |
| (1,327) | 1:B:81:TRP:HB3 | 1:B:78:ALA:HA | 8 | 1.15 |
| (1,282) | 1:B:60:LYS:HD3 | 1:B:57:SER:HA | 7 | 1.15 |
| (2,129) | 1:B:40:PHE:HB2 | 1:B:41:ASP:HB3 | 2 | 1.14 |
| (2,129) | 1:B:88:CYS:HB2 | 1:B:91:LYS:HE2 | 2 | 1.14 |
| (1,667) | 1:B:55:PRO:HD3 | 1:B:53:LEU:HA | 7 | 1.14 |
| (1,489) | 1:B:64:GLU:HB3 | 1:B:61:CYS:HA | 4 | 1.14 |
| (1,489) | 1:B:64:GLU:HB3 | 1:B:61:CYS:HA | 7 | 1.14 |
| (1,306) | 1:B:31:ILE:HG13 | 1:B:37:LYS:HD3 | 10 | 1.14 |
| (1,263) | 1:B:11:LYS:HB2 | 1:B:72:LYS:HA | 1 | 1.14 |
| (2,882) | 1:B:93:PHE:HB3 | 1:B:90:GLY:HA3 | 4 | 1.13 |
| (2,882) | 1:B:93:PHE:HB2 | 1:B:90:GLY:HA3 | 4 | 1.13 |
| (1,797) | 1:B:81:TRP:HB2 | 1:B:85:LEU:HD23 | 2 | 1.13 |
| (1,797) | 1:B:81:TRP:HB2 | 1:B:85:LEU:HD21 | 2 | 1.13 |
| (1,797) | 1:B:81:TRP:HB2 | 1:B:85:LEU:HD22 | 2 | 1.13 |
| (1,306) | 1:B:31:ILE:HG13 | 1:B:37:LYS:HD3 | 3 | 1.13 |
| (1,263) | 1:B:11:LYS:HB2 | 1:B:72:LYS:HA | 8 | 1.13 |
| (2,155) | 1:B:87:GLU:HG3 | 1:B:65:LEU:HD11 | 3 | 1.12 |
| (2,155) | 1:B:87:GLU:HG3 | 1:B:65:LEU:HD12 | 3 | 1.12 |
| (2,155) | 1:B:87:GLU:HG3 | 1:B:65:LEU:HD13 | 3 | 1.12 |
| (2,155) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HG12 | 3 | 1.12 |
| (1,263) | 1:B:11:LYS:HB2 | 1:B:72:LYS:HA | 3 | 1.12 |
| (1,1022) | 1:B:40:PHE:H | 1:B:45:MET:HB2 | 6 | 1.12 |
| (1,1022) | 1:B:40:PHE:H | 1:B:45:MET:HB2 | 7 | 1.12 |
| (2,418) | 1:B:65:LEU:HB2 | 1:B:81:TRP:HB2 | 7 | 1.11 |
| (2,418) | 1:B:69:MET:HG3 | 1:B:81:TRP:HB2 | 7 | 1.11 |
| (1,721) | 1:B:90:GLY:HA3 | 1:B:93:PHE:HD2 | 8 | 1.11 |
| (1,721) | 1:B:90:GLY:HA3 | 1:B:93:PHE:HD1 | 8 | 1.11 |
| (1,667) | 1:B:55:PRO:HD3 | 1:B:53:LEU:HA | 2 | 1.11 |
| (1,306) | 1:B:31:ILE:HG13 | 1:B:37:LYS:HD3 | 8 | 1.11 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,294) | 1:B:48:GLU:HB3 | 1:B:46:THR:HB | 9 | 1.11 |
| (1,975) | 1:B:62:GLN:H | 1:B:63:ASP:HB3 | 4 | 1.1 |
| (1,119) | 1:B:47:TYR:HB3 | 1:B:31:ILE:HD12 | 9 | 1.1 |
| (1,119) | 1:B:47:TYR:HB3 | 1:B:31:ILE:HD11 | 9 | 1.1 |
| (1,119) | 1:B:47:TYR:HB3 | 1:B:31:ILE:HD13 | 9 | 1.1 |
| (2,967) | 1:B:56:GLU:HG2 | 1:B:96:LYS:HE3 | 7 | 1.09 |
| (2,967) | 1:B:56:GLU:HG2 | 1:B:96:LYS:HE2 | 7 | 1.09 |
| (2,967) | 1:B:64:GLU:HG3 | 1:B:63:ASP:HB3 | 7 | 1.09 |
| (2,467) | 1:B:39:ARG:HG2 | 1:B:43:ILE:HG12 | 2 | 1.09 |
| (2,467) | 1:B:39:ARG:HG2 | 1:B:98:LEU:HB2 | 2 | 1.09 |
| (1,969) | 1:B:14:TRP:HZ3 | 1:B:62:GLN:HG3 | 6 | 1.09 |
| (1,665) | 1:B:23:PRO:HG2 | 1:B:55:PRO:HD2 | 10 | 1.09 |
| (1,327) | 1:B:81:TRP:HB3 | 1:B:78:ALA:HA | 7 | 1.09 |
| (1,306) | 1:B:31:ILE:HG13 | 1:B:37:LYS:HD3 | 7 | 1.09 |
| (1,263) | 1:B:11:LYS:HB2 | 1:B:72:LYS:HA | 6 | 1.09 |
| (1,797) | 1:B:81:TRP:HB2 | 1:B:85:LEU:HD23 | 5 | 1.08 |
| (1,797) | 1:B:81:TRP:HB2 | 1:B:85:LEU:HD21 | 5 | 1.08 |
| (1,797) | 1:B:81:TRP:HB2 | 1:B:85:LEU:HD22 | 5 | 1.08 |
| (1,318) | 1:B:30:PHE:HB3 | 1:B:31:ILE:HG12 | 7 | 1.08 |
| (1,318) | 1:B:30:PHE:HB3 | 1:B:31:ILE:HG12 | 8 | 1.08 |
| (1,201) | 1:B:97:HIS:HB2 | 1:B:53:LEU:HD11 | 4 | 1.08 |
| (1,201) | 1:B:97:HIS:HB2 | 1:B:53:LEU:HD12 | 4 | 1.08 |
| (1,201) | 1:B:97:HIS:HB2 | 1:B:53:LEU:HD13 | 4 | 1.08 |
| (1,922) | 1:B:85:LEU:H | 1:B:88:CYS:HB3 | 1 | 1.07 |
| (1,252) | 1:B:45:MET:HB2 | 1:B:40:PHE:HA | 10 | 1.07 |
| (1,102) | 1:B:5:ASN:HB2 | 1:B:6:PRO:HD2 | 7 | 1.07 |
| (1,797) | 1:B:81:TRP:HB2 | 1:B:85:LEU:HD23 | 1 | 1.06 |
| (1,797) | 1:B:81:TRP:HB2 | 1:B:85:LEU:HD21 | 1 | 1.06 |
| (1,797) | 1:B:81:TRP:HB2 | 1:B:85:LEU:HD22 | 1 | 1.06 |
| (1,756) | 1:B:20:PRO:HD3 | 1:B:21:LEU:HB2 | 4 | 1.06 |
| (1,756) | 1:B:20:PRO:HD3 | 1:B:21:LEU:HB2 | 7 | 1.06 |
| (1,667) | 1:B:55:PRO:HD3 | 1:B:53:LEU:HA | 1 | 1.06 |
| (2,467) | 1:B:39:ARG:HG2 | 1:B:43:ILE:HG12 | 10 | 1.05 |
| (2,467) | 1:B:39:ARG:HG2 | 1:B:98:LEU:HB2 | 10 | 1.05 |
| (2,1018) | 1:B:21:LEU:H | 1:B:18:MET:HG3 | 8 | 1.05 |
| (2,1018) | 1:B:22:LEU:H | 1:B:18:MET:HG3 | 8 | 1.05 |
| (1,667) | 1:B:55:PRO:HD3 | 1:B:53:LEU:HA | 6 | 1.05 |
| (1,489) | 1:B:64:GLU:HB3 | 1:B:61:CYS:HA | 2 | 1.05 |
| (1,253) | 1:B:23:PRO:HB3 | 1:B:55:PRO:HD2 | 3 | 1.05 |
| (2,882) | 1:B:93:PHE:HB3 | 1:B:90:GLY:HA3 | 3 | 1.04 |
| (2,882) | 1:B:93:PHE:HB2 | 1:B:90:GLY:HA3 | 3 | 1.04 |
| (2,882) | 1:B:93:PHE:HB3 | 1:B:90:GLY:HA3 | 8 | 1.04 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|----------------|-----------------|----------|---------------|
| (2,882) | 1:B:93:PHE:HB2 | 1:B:90:GLY:HA3 | 8 | 1.04 |
| (1,756) | 1:B:20:PRO:HD3 | 1:B:21:LEU:HB2 | 9 | 1.04 |
| (1,667) | 1:B:55:PRO:HD3 | 1:B:53:LEU:HA | 9 | 1.04 |
| (1,665) | 1:B:23:PRO:HG2 | 1:B:55:PRO:HD2 | 6 | 1.04 |
| (1,447) | 1:B:60:LYS:HG3 | 1:B:61:CYS:HA | 9 | 1.04 |
| (1,439) | 1:B:64:GLU:HB3 | 1:B:65:LEU:HD11 | 8 | 1.04 |
| (1,439) | 1:B:64:GLU:HB3 | 1:B:65:LEU:HD12 | 8 | 1.04 |
| (1,439) | 1:B:64:GLU:HB3 | 1:B:65:LEU:HD13 | 8 | 1.04 |
| (1,327) | 1:B:81:TRP:HB3 | 1:B:78:ALA:HA | 1 | 1.04 |
| (1,263) | 1:B:11:LYS:HB2 | 1:B:72:LYS:HA | 9 | 1.04 |
| (1,253) | 1:B:23:PRO:HB3 | 1:B:55:PRO:HD2 | 5 | 1.04 |
| (2,467) | 1:B:39:ARG:HG2 | 1:B:43:ILE:HG12 | 1 | 1.03 |
| (2,467) | 1:B:39:ARG:HG2 | 1:B:98:LEU:HB2 | 1 | 1.03 |
| (2,467) | 1:B:39:ARG:HG2 | 1:B:43:ILE:HG12 | 5 | 1.03 |
| (2,467) | 1:B:39:ARG:HG2 | 1:B:98:LEU:HB2 | 5 | 1.03 |
| (1,756) | 1:B:20:PRO:HD3 | 1:B:21:LEU:HB2 | 8 | 1.03 |
| (1,667) | 1:B:55:PRO:HD3 | 1:B:53:LEU:HA | 4 | 1.03 |
| (1,628) | 1:B:98:LEU:HB3 | 1:B:94:ALA:HA | 8 | 1.03 |
| (1,1022) | 1:B:40:PHE:H | 1:B:45:MET:HB2 | 10 | 1.03 |
| (1,439) | 1:B:64:GLU:HB3 | 1:B:65:LEU:HD11 | 10 | 1.02 |
| (1,439) | 1:B:64:GLU:HB3 | 1:B:65:LEU:HD12 | 10 | 1.02 |
| (1,439) | 1:B:64:GLU:HB3 | 1:B:65:LEU:HD13 | 10 | 1.02 |
| (1,294) | 1:B:48:GLU:HB3 | 1:B:46:THR:HB | 8 | 1.02 |
| (2,974) | 1:B:53:LEU:HB2 | 1:B:56:GLU:HG3 | 8 | 1.01 |
| (2,974) | 1:B:55:PRO:HB2 | 1:B:56:GLU:HG3 | 8 | 1.01 |
| (2,974) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HB | 8 | 1.01 |
| (2,974) | 1:B:53:LEU:HB2 | 1:B:56:GLU:HG3 | 9 | 1.01 |
| (2,974) | 1:B:55:PRO:HB2 | 1:B:56:GLU:HG3 | 9 | 1.01 |
| (2,974) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HB | 9 | 1.01 |
| (2,155) | 1:B:87:GLU:HG3 | 1:B:65:LEU:HD11 | 1 | 1.01 |
| (2,155) | 1:B:87:GLU:HG3 | 1:B:65:LEU:HD12 | 1 | 1.01 |
| (2,155) | 1:B:87:GLU:HG3 | 1:B:65:LEU:HD13 | 1 | 1.01 |
| (2,155) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HG12 | 1 | 1.01 |
| (1,756) | 1:B:20:PRO:HD3 | 1:B:21:LEU:HB2 | 2 | 1.01 |
| (1,756) | 1:B:20:PRO:HD3 | 1:B:21:LEU:HB2 | 5 | 1.01 |
| (1,756) | 1:B:20:PRO:HD3 | 1:B:21:LEU:HB2 | 6 | 1.01 |
| (1,665) | 1:B:23:PRO:HG2 | 1:B:55:PRO:HD2 | 7 | 1.01 |
| (1,1229) | 1:B:96:LYS:H | 1:B:98:LEU:HB3 | 5 | 1.01 |
| (1,119) | 1:B:47:TYR:HB3 | 1:B:31:ILE:HD12 | 4 | 1.01 |
| (1,119) | 1:B:47:TYR:HB3 | 1:B:31:ILE:HD11 | 4 | 1.01 |
| (1,119) | 1:B:47:TYR:HB3 | 1:B:31:ILE:HD13 | 4 | 1.01 |
| (2,467) | 1:B:39:ARG:HG2 | 1:B:43:ILE:HG12 | 3 | 1.0 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|-----------------|-----------------|----------|---------------|
| (2,467) | 1:B:39:ARG:HG2 | 1:B:98:LEU:HB2 | 3 | 1.0 |
| (1,975) | 1:B:62:GLN:H | 1:B:63:ASP:HB3 | 5 | 1.0 |
| (1,969) | 1:B:14:TRP:HZ3 | 1:B:62:GLN:HG3 | 8 | 1.0 |
| (1,756) | 1:B:20:PRO:HD3 | 1:B:21:LEU:HB2 | 1 | 1.0 |
| (1,439) | 1:B:64:GLU:HB3 | 1:B:65:LEU:HD11 | 9 | 1.0 |
| (1,439) | 1:B:64:GLU:HB3 | 1:B:65:LEU:HD12 | 9 | 1.0 |
| (1,439) | 1:B:64:GLU:HB3 | 1:B:65:LEU:HD13 | 9 | 1.0 |
| (1,489) | 1:B:64:GLU:HB3 | 1:B:61:CYS:HA | 6 | 0.99 |
| (1,489) | 1:B:64:GLU:HB3 | 1:B:61:CYS:HA | 10 | 0.99 |
| (2,882) | 1:B:93:PHE:HB3 | 1:B:90:GLY:HA3 | 1 | 0.98 |
| (2,882) | 1:B:93:PHE:HB2 | 1:B:90:GLY:HA3 | 1 | 0.98 |
| (1,92) | 1:B:30:PHE:HB2 | 1:B:40:PHE:HB3 | 10 | 0.98 |
| (1,489) | 1:B:64:GLU:HB3 | 1:B:61:CYS:HA | 1 | 0.98 |
| (1,489) | 1:B:64:GLU:HB3 | 1:B:61:CYS:HA | 5 | 0.98 |
| (1,439) | 1:B:64:GLU:HB3 | 1:B:65:LEU:HD11 | 1 | 0.98 |
| (1,439) | 1:B:64:GLU:HB3 | 1:B:65:LEU:HD12 | 1 | 0.98 |
| (1,439) | 1:B:64:GLU:HB3 | 1:B:65:LEU:HD13 | 1 | 0.98 |
| (1,102) | 1:B:5:ASN:HB2 | 1:B:6:PRO:HD2 | 3 | 0.98 |
| (2,467) | 1:B:39:ARG:HG2 | 1:B:43:ILE:HG12 | 8 | 0.97 |
| (2,467) | 1:B:39:ARG:HG2 | 1:B:98:LEU:HB2 | 8 | 0.97 |
| (1,58) | 1:B:36:LEU:HB2 | 1:B:30:PHE:HB2 | 1 | 0.97 |
| (1,58) | 1:B:36:LEU:HB2 | 1:B:30:PHE:HB2 | 4 | 0.97 |
| (1,294) | 1:B:48:GLU:HB3 | 1:B:46:THR:HB | 2 | 0.97 |
| (2,564) | 1:B:36:LEU:HD21 | 1:B:30:PHE:HA | 4 | 0.96 |
| (2,564) | 1:B:36:LEU:HD23 | 1:B:30:PHE:HA | 4 | 0.96 |
| (2,564) | 1:B:36:LEU:HD22 | 1:B:30:PHE:HA | 4 | 0.96 |
| (2,564) | 1:B:85:LEU:HD11 | 1:B:82:GLY:HA3 | 4 | 0.96 |
| (2,564) | 1:B:85:LEU:HD12 | 1:B:82:GLY:HA3 | 4 | 0.96 |
| (2,564) | 1:B:85:LEU:HD13 | 1:B:82:GLY:HA3 | 4 | 0.96 |
| (2,467) | 1:B:39:ARG:HG2 | 1:B:43:ILE:HG12 | 4 | 0.96 |
| (2,467) | 1:B:39:ARG:HG2 | 1:B:98:LEU:HB2 | 4 | 0.96 |
| (1,754) | 1:B:37:LYS:H | 1:B:33:ASP:HB2 | 8 | 0.96 |
| (1,667) | 1:B:55:PRO:HD3 | 1:B:53:LEU:HA | 3 | 0.96 |
| (1,447) | 1:B:60:LYS:HG3 | 1:B:61:CYS:HA | 4 | 0.96 |
| (1,197) | 1:B:61:CYS:H | 1:B:60:LYS:HB2 | 5 | 0.96 |
| (2,974) | 1:B:53:LEU:HB2 | 1:B:56:GLU:HG3 | 6 | 0.95 |
| (2,974) | 1:B:55:PRO:HB2 | 1:B:56:GLU:HG3 | 6 | 0.95 |
| (2,974) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HB | 6 | 0.95 |
| (2,130) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HG3 | 4 | 0.95 |
| (2,130) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HG2 | 4 | 0.95 |
| (2,130) | 1:B:88:CYS:HB2 | 1:B:91:LYS:HG3 | 4 | 0.95 |
| (1,754) | 1:B:37:LYS:H | 1:B:33:ASP:HB2 | 9 | 0.95 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,628) | 1:B:98:LEU:HB3 | 1:B:94:ALA:HA | 5 | 0.95 |
| (1,58) | 1:B:36:LEU:HB2 | 1:B:30:PHE:HB2 | 6 | 0.95 |
| (2,998) | 1:B:74:ASN:HB3 | 1:B:8:GLU:HB2 | 9 | 0.94 |
| (2,998) | 1:B:74:ASN:HB3 | 1:B:8:GLU:HB3 | 9 | 0.94 |
| (2,974) | 1:B:53:LEU:HB2 | 1:B:56:GLU:HG3 | 5 | 0.94 |
| (2,974) | 1:B:55:PRO:HB2 | 1:B:56:GLU:HG3 | 5 | 0.94 |
| (2,974) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HB | 5 | 0.94 |
| (2,1138) | 1:B:38:LYS:HG2 | 1:B:36:LEU:HA | 7 | 0.94 |
| (2,1138) | 1:B:36:LEU:HA | 1:B:98:LEU:HB2 | 7 | 0.94 |
| (1,628) | 1:B:98:LEU:HB3 | 1:B:94:ALA:HA | 6 | 0.94 |
| (1,1349) | 1:B:15:LEU:H | 1:B:11:LYS:HB3 | 7 | 0.94 |
| (1,102) | 1:B:5:ASN:HB2 | 1:B:6:PRO:HD2 | 8 | 0.94 |
| (2,1004) | 1:B:20:PRO:HB2 | 1:B:19:THR:HG22 | 8 | 0.93 |
| (2,1004) | 1:B:20:PRO:HB2 | 1:B:19:THR:HG21 | 8 | 0.93 |
| (2,1004) | 1:B:20:PRO:HB2 | 1:B:19:THR:HG23 | 8 | 0.93 |
| (2,1004) | 1:B:58:THR:HG22 | 1:B:20:PRO:HB2 | 8 | 0.93 |
| (2,1004) | 1:B:58:THR:HG23 | 1:B:20:PRO:HB2 | 8 | 0.93 |
| (2,1004) | 1:B:58:THR:HG21 | 1:B:20:PRO:HB2 | 8 | 0.93 |
| (1,754) | 1:B:37:LYS:H | 1:B:33:ASP:HB2 | 10 | 0.93 |
| (1,667) | 1:B:55:PRO:HD3 | 1:B:53:LEU:HA | 5 | 0.93 |
| (1,667) | 1:B:55:PRO:HD3 | 1:B:53:LEU:HA | 8 | 0.93 |
| (1,463) | 1:B:96:LYS:HB3 | 1:B:93:PHE:HA | 1 | 0.93 |
| (1,294) | 1:B:48:GLU:HB3 | 1:B:46:THR:HB | 1 | 0.93 |
| (1,1295) | 1:B:97:HIS:H | 1:B:98:LEU:HB3 | 6 | 0.93 |
| (1,797) | 1:B:81:TRP:HB2 | 1:B:85:LEU:HD23 | 8 | 0.92 |
| (1,797) | 1:B:81:TRP:HB2 | 1:B:85:LEU:HD21 | 8 | 0.92 |
| (1,797) | 1:B:81:TRP:HB2 | 1:B:85:LEU:HD22 | 8 | 0.92 |
| (1,489) | 1:B:64:GLU:HB3 | 1:B:61:CYS:HA | 9 | 0.92 |
| (1,439) | 1:B:64:GLU:HB3 | 1:B:65:LEU:HD11 | 6 | 0.92 |
| (1,439) | 1:B:64:GLU:HB3 | 1:B:65:LEU:HD12 | 6 | 0.92 |
| (1,439) | 1:B:64:GLU:HB3 | 1:B:65:LEU:HD13 | 6 | 0.92 |
| (1,318) | 1:B:30:PHE:HB3 | 1:B:31:ILE:HG12 | 10 | 0.92 |
| (2,1004) | 1:B:20:PRO:HB2 | 1:B:19:THR:HG22 | 4 | 0.91 |
| (2,1004) | 1:B:20:PRO:HB2 | 1:B:19:THR:HG21 | 4 | 0.91 |
| (2,1004) | 1:B:20:PRO:HB2 | 1:B:19:THR:HG23 | 4 | 0.91 |
| (2,1004) | 1:B:58:THR:HG22 | 1:B:20:PRO:HB2 | 4 | 0.91 |
| (2,1004) | 1:B:58:THR:HG23 | 1:B:20:PRO:HB2 | 4 | 0.91 |
| (2,1004) | 1:B:58:THR:HG21 | 1:B:20:PRO:HB2 | 4 | 0.91 |
| (2,1004) | 1:B:20:PRO:HB2 | 1:B:19:THR:HG22 | 10 | 0.91 |
| (2,1004) | 1:B:20:PRO:HB2 | 1:B:19:THR:HG21 | 10 | 0.91 |
| (2,1004) | 1:B:20:PRO:HB2 | 1:B:19:THR:HG23 | 10 | 0.91 |
| (2,1004) | 1:B:58:THR:HG22 | 1:B:20:PRO:HB2 | 10 | 0.91 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,1004) | 1:B:58:THR:HG23 | 1:B:20:PRO:HB2 | 10 | 0.91 |
| (2,1004) | 1:B:58:THR:HG21 | 1:B:20:PRO:HB2 | 10 | 0.91 |
| (1,797) | 1:B:81:TRP:HB2 | 1:B:85:LEU:HD23 | 4 | 0.91 |
| (1,797) | 1:B:81:TRP:HB2 | 1:B:85:LEU:HD21 | 4 | 0.91 |
| (1,797) | 1:B:81:TRP:HB2 | 1:B:85:LEU:HD22 | 4 | 0.91 |
| (1,797) | 1:B:81:TRP:HB2 | 1:B:85:LEU:HD23 | 10 | 0.91 |
| (1,797) | 1:B:81:TRP:HB2 | 1:B:85:LEU:HD21 | 10 | 0.91 |
| (1,797) | 1:B:81:TRP:HB2 | 1:B:85:LEU:HD22 | 10 | 0.91 |
| (1,427) | 1:B:33:ASP:HB3 | 1:B:36:LEU:HD21 | 2 | 0.91 |
| (1,427) | 1:B:33:ASP:HB3 | 1:B:36:LEU:HD23 | 2 | 0.91 |
| (1,427) | 1:B:33:ASP:HB3 | 1:B:36:LEU:HD22 | 2 | 0.91 |
| (1,253) | 1:B:23:PRO:HB3 | 1:B:55:PRO:HD2 | 4 | 0.91 |
| (1,102) | 1:B:5:ASN:HB2 | 1:B:6:PRO:HD2 | 6 | 0.91 |
| (2,1143) | 1:B:4:ALA:HB1 | 1:B:5:ASN:HB3 | 1 | 0.9 |
| (2,1143) | 1:B:4:ALA:HB2 | 1:B:5:ASN:HB3 | 1 | 0.9 |
| (2,1143) | 1:B:4:ALA:HB3 | 1:B:5:ASN:HB3 | 1 | 0.9 |
| (2,1143) | 1:B:78:ALA:HB1 | 1:B:74:ASN:HB2 | 1 | 0.9 |
| (2,1143) | 1:B:78:ALA:HB2 | 1:B:74:ASN:HB2 | 1 | 0.9 |
| (2,1143) | 1:B:78:ALA:HB3 | 1:B:74:ASN:HB2 | 1 | 0.9 |
| (2,1143) | 1:B:78:ALA:HB1 | 1:B:81:TRP:HB3 | 1 | 0.9 |
| (2,1143) | 1:B:78:ALA:HB2 | 1:B:81:TRP:HB3 | 1 | 0.9 |
| (2,1143) | 1:B:78:ALA:HB3 | 1:B:81:TRP:HB3 | 1 | 0.9 |
| (2,1084) | 1:B:53:LEU:HD11 | 1:B:96:LYS:HD3 | 4 | 0.9 |
| (2,1084) | 1:B:53:LEU:HD12 | 1:B:96:LYS:HD3 | 4 | 0.9 |
| (2,1084) | 1:B:53:LEU:HD13 | 1:B:96:LYS:HD3 | 4 | 0.9 |
| (2,1084) | 1:B:96:LYS:HD2 | 1:B:53:LEU:HD11 | 4 | 0.9 |
| (2,1084) | 1:B:96:LYS:HD2 | 1:B:53:LEU:HD12 | 4 | 0.9 |
| (2,1084) | 1:B:96:LYS:HD2 | 1:B:53:LEU:HD13 | 4 | 0.9 |
| (2,1004) | 1:B:20:PRO:HB2 | 1:B:19:THR:HG22 | 2 | 0.9 |
| (2,1004) | 1:B:20:PRO:HB2 | 1:B:19:THR:HG21 | 2 | 0.9 |
| (2,1004) | 1:B:20:PRO:HB2 | 1:B:19:THR:HG23 | 2 | 0.9 |
| (2,1004) | 1:B:58:THR:HG22 | 1:B:20:PRO:HB2 | 2 | 0.9 |
| (2,1004) | 1:B:58:THR:HG23 | 1:B:20:PRO:HB2 | 2 | 0.9 |
| (2,1004) | 1:B:58:THR:HG21 | 1:B:20:PRO:HB2 | 2 | 0.9 |
| (2,1004) | 1:B:20:PRO:HB2 | 1:B:19:THR:HG22 | 7 | 0.9 |
| (2,1004) | 1:B:20:PRO:HB2 | 1:B:19:THR:HG21 | 7 | 0.9 |
| (2,1004) | 1:B:20:PRO:HB2 | 1:B:19:THR:HG23 | 7 | 0.9 |
| (2,1004) | 1:B:58:THR:HG22 | 1:B:20:PRO:HB2 | 7 | 0.9 |
| (2,1004) | 1:B:58:THR:HG23 | 1:B:20:PRO:HB2 | 7 | 0.9 |
| (2,1004) | 1:B:58:THR:HG21 | 1:B:20:PRO:HB2 | 7 | 0.9 |
| (1,754) | 1:B:37:LYS:H | 1:B:33:ASP:HB2 | 2 | 0.9 |
| (1,718) | 1:B:90:GLY:HA3 | 1:B:94:ALA:H | 1 | 0.9 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,489) | 1:B:64:GLU:HB3 | 1:B:61:CYS:HA | 8 | 0.9 |
| (1,439) | 1:B:64:GLU:HB3 | 1:B:65:LEU:HD11 | 2 | 0.9 |
| (1,439) | 1:B:64:GLU:HB3 | 1:B:65:LEU:HD12 | 2 | 0.9 |
| (1,439) | 1:B:64:GLU:HB3 | 1:B:65:LEU:HD13 | 2 | 0.9 |
| (2,130) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HG3 | 1 | 0.89 |
| (2,130) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HG2 | 1 | 0.89 |
| (2,130) | 1:B:88:CYS:HB2 | 1:B:91:LYS:HG3 | 1 | 0.89 |
| (2,1004) | 1:B:20:PRO:HB2 | 1:B:19:THR:HG22 | 5 | 0.89 |
| (2,1004) | 1:B:20:PRO:HB2 | 1:B:19:THR:HG21 | 5 | 0.89 |
| (2,1004) | 1:B:20:PRO:HB2 | 1:B:19:THR:HG23 | 5 | 0.89 |
| (2,1004) | 1:B:58:THR:HG22 | 1:B:20:PRO:HB2 | 5 | 0.89 |
| (2,1004) | 1:B:58:THR:HG23 | 1:B:20:PRO:HB2 | 5 | 0.89 |
| (2,1004) | 1:B:58:THR:HG21 | 1:B:20:PRO:HB2 | 5 | 0.89 |
| (1,754) | 1:B:37:LYS:H | 1:B:33:ASP:HB2 | 3 | 0.89 |
| (1,427) | 1:B:33:ASP:HB3 | 1:B:36:LEU:HD21 | 10 | 0.89 |
| (1,427) | 1:B:33:ASP:HB3 | 1:B:36:LEU:HD23 | 10 | 0.89 |
| (1,427) | 1:B:33:ASP:HB3 | 1:B:36:LEU:HD22 | 10 | 0.89 |
| (1,318) | 1:B:30:PHE:HB3 | 1:B:31:ILE:HG12 | 3 | 0.89 |
| (1,294) | 1:B:48:GLU:HB3 | 1:B:46:THR:HB | 7 | 0.89 |
| (1,1229) | 1:B:96:LYS:H | 1:B:98:LEU:HB3 | 3 | 0.89 |
| (1,1088) | 1:B:49:GLN:H | 1:B:48:GLU:HB3 | 7 | 0.89 |
| (2,714) | 1:B:50:CYS:HB2 | 1:B:51:VAL:HG13 | 3 | 0.88 |
| (2,714) | 1:B:50:CYS:HB2 | 1:B:51:VAL:HG11 | 3 | 0.88 |
| (2,714) | 1:B:50:CYS:HB2 | 1:B:51:VAL:HG12 | 3 | 0.88 |
| (2,714) | 1:B:50:CYS:HB2 | 1:B:51:VAL:HG21 | 3 | 0.88 |
| (2,714) | 1:B:50:CYS:HB2 | 1:B:51:VAL:HG23 | 3 | 0.88 |
| (2,714) | 1:B:50:CYS:HB2 | 1:B:51:VAL:HG22 | 3 | 0.88 |
| (1,87) | 1:B:63:ASP:H | 1:B:63:ASP:HB3 | 5 | 0.88 |
| (1,797) | 1:B:81:TRP:HB2 | 1:B:85:LEU:HD23 | 9 | 0.88 |
| (1,797) | 1:B:81:TRP:HB2 | 1:B:85:LEU:HD21 | 9 | 0.88 |
| (1,797) | 1:B:81:TRP:HB2 | 1:B:85:LEU:HD22 | 9 | 0.88 |
| (1,628) | 1:B:98:LEU:HB3 | 1:B:94:ALA:HA | 9 | 0.88 |
| (1,439) | 1:B:64:GLU:HB3 | 1:B:65:LEU:HD11 | 4 | 0.88 |
| (1,439) | 1:B:64:GLU:HB3 | 1:B:65:LEU:HD12 | 4 | 0.88 |
| (1,439) | 1:B:64:GLU:HB3 | 1:B:65:LEU:HD13 | 4 | 0.88 |
| (1,439) | 1:B:64:GLU:HB3 | 1:B:65:LEU:HD11 | 5 | 0.88 |
| (1,439) | 1:B:64:GLU:HB3 | 1:B:65:LEU:HD12 | 5 | 0.88 |
| (1,439) | 1:B:64:GLU:HB3 | 1:B:65:LEU:HD13 | 5 | 0.88 |
| (1,1295) | 1:B:97:HIS:H | 1:B:98:LEU:HB3 | 9 | 0.88 |
| (1,119) | 1:B:47:TYR:HB3 | 1:B:31:ILE:HD12 | 7 | 0.88 |
| (1,119) | 1:B:47:TYR:HB3 | 1:B:31:ILE:HD11 | 7 | 0.88 |
| (1,119) | 1:B:47:TYR:HB3 | 1:B:31:ILE:HD13 | 7 | 0.88 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,714) | 1:B:50:CYS:HB2 | 1:B:51:VAL:HG13 | 5 | 0.87 |
| (2,714) | 1:B:50:CYS:HB2 | 1:B:51:VAL:HG11 | 5 | 0.87 |
| (2,714) | 1:B:50:CYS:HB2 | 1:B:51:VAL:HG12 | 5 | 0.87 |
| (2,714) | 1:B:50:CYS:HB2 | 1:B:51:VAL:HG21 | 5 | 0.87 |
| (2,714) | 1:B:50:CYS:HB2 | 1:B:51:VAL:HG23 | 5 | 0.87 |
| (2,714) | 1:B:50:CYS:HB2 | 1:B:51:VAL:HG22 | 5 | 0.87 |
| (2,1004) | 1:B:20:PRO:HB2 | 1:B:19:THR:HG22 | 3 | 0.87 |
| (2,1004) | 1:B:20:PRO:HB2 | 1:B:19:THR:HG21 | 3 | 0.87 |
| (2,1004) | 1:B:20:PRO:HB2 | 1:B:19:THR:HG23 | 3 | 0.87 |
| (2,1004) | 1:B:58:THR:HG22 | 1:B:20:PRO:HB2 | 3 | 0.87 |
| (2,1004) | 1:B:58:THR:HG23 | 1:B:20:PRO:HB2 | 3 | 0.87 |
| (2,1004) | 1:B:58:THR:HG21 | 1:B:20:PRO:HB2 | 3 | 0.87 |
| (1,718) | 1:B:90:GLY:HA3 | 1:B:94:ALA:H | 4 | 0.87 |
| (1,628) | 1:B:98:LEU:HB3 | 1:B:94:ALA:HA | 10 | 0.87 |
| (1,569) | 1:B:89:ILE:HG23 | 1:B:90:GLY:HA3 | 6 | 0.87 |
| (1,569) | 1:B:89:ILE:HG21 | 1:B:90:GLY:HA3 | 6 | 0.87 |
| (1,569) | 1:B:89:ILE:HG22 | 1:B:90:GLY:HA3 | 6 | 0.87 |
| (1,253) | 1:B:23:PRO:HB3 | 1:B:55:PRO:HD2 | 6 | 0.87 |
| (1,197) | 1:B:61:CYS:H | 1:B:60:LYS:HB2 | 2 | 0.87 |
| (1,197) | 1:B:61:CYS:H | 1:B:60:LYS:HB2 | 6 | 0.87 |
| (1,1295) | 1:B:97:HIS:H | 1:B:98:LEU:HB3 | 8 | 0.87 |
| (1,114) | 1:B:50:CYS:HB2 | 1:B:51:VAL:HG13 | 3 | 0.87 |
| (1,114) | 1:B:50:CYS:HB2 | 1:B:51:VAL:HG11 | 3 | 0.87 |
| (1,114) | 1:B:50:CYS:HB2 | 1:B:51:VAL:HG12 | 3 | 0.87 |
| (1,114) | 1:B:50:CYS:HB2 | 1:B:51:VAL:HG13 | 5 | 0.87 |
| (1,114) | 1:B:50:CYS:HB2 | 1:B:51:VAL:HG11 | 5 | 0.87 |
| (1,114) | 1:B:50:CYS:HB2 | 1:B:51:VAL:HG12 | 5 | 0.87 |
| (1,102) | 1:B:5:ASN:HB2 | 1:B:6:PRO:HD2 | 1 | 0.87 |
| (1,58) | 1:B:36:LEU:HB2 | 1:B:30:PHE:HB2 | 5 | 0.86 |
| (1,569) | 1:B:89:ILE:HG23 | 1:B:90:GLY:HA3 | 4 | 0.86 |
| (1,569) | 1:B:89:ILE:HG21 | 1:B:90:GLY:HA3 | 4 | 0.86 |
| (1,569) | 1:B:89:ILE:HG22 | 1:B:90:GLY:HA3 | 4 | 0.86 |
| (1,427) | 1:B:33:ASP:HB3 | 1:B:36:LEU:HD21 | 9 | 0.86 |
| (1,427) | 1:B:33:ASP:HB3 | 1:B:36:LEU:HD23 | 9 | 0.86 |
| (1,427) | 1:B:33:ASP:HB3 | 1:B:36:LEU:HD22 | 9 | 0.86 |
| (1,306) | 1:B:31:ILE:HG13 | 1:B:37:LYS:HD3 | 5 | 0.86 |
| (1,214) | 1:B:34:PRO:HB3 | 1:B:34:PRO:HD2 | 3 | 0.86 |
| (1,1295) | 1:B:97:HIS:H | 1:B:98:LEU:HB3 | 5 | 0.86 |
| (2,130) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HG3 | 2 | 0.85 |
| (2,130) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HG2 | 2 | 0.85 |
| (2,130) | 1:B:88:CYS:HB2 | 1:B:91:LYS:HG3 | 2 | 0.85 |
| (2,1030) | 1:B:44:LYS:HD3 | 1:B:41:ASP:HB2 | 10 | 0.85 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,1030) | 1:B:44:LYS:HD2 | 1:B:41:ASP:HB2 | 10 | 0.85 |
| (2,1030) | 1:B:54:ILE:HG12 | 1:B:27:CYS:HB3 | 10 | 0.85 |
| (1,797) | 1:B:81:TRP:HB2 | 1:B:85:LEU:HD23 | 3 | 0.85 |
| (1,797) | 1:B:81:TRP:HB2 | 1:B:85:LEU:HD21 | 3 | 0.85 |
| (1,797) | 1:B:81:TRP:HB2 | 1:B:85:LEU:HD22 | 3 | 0.85 |
| (1,754) | 1:B:37:LYS:H | 1:B:33:ASP:HB2 | 7 | 0.85 |
| (1,58) | 1:B:36:LEU:HB2 | 1:B:30:PHE:HB2 | 7 | 0.85 |
| (1,569) | 1:B:89:ILE:HG23 | 1:B:90:GLY:HA3 | 8 | 0.85 |
| (1,569) | 1:B:89:ILE:HG21 | 1:B:90:GLY:HA3 | 8 | 0.85 |
| (1,569) | 1:B:89:ILE:HG22 | 1:B:90:GLY:HA3 | 8 | 0.85 |
| (1,197) | 1:B:61:CYS:H | 1:B:60:LYS:HB2 | 1 | 0.85 |
| (1,197) | 1:B:61:CYS:H | 1:B:60:LYS:HB2 | 7 | 0.85 |
| (1,1295) | 1:B:97:HIS:H | 1:B:98:LEU:HB3 | 4 | 0.85 |
| (1,1062) | 1:B:11:LYS:H | 1:B:72:LYS:HG3 | 4 | 0.85 |
| (2,998) | 1:B:74:ASN:HB3 | 1:B:8:GLU:HB2 | 8 | 0.84 |
| (2,998) | 1:B:74:ASN:HB3 | 1:B:8:GLU:HB3 | 8 | 0.84 |
| (2,256) | 1:B:19:THR:HB | 1:B:20:PRO:HB2 | 3 | 0.84 |
| (2,256) | 1:B:19:THR:HB | 1:B:23:PRO:HG3 | 3 | 0.84 |
| (2,256) | 1:B:52:THR:HB | 1:B:49:GLN:HG3 | 3 | 0.84 |
| (2,130) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HG3 | 6 | 0.84 |
| (2,130) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HG2 | 6 | 0.84 |
| (2,130) | 1:B:88:CYS:HB2 | 1:B:91:LYS:HG3 | 6 | 0.84 |
| (1,214) | 1:B:34:PRO:HB3 | 1:B:34:PRO:HD2 | 7 | 0.84 |
| (1,1295) | 1:B:97:HIS:H | 1:B:98:LEU:HB3 | 1 | 0.84 |
| (1,1295) | 1:B:97:HIS:H | 1:B:98:LEU:HB3 | 3 | 0.84 |
| (1,1295) | 1:B:97:HIS:H | 1:B:98:LEU:HB3 | 7 | 0.84 |
| (1,1229) | 1:B:96:LYS:H | 1:B:98:LEU:HB3 | 10 | 0.84 |
| (2,256) | 1:B:19:THR:HB | 1:B:20:PRO:HB2 | 4 | 0.83 |
| (2,256) | 1:B:19:THR:HB | 1:B:23:PRO:HG3 | 4 | 0.83 |
| (2,256) | 1:B:52:THR:HB | 1:B:49:GLN:HG3 | 4 | 0.83 |
| (2,256) | 1:B:19:THR:HB | 1:B:20:PRO:HB2 | 5 | 0.83 |
| (2,256) | 1:B:19:THR:HB | 1:B:23:PRO:HG3 | 5 | 0.83 |
| (2,256) | 1:B:52:THR:HB | 1:B:49:GLN:HG3 | 5 | 0.83 |
| (2,130) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HG3 | 3 | 0.83 |
| (2,130) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HG2 | 3 | 0.83 |
| (2,130) | 1:B:88:CYS:HB2 | 1:B:91:LYS:HG3 | 3 | 0.83 |
| (2,130) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HG3 | 9 | 0.83 |
| (2,130) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HG2 | 9 | 0.83 |
| (2,130) | 1:B:88:CYS:HB2 | 1:B:91:LYS:HG3 | 9 | 0.83 |
| (1,628) | 1:B:98:LEU:HB3 | 1:B:94:ALA:HA | 3 | 0.83 |
| (1,457) | 1:B:85:LEU:HD23 | 1:B:62:GLN:HA | 6 | 0.83 |
| (1,457) | 1:B:85:LEU:HD21 | 1:B:62:GLN:HA | 6 | 0.83 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,457) | 1:B:85:LEU:HD22 | 1:B:62:GLN:HA | 6 | 0.83 |
| (1,321) | 1:B:81:TRP:HB2 | 1:B:81:TRP:HE3 | 9 | 0.83 |
| (1,318) | 1:B:30:PHE:HB3 | 1:B:31:ILE:HG12 | 9 | 0.83 |
| (1,253) | 1:B:23:PRO:HB3 | 1:B:55:PRO:HD2 | 2 | 0.83 |
| (1,253) | 1:B:23:PRO:HB3 | 1:B:55:PRO:HD2 | 10 | 0.83 |
| (1,214) | 1:B:34:PRO:HB3 | 1:B:34:PRO:HD2 | 4 | 0.83 |
| (1,214) | 1:B:34:PRO:HB3 | 1:B:34:PRO:HD2 | 8 | 0.83 |
| (1,214) | 1:B:34:PRO:HB3 | 1:B:34:PRO:HD2 | 9 | 0.83 |
| (1,197) | 1:B:61:CYS:H | 1:B:60:LYS:HB2 | 10 | 0.83 |
| (1,15) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HB2 | 2 | 0.83 |
| (2,974) | 1:B:53:LEU:HB2 | 1:B:56:GLU:HG3 | 2 | 0.82 |
| (2,974) | 1:B:55:PRO:HB2 | 1:B:56:GLU:HG3 | 2 | 0.82 |
| (2,974) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HB | 2 | 0.82 |
| (1,87) | 1:B:63:ASP:H | 1:B:63:ASP:HB3 | 4 | 0.82 |
| (1,569) | 1:B:89:ILE:HG23 | 1:B:90:GLY:HA3 | 1 | 0.82 |
| (1,569) | 1:B:89:ILE:HG21 | 1:B:90:GLY:HA3 | 1 | 0.82 |
| (1,569) | 1:B:89:ILE:HG22 | 1:B:90:GLY:HA3 | 1 | 0.82 |
| (1,321) | 1:B:81:TRP:HB2 | 1:B:81:TRP:HE3 | 3 | 0.82 |
| (1,321) | 1:B:81:TRP:HB2 | 1:B:81:TRP:HE3 | 4 | 0.82 |
| (1,272) | 1:B:64:GLU:H | 1:B:64:GLU:HB3 | 4 | 0.82 |
| (1,214) | 1:B:34:PRO:HB3 | 1:B:34:PRO:HD2 | 1 | 0.82 |
| (1,214) | 1:B:34:PRO:HB3 | 1:B:34:PRO:HD2 | 6 | 0.82 |
| (1,1295) | 1:B:97:HIS:H | 1:B:98:LEU:HB3 | 10 | 0.82 |
| (1,1229) | 1:B:96:LYS:H | 1:B:98:LEU:HB3 | 9 | 0.82 |
| (2,643) | 1:B:45:MET:HB2 | 1:B:40:PHE:HA | 10 | 0.81 |
| (2,643) | 1:B:96:LYS:HB3 | 1:B:93:PHE:HA | 10 | 0.81 |
| (2,552) | 1:B:64:GLU:HG2 | 1:B:60:LYS:HG3 | 3 | 0.81 |
| (2,552) | 1:B:64:GLU:HG3 | 1:B:60:LYS:HG3 | 3 | 0.81 |
| (2,256) | 1:B:19:THR:HB | 1:B:20:PRO:HB2 | 9 | 0.81 |
| (2,256) | 1:B:19:THR:HB | 1:B:23:PRO:HG3 | 9 | 0.81 |
| (2,256) | 1:B:52:THR:HB | 1:B:49:GLN:HG3 | 9 | 0.81 |
| (2,1004) | 1:B:20:PRO:HB2 | 1:B:19:THR:HG22 | 1 | 0.81 |
| (2,1004) | 1:B:20:PRO:HB2 | 1:B:19:THR:HG21 | 1 | 0.81 |
| (2,1004) | 1:B:20:PRO:HB2 | 1:B:19:THR:HG23 | 1 | 0.81 |
| (2,1004) | 1:B:58:THR:HG22 | 1:B:20:PRO:HB2 | 1 | 0.81 |
| (2,1004) | 1:B:58:THR:HG23 | 1:B:20:PRO:HB2 | 1 | 0.81 |
| (2,1004) | 1:B:58:THR:HG21 | 1:B:20:PRO:HB2 | 1 | 0.81 |
| (1,427) | 1:B:33:ASP:HB3 | 1:B:36:LEU:HD21 | 8 | 0.81 |
| (1,427) | 1:B:33:ASP:HB3 | 1:B:36:LEU:HD23 | 8 | 0.81 |
| (1,427) | 1:B:33:ASP:HB3 | 1:B:36:LEU:HD22 | 8 | 0.81 |
| (1,321) | 1:B:81:TRP:HB2 | 1:B:81:TRP:HE3 | 8 | 0.81 |
| (1,321) | 1:B:81:TRP:HB2 | 1:B:81:TRP:HE3 | 10 | 0.81 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,272) | 1:B:64:GLU:H | 1:B:64:GLU:HB3 | 1 | 0.81 |
| (1,272) | 1:B:64:GLU:H | 1:B:64:GLU:HB3 | 5 | 0.81 |
| (1,272) | 1:B:64:GLU:H | 1:B:64:GLU:HB3 | 9 | 0.81 |
| (1,272) | 1:B:64:GLU:H | 1:B:64:GLU:HB3 | 10 | 0.81 |
| (1,214) | 1:B:34:PRO:HB3 | 1:B:34:PRO:HD2 | 2 | 0.81 |
| (1,214) | 1:B:34:PRO:HB3 | 1:B:34:PRO:HD2 | 5 | 0.81 |
| (1,197) | 1:B:61:CYS:H | 1:B:60:LYS:HB2 | 4 | 0.81 |
| (1,119) | 1:B:47:TYR:HB3 | 1:B:31:ILE:HD12 | 2 | 0.81 |
| (1,119) | 1:B:47:TYR:HB3 | 1:B:31:ILE:HD11 | 2 | 0.81 |
| (1,119) | 1:B:47:TYR:HB3 | 1:B:31:ILE:HD13 | 2 | 0.81 |
| (1,119) | 1:B:47:TYR:HB3 | 1:B:31:ILE:HD12 | 5 | 0.81 |
| (1,119) | 1:B:47:TYR:HB3 | 1:B:31:ILE:HD11 | 5 | 0.81 |
| (1,119) | 1:B:47:TYR:HB3 | 1:B:31:ILE:HD13 | 5 | 0.81 |
| (2,974) | 1:B:53:LEU:HB2 | 1:B:56:GLU:HG3 | 4 | 0.8 |
| (2,974) | 1:B:55:PRO:HB2 | 1:B:56:GLU:HG3 | 4 | 0.8 |
| (2,974) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HB | 4 | 0.8 |
| (2,564) | 1:B:36:LEU:HD21 | 1:B:30:PHE:HA | 3 | 0.8 |
| (2,564) | 1:B:36:LEU:HD23 | 1:B:30:PHE:HA | 3 | 0.8 |
| (2,564) | 1:B:36:LEU:HD22 | 1:B:30:PHE:HA | 3 | 0.8 |
| (2,564) | 1:B:85:LEU:HD11 | 1:B:82:GLY:HA3 | 3 | 0.8 |
| (2,564) | 1:B:85:LEU:HD12 | 1:B:82:GLY:HA3 | 3 | 0.8 |
| (2,564) | 1:B:85:LEU:HD13 | 1:B:82:GLY:HA3 | 3 | 0.8 |
| (2,409) | 1:B:56:GLU:HG2 | 1:B:96:LYS:HD3 | 1 | 0.8 |
| (2,409) | 1:B:97:HIS:HB3 | 1:B:96:LYS:HD3 | 1 | 0.8 |
| (2,409) | 1:B:56:GLU:HG2 | 1:B:96:LYS:HD2 | 1 | 0.8 |
| (2,409) | 1:B:97:HIS:HB3 | 1:B:96:LYS:HD2 | 1 | 0.8 |
| (2,256) | 1:B:19:THR:HB | 1:B:20:PRO:HB2 | 1 | 0.8 |
| (2,256) | 1:B:19:THR:HB | 1:B:23:PRO:HG3 | 1 | 0.8 |
| (2,256) | 1:B:52:THR:HB | 1:B:49:GLN:HG3 | 1 | 0.8 |
| (2,1004) | 1:B:20:PRO:HB2 | 1:B:19:THR:HG22 | 6 | 0.8 |
| (2,1004) | 1:B:20:PRO:HB2 | 1:B:19:THR:HG21 | 6 | 0.8 |
| (2,1004) | 1:B:20:PRO:HB2 | 1:B:19:THR:HG23 | 6 | 0.8 |
| (2,1004) | 1:B:58:THR:HG22 | 1:B:20:PRO:HB2 | 6 | 0.8 |
| (2,1004) | 1:B:58:THR:HG23 | 1:B:20:PRO:HB2 | 6 | 0.8 |
| (2,1004) | 1:B:58:THR:HG21 | 1:B:20:PRO:HB2 | 6 | 0.8 |
| (1,92) | 1:B:30:PHE:HB2 | 1:B:40:PHE:HB3 | 8 | 0.8 |
| (1,321) | 1:B:81:TRP:HB2 | 1:B:81:TRP:HE3 | 5 | 0.8 |
| (1,272) | 1:B:64:GLU:H | 1:B:64:GLU:HB3 | 2 | 0.8 |
| (1,272) | 1:B:64:GLU:H | 1:B:64:GLU:HB3 | 7 | 0.8 |
| (1,272) | 1:B:64:GLU:H | 1:B:64:GLU:HB3 | 8 | 0.8 |
| (1,253) | 1:B:23:PRO:HB3 | 1:B:55:PRO:HD2 | 1 | 0.8 |
| (1,1295) | 1:B:97:HIS:H | 1:B:98:LEU:HB3 | 2 | 0.8 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1169) | 1:B:51:VAL:H | 1:B:27:CYS:HB3 | 7 | 0.8 |
| (2,1385) | 1:B:64:GLU:H | 1:B:60:LYS:HD2 | 4 | 0.79 |
| (2,1385) | 1:B:64:GLU:H | 1:B:60:LYS:HG3 | 4 | 0.79 |
| (1,814) | 1:B:33:ASP:HB2 | 1:B:30:PHE:HA | 7 | 0.79 |
| (1,677) | 1:B:5:ASN:HA | 1:B:6:PRO:HD2 | 10 | 0.79 |
| (1,565) | 1:B:71:ASP:HA | 1:B:11:LYS:HD3 | 4 | 0.79 |
| (1,321) | 1:B:81:TRP:HB2 | 1:B:81:TRP:HE3 | 1 | 0.79 |
| (1,321) | 1:B:81:TRP:HB2 | 1:B:81:TRP:HE3 | 7 | 0.79 |
| (1,318) | 1:B:30:PHE:HB3 | 1:B:31:ILE:HG12 | 2 | 0.79 |
| (1,318) | 1:B:30:PHE:HB3 | 1:B:31:ILE:HG12 | 4 | 0.79 |
| (1,294) | 1:B:48:GLU:HB3 | 1:B:46:THR:HB | 5 | 0.79 |
| (1,272) | 1:B:64:GLU:H | 1:B:64:GLU:HB3 | 6 | 0.79 |
| (1,1088) | 1:B:49:GLN:H | 1:B:48:GLU:HB3 | 4 | 0.79 |
| (2,592) | 1:B:44:LYS:HG3 | 1:B:42:GLU:HA | 2 | 0.78 |
| (2,592) | 1:B:72:LYS:HG2 | 1:B:71:ASP:HA | 2 | 0.78 |
| (2,130) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HG3 | 5 | 0.78 |
| (2,130) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HG2 | 5 | 0.78 |
| (2,130) | 1:B:88:CYS:HB2 | 1:B:91:LYS:HG3 | 5 | 0.78 |
| (2,130) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HG3 | 10 | 0.78 |
| (2,130) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HG2 | 10 | 0.78 |
| (2,130) | 1:B:88:CYS:HB2 | 1:B:91:LYS:HG3 | 10 | 0.78 |
| (2,1004) | 1:B:20:PRO:HB2 | 1:B:19:THR:HG22 | 9 | 0.78 |
| (2,1004) | 1:B:20:PRO:HB2 | 1:B:19:THR:HG21 | 9 | 0.78 |
| (2,1004) | 1:B:20:PRO:HB2 | 1:B:19:THR:HG23 | 9 | 0.78 |
| (2,1004) | 1:B:58:THR:HG22 | 1:B:20:PRO:HB2 | 9 | 0.78 |
| (2,1004) | 1:B:58:THR:HG23 | 1:B:20:PRO:HB2 | 9 | 0.78 |
| (2,1004) | 1:B:58:THR:HG21 | 1:B:20:PRO:HB2 | 9 | 0.78 |
| (1,941) | 1:B:87:GLU:H | 1:B:88:CYS:HB3 | 1 | 0.78 |
| (1,814) | 1:B:33:ASP:HB2 | 1:B:30:PHE:HA | 6 | 0.78 |
| (1,628) | 1:B:98:LEU:HB3 | 1:B:94:ALA:HA | 7 | 0.78 |
| (1,447) | 1:B:60:LYS:HG3 | 1:B:61:CYS:HA | 3 | 0.78 |
| (1,321) | 1:B:81:TRP:HB2 | 1:B:81:TRP:HE3 | 6 | 0.78 |
| (1,318) | 1:B:30:PHE:HB3 | 1:B:31:ILE:HG12 | 5 | 0.78 |
| (1,318) | 1:B:30:PHE:HB3 | 1:B:31:ILE:HG12 | 6 | 0.78 |
| (1,119) | 1:B:47:TYR:HB3 | 1:B:31:ILE:HD12 | 3 | 0.78 |
| (1,119) | 1:B:47:TYR:HB3 | 1:B:31:ILE:HD11 | 3 | 0.78 |
| (1,119) | 1:B:47:TYR:HB3 | 1:B:31:ILE:HD13 | 3 | 0.78 |
| (2,1518) | 1:B:61:CYS:H | 1:B:85:LEU:HD23 | 6 | 0.77 |
| (2,1518) | 1:B:61:CYS:H | 1:B:85:LEU:HD21 | 6 | 0.77 |
| (2,1518) | 1:B:61:CYS:H | 1:B:85:LEU:HD22 | 6 | 0.77 |
| (2,1518) | 1:B:65:LEU:H | 1:B:85:LEU:HD23 | 6 | 0.77 |
| (2,1518) | 1:B:65:LEU:H | 1:B:85:LEU:HD21 | 6 | 0.77 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|----------------|-----------------|----------|---------------|
| (2,1518) | 1:B:65:LEU:H | 1:B:85:LEU:HD22 | 6 | 0.77 |
| (2,130) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HG3 | 8 | 0.77 |
| (2,130) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HG2 | 8 | 0.77 |
| (2,130) | 1:B:88:CYS:HB2 | 1:B:91:LYS:HG3 | 8 | 0.77 |
| (1,978) | 1:B:62:GLN:H | 1:B:85:LEU:HD23 | 6 | 0.77 |
| (1,978) | 1:B:62:GLN:H | 1:B:85:LEU:HD21 | 6 | 0.77 |
| (1,978) | 1:B:62:GLN:H | 1:B:85:LEU:HD22 | 6 | 0.77 |
| (1,97) | 1:B:66:TYR:HB2 | 1:B:67:ALA:HB1 | 3 | 0.77 |
| (1,97) | 1:B:66:TYR:HB2 | 1:B:67:ALA:HB2 | 3 | 0.77 |
| (1,97) | 1:B:66:TYR:HB2 | 1:B:67:ALA:HB3 | 3 | 0.77 |
| (1,97) | 1:B:66:TYR:HB2 | 1:B:67:ALA:HB1 | 4 | 0.77 |
| (1,97) | 1:B:66:TYR:HB2 | 1:B:67:ALA:HB2 | 4 | 0.77 |
| (1,97) | 1:B:66:TYR:HB2 | 1:B:67:ALA:HB3 | 4 | 0.77 |
| (1,754) | 1:B:37:LYS:H | 1:B:33:ASP:HB2 | 6 | 0.77 |
| (1,721) | 1:B:90:GLY:HA3 | 1:B:93:PHE:HD2 | 6 | 0.77 |
| (1,721) | 1:B:90:GLY:HA3 | 1:B:93:PHE:HD1 | 6 | 0.77 |
| (1,718) | 1:B:90:GLY:HA3 | 1:B:94:ALA:H | 8 | 0.77 |
| (1,439) | 1:B:64:GLU:HB3 | 1:B:65:LEU:HD11 | 7 | 0.77 |
| (1,439) | 1:B:64:GLU:HB3 | 1:B:65:LEU:HD12 | 7 | 0.77 |
| (1,439) | 1:B:64:GLU:HB3 | 1:B:65:LEU:HD13 | 7 | 0.77 |
| (1,321) | 1:B:81:TRP:HB2 | 1:B:81:TRP:HE3 | 2 | 0.77 |
| (1,197) | 1:B:61:CYS:H | 1:B:60:LYS:HB2 | 8 | 0.77 |
| (1,15) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HB2 | 3 | 0.77 |
| (1,15) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HB2 | 9 | 0.77 |
| (1,1349) | 1:B:15:LEU:H | 1:B:11:LYS:HB3 | 4 | 0.77 |
| (1,119) | 1:B:47:TYR:HB3 | 1:B:31:ILE:HD12 | 8 | 0.77 |
| (1,119) | 1:B:47:TYR:HB3 | 1:B:31:ILE:HD11 | 8 | 0.77 |
| (1,119) | 1:B:47:TYR:HB3 | 1:B:31:ILE:HD13 | 8 | 0.77 |
| (1,97) | 1:B:66:TYR:HB2 | 1:B:67:ALA:HB1 | 10 | 0.76 |
| (1,97) | 1:B:66:TYR:HB2 | 1:B:67:ALA:HB2 | 10 | 0.76 |
| (1,97) | 1:B:66:TYR:HB2 | 1:B:67:ALA:HB3 | 10 | 0.76 |
| (1,628) | 1:B:98:LEU:HB3 | 1:B:94:ALA:HA | 1 | 0.76 |
| (1,58) | 1:B:36:LEU:HB2 | 1:B:30:PHE:HB2 | 8 | 0.76 |
| (1,252) | 1:B:45:MET:HB2 | 1:B:40:PHE:HA | 9 | 0.76 |
| (1,214) | 1:B:34:PRO:HB3 | 1:B:34:PRO:HD2 | 10 | 0.76 |
| (1,1088) | 1:B:49:GLN:H | 1:B:48:GLU:HB3 | 2 | 0.76 |
| (2,882) | 1:B:93:PHE:HB3 | 1:B:90:GLY:HA3 | 10 | 0.75 |
| (2,882) | 1:B:93:PHE:HB2 | 1:B:90:GLY:HA3 | 10 | 0.75 |
| (2,643) | 1:B:45:MET:HB2 | 1:B:40:PHE:HA | 1 | 0.75 |
| (2,643) | 1:B:96:LYS:HB3 | 1:B:93:PHE:HA | 1 | 0.75 |
| (2,1436) | 1:B:60:LYS:H | 1:B:63:ASP:HB3 | 4 | 0.75 |
| (2,1436) | 1:B:60:LYS:H | 1:B:96:LYS:HE3 | 4 | 0.75 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,1436) | 1:B:60:LYS:H | 1:B:96:LYS:HE2 | 4 | 0.75 |
| (2,130) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HG3 | 7 | 0.75 |
| (2,130) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HG2 | 7 | 0.75 |
| (2,130) | 1:B:88:CYS:HB2 | 1:B:91:LYS:HG3 | 7 | 0.75 |
| (1,97) | 1:B:66:TYR:HB2 | 1:B:67:ALA:HB1 | 9 | 0.75 |
| (1,97) | 1:B:66:TYR:HB2 | 1:B:67:ALA:HB2 | 9 | 0.75 |
| (1,97) | 1:B:66:TYR:HB2 | 1:B:67:ALA:HB3 | 9 | 0.75 |
| (1,628) | 1:B:98:LEU:HB3 | 1:B:94:ALA:HA | 2 | 0.75 |
| (1,569) | 1:B:89:ILE:HG23 | 1:B:90:GLY:HA3 | 10 | 0.75 |
| (1,569) | 1:B:89:ILE:HG21 | 1:B:90:GLY:HA3 | 10 | 0.75 |
| (1,569) | 1:B:89:ILE:HG22 | 1:B:90:GLY:HA3 | 10 | 0.75 |
| (1,15) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HB2 | 8 | 0.75 |
| (1,119) | 1:B:47:TYR:HB3 | 1:B:31:ILE:HD12 | 10 | 0.75 |
| (1,119) | 1:B:47:TYR:HB3 | 1:B:31:ILE:HD11 | 10 | 0.75 |
| (1,119) | 1:B:47:TYR:HB3 | 1:B:31:ILE:HD13 | 10 | 0.75 |
| (2,998) | 1:B:74:ASN:HB3 | 1:B:8:GLU:HB2 | 5 | 0.74 |
| (2,998) | 1:B:74:ASN:HB3 | 1:B:8:GLU:HB3 | 5 | 0.74 |
| (2,974) | 1:B:53:LEU:HB2 | 1:B:56:GLU:HG3 | 1 | 0.74 |
| (2,974) | 1:B:55:PRO:HB2 | 1:B:56:GLU:HG3 | 1 | 0.74 |
| (2,974) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HB | 1 | 0.74 |
| (2,643) | 1:B:45:MET:HB2 | 1:B:40:PHE:HA | 6 | 0.74 |
| (2,643) | 1:B:96:LYS:HB3 | 1:B:93:PHE:HA | 6 | 0.74 |
| (2,256) | 1:B:19:THR:HB | 1:B:20:PRO:HB2 | 8 | 0.74 |
| (2,256) | 1:B:19:THR:HB | 1:B:23:PRO:HG3 | 8 | 0.74 |
| (2,256) | 1:B:52:THR:HB | 1:B:49:GLN:HG3 | 8 | 0.74 |
| (1,97) | 1:B:66:TYR:HB2 | 1:B:67:ALA:HB1 | 5 | 0.74 |
| (1,97) | 1:B:66:TYR:HB2 | 1:B:67:ALA:HB2 | 5 | 0.74 |
| (1,97) | 1:B:66:TYR:HB2 | 1:B:67:ALA:HB3 | 5 | 0.74 |
| (1,569) | 1:B:89:ILE:HG23 | 1:B:90:GLY:HA3 | 7 | 0.74 |
| (1,569) | 1:B:89:ILE:HG21 | 1:B:90:GLY:HA3 | 7 | 0.74 |
| (1,569) | 1:B:89:ILE:HG22 | 1:B:90:GLY:HA3 | 7 | 0.74 |
| (1,36) | 1:B:85:LEU:H | 1:B:85:LEU:HB3 | 1 | 0.74 |
| (1,36) | 1:B:85:LEU:H | 1:B:85:LEU:HB3 | 2 | 0.74 |
| (1,36) | 1:B:85:LEU:H | 1:B:85:LEU:HB3 | 3 | 0.74 |
| (1,36) | 1:B:85:LEU:H | 1:B:85:LEU:HB3 | 4 | 0.74 |
| (1,36) | 1:B:85:LEU:H | 1:B:85:LEU:HB3 | 9 | 0.74 |
| (1,36) | 1:B:85:LEU:H | 1:B:85:LEU:HB3 | 10 | 0.74 |
| (1,318) | 1:B:30:PHE:HB3 | 1:B:31:ILE:HG12 | 1 | 0.74 |
| (1,1336) | 1:B:90:GLY:H | 1:B:91:LYS:HG3 | 5 | 0.74 |
| (1,119) | 1:B:47:TYR:HB3 | 1:B:31:ILE:HD12 | 6 | 0.74 |
| (1,119) | 1:B:47:TYR:HB3 | 1:B:31:ILE:HD11 | 6 | 0.74 |
| (1,119) | 1:B:47:TYR:HB3 | 1:B:31:ILE:HD13 | 6 | 0.74 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|----------------|----------|---------------|
| (1,1088) | 1:B:49:GLN:H | 1:B:48:GLU:HB3 | 6 | 0.74 |
| (2,412) | 1:B:26:ILE:HG13 | 1:B:86:GLY:HA2 | 7 | 0.73 |
| (2,412) | 1:B:31:ILE:HG12 | 1:B:28:LYS:HA | 7 | 0.73 |
| (2,412) | 1:B:26:ILE:HG13 | 1:B:86:GLY:HA2 | 10 | 0.73 |
| (2,412) | 1:B:31:ILE:HG12 | 1:B:28:LYS:HA | 10 | 0.73 |
| (2,286) | 1:B:42:GLU:HB2 | 1:B:39:ARG:HG2 | 9 | 0.73 |
| (2,286) | 1:B:65:LEU:HB2 | 1:B:64:GLU:HB3 | 9 | 0.73 |
| (1,92) | 1:B:30:PHE:HB2 | 1:B:40:PHE:HB3 | 6 | 0.73 |
| (1,721) | 1:B:90:GLY:HA3 | 1:B:93:PHE:HD2 | 10 | 0.73 |
| (1,721) | 1:B:90:GLY:HA3 | 1:B:93:PHE:HD1 | 10 | 0.73 |
| (1,628) | 1:B:98:LEU:HB3 | 1:B:94:ALA:HA | 4 | 0.73 |
| (1,36) | 1:B:85:LEU:H | 1:B:85:LEU:HB3 | 5 | 0.73 |
| (1,36) | 1:B:85:LEU:H | 1:B:85:LEU:HB3 | 7 | 0.73 |
| (1,36) | 1:B:85:LEU:H | 1:B:85:LEU:HB3 | 8 | 0.73 |
| (1,252) | 1:B:45:MET:HB2 | 1:B:40:PHE:HA | 2 | 0.73 |
| (2,643) | 1:B:45:MET:HB2 | 1:B:40:PHE:HA | 5 | 0.72 |
| (2,643) | 1:B:96:LYS:HB3 | 1:B:93:PHE:HA | 5 | 0.72 |
| (2,564) | 1:B:36:LEU:HD21 | 1:B:30:PHE:HA | 7 | 0.72 |
| (2,564) | 1:B:36:LEU:HD23 | 1:B:30:PHE:HA | 7 | 0.72 |
| (2,564) | 1:B:36:LEU:HD22 | 1:B:30:PHE:HA | 7 | 0.72 |
| (2,564) | 1:B:85:LEU:HD11 | 1:B:82:GLY:HA3 | 7 | 0.72 |
| (2,564) | 1:B:85:LEU:HD12 | 1:B:82:GLY:HA3 | 7 | 0.72 |
| (2,564) | 1:B:85:LEU:HD13 | 1:B:82:GLY:HA3 | 7 | 0.72 |
| (2,30) | 1:B:25:LEU:HB2 | 1:B:26:ILE:HA | 4 | 0.72 |
| (2,30) | 1:B:25:LEU:HB2 | 1:B:86:GLY:HA3 | 4 | 0.72 |
| (1,814) | 1:B:33:ASP:HB2 | 1:B:30:PHE:HA | 9 | 0.72 |
| (1,718) | 1:B:90:GLY:HA3 | 1:B:94:ALA:H | 10 | 0.72 |
| (1,294) | 1:B:48:GLU:HB3 | 1:B:46:THR:HB | 10 | 0.72 |
| (1,1022) | 1:B:40:PHE:H | 1:B:45:MET:HB2 | 9 | 0.72 |
| (2,564) | 1:B:36:LEU:HD21 | 1:B:30:PHE:HA | 1 | 0.71 |
| (2,564) | 1:B:36:LEU:HD23 | 1:B:30:PHE:HA | 1 | 0.71 |
| (2,564) | 1:B:36:LEU:HD22 | 1:B:30:PHE:HA | 1 | 0.71 |
| (2,564) | 1:B:85:LEU:HD11 | 1:B:82:GLY:HA3 | 1 | 0.71 |
| (2,564) | 1:B:85:LEU:HD12 | 1:B:82:GLY:HA3 | 1 | 0.71 |
| (2,564) | 1:B:85:LEU:HD13 | 1:B:82:GLY:HA3 | 1 | 0.71 |
| (1,58) | 1:B:36:LEU:HB2 | 1:B:30:PHE:HB2 | 9 | 0.71 |
| (1,380) | 1:B:81:TRP:HE1 | 1:B:70:PRO:HG2 | 2 | 0.71 |
| (1,282) | 1:B:60:LYS:HD3 | 1:B:57:SER:HA | 6 | 0.71 |
| (1,120) | 1:B:48:GLU:H | 1:B:47:TYR:HB2 | 10 | 0.71 |
| (1,117) | 1:B:61:CYS:HB3 | 1:B:88:CYS:HB3 | 1 | 0.71 |
| (2,974) | 1:B:53:LEU:HB2 | 1:B:56:GLU:HG3 | 3 | 0.7 |
| (2,974) | 1:B:55:PRO:HB2 | 1:B:56:GLU:HG3 | 3 | 0.7 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,974) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HB | 3 | 0.7 |
| (2,256) | 1:B:19:THR:HB | 1:B:20:PRO:HB2 | 6 | 0.7 |
| (2,256) | 1:B:19:THR:HB | 1:B:23:PRO:HG3 | 6 | 0.7 |
| (2,256) | 1:B:52:THR:HB | 1:B:49:GLN:HG3 | 6 | 0.7 |
| (2,118) | 1:B:88:CYS:HB3 | 1:B:85:LEU:HD11 | 1 | 0.7 |
| (2,118) | 1:B:88:CYS:HB3 | 1:B:85:LEU:HD12 | 1 | 0.7 |
| (2,118) | 1:B:88:CYS:HB3 | 1:B:85:LEU:HD13 | 1 | 0.7 |
| (2,118) | 1:B:88:CYS:HB3 | 1:B:89:ILE:HD11 | 1 | 0.7 |
| (2,118) | 1:B:88:CYS:HB3 | 1:B:89:ILE:HD13 | 1 | 0.7 |
| (2,118) | 1:B:88:CYS:HB3 | 1:B:89:ILE:HD12 | 1 | 0.7 |
| (2,118) | 1:B:88:CYS:HB3 | 1:B:89:ILE:HG23 | 1 | 0.7 |
| (2,118) | 1:B:88:CYS:HB3 | 1:B:89:ILE:HG21 | 1 | 0.7 |
| (2,118) | 1:B:88:CYS:HB3 | 1:B:89:ILE:HG22 | 1 | 0.7 |
| (1,97) | 1:B:66:TYR:HB2 | 1:B:67:ALA:HB1 | 1 | 0.7 |
| (1,97) | 1:B:66:TYR:HB2 | 1:B:67:ALA:HB2 | 1 | 0.7 |
| (1,97) | 1:B:66:TYR:HB2 | 1:B:67:ALA:HB3 | 1 | 0.7 |
| (1,15) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HB2 | 10 | 0.7 |
| (1,1022) | 1:B:40:PHE:H | 1:B:45:MET:HB2 | 2 | 0.7 |
| (2,974) | 1:B:53:LEU:HB2 | 1:B:56:GLU:HG3 | 10 | 0.69 |
| (2,974) | 1:B:55:PRO:HB2 | 1:B:56:GLU:HG3 | 10 | 0.69 |
| (2,974) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HB | 10 | 0.69 |
| (2,87) | 1:B:74:ASN:HB3 | 1:B:8:GLU:HB2 | 8 | 0.69 |
| (2,87) | 1:B:74:ASN:HB3 | 1:B:8:GLU:HB3 | 8 | 0.69 |
| (2,87) | 1:B:93:PHE:HB3 | 1:B:53:LEU:HB2 | 8 | 0.69 |
| (2,87) | 1:B:93:PHE:HB2 | 1:B:53:LEU:HB2 | 8 | 0.69 |
| (2,412) | 1:B:26:ILE:HG13 | 1:B:86:GLY:HA2 | 8 | 0.69 |
| (2,412) | 1:B:31:ILE:HG12 | 1:B:28:LYS:HA | 8 | 0.69 |
| (2,286) | 1:B:42:GLU:HB2 | 1:B:39:ARG:HG2 | 10 | 0.69 |
| (2,286) | 1:B:65:LEU:HB2 | 1:B:64:GLU:HB3 | 10 | 0.69 |
| (1,97) | 1:B:66:TYR:HB2 | 1:B:67:ALA:HB1 | 8 | 0.69 |
| (1,97) | 1:B:66:TYR:HB2 | 1:B:67:ALA:HB2 | 8 | 0.69 |
| (1,97) | 1:B:66:TYR:HB2 | 1:B:67:ALA:HB3 | 8 | 0.69 |
| (1,718) | 1:B:90:GLY:HA3 | 1:B:94:ALA:H | 3 | 0.69 |
| (1,569) | 1:B:89:ILE:HG23 | 1:B:90:GLY:HA3 | 3 | 0.69 |
| (1,569) | 1:B:89:ILE:HG21 | 1:B:90:GLY:HA3 | 3 | 0.69 |
| (1,569) | 1:B:89:ILE:HG22 | 1:B:90:GLY:HA3 | 3 | 0.69 |
| (1,28) | 1:B:26:ILE:H | 1:B:25:LEU:HB2 | 8 | 0.69 |
| (1,137) | 1:B:41:ASP:H | 1:B:40:PHE:HB2 | 6 | 0.69 |
| (1,1229) | 1:B:96:LYS:H | 1:B:98:LEU:HB3 | 1 | 0.69 |
| (1,116) | 1:B:88:CYS:H | 1:B:88:CYS:HB3 | 1 | 0.69 |
| (2,592) | 1:B:44:LYS:HG3 | 1:B:42:GLU:HA | 1 | 0.68 |
| (2,592) | 1:B:72:LYS:HG2 | 1:B:71:ASP:HA | 1 | 0.68 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,412) | 1:B:26:ILE:HG13 | 1:B:86:GLY:HA2 | 9 | 0.68 |
| (2,412) | 1:B:31:ILE:HG12 | 1:B:28:LYS:HA | 9 | 0.68 |
| (1,97) | 1:B:66:TYR:HB2 | 1:B:67:ALA:HB1 | 7 | 0.68 |
| (1,97) | 1:B:66:TYR:HB2 | 1:B:67:ALA:HB2 | 7 | 0.68 |
| (1,97) | 1:B:66:TYR:HB2 | 1:B:67:ALA:HB3 | 7 | 0.68 |
| (1,253) | 1:B:23:PRO:HB3 | 1:B:55:PRO:HD2 | 7 | 0.68 |
| (1,15) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HB2 | 7 | 0.68 |
| (1,1229) | 1:B:96:LYS:H | 1:B:98:LEU:HB3 | 2 | 0.68 |
| (1,1229) | 1:B:96:LYS:H | 1:B:98:LEU:HB3 | 8 | 0.68 |
| (1,1012) | 1:B:50:CYS:H | 1:B:27:CYS:HB3 | 1 | 0.68 |
| (2,882) | 1:B:93:PHE:HB3 | 1:B:90:GLY:HA3 | 5 | 0.67 |
| (2,882) | 1:B:93:PHE:HB2 | 1:B:90:GLY:HA3 | 5 | 0.67 |
| (2,882) | 1:B:93:PHE:HB3 | 1:B:90:GLY:HA3 | 6 | 0.67 |
| (2,882) | 1:B:93:PHE:HB2 | 1:B:90:GLY:HA3 | 6 | 0.67 |
| (2,564) | 1:B:36:LEU:HD21 | 1:B:30:PHE:HA | 10 | 0.67 |
| (2,564) | 1:B:36:LEU:HD23 | 1:B:30:PHE:HA | 10 | 0.67 |
| (2,564) | 1:B:36:LEU:HD22 | 1:B:30:PHE:HA | 10 | 0.67 |
| (2,564) | 1:B:85:LEU:HD11 | 1:B:82:GLY:HA3 | 10 | 0.67 |
| (2,564) | 1:B:85:LEU:HD12 | 1:B:82:GLY:HA3 | 10 | 0.67 |
| (2,564) | 1:B:85:LEU:HD13 | 1:B:82:GLY:HA3 | 10 | 0.67 |
| (1,97) | 1:B:66:TYR:HB2 | 1:B:67:ALA:HB1 | 2 | 0.67 |
| (1,97) | 1:B:66:TYR:HB2 | 1:B:67:ALA:HB2 | 2 | 0.67 |
| (1,97) | 1:B:66:TYR:HB2 | 1:B:67:ALA:HB3 | 2 | 0.67 |
| (1,97) | 1:B:66:TYR:HB2 | 1:B:67:ALA:HB1 | 6 | 0.67 |
| (1,97) | 1:B:66:TYR:HB2 | 1:B:67:ALA:HB2 | 6 | 0.67 |
| (1,97) | 1:B:66:TYR:HB2 | 1:B:67:ALA:HB3 | 6 | 0.67 |
| (1,58) | 1:B:36:LEU:HB2 | 1:B:30:PHE:HB2 | 10 | 0.67 |
| (1,569) | 1:B:89:ILE:HG23 | 1:B:90:GLY:HA3 | 5 | 0.67 |
| (1,569) | 1:B:89:ILE:HG21 | 1:B:90:GLY:HA3 | 5 | 0.67 |
| (1,569) | 1:B:89:ILE:HG22 | 1:B:90:GLY:HA3 | 5 | 0.67 |
| (1,459) | 1:B:85:LEU:HB2 | 1:B:85:LEU:HD23 | 4 | 0.67 |
| (1,459) | 1:B:85:LEU:HB2 | 1:B:85:LEU:HD21 | 4 | 0.67 |
| (1,459) | 1:B:85:LEU:HB2 | 1:B:85:LEU:HD22 | 4 | 0.67 |
| (1,197) | 1:B:61:CYS:H | 1:B:60:LYS:HB2 | 3 | 0.67 |
| (1,137) | 1:B:41:ASP:H | 1:B:40:PHE:HB2 | 2 | 0.67 |
| (1,1349) | 1:B:15:LEU:H | 1:B:11:LYS:HB3 | 6 | 0.67 |
| (1,120) | 1:B:48:GLU:H | 1:B:47:TYR:HB2 | 6 | 0.67 |
| (1,120) | 1:B:48:GLU:H | 1:B:47:TYR:HB2 | 9 | 0.67 |
| (1,1088) | 1:B:49:GLN:H | 1:B:48:GLU:HB3 | 8 | 0.67 |
| (1,1088) | 1:B:49:GLN:H | 1:B:48:GLU:HB3 | 9 | 0.67 |
| (2,882) | 1:B:93:PHE:HB3 | 1:B:90:GLY:HA3 | 9 | 0.66 |
| (2,882) | 1:B:93:PHE:HB2 | 1:B:90:GLY:HA3 | 9 | 0.66 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,256) | 1:B:19:THR:HB | 1:B:20:PRO:HB2 | 10 | 0.66 |
| (2,256) | 1:B:19:THR:HB | 1:B:23:PRO:HG3 | 10 | 0.66 |
| (2,256) | 1:B:52:THR:HB | 1:B:49:GLN:HG3 | 10 | 0.66 |
| (1,459) | 1:B:85:LEU:HB2 | 1:B:85:LEU:HD23 | 1 | 0.66 |
| (1,459) | 1:B:85:LEU:HB2 | 1:B:85:LEU:HD21 | 1 | 0.66 |
| (1,459) | 1:B:85:LEU:HB2 | 1:B:85:LEU:HD22 | 1 | 0.66 |
| (1,459) | 1:B:85:LEU:HB2 | 1:B:85:LEU:HD23 | 2 | 0.66 |
| (1,459) | 1:B:85:LEU:HB2 | 1:B:85:LEU:HD21 | 2 | 0.66 |
| (1,459) | 1:B:85:LEU:HB2 | 1:B:85:LEU:HD22 | 2 | 0.66 |
| (1,459) | 1:B:85:LEU:HB2 | 1:B:85:LEU:HD23 | 3 | 0.66 |
| (1,459) | 1:B:85:LEU:HB2 | 1:B:85:LEU:HD21 | 3 | 0.66 |
| (1,459) | 1:B:85:LEU:HB2 | 1:B:85:LEU:HD22 | 3 | 0.66 |
| (1,459) | 1:B:85:LEU:HB2 | 1:B:85:LEU:HD23 | 5 | 0.66 |
| (1,459) | 1:B:85:LEU:HB2 | 1:B:85:LEU:HD21 | 5 | 0.66 |
| (1,459) | 1:B:85:LEU:HB2 | 1:B:85:LEU:HD22 | 5 | 0.66 |
| (1,459) | 1:B:85:LEU:HB2 | 1:B:85:LEU:HD23 | 7 | 0.66 |
| (1,459) | 1:B:85:LEU:HB2 | 1:B:85:LEU:HD21 | 7 | 0.66 |
| (1,459) | 1:B:85:LEU:HB2 | 1:B:85:LEU:HD22 | 7 | 0.66 |
| (1,459) | 1:B:85:LEU:HB2 | 1:B:85:LEU:HD23 | 9 | 0.66 |
| (1,459) | 1:B:85:LEU:HB2 | 1:B:85:LEU:HD21 | 9 | 0.66 |
| (1,459) | 1:B:85:LEU:HB2 | 1:B:85:LEU:HD22 | 9 | 0.66 |
| (1,459) | 1:B:85:LEU:HB2 | 1:B:85:LEU:HD23 | 10 | 0.66 |
| (1,459) | 1:B:85:LEU:HB2 | 1:B:85:LEU:HD21 | 10 | 0.66 |
| (1,459) | 1:B:85:LEU:HB2 | 1:B:85:LEU:HD22 | 10 | 0.66 |
| (1,447) | 1:B:60:LYS:HG3 | 1:B:61:CYS:HA | 8 | 0.66 |
| (1,185) | 1:B:101:LYS:H | 1:B:101:LYS:HB3 | 6 | 0.66 |
| (1,1349) | 1:B:15:LEU:H | 1:B:11:LYS:HB3 | 1 | 0.66 |
| (1,1349) | 1:B:15:LEU:H | 1:B:11:LYS:HB3 | 10 | 0.66 |
| (2,564) | 1:B:36:LEU:HD21 | 1:B:30:PHE:HA | 5 | 0.65 |
| (2,564) | 1:B:36:LEU:HD23 | 1:B:30:PHE:HA | 5 | 0.65 |
| (2,564) | 1:B:36:LEU:HD22 | 1:B:30:PHE:HA | 5 | 0.65 |
| (2,564) | 1:B:85:LEU:HD11 | 1:B:82:GLY:HA3 | 5 | 0.65 |
| (2,564) | 1:B:85:LEU:HD12 | 1:B:82:GLY:HA3 | 5 | 0.65 |
| (2,564) | 1:B:85:LEU:HD13 | 1:B:82:GLY:HA3 | 5 | 0.65 |
| (2,286) | 1:B:42:GLU:HB2 | 1:B:39:ARG:HG2 | 8 | 0.65 |
| (2,286) | 1:B:65:LEU:HB2 | 1:B:64:GLU:HB3 | 8 | 0.65 |
| (2,256) | 1:B:19:THR:HB | 1:B:20:PRO:HB2 | 7 | 0.65 |
| (2,256) | 1:B:19:THR:HB | 1:B:23:PRO:HG3 | 7 | 0.65 |
| (2,256) | 1:B:52:THR:HB | 1:B:49:GLN:HG3 | 7 | 0.65 |
| (2,1138) | 1:B:38:LYS:HG2 | 1:B:36:LEU:HA | 6 | 0.65 |
| (2,1138) | 1:B:36:LEU:HA | 1:B:98:LEU:HB2 | 6 | 0.65 |
| (1,92) | 1:B:30:PHE:HB2 | 1:B:40:PHE:HB3 | 7 | 0.65 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,58) | 1:B:36:LEU:HB2 | 1:B:30:PHE:HB2 | 2 | 0.65 |
| (1,447) | 1:B:60:LYS:HG3 | 1:B:61:CYS:HA | 7 | 0.65 |
| (1,28) | 1:B:26:ILE:H | 1:B:25:LEU:HB2 | 4 | 0.65 |
| (1,197) | 1:B:61:CYS:H | 1:B:60:LYS:HB2 | 9 | 0.65 |
| (1,137) | 1:B:41:ASP:H | 1:B:40:PHE:HB2 | 7 | 0.65 |
| (1,137) | 1:B:41:ASP:H | 1:B:40:PHE:HB2 | 8 | 0.65 |
| (1,120) | 1:B:48:GLU:H | 1:B:47:TYR:HB2 | 4 | 0.65 |
| (1,1088) | 1:B:49:GLN:H | 1:B:48:GLU:HB3 | 10 | 0.65 |
| (2,564) | 1:B:36:LEU:HD21 | 1:B:30:PHE:HA | 9 | 0.64 |
| (2,564) | 1:B:36:LEU:HD23 | 1:B:30:PHE:HA | 9 | 0.64 |
| (2,564) | 1:B:36:LEU:HD22 | 1:B:30:PHE:HA | 9 | 0.64 |
| (2,564) | 1:B:85:LEU:HD11 | 1:B:82:GLY:HA3 | 9 | 0.64 |
| (2,564) | 1:B:85:LEU:HD12 | 1:B:82:GLY:HA3 | 9 | 0.64 |
| (2,564) | 1:B:85:LEU:HD13 | 1:B:82:GLY:HA3 | 9 | 0.64 |
| (2,467) | 1:B:39:ARG:HG2 | 1:B:43:ILE:HG12 | 9 | 0.64 |
| (2,467) | 1:B:39:ARG:HG2 | 1:B:98:LEU:HB2 | 9 | 0.64 |
| (1,814) | 1:B:33:ASP:HB2 | 1:B:30:PHE:HA | 2 | 0.64 |
| (1,721) | 1:B:90:GLY:HA3 | 1:B:93:PHE:HD2 | 5 | 0.64 |
| (1,721) | 1:B:90:GLY:HA3 | 1:B:93:PHE:HD1 | 5 | 0.64 |
| (1,672) | 1:B:21:LEU:H | 1:B:20:PRO:HD3 | 3 | 0.64 |
| (1,569) | 1:B:89:ILE:HG23 | 1:B:90:GLY:HA3 | 2 | 0.64 |
| (1,569) | 1:B:89:ILE:HG21 | 1:B:90:GLY:HA3 | 2 | 0.64 |
| (1,569) | 1:B:89:ILE:HG22 | 1:B:90:GLY:HA3 | 2 | 0.64 |
| (1,137) | 1:B:41:ASP:H | 1:B:40:PHE:HB2 | 1 | 0.64 |
| (1,137) | 1:B:41:ASP:H | 1:B:40:PHE:HB2 | 4 | 0.64 |
| (1,1229) | 1:B:96:LYS:H | 1:B:98:LEU:HB3 | 7 | 0.64 |
| (1,120) | 1:B:48:GLU:H | 1:B:47:TYR:HB2 | 2 | 0.64 |
| (1,111) | 1:B:51:VAL:H | 1:B:50:CYS:HB2 | 3 | 0.64 |
| (1,1088) | 1:B:49:GLN:H | 1:B:48:GLU:HB3 | 1 | 0.64 |
| (1,1012) | 1:B:50:CYS:H | 1:B:27:CYS:HB3 | 8 | 0.64 |
| (2,643) | 1:B:45:MET:HB2 | 1:B:40:PHE:HA | 2 | 0.63 |
| (2,643) | 1:B:96:LYS:HB3 | 1:B:93:PHE:HA | 2 | 0.63 |
| (2,30) | 1:B:25:LEU:HB2 | 1:B:26:ILE:HA | 8 | 0.63 |
| (2,30) | 1:B:25:LEU:HB2 | 1:B:86:GLY:HA3 | 8 | 0.63 |
| (2,140) | 1:B:64:GLU:HG2 | 1:B:60:LYS:HG3 | 3 | 0.63 |
| (2,140) | 1:B:64:GLU:HG3 | 1:B:60:LYS:HG3 | 3 | 0.63 |
| (2,140) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB1 | 3 | 0.63 |
| (2,140) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB3 | 3 | 0.63 |
| (2,140) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB2 | 3 | 0.63 |
| (1,721) | 1:B:90:GLY:HA3 | 1:B:93:PHE:HD2 | 9 | 0.63 |
| (1,721) | 1:B:90:GLY:HA3 | 1:B:93:PHE:HD1 | 9 | 0.63 |
| (1,459) | 1:B:85:LEU:HB2 | 1:B:85:LEU:HD23 | 8 | 0.63 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|----------------|-----------------|----------|---------------|
| (1,459) | 1:B:85:LEU:HB2 | 1:B:85:LEU:HD21 | 8 | 0.63 |
| (1,459) | 1:B:85:LEU:HB2 | 1:B:85:LEU:HD22 | 8 | 0.63 |
| (1,282) | 1:B:60:LYS:HD3 | 1:B:57:SER:HA | 2 | 0.63 |
| (1,137) | 1:B:41:ASP:H | 1:B:40:PHE:HB2 | 5 | 0.63 |
| (1,120) | 1:B:48:GLU:H | 1:B:47:TYR:HB2 | 5 | 0.63 |
| (1,120) | 1:B:48:GLU:H | 1:B:47:TYR:HB2 | 8 | 0.63 |
| (2,974) | 1:B:53:LEU:HB2 | 1:B:56:GLU:HG3 | 7 | 0.62 |
| (2,974) | 1:B:55:PRO:HB2 | 1:B:56:GLU:HG3 | 7 | 0.62 |
| (2,974) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HB | 7 | 0.62 |
| (2,286) | 1:B:42:GLU:HB2 | 1:B:39:ARG:HG2 | 6 | 0.62 |
| (2,286) | 1:B:65:LEU:HB2 | 1:B:64:GLU:HB3 | 6 | 0.62 |
| (2,256) | 1:B:19:THR:HB | 1:B:20:PRO:HB2 | 2 | 0.62 |
| (2,256) | 1:B:19:THR:HB | 1:B:23:PRO:HG3 | 2 | 0.62 |
| (2,256) | 1:B:52:THR:HB | 1:B:49:GLN:HG3 | 2 | 0.62 |
| (2,1143) | 1:B:4:ALA:HB1 | 1:B:5:ASN:HB3 | 7 | 0.62 |
| (2,1143) | 1:B:4:ALA:HB2 | 1:B:5:ASN:HB3 | 7 | 0.62 |
| (2,1143) | 1:B:4:ALA:HB3 | 1:B:5:ASN:HB3 | 7 | 0.62 |
| (2,1143) | 1:B:78:ALA:HB1 | 1:B:74:ASN:HB2 | 7 | 0.62 |
| (2,1143) | 1:B:78:ALA:HB2 | 1:B:74:ASN:HB2 | 7 | 0.62 |
| (2,1143) | 1:B:78:ALA:HB3 | 1:B:74:ASN:HB2 | 7 | 0.62 |
| (2,1143) | 1:B:78:ALA:HB1 | 1:B:81:TRP:HB3 | 7 | 0.62 |
| (2,1143) | 1:B:78:ALA:HB2 | 1:B:81:TRP:HB3 | 7 | 0.62 |
| (2,1143) | 1:B:78:ALA:HB3 | 1:B:81:TRP:HB3 | 7 | 0.62 |
| (2,1143) | 1:B:4:ALA:HB1 | 1:B:5:ASN:HB3 | 9 | 0.62 |
| (2,1143) | 1:B:4:ALA:HB2 | 1:B:5:ASN:HB3 | 9 | 0.62 |
| (2,1143) | 1:B:4:ALA:HB3 | 1:B:5:ASN:HB3 | 9 | 0.62 |
| (2,1143) | 1:B:78:ALA:HB1 | 1:B:74:ASN:HB2 | 9 | 0.62 |
| (2,1143) | 1:B:78:ALA:HB2 | 1:B:74:ASN:HB2 | 9 | 0.62 |
| (2,1143) | 1:B:78:ALA:HB3 | 1:B:74:ASN:HB2 | 9 | 0.62 |
| (2,1143) | 1:B:78:ALA:HB1 | 1:B:81:TRP:HB3 | 9 | 0.62 |
| (2,1143) | 1:B:78:ALA:HB2 | 1:B:81:TRP:HB3 | 9 | 0.62 |
| (2,1143) | 1:B:78:ALA:HB3 | 1:B:81:TRP:HB3 | 9 | 0.62 |
| (1,736) | 1:B:11:LYS:HD2 | 1:B:66:TYR:HE1 | 6 | 0.62 |
| (1,736) | 1:B:11:LYS:HD2 | 1:B:66:TYR:HE2 | 6 | 0.62 |
| (1,278) | 1:B:64:GLU:HB3 | 1:B:61:CYS:HB3 | 2 | 0.62 |
| (1,15) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HB2 | 6 | 0.62 |
| (1,1169) | 1:B:51:VAL:H | 1:B:27:CYS:HB3 | 10 | 0.62 |
| (1,111) | 1:B:51:VAL:H | 1:B:50:CYS:HB2 | 5 | 0.62 |
| (1,1068) | 1:B:30:PHE:H | 1:B:31:ILE:HG12 | 3 | 0.62 |
| (1,1062) | 1:B:11:LYS:H | 1:B:72:LYS:HG3 | 5 | 0.62 |
| (1,1062) | 1:B:11:LYS:H | 1:B:72:LYS:HG3 | 10 | 0.62 |
| (2,592) | 1:B:44:LYS:HG3 | 1:B:42:GLU:HA | 3 | 0.61 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,592) | 1:B:72:LYS:HG2 | 1:B:71:ASP:HA | 3 | 0.61 |
| (1,672) | 1:B:21:LEU:H | 1:B:20:PRO:HD3 | 10 | 0.61 |
| (1,569) | 1:B:89:ILE:HG23 | 1:B:90:GLY:HA3 | 9 | 0.61 |
| (1,569) | 1:B:89:ILE:HG21 | 1:B:90:GLY:HA3 | 9 | 0.61 |
| (1,569) | 1:B:89:ILE:HG22 | 1:B:90:GLY:HA3 | 9 | 0.61 |
| (1,391) | 1:B:99:ILE:HG12 | 1:B:94:ALA:HB1 | 6 | 0.61 |
| (1,391) | 1:B:99:ILE:HG12 | 1:B:94:ALA:HB3 | 6 | 0.61 |
| (1,391) | 1:B:99:ILE:HG12 | 1:B:94:ALA:HB2 | 6 | 0.61 |
| (1,137) | 1:B:41:ASP:H | 1:B:40:PHE:HB2 | 3 | 0.61 |
| (1,120) | 1:B:48:GLU:H | 1:B:47:TYR:HB2 | 3 | 0.61 |
| (2,592) | 1:B:44:LYS:HG3 | 1:B:42:GLU:HA | 6 | 0.6 |
| (2,592) | 1:B:72:LYS:HG2 | 1:B:71:ASP:HA | 6 | 0.6 |
| (2,592) | 1:B:44:LYS:HG3 | 1:B:42:GLU:HA | 7 | 0.6 |
| (2,592) | 1:B:72:LYS:HG2 | 1:B:71:ASP:HA | 7 | 0.6 |
| (2,286) | 1:B:42:GLU:HB2 | 1:B:39:ARG:HG2 | 2 | 0.6 |
| (2,286) | 1:B:65:LEU:HB2 | 1:B:64:GLU:HB3 | 2 | 0.6 |
| (1,92) | 1:B:30:PHE:HB2 | 1:B:40:PHE:HB3 | 3 | 0.6 |
| (1,814) | 1:B:33:ASP:HB2 | 1:B:30:PHE:HA | 8 | 0.6 |
| (1,736) | 1:B:11:LYS:HD2 | 1:B:66:TYR:HE1 | 5 | 0.6 |
| (1,736) | 1:B:11:LYS:HD2 | 1:B:66:TYR:HE2 | 5 | 0.6 |
| (1,672) | 1:B:21:LEU:H | 1:B:20:PRO:HD3 | 9 | 0.6 |
| (1,565) | 1:B:71:ASP:HA | 1:B:11:LYS:HD3 | 3 | 0.6 |
| (1,137) | 1:B:41:ASP:H | 1:B:40:PHE:HB2 | 10 | 0.6 |
| (1,1068) | 1:B:30:PHE:H | 1:B:31:ILE:HG12 | 5 | 0.6 |
| (2,592) | 1:B:44:LYS:HG3 | 1:B:42:GLU:HA | 4 | 0.59 |
| (2,592) | 1:B:72:LYS:HG2 | 1:B:71:ASP:HA | 4 | 0.59 |
| (2,412) | 1:B:26:ILE:HG13 | 1:B:86:GLY:HA2 | 5 | 0.59 |
| (2,412) | 1:B:31:ILE:HG12 | 1:B:28:LYS:HA | 5 | 0.59 |
| (2,155) | 1:B:87:GLU:HG3 | 1:B:65:LEU:HD11 | 9 | 0.59 |
| (2,155) | 1:B:87:GLU:HG3 | 1:B:65:LEU:HD12 | 9 | 0.59 |
| (2,155) | 1:B:87:GLU:HG3 | 1:B:65:LEU:HD13 | 9 | 0.59 |
| (2,155) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HG12 | 9 | 0.59 |
| (2,144) | 1:B:56:GLU:HG3 | 1:B:53:LEU:HG | 5 | 0.59 |
| (2,144) | 1:B:87:GLU:HG3 | 1:B:83:ARG:HG3 | 5 | 0.59 |
| (2,144) | 1:B:87:GLU:HG3 | 1:B:85:LEU:HG | 5 | 0.59 |
| (2,144) | 1:B:87:GLU:HG3 | 1:B:91:LYS:HD3 | 5 | 0.59 |
| (2,144) | 1:B:87:GLU:HG3 | 1:B:91:LYS:HD2 | 5 | 0.59 |
| (2,144) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HB | 5 | 0.59 |
| (2,140) | 1:B:64:GLU:HG2 | 1:B:60:LYS:HG3 | 4 | 0.59 |
| (2,140) | 1:B:64:GLU:HG3 | 1:B:60:LYS:HG3 | 4 | 0.59 |
| (2,140) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB1 | 4 | 0.59 |
| (2,140) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB3 | 4 | 0.59 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|-----------------|-----------------|----------|---------------|
| (2,140) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB2 | 4 | 0.59 |
| (1,721) | 1:B:90:GLY:HA3 | 1:B:93:PHE:HD2 | 7 | 0.59 |
| (1,721) | 1:B:90:GLY:HA3 | 1:B:93:PHE:HD1 | 7 | 0.59 |
| (1,672) | 1:B:21:LEU:H | 1:B:20:PRO:HD3 | 1 | 0.59 |
| (1,672) | 1:B:21:LEU:H | 1:B:20:PRO:HD3 | 2 | 0.59 |
| (1,672) | 1:B:21:LEU:H | 1:B:20:PRO:HD3 | 7 | 0.59 |
| (1,672) | 1:B:21:LEU:H | 1:B:20:PRO:HD3 | 8 | 0.59 |
| (1,58) | 1:B:36:LEU:HB2 | 1:B:30:PHE:HB2 | 3 | 0.59 |
| (1,447) | 1:B:60:LYS:HG3 | 1:B:61:CYS:HA | 10 | 0.59 |
| (2,552) | 1:B:64:GLU:HG2 | 1:B:60:LYS:HG3 | 4 | 0.58 |
| (2,552) | 1:B:64:GLU:HG3 | 1:B:60:LYS:HG3 | 4 | 0.58 |
| (2,412) | 1:B:26:ILE:HG13 | 1:B:86:GLY:HA2 | 1 | 0.58 |
| (2,412) | 1:B:31:ILE:HG12 | 1:B:28:LYS:HA | 1 | 0.58 |
| (2,286) | 1:B:42:GLU:HB2 | 1:B:39:ARG:HG2 | 1 | 0.58 |
| (2,286) | 1:B:65:LEU:HB2 | 1:B:64:GLU:HB3 | 1 | 0.58 |
| (2,286) | 1:B:42:GLU:HB2 | 1:B:39:ARG:HG2 | 7 | 0.58 |
| (2,286) | 1:B:65:LEU:HB2 | 1:B:64:GLU:HB3 | 7 | 0.58 |
| (1,672) | 1:B:21:LEU:H | 1:B:20:PRO:HD3 | 5 | 0.58 |
| (1,672) | 1:B:21:LEU:H | 1:B:20:PRO:HD3 | 6 | 0.58 |
| (1,463) | 1:B:96:LYS:HB3 | 1:B:93:PHE:HA | 10 | 0.58 |
| (1,188) | 1:B:96:LYS:H | 1:B:96:LYS:HB3 | 10 | 0.58 |
| (1,185) | 1:B:101:LYS:H | 1:B:101:LYS:HB3 | 4 | 0.58 |
| (2,955) | 1:B:6:PRO:HB3 | 1:B:7:ASN:HB3 | 5 | 0.57 |
| (2,955) | 1:B:8:GLU:HB2 | 1:B:7:ASN:HB3 | 5 | 0.57 |
| (2,955) | 1:B:8:GLU:HB3 | 1:B:7:ASN:HB3 | 5 | 0.57 |
| (2,564) | 1:B:36:LEU:HD21 | 1:B:30:PHE:HA | 2 | 0.57 |
| (2,564) | 1:B:36:LEU:HD23 | 1:B:30:PHE:HA | 2 | 0.57 |
| (2,564) | 1:B:36:LEU:HD22 | 1:B:30:PHE:HA | 2 | 0.57 |
| (2,564) | 1:B:85:LEU:HD11 | 1:B:82:GLY:HA3 | 2 | 0.57 |
| (2,564) | 1:B:85:LEU:HD12 | 1:B:82:GLY:HA3 | 2 | 0.57 |
| (2,564) | 1:B:85:LEU:HD13 | 1:B:82:GLY:HA3 | 2 | 0.57 |
| (2,412) | 1:B:26:ILE:HG13 | 1:B:86:GLY:HA2 | 2 | 0.57 |
| (2,412) | 1:B:31:ILE:HG12 | 1:B:28:LYS:HA | 2 | 0.57 |
| (2,412) | 1:B:26:ILE:HG13 | 1:B:86:GLY:HA2 | 6 | 0.57 |
| (2,412) | 1:B:31:ILE:HG12 | 1:B:28:LYS:HA | 6 | 0.57 |
| (1,969) | 1:B:14:TRP:HZ3 | 1:B:62:GLN:HG3 | 5 | 0.57 |
| (1,718) | 1:B:90:GLY:HA3 | 1:B:94:ALA:H | 9 | 0.57 |
| (1,380) | 1:B:81:TRP:HE1 | 1:B:70:PRO:HG2 | 1 | 0.57 |
| (1,282) | 1:B:60:LYS:HD3 | 1:B:57:SER:HA | 1 | 0.57 |
| (1,282) | 1:B:60:LYS:HD3 | 1:B:57:SER:HA | 10 | 0.57 |
| (1,278) | 1:B:64:GLU:HB3 | 1:B:61:CYS:HB3 | 9 | 0.57 |
| (1,262) | 1:B:11:LYS:H | 1:B:11:LYS:HB2 | 1 | 0.57 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|----------------|-----------------|----------|---------------|
| (1,262) | 1:B:11:LYS:H | 1:B:11:LYS:HB2 | 4 | 0.57 |
| (1,188) | 1:B:96:LYS:H | 1:B:96:LYS:HB3 | 5 | 0.57 |
| (1,137) | 1:B:41:ASP:H | 1:B:40:PHE:HB2 | 9 | 0.57 |
| (1,1012) | 1:B:50:CYS:H | 1:B:27:CYS:HB3 | 10 | 0.57 |
| (2,882) | 1:B:93:PHE:HB3 | 1:B:90:GLY:HA3 | 2 | 0.56 |
| (2,882) | 1:B:93:PHE:HB2 | 1:B:90:GLY:HA3 | 2 | 0.56 |
| (2,592) | 1:B:44:LYS:HG3 | 1:B:42:GLU:HA | 9 | 0.56 |
| (2,592) | 1:B:72:LYS:HG2 | 1:B:71:ASP:HA | 9 | 0.56 |
| (1,677) | 1:B:5:ASN:HA | 1:B:6:PRO:HD2 | 3 | 0.56 |
| (1,677) | 1:B:5:ASN:HA | 1:B:6:PRO:HD2 | 7 | 0.56 |
| (1,565) | 1:B:71:ASP:HA | 1:B:11:LYS:HD3 | 7 | 0.56 |
| (1,379) | 1:B:57:SER:HB2 | 1:B:54:ILE:HD12 | 9 | 0.56 |
| (1,379) | 1:B:57:SER:HB2 | 1:B:54:ILE:HD11 | 9 | 0.56 |
| (1,379) | 1:B:57:SER:HB2 | 1:B:54:ILE:HD13 | 9 | 0.56 |
| (1,294) | 1:B:48:GLU:HB3 | 1:B:46:THR:HB | 3 | 0.56 |
| (1,262) | 1:B:11:LYS:H | 1:B:11:LYS:HB2 | 3 | 0.56 |
| (1,262) | 1:B:11:LYS:H | 1:B:11:LYS:HB2 | 5 | 0.56 |
| (1,262) | 1:B:11:LYS:H | 1:B:11:LYS:HB2 | 6 | 0.56 |
| (1,262) | 1:B:11:LYS:H | 1:B:11:LYS:HB2 | 7 | 0.56 |
| (1,262) | 1:B:11:LYS:H | 1:B:11:LYS:HB2 | 8 | 0.56 |
| (1,262) | 1:B:11:LYS:H | 1:B:11:LYS:HB2 | 9 | 0.56 |
| (1,24) | 1:B:36:LEU:H | 1:B:33:ASP:HB2 | 10 | 0.56 |
| (1,185) | 1:B:101:LYS:H | 1:B:101:LYS:HB3 | 2 | 0.56 |
| (1,185) | 1:B:101:LYS:H | 1:B:101:LYS:HB3 | 5 | 0.56 |
| (1,185) | 1:B:101:LYS:H | 1:B:101:LYS:HB3 | 8 | 0.56 |
| (1,185) | 1:B:101:LYS:H | 1:B:101:LYS:HB3 | 9 | 0.56 |
| (1,185) | 1:B:101:LYS:H | 1:B:101:LYS:HB3 | 10 | 0.56 |
| (1,1068) | 1:B:30:PHE:H | 1:B:31:ILE:HG12 | 8 | 0.56 |
| (1,1012) | 1:B:50:CYS:H | 1:B:27:CYS:HB3 | 7 | 0.56 |
| (2,286) | 1:B:42:GLU:HB2 | 1:B:39:ARG:HG2 | 4 | 0.55 |
| (2,286) | 1:B:65:LEU:HB2 | 1:B:64:GLU:HB3 | 4 | 0.55 |
| (1,937) | 1:B:73:ILE:H | 1:B:72:LYS:HG3 | 1 | 0.55 |
| (1,92) | 1:B:30:PHE:HB2 | 1:B:40:PHE:HB3 | 9 | 0.55 |
| (1,736) | 1:B:11:LYS:HD2 | 1:B:66:TYR:HE1 | 1 | 0.55 |
| (1,736) | 1:B:11:LYS:HD2 | 1:B:66:TYR:HE2 | 1 | 0.55 |
| (1,718) | 1:B:90:GLY:HA3 | 1:B:94:ALA:H | 6 | 0.55 |
| (1,672) | 1:B:21:LEU:H | 1:B:20:PRO:HD3 | 4 | 0.55 |
| (1,447) | 1:B:60:LYS:HG3 | 1:B:61:CYS:HA | 6 | 0.55 |
| (1,307) | 1:B:48:GLU:H | 1:B:48:GLU:HB3 | 8 | 0.55 |
| (1,262) | 1:B:11:LYS:H | 1:B:11:LYS:HB2 | 2 | 0.55 |
| (1,262) | 1:B:11:LYS:H | 1:B:11:LYS:HB2 | 10 | 0.55 |
| (1,1229) | 1:B:96:LYS:H | 1:B:98:LEU:HB3 | 6 | 0.55 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1169) | 1:B:51:VAL:H | 1:B:27:CYS:HB3 | 6 | 0.55 |
| (1,1012) | 1:B:50:CYS:H | 1:B:27:CYS:HB3 | 6 | 0.55 |
| (2,932) | 1:B:-1:LYS:HE2 | 1:B:-1:LYS:HB2 | 9 | 0.54 |
| (2,932) | 1:B:44:LYS:HE3 | 1:B:44:LYS:HB2 | 9 | 0.54 |
| (2,932) | 1:B:44:LYS:HE2 | 1:B:44:LYS:HB2 | 9 | 0.54 |
| (2,932) | 1:B:60:LYS:HE3 | 1:B:60:LYS:HB2 | 9 | 0.54 |
| (2,65) | 1:B:72:LYS:HE3 | 1:B:72:LYS:HG3 | 1 | 0.54 |
| (2,65) | 1:B:72:LYS:HE2 | 1:B:72:LYS:HG3 | 1 | 0.54 |
| (2,409) | 1:B:56:GLU:HG2 | 1:B:96:LYS:HD3 | 3 | 0.54 |
| (2,409) | 1:B:97:HIS:HB3 | 1:B:96:LYS:HD3 | 3 | 0.54 |
| (2,409) | 1:B:56:GLU:HG2 | 1:B:96:LYS:HD2 | 3 | 0.54 |
| (2,409) | 1:B:97:HIS:HB3 | 1:B:96:LYS:HD2 | 3 | 0.54 |
| (2,155) | 1:B:87:GLU:HG3 | 1:B:65:LEU:HD11 | 10 | 0.54 |
| (2,155) | 1:B:87:GLU:HG3 | 1:B:65:LEU:HD12 | 10 | 0.54 |
| (2,155) | 1:B:87:GLU:HG3 | 1:B:65:LEU:HD13 | 10 | 0.54 |
| (2,155) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HG12 | 10 | 0.54 |
| (1,982) | 1:B:91:LYS:H | 1:B:91:LYS:HG3 | 5 | 0.54 |
| (1,822) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HA | 3 | 0.54 |
| (1,822) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HA | 5 | 0.54 |
| (1,307) | 1:B:48:GLU:H | 1:B:48:GLU:HB3 | 2 | 0.54 |
| (1,307) | 1:B:48:GLU:H | 1:B:48:GLU:HB3 | 4 | 0.54 |
| (1,307) | 1:B:48:GLU:H | 1:B:48:GLU:HB3 | 9 | 0.54 |
| (1,307) | 1:B:48:GLU:H | 1:B:48:GLU:HB3 | 10 | 0.54 |
| (1,188) | 1:B:96:LYS:H | 1:B:96:LYS:HB3 | 1 | 0.54 |
| (1,1349) | 1:B:15:LEU:H | 1:B:11:LYS:HB3 | 3 | 0.54 |
| (1,1349) | 1:B:15:LEU:H | 1:B:11:LYS:HB3 | 5 | 0.54 |
| (1,1062) | 1:B:11:LYS:H | 1:B:72:LYS:HG3 | 8 | 0.54 |
| (2,87) | 1:B:74:ASN:HB3 | 1:B:8:GLU:HB2 | 5 | 0.53 |
| (2,87) | 1:B:74:ASN:HB3 | 1:B:8:GLU:HB3 | 5 | 0.53 |
| (2,87) | 1:B:93:PHE:HB3 | 1:B:53:LEU:HB2 | 5 | 0.53 |
| (2,87) | 1:B:93:PHE:HB2 | 1:B:53:LEU:HB2 | 5 | 0.53 |
| (1,822) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HA | 6 | 0.53 |
| (1,718) | 1:B:90:GLY:HA3 | 1:B:94:ALA:H | 2 | 0.53 |
| (1,307) | 1:B:48:GLU:H | 1:B:48:GLU:HB3 | 1 | 0.53 |
| (1,307) | 1:B:48:GLU:H | 1:B:48:GLU:HB3 | 3 | 0.53 |
| (1,307) | 1:B:48:GLU:H | 1:B:48:GLU:HB3 | 5 | 0.53 |
| (1,307) | 1:B:48:GLU:H | 1:B:48:GLU:HB3 | 7 | 0.53 |
| (1,24) | 1:B:36:LEU:H | 1:B:33:ASP:HB2 | 8 | 0.53 |
| (1,1169) | 1:B:51:VAL:H | 1:B:27:CYS:HB3 | 8 | 0.53 |
| (1,1062) | 1:B:11:LYS:H | 1:B:72:LYS:HG3 | 7 | 0.53 |
| (2,412) | 1:B:26:ILE:HG13 | 1:B:86:GLY:HA2 | 4 | 0.52 |
| (2,412) | 1:B:31:ILE:HG12 | 1:B:28:LYS:HA | 4 | 0.52 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,1203) | 1:B:89:ILE:H | 1:B:60:LYS:HD3 | 5 | 0.52 |
| (2,1203) | 1:B:89:ILE:H | 1:B:91:LYS:HG3 | 5 | 0.52 |
| (1,88) | 1:B:30:PHE:H | 1:B:30:PHE:HB3 | 1 | 0.52 |
| (1,88) | 1:B:30:PHE:H | 1:B:30:PHE:HB3 | 6 | 0.52 |
| (1,88) | 1:B:30:PHE:H | 1:B:30:PHE:HB3 | 10 | 0.52 |
| (1,391) | 1:B:99:ILE:HG12 | 1:B:94:ALA:HB1 | 2 | 0.52 |
| (1,391) | 1:B:99:ILE:HG12 | 1:B:94:ALA:HB3 | 2 | 0.52 |
| (1,391) | 1:B:99:ILE:HG12 | 1:B:94:ALA:HB2 | 2 | 0.52 |
| (1,317) | 1:B:31:ILE:H | 1:B:31:ILE:HG12 | 7 | 0.52 |
| (1,185) | 1:B:101:LYS:H | 1:B:101:LYS:HB3 | 1 | 0.52 |
| (1,1229) | 1:B:96:LYS:H | 1:B:98:LEU:HB3 | 4 | 0.52 |
| (1,937) | 1:B:73:ILE:H | 1:B:72:LYS:HG3 | 7 | 0.51 |
| (1,88) | 1:B:30:PHE:H | 1:B:30:PHE:HB3 | 4 | 0.51 |
| (1,88) | 1:B:30:PHE:H | 1:B:30:PHE:HB3 | 7 | 0.51 |
| (1,88) | 1:B:30:PHE:H | 1:B:30:PHE:HB3 | 9 | 0.51 |
| (1,822) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HA | 7 | 0.51 |
| (1,307) | 1:B:48:GLU:H | 1:B:48:GLU:HB3 | 6 | 0.51 |
| (1,1349) | 1:B:15:LEU:H | 1:B:11:LYS:HB3 | 8 | 0.51 |
| (1,1269) | 1:B:10:THR:H | 1:B:72:LYS:HG3 | 6 | 0.51 |
| (1,1169) | 1:B:51:VAL:H | 1:B:27:CYS:HB3 | 2 | 0.51 |
| (1,1012) | 1:B:50:CYS:H | 1:B:27:CYS:HB3 | 2 | 0.51 |
| (2,87) | 1:B:74:ASN:HB3 | 1:B:8:GLU:HB2 | 9 | 0.5 |
| (2,87) | 1:B:74:ASN:HB3 | 1:B:8:GLU:HB3 | 9 | 0.5 |
| (2,87) | 1:B:93:PHE:HB3 | 1:B:53:LEU:HB2 | 9 | 0.5 |
| (2,87) | 1:B:93:PHE:HB2 | 1:B:53:LEU:HB2 | 9 | 0.5 |
| (1,88) | 1:B:30:PHE:H | 1:B:30:PHE:HB3 | 2 | 0.5 |
| (1,88) | 1:B:30:PHE:H | 1:B:30:PHE:HB3 | 3 | 0.5 |
| (1,88) | 1:B:30:PHE:H | 1:B:30:PHE:HB3 | 8 | 0.5 |
| (1,736) | 1:B:11:LYS:HD2 | 1:B:66:TYR:HE1 | 7 | 0.5 |
| (1,736) | 1:B:11:LYS:HD2 | 1:B:66:TYR:HE2 | 7 | 0.5 |
| (1,718) | 1:B:90:GLY:HA3 | 1:B:94:ALA:H | 7 | 0.5 |
| (1,697) | 1:B:85:LEU:H | 1:B:82:GLY:HA3 | 9 | 0.5 |
| (1,391) | 1:B:99:ILE:HG12 | 1:B:94:ALA:HB1 | 3 | 0.5 |
| (1,391) | 1:B:99:ILE:HG12 | 1:B:94:ALA:HB3 | 3 | 0.5 |
| (1,391) | 1:B:99:ILE:HG12 | 1:B:94:ALA:HB2 | 3 | 0.5 |
| (1,317) | 1:B:31:ILE:H | 1:B:31:ILE:HG12 | 4 | 0.5 |
| (1,317) | 1:B:31:ILE:H | 1:B:31:ILE:HG12 | 6 | 0.5 |
| (1,317) | 1:B:31:ILE:H | 1:B:31:ILE:HG12 | 9 | 0.5 |
| (1,24) | 1:B:36:LEU:H | 1:B:33:ASP:HB2 | 3 | 0.5 |
| (1,1068) | 1:B:30:PHE:H | 1:B:31:ILE:HG12 | 2 | 0.5 |
| (2,144) | 1:B:56:GLU:HG3 | 1:B:53:LEU:HG | 8 | 0.49 |
| (2,144) | 1:B:87:GLU:HG3 | 1:B:83:ARG:HG3 | 8 | 0.49 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,144) | 1:B:87:GLU:HG3 | 1:B:85:LEU:HG | 8 | 0.49 |
| (2,144) | 1:B:87:GLU:HG3 | 1:B:91:LYS:HD3 | 8 | 0.49 |
| (2,144) | 1:B:87:GLU:HG3 | 1:B:91:LYS:HD2 | 8 | 0.49 |
| (2,144) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HB | 8 | 0.49 |
| (2,1030) | 1:B:44:LYS:HD3 | 1:B:41:ASP:HB2 | 9 | 0.49 |
| (2,1030) | 1:B:44:LYS:HD2 | 1:B:41:ASP:HB2 | 9 | 0.49 |
| (2,1030) | 1:B:54:ILE:HG12 | 1:B:27:CYS:HB3 | 9 | 0.49 |
| (1,88) | 1:B:30:PHE:H | 1:B:30:PHE:HB3 | 5 | 0.49 |
| (1,822) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HA | 4 | 0.49 |
| (1,677) | 1:B:5:ASN:HA | 1:B:6:PRO:HD2 | 1 | 0.49 |
| (1,317) | 1:B:31:ILE:H | 1:B:31:ILE:HG12 | 1 | 0.49 |
| (1,282) | 1:B:60:LYS:HD3 | 1:B:57:SER:HA | 8 | 0.49 |
| (1,278) | 1:B:64:GLU:HB3 | 1:B:61:CYS:HB3 | 10 | 0.49 |
| (1,188) | 1:B:96:LYS:H | 1:B:96:LYS:HB3 | 2 | 0.49 |
| (1,1269) | 1:B:10:THR:H | 1:B:72:LYS:HG3 | 1 | 0.49 |
| (1,1088) | 1:B:49:GLN:H | 1:B:48:GLU:HB3 | 5 | 0.49 |
| (1,1068) | 1:B:30:PHE:H | 1:B:31:ILE:HG12 | 7 | 0.49 |
| (1,1062) | 1:B:11:LYS:H | 1:B:72:LYS:HG3 | 1 | 0.49 |
| (1,1062) | 1:B:11:LYS:H | 1:B:72:LYS:HG3 | 3 | 0.49 |
| (2,967) | 1:B:56:GLU:HG2 | 1:B:96:LYS:HE3 | 3 | 0.48 |
| (2,967) | 1:B:56:GLU:HG2 | 1:B:96:LYS:HE2 | 3 | 0.48 |
| (2,967) | 1:B:64:GLU:HG3 | 1:B:63:ASP:HB3 | 3 | 0.48 |
| (2,87) | 1:B:74:ASN:HB3 | 1:B:8:GLU:HB2 | 10 | 0.48 |
| (2,87) | 1:B:74:ASN:HB3 | 1:B:8:GLU:HB3 | 10 | 0.48 |
| (2,87) | 1:B:93:PHE:HB3 | 1:B:53:LEU:HB2 | 10 | 0.48 |
| (2,87) | 1:B:93:PHE:HB2 | 1:B:53:LEU:HB2 | 10 | 0.48 |
| (2,39) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD21 | 10 | 0.48 |
| (2,39) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD23 | 10 | 0.48 |
| (2,39) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD22 | 10 | 0.48 |
| (2,39) | 1:B:61:CYS:HB2 | 1:B:89:ILE:HD11 | 10 | 0.48 |
| (2,39) | 1:B:61:CYS:HB2 | 1:B:89:ILE:HD13 | 10 | 0.48 |
| (2,39) | 1:B:61:CYS:HB2 | 1:B:89:ILE:HD12 | 10 | 0.48 |
| (2,27) | 1:B:33:ASP:HB3 | 1:B:36:LEU:HD21 | 8 | 0.48 |
| (2,27) | 1:B:33:ASP:HB3 | 1:B:36:LEU:HD23 | 8 | 0.48 |
| (2,27) | 1:B:33:ASP:HB3 | 1:B:36:LEU:HD22 | 8 | 0.48 |
| (2,27) | 1:B:24:ASP:HB3 | 1:B:25:LEU:HD12 | 8 | 0.48 |
| (2,27) | 1:B:24:ASP:HB3 | 1:B:25:LEU:HD11 | 8 | 0.48 |
| (2,27) | 1:B:24:ASP:HB3 | 1:B:25:LEU:HD13 | 8 | 0.48 |
| (2,228) | 1:B:21:LEU:H | 1:B:20:PRO:HB3 | 2 | 0.48 |
| (2,228) | 1:B:38:LYS:H | 1:B:37:LYS:HB2 | 2 | 0.48 |
| (1,937) | 1:B:73:ILE:H | 1:B:72:LYS:HG3 | 4 | 0.48 |
| (1,921) | 1:B:85:LEU:H | 1:B:84:SER:HB2 | 10 | 0.48 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|----------------|-----------------|----------|---------------|
| (1,60) | 1:B:36:LEU:HB2 | 1:B:36:LEU:HD21 | 2 | 0.48 |
| (1,60) | 1:B:36:LEU:HB2 | 1:B:36:LEU:HD23 | 2 | 0.48 |
| (1,60) | 1:B:36:LEU:HB2 | 1:B:36:LEU:HD22 | 2 | 0.48 |
| (1,60) | 1:B:36:LEU:HB2 | 1:B:36:LEU:HD21 | 8 | 0.48 |
| (1,60) | 1:B:36:LEU:HB2 | 1:B:36:LEU:HD23 | 8 | 0.48 |
| (1,60) | 1:B:36:LEU:HB2 | 1:B:36:LEU:HD22 | 8 | 0.48 |
| (1,60) | 1:B:36:LEU:HB2 | 1:B:36:LEU:HD21 | 9 | 0.48 |
| (1,60) | 1:B:36:LEU:HB2 | 1:B:36:LEU:HD23 | 9 | 0.48 |
| (1,60) | 1:B:36:LEU:HB2 | 1:B:36:LEU:HD22 | 9 | 0.48 |
| (1,60) | 1:B:36:LEU:HB2 | 1:B:36:LEU:HD21 | 10 | 0.48 |
| (1,60) | 1:B:36:LEU:HB2 | 1:B:36:LEU:HD23 | 10 | 0.48 |
| (1,60) | 1:B:36:LEU:HB2 | 1:B:36:LEU:HD22 | 10 | 0.48 |
| (1,447) | 1:B:60:LYS:HG3 | 1:B:61:CYS:HA | 1 | 0.48 |
| (1,447) | 1:B:60:LYS:HG3 | 1:B:61:CYS:HA | 2 | 0.48 |
| (1,379) | 1:B:57:SER:HB2 | 1:B:54:ILE:HD12 | 8 | 0.48 |
| (1,379) | 1:B:57:SER:HB2 | 1:B:54:ILE:HD11 | 8 | 0.48 |
| (1,379) | 1:B:57:SER:HB2 | 1:B:54:ILE:HD13 | 8 | 0.48 |
| (1,317) | 1:B:31:ILE:H | 1:B:31:ILE:HG12 | 8 | 0.48 |
| (1,317) | 1:B:31:ILE:H | 1:B:31:ILE:HG12 | 10 | 0.48 |
| (1,252) | 1:B:45:MET:HB2 | 1:B:40:PHE:HA | 1 | 0.48 |
| (1,24) | 1:B:36:LEU:H | 1:B:33:ASP:HB2 | 6 | 0.48 |
| (1,188) | 1:B:96:LYS:H | 1:B:96:LYS:HB3 | 6 | 0.48 |
| (1,1349) | 1:B:15:LEU:H | 1:B:11:LYS:HB3 | 9 | 0.48 |
| (1,120) | 1:B:48:GLU:H | 1:B:47:TYR:HB2 | 1 | 0.48 |
| (1,1012) | 1:B:50:CYS:H | 1:B:27:CYS:HB3 | 9 | 0.48 |
| (2,228) | 1:B:21:LEU:H | 1:B:20:PRO:HB3 | 3 | 0.47 |
| (2,228) | 1:B:38:LYS:H | 1:B:37:LYS:HB2 | 3 | 0.47 |
| (2,228) | 1:B:21:LEU:H | 1:B:20:PRO:HB3 | 8 | 0.47 |
| (2,228) | 1:B:38:LYS:H | 1:B:37:LYS:HB2 | 8 | 0.47 |
| (2,1502) | 1:B:38:LYS:H | 1:B:37:LYS:HB2 | 3 | 0.47 |
| (2,1502) | 1:B:38:LYS:H | 1:B:38:LYS:HD2 | 3 | 0.47 |
| (2,144) | 1:B:56:GLU:HG3 | 1:B:53:LEU:HG | 9 | 0.47 |
| (2,144) | 1:B:87:GLU:HG3 | 1:B:83:ARG:HG3 | 9 | 0.47 |
| (2,144) | 1:B:87:GLU:HG3 | 1:B:85:LEU:HG | 9 | 0.47 |
| (2,144) | 1:B:87:GLU:HG3 | 1:B:91:LYS:HD3 | 9 | 0.47 |
| (2,144) | 1:B:87:GLU:HG3 | 1:B:91:LYS:HD2 | 9 | 0.47 |
| (2,144) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HB | 9 | 0.47 |
| (2,140) | 1:B:64:GLU:HG2 | 1:B:60:LYS:HG3 | 7 | 0.47 |
| (2,140) | 1:B:64:GLU:HG3 | 1:B:60:LYS:HG3 | 7 | 0.47 |
| (2,140) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB1 | 7 | 0.47 |
| (2,140) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB3 | 7 | 0.47 |
| (2,140) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB2 | 7 | 0.47 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,1103) | 1:B:36:LEU:HD12 | 1:B:35:ASP:HB2 | 8 | 0.47 |
| (2,1103) | 1:B:36:LEU:HD11 | 1:B:35:ASP:HB2 | 8 | 0.47 |
| (2,1103) | 1:B:36:LEU:HD13 | 1:B:35:ASP:HB2 | 8 | 0.47 |
| (2,1103) | 1:B:24:ASP:HB2 | 1:B:21:LEU:HD23 | 8 | 0.47 |
| (2,1103) | 1:B:24:ASP:HB2 | 1:B:21:LEU:HD21 | 8 | 0.47 |
| (2,1103) | 1:B:24:ASP:HB2 | 1:B:21:LEU:HD22 | 8 | 0.47 |
| (1,937) | 1:B:73:ILE:H | 1:B:72:LYS:HG3 | 9 | 0.47 |
| (1,92) | 1:B:30:PHE:HB2 | 1:B:40:PHE:HB3 | 5 | 0.47 |
| (1,699) | 1:B:82:GLY:HA3 | 1:B:14:TRP:HH2 | 1 | 0.47 |
| (1,697) | 1:B:85:LEU:H | 1:B:82:GLY:HA3 | 3 | 0.47 |
| (1,697) | 1:B:85:LEU:H | 1:B:82:GLY:HA3 | 10 | 0.47 |
| (1,317) | 1:B:31:ILE:H | 1:B:31:ILE:HG12 | 2 | 0.47 |
| (1,269) | 1:B:18:MET:HG3 | 1:B:18:MET:HA | 8 | 0.47 |
| (1,215) | 1:B:6:PRO:HB2 | 1:B:6:PRO:HA | 1 | 0.47 |
| (1,188) | 1:B:96:LYS:H | 1:B:96:LYS:HB3 | 3 | 0.47 |
| (1,1068) | 1:B:30:PHE:H | 1:B:31:ILE:HG12 | 10 | 0.47 |
| (2,959) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HB3 | 4 | 0.46 |
| (2,959) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HD3 | 4 | 0.46 |
| (2,959) | 1:B:88:CYS:HB2 | 1:B:89:ILE:HG13 | 4 | 0.46 |
| (2,592) | 1:B:44:LYS:HG3 | 1:B:42:GLU:HA | 8 | 0.46 |
| (2,592) | 1:B:72:LYS:HG2 | 1:B:71:ASP:HA | 8 | 0.46 |
| (2,4) | 1:B:53:LEU:HB2 | 1:B:49:GLN:HG3 | 5 | 0.46 |
| (2,4) | 1:B:53:LEU:HB2 | 1:B:56:GLU:HG3 | 5 | 0.46 |
| (2,4) | 1:B:65:LEU:HB2 | 1:B:64:GLU:HB3 | 5 | 0.46 |
| (2,286) | 1:B:42:GLU:HB2 | 1:B:39:ARG:HG2 | 5 | 0.46 |
| (2,286) | 1:B:65:LEU:HB2 | 1:B:64:GLU:HB3 | 5 | 0.46 |
| (2,228) | 1:B:21:LEU:H | 1:B:20:PRO:HB3 | 7 | 0.46 |
| (2,228) | 1:B:38:LYS:H | 1:B:37:LYS:HB2 | 7 | 0.46 |
| (2,228) | 1:B:21:LEU:H | 1:B:20:PRO:HB3 | 9 | 0.46 |
| (2,228) | 1:B:38:LYS:H | 1:B:37:LYS:HB2 | 9 | 0.46 |
| (2,154) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HG13 | 5 | 0.46 |
| (2,154) | 1:B:56:GLU:HG3 | 1:B:53:LEU:HB3 | 5 | 0.46 |
| (2,154) | 1:B:56:GLU:HG3 | 1:B:96:LYS:HD2 | 5 | 0.46 |
| (1,937) | 1:B:73:ILE:H | 1:B:72:LYS:HG3 | 5 | 0.46 |
| (1,937) | 1:B:73:ILE:H | 1:B:72:LYS:HG3 | 6 | 0.46 |
| (1,937) | 1:B:73:ILE:H | 1:B:72:LYS:HG3 | 8 | 0.46 |
| (1,822) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HA | 9 | 0.46 |
| (1,753) | 1:B:54:ILE:HA | 1:B:53:LEU:HB3 | 9 | 0.46 |
| (1,565) | 1:B:71:ASP:HA | 1:B:11:LYS:HD3 | 2 | 0.46 |
| (1,282) | 1:B:60:LYS:HD3 | 1:B:57:SER:HA | 4 | 0.46 |
| (1,24) | 1:B:36:LEU:H | 1:B:33:ASP:HB2 | 9 | 0.46 |
| (1,194) | 1:B:60:LYS:HB3 | 1:B:60:LYS:HA | 9 | 0.46 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|-----------------|-----------------|----------|---------------|
| (1,120) | 1:B:48:GLU:H | 1:B:47:TYR:HB2 | 7 | 0.46 |
| (2,955) | 1:B:6:PRO:HB3 | 1:B:7:ASN:HB3 | 4 | 0.45 |
| (2,955) | 1:B:8:GLU:HB2 | 1:B:7:ASN:HB3 | 4 | 0.45 |
| (2,955) | 1:B:8:GLU:HB3 | 1:B:7:ASN:HB3 | 4 | 0.45 |
| (2,937) | 1:B:35:ASP:HB2 | 1:B:36:LEU:HB2 | 7 | 0.45 |
| (2,937) | 1:B:35:ASP:HB2 | 1:B:37:LYS:HB3 | 7 | 0.45 |
| (2,937) | 1:B:24:ASP:HB2 | 1:B:23:PRO:HG3 | 7 | 0.45 |
| (2,592) | 1:B:44:LYS:HG3 | 1:B:42:GLU:HA | 5 | 0.45 |
| (2,592) | 1:B:72:LYS:HG2 | 1:B:71:ASP:HA | 5 | 0.45 |
| (2,412) | 1:B:26:ILE:HG13 | 1:B:86:GLY:HA2 | 3 | 0.45 |
| (2,412) | 1:B:31:ILE:HG12 | 1:B:28:LYS:HA | 3 | 0.45 |
| (2,228) | 1:B:21:LEU:H | 1:B:20:PRO:HB3 | 1 | 0.45 |
| (2,228) | 1:B:38:LYS:H | 1:B:37:LYS:HB2 | 1 | 0.45 |
| (2,228) | 1:B:21:LEU:H | 1:B:20:PRO:HB3 | 10 | 0.45 |
| (2,228) | 1:B:38:LYS:H | 1:B:37:LYS:HB2 | 10 | 0.45 |
| (2,155) | 1:B:87:GLU:HG3 | 1:B:65:LEU:HD11 | 7 | 0.45 |
| (2,155) | 1:B:87:GLU:HG3 | 1:B:65:LEU:HD12 | 7 | 0.45 |
| (2,155) | 1:B:87:GLU:HG3 | 1:B:65:LEU:HD13 | 7 | 0.45 |
| (2,155) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HG12 | 7 | 0.45 |
| (1,718) | 1:B:90:GLY:HA3 | 1:B:94:ALA:H | 5 | 0.45 |
| (1,485) | 1:B:98:LEU:HD21 | 1:B:40:PHE:HB3 | 9 | 0.45 |
| (1,485) | 1:B:98:LEU:HD22 | 1:B:40:PHE:HB3 | 9 | 0.45 |
| (1,485) | 1:B:98:LEU:HD23 | 1:B:40:PHE:HB3 | 9 | 0.45 |
| (1,463) | 1:B:96:LYS:HB3 | 1:B:93:PHE:HA | 6 | 0.45 |
| (1,392) | 1:B:99:ILE:H | 1:B:99:ILE:HG12 | 2 | 0.45 |
| (1,373) | 1:B:92:ASP:HB2 | 1:B:57:SER:HB3 | 4 | 0.45 |
| (1,365) | 1:B:36:LEU:H | 1:B:36:LEU:HG | 3 | 0.45 |
| (1,294) | 1:B:48:GLU:HB3 | 1:B:46:THR:HB | 6 | 0.45 |
| (1,24) | 1:B:36:LEU:H | 1:B:33:ASP:HB2 | 2 | 0.45 |
| (1,194) | 1:B:60:LYS:HB3 | 1:B:60:LYS:HA | 1 | 0.45 |
| (1,194) | 1:B:60:LYS:HB3 | 1:B:60:LYS:HA | 2 | 0.45 |
| (1,194) | 1:B:60:LYS:HB3 | 1:B:60:LYS:HA | 3 | 0.45 |
| (1,194) | 1:B:60:LYS:HB3 | 1:B:60:LYS:HA | 4 | 0.45 |
| (1,194) | 1:B:60:LYS:HB3 | 1:B:60:LYS:HA | 6 | 0.45 |
| (1,194) | 1:B:60:LYS:HB3 | 1:B:60:LYS:HA | 7 | 0.45 |
| (1,194) | 1:B:60:LYS:HB3 | 1:B:60:LYS:HA | 8 | 0.45 |
| (1,194) | 1:B:60:LYS:HB3 | 1:B:60:LYS:HA | 10 | 0.45 |
| (2,824) | 1:B:73:ILE:HG22 | 1:B:11:LYS:HB3 | 4 | 0.44 |
| (2,824) | 1:B:73:ILE:HG21 | 1:B:11:LYS:HB3 | 4 | 0.44 |
| (2,824) | 1:B:73:ILE:HG23 | 1:B:11:LYS:HB3 | 4 | 0.44 |
| (2,824) | 1:B:73:ILE:HG22 | 1:B:70:PRO:HG3 | 4 | 0.44 |
| (2,824) | 1:B:73:ILE:HG21 | 1:B:70:PRO:HG3 | 4 | 0.44 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,824) | 1:B:73:ILE:HG23 | 1:B:70:PRO:HG3 | 4 | 0.44 |
| (2,228) | 1:B:21:LEU:H | 1:B:20:PRO:HB3 | 5 | 0.44 |
| (2,228) | 1:B:38:LYS:H | 1:B:37:LYS:HB2 | 5 | 0.44 |
| (2,228) | 1:B:21:LEU:H | 1:B:20:PRO:HB3 | 6 | 0.44 |
| (2,228) | 1:B:38:LYS:H | 1:B:37:LYS:HB2 | 6 | 0.44 |
| (2,169) | 1:B:32:GLN:HG2 | 1:B:28:LYS:HB2 | 10 | 0.44 |
| (2,169) | 1:B:62:GLN:HG2 | 1:B:59:LYS:HD2 | 10 | 0.44 |
| (2,169) | 1:B:62:GLN:HG3 | 1:B:59:LYS:HD2 | 10 | 0.44 |
| (2,169) | 1:B:62:GLN:HG3 | 1:B:85:LEU:HG | 10 | 0.44 |
| (2,155) | 1:B:87:GLU:HG3 | 1:B:65:LEU:HD11 | 4 | 0.44 |
| (2,155) | 1:B:87:GLU:HG3 | 1:B:65:LEU:HD12 | 4 | 0.44 |
| (2,155) | 1:B:87:GLU:HG3 | 1:B:65:LEU:HD13 | 4 | 0.44 |
| (2,155) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HG12 | 4 | 0.44 |
| (1,937) | 1:B:73:ILE:H | 1:B:72:LYS:HG3 | 2 | 0.44 |
| (1,92) | 1:B:30:PHE:HB2 | 1:B:40:PHE:HB3 | 2 | 0.44 |
| (1,822) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HA | 8 | 0.44 |
| (1,736) | 1:B:11:LYS:HD2 | 1:B:66:TYR:HE1 | 2 | 0.44 |
| (1,736) | 1:B:11:LYS:HD2 | 1:B:66:TYR:HE2 | 2 | 0.44 |
| (1,697) | 1:B:85:LEU:H | 1:B:82:GLY:HA3 | 2 | 0.44 |
| (1,697) | 1:B:85:LEU:H | 1:B:82:GLY:HA3 | 4 | 0.44 |
| (1,448) | 1:B:72:LYS:H | 1:B:72:LYS:HG2 | 2 | 0.44 |
| (1,278) | 1:B:64:GLU:HB3 | 1:B:61:CYS:HB3 | 4 | 0.44 |
| (1,24) | 1:B:36:LEU:H | 1:B:33:ASP:HB2 | 7 | 0.44 |
| (1,215) | 1:B:6:PRO:HB2 | 1:B:6:PRO:HA | 3 | 0.44 |
| (1,1349) | 1:B:15:LEU:H | 1:B:11:LYS:HB3 | 2 | 0.44 |
| (1,1269) | 1:B:10:THR:H | 1:B:72:LYS:HG3 | 4 | 0.44 |
| (2,882) | 1:B:93:PHE:HB3 | 1:B:90:GLY:HA3 | 7 | 0.43 |
| (2,882) | 1:B:93:PHE:HB2 | 1:B:90:GLY:HA3 | 7 | 0.43 |
| (2,228) | 1:B:21:LEU:H | 1:B:20:PRO:HB3 | 4 | 0.43 |
| (2,228) | 1:B:38:LYS:H | 1:B:37:LYS:HB2 | 4 | 0.43 |
| (1,937) | 1:B:73:ILE:H | 1:B:72:LYS:HG3 | 3 | 0.43 |
| (1,785) | 1:B:57:SER:HB3 | 1:B:93:PHE:H | 1 | 0.43 |
| (1,549) | 1:B:25:LEU:HB3 | 1:B:25:LEU:HA | 4 | 0.43 |
| (1,549) | 1:B:25:LEU:HB3 | 1:B:25:LEU:HA | 8 | 0.43 |
| (1,463) | 1:B:96:LYS:HB3 | 1:B:93:PHE:HA | 2 | 0.43 |
| (1,392) | 1:B:99:ILE:H | 1:B:99:ILE:HG12 | 6 | 0.43 |
| (1,380) | 1:B:81:TRP:HE1 | 1:B:70:PRO:HG2 | 7 | 0.43 |
| (1,365) | 1:B:36:LEU:H | 1:B:36:LEU:HG | 4 | 0.43 |
| (1,365) | 1:B:36:LEU:H | 1:B:36:LEU:HG | 6 | 0.43 |
| (1,270) | 1:B:11:LYS:HB2 | 1:B:11:LYS:HD3 | 2 | 0.43 |
| (1,270) | 1:B:11:LYS:HB2 | 1:B:11:LYS:HD3 | 5 | 0.43 |
| (1,270) | 1:B:11:LYS:HB2 | 1:B:11:LYS:HD3 | 10 | 0.43 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,194) | 1:B:60:LYS:HB3 | 1:B:60:LYS:HA | 5 | 0.43 |
| (2,824) | 1:B:73:ILE:HG22 | 1:B:11:LYS:HB3 | 8 | 0.42 |
| (2,824) | 1:B:73:ILE:HG21 | 1:B:11:LYS:HB3 | 8 | 0.42 |
| (2,824) | 1:B:73:ILE:HG23 | 1:B:11:LYS:HB3 | 8 | 0.42 |
| (2,824) | 1:B:73:ILE:HG22 | 1:B:70:PRO:HG3 | 8 | 0.42 |
| (2,824) | 1:B:73:ILE:HG21 | 1:B:70:PRO:HG3 | 8 | 0.42 |
| (2,824) | 1:B:73:ILE:HG23 | 1:B:70:PRO:HG3 | 8 | 0.42 |
| (2,824) | 1:B:73:ILE:HG22 | 1:B:11:LYS:HB3 | 10 | 0.42 |
| (2,824) | 1:B:73:ILE:HG21 | 1:B:11:LYS:HB3 | 10 | 0.42 |
| (2,824) | 1:B:73:ILE:HG23 | 1:B:11:LYS:HB3 | 10 | 0.42 |
| (2,824) | 1:B:73:ILE:HG22 | 1:B:70:PRO:HG3 | 10 | 0.42 |
| (2,824) | 1:B:73:ILE:HG21 | 1:B:70:PRO:HG3 | 10 | 0.42 |
| (2,824) | 1:B:73:ILE:HG23 | 1:B:70:PRO:HG3 | 10 | 0.42 |
| (2,564) | 1:B:36:LEU:HD21 | 1:B:30:PHE:HA | 8 | 0.42 |
| (2,564) | 1:B:36:LEU:HD23 | 1:B:30:PHE:HA | 8 | 0.42 |
| (2,564) | 1:B:36:LEU:HD22 | 1:B:30:PHE:HA | 8 | 0.42 |
| (2,564) | 1:B:85:LEU:HD11 | 1:B:82:GLY:HA3 | 8 | 0.42 |
| (2,564) | 1:B:85:LEU:HD12 | 1:B:82:GLY:HA3 | 8 | 0.42 |
| (2,564) | 1:B:85:LEU:HD13 | 1:B:82:GLY:HA3 | 8 | 0.42 |
| (2,1567) | 1:B:71:ASP:H | 1:B:11:LYS:HD3 | 4 | 0.42 |
| (2,1567) | 1:B:71:ASP:H | 1:B:72:LYS:HG2 | 4 | 0.42 |
| (2,1385) | 1:B:64:GLU:H | 1:B:60:LYS:HD2 | 7 | 0.42 |
| (2,1385) | 1:B:64:GLU:H | 1:B:60:LYS:HG3 | 7 | 0.42 |
| (2,1030) | 1:B:44:LYS:HD3 | 1:B:41:ASP:HB2 | 6 | 0.42 |
| (2,1030) | 1:B:44:LYS:HD2 | 1:B:41:ASP:HB2 | 6 | 0.42 |
| (2,1030) | 1:B:54:ILE:HG12 | 1:B:27:CYS:HB3 | 6 | 0.42 |
| (2,1030) | 1:B:44:LYS:HD3 | 1:B:41:ASP:HB2 | 8 | 0.42 |
| (2,1030) | 1:B:44:LYS:HD2 | 1:B:41:ASP:HB2 | 8 | 0.42 |
| (2,1030) | 1:B:54:ILE:HG12 | 1:B:27:CYS:HB3 | 8 | 0.42 |
| (2,1017) | 1:B:45:MET:HG2 | 1:B:97:HIS:HB3 | 3 | 0.42 |
| (2,1017) | 1:B:64:GLU:HG2 | 1:B:60:LYS:HD2 | 3 | 0.42 |
| (2,1017) | 1:B:64:GLU:HG3 | 1:B:60:LYS:HD2 | 3 | 0.42 |
| (2,1017) | 1:B:64:GLU:HG2 | 1:B:60:LYS:HD3 | 3 | 0.42 |
| (2,1017) | 1:B:64:GLU:HG3 | 1:B:60:LYS:HD3 | 3 | 0.42 |
| (1,822) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HA | 2 | 0.42 |
| (1,746) | 1:B:53:LEU:HA | 1:B:53:LEU:HD22 | 4 | 0.42 |
| (1,746) | 1:B:53:LEU:HA | 1:B:53:LEU:HD21 | 4 | 0.42 |
| (1,746) | 1:B:53:LEU:HA | 1:B:53:LEU:HD23 | 4 | 0.42 |
| (1,699) | 1:B:82:GLY:HA3 | 1:B:14:TRP:HH2 | 7 | 0.42 |
| (1,448) | 1:B:72:LYS:H | 1:B:72:LYS:HG2 | 6 | 0.42 |
| (1,270) | 1:B:11:LYS:HB2 | 1:B:11:LYS:HD3 | 9 | 0.42 |
| (1,175) | 1:B:62:GLN:HG3 | 1:B:62:GLN:HA | 2 | 0.42 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,175) | 1:B:62:GLN:HG3 | 1:B:62:GLN:HA | 8 | 0.42 |
| (1,1307) | 1:B:31:ILE:H | 1:B:30:PHE:HB3 | 1 | 0.42 |
| (1,1307) | 1:B:31:ILE:H | 1:B:30:PHE:HB3 | 4 | 0.42 |
| (1,1307) | 1:B:31:ILE:H | 1:B:30:PHE:HB3 | 7 | 0.42 |
| (1,1169) | 1:B:51:VAL:H | 1:B:27:CYS:HB3 | 1 | 0.42 |
| (2,967) | 1:B:56:GLU:HG2 | 1:B:96:LYS:HE3 | 4 | 0.41 |
| (2,967) | 1:B:56:GLU:HG2 | 1:B:96:LYS:HE2 | 4 | 0.41 |
| (2,967) | 1:B:64:GLU:HG3 | 1:B:63:ASP:HB3 | 4 | 0.41 |
| (2,959) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HB3 | 2 | 0.41 |
| (2,959) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HD3 | 2 | 0.41 |
| (2,959) | 1:B:88:CYS:HB2 | 1:B:89:ILE:HG13 | 2 | 0.41 |
| (2,824) | 1:B:73:ILE:HG22 | 1:B:11:LYS:HB3 | 3 | 0.41 |
| (2,824) | 1:B:73:ILE:HG21 | 1:B:11:LYS:HB3 | 3 | 0.41 |
| (2,824) | 1:B:73:ILE:HG23 | 1:B:11:LYS:HB3 | 3 | 0.41 |
| (2,824) | 1:B:73:ILE:HG22 | 1:B:70:PRO:HG3 | 3 | 0.41 |
| (2,824) | 1:B:73:ILE:HG21 | 1:B:70:PRO:HG3 | 3 | 0.41 |
| (2,824) | 1:B:73:ILE:HG23 | 1:B:70:PRO:HG3 | 3 | 0.41 |
| (2,652) | 1:B:86:GLY:H | 1:B:22:LEU:HD11 | 5 | 0.41 |
| (2,652) | 1:B:86:GLY:H | 1:B:22:LEU:HD12 | 5 | 0.41 |
| (2,652) | 1:B:86:GLY:H | 1:B:22:LEU:HD13 | 5 | 0.41 |
| (2,652) | 1:B:36:LEU:H | 1:B:36:LEU:HD12 | 5 | 0.41 |
| (2,652) | 1:B:36:LEU:H | 1:B:36:LEU:HD11 | 5 | 0.41 |
| (2,652) | 1:B:36:LEU:H | 1:B:36:LEU:HD13 | 5 | 0.41 |
| (2,29) | 1:B:65:LEU:HB3 | 1:B:68:SER:HB2 | 4 | 0.41 |
| (2,29) | 1:B:25:LEU:HB2 | 1:B:22:LEU:HA | 4 | 0.41 |
| (2,27) | 1:B:33:ASP:HB3 | 1:B:36:LEU:HD21 | 10 | 0.41 |
| (2,27) | 1:B:33:ASP:HB3 | 1:B:36:LEU:HD23 | 10 | 0.41 |
| (2,27) | 1:B:33:ASP:HB3 | 1:B:36:LEU:HD22 | 10 | 0.41 |
| (2,27) | 1:B:24:ASP:HB3 | 1:B:25:LEU:HD12 | 10 | 0.41 |
| (2,27) | 1:B:24:ASP:HB3 | 1:B:25:LEU:HD11 | 10 | 0.41 |
| (2,27) | 1:B:24:ASP:HB3 | 1:B:25:LEU:HD13 | 10 | 0.41 |
| (2,140) | 1:B:64:GLU:HG2 | 1:B:60:LYS:HG3 | 10 | 0.41 |
| (2,140) | 1:B:64:GLU:HG3 | 1:B:60:LYS:HG3 | 10 | 0.41 |
| (2,140) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB1 | 10 | 0.41 |
| (2,140) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB3 | 10 | 0.41 |
| (2,140) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB2 | 10 | 0.41 |
| (2,1143) | 1:B:4:ALA:HB1 | 1:B:5:ASN:HB3 | 8 | 0.41 |
| (2,1143) | 1:B:4:ALA:HB2 | 1:B:5:ASN:HB3 | 8 | 0.41 |
| (2,1143) | 1:B:4:ALA:HB3 | 1:B:5:ASN:HB3 | 8 | 0.41 |
| (2,1143) | 1:B:78:ALA:HB1 | 1:B:74:ASN:HB2 | 8 | 0.41 |
| (2,1143) | 1:B:78:ALA:HB2 | 1:B:74:ASN:HB2 | 8 | 0.41 |
| (2,1143) | 1:B:78:ALA:HB3 | 1:B:74:ASN:HB2 | 8 | 0.41 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,1143) | 1:B:78:ALA:HB1 | 1:B:81:TRP:HB3 | 8 | 0.41 |
| (2,1143) | 1:B:78:ALA:HB2 | 1:B:81:TRP:HB3 | 8 | 0.41 |
| (2,1143) | 1:B:78:ALA:HB3 | 1:B:81:TRP:HB3 | 8 | 0.41 |
| (1,937) | 1:B:73:ILE:H | 1:B:72:LYS:HG3 | 10 | 0.41 |
| (1,697) | 1:B:85:LEU:H | 1:B:82:GLY:HA3 | 1 | 0.41 |
| (1,565) | 1:B:71:ASP:HA | 1:B:11:LYS:HD3 | 9 | 0.41 |
| (1,391) | 1:B:99:ILE:HG12 | 1:B:94:ALA:HB1 | 1 | 0.41 |
| (1,391) | 1:B:99:ILE:HG12 | 1:B:94:ALA:HB3 | 1 | 0.41 |
| (1,391) | 1:B:99:ILE:HG12 | 1:B:94:ALA:HB2 | 1 | 0.41 |
| (1,373) | 1:B:92:ASP:HB2 | 1:B:57:SER:HB3 | 5 | 0.41 |
| (1,365) | 1:B:36:LEU:H | 1:B:36:LEU:HG | 1 | 0.41 |
| (1,215) | 1:B:6:PRO:HB2 | 1:B:6:PRO:HA | 7 | 0.41 |
| (1,175) | 1:B:62:GLN:HG3 | 1:B:62:GLN:HA | 1 | 0.41 |
| (1,175) | 1:B:62:GLN:HG3 | 1:B:62:GLN:HA | 6 | 0.41 |
| (2,824) | 1:B:73:ILE:HG22 | 1:B:11:LYS:HB3 | 7 | 0.4 |
| (2,824) | 1:B:73:ILE:HG21 | 1:B:11:LYS:HB3 | 7 | 0.4 |
| (2,824) | 1:B:73:ILE:HG23 | 1:B:11:LYS:HB3 | 7 | 0.4 |
| (2,824) | 1:B:73:ILE:HG22 | 1:B:70:PRO:HG3 | 7 | 0.4 |
| (2,824) | 1:B:73:ILE:HG21 | 1:B:70:PRO:HG3 | 7 | 0.4 |
| (2,824) | 1:B:73:ILE:HG23 | 1:B:70:PRO:HG3 | 7 | 0.4 |
| (1,866) | 1:B:101:LYS:H | 1:B:101:LYS:HG3 | 6 | 0.4 |
| (1,759) | 1:B:35:ASP:HB2 | 1:B:36:LEU:HG | 3 | 0.4 |
| (1,736) | 1:B:11:LYS:HD2 | 1:B:66:TYR:HE1 | 10 | 0.4 |
| (1,736) | 1:B:11:LYS:HD2 | 1:B:66:TYR:HE2 | 10 | 0.4 |
| (1,448) | 1:B:72:LYS:H | 1:B:72:LYS:HG2 | 1 | 0.4 |
| (1,365) | 1:B:36:LEU:H | 1:B:36:LEU:HG | 7 | 0.4 |
| (1,270) | 1:B:11:LYS:HB2 | 1:B:11:LYS:HD3 | 1 | 0.4 |
| (1,270) | 1:B:11:LYS:HB2 | 1:B:11:LYS:HD3 | 6 | 0.4 |
| (1,270) | 1:B:11:LYS:HB2 | 1:B:11:LYS:HD3 | 8 | 0.4 |
| (1,213) | 1:B:35:ASP:H | 1:B:34:PRO:HB3 | 9 | 0.4 |
| (1,1269) | 1:B:10:THR:H | 1:B:72:LYS:HG3 | 5 | 0.4 |
| (1,1269) | 1:B:10:THR:H | 1:B:72:LYS:HG3 | 10 | 0.4 |
| (1,1088) | 1:B:49:GLN:H | 1:B:48:GLU:HB3 | 3 | 0.4 |
| (2,959) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HB3 | 5 | 0.39 |
| (2,959) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HD3 | 5 | 0.39 |
| (2,959) | 1:B:88:CYS:HB2 | 1:B:89:ILE:HG13 | 5 | 0.39 |
| (2,87) | 1:B:74:ASN:HB3 | 1:B:8:GLU:HB2 | 4 | 0.39 |
| (2,87) | 1:B:74:ASN:HB3 | 1:B:8:GLU:HB3 | 4 | 0.39 |
| (2,87) | 1:B:93:PHE:HB3 | 1:B:53:LEU:HB2 | 4 | 0.39 |
| (2,87) | 1:B:93:PHE:HB2 | 1:B:53:LEU:HB2 | 4 | 0.39 |
| (2,638) | 1:B:98:LEU:HB2 | 1:B:98:LEU:HD21 | 6 | 0.39 |
| (2,638) | 1:B:98:LEU:HB2 | 1:B:98:LEU:HD22 | 6 | 0.39 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,638) | 1:B:98:LEU:HB2 | 1:B:98:LEU:HD23 | 6 | 0.39 |
| (2,638) | 1:B:43:ILE:HG12 | 1:B:98:LEU:HD21 | 6 | 0.39 |
| (2,638) | 1:B:43:ILE:HG12 | 1:B:98:LEU:HD22 | 6 | 0.39 |
| (2,638) | 1:B:43:ILE:HG12 | 1:B:98:LEU:HD23 | 6 | 0.39 |
| (2,534) | 1:B:96:LYS:HG2 | 1:B:96:LYS:HE3 | 4 | 0.39 |
| (2,534) | 1:B:96:LYS:HG2 | 1:B:96:LYS:HE2 | 4 | 0.39 |
| (2,4) | 1:B:53:LEU:HB2 | 1:B:49:GLN:HG3 | 9 | 0.39 |
| (2,4) | 1:B:53:LEU:HB2 | 1:B:56:GLU:HG3 | 9 | 0.39 |
| (2,4) | 1:B:65:LEU:HB2 | 1:B:64:GLU:HB3 | 9 | 0.39 |
| (2,39) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD21 | 2 | 0.39 |
| (2,39) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD23 | 2 | 0.39 |
| (2,39) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD22 | 2 | 0.39 |
| (2,39) | 1:B:61:CYS:HB2 | 1:B:89:ILE:HD11 | 2 | 0.39 |
| (2,39) | 1:B:61:CYS:HB2 | 1:B:89:ILE:HD13 | 2 | 0.39 |
| (2,39) | 1:B:61:CYS:HB2 | 1:B:89:ILE:HD12 | 2 | 0.39 |
| (2,140) | 1:B:64:GLU:HG2 | 1:B:60:LYS:HG3 | 9 | 0.39 |
| (2,140) | 1:B:64:GLU:HG3 | 1:B:60:LYS:HG3 | 9 | 0.39 |
| (2,140) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB1 | 9 | 0.39 |
| (2,140) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB3 | 9 | 0.39 |
| (2,140) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB2 | 9 | 0.39 |
| (2,1137) | 1:B:24:ASP:HA | 1:B:25:LEU:HB2 | 7 | 0.39 |
| (2,1137) | 1:B:24:ASP:HA | 1:B:25:LEU:HG | 7 | 0.39 |
| (2,1137) | 1:B:24:ASP:HA | 1:B:28:LYS:HG3 | 7 | 0.39 |
| (1,463) | 1:B:96:LYS:HB3 | 1:B:93:PHE:HA | 5 | 0.39 |
| (1,448) | 1:B:72:LYS:H | 1:B:72:LYS:HG2 | 7 | 0.39 |
| (1,425) | 1:B:91:LYS:HG2 | 1:B:91:LYS:HA | 5 | 0.39 |
| (1,394) | 1:B:99:ILE:HG12 | 1:B:95:GLU:HA | 5 | 0.39 |
| (1,392) | 1:B:99:ILE:H | 1:B:99:ILE:HG12 | 3 | 0.39 |
| (1,387) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD11 | 7 | 0.39 |
| (1,387) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD13 | 7 | 0.39 |
| (1,387) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD12 | 7 | 0.39 |
| (1,365) | 1:B:36:LEU:H | 1:B:36:LEU:HG | 5 | 0.39 |
| (1,270) | 1:B:11:LYS:HB2 | 1:B:11:LYS:HD3 | 3 | 0.39 |
| (1,1307) | 1:B:31:ILE:H | 1:B:30:PHE:HB3 | 9 | 0.39 |
| (2,959) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HB3 | 7 | 0.38 |
| (2,959) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HD3 | 7 | 0.38 |
| (2,959) | 1:B:88:CYS:HB2 | 1:B:89:ILE:HG13 | 7 | 0.38 |
| (2,824) | 1:B:73:ILE:HG22 | 1:B:11:LYS:HB3 | 2 | 0.38 |
| (2,824) | 1:B:73:ILE:HG21 | 1:B:11:LYS:HB3 | 2 | 0.38 |
| (2,824) | 1:B:73:ILE:HG23 | 1:B:11:LYS:HB3 | 2 | 0.38 |
| (2,824) | 1:B:73:ILE:HG22 | 1:B:70:PRO:HG3 | 2 | 0.38 |
| (2,824) | 1:B:73:ILE:HG21 | 1:B:70:PRO:HG3 | 2 | 0.38 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,824) | 1:B:73:ILE:HG23 | 1:B:70:PRO:HG3 | 2 | 0.38 |
| (2,824) | 1:B:73:ILE:HG22 | 1:B:11:LYS:HB3 | 5 | 0.38 |
| (2,824) | 1:B:73:ILE:HG21 | 1:B:11:LYS:HB3 | 5 | 0.38 |
| (2,824) | 1:B:73:ILE:HG23 | 1:B:11:LYS:HB3 | 5 | 0.38 |
| (2,824) | 1:B:73:ILE:HG22 | 1:B:70:PRO:HG3 | 5 | 0.38 |
| (2,824) | 1:B:73:ILE:HG21 | 1:B:70:PRO:HG3 | 5 | 0.38 |
| (2,824) | 1:B:73:ILE:HG23 | 1:B:70:PRO:HG3 | 5 | 0.38 |
| (2,824) | 1:B:73:ILE:HG22 | 1:B:11:LYS:HB3 | 6 | 0.38 |
| (2,824) | 1:B:73:ILE:HG21 | 1:B:11:LYS:HB3 | 6 | 0.38 |
| (2,824) | 1:B:73:ILE:HG23 | 1:B:11:LYS:HB3 | 6 | 0.38 |
| (2,824) | 1:B:73:ILE:HG22 | 1:B:70:PRO:HG3 | 6 | 0.38 |
| (2,824) | 1:B:73:ILE:HG21 | 1:B:70:PRO:HG3 | 6 | 0.38 |
| (2,824) | 1:B:73:ILE:HG23 | 1:B:70:PRO:HG3 | 6 | 0.38 |
| (2,652) | 1:B:86:GLY:H | 1:B:22:LEU:HD11 | 6 | 0.38 |
| (2,652) | 1:B:86:GLY:H | 1:B:22:LEU:HD12 | 6 | 0.38 |
| (2,652) | 1:B:86:GLY:H | 1:B:22:LEU:HD13 | 6 | 0.38 |
| (2,652) | 1:B:36:LEU:H | 1:B:36:LEU:HD12 | 6 | 0.38 |
| (2,652) | 1:B:36:LEU:H | 1:B:36:LEU:HD11 | 6 | 0.38 |
| (2,652) | 1:B:36:LEU:H | 1:B:36:LEU:HD13 | 6 | 0.38 |
| (2,601) | 1:B:72:LYS:HG3 | 1:B:10:THR:HG22 | 4 | 0.38 |
| (2,601) | 1:B:72:LYS:HG3 | 1:B:10:THR:HG21 | 4 | 0.38 |
| (2,601) | 1:B:72:LYS:HG3 | 1:B:10:THR:HG23 | 4 | 0.38 |
| (2,601) | 1:B:72:LYS:HB3 | 1:B:72:LYS:HG3 | 4 | 0.38 |
| (2,601) | 1:B:72:LYS:HG3 | 1:B:10:THR:HG22 | 6 | 0.38 |
| (2,601) | 1:B:72:LYS:HG3 | 1:B:10:THR:HG21 | 6 | 0.38 |
| (2,601) | 1:B:72:LYS:HG3 | 1:B:10:THR:HG23 | 6 | 0.38 |
| (2,601) | 1:B:72:LYS:HB3 | 1:B:72:LYS:HG3 | 6 | 0.38 |
| (2,155) | 1:B:87:GLU:HG3 | 1:B:65:LEU:HD11 | 8 | 0.38 |
| (2,155) | 1:B:87:GLU:HG3 | 1:B:65:LEU:HD12 | 8 | 0.38 |
| (2,155) | 1:B:87:GLU:HG3 | 1:B:65:LEU:HD13 | 8 | 0.38 |
| (2,155) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HG12 | 8 | 0.38 |
| (2,1143) | 1:B:4:ALA:HB1 | 1:B:5:ASN:HB3 | 5 | 0.38 |
| (2,1143) | 1:B:4:ALA:HB2 | 1:B:5:ASN:HB3 | 5 | 0.38 |
| (2,1143) | 1:B:4:ALA:HB3 | 1:B:5:ASN:HB3 | 5 | 0.38 |
| (2,1143) | 1:B:78:ALA:HB1 | 1:B:74:ASN:HB2 | 5 | 0.38 |
| (2,1143) | 1:B:78:ALA:HB2 | 1:B:74:ASN:HB2 | 5 | 0.38 |
| (2,1143) | 1:B:78:ALA:HB3 | 1:B:74:ASN:HB2 | 5 | 0.38 |
| (2,1143) | 1:B:78:ALA:HB1 | 1:B:81:TRP:HB3 | 5 | 0.38 |
| (2,1143) | 1:B:78:ALA:HB2 | 1:B:81:TRP:HB3 | 5 | 0.38 |
| (2,1143) | 1:B:78:ALA:HB3 | 1:B:81:TRP:HB3 | 5 | 0.38 |
| (2,1016) | 1:B:56:GLU:HB2 | 1:B:53:LEU:HG | 6 | 0.38 |
| (2,1016) | 1:B:56:GLU:HB2 | 1:B:54:ILE:HG12 | 6 | 0.38 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,1016) | 1:B:56:GLU:HB2 | 1:B:97:HIS:HB2 | 6 | 0.38 |
| (2,1016) | 1:B:56:GLU:HB3 | 1:B:53:LEU:HG | 6 | 0.38 |
| (2,1016) | 1:B:56:GLU:HB3 | 1:B:54:ILE:HG12 | 6 | 0.38 |
| (2,1016) | 1:B:64:GLU:HB3 | 1:B:65:LEU:HB3 | 6 | 0.38 |
| (2,1016) | 1:B:64:GLU:HB3 | 1:B:85:LEU:HG | 6 | 0.38 |
| (1,822) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HA | 1 | 0.38 |
| (1,822) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HA | 10 | 0.38 |
| (1,759) | 1:B:35:ASP:HB2 | 1:B:36:LEU:HG | 6 | 0.38 |
| (1,697) | 1:B:85:LEU:H | 1:B:82:GLY:HA3 | 7 | 0.38 |
| (1,697) | 1:B:85:LEU:H | 1:B:82:GLY:HA3 | 8 | 0.38 |
| (1,565) | 1:B:71:ASP:HA | 1:B:11:LYS:HD3 | 8 | 0.38 |
| (1,565) | 1:B:71:ASP:HA | 1:B:11:LYS:HD3 | 10 | 0.38 |
| (1,317) | 1:B:31:ILE:H | 1:B:31:ILE:HG12 | 5 | 0.38 |
| (1,270) | 1:B:11:LYS:HB2 | 1:B:11:LYS:HD3 | 7 | 0.38 |
| (1,160) | 1:B:95:GLU:HG3 | 1:B:95:GLU:HA | 2 | 0.38 |
| (1,1269) | 1:B:10:THR:H | 1:B:72:LYS:HG3 | 3 | 0.38 |
| (1,1062) | 1:B:11:LYS:H | 1:B:72:LYS:HG3 | 6 | 0.38 |
| (2,955) | 1:B:6:PRO:HB3 | 1:B:7:ASN:HB3 | 3 | 0.37 |
| (2,955) | 1:B:8:GLU:HB2 | 1:B:7:ASN:HB3 | 3 | 0.37 |
| (2,955) | 1:B:8:GLU:HB3 | 1:B:7:ASN:HB3 | 3 | 0.37 |
| (2,955) | 1:B:6:PRO:HB3 | 1:B:7:ASN:HB3 | 8 | 0.37 |
| (2,955) | 1:B:8:GLU:HB2 | 1:B:7:ASN:HB3 | 8 | 0.37 |
| (2,955) | 1:B:8:GLU:HB3 | 1:B:7:ASN:HB3 | 8 | 0.37 |
| (2,824) | 1:B:73:ILE:HG22 | 1:B:11:LYS:HB3 | 1 | 0.37 |
| (2,824) | 1:B:73:ILE:HG21 | 1:B:11:LYS:HB3 | 1 | 0.37 |
| (2,824) | 1:B:73:ILE:HG23 | 1:B:11:LYS:HB3 | 1 | 0.37 |
| (2,824) | 1:B:73:ILE:HG22 | 1:B:70:PRO:HG3 | 1 | 0.37 |
| (2,824) | 1:B:73:ILE:HG21 | 1:B:70:PRO:HG3 | 1 | 0.37 |
| (2,824) | 1:B:73:ILE:HG23 | 1:B:70:PRO:HG3 | 1 | 0.37 |
| (2,824) | 1:B:73:ILE:HG22 | 1:B:11:LYS:HB3 | 9 | 0.37 |
| (2,824) | 1:B:73:ILE:HG21 | 1:B:11:LYS:HB3 | 9 | 0.37 |
| (2,824) | 1:B:73:ILE:HG23 | 1:B:11:LYS:HB3 | 9 | 0.37 |
| (2,824) | 1:B:73:ILE:HG22 | 1:B:70:PRO:HG3 | 9 | 0.37 |
| (2,824) | 1:B:73:ILE:HG21 | 1:B:70:PRO:HG3 | 9 | 0.37 |
| (2,824) | 1:B:73:ILE:HG23 | 1:B:70:PRO:HG3 | 9 | 0.37 |
| (2,601) | 1:B:72:LYS:HG3 | 1:B:10:THR:HG22 | 1 | 0.37 |
| (2,601) | 1:B:72:LYS:HG3 | 1:B:10:THR:HG21 | 1 | 0.37 |
| (2,601) | 1:B:72:LYS:HG3 | 1:B:10:THR:HG23 | 1 | 0.37 |
| (2,601) | 1:B:72:LYS:HB3 | 1:B:72:LYS:HG3 | 1 | 0.37 |
| (2,27) | 1:B:33:ASP:HB3 | 1:B:36:LEU:HD21 | 2 | 0.37 |
| (2,27) | 1:B:33:ASP:HB3 | 1:B:36:LEU:HD23 | 2 | 0.37 |
| (2,27) | 1:B:33:ASP:HB3 | 1:B:36:LEU:HD22 | 2 | 0.37 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,27) | 1:B:24:ASP:HB3 | 1:B:25:LEU:HD12 | 2 | 0.37 |
| (2,27) | 1:B:24:ASP:HB3 | 1:B:25:LEU:HD11 | 2 | 0.37 |
| (2,27) | 1:B:24:ASP:HB3 | 1:B:25:LEU:HD13 | 2 | 0.37 |
| (2,1567) | 1:B:71:ASP:H | 1:B:11:LYS:HD3 | 3 | 0.37 |
| (2,1567) | 1:B:71:ASP:H | 1:B:72:LYS:HG2 | 3 | 0.37 |
| (2,1523) | 1:B:56:GLU:H | 1:B:23:PRO:HG2 | 8 | 0.37 |
| (2,1523) | 1:B:56:GLU:H | 1:B:59:LYS:HD3 | 8 | 0.37 |
| (2,1523) | 1:B:56:GLU:H | 1:B:60:LYS:HD3 | 8 | 0.37 |
| (2,144) | 1:B:56:GLU:HG3 | 1:B:53:LEU:HG | 10 | 0.37 |
| (2,144) | 1:B:87:GLU:HG3 | 1:B:83:ARG:HG3 | 10 | 0.37 |
| (2,144) | 1:B:87:GLU:HG3 | 1:B:85:LEU:HG | 10 | 0.37 |
| (2,144) | 1:B:87:GLU:HG3 | 1:B:91:LYS:HD3 | 10 | 0.37 |
| (2,144) | 1:B:87:GLU:HG3 | 1:B:91:LYS:HD2 | 10 | 0.37 |
| (2,144) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HB | 10 | 0.37 |
| (1,866) | 1:B:101:LYS:H | 1:B:101:LYS:HG3 | 2 | 0.37 |
| (1,814) | 1:B:33:ASP:HB2 | 1:B:30:PHE:HA | 3 | 0.37 |
| (1,785) | 1:B:57:SER:HB3 | 1:B:93:PHE:H | 8 | 0.37 |
| (1,785) | 1:B:57:SER:HB3 | 1:B:93:PHE:H | 10 | 0.37 |
| (1,699) | 1:B:82:GLY:HA3 | 1:B:14:TRP:HH2 | 2 | 0.37 |
| (1,565) | 1:B:71:ASP:HA | 1:B:11:LYS:HD3 | 1 | 0.37 |
| (1,448) | 1:B:72:LYS:H | 1:B:72:LYS:HG2 | 3 | 0.37 |
| (1,394) | 1:B:99:ILE:HG12 | 1:B:95:GLU:HA | 3 | 0.37 |
| (1,392) | 1:B:99:ILE:H | 1:B:99:ILE:HG12 | 1 | 0.37 |
| (1,392) | 1:B:99:ILE:H | 1:B:99:ILE:HG12 | 5 | 0.37 |
| (1,387) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD11 | 1 | 0.37 |
| (1,387) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD13 | 1 | 0.37 |
| (1,387) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD12 | 1 | 0.37 |
| (1,278) | 1:B:64:GLU:HB3 | 1:B:61:CYS:HB3 | 8 | 0.37 |
| (1,270) | 1:B:11:LYS:HB2 | 1:B:11:LYS:HD3 | 4 | 0.37 |
| (1,213) | 1:B:35:ASP:H | 1:B:34:PRO:HB3 | 1 | 0.37 |
| (1,1062) | 1:B:11:LYS:H | 1:B:72:LYS:HG3 | 9 | 0.37 |
| (1,1022) | 1:B:40:PHE:H | 1:B:45:MET:HB2 | 1 | 0.37 |
| (2,902) | 1:B:81:TRP:HB3 | 1:B:69:MET:HE1 | 1 | 0.36 |
| (2,902) | 1:B:81:TRP:HB3 | 1:B:69:MET:HE2 | 1 | 0.36 |
| (2,902) | 1:B:81:TRP:HB3 | 1:B:69:MET:HE3 | 1 | 0.36 |
| (2,902) | 1:B:81:TRP:HB3 | 1:B:73:ILE:HD11 | 1 | 0.36 |
| (2,902) | 1:B:81:TRP:HB3 | 1:B:73:ILE:HD13 | 1 | 0.36 |
| (2,902) | 1:B:81:TRP:HB3 | 1:B:73:ILE:HD12 | 1 | 0.36 |
| (2,902) | 1:B:81:TRP:HB3 | 1:B:69:MET:HE1 | 7 | 0.36 |
| (2,902) | 1:B:81:TRP:HB3 | 1:B:69:MET:HE2 | 7 | 0.36 |
| (2,902) | 1:B:81:TRP:HB3 | 1:B:69:MET:HE3 | 7 | 0.36 |
| (2,902) | 1:B:81:TRP:HB3 | 1:B:73:ILE:HD11 | 7 | 0.36 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,902) | 1:B:81:TRP:HB3 | 1:B:73:ILE:HD13 | 7 | 0.36 |
| (2,902) | 1:B:81:TRP:HB3 | 1:B:73:ILE:HD12 | 7 | 0.36 |
| (2,643) | 1:B:45:MET:HB2 | 1:B:40:PHE:HA | 7 | 0.36 |
| (2,643) | 1:B:96:LYS:HB3 | 1:B:93:PHE:HA | 7 | 0.36 |
| (2,643) | 1:B:45:MET:HB2 | 1:B:40:PHE:HA | 9 | 0.36 |
| (2,643) | 1:B:96:LYS:HB3 | 1:B:93:PHE:HA | 9 | 0.36 |
| (2,638) | 1:B:98:LEU:HB2 | 1:B:98:LEU:HD21 | 2 | 0.36 |
| (2,638) | 1:B:98:LEU:HB2 | 1:B:98:LEU:HD22 | 2 | 0.36 |
| (2,638) | 1:B:98:LEU:HB2 | 1:B:98:LEU:HD23 | 2 | 0.36 |
| (2,638) | 1:B:43:ILE:HG12 | 1:B:98:LEU:HD21 | 2 | 0.36 |
| (2,638) | 1:B:43:ILE:HG12 | 1:B:98:LEU:HD22 | 2 | 0.36 |
| (2,638) | 1:B:43:ILE:HG12 | 1:B:98:LEU:HD23 | 2 | 0.36 |
| (2,601) | 1:B:72:LYS:HG3 | 1:B:10:THR:HG22 | 5 | 0.36 |
| (2,601) | 1:B:72:LYS:HG3 | 1:B:10:THR:HG21 | 5 | 0.36 |
| (2,601) | 1:B:72:LYS:HG3 | 1:B:10:THR:HG23 | 5 | 0.36 |
| (2,601) | 1:B:72:LYS:HB3 | 1:B:72:LYS:HG3 | 5 | 0.36 |
| (2,4) | 1:B:53:LEU:HB2 | 1:B:49:GLN:HG3 | 8 | 0.36 |
| (2,4) | 1:B:53:LEU:HB2 | 1:B:56:GLU:HG3 | 8 | 0.36 |
| (2,4) | 1:B:65:LEU:HB2 | 1:B:64:GLU:HB3 | 8 | 0.36 |
| (2,1502) | 1:B:38:LYS:H | 1:B:37:LYS:HB2 | 2 | 0.36 |
| (2,1502) | 1:B:38:LYS:H | 1:B:38:LYS:HD2 | 2 | 0.36 |
| (2,140) | 1:B:64:GLU:HG2 | 1:B:60:LYS:HG3 | 6 | 0.36 |
| (2,140) | 1:B:64:GLU:HG3 | 1:B:60:LYS:HG3 | 6 | 0.36 |
| (2,140) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB1 | 6 | 0.36 |
| (2,140) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB3 | 6 | 0.36 |
| (2,140) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB2 | 6 | 0.36 |
| (1,92) | 1:B:30:PHE:HB2 | 1:B:40:PHE:HB3 | 1 | 0.36 |
| (1,866) | 1:B:101:LYS:H | 1:B:101:LYS:HG3 | 10 | 0.36 |
| (1,52) | 1:B:11:LYS:HE2 | 1:B:69:MET:HB3 | 2 | 0.36 |
| (1,387) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD11 | 2 | 0.36 |
| (1,387) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD13 | 2 | 0.36 |
| (1,387) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD12 | 2 | 0.36 |
| (1,387) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD11 | 4 | 0.36 |
| (1,387) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD13 | 4 | 0.36 |
| (1,387) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD12 | 4 | 0.36 |
| (1,377) | 1:B:58:THR:H | 1:B:57:SER:HB2 | 9 | 0.36 |
| (1,329) | 1:B:44:LYS:HB2 | 1:B:44:LYS:HA | 5 | 0.36 |
| (1,317) | 1:B:31:ILE:H | 1:B:31:ILE:HG12 | 3 | 0.36 |
| (1,215) | 1:B:6:PRO:HB2 | 1:B:6:PRO:HA | 10 | 0.36 |
| (1,213) | 1:B:35:ASP:H | 1:B:34:PRO:HB3 | 4 | 0.36 |
| (1,213) | 1:B:35:ASP:H | 1:B:34:PRO:HB3 | 6 | 0.36 |
| (1,155) | 1:B:95:GLU:H | 1:B:95:GLU:HG2 | 1 | 0.36 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,155) | 1:B:95:GLU:H | 1:B:95:GLU:HG2 | 7 | 0.36 |
| (1,155) | 1:B:95:GLU:H | 1:B:95:GLU:HG2 | 8 | 0.36 |
| (1,155) | 1:B:95:GLU:H | 1:B:95:GLU:HG2 | 10 | 0.36 |
| (1,1307) | 1:B:31:ILE:H | 1:B:30:PHE:HB3 | 6 | 0.36 |
| (2,827) | 1:B:73:ILE:HG22 | 1:B:74:ASN:HB2 | 3 | 0.35 |
| (2,827) | 1:B:73:ILE:HG21 | 1:B:74:ASN:HB2 | 3 | 0.35 |
| (2,827) | 1:B:73:ILE:HG23 | 1:B:74:ASN:HB2 | 3 | 0.35 |
| (2,827) | 1:B:73:ILE:HG22 | 1:B:81:TRP:HB3 | 3 | 0.35 |
| (2,827) | 1:B:73:ILE:HG21 | 1:B:81:TRP:HB3 | 3 | 0.35 |
| (2,827) | 1:B:73:ILE:HG23 | 1:B:81:TRP:HB3 | 3 | 0.35 |
| (2,715) | 1:B:51:VAL:HG13 | 1:B:24:ASP:HB3 | 7 | 0.35 |
| (2,715) | 1:B:51:VAL:HG11 | 1:B:24:ASP:HB3 | 7 | 0.35 |
| (2,715) | 1:B:51:VAL:HG12 | 1:B:24:ASP:HB3 | 7 | 0.35 |
| (2,715) | 1:B:51:VAL:HG13 | 1:B:27:CYS:HB3 | 7 | 0.35 |
| (2,715) | 1:B:51:VAL:HG11 | 1:B:27:CYS:HB3 | 7 | 0.35 |
| (2,715) | 1:B:51:VAL:HG12 | 1:B:27:CYS:HB3 | 7 | 0.35 |
| (2,715) | 1:B:51:VAL:HG21 | 1:B:48:GLU:HG3 | 7 | 0.35 |
| (2,715) | 1:B:51:VAL:HG23 | 1:B:48:GLU:HG3 | 7 | 0.35 |
| (2,715) | 1:B:51:VAL:HG22 | 1:B:48:GLU:HG3 | 7 | 0.35 |
| (2,601) | 1:B:72:LYS:HG3 | 1:B:10:THR:HG22 | 3 | 0.35 |
| (2,601) | 1:B:72:LYS:HG3 | 1:B:10:THR:HG21 | 3 | 0.35 |
| (2,601) | 1:B:72:LYS:HG3 | 1:B:10:THR:HG23 | 3 | 0.35 |
| (2,601) | 1:B:72:LYS:HB3 | 1:B:72:LYS:HG3 | 3 | 0.35 |
| (2,601) | 1:B:72:LYS:HG3 | 1:B:10:THR:HG22 | 10 | 0.35 |
| (2,601) | 1:B:72:LYS:HG3 | 1:B:10:THR:HG21 | 10 | 0.35 |
| (2,601) | 1:B:72:LYS:HG3 | 1:B:10:THR:HG23 | 10 | 0.35 |
| (2,601) | 1:B:72:LYS:HB3 | 1:B:72:LYS:HG3 | 10 | 0.35 |
| (2,39) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD21 | 8 | 0.35 |
| (2,39) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD23 | 8 | 0.35 |
| (2,39) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD22 | 8 | 0.35 |
| (2,39) | 1:B:61:CYS:HB2 | 1:B:89:ILE:HD11 | 8 | 0.35 |
| (2,39) | 1:B:61:CYS:HB2 | 1:B:89:ILE:HD13 | 8 | 0.35 |
| (2,39) | 1:B:61:CYS:HB2 | 1:B:89:ILE:HD12 | 8 | 0.35 |
| (2,1523) | 1:B:56:GLU:H | 1:B:23:PRO:HG2 | 4 | 0.35 |
| (2,1523) | 1:B:56:GLU:H | 1:B:59:LYS:HD3 | 4 | 0.35 |
| (2,1523) | 1:B:56:GLU:H | 1:B:60:LYS:HD3 | 4 | 0.35 |
| (2,140) | 1:B:64:GLU:HG2 | 1:B:60:LYS:HG3 | 1 | 0.35 |
| (2,140) | 1:B:64:GLU:HG3 | 1:B:60:LYS:HG3 | 1 | 0.35 |
| (2,140) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB1 | 1 | 0.35 |
| (2,140) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB3 | 1 | 0.35 |
| (2,140) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB2 | 1 | 0.35 |
| (1,753) | 1:B:54:ILE:HA | 1:B:53:LEU:HB3 | 5 | 0.35 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,736) | 1:B:11:LYS:HD2 | 1:B:66:TYR:HE1 | 4 | 0.35 |
| (1,736) | 1:B:11:LYS:HD2 | 1:B:66:TYR:HE2 | 4 | 0.35 |
| (1,721) | 1:B:90:GLY:HA3 | 1:B:93:PHE:HD2 | 2 | 0.35 |
| (1,721) | 1:B:90:GLY:HA3 | 1:B:93:PHE:HD1 | 2 | 0.35 |
| (1,598) | 1:B:26:ILE:HG21 | 1:B:90:GLY:HA3 | 1 | 0.35 |
| (1,598) | 1:B:26:ILE:HG22 | 1:B:90:GLY:HA3 | 1 | 0.35 |
| (1,598) | 1:B:26:ILE:HG23 | 1:B:90:GLY:HA3 | 1 | 0.35 |
| (1,565) | 1:B:71:ASP:HA | 1:B:11:LYS:HD3 | 6 | 0.35 |
| (1,329) | 1:B:44:LYS:HB2 | 1:B:44:LYS:HA | 1 | 0.35 |
| (1,329) | 1:B:44:LYS:HB2 | 1:B:44:LYS:HA | 3 | 0.35 |
| (1,329) | 1:B:44:LYS:HB2 | 1:B:44:LYS:HA | 4 | 0.35 |
| (1,329) | 1:B:44:LYS:HB2 | 1:B:44:LYS:HA | 6 | 0.35 |
| (1,329) | 1:B:44:LYS:HB2 | 1:B:44:LYS:HA | 7 | 0.35 |
| (1,329) | 1:B:44:LYS:HB2 | 1:B:44:LYS:HA | 8 | 0.35 |
| (1,329) | 1:B:44:LYS:HB2 | 1:B:44:LYS:HA | 9 | 0.35 |
| (1,329) | 1:B:44:LYS:HB2 | 1:B:44:LYS:HA | 10 | 0.35 |
| (1,155) | 1:B:95:GLU:H | 1:B:95:GLU:HG2 | 9 | 0.35 |
| (1,1068) | 1:B:30:PHE:H | 1:B:31:ILE:HG12 | 9 | 0.35 |
| (1,1012) | 1:B:50:CYS:H | 1:B:27:CYS:HB3 | 4 | 0.35 |
| (2,959) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HB3 | 3 | 0.34 |
| (2,959) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HD3 | 3 | 0.34 |
| (2,959) | 1:B:88:CYS:HB2 | 1:B:89:ILE:HG13 | 3 | 0.34 |
| (2,932) | 1:B:-1:LYS:HE2 | 1:B:-1:LYS:HB2 | 6 | 0.34 |
| (2,932) | 1:B:44:LYS:HE3 | 1:B:44:LYS:HB2 | 6 | 0.34 |
| (2,932) | 1:B:44:LYS:HE2 | 1:B:44:LYS:HB2 | 6 | 0.34 |
| (2,932) | 1:B:60:LYS:HE3 | 1:B:60:LYS:HB2 | 6 | 0.34 |
| (2,902) | 1:B:81:TRP:HB3 | 1:B:69:MET:HE1 | 2 | 0.34 |
| (2,902) | 1:B:81:TRP:HB3 | 1:B:69:MET:HE2 | 2 | 0.34 |
| (2,902) | 1:B:81:TRP:HB3 | 1:B:69:MET:HE3 | 2 | 0.34 |
| (2,902) | 1:B:81:TRP:HB3 | 1:B:73:ILE:HD11 | 2 | 0.34 |
| (2,902) | 1:B:81:TRP:HB3 | 1:B:73:ILE:HD13 | 2 | 0.34 |
| (2,902) | 1:B:81:TRP:HB3 | 1:B:73:ILE:HD12 | 2 | 0.34 |
| (2,652) | 1:B:86:GLY:H | 1:B:22:LEU:HD11 | 7 | 0.34 |
| (2,652) | 1:B:86:GLY:H | 1:B:22:LEU:HD12 | 7 | 0.34 |
| (2,652) | 1:B:86:GLY:H | 1:B:22:LEU:HD13 | 7 | 0.34 |
| (2,652) | 1:B:36:LEU:H | 1:B:36:LEU:HD12 | 7 | 0.34 |
| (2,652) | 1:B:36:LEU:H | 1:B:36:LEU:HD11 | 7 | 0.34 |
| (2,652) | 1:B:36:LEU:H | 1:B:36:LEU:HD13 | 7 | 0.34 |
| (2,638) | 1:B:98:LEU:HB2 | 1:B:98:LEU:HD21 | 3 | 0.34 |
| (2,638) | 1:B:98:LEU:HB2 | 1:B:98:LEU:HD22 | 3 | 0.34 |
| (2,638) | 1:B:98:LEU:HB2 | 1:B:98:LEU:HD23 | 3 | 0.34 |
| (2,638) | 1:B:43:ILE:HG12 | 1:B:98:LEU:HD21 | 3 | 0.34 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,638) | 1:B:43:ILE:HG12 | 1:B:98:LEU:HD22 | 3 | 0.34 |
| (2,638) | 1:B:43:ILE:HG12 | 1:B:98:LEU:HD23 | 3 | 0.34 |
| (2,638) | 1:B:98:LEU:HB2 | 1:B:98:LEU:HD21 | 10 | 0.34 |
| (2,638) | 1:B:98:LEU:HB2 | 1:B:98:LEU:HD22 | 10 | 0.34 |
| (2,638) | 1:B:98:LEU:HB2 | 1:B:98:LEU:HD23 | 10 | 0.34 |
| (2,638) | 1:B:43:ILE:HG12 | 1:B:98:LEU:HD21 | 10 | 0.34 |
| (2,638) | 1:B:43:ILE:HG12 | 1:B:98:LEU:HD22 | 10 | 0.34 |
| (2,638) | 1:B:43:ILE:HG12 | 1:B:98:LEU:HD23 | 10 | 0.34 |
| (2,592) | 1:B:44:LYS:HG3 | 1:B:42:GLU:HA | 10 | 0.34 |
| (2,592) | 1:B:72:LYS:HG2 | 1:B:71:ASP:HA | 10 | 0.34 |
| (2,29) | 1:B:65:LEU:HB3 | 1:B:68:SER:HB2 | 8 | 0.34 |
| (2,29) | 1:B:25:LEU:HB2 | 1:B:22:LEU:HA | 8 | 0.34 |
| (2,1128) | 1:B:99:ILE:HA | 1:B:99:ILE:HG13 | 10 | 0.34 |
| (2,1128) | 1:B:99:ILE:HA | 1:B:101:LYS:HG3 | 10 | 0.34 |
| (1,753) | 1:B:54:ILE:HA | 1:B:53:LEU:HB3 | 8 | 0.34 |
| (1,697) | 1:B:85:LEU:H | 1:B:82:GLY:HA3 | 5 | 0.34 |
| (1,598) | 1:B:26:ILE:HG21 | 1:B:90:GLY:HA3 | 7 | 0.34 |
| (1,598) | 1:B:26:ILE:HG22 | 1:B:90:GLY:HA3 | 7 | 0.34 |
| (1,598) | 1:B:26:ILE:HG23 | 1:B:90:GLY:HA3 | 7 | 0.34 |
| (1,497) | 1:B:48:GLU:HB2 | 1:B:48:GLU:HA | 1 | 0.34 |
| (1,497) | 1:B:48:GLU:HB2 | 1:B:48:GLU:HA | 2 | 0.34 |
| (1,497) | 1:B:48:GLU:HB2 | 1:B:48:GLU:HA | 3 | 0.34 |
| (1,497) | 1:B:48:GLU:HB2 | 1:B:48:GLU:HA | 5 | 0.34 |
| (1,497) | 1:B:48:GLU:HB2 | 1:B:48:GLU:HA | 6 | 0.34 |
| (1,497) | 1:B:48:GLU:HB2 | 1:B:48:GLU:HA | 7 | 0.34 |
| (1,497) | 1:B:48:GLU:HB2 | 1:B:48:GLU:HA | 8 | 0.34 |
| (1,497) | 1:B:48:GLU:HB2 | 1:B:48:GLU:HA | 9 | 0.34 |
| (1,497) | 1:B:48:GLU:HB2 | 1:B:48:GLU:HA | 10 | 0.34 |
| (1,448) | 1:B:72:LYS:H | 1:B:72:LYS:HG2 | 9 | 0.34 |
| (1,382) | 1:B:39:ARG:HG2 | 1:B:39:ARG:HA | 7 | 0.34 |
| (1,362) | 1:B:34:PRO:HB2 | 1:B:34:PRO:HA | 7 | 0.34 |
| (1,160) | 1:B:95:GLU:HG3 | 1:B:95:GLU:HA | 5 | 0.34 |
| (1,155) | 1:B:95:GLU:H | 1:B:95:GLU:HG2 | 3 | 0.34 |
| (1,155) | 1:B:95:GLU:H | 1:B:95:GLU:HG2 | 6 | 0.34 |
| (1,1062) | 1:B:11:LYS:H | 1:B:72:LYS:HG3 | 2 | 0.34 |
| (2,959) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HB3 | 6 | 0.33 |
| (2,959) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HD3 | 6 | 0.33 |
| (2,959) | 1:B:88:CYS:HB2 | 1:B:89:ILE:HG13 | 6 | 0.33 |
| (2,943) | 1:B:-2:ASP:HB3 | 1:B:-1:LYS:HD3 | 5 | 0.33 |
| (2,943) | 1:B:13:ALA:HB1 | 1:B:12:ASP:HB2 | 5 | 0.33 |
| (2,943) | 1:B:13:ALA:HB2 | 1:B:12:ASP:HB2 | 5 | 0.33 |
| (2,943) | 1:B:13:ALA:HB3 | 1:B:12:ASP:HB2 | 5 | 0.33 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|----------------|-----------------|----------|---------------|
| (2,943) | 1:B:27:CYS:HB3 | 1:B:26:ILE:HG12 | 5 | 0.33 |
| (2,943) | 1:B:27:CYS:HB3 | 1:B:28:LYS:HD2 | 5 | 0.33 |
| (2,943) | 1:B:27:CYS:HB3 | 1:B:28:LYS:HD3 | 5 | 0.33 |
| (2,943) | 1:B:27:CYS:HB3 | 1:B:45:MET:HG2 | 5 | 0.33 |
| (2,943) | 1:B:35:ASP:HB3 | 1:B:38:LYS:HG2 | 5 | 0.33 |
| (2,943) | 1:B:71:ASP:HB2 | 1:B:72:LYS:HB2 | 5 | 0.33 |
| (2,943) | 1:B:71:ASP:HB2 | 1:B:72:LYS:HD2 | 5 | 0.33 |
| (2,943) | 1:B:71:ASP:HB2 | 1:B:72:LYS:HD3 | 5 | 0.33 |
| (2,839) | 1:B:23:PRO:HB3 | 1:B:55:PRO:HD2 | 8 | 0.33 |
| (2,839) | 1:B:20:PRO:HB2 | 1:B:20:PRO:HD2 | 8 | 0.33 |
| (2,601) | 1:B:72:LYS:HG3 | 1:B:10:THR:HG22 | 7 | 0.33 |
| (2,601) | 1:B:72:LYS:HG3 | 1:B:10:THR:HG21 | 7 | 0.33 |
| (2,601) | 1:B:72:LYS:HG3 | 1:B:10:THR:HG23 | 7 | 0.33 |
| (2,601) | 1:B:72:LYS:HB3 | 1:B:72:LYS:HG3 | 7 | 0.33 |
| (2,261) | 1:B:45:MET:HG3 | 1:B:53:LEU:HD11 | 4 | 0.33 |
| (2,261) | 1:B:45:MET:HG3 | 1:B:53:LEU:HD12 | 4 | 0.33 |
| (2,261) | 1:B:45:MET:HG3 | 1:B:53:LEU:HD13 | 4 | 0.33 |
| (2,261) | 1:B:45:MET:HG3 | 1:B:98:LEU:HD21 | 4 | 0.33 |
| (2,261) | 1:B:45:MET:HG3 | 1:B:98:LEU:HD22 | 4 | 0.33 |
| (2,261) | 1:B:45:MET:HG3 | 1:B:98:LEU:HD23 | 4 | 0.33 |
| (2,170) | 1:B:62:GLN:HG3 | 1:B:85:LEU:HD23 | 6 | 0.33 |
| (2,170) | 1:B:62:GLN:HG3 | 1:B:85:LEU:HD21 | 6 | 0.33 |
| (2,170) | 1:B:62:GLN:HG3 | 1:B:85:LEU:HD22 | 6 | 0.33 |
| (2,170) | 1:B:62:GLN:HG2 | 1:B:85:LEU:HD23 | 6 | 0.33 |
| (2,170) | 1:B:62:GLN:HG2 | 1:B:85:LEU:HD21 | 6 | 0.33 |
| (2,170) | 1:B:62:GLN:HG2 | 1:B:85:LEU:HD22 | 6 | 0.33 |
| (2,1523) | 1:B:56:GLU:H | 1:B:23:PRO:HG2 | 5 | 0.33 |
| (2,1523) | 1:B:56:GLU:H | 1:B:59:LYS:HD3 | 5 | 0.33 |
| (2,1523) | 1:B:56:GLU:H | 1:B:60:LYS:HD3 | 5 | 0.33 |
| (2,1517) | 1:B:61:CYS:H | 1:B:60:LYS:HD3 | 4 | 0.33 |
| (2,1517) | 1:B:61:CYS:H | 1:B:60:LYS:HG3 | 4 | 0.33 |
| (2,144) | 1:B:56:GLU:HG3 | 1:B:53:LEU:HG | 3 | 0.33 |
| (2,144) | 1:B:87:GLU:HG3 | 1:B:83:ARG:HG3 | 3 | 0.33 |
| (2,144) | 1:B:87:GLU:HG3 | 1:B:85:LEU:HG | 3 | 0.33 |
| (2,144) | 1:B:87:GLU:HG3 | 1:B:91:LYS:HD3 | 3 | 0.33 |
| (2,144) | 1:B:87:GLU:HG3 | 1:B:91:LYS:HD2 | 3 | 0.33 |
| (2,144) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HB | 3 | 0.33 |
| (2,1143) | 1:B:4:ALA:HB1 | 1:B:5:ASN:HB3 | 3 | 0.33 |
| (2,1143) | 1:B:4:ALA:HB2 | 1:B:5:ASN:HB3 | 3 | 0.33 |
| (2,1143) | 1:B:4:ALA:HB3 | 1:B:5:ASN:HB3 | 3 | 0.33 |
| (2,1143) | 1:B:78:ALA:HB1 | 1:B:74:ASN:HB2 | 3 | 0.33 |
| (2,1143) | 1:B:78:ALA:HB2 | 1:B:74:ASN:HB2 | 3 | 0.33 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,1143) | 1:B:78:ALA:HB3 | 1:B:74:ASN:HB2 | 3 | 0.33 |
| (2,1143) | 1:B:78:ALA:HB1 | 1:B:81:TRP:HB3 | 3 | 0.33 |
| (2,1143) | 1:B:78:ALA:HB2 | 1:B:81:TRP:HB3 | 3 | 0.33 |
| (2,1143) | 1:B:78:ALA:HB3 | 1:B:81:TRP:HB3 | 3 | 0.33 |
| (2,1122) | 1:B:51:VAL:HG13 | 1:B:23:PRO:HD3 | 9 | 0.33 |
| (2,1122) | 1:B:51:VAL:HG11 | 1:B:23:PRO:HD3 | 9 | 0.33 |
| (2,1122) | 1:B:51:VAL:HG12 | 1:B:23:PRO:HD3 | 9 | 0.33 |
| (2,1122) | 1:B:51:VAL:HG13 | 1:B:55:PRO:HD2 | 9 | 0.33 |
| (2,1122) | 1:B:51:VAL:HG11 | 1:B:55:PRO:HD2 | 9 | 0.33 |
| (2,1122) | 1:B:51:VAL:HG12 | 1:B:55:PRO:HD2 | 9 | 0.33 |
| (2,1122) | 1:B:51:VAL:HG21 | 1:B:55:PRO:HD2 | 9 | 0.33 |
| (2,1122) | 1:B:51:VAL:HG23 | 1:B:55:PRO:HD2 | 9 | 0.33 |
| (2,1122) | 1:B:51:VAL:HG22 | 1:B:55:PRO:HD2 | 9 | 0.33 |
| (1,747) | 1:B:37:LYS:HB2 | 1:B:34:PRO:HA | 6 | 0.33 |
| (1,736) | 1:B:11:LYS:HD2 | 1:B:66:TYR:HE1 | 3 | 0.33 |
| (1,736) | 1:B:11:LYS:HD2 | 1:B:66:TYR:HE2 | 3 | 0.33 |
| (1,660) | 1:B:74:ASN:HB3 | 1:B:74:ASN:HA | 8 | 0.33 |
| (1,598) | 1:B:26:ILE:HG21 | 1:B:90:GLY:HA3 | 8 | 0.33 |
| (1,598) | 1:B:26:ILE:HG22 | 1:B:90:GLY:HA3 | 8 | 0.33 |
| (1,598) | 1:B:26:ILE:HG23 | 1:B:90:GLY:HA3 | 8 | 0.33 |
| (1,598) | 1:B:26:ILE:HG21 | 1:B:90:GLY:HA3 | 10 | 0.33 |
| (1,598) | 1:B:26:ILE:HG22 | 1:B:90:GLY:HA3 | 10 | 0.33 |
| (1,598) | 1:B:26:ILE:HG23 | 1:B:90:GLY:HA3 | 10 | 0.33 |
| (1,497) | 1:B:48:GLU:HB2 | 1:B:48:GLU:HA | 4 | 0.33 |
| (1,485) | 1:B:98:LEU:HD21 | 1:B:40:PHE:HB3 | 3 | 0.33 |
| (1,485) | 1:B:98:LEU:HD22 | 1:B:40:PHE:HB3 | 3 | 0.33 |
| (1,485) | 1:B:98:LEU:HD23 | 1:B:40:PHE:HB3 | 3 | 0.33 |
| (1,426) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD21 | 6 | 0.33 |
| (1,426) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD23 | 6 | 0.33 |
| (1,426) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD22 | 6 | 0.33 |
| (1,382) | 1:B:39:ARG:HG2 | 1:B:39:ARG:HA | 1 | 0.33 |
| (1,38) | 1:B:98:LEU:H | 1:B:98:LEU:HB3 | 6 | 0.33 |
| (1,362) | 1:B:34:PRO:HB2 | 1:B:34:PRO:HA | 1 | 0.33 |
| (1,362) | 1:B:34:PRO:HB2 | 1:B:34:PRO:HA | 2 | 0.33 |
| (1,362) | 1:B:34:PRO:HB2 | 1:B:34:PRO:HA | 3 | 0.33 |
| (1,362) | 1:B:34:PRO:HB2 | 1:B:34:PRO:HA | 4 | 0.33 |
| (1,362) | 1:B:34:PRO:HB2 | 1:B:34:PRO:HA | 5 | 0.33 |
| (1,362) | 1:B:34:PRO:HB2 | 1:B:34:PRO:HA | 8 | 0.33 |
| (1,160) | 1:B:95:GLU:HG3 | 1:B:95:GLU:HA | 8 | 0.33 |
| (1,155) | 1:B:95:GLU:H | 1:B:95:GLU:HG2 | 5 | 0.33 |
| (1,1152) | 1:B:93:PHE:H | 1:B:90:GLY:HA3 | 4 | 0.33 |
| (2,643) | 1:B:45:MET:HB2 | 1:B:40:PHE:HA | 8 | 0.32 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|----------------|----------|---------------|
| (2,643) | 1:B:96:LYS:HB3 | 1:B:93:PHE:HA | 8 | 0.32 |
| (2,490) | 1:B:39:ARG:HG3 | 1:B:39:ARG:H | 6 | 0.32 |
| (2,490) | 1:B:99:ILE:H | 1:B:39:ARG:HG3 | 6 | 0.32 |
| (2,490) | 1:B:72:LYS:H | 1:B:70:PRO:HG3 | 6 | 0.32 |
| (2,490) | 1:B:70:PRO:HG3 | 1:B:81:TRP:HZ2 | 6 | 0.32 |
| (2,490) | 1:B:81:TRP:HE3 | 1:B:85:LEU:HG | 6 | 0.32 |
| (2,420) | 1:B:81:TRP:HB3 | 1:B:79:GLY:HA2 | 10 | 0.32 |
| (2,420) | 1:B:81:TRP:HB3 | 1:B:80:THR:HA | 10 | 0.32 |
| (2,420) | 1:B:81:TRP:HB3 | 1:B:80:THR:HB | 10 | 0.32 |
| (2,420) | 1:B:81:TRP:HB3 | 1:B:84:SER:HB2 | 10 | 0.32 |
| (2,360) | 1:B:21:LEU:H | 1:B:23:PRO:HG3 | 5 | 0.32 |
| (2,360) | 1:B:22:LEU:H | 1:B:23:PRO:HG3 | 5 | 0.32 |
| (2,360) | 1:B:55:PRO:HG3 | 1:B:52:THR:H | 5 | 0.32 |
| (2,1502) | 1:B:38:LYS:H | 1:B:37:LYS:HB2 | 7 | 0.32 |
| (2,1502) | 1:B:38:LYS:H | 1:B:38:LYS:HD2 | 7 | 0.32 |
| (2,150) | 1:B:64:GLU:H | 1:B:64:GLU:HG2 | 3 | 0.32 |
| (2,150) | 1:B:64:GLU:H | 1:B:64:GLU:HG3 | 3 | 0.32 |
| (2,144) | 1:B:56:GLU:HG3 | 1:B:53:LEU:HG | 6 | 0.32 |
| (2,144) | 1:B:87:GLU:HG3 | 1:B:83:ARG:HG3 | 6 | 0.32 |
| (2,144) | 1:B:87:GLU:HG3 | 1:B:85:LEU:HG | 6 | 0.32 |
| (2,144) | 1:B:87:GLU:HG3 | 1:B:91:LYS:HD3 | 6 | 0.32 |
| (2,144) | 1:B:87:GLU:HG3 | 1:B:91:LYS:HD2 | 6 | 0.32 |
| (2,144) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HB | 6 | 0.32 |
| (2,1422) | 1:B:41:ASP:H | 1:B:44:LYS:HG3 | 4 | 0.32 |
| (2,1422) | 1:B:41:ASP:H | 1:B:45:MET:HB2 | 4 | 0.32 |
| (2,1422) | 1:B:41:ASP:H | 1:B:44:LYS:HG3 | 6 | 0.32 |
| (2,1422) | 1:B:41:ASP:H | 1:B:45:MET:HB2 | 6 | 0.32 |
| (1,736) | 1:B:11:LYS:HD2 | 1:B:66:TYR:HE1 | 8 | 0.32 |
| (1,736) | 1:B:11:LYS:HD2 | 1:B:66:TYR:HE2 | 8 | 0.32 |
| (1,660) | 1:B:74:ASN:HB3 | 1:B:74:ASN:HA | 1 | 0.32 |
| (1,660) | 1:B:74:ASN:HB3 | 1:B:74:ASN:HA | 9 | 0.32 |
| (1,660) | 1:B:74:ASN:HB3 | 1:B:74:ASN:HA | 10 | 0.32 |
| (1,598) | 1:B:26:ILE:HG21 | 1:B:90:GLY:HA3 | 2 | 0.32 |
| (1,598) | 1:B:26:ILE:HG22 | 1:B:90:GLY:HA3 | 2 | 0.32 |
| (1,598) | 1:B:26:ILE:HG23 | 1:B:90:GLY:HA3 | 2 | 0.32 |
| (1,394) | 1:B:99:ILE:HG12 | 1:B:95:GLU:HA | 2 | 0.32 |
| (1,382) | 1:B:39:ARG:HG2 | 1:B:39:ARG:HA | 9 | 0.32 |
| (1,38) | 1:B:98:LEU:H | 1:B:98:LEU:HB3 | 1 | 0.32 |
| (1,377) | 1:B:58:THR:H | 1:B:57:SER:HB2 | 2 | 0.32 |
| (1,362) | 1:B:34:PRO:HB2 | 1:B:34:PRO:HA | 6 | 0.32 |
| (1,278) | 1:B:64:GLU:HB3 | 1:B:61:CYS:HB3 | 6 | 0.32 |
| (1,213) | 1:B:35:ASP:H | 1:B:34:PRO:HB3 | 2 | 0.32 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,213) | 1:B:35:ASP:H | 1:B:34:PRO:HB3 | 3 | 0.32 |
| (1,213) | 1:B:35:ASP:H | 1:B:34:PRO:HB3 | 5 | 0.32 |
| (1,160) | 1:B:95:GLU:HG3 | 1:B:95:GLU:HA | 3 | 0.32 |
| (1,155) | 1:B:95:GLU:H | 1:B:95:GLU:HG2 | 2 | 0.32 |
| (1,155) | 1:B:95:GLU:H | 1:B:95:GLU:HG2 | 4 | 0.32 |
| (1,1307) | 1:B:31:ILE:H | 1:B:30:PHE:HB3 | 8 | 0.32 |
| (1,1068) | 1:B:30:PHE:H | 1:B:31:ILE:HG12 | 6 | 0.32 |
| (2,959) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HB3 | 8 | 0.31 |
| (2,959) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HD3 | 8 | 0.31 |
| (2,959) | 1:B:88:CYS:HB2 | 1:B:89:ILE:HG13 | 8 | 0.31 |
| (2,638) | 1:B:98:LEU:HB2 | 1:B:98:LEU:HD21 | 7 | 0.31 |
| (2,638) | 1:B:98:LEU:HB2 | 1:B:98:LEU:HD22 | 7 | 0.31 |
| (2,638) | 1:B:98:LEU:HB2 | 1:B:98:LEU:HD23 | 7 | 0.31 |
| (2,638) | 1:B:43:ILE:HG12 | 1:B:98:LEU:HD21 | 7 | 0.31 |
| (2,638) | 1:B:43:ILE:HG12 | 1:B:98:LEU:HD22 | 7 | 0.31 |
| (2,638) | 1:B:43:ILE:HG12 | 1:B:98:LEU:HD23 | 7 | 0.31 |
| (2,601) | 1:B:72:LYS:HG3 | 1:B:10:THR:HG22 | 8 | 0.31 |
| (2,601) | 1:B:72:LYS:HG3 | 1:B:10:THR:HG21 | 8 | 0.31 |
| (2,601) | 1:B:72:LYS:HG3 | 1:B:10:THR:HG23 | 8 | 0.31 |
| (2,601) | 1:B:72:LYS:HB3 | 1:B:72:LYS:HG3 | 8 | 0.31 |
| (2,601) | 1:B:72:LYS:HG3 | 1:B:10:THR:HG22 | 9 | 0.31 |
| (2,601) | 1:B:72:LYS:HG3 | 1:B:10:THR:HG21 | 9 | 0.31 |
| (2,601) | 1:B:72:LYS:HG3 | 1:B:10:THR:HG23 | 9 | 0.31 |
| (2,601) | 1:B:72:LYS:HB3 | 1:B:72:LYS:HG3 | 9 | 0.31 |
| (2,552) | 1:B:64:GLU:HG2 | 1:B:60:LYS:HG3 | 7 | 0.31 |
| (2,552) | 1:B:64:GLU:HG3 | 1:B:60:LYS:HG3 | 7 | 0.31 |
| (2,39) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD21 | 9 | 0.31 |
| (2,39) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD23 | 9 | 0.31 |
| (2,39) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD22 | 9 | 0.31 |
| (2,39) | 1:B:61:CYS:HB2 | 1:B:89:ILE:HD11 | 9 | 0.31 |
| (2,39) | 1:B:61:CYS:HB2 | 1:B:89:ILE:HD13 | 9 | 0.31 |
| (2,39) | 1:B:61:CYS:HB2 | 1:B:89:ILE:HD12 | 9 | 0.31 |
| (2,1502) | 1:B:38:LYS:H | 1:B:37:LYS:HB2 | 9 | 0.31 |
| (2,1502) | 1:B:38:LYS:H | 1:B:38:LYS:HD2 | 9 | 0.31 |
| (2,1414) | 1:B:41:ASP:H | 1:B:42:GLU:HG3 | 9 | 0.31 |
| (2,1414) | 1:B:41:ASP:H | 1:B:30:PHE:HB2 | 9 | 0.31 |
| (2,140) | 1:B:64:GLU:HG2 | 1:B:60:LYS:HG3 | 8 | 0.31 |
| (2,140) | 1:B:64:GLU:HG3 | 1:B:60:LYS:HG3 | 8 | 0.31 |
| (2,140) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB1 | 8 | 0.31 |
| (2,140) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB3 | 8 | 0.31 |
| (2,140) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB2 | 8 | 0.31 |
| (2,1164) | 1:B:54:ILE:HD12 | 1:B:23:PRO:HD3 | 3 | 0.31 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,1164) | 1:B:54:ILE:HD11 | 1:B:23:PRO:HD3 | 3 | 0.31 |
| (2,1164) | 1:B:54:ILE:HD13 | 1:B:23:PRO:HD3 | 3 | 0.31 |
| (2,1164) | 1:B:54:ILE:HD12 | 1:B:55:PRO:HD2 | 3 | 0.31 |
| (2,1164) | 1:B:54:ILE:HD11 | 1:B:55:PRO:HD2 | 3 | 0.31 |
| (2,1164) | 1:B:54:ILE:HD13 | 1:B:55:PRO:HD2 | 3 | 0.31 |
| (2,1164) | 1:B:54:ILE:HD12 | 1:B:94:ALA:HA | 3 | 0.31 |
| (2,1164) | 1:B:54:ILE:HD11 | 1:B:94:ALA:HA | 3 | 0.31 |
| (2,1164) | 1:B:54:ILE:HD13 | 1:B:94:ALA:HA | 3 | 0.31 |
| (2,1164) | 1:B:54:ILE:HD12 | 1:B:23:PRO:HD3 | 5 | 0.31 |
| (2,1164) | 1:B:54:ILE:HD11 | 1:B:23:PRO:HD3 | 5 | 0.31 |
| (2,1164) | 1:B:54:ILE:HD13 | 1:B:23:PRO:HD3 | 5 | 0.31 |
| (2,1164) | 1:B:54:ILE:HD12 | 1:B:55:PRO:HD2 | 5 | 0.31 |
| (2,1164) | 1:B:54:ILE:HD11 | 1:B:55:PRO:HD2 | 5 | 0.31 |
| (2,1164) | 1:B:54:ILE:HD13 | 1:B:55:PRO:HD2 | 5 | 0.31 |
| (2,1164) | 1:B:54:ILE:HD12 | 1:B:94:ALA:HA | 5 | 0.31 |
| (2,1164) | 1:B:54:ILE:HD11 | 1:B:94:ALA:HA | 5 | 0.31 |
| (2,1164) | 1:B:54:ILE:HD13 | 1:B:94:ALA:HA | 5 | 0.31 |
| (2,1143) | 1:B:4:ALA:HB1 | 1:B:5:ASN:HB3 | 6 | 0.31 |
| (2,1143) | 1:B:4:ALA:HB2 | 1:B:5:ASN:HB3 | 6 | 0.31 |
| (2,1143) | 1:B:4:ALA:HB3 | 1:B:5:ASN:HB3 | 6 | 0.31 |
| (2,1143) | 1:B:78:ALA:HB1 | 1:B:74:ASN:HB2 | 6 | 0.31 |
| (2,1143) | 1:B:78:ALA:HB2 | 1:B:74:ASN:HB2 | 6 | 0.31 |
| (2,1143) | 1:B:78:ALA:HB3 | 1:B:74:ASN:HB2 | 6 | 0.31 |
| (2,1143) | 1:B:78:ALA:HB1 | 1:B:81:TRP:HB3 | 6 | 0.31 |
| (2,1143) | 1:B:78:ALA:HB2 | 1:B:81:TRP:HB3 | 6 | 0.31 |
| (2,1143) | 1:B:78:ALA:HB3 | 1:B:81:TRP:HB3 | 6 | 0.31 |
| (2,1128) | 1:B:99:ILE:HA | 1:B:99:ILE:HG13 | 7 | 0.31 |
| (2,1128) | 1:B:99:ILE:HA | 1:B:101:LYS:HG3 | 7 | 0.31 |
| (2,1122) | 1:B:51:VAL:HG13 | 1:B:23:PRO:HD3 | 5 | 0.31 |
| (2,1122) | 1:B:51:VAL:HG11 | 1:B:23:PRO:HD3 | 5 | 0.31 |
| (2,1122) | 1:B:51:VAL:HG12 | 1:B:23:PRO:HD3 | 5 | 0.31 |
| (2,1122) | 1:B:51:VAL:HG13 | 1:B:55:PRO:HD2 | 5 | 0.31 |
| (2,1122) | 1:B:51:VAL:HG11 | 1:B:55:PRO:HD2 | 5 | 0.31 |
| (2,1122) | 1:B:51:VAL:HG12 | 1:B:55:PRO:HD2 | 5 | 0.31 |
| (2,1122) | 1:B:51:VAL:HG21 | 1:B:55:PRO:HD2 | 5 | 0.31 |
| (2,1122) | 1:B:51:VAL:HG23 | 1:B:55:PRO:HD2 | 5 | 0.31 |
| (2,1122) | 1:B:51:VAL:HG22 | 1:B:55:PRO:HD2 | 5 | 0.31 |
| (2,1122) | 1:B:51:VAL:HG13 | 1:B:23:PRO:HD3 | 8 | 0.31 |
| (2,1122) | 1:B:51:VAL:HG11 | 1:B:23:PRO:HD3 | 8 | 0.31 |
| (2,1122) | 1:B:51:VAL:HG12 | 1:B:23:PRO:HD3 | 8 | 0.31 |
| (2,1122) | 1:B:51:VAL:HG13 | 1:B:55:PRO:HD2 | 8 | 0.31 |
| (2,1122) | 1:B:51:VAL:HG11 | 1:B:55:PRO:HD2 | 8 | 0.31 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,1122) | 1:B:51:VAL:HG12 | 1:B:55:PRO:HD2 | 8 | 0.31 |
| (2,1122) | 1:B:51:VAL:HG21 | 1:B:55:PRO:HD2 | 8 | 0.31 |
| (2,1122) | 1:B:51:VAL:HG23 | 1:B:55:PRO:HD2 | 8 | 0.31 |
| (2,1122) | 1:B:51:VAL:HG22 | 1:B:55:PRO:HD2 | 8 | 0.31 |
| (2,1062) | 1:B:60:LYS:HB2 | 1:B:57:SER:HB3 | 6 | 0.31 |
| (2,1062) | 1:B:57:SER:HB3 | 1:B:89:ILE:HB | 6 | 0.31 |
| (1,771) | 1:B:43:ILE:H | 1:B:45:MET:HB3 | 2 | 0.31 |
| (1,736) | 1:B:11:LYS:HD2 | 1:B:66:TYR:HE1 | 9 | 0.31 |
| (1,736) | 1:B:11:LYS:HD2 | 1:B:66:TYR:HE2 | 9 | 0.31 |
| (1,697) | 1:B:85:LEU:H | 1:B:82:GLY:HA3 | 6 | 0.31 |
| (1,598) | 1:B:26:ILE:HG21 | 1:B:90:GLY:HA3 | 6 | 0.31 |
| (1,598) | 1:B:26:ILE:HG22 | 1:B:90:GLY:HA3 | 6 | 0.31 |
| (1,598) | 1:B:26:ILE:HG23 | 1:B:90:GLY:HA3 | 6 | 0.31 |
| (1,529) | 1:B:59:LYS:HD2 | 1:B:59:LYS:HA | 10 | 0.31 |
| (1,448) | 1:B:72:LYS:H | 1:B:72:LYS:HG2 | 10 | 0.31 |
| (1,426) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD21 | 3 | 0.31 |
| (1,426) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD23 | 3 | 0.31 |
| (1,426) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD22 | 3 | 0.31 |
| (1,382) | 1:B:39:ARG:HG2 | 1:B:39:ARG:HA | 2 | 0.31 |
| (1,382) | 1:B:39:ARG:HG2 | 1:B:39:ARG:HA | 10 | 0.31 |
| (1,38) | 1:B:98:LEU:H | 1:B:98:LEU:HB3 | 2 | 0.31 |
| (1,38) | 1:B:98:LEU:H | 1:B:98:LEU:HB3 | 3 | 0.31 |
| (1,38) | 1:B:98:LEU:H | 1:B:98:LEU:HB3 | 8 | 0.31 |
| (1,38) | 1:B:98:LEU:H | 1:B:98:LEU:HB3 | 9 | 0.31 |
| (1,38) | 1:B:98:LEU:H | 1:B:98:LEU:HB3 | 10 | 0.31 |
| (1,379) | 1:B:57:SER:HB2 | 1:B:54:ILE:HD12 | 2 | 0.31 |
| (1,379) | 1:B:57:SER:HB2 | 1:B:54:ILE:HD11 | 2 | 0.31 |
| (1,379) | 1:B:57:SER:HB2 | 1:B:54:ILE:HD13 | 2 | 0.31 |
| (1,362) | 1:B:34:PRO:HB2 | 1:B:34:PRO:HA | 9 | 0.31 |
| (1,166) | 1:B:54:ILE:HB | 1:B:55:PRO:HD2 | 6 | 0.31 |
| (1,1269) | 1:B:10:THR:H | 1:B:72:LYS:HG3 | 7 | 0.31 |
| (1,1269) | 1:B:10:THR:H | 1:B:72:LYS:HG3 | 8 | 0.31 |
| (1,1169) | 1:B:51:VAL:H | 1:B:27:CYS:HB3 | 9 | 0.31 |
| (1,1137) | 1:B:60:LYS:H | 1:B:60:LYS:HE3 | 2 | 0.31 |
| (1,1006) | 1:B:94:ALA:H | 1:B:96:LYS:HB3 | 1 | 0.31 |
| (2,638) | 1:B:98:LEU:HB2 | 1:B:98:LEU:HD21 | 1 | 0.3 |
| (2,638) | 1:B:98:LEU:HB2 | 1:B:98:LEU:HD22 | 1 | 0.3 |
| (2,638) | 1:B:98:LEU:HB2 | 1:B:98:LEU:HD23 | 1 | 0.3 |
| (2,638) | 1:B:43:ILE:HG12 | 1:B:98:LEU:HD21 | 1 | 0.3 |
| (2,638) | 1:B:43:ILE:HG12 | 1:B:98:LEU:HD22 | 1 | 0.3 |
| (2,638) | 1:B:43:ILE:HG12 | 1:B:98:LEU:HD23 | 1 | 0.3 |
| (2,360) | 1:B:21:LEU:H | 1:B:23:PRO:HG3 | 3 | 0.3 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,360) | 1:B:22:LEU:H | 1:B:23:PRO:HG3 | 3 | 0.3 |
| (2,360) | 1:B:55:PRO:HG3 | 1:B:52:THR:H | 3 | 0.3 |
| (2,360) | 1:B:21:LEU:H | 1:B:23:PRO:HG3 | 4 | 0.3 |
| (2,360) | 1:B:22:LEU:H | 1:B:23:PRO:HG3 | 4 | 0.3 |
| (2,360) | 1:B:55:PRO:HG3 | 1:B:52:THR:H | 4 | 0.3 |
| (2,174) | 1:B:52:THR:H | 1:B:49:GLN:HG3 | 1 | 0.3 |
| (2,174) | 1:B:52:THR:H | 1:B:49:GLN:HG2 | 1 | 0.3 |
| (2,174) | 1:B:62:GLN:HG3 | 1:B:14:TRP:HE3 | 1 | 0.3 |
| (2,1567) | 1:B:71:ASP:H | 1:B:11:LYS:HD3 | 7 | 0.3 |
| (2,1567) | 1:B:71:ASP:H | 1:B:72:LYS:HG2 | 7 | 0.3 |
| (2,1502) | 1:B:38:LYS:H | 1:B:37:LYS:HB2 | 1 | 0.3 |
| (2,1502) | 1:B:38:LYS:H | 1:B:38:LYS:HD2 | 1 | 0.3 |
| (2,1422) | 1:B:41:ASP:H | 1:B:44:LYS:HG3 | 8 | 0.3 |
| (2,1422) | 1:B:41:ASP:H | 1:B:45:MET:HB2 | 8 | 0.3 |
| (2,119) | 1:B:47:TYR:HB2 | 1:B:46:THR:HA | 3 | 0.3 |
| (2,119) | 1:B:47:TYR:HB2 | 1:B:46:THR:HB | 3 | 0.3 |
| (2,1164) | 1:B:54:ILE:HD12 | 1:B:23:PRO:HD3 | 7 | 0.3 |
| (2,1164) | 1:B:54:ILE:HD11 | 1:B:23:PRO:HD3 | 7 | 0.3 |
| (2,1164) | 1:B:54:ILE:HD13 | 1:B:23:PRO:HD3 | 7 | 0.3 |
| (2,1164) | 1:B:54:ILE:HD12 | 1:B:55:PRO:HD2 | 7 | 0.3 |
| (2,1164) | 1:B:54:ILE:HD11 | 1:B:55:PRO:HD2 | 7 | 0.3 |
| (2,1164) | 1:B:54:ILE:HD13 | 1:B:55:PRO:HD2 | 7 | 0.3 |
| (2,1164) | 1:B:54:ILE:HD12 | 1:B:94:ALA:HA | 7 | 0.3 |
| (2,1164) | 1:B:54:ILE:HD11 | 1:B:94:ALA:HA | 7 | 0.3 |
| (2,1164) | 1:B:54:ILE:HD13 | 1:B:94:ALA:HA | 7 | 0.3 |
| (2,1164) | 1:B:54:ILE:HD12 | 1:B:23:PRO:HD3 | 8 | 0.3 |
| (2,1164) | 1:B:54:ILE:HD11 | 1:B:23:PRO:HD3 | 8 | 0.3 |
| (2,1164) | 1:B:54:ILE:HD13 | 1:B:23:PRO:HD3 | 8 | 0.3 |
| (2,1164) | 1:B:54:ILE:HD12 | 1:B:55:PRO:HD2 | 8 | 0.3 |
| (2,1164) | 1:B:54:ILE:HD11 | 1:B:55:PRO:HD2 | 8 | 0.3 |
| (2,1164) | 1:B:54:ILE:HD13 | 1:B:55:PRO:HD2 | 8 | 0.3 |
| (2,1164) | 1:B:54:ILE:HD12 | 1:B:94:ALA:HA | 8 | 0.3 |
| (2,1164) | 1:B:54:ILE:HD11 | 1:B:94:ALA:HA | 8 | 0.3 |
| (2,1164) | 1:B:54:ILE:HD13 | 1:B:94:ALA:HA | 8 | 0.3 |
| (2,1055) | 1:B:30:PHE:H | 1:B:31:ILE:HG12 | 3 | 0.3 |
| (2,1055) | 1:B:32:GLN:H | 1:B:31:ILE:HG12 | 3 | 0.3 |
| (2,1055) | 1:B:30:PHE:H | 1:B:31:ILE:HG12 | 5 | 0.3 |
| (2,1055) | 1:B:32:GLN:H | 1:B:31:ILE:HG12 | 5 | 0.3 |
| (2,1055) | 1:B:30:PHE:H | 1:B:31:ILE:HG12 | 8 | 0.3 |
| (2,1055) | 1:B:32:GLN:H | 1:B:31:ILE:HG12 | 8 | 0.3 |
| (1,93) | 1:B:30:PHE:HB2 | 1:B:36:LEU:HB3 | 4 | 0.3 |
| (1,82) | 1:B:74:ASN:H | 1:B:74:ASN:HB2 | 3 | 0.3 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,785) | 1:B:57:SER:HB3 | 1:B:93:PHE:H | 9 | 0.3 |
| (1,747) | 1:B:37:LYS:HB2 | 1:B:34:PRO:HA | 9 | 0.3 |
| (1,660) | 1:B:74:ASN:HB3 | 1:B:74:ASN:HA | 4 | 0.3 |
| (1,660) | 1:B:74:ASN:HB3 | 1:B:74:ASN:HA | 5 | 0.3 |
| (1,52) | 1:B:11:LYS:HE2 | 1:B:69:MET:HB3 | 1 | 0.3 |
| (1,382) | 1:B:39:ARG:HG2 | 1:B:39:ARG:HA | 6 | 0.3 |
| (1,38) | 1:B:98:LEU:H | 1:B:98:LEU:HB3 | 4 | 0.3 |
| (1,38) | 1:B:98:LEU:H | 1:B:98:LEU:HB3 | 5 | 0.3 |
| (1,38) | 1:B:98:LEU:H | 1:B:98:LEU:HB3 | 7 | 0.3 |
| (1,282) | 1:B:60:LYS:HD3 | 1:B:57:SER:HA | 5 | 0.3 |
| (1,213) | 1:B:35:ASP:H | 1:B:34:PRO:HB3 | 8 | 0.3 |
| (1,206) | 1:B:45:MET:HB3 | 1:B:45:MET:HG3 | 2 | 0.3 |
| (1,206) | 1:B:45:MET:HB3 | 1:B:45:MET:HG3 | 6 | 0.3 |
| (1,206) | 1:B:45:MET:HB3 | 1:B:45:MET:HG3 | 9 | 0.3 |
| (1,160) | 1:B:95:GLU:HG3 | 1:B:95:GLU:HA | 7 | 0.3 |
| (1,160) | 1:B:95:GLU:HG3 | 1:B:95:GLU:HA | 9 | 0.3 |
| (1,1318) | 1:B:43:ILE:H | 1:B:39:ARG:HG2 | 7 | 0.3 |
| (1,1068) | 1:B:30:PHE:H | 1:B:31:ILE:HG12 | 4 | 0.3 |
| (2,959) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HB3 | 9 | 0.29 |
| (2,959) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HD3 | 9 | 0.29 |
| (2,959) | 1:B:88:CYS:HB2 | 1:B:89:ILE:HG13 | 9 | 0.29 |
| (2,839) | 1:B:23:PRO:HB3 | 1:B:55:PRO:HD2 | 9 | 0.29 |
| (2,839) | 1:B:20:PRO:HB2 | 1:B:20:PRO:HD2 | 9 | 0.29 |
| (2,360) | 1:B:21:LEU:H | 1:B:23:PRO:HG3 | 7 | 0.29 |
| (2,360) | 1:B:22:LEU:H | 1:B:23:PRO:HG3 | 7 | 0.29 |
| (2,360) | 1:B:55:PRO:HG3 | 1:B:52:THR:H | 7 | 0.29 |
| (2,1567) | 1:B:71:ASP:H | 1:B:11:LYS:HD3 | 1 | 0.29 |
| (2,1567) | 1:B:71:ASP:H | 1:B:72:LYS:HG2 | 1 | 0.29 |
| (2,1567) | 1:B:71:ASP:H | 1:B:11:LYS:HD3 | 2 | 0.29 |
| (2,1567) | 1:B:71:ASP:H | 1:B:72:LYS:HG2 | 2 | 0.29 |
| (2,154) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HG13 | 6 | 0.29 |
| (2,154) | 1:B:56:GLU:HG3 | 1:B:53:LEU:HB3 | 6 | 0.29 |
| (2,154) | 1:B:56:GLU:HG3 | 1:B:96:LYS:HD2 | 6 | 0.29 |
| (2,154) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HG13 | 9 | 0.29 |
| (2,154) | 1:B:56:GLU:HG3 | 1:B:53:LEU:HB3 | 9 | 0.29 |
| (2,154) | 1:B:56:GLU:HG3 | 1:B:96:LYS:HD2 | 9 | 0.29 |
| (2,1414) | 1:B:41:ASP:H | 1:B:42:GLU:HG3 | 1 | 0.29 |
| (2,1414) | 1:B:41:ASP:H | 1:B:30:PHE:HB2 | 1 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD12 | 1:B:23:PRO:HD3 | 4 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD11 | 1:B:23:PRO:HD3 | 4 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD13 | 1:B:23:PRO:HD3 | 4 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD12 | 1:B:55:PRO:HD2 | 4 | 0.29 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,1164) | 1:B:54:ILE:HD11 | 1:B:55:PRO:HD2 | 4 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD13 | 1:B:55:PRO:HD2 | 4 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD12 | 1:B:94:ALA:HA | 4 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD11 | 1:B:94:ALA:HA | 4 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD13 | 1:B:94:ALA:HA | 4 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD12 | 1:B:23:PRO:HD3 | 6 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD11 | 1:B:23:PRO:HD3 | 6 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD13 | 1:B:23:PRO:HD3 | 6 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD12 | 1:B:55:PRO:HD2 | 6 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD11 | 1:B:55:PRO:HD2 | 6 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD13 | 1:B:55:PRO:HD2 | 6 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD12 | 1:B:94:ALA:HA | 6 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD11 | 1:B:94:ALA:HA | 6 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD13 | 1:B:94:ALA:HA | 6 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD12 | 1:B:23:PRO:HD3 | 9 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD11 | 1:B:23:PRO:HD3 | 9 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD13 | 1:B:23:PRO:HD3 | 9 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD12 | 1:B:55:PRO:HD2 | 9 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD11 | 1:B:55:PRO:HD2 | 9 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD13 | 1:B:55:PRO:HD2 | 9 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD12 | 1:B:94:ALA:HA | 9 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD11 | 1:B:94:ALA:HA | 9 | 0.29 |
| (2,1164) | 1:B:54:ILE:HD13 | 1:B:94:ALA:HA | 9 | 0.29 |
| (1,93) | 1:B:30:PHE:HB2 | 1:B:36:LEU:HB3 | 1 | 0.29 |
| (1,426) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD21 | 7 | 0.29 |
| (1,426) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD23 | 7 | 0.29 |
| (1,426) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD22 | 7 | 0.29 |
| (1,382) | 1:B:39:ARG:HG2 | 1:B:39:ARG:HA | 3 | 0.29 |
| (1,382) | 1:B:39:ARG:HG2 | 1:B:39:ARG:HA | 8 | 0.29 |
| (1,377) | 1:B:58:THR:H | 1:B:57:SER:HB2 | 1 | 0.29 |
| (1,377) | 1:B:58:THR:H | 1:B:57:SER:HB2 | 10 | 0.29 |
| (1,324) | 1:B:81:TRP:H | 1:B:81:TRP:HB3 | 4 | 0.29 |
| (1,324) | 1:B:81:TRP:H | 1:B:81:TRP:HB3 | 5 | 0.29 |
| (1,324) | 1:B:81:TRP:H | 1:B:81:TRP:HB3 | 6 | 0.29 |
| (1,278) | 1:B:64:GLU:HB3 | 1:B:61:CYS:HB3 | 5 | 0.29 |
| (1,278) | 1:B:64:GLU:HB3 | 1:B:61:CYS:HB3 | 7 | 0.29 |
| (1,206) | 1:B:45:MET:HB3 | 1:B:45:MET:HG3 | 3 | 0.29 |
| (1,206) | 1:B:45:MET:HB3 | 1:B:45:MET:HG3 | 5 | 0.29 |
| (1,206) | 1:B:45:MET:HB3 | 1:B:45:MET:HG3 | 7 | 0.29 |
| (1,206) | 1:B:45:MET:HB3 | 1:B:45:MET:HG3 | 8 | 0.29 |
| (1,206) | 1:B:45:MET:HB3 | 1:B:45:MET:HG3 | 10 | 0.29 |
| (1,166) | 1:B:54:ILE:HB | 1:B:55:PRO:HD2 | 8 | 0.29 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|----------------|-----------------|----------|---------------|
| (1,166) | 1:B:54:ILE:HB | 1:B:55:PRO:HD2 | 9 | 0.29 |
| (1,160) | 1:B:95:GLU:HG3 | 1:B:95:GLU:HA | 1 | 0.29 |
| (1,160) | 1:B:95:GLU:HG3 | 1:B:95:GLU:HA | 4 | 0.29 |
| (1,1169) | 1:B:51:VAL:H | 1:B:27:CYS:HB3 | 4 | 0.29 |
| (1,1035) | 1:B:42:GLU:H | 1:B:41:ASP:HB2 | 1 | 0.29 |
| (2,943) | 1:B:-2:ASP:HB3 | 1:B:-1:LYS:HD3 | 3 | 0.28 |
| (2,943) | 1:B:13:ALA:HB1 | 1:B:12:ASP:HB2 | 3 | 0.28 |
| (2,943) | 1:B:13:ALA:HB2 | 1:B:12:ASP:HB2 | 3 | 0.28 |
| (2,943) | 1:B:13:ALA:HB3 | 1:B:12:ASP:HB2 | 3 | 0.28 |
| (2,943) | 1:B:27:CYS:HB3 | 1:B:26:ILE:HG12 | 3 | 0.28 |
| (2,943) | 1:B:27:CYS:HB3 | 1:B:28:LYS:HD2 | 3 | 0.28 |
| (2,943) | 1:B:27:CYS:HB3 | 1:B:28:LYS:HD3 | 3 | 0.28 |
| (2,943) | 1:B:27:CYS:HB3 | 1:B:45:MET:HG2 | 3 | 0.28 |
| (2,943) | 1:B:35:ASP:HB3 | 1:B:38:LYS:HG2 | 3 | 0.28 |
| (2,943) | 1:B:71:ASP:HB2 | 1:B:72:LYS:HB2 | 3 | 0.28 |
| (2,943) | 1:B:71:ASP:HB2 | 1:B:72:LYS:HD2 | 3 | 0.28 |
| (2,943) | 1:B:71:ASP:HB2 | 1:B:72:LYS:HD3 | 3 | 0.28 |
| (2,839) | 1:B:23:PRO:HB3 | 1:B:55:PRO:HD2 | 3 | 0.28 |
| (2,839) | 1:B:20:PRO:HB2 | 1:B:20:PRO:HD2 | 3 | 0.28 |
| (2,360) | 1:B:21:LEU:H | 1:B:23:PRO:HG3 | 2 | 0.28 |
| (2,360) | 1:B:22:LEU:H | 1:B:23:PRO:HG3 | 2 | 0.28 |
| (2,360) | 1:B:55:PRO:HG3 | 1:B:52:THR:H | 2 | 0.28 |
| (2,360) | 1:B:21:LEU:H | 1:B:23:PRO:HG3 | 6 | 0.28 |
| (2,360) | 1:B:22:LEU:H | 1:B:23:PRO:HG3 | 6 | 0.28 |
| (2,360) | 1:B:55:PRO:HG3 | 1:B:52:THR:H | 6 | 0.28 |
| (2,1567) | 1:B:71:ASP:H | 1:B:11:LYS:HD3 | 9 | 0.28 |
| (2,1567) | 1:B:71:ASP:H | 1:B:72:LYS:HG2 | 9 | 0.28 |
| (2,1523) | 1:B:56:GLU:H | 1:B:23:PRO:HG2 | 10 | 0.28 |
| (2,1523) | 1:B:56:GLU:H | 1:B:59:LYS:HD3 | 10 | 0.28 |
| (2,1523) | 1:B:56:GLU:H | 1:B:60:LYS:HD3 | 10 | 0.28 |
| (1,895) | 1:B:33:ASP:H | 1:B:33:ASP:HB3 | 5 | 0.28 |
| (1,377) | 1:B:58:THR:H | 1:B:57:SER:HB2 | 8 | 0.28 |
| (1,215) | 1:B:6:PRO:HB2 | 1:B:6:PRO:HA | 5 | 0.28 |
| (1,213) | 1:B:35:ASP:H | 1:B:34:PRO:HB3 | 7 | 0.28 |
| (1,206) | 1:B:45:MET:HB3 | 1:B:45:MET:HG3 | 1 | 0.28 |
| (1,160) | 1:B:95:GLU:HG3 | 1:B:95:GLU:HA | 6 | 0.28 |
| (1,160) | 1:B:95:GLU:HG3 | 1:B:95:GLU:HA | 10 | 0.28 |
| (1,151) | 1:B:48:GLU:HG2 | 1:B:48:GLU:HB2 | 1 | 0.28 |
| (1,151) | 1:B:48:GLU:HG2 | 1:B:48:GLU:HB2 | 2 | 0.28 |
| (1,151) | 1:B:48:GLU:HG2 | 1:B:48:GLU:HB2 | 3 | 0.28 |
| (1,151) | 1:B:48:GLU:HG2 | 1:B:48:GLU:HB2 | 4 | 0.28 |
| (1,151) | 1:B:48:GLU:HG2 | 1:B:48:GLU:HB2 | 5 | 0.28 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|----------------|-----------------|----------|---------------|
| (1,151) | 1:B:48:GLU:HG2 | 1:B:48:GLU:HB2 | 7 | 0.28 |
| (1,151) | 1:B:48:GLU:HG2 | 1:B:48:GLU:HB2 | 8 | 0.28 |
| (1,151) | 1:B:48:GLU:HG2 | 1:B:48:GLU:HB2 | 9 | 0.28 |
| (1,151) | 1:B:48:GLU:HG2 | 1:B:48:GLU:HB2 | 10 | 0.28 |
| (1,1072) | 1:B:64:GLU:H | 1:B:63:ASP:HB3 | 5 | 0.28 |
| (1,1006) | 1:B:94:ALA:H | 1:B:96:LYS:HB3 | 10 | 0.28 |
| (2,900) | 1:B:11:LYS:HB3 | 1:B:69:MET:HE1 | 7 | 0.27 |
| (2,900) | 1:B:11:LYS:HB3 | 1:B:69:MET:HE2 | 7 | 0.27 |
| (2,900) | 1:B:11:LYS:HB3 | 1:B:69:MET:HE3 | 7 | 0.27 |
| (2,900) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD11 | 7 | 0.27 |
| (2,900) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD13 | 7 | 0.27 |
| (2,900) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD12 | 7 | 0.27 |
| (2,839) | 1:B:23:PRO:HB3 | 1:B:55:PRO:HD2 | 5 | 0.27 |
| (2,839) | 1:B:20:PRO:HB2 | 1:B:20:PRO:HD2 | 5 | 0.27 |
| (2,79) | 1:B:-1:LYS:H | 1:B:-2:ASP:HB2 | 5 | 0.27 |
| (2,79) | 1:B:2:ASP:HB2 | 1:B:3:THR:H | 5 | 0.27 |
| (2,79) | 1:B:27:CYS:H | 1:B:27:CYS:HB3 | 5 | 0.27 |
| (2,79) | 1:B:35:ASP:H | 1:B:35:ASP:HB3 | 5 | 0.27 |
| (2,652) | 1:B:86:GLY:H | 1:B:22:LEU:HD11 | 4 | 0.27 |
| (2,652) | 1:B:86:GLY:H | 1:B:22:LEU:HD12 | 4 | 0.27 |
| (2,652) | 1:B:86:GLY:H | 1:B:22:LEU:HD13 | 4 | 0.27 |
| (2,652) | 1:B:36:LEU:H | 1:B:36:LEU:HD12 | 4 | 0.27 |
| (2,652) | 1:B:36:LEU:H | 1:B:36:LEU:HD11 | 4 | 0.27 |
| (2,652) | 1:B:36:LEU:H | 1:B:36:LEU:HD13 | 4 | 0.27 |
| (2,601) | 1:B:72:LYS:HG3 | 1:B:10:THR:HG22 | 2 | 0.27 |
| (2,601) | 1:B:72:LYS:HG3 | 1:B:10:THR:HG21 | 2 | 0.27 |
| (2,601) | 1:B:72:LYS:HG3 | 1:B:10:THR:HG23 | 2 | 0.27 |
| (2,601) | 1:B:72:LYS:HB3 | 1:B:72:LYS:HG3 | 2 | 0.27 |
| (2,566) | 1:B:36:LEU:HB2 | 1:B:36:LEU:HD21 | 10 | 0.27 |
| (2,566) | 1:B:36:LEU:HB2 | 1:B:36:LEU:HD23 | 10 | 0.27 |
| (2,566) | 1:B:36:LEU:HB2 | 1:B:36:LEU:HD22 | 10 | 0.27 |
| (2,566) | 1:B:43:ILE:HB | 1:B:45:MET:HE2 | 10 | 0.27 |
| (2,566) | 1:B:43:ILE:HB | 1:B:45:MET:HE1 | 10 | 0.27 |
| (2,566) | 1:B:43:ILE:HB | 1:B:45:MET:HE3 | 10 | 0.27 |
| (2,393) | 1:B:44:LYS:HB2 | 1:B:40:PHE:HE1 | 7 | 0.27 |
| (2,393) | 1:B:44:LYS:HB2 | 1:B:40:PHE:HE2 | 7 | 0.27 |
| (2,393) | 1:B:48:GLU:HB2 | 1:B:47:TYR:HD1 | 7 | 0.27 |
| (2,393) | 1:B:48:GLU:HB2 | 1:B:47:TYR:HD2 | 7 | 0.27 |
| (2,393) | 1:B:48:GLU:HB2 | 1:B:47:TYR:HE1 | 7 | 0.27 |
| (2,393) | 1:B:48:GLU:HB2 | 1:B:47:TYR:HE2 | 7 | 0.27 |
| (2,393) | 1:B:83:ARG:HB2 | 1:B:14:TRP:HH2 | 7 | 0.27 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:43:ILE:HG23 | 9 | 0.27 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,297) | 1:B:42:GLU:HB2 | 1:B:43:ILE:HG21 | 9 | 0.27 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:43:ILE:HG22 | 9 | 0.27 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:45:MET:HE2 | 9 | 0.27 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:45:MET:HE1 | 9 | 0.27 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:45:MET:HE3 | 9 | 0.27 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:98:LEU:HD13 | 9 | 0.27 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:98:LEU:HD11 | 9 | 0.27 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:98:LEU:HD12 | 9 | 0.27 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:15:LEU:HD23 | 9 | 0.27 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:15:LEU:HD21 | 9 | 0.27 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:15:LEU:HD22 | 9 | 0.27 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:85:LEU:HD11 | 9 | 0.27 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:85:LEU:HD12 | 9 | 0.27 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:85:LEU:HD13 | 9 | 0.27 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:89:ILE:HD11 | 9 | 0.27 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:89:ILE:HD13 | 9 | 0.27 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:89:ILE:HD12 | 9 | 0.27 |
| (2,268) | 1:B:45:MET:HG2 | 1:B:53:LEU:HD11 | 4 | 0.27 |
| (2,268) | 1:B:45:MET:HG2 | 1:B:53:LEU:HD12 | 4 | 0.27 |
| (2,268) | 1:B:45:MET:HG2 | 1:B:53:LEU:HD13 | 4 | 0.27 |
| (2,268) | 1:B:45:MET:HG2 | 1:B:98:LEU:HD21 | 4 | 0.27 |
| (2,268) | 1:B:45:MET:HG2 | 1:B:98:LEU:HD22 | 4 | 0.27 |
| (2,268) | 1:B:45:MET:HG2 | 1:B:98:LEU:HD23 | 4 | 0.27 |
| (2,1502) | 1:B:38:LYS:H | 1:B:37:LYS:HB2 | 4 | 0.27 |
| (2,1502) | 1:B:38:LYS:H | 1:B:38:LYS:HD2 | 4 | 0.27 |
| (2,1502) | 1:B:38:LYS:H | 1:B:37:LYS:HB2 | 6 | 0.27 |
| (2,1502) | 1:B:38:LYS:H | 1:B:38:LYS:HD2 | 6 | 0.27 |
| (2,1385) | 1:B:64:GLU:H | 1:B:60:LYS:HD2 | 9 | 0.27 |
| (2,1385) | 1:B:64:GLU:H | 1:B:60:LYS:HG3 | 9 | 0.27 |
| (2,119) | 1:B:47:TYR:HB2 | 1:B:46:THR:HA | 9 | 0.27 |
| (2,119) | 1:B:47:TYR:HB2 | 1:B:46:THR:HB | 9 | 0.27 |
| (2,1164) | 1:B:54:ILE:HD12 | 1:B:23:PRO:HD3 | 1 | 0.27 |
| (2,1164) | 1:B:54:ILE:HD11 | 1:B:23:PRO:HD3 | 1 | 0.27 |
| (2,1164) | 1:B:54:ILE:HD13 | 1:B:23:PRO:HD3 | 1 | 0.27 |
| (2,1164) | 1:B:54:ILE:HD12 | 1:B:55:PRO:HD2 | 1 | 0.27 |
| (2,1164) | 1:B:54:ILE:HD11 | 1:B:55:PRO:HD2 | 1 | 0.27 |
| (2,1164) | 1:B:54:ILE:HD13 | 1:B:55:PRO:HD2 | 1 | 0.27 |
| (2,1164) | 1:B:54:ILE:HD12 | 1:B:94:ALA:HA | 1 | 0.27 |
| (2,1164) | 1:B:54:ILE:HD11 | 1:B:94:ALA:HA | 1 | 0.27 |
| (2,1164) | 1:B:54:ILE:HD13 | 1:B:94:ALA:HA | 1 | 0.27 |
| (2,1122) | 1:B:51:VAL:HG13 | 1:B:23:PRO:HD3 | 3 | 0.27 |
| (2,1122) | 1:B:51:VAL:HG11 | 1:B:23:PRO:HD3 | 3 | 0.27 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,1122) | 1:B:51:VAL:HG12 | 1:B:23:PRO:HD3 | 3 | 0.27 |
| (2,1122) | 1:B:51:VAL:HG13 | 1:B:55:PRO:HD2 | 3 | 0.27 |
| (2,1122) | 1:B:51:VAL:HG11 | 1:B:55:PRO:HD2 | 3 | 0.27 |
| (2,1122) | 1:B:51:VAL:HG12 | 1:B:55:PRO:HD2 | 3 | 0.27 |
| (2,1122) | 1:B:51:VAL:HG21 | 1:B:55:PRO:HD2 | 3 | 0.27 |
| (2,1122) | 1:B:51:VAL:HG23 | 1:B:55:PRO:HD2 | 3 | 0.27 |
| (2,1122) | 1:B:51:VAL:HG22 | 1:B:55:PRO:HD2 | 3 | 0.27 |
| (2,1103) | 1:B:36:LEU:HD12 | 1:B:35:ASP:HB2 | 10 | 0.27 |
| (2,1103) | 1:B:36:LEU:HD11 | 1:B:35:ASP:HB2 | 10 | 0.27 |
| (2,1103) | 1:B:36:LEU:HD13 | 1:B:35:ASP:HB2 | 10 | 0.27 |
| (2,1103) | 1:B:24:ASP:HB2 | 1:B:21:LEU:HD23 | 10 | 0.27 |
| (2,1103) | 1:B:24:ASP:HB2 | 1:B:21:LEU:HD21 | 10 | 0.27 |
| (2,1103) | 1:B:24:ASP:HB2 | 1:B:21:LEU:HD22 | 10 | 0.27 |
| (2,1055) | 1:B:30:PHE:H | 1:B:31:ILE:HG12 | 2 | 0.27 |
| (2,1055) | 1:B:32:GLN:H | 1:B:31:ILE:HG12 | 2 | 0.27 |
| (1,759) | 1:B:35:ASP:HB2 | 1:B:36:LEU:HG | 1 | 0.27 |
| (1,759) | 1:B:35:ASP:HB2 | 1:B:36:LEU:HG | 5 | 0.27 |
| (1,598) | 1:B:26:ILE:HG21 | 1:B:90:GLY:HA3 | 4 | 0.27 |
| (1,598) | 1:B:26:ILE:HG22 | 1:B:90:GLY:HA3 | 4 | 0.27 |
| (1,598) | 1:B:26:ILE:HG23 | 1:B:90:GLY:HA3 | 4 | 0.27 |
| (1,448) | 1:B:72:LYS:H | 1:B:72:LYS:HG2 | 8 | 0.27 |
| (1,382) | 1:B:39:ARG:HG2 | 1:B:39:ARG:HA | 5 | 0.27 |
| (1,373) | 1:B:92:ASP:HB2 | 1:B:57:SER:HB3 | 6 | 0.27 |
| (1,206) | 1:B:45:MET:HB3 | 1:B:45:MET:HG3 | 4 | 0.27 |
| (1,166) | 1:B:54:ILE:HB | 1:B:55:PRO:HD2 | 5 | 0.27 |
| (1,166) | 1:B:54:ILE:HB | 1:B:55:PRO:HD2 | 10 | 0.27 |
| (1,151) | 1:B:48:GLU:HG2 | 1:B:48:GLU:HB2 | 6 | 0.27 |
| (1,1307) | 1:B:31:ILE:H | 1:B:30:PHE:HB3 | 2 | 0.27 |
| (1,1307) | 1:B:31:ILE:H | 1:B:30:PHE:HB3 | 10 | 0.27 |
| (1,1154) | 1:B:93:PHE:H | 1:B:92:ASP:HB2 | 10 | 0.27 |
| (2,984) | 1:B:62:GLN:HG3 | 1:B:59:LYS:HD2 | 10 | 0.26 |
| (2,984) | 1:B:32:GLN:HG2 | 1:B:28:LYS:HB2 | 10 | 0.26 |
| (2,984) | 1:B:62:GLN:HG2 | 1:B:59:LYS:HD2 | 10 | 0.26 |
| (2,667) | 1:B:22:LEU:HD11 | 1:B:14:TRP:HZ2 | 2 | 0.26 |
| (2,667) | 1:B:22:LEU:HD12 | 1:B:14:TRP:HZ2 | 2 | 0.26 |
| (2,667) | 1:B:22:LEU:HD13 | 1:B:14:TRP:HZ2 | 2 | 0.26 |
| (2,667) | 1:B:25:LEU:H | 1:B:22:LEU:HD11 | 2 | 0.26 |
| (2,667) | 1:B:25:LEU:H | 1:B:22:LEU:HD12 | 2 | 0.26 |
| (2,667) | 1:B:25:LEU:H | 1:B:22:LEU:HD13 | 2 | 0.26 |
| (2,667) | 1:B:36:LEU:HD12 | 1:B:39:ARG:H | 2 | 0.26 |
| (2,667) | 1:B:36:LEU:HD11 | 1:B:39:ARG:H | 2 | 0.26 |
| (2,667) | 1:B:36:LEU:HD13 | 1:B:39:ARG:H | 2 | 0.26 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|-----------------|-----------------|----------|---------------|
| (2,667) | 1:B:98:LEU:HD13 | 1:B:39:ARG:H | 2 | 0.26 |
| (2,667) | 1:B:98:LEU:HD11 | 1:B:39:ARG:H | 2 | 0.26 |
| (2,667) | 1:B:98:LEU:HD12 | 1:B:39:ARG:H | 2 | 0.26 |
| (2,667) | 1:B:99:ILE:H | 1:B:98:LEU:HD13 | 2 | 0.26 |
| (2,667) | 1:B:99:ILE:H | 1:B:98:LEU:HD11 | 2 | 0.26 |
| (2,667) | 1:B:99:ILE:H | 1:B:98:LEU:HD12 | 2 | 0.26 |
| (2,667) | 1:B:22:LEU:HD11 | 1:B:14:TRP:HZ2 | 10 | 0.26 |
| (2,667) | 1:B:22:LEU:HD12 | 1:B:14:TRP:HZ2 | 10 | 0.26 |
| (2,667) | 1:B:22:LEU:HD13 | 1:B:14:TRP:HZ2 | 10 | 0.26 |
| (2,667) | 1:B:25:LEU:H | 1:B:22:LEU:HD11 | 10 | 0.26 |
| (2,667) | 1:B:25:LEU:H | 1:B:22:LEU:HD12 | 10 | 0.26 |
| (2,667) | 1:B:25:LEU:H | 1:B:22:LEU:HD13 | 10 | 0.26 |
| (2,667) | 1:B:36:LEU:HD12 | 1:B:39:ARG:H | 10 | 0.26 |
| (2,667) | 1:B:36:LEU:HD11 | 1:B:39:ARG:H | 10 | 0.26 |
| (2,667) | 1:B:36:LEU:HD13 | 1:B:39:ARG:H | 10 | 0.26 |
| (2,667) | 1:B:98:LEU:HD13 | 1:B:39:ARG:H | 10 | 0.26 |
| (2,667) | 1:B:98:LEU:HD11 | 1:B:39:ARG:H | 10 | 0.26 |
| (2,667) | 1:B:98:LEU:HD12 | 1:B:39:ARG:H | 10 | 0.26 |
| (2,667) | 1:B:99:ILE:H | 1:B:98:LEU:HD13 | 10 | 0.26 |
| (2,667) | 1:B:99:ILE:H | 1:B:98:LEU:HD11 | 10 | 0.26 |
| (2,667) | 1:B:99:ILE:H | 1:B:98:LEU:HD12 | 10 | 0.26 |
| (2,652) | 1:B:86:GLY:H | 1:B:22:LEU:HD11 | 1 | 0.26 |
| (2,652) | 1:B:86:GLY:H | 1:B:22:LEU:HD12 | 1 | 0.26 |
| (2,652) | 1:B:86:GLY:H | 1:B:22:LEU:HD13 | 1 | 0.26 |
| (2,652) | 1:B:36:LEU:H | 1:B:36:LEU:HD12 | 1 | 0.26 |
| (2,652) | 1:B:36:LEU:H | 1:B:36:LEU:HD11 | 1 | 0.26 |
| (2,652) | 1:B:36:LEU:H | 1:B:36:LEU:HD13 | 1 | 0.26 |
| (2,565) | 1:B:15:LEU:HD23 | 1:B:62:GLN:HA | 4 | 0.26 |
| (2,565) | 1:B:15:LEU:HD21 | 1:B:62:GLN:HA | 4 | 0.26 |
| (2,565) | 1:B:15:LEU:HD22 | 1:B:62:GLN:HA | 4 | 0.26 |
| (2,565) | 1:B:19:THR:HA | 1:B:22:LEU:HD23 | 4 | 0.26 |
| (2,565) | 1:B:19:THR:HA | 1:B:22:LEU:HD21 | 4 | 0.26 |
| (2,565) | 1:B:19:THR:HA | 1:B:22:LEU:HD22 | 4 | 0.26 |
| (2,565) | 1:B:36:LEU:HD21 | 1:B:29:GLY:HA3 | 4 | 0.26 |
| (2,565) | 1:B:36:LEU:HD23 | 1:B:29:GLY:HA3 | 4 | 0.26 |
| (2,565) | 1:B:36:LEU:HD22 | 1:B:29:GLY:HA3 | 4 | 0.26 |
| (2,565) | 1:B:85:LEU:HD11 | 1:B:62:GLN:HA | 4 | 0.26 |
| (2,565) | 1:B:85:LEU:HD12 | 1:B:62:GLN:HA | 4 | 0.26 |
| (2,565) | 1:B:85:LEU:HD13 | 1:B:62:GLN:HA | 4 | 0.26 |
| (2,490) | 1:B:39:ARG:HG3 | 1:B:39:ARG:H | 1 | 0.26 |
| (2,490) | 1:B:99:ILE:H | 1:B:39:ARG:HG3 | 1 | 0.26 |
| (2,490) | 1:B:72:LYS:H | 1:B:70:PRO:HG3 | 1 | 0.26 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,490) | 1:B:70:PRO:HG3 | 1:B:81:TRP:HZ2 | 1 | 0.26 |
| (2,490) | 1:B:81:TRP:HE3 | 1:B:85:LEU:HG | 1 | 0.26 |
| (2,393) | 1:B:44:LYS:HB2 | 1:B:40:PHE:HE1 | 1 | 0.26 |
| (2,393) | 1:B:44:LYS:HB2 | 1:B:40:PHE:HE2 | 1 | 0.26 |
| (2,393) | 1:B:48:GLU:HB2 | 1:B:47:TYR:HD1 | 1 | 0.26 |
| (2,393) | 1:B:48:GLU:HB2 | 1:B:47:TYR:HD2 | 1 | 0.26 |
| (2,393) | 1:B:48:GLU:HB2 | 1:B:47:TYR:HE1 | 1 | 0.26 |
| (2,393) | 1:B:48:GLU:HB2 | 1:B:47:TYR:HE2 | 1 | 0.26 |
| (2,393) | 1:B:83:ARG:HB2 | 1:B:14:TRP:HH2 | 1 | 0.26 |
| (2,360) | 1:B:21:LEU:H | 1:B:23:PRO:HG3 | 1 | 0.26 |
| (2,360) | 1:B:22:LEU:H | 1:B:23:PRO:HG3 | 1 | 0.26 |
| (2,360) | 1:B:55:PRO:HG3 | 1:B:52:THR:H | 1 | 0.26 |
| (2,1567) | 1:B:71:ASP:H | 1:B:11:LYS:HD3 | 10 | 0.26 |
| (2,1567) | 1:B:71:ASP:H | 1:B:72:LYS:HG2 | 10 | 0.26 |
| (2,1523) | 1:B:56:GLU:H | 1:B:23:PRO:HG2 | 2 | 0.26 |
| (2,1523) | 1:B:56:GLU:H | 1:B:59:LYS:HD3 | 2 | 0.26 |
| (2,1523) | 1:B:56:GLU:H | 1:B:60:LYS:HD3 | 2 | 0.26 |
| (2,1385) | 1:B:64:GLU:H | 1:B:60:LYS:HD2 | 10 | 0.26 |
| (2,1385) | 1:B:64:GLU:H | 1:B:60:LYS:HG3 | 10 | 0.26 |
| (2,1211) | 1:B:33:ASP:H | 1:B:31:ILE:HG21 | 8 | 0.26 |
| (2,1211) | 1:B:33:ASP:H | 1:B:31:ILE:HG22 | 8 | 0.26 |
| (2,1211) | 1:B:33:ASP:H | 1:B:31:ILE:HG23 | 8 | 0.26 |
| (2,1211) | 1:B:33:ASP:H | 1:B:36:LEU:HD21 | 8 | 0.26 |
| (2,1211) | 1:B:33:ASP:H | 1:B:36:LEU:HD23 | 8 | 0.26 |
| (2,1211) | 1:B:33:ASP:H | 1:B:36:LEU:HD22 | 8 | 0.26 |
| (2,1211) | 1:B:33:ASP:H | 1:B:31:ILE:HG21 | 9 | 0.26 |
| (2,1211) | 1:B:33:ASP:H | 1:B:31:ILE:HG22 | 9 | 0.26 |
| (2,1211) | 1:B:33:ASP:H | 1:B:31:ILE:HG23 | 9 | 0.26 |
| (2,1211) | 1:B:33:ASP:H | 1:B:36:LEU:HD21 | 9 | 0.26 |
| (2,1211) | 1:B:33:ASP:H | 1:B:36:LEU:HD23 | 9 | 0.26 |
| (2,1211) | 1:B:33:ASP:H | 1:B:36:LEU:HD22 | 9 | 0.26 |
| (2,119) | 1:B:47:TYR:HB2 | 1:B:46:THR:HA | 2 | 0.26 |
| (2,119) | 1:B:47:TYR:HB2 | 1:B:46:THR:HB | 2 | 0.26 |
| (2,1164) | 1:B:54:ILE:HD12 | 1:B:23:PRO:HD3 | 10 | 0.26 |
| (2,1164) | 1:B:54:ILE:HD11 | 1:B:23:PRO:HD3 | 10 | 0.26 |
| (2,1164) | 1:B:54:ILE:HD13 | 1:B:23:PRO:HD3 | 10 | 0.26 |
| (2,1164) | 1:B:54:ILE:HD12 | 1:B:55:PRO:HD2 | 10 | 0.26 |
| (2,1164) | 1:B:54:ILE:HD11 | 1:B:55:PRO:HD2 | 10 | 0.26 |
| (2,1164) | 1:B:54:ILE:HD13 | 1:B:55:PRO:HD2 | 10 | 0.26 |
| (2,1164) | 1:B:54:ILE:HD12 | 1:B:94:ALA:HA | 10 | 0.26 |
| (2,1164) | 1:B:54:ILE:HD11 | 1:B:94:ALA:HA | 10 | 0.26 |
| (2,1164) | 1:B:54:ILE:HD13 | 1:B:94:ALA:HA | 10 | 0.26 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,1055) | 1:B:30:PHE:H | 1:B:31:ILE:HG12 | 7 | 0.26 |
| (2,1055) | 1:B:32:GLN:H | 1:B:31:ILE:HG12 | 7 | 0.26 |
| (2,1055) | 1:B:30:PHE:H | 1:B:31:ILE:HG12 | 10 | 0.26 |
| (2,1055) | 1:B:32:GLN:H | 1:B:31:ILE:HG12 | 10 | 0.26 |
| (1,759) | 1:B:35:ASP:HB2 | 1:B:36:LEU:HG | 4 | 0.26 |
| (1,387) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD11 | 6 | 0.26 |
| (1,387) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD13 | 6 | 0.26 |
| (1,387) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD12 | 6 | 0.26 |
| (1,324) | 1:B:81:TRP:H | 1:B:81:TRP:HB3 | 3 | 0.26 |
| (1,324) | 1:B:81:TRP:H | 1:B:81:TRP:HB3 | 8 | 0.26 |
| (1,324) | 1:B:81:TRP:H | 1:B:81:TRP:HB3 | 10 | 0.26 |
| (1,166) | 1:B:54:ILE:HB | 1:B:55:PRO:HD2 | 3 | 0.26 |
| (1,166) | 1:B:54:ILE:HB | 1:B:55:PRO:HD2 | 7 | 0.26 |
| (1,1152) | 1:B:93:PHE:H | 1:B:90:GLY:HA3 | 1 | 0.26 |
| (1,1035) | 1:B:42:GLU:H | 1:B:41:ASP:HB2 | 7 | 0.26 |
| (2,998) | 1:B:74:ASN:HB3 | 1:B:8:GLU:HB2 | 1 | 0.25 |
| (2,998) | 1:B:74:ASN:HB3 | 1:B:8:GLU:HB3 | 1 | 0.25 |
| (2,87) | 1:B:74:ASN:HB3 | 1:B:8:GLU:HB2 | 1 | 0.25 |
| (2,87) | 1:B:74:ASN:HB3 | 1:B:8:GLU:HB3 | 1 | 0.25 |
| (2,87) | 1:B:93:PHE:HB3 | 1:B:53:LEU:HB2 | 1 | 0.25 |
| (2,87) | 1:B:93:PHE:HB2 | 1:B:53:LEU:HB2 | 1 | 0.25 |
| (2,638) | 1:B:98:LEU:HB2 | 1:B:98:LEU:HD21 | 4 | 0.25 |
| (2,638) | 1:B:98:LEU:HB2 | 1:B:98:LEU:HD22 | 4 | 0.25 |
| (2,638) | 1:B:98:LEU:HB2 | 1:B:98:LEU:HD23 | 4 | 0.25 |
| (2,638) | 1:B:43:ILE:HG12 | 1:B:98:LEU:HD21 | 4 | 0.25 |
| (2,638) | 1:B:43:ILE:HG12 | 1:B:98:LEU:HD22 | 4 | 0.25 |
| (2,638) | 1:B:43:ILE:HG12 | 1:B:98:LEU:HD23 | 4 | 0.25 |
| (2,638) | 1:B:98:LEU:HB2 | 1:B:98:LEU:HD21 | 8 | 0.25 |
| (2,638) | 1:B:98:LEU:HB2 | 1:B:98:LEU:HD22 | 8 | 0.25 |
| (2,638) | 1:B:98:LEU:HB2 | 1:B:98:LEU:HD23 | 8 | 0.25 |
| (2,638) | 1:B:43:ILE:HG12 | 1:B:98:LEU:HD21 | 8 | 0.25 |
| (2,638) | 1:B:43:ILE:HG12 | 1:B:98:LEU:HD22 | 8 | 0.25 |
| (2,638) | 1:B:43:ILE:HG12 | 1:B:98:LEU:HD23 | 8 | 0.25 |
| (2,490) | 1:B:39:ARG:HG3 | 1:B:39:ARG:H | 2 | 0.25 |
| (2,490) | 1:B:99:ILE:H | 1:B:39:ARG:HG3 | 2 | 0.25 |
| (2,490) | 1:B:72:LYS:H | 1:B:70:PRO:HG3 | 2 | 0.25 |
| (2,490) | 1:B:70:PRO:HG3 | 1:B:81:TRP:HZ2 | 2 | 0.25 |
| (2,490) | 1:B:81:TRP:HE3 | 1:B:85:LEU:HG | 2 | 0.25 |
| (2,370) | 1:B:44:LYS:HD2 | 1:B:44:LYS:HA | 10 | 0.25 |
| (2,370) | 1:B:59:LYS:HD2 | 1:B:59:LYS:HA | 10 | 0.25 |
| (2,360) | 1:B:21:LEU:H | 1:B:23:PRO:HG3 | 10 | 0.25 |
| (2,360) | 1:B:22:LEU:H | 1:B:23:PRO:HG3 | 10 | 0.25 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,360) | 1:B:55:PRO:HG3 | 1:B:52:THR:H | 10 | 0.25 |
| (2,174) | 1:B:52:THR:H | 1:B:49:GLN:HG3 | 5 | 0.25 |
| (2,174) | 1:B:52:THR:H | 1:B:49:GLN:HG2 | 5 | 0.25 |
| (2,174) | 1:B:62:GLN:HG3 | 1:B:14:TRP:HE3 | 5 | 0.25 |
| (2,1567) | 1:B:71:ASP:H | 1:B:11:LYS:HD3 | 6 | 0.25 |
| (2,1567) | 1:B:71:ASP:H | 1:B:72:LYS:HG2 | 6 | 0.25 |
| (2,154) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HG13 | 4 | 0.25 |
| (2,154) | 1:B:56:GLU:HG3 | 1:B:53:LEU:HB3 | 4 | 0.25 |
| (2,154) | 1:B:56:GLU:HG3 | 1:B:96:LYS:HD2 | 4 | 0.25 |
| (2,154) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HG13 | 7 | 0.25 |
| (2,154) | 1:B:56:GLU:HG3 | 1:B:53:LEU:HB3 | 7 | 0.25 |
| (2,154) | 1:B:56:GLU:HG3 | 1:B:96:LYS:HD2 | 7 | 0.25 |
| (2,1523) | 1:B:56:GLU:H | 1:B:23:PRO:HG2 | 6 | 0.25 |
| (2,1523) | 1:B:56:GLU:H | 1:B:59:LYS:HD3 | 6 | 0.25 |
| (2,1523) | 1:B:56:GLU:H | 1:B:60:LYS:HD3 | 6 | 0.25 |
| (2,1502) | 1:B:38:LYS:H | 1:B:37:LYS:HB2 | 5 | 0.25 |
| (2,1502) | 1:B:38:LYS:H | 1:B:38:LYS:HD2 | 5 | 0.25 |
| (2,140) | 1:B:64:GLU:HG2 | 1:B:60:LYS:HG3 | 5 | 0.25 |
| (2,140) | 1:B:64:GLU:HG3 | 1:B:60:LYS:HG3 | 5 | 0.25 |
| (2,140) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB1 | 5 | 0.25 |
| (2,140) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB3 | 5 | 0.25 |
| (2,140) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB2 | 5 | 0.25 |
| (2,1385) | 1:B:64:GLU:H | 1:B:60:LYS:HD2 | 3 | 0.25 |
| (2,1385) | 1:B:64:GLU:H | 1:B:60:LYS:HG3 | 3 | 0.25 |
| (2,119) | 1:B:47:TYR:HB2 | 1:B:46:THR:HA | 10 | 0.25 |
| (2,119) | 1:B:47:TYR:HB2 | 1:B:46:THR:HB | 10 | 0.25 |
| (2,1122) | 1:B:51:VAL:HG13 | 1:B:23:PRO:HD3 | 6 | 0.25 |
| (2,1122) | 1:B:51:VAL:HG11 | 1:B:23:PRO:HD3 | 6 | 0.25 |
| (2,1122) | 1:B:51:VAL:HG12 | 1:B:23:PRO:HD3 | 6 | 0.25 |
| (2,1122) | 1:B:51:VAL:HG13 | 1:B:55:PRO:HD2 | 6 | 0.25 |
| (2,1122) | 1:B:51:VAL:HG11 | 1:B:55:PRO:HD2 | 6 | 0.25 |
| (2,1122) | 1:B:51:VAL:HG12 | 1:B:55:PRO:HD2 | 6 | 0.25 |
| (2,1122) | 1:B:51:VAL:HG21 | 1:B:55:PRO:HD2 | 6 | 0.25 |
| (2,1122) | 1:B:51:VAL:HG23 | 1:B:55:PRO:HD2 | 6 | 0.25 |
| (2,1122) | 1:B:51:VAL:HG22 | 1:B:55:PRO:HD2 | 6 | 0.25 |
| (1,895) | 1:B:33:ASP:H | 1:B:33:ASP:HB3 | 1 | 0.25 |
| (1,895) | 1:B:33:ASP:H | 1:B:33:ASP:HB3 | 4 | 0.25 |
| (1,387) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD11 | 5 | 0.25 |
| (1,387) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD13 | 5 | 0.25 |
| (1,387) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD12 | 5 | 0.25 |
| (1,382) | 1:B:39:ARG:HG2 | 1:B:39:ARG:HA | 4 | 0.25 |
| (1,324) | 1:B:81:TRP:H | 1:B:81:TRP:HB3 | 1 | 0.25 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,324) | 1:B:81:TRP:H | 1:B:81:TRP:HB3 | 2 | 0.25 |
| (1,324) | 1:B:81:TRP:H | 1:B:81:TRP:HB3 | 7 | 0.25 |
| (1,324) | 1:B:81:TRP:H | 1:B:81:TRP:HB3 | 9 | 0.25 |
| (1,272) | 1:B:64:GLU:H | 1:B:64:GLU:HB3 | 3 | 0.25 |
| (1,215) | 1:B:6:PRO:HB2 | 1:B:6:PRO:HA | 2 | 0.25 |
| (1,215) | 1:B:6:PRO:HB2 | 1:B:6:PRO:HA | 4 | 0.25 |
| (1,1137) | 1:B:60:LYS:H | 1:B:60:LYS:HE3 | 10 | 0.25 |
| (2,943) | 1:B:-2:ASP:HB3 | 1:B:-1:LYS:HD3 | 4 | 0.24 |
| (2,943) | 1:B:13:ALA:HB1 | 1:B:12:ASP:HB2 | 4 | 0.24 |
| (2,943) | 1:B:13:ALA:HB2 | 1:B:12:ASP:HB2 | 4 | 0.24 |
| (2,943) | 1:B:13:ALA:HB3 | 1:B:12:ASP:HB2 | 4 | 0.24 |
| (2,943) | 1:B:27:CYS:HB3 | 1:B:26:ILE:HG12 | 4 | 0.24 |
| (2,943) | 1:B:27:CYS:HB3 | 1:B:28:LYS:HD2 | 4 | 0.24 |
| (2,943) | 1:B:27:CYS:HB3 | 1:B:28:LYS:HD3 | 4 | 0.24 |
| (2,943) | 1:B:27:CYS:HB3 | 1:B:45:MET:HG2 | 4 | 0.24 |
| (2,943) | 1:B:35:ASP:HB3 | 1:B:38:LYS:HG2 | 4 | 0.24 |
| (2,943) | 1:B:71:ASP:HB2 | 1:B:72:LYS:HB2 | 4 | 0.24 |
| (2,943) | 1:B:71:ASP:HB2 | 1:B:72:LYS:HD2 | 4 | 0.24 |
| (2,943) | 1:B:71:ASP:HB2 | 1:B:72:LYS:HD3 | 4 | 0.24 |
| (2,845) | 1:B:100:PRO:HD3 | 1:B:43:ILE:HG13 | 10 | 0.24 |
| (2,845) | 1:B:100:PRO:HD3 | 1:B:99:ILE:HG13 | 10 | 0.24 |
| (2,845) | 1:B:100:PRO:HD3 | 1:B:101:LYS:HG3 | 10 | 0.24 |
| (2,839) | 1:B:23:PRO:HB3 | 1:B:55:PRO:HD2 | 4 | 0.24 |
| (2,839) | 1:B:20:PRO:HB2 | 1:B:20:PRO:HD2 | 4 | 0.24 |
| (2,416) | 1:B:81:TRP:HB2 | 1:B:80:THR:HB | 6 | 0.24 |
| (2,416) | 1:B:81:TRP:HB2 | 1:B:84:SER:HB2 | 6 | 0.24 |
| (2,416) | 1:B:81:TRP:HB2 | 1:B:84:SER:HB3 | 6 | 0.24 |
| (2,360) | 1:B:21:LEU:H | 1:B:23:PRO:HG3 | 9 | 0.24 |
| (2,360) | 1:B:22:LEU:H | 1:B:23:PRO:HG3 | 9 | 0.24 |
| (2,360) | 1:B:55:PRO:HG3 | 1:B:52:THR:H | 9 | 0.24 |
| (2,1523) | 1:B:56:GLU:H | 1:B:23:PRO:HG2 | 1 | 0.24 |
| (2,1523) | 1:B:56:GLU:H | 1:B:59:LYS:HD3 | 1 | 0.24 |
| (2,1523) | 1:B:56:GLU:H | 1:B:60:LYS:HD3 | 1 | 0.24 |
| (2,1290) | 1:B:91:LYS:H | 1:B:87:GLU:HG2 | 10 | 0.24 |
| (2,1290) | 1:B:91:LYS:H | 1:B:95:GLU:HG2 | 10 | 0.24 |
| (2,119) | 1:B:47:TYR:HB2 | 1:B:46:THR:HA | 5 | 0.24 |
| (2,119) | 1:B:47:TYR:HB2 | 1:B:46:THR:HB | 5 | 0.24 |
| (2,119) | 1:B:47:TYR:HB2 | 1:B:46:THR:HA | 6 | 0.24 |
| (2,119) | 1:B:47:TYR:HB2 | 1:B:46:THR:HB | 6 | 0.24 |
| (2,1164) | 1:B:54:ILE:HD12 | 1:B:23:PRO:HD3 | 2 | 0.24 |
| (2,1164) | 1:B:54:ILE:HD11 | 1:B:23:PRO:HD3 | 2 | 0.24 |
| (2,1164) | 1:B:54:ILE:HD13 | 1:B:23:PRO:HD3 | 2 | 0.24 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,1164) | 1:B:54:ILE:HD12 | 1:B:55:PRO:HD2 | 2 | 0.24 |
| (2,1164) | 1:B:54:ILE:HD11 | 1:B:55:PRO:HD2 | 2 | 0.24 |
| (2,1164) | 1:B:54:ILE:HD13 | 1:B:55:PRO:HD2 | 2 | 0.24 |
| (2,1164) | 1:B:54:ILE:HD12 | 1:B:94:ALA:HA | 2 | 0.24 |
| (2,1164) | 1:B:54:ILE:HD11 | 1:B:94:ALA:HA | 2 | 0.24 |
| (2,1164) | 1:B:54:ILE:HD13 | 1:B:94:ALA:HA | 2 | 0.24 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:36:LEU:HD12 | 3 | 0.24 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:36:LEU:HD11 | 3 | 0.24 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:36:LEU:HD13 | 3 | 0.24 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:36:LEU:HD21 | 3 | 0.24 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:36:LEU:HD23 | 3 | 0.24 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:36:LEU:HD22 | 3 | 0.24 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:98:LEU:HD13 | 3 | 0.24 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:98:LEU:HD11 | 3 | 0.24 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:98:LEU:HD12 | 3 | 0.24 |
| (1,448) | 1:B:72:LYS:H | 1:B:72:LYS:HG2 | 4 | 0.24 |
| (1,1137) | 1:B:60:LYS:H | 1:B:60:LYS:HE3 | 6 | 0.24 |
| (1,11) | 1:B:53:LEU:HB3 | 1:B:53:LEU:HD11 | 4 | 0.24 |
| (1,11) | 1:B:53:LEU:HB3 | 1:B:53:LEU:HD12 | 4 | 0.24 |
| (1,11) | 1:B:53:LEU:HB3 | 1:B:53:LEU:HD13 | 4 | 0.24 |
| (1,1072) | 1:B:64:GLU:H | 1:B:63:ASP:HB3 | 4 | 0.24 |
| (1,1068) | 1:B:30:PHE:H | 1:B:31:ILE:HG12 | 1 | 0.24 |
| (2,841) | 1:B:20:PRO:HD3 | 1:B:18:MET:HA | 1 | 0.23 |
| (2,841) | 1:B:20:PRO:HD3 | 1:B:20:PRO:HA | 1 | 0.23 |
| (2,841) | 1:B:20:PRO:HD3 | 1:B:18:MET:HA | 9 | 0.23 |
| (2,841) | 1:B:20:PRO:HD3 | 1:B:20:PRO:HA | 9 | 0.23 |
| (2,839) | 1:B:23:PRO:HB3 | 1:B:55:PRO:HD2 | 6 | 0.23 |
| (2,839) | 1:B:20:PRO:HB2 | 1:B:20:PRO:HD2 | 6 | 0.23 |
| (2,638) | 1:B:98:LEU:HB2 | 1:B:98:LEU:HD21 | 9 | 0.23 |
| (2,638) | 1:B:98:LEU:HB2 | 1:B:98:LEU:HD22 | 9 | 0.23 |
| (2,638) | 1:B:98:LEU:HB2 | 1:B:98:LEU:HD23 | 9 | 0.23 |
| (2,638) | 1:B:43:ILE:HG12 | 1:B:98:LEU:HD21 | 9 | 0.23 |
| (2,638) | 1:B:43:ILE:HG12 | 1:B:98:LEU:HD22 | 9 | 0.23 |
| (2,638) | 1:B:43:ILE:HG12 | 1:B:98:LEU:HD23 | 9 | 0.23 |
| (2,360) | 1:B:21:LEU:H | 1:B:23:PRO:HG3 | 8 | 0.23 |
| (2,360) | 1:B:22:LEU:H | 1:B:23:PRO:HG3 | 8 | 0.23 |
| (2,360) | 1:B:55:PRO:HG3 | 1:B:52:THR:H | 8 | 0.23 |
| (2,1517) | 1:B:61:CYS:H | 1:B:60:LYS:HD3 | 7 | 0.23 |
| (2,1517) | 1:B:61:CYS:H | 1:B:60:LYS:HG3 | 7 | 0.23 |
| (2,1502) | 1:B:38:LYS:H | 1:B:37:LYS:HB2 | 8 | 0.23 |
| (2,1502) | 1:B:38:LYS:H | 1:B:38:LYS:HD2 | 8 | 0.23 |
| (2,1414) | 1:B:41:ASP:H | 1:B:42:GLU:HG3 | 6 | 0.23 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,1414) | 1:B:41:ASP:H | 1:B:30:PHE:HB2 | 6 | 0.23 |
| (2,124) | 1:B:39:ARG:H | 1:B:40:PHE:HB3 | 5 | 0.23 |
| (2,124) | 1:B:43:ILE:H | 1:B:40:PHE:HB3 | 5 | 0.23 |
| (2,1138) | 1:B:38:LYS:HG2 | 1:B:36:LEU:HA | 10 | 0.23 |
| (2,1138) | 1:B:36:LEU:HA | 1:B:98:LEU:HB2 | 10 | 0.23 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:36:LEU:HD12 | 1 | 0.23 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:36:LEU:HD11 | 1 | 0.23 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:36:LEU:HD13 | 1 | 0.23 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:36:LEU:HD21 | 1 | 0.23 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:36:LEU:HD23 | 1 | 0.23 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:36:LEU:HD22 | 1 | 0.23 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:98:LEU:HD13 | 1 | 0.23 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:98:LEU:HD11 | 1 | 0.23 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:98:LEU:HD12 | 1 | 0.23 |
| (2,1030) | 1:B:44:LYS:HD3 | 1:B:41:ASP:HB2 | 4 | 0.23 |
| (2,1030) | 1:B:44:LYS:HD2 | 1:B:41:ASP:HB2 | 4 | 0.23 |
| (2,1030) | 1:B:54:ILE:HG12 | 1:B:27:CYS:HB3 | 4 | 0.23 |
| (1,448) | 1:B:72:LYS:H | 1:B:72:LYS:HG2 | 5 | 0.23 |
| (1,398) | 1:B:52:THR:HA | 1:B:55:PRO:HD3 | 6 | 0.23 |
| (1,384) | 1:B:39:ARG:HG2 | 1:B:98:LEU:HD13 | 5 | 0.23 |
| (1,384) | 1:B:39:ARG:HG2 | 1:B:98:LEU:HD11 | 5 | 0.23 |
| (1,384) | 1:B:39:ARG:HG2 | 1:B:98:LEU:HD12 | 5 | 0.23 |
| (1,175) | 1:B:62:GLN:HG3 | 1:B:62:GLN:HA | 5 | 0.23 |
| (1,166) | 1:B:54:ILE:HB | 1:B:55:PRO:HD2 | 1 | 0.23 |
| (1,147) | 1:B:48:GLU:HG3 | 1:B:48:GLU:HB3 | 1 | 0.23 |
| (1,147) | 1:B:48:GLU:HG3 | 1:B:48:GLU:HB3 | 2 | 0.23 |
| (1,147) | 1:B:48:GLU:HG3 | 1:B:48:GLU:HB3 | 3 | 0.23 |
| (1,147) | 1:B:48:GLU:HG3 | 1:B:48:GLU:HB3 | 4 | 0.23 |
| (1,147) | 1:B:48:GLU:HG3 | 1:B:48:GLU:HB3 | 5 | 0.23 |
| (1,147) | 1:B:48:GLU:HG3 | 1:B:48:GLU:HB3 | 7 | 0.23 |
| (1,147) | 1:B:48:GLU:HG3 | 1:B:48:GLU:HB3 | 9 | 0.23 |
| (1,1035) | 1:B:42:GLU:H | 1:B:41:ASP:HB2 | 5 | 0.23 |
| (1,102) | 1:B:5:ASN:HB2 | 1:B:6:PRO:HD2 | 5 | 0.23 |
| (2,947) | 1:B:41:ASP:HB3 | 1:B:37:LYS:HD2 | 10 | 0.22 |
| (2,947) | 1:B:37:LYS:HG3 | 1:B:41:ASP:HB3 | 10 | 0.22 |
| (2,947) | 1:B:37:LYS:HG2 | 1:B:41:ASP:HB3 | 10 | 0.22 |
| (2,900) | 1:B:11:LYS:HB3 | 1:B:69:MET:HE1 | 1 | 0.22 |
| (2,900) | 1:B:11:LYS:HB3 | 1:B:69:MET:HE2 | 1 | 0.22 |
| (2,900) | 1:B:11:LYS:HB3 | 1:B:69:MET:HE3 | 1 | 0.22 |
| (2,900) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD11 | 1 | 0.22 |
| (2,900) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD13 | 1 | 0.22 |
| (2,900) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD12 | 1 | 0.22 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|----------------|-----------------|----------|---------------|
| (2,884) | 1:B:90:GLY:HA3 | 1:B:91:LYS:HG3 | 5 | 0.22 |
| (2,884) | 1:B:90:GLY:HA3 | 1:B:94:ALA:HB1 | 5 | 0.22 |
| (2,884) | 1:B:90:GLY:HA3 | 1:B:94:ALA:HB3 | 5 | 0.22 |
| (2,884) | 1:B:90:GLY:HA3 | 1:B:94:ALA:HB2 | 5 | 0.22 |
| (2,841) | 1:B:20:PRO:HD3 | 1:B:18:MET:HA | 2 | 0.22 |
| (2,841) | 1:B:20:PRO:HD3 | 1:B:20:PRO:HA | 2 | 0.22 |
| (2,841) | 1:B:20:PRO:HD3 | 1:B:18:MET:HA | 4 | 0.22 |
| (2,841) | 1:B:20:PRO:HD3 | 1:B:20:PRO:HA | 4 | 0.22 |
| (2,841) | 1:B:20:PRO:HD3 | 1:B:18:MET:HA | 5 | 0.22 |
| (2,841) | 1:B:20:PRO:HD3 | 1:B:20:PRO:HA | 5 | 0.22 |
| (2,841) | 1:B:20:PRO:HD3 | 1:B:18:MET:HA | 7 | 0.22 |
| (2,841) | 1:B:20:PRO:HD3 | 1:B:20:PRO:HA | 7 | 0.22 |
| (2,841) | 1:B:20:PRO:HD3 | 1:B:18:MET:HA | 10 | 0.22 |
| (2,841) | 1:B:20:PRO:HD3 | 1:B:20:PRO:HA | 10 | 0.22 |
| (2,643) | 1:B:45:MET:HB2 | 1:B:40:PHE:HA | 3 | 0.22 |
| (2,643) | 1:B:96:LYS:HB3 | 1:B:93:PHE:HA | 3 | 0.22 |
| (2,4) | 1:B:53:LEU:HB2 | 1:B:49:GLN:HG3 | 7 | 0.22 |
| (2,4) | 1:B:53:LEU:HB2 | 1:B:56:GLU:HG3 | 7 | 0.22 |
| (2,4) | 1:B:65:LEU:HB2 | 1:B:64:GLU:HB3 | 7 | 0.22 |
| (2,371) | 1:B:44:LYS:HD3 | 1:B:44:LYS:HB3 | 10 | 0.22 |
| (2,371) | 1:B:44:LYS:HD2 | 1:B:44:LYS:HB3 | 10 | 0.22 |
| (2,371) | 1:B:59:LYS:HD2 | 1:B:62:GLN:HB2 | 10 | 0.22 |
| (2,371) | 1:B:59:LYS:HD2 | 1:B:62:GLN:HB3 | 10 | 0.22 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:43:ILE:HG23 | 1 | 0.22 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:43:ILE:HG21 | 1 | 0.22 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:43:ILE:HG22 | 1 | 0.22 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:45:MET:HE2 | 1 | 0.22 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:45:MET:HE1 | 1 | 0.22 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:45:MET:HE3 | 1 | 0.22 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:98:LEU:HD13 | 1 | 0.22 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:98:LEU:HD11 | 1 | 0.22 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:98:LEU:HD12 | 1 | 0.22 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:15:LEU:HD23 | 1 | 0.22 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:15:LEU:HD21 | 1 | 0.22 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:15:LEU:HD22 | 1 | 0.22 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:85:LEU:HD11 | 1 | 0.22 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:85:LEU:HD12 | 1 | 0.22 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:85:LEU:HD13 | 1 | 0.22 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:89:ILE:HD11 | 1 | 0.22 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:89:ILE:HD13 | 1 | 0.22 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:89:ILE:HD12 | 1 | 0.22 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:43:ILE:HG23 | 10 | 0.22 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,297) | 1:B:42:GLU:HB2 | 1:B:43:ILE:HG21 | 10 | 0.22 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:43:ILE:HG22 | 10 | 0.22 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:45:MET:HE2 | 10 | 0.22 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:45:MET:HE1 | 10 | 0.22 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:45:MET:HE3 | 10 | 0.22 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:98:LEU:HD13 | 10 | 0.22 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:98:LEU:HD11 | 10 | 0.22 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:98:LEU:HD12 | 10 | 0.22 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:15:LEU:HD23 | 10 | 0.22 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:15:LEU:HD21 | 10 | 0.22 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:15:LEU:HD22 | 10 | 0.22 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:85:LEU:HD11 | 10 | 0.22 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:85:LEU:HD12 | 10 | 0.22 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:85:LEU:HD13 | 10 | 0.22 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:89:ILE:HD11 | 10 | 0.22 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:89:ILE:HD13 | 10 | 0.22 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:89:ILE:HD12 | 10 | 0.22 |
| (2,268) | 1:B:45:MET:HG2 | 1:B:53:LEU:HD11 | 3 | 0.22 |
| (2,268) | 1:B:45:MET:HG2 | 1:B:53:LEU:HD12 | 3 | 0.22 |
| (2,268) | 1:B:45:MET:HG2 | 1:B:53:LEU:HD13 | 3 | 0.22 |
| (2,268) | 1:B:45:MET:HG2 | 1:B:98:LEU:HD21 | 3 | 0.22 |
| (2,268) | 1:B:45:MET:HG2 | 1:B:98:LEU:HD22 | 3 | 0.22 |
| (2,268) | 1:B:45:MET:HG2 | 1:B:98:LEU:HD23 | 3 | 0.22 |
| (2,174) | 1:B:52:THR:H | 1:B:49:GLN:HG3 | 8 | 0.22 |
| (2,174) | 1:B:52:THR:H | 1:B:49:GLN:HG2 | 8 | 0.22 |
| (2,174) | 1:B:62:GLN:HG3 | 1:B:14:TRP:HE3 | 8 | 0.22 |
| (2,1567) | 1:B:71:ASP:H | 1:B:11:LYS:HD3 | 8 | 0.22 |
| (2,1567) | 1:B:71:ASP:H | 1:B:72:LYS:HG2 | 8 | 0.22 |
| (2,1290) | 1:B:91:LYS:H | 1:B:87:GLU:HG2 | 8 | 0.22 |
| (2,1290) | 1:B:91:LYS:H | 1:B:95:GLU:HG2 | 8 | 0.22 |
| (2,1122) | 1:B:51:VAL:HG13 | 1:B:23:PRO:HD3 | 7 | 0.22 |
| (2,1122) | 1:B:51:VAL:HG11 | 1:B:23:PRO:HD3 | 7 | 0.22 |
| (2,1122) | 1:B:51:VAL:HG12 | 1:B:23:PRO:HD3 | 7 | 0.22 |
| (2,1122) | 1:B:51:VAL:HG13 | 1:B:55:PRO:HD2 | 7 | 0.22 |
| (2,1122) | 1:B:51:VAL:HG11 | 1:B:55:PRO:HD2 | 7 | 0.22 |
| (2,1122) | 1:B:51:VAL:HG12 | 1:B:55:PRO:HD2 | 7 | 0.22 |
| (2,1122) | 1:B:51:VAL:HG21 | 1:B:55:PRO:HD2 | 7 | 0.22 |
| (2,1122) | 1:B:51:VAL:HG23 | 1:B:55:PRO:HD2 | 7 | 0.22 |
| (2,1122) | 1:B:51:VAL:HG22 | 1:B:55:PRO:HD2 | 7 | 0.22 |
| (1,738) | 1:B:54:ILE:H | 1:B:53:LEU:HB3 | 9 | 0.22 |
| (1,558) | 1:B:101:LYS:HB2 | 1:B:101:LYS:HA | 1 | 0.22 |
| (1,558) | 1:B:101:LYS:HB2 | 1:B:101:LYS:HA | 2 | 0.22 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,455) | 1:B:85:LEU:HD23 | 1:B:85:LEU:H | 6 | 0.22 |
| (1,455) | 1:B:85:LEU:HD21 | 1:B:85:LEU:H | 6 | 0.22 |
| (1,455) | 1:B:85:LEU:HD22 | 1:B:85:LEU:H | 6 | 0.22 |
| (1,439) | 1:B:64:GLU:HB3 | 1:B:65:LEU:HD11 | 3 | 0.22 |
| (1,439) | 1:B:64:GLU:HB3 | 1:B:65:LEU:HD12 | 3 | 0.22 |
| (1,439) | 1:B:64:GLU:HB3 | 1:B:65:LEU:HD13 | 3 | 0.22 |
| (1,399) | 1:B:55:PRO:HG3 | 1:B:52:THR:HA | 1 | 0.22 |
| (1,387) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD11 | 9 | 0.22 |
| (1,387) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD13 | 9 | 0.22 |
| (1,387) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD12 | 9 | 0.22 |
| (1,37) | 1:B:86:GLY:H | 1:B:85:LEU:HB3 | 8 | 0.22 |
| (1,37) | 1:B:86:GLY:H | 1:B:85:LEU:HB3 | 10 | 0.22 |
| (1,215) | 1:B:6:PRO:HB2 | 1:B:6:PRO:HA | 6 | 0.22 |
| (1,213) | 1:B:35:ASP:H | 1:B:34:PRO:HB3 | 10 | 0.22 |
| (1,166) | 1:B:54:ILE:HB | 1:B:55:PRO:HD2 | 4 | 0.22 |
| (1,147) | 1:B:48:GLU:HG3 | 1:B:48:GLU:HB3 | 6 | 0.22 |
| (1,147) | 1:B:48:GLU:HG3 | 1:B:48:GLU:HB3 | 8 | 0.22 |
| (1,147) | 1:B:48:GLU:HG3 | 1:B:48:GLU:HB3 | 10 | 0.22 |
| (1,1307) | 1:B:31:ILE:H | 1:B:30:PHE:HB3 | 5 | 0.22 |
| (1,1220) | 1:B:98:LEU:H | 1:B:99:ILE:HG12 | 2 | 0.22 |
| (1,1152) | 1:B:93:PHE:H | 1:B:90:GLY:HA3 | 8 | 0.22 |
| (2,841) | 1:B:20:PRO:HD3 | 1:B:18:MET:HA | 8 | 0.21 |
| (2,841) | 1:B:20:PRO:HD3 | 1:B:20:PRO:HA | 8 | 0.21 |
| (2,839) | 1:B:23:PRO:HB3 | 1:B:55:PRO:HD2 | 2 | 0.21 |
| (2,839) | 1:B:20:PRO:HB2 | 1:B:20:PRO:HD2 | 2 | 0.21 |
| (2,839) | 1:B:23:PRO:HB3 | 1:B:55:PRO:HD2 | 10 | 0.21 |
| (2,839) | 1:B:20:PRO:HB2 | 1:B:20:PRO:HD2 | 10 | 0.21 |
| (2,652) | 1:B:86:GLY:H | 1:B:22:LEU:HD11 | 8 | 0.21 |
| (2,652) | 1:B:86:GLY:H | 1:B:22:LEU:HD12 | 8 | 0.21 |
| (2,652) | 1:B:86:GLY:H | 1:B:22:LEU:HD13 | 8 | 0.21 |
| (2,652) | 1:B:36:LEU:H | 1:B:36:LEU:HD12 | 8 | 0.21 |
| (2,652) | 1:B:36:LEU:H | 1:B:36:LEU:HD11 | 8 | 0.21 |
| (2,652) | 1:B:36:LEU:H | 1:B:36:LEU:HD13 | 8 | 0.21 |
| (2,643) | 1:B:45:MET:HB2 | 1:B:40:PHE:HA | 4 | 0.21 |
| (2,643) | 1:B:96:LYS:HB3 | 1:B:93:PHE:HA | 4 | 0.21 |
| (2,608) | 1:B:85:LEU:HD23 | 1:B:62:GLN:HB2 | 6 | 0.21 |
| (2,608) | 1:B:85:LEU:HD21 | 1:B:62:GLN:HB2 | 6 | 0.21 |
| (2,608) | 1:B:85:LEU:HD22 | 1:B:62:GLN:HB2 | 6 | 0.21 |
| (2,608) | 1:B:62:GLN:HG3 | 1:B:85:LEU:HD23 | 6 | 0.21 |
| (2,608) | 1:B:62:GLN:HG3 | 1:B:85:LEU:HD21 | 6 | 0.21 |
| (2,608) | 1:B:62:GLN:HG3 | 1:B:85:LEU:HD22 | 6 | 0.21 |
| (2,608) | 1:B:64:GLU:HB3 | 1:B:85:LEU:HD23 | 6 | 0.21 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|----------------|-----------------|----------|---------------|
| (2,608) | 1:B:64:GLU:HB3 | 1:B:85:LEU:HD21 | 6 | 0.21 |
| (2,608) | 1:B:64:GLU:HB3 | 1:B:85:LEU:HD22 | 6 | 0.21 |
| (2,58) | 1:B:85:LEU:HB2 | 1:B:88:CYS:H | 3 | 0.21 |
| (2,58) | 1:B:83:ARG:H | 1:B:85:LEU:HB3 | 3 | 0.21 |
| (2,58) | 1:B:85:LEU:HB3 | 1:B:88:CYS:H | 3 | 0.21 |
| (2,566) | 1:B:36:LEU:HB2 | 1:B:36:LEU:HD21 | 9 | 0.21 |
| (2,566) | 1:B:36:LEU:HB2 | 1:B:36:LEU:HD23 | 9 | 0.21 |
| (2,566) | 1:B:36:LEU:HB2 | 1:B:36:LEU:HD22 | 9 | 0.21 |
| (2,566) | 1:B:43:ILE:HB | 1:B:45:MET:HE2 | 9 | 0.21 |
| (2,566) | 1:B:43:ILE:HB | 1:B:45:MET:HE1 | 9 | 0.21 |
| (2,566) | 1:B:43:ILE:HB | 1:B:45:MET:HE3 | 9 | 0.21 |
| (2,490) | 1:B:39:ARG:HG3 | 1:B:39:ARG:H | 8 | 0.21 |
| (2,490) | 1:B:99:ILE:H | 1:B:39:ARG:HG3 | 8 | 0.21 |
| (2,490) | 1:B:72:LYS:H | 1:B:70:PRO:HG3 | 8 | 0.21 |
| (2,490) | 1:B:70:PRO:HG3 | 1:B:81:TRP:HZ2 | 8 | 0.21 |
| (2,490) | 1:B:81:TRP:HE3 | 1:B:85:LEU:HG | 8 | 0.21 |
| (2,490) | 1:B:39:ARG:HG3 | 1:B:39:ARG:H | 9 | 0.21 |
| (2,490) | 1:B:99:ILE:H | 1:B:39:ARG:HG3 | 9 | 0.21 |
| (2,490) | 1:B:72:LYS:H | 1:B:70:PRO:HG3 | 9 | 0.21 |
| (2,490) | 1:B:70:PRO:HG3 | 1:B:81:TRP:HZ2 | 9 | 0.21 |
| (2,490) | 1:B:81:TRP:HE3 | 1:B:85:LEU:HG | 9 | 0.21 |
| (2,459) | 1:B:34:PRO:HG3 | 1:B:34:PRO:HA | 10 | 0.21 |
| (2,459) | 1:B:34:PRO:HG2 | 1:B:34:PRO:HA | 10 | 0.21 |
| (2,4) | 1:B:53:LEU:HB2 | 1:B:49:GLN:HG3 | 2 | 0.21 |
| (2,4) | 1:B:53:LEU:HB2 | 1:B:56:GLU:HG3 | 2 | 0.21 |
| (2,4) | 1:B:65:LEU:HB2 | 1:B:64:GLU:HB3 | 2 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:43:ILE:HG23 | 2 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:43:ILE:HG21 | 2 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:43:ILE:HG22 | 2 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:45:MET:HE2 | 2 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:45:MET:HE1 | 2 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:45:MET:HE3 | 2 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:98:LEU:HD13 | 2 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:98:LEU:HD11 | 2 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:98:LEU:HD12 | 2 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:15:LEU:HD23 | 2 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:15:LEU:HD21 | 2 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:15:LEU:HD22 | 2 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:85:LEU:HD11 | 2 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:85:LEU:HD12 | 2 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:85:LEU:HD13 | 2 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:89:ILE:HD11 | 2 | 0.21 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|----------------|-----------------|----------|---------------|
| (2,297) | 1:B:64:GLU:HB3 | 1:B:89:ILE:HD13 | 2 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:89:ILE:HD12 | 2 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:43:ILE:HG23 | 5 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:43:ILE:HG21 | 5 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:43:ILE:HG22 | 5 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:45:MET:HE2 | 5 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:45:MET:HE1 | 5 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:45:MET:HE3 | 5 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:98:LEU:HD13 | 5 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:98:LEU:HD11 | 5 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:98:LEU:HD12 | 5 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:15:LEU:HD23 | 5 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:15:LEU:HD21 | 5 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:15:LEU:HD22 | 5 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:85:LEU:HD11 | 5 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:85:LEU:HD12 | 5 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:85:LEU:HD13 | 5 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:89:ILE:HD11 | 5 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:89:ILE:HD13 | 5 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:89:ILE:HD12 | 5 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:43:ILE:HG23 | 7 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:43:ILE:HG21 | 7 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:43:ILE:HG22 | 7 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:45:MET:HE2 | 7 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:45:MET:HE1 | 7 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:45:MET:HE3 | 7 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:98:LEU:HD13 | 7 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:98:LEU:HD11 | 7 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:98:LEU:HD12 | 7 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:15:LEU:HD23 | 7 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:15:LEU:HD21 | 7 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:15:LEU:HD22 | 7 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:85:LEU:HD11 | 7 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:85:LEU:HD12 | 7 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:85:LEU:HD13 | 7 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:89:ILE:HD11 | 7 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:89:ILE:HD13 | 7 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:89:ILE:HD12 | 7 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:43:ILE:HG23 | 8 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:43:ILE:HG21 | 8 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:43:ILE:HG22 | 8 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:45:MET:HE2 | 8 | 0.21 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|----------------|-----------------|----------|---------------|
| (2,297) | 1:B:42:GLU:HB2 | 1:B:45:MET:HE1 | 8 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:45:MET:HE3 | 8 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:98:LEU:HD13 | 8 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:98:LEU:HD11 | 8 | 0.21 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:98:LEU:HD12 | 8 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:15:LEU:HD23 | 8 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:15:LEU:HD21 | 8 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:15:LEU:HD22 | 8 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:85:LEU:HD11 | 8 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:85:LEU:HD12 | 8 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:85:LEU:HD13 | 8 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:89:ILE:HD11 | 8 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:89:ILE:HD13 | 8 | 0.21 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:89:ILE:HD12 | 8 | 0.21 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:85:LEU:HD23 | 4 | 0.21 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:85:LEU:HD21 | 4 | 0.21 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:85:LEU:HD22 | 4 | 0.21 |
| (2,282) | 1:B:60:LYS:HD3 | 1:B:89:ILE:HG23 | 4 | 0.21 |
| (2,282) | 1:B:60:LYS:HD3 | 1:B:89:ILE:HG21 | 4 | 0.21 |
| (2,282) | 1:B:60:LYS:HD3 | 1:B:89:ILE:HG22 | 4 | 0.21 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:21:LEU:HD11 | 4 | 0.21 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:21:LEU:HD13 | 4 | 0.21 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:21:LEU:HD12 | 4 | 0.21 |
| (2,272) | 1:B:19:THR:HA | 1:B:20:PRO:HG2 | 6 | 0.21 |
| (2,272) | 1:B:19:THR:HA | 1:B:20:PRO:HG3 | 6 | 0.21 |
| (2,272) | 1:B:21:LEU:HB2 | 1:B:19:THR:HA | 6 | 0.21 |
| (2,272) | 1:B:19:THR:HA | 1:B:55:PRO:HG2 | 6 | 0.21 |
| (2,272) | 1:B:85:LEU:HB3 | 1:B:19:THR:HA | 6 | 0.21 |
| (2,272) | 1:B:85:LEU:HB2 | 1:B:19:THR:HA | 6 | 0.21 |
| (2,272) | 1:B:80:THR:HB | 1:B:70:PRO:HG2 | 6 | 0.21 |
| (2,211) | 1:B:34:PRO:HB2 | 1:B:37:LYS:H | 1 | 0.21 |
| (2,211) | 1:B:38:LYS:HB3 | 1:B:37:LYS:H | 1 | 0.21 |
| (2,211) | 1:B:67:ALA:H | 1:B:69:MET:HG3 | 1 | 0.21 |
| (2,211) | 1:B:93:PHE:H | 1:B:91:LYS:HB2 | 1 | 0.21 |
| (2,211) | 1:B:93:PHE:H | 1:B:91:LYS:HB3 | 1 | 0.21 |
| (2,189) | 1:B:60:LYS:HB3 | 1:B:60:LYS:HD3 | 5 | 0.21 |
| (2,189) | 1:B:60:LYS:HB3 | 1:B:60:LYS:HG3 | 5 | 0.21 |
| (2,1474) | 1:B:65:LEU:H | 1:B:60:LYS:HG3 | 7 | 0.21 |
| (2,1474) | 1:B:63:ASP:H | 1:B:59:LYS:HD3 | 7 | 0.21 |
| (2,1474) | 1:B:63:ASP:H | 1:B:60:LYS:HD3 | 7 | 0.21 |
| (2,1474) | 1:B:63:ASP:H | 1:B:60:LYS:HG3 | 7 | 0.21 |
| (2,146) | 1:B:8:GLU:HG2 | 1:B:8:GLU:HA | 1 | 0.21 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|----------------|----------|---------------|
| (2,146) | 1:B:8:GLU:HG3 | 1:B:8:GLU:HA | 1 | 0.21 |
| (2,146) | 1:B:8:GLU:HG2 | 1:B:8:GLU:HA | 2 | 0.21 |
| (2,146) | 1:B:8:GLU:HG3 | 1:B:8:GLU:HA | 2 | 0.21 |
| (2,146) | 1:B:8:GLU:HG2 | 1:B:8:GLU:HA | 6 | 0.21 |
| (2,146) | 1:B:8:GLU:HG3 | 1:B:8:GLU:HA | 6 | 0.21 |
| (2,146) | 1:B:8:GLU:HG2 | 1:B:8:GLU:HA | 7 | 0.21 |
| (2,146) | 1:B:8:GLU:HG3 | 1:B:8:GLU:HA | 7 | 0.21 |
| (2,1422) | 1:B:41:ASP:H | 1:B:44:LYS:HG3 | 5 | 0.21 |
| (2,1422) | 1:B:41:ASP:H | 1:B:45:MET:HB2 | 5 | 0.21 |
| (2,1414) | 1:B:41:ASP:H | 1:B:42:GLU:HG3 | 5 | 0.21 |
| (2,1414) | 1:B:41:ASP:H | 1:B:30:PHE:HB2 | 5 | 0.21 |
| (2,1290) | 1:B:91:LYS:H | 1:B:87:GLU:HG2 | 7 | 0.21 |
| (2,1290) | 1:B:91:LYS:H | 1:B:95:GLU:HG2 | 7 | 0.21 |
| (2,124) | 1:B:39:ARG:H | 1:B:40:PHE:HB3 | 9 | 0.21 |
| (2,124) | 1:B:43:ILE:H | 1:B:40:PHE:HB3 | 9 | 0.21 |
| (2,1143) | 1:B:4:ALA:HB1 | 1:B:5:ASN:HB3 | 4 | 0.21 |
| (2,1143) | 1:B:4:ALA:HB2 | 1:B:5:ASN:HB3 | 4 | 0.21 |
| (2,1143) | 1:B:4:ALA:HB3 | 1:B:5:ASN:HB3 | 4 | 0.21 |
| (2,1143) | 1:B:78:ALA:HB1 | 1:B:74:ASN:HB2 | 4 | 0.21 |
| (2,1143) | 1:B:78:ALA:HB2 | 1:B:74:ASN:HB2 | 4 | 0.21 |
| (2,1143) | 1:B:78:ALA:HB3 | 1:B:74:ASN:HB2 | 4 | 0.21 |
| (2,1143) | 1:B:78:ALA:HB1 | 1:B:81:TRP:HB3 | 4 | 0.21 |
| (2,1143) | 1:B:78:ALA:HB2 | 1:B:81:TRP:HB3 | 4 | 0.21 |
| (2,1143) | 1:B:78:ALA:HB3 | 1:B:81:TRP:HB3 | 4 | 0.21 |
| (2,1122) | 1:B:51:VAL:HG13 | 1:B:23:PRO:HD3 | 1 | 0.21 |
| (2,1122) | 1:B:51:VAL:HG11 | 1:B:23:PRO:HD3 | 1 | 0.21 |
| (2,1122) | 1:B:51:VAL:HG12 | 1:B:23:PRO:HD3 | 1 | 0.21 |
| (2,1122) | 1:B:51:VAL:HG13 | 1:B:55:PRO:HD2 | 1 | 0.21 |
| (2,1122) | 1:B:51:VAL:HG11 | 1:B:55:PRO:HD2 | 1 | 0.21 |
| (2,1122) | 1:B:51:VAL:HG12 | 1:B:55:PRO:HD2 | 1 | 0.21 |
| (2,1122) | 1:B:51:VAL:HG21 | 1:B:55:PRO:HD2 | 1 | 0.21 |
| (2,1122) | 1:B:51:VAL:HG23 | 1:B:55:PRO:HD2 | 1 | 0.21 |
| (2,1122) | 1:B:51:VAL:HG22 | 1:B:55:PRO:HD2 | 1 | 0.21 |
| (2,1122) | 1:B:51:VAL:HG13 | 1:B:23:PRO:HD3 | 4 | 0.21 |
| (2,1122) | 1:B:51:VAL:HG11 | 1:B:23:PRO:HD3 | 4 | 0.21 |
| (2,1122) | 1:B:51:VAL:HG12 | 1:B:23:PRO:HD3 | 4 | 0.21 |
| (2,1122) | 1:B:51:VAL:HG13 | 1:B:55:PRO:HD2 | 4 | 0.21 |
| (2,1122) | 1:B:51:VAL:HG11 | 1:B:55:PRO:HD2 | 4 | 0.21 |
| (2,1122) | 1:B:51:VAL:HG12 | 1:B:55:PRO:HD2 | 4 | 0.21 |
| (2,1122) | 1:B:51:VAL:HG21 | 1:B:55:PRO:HD2 | 4 | 0.21 |
| (2,1122) | 1:B:51:VAL:HG23 | 1:B:55:PRO:HD2 | 4 | 0.21 |
| (2,1122) | 1:B:51:VAL:HG22 | 1:B:55:PRO:HD2 | 4 | 0.21 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,1122) | 1:B:51:VAL:HG13 | 1:B:23:PRO:HD3 | 10 | 0.21 |
| (2,1122) | 1:B:51:VAL:HG11 | 1:B:23:PRO:HD3 | 10 | 0.21 |
| (2,1122) | 1:B:51:VAL:HG12 | 1:B:23:PRO:HD3 | 10 | 0.21 |
| (2,1122) | 1:B:51:VAL:HG13 | 1:B:55:PRO:HD2 | 10 | 0.21 |
| (2,1122) | 1:B:51:VAL:HG11 | 1:B:55:PRO:HD2 | 10 | 0.21 |
| (2,1122) | 1:B:51:VAL:HG12 | 1:B:55:PRO:HD2 | 10 | 0.21 |
| (2,1122) | 1:B:51:VAL:HG21 | 1:B:55:PRO:HD2 | 10 | 0.21 |
| (2,1122) | 1:B:51:VAL:HG23 | 1:B:55:PRO:HD2 | 10 | 0.21 |
| (2,1122) | 1:B:51:VAL:HG22 | 1:B:55:PRO:HD2 | 10 | 0.21 |
| (1,93) | 1:B:30:PHE:HB2 | 1:B:36:LEU:HB3 | 5 | 0.21 |
| (1,93) | 1:B:30:PHE:HB2 | 1:B:36:LEU:HB3 | 10 | 0.21 |
| (1,762) | 1:B:89:ILE:HG13 | 1:B:88:CYS:HB3 | 1 | 0.21 |
| (1,742) | 1:B:72:LYS:HG2 | 1:B:71:ASP:HB3 | 4 | 0.21 |
| (1,742) | 1:B:72:LYS:HG2 | 1:B:71:ASP:HB3 | 8 | 0.21 |
| (1,558) | 1:B:101:LYS:HB2 | 1:B:101:LYS:HA | 4 | 0.21 |
| (1,558) | 1:B:101:LYS:HB2 | 1:B:101:LYS:HA | 5 | 0.21 |
| (1,558) | 1:B:101:LYS:HB2 | 1:B:101:LYS:HA | 6 | 0.21 |
| (1,558) | 1:B:101:LYS:HB2 | 1:B:101:LYS:HA | 8 | 0.21 |
| (1,558) | 1:B:101:LYS:HB2 | 1:B:101:LYS:HA | 9 | 0.21 |
| (1,558) | 1:B:101:LYS:HB2 | 1:B:101:LYS:HA | 10 | 0.21 |
| (1,52) | 1:B:11:LYS:HE2 | 1:B:69:MET:HB3 | 7 | 0.21 |
| (1,387) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD11 | 8 | 0.21 |
| (1,387) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD13 | 8 | 0.21 |
| (1,387) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD12 | 8 | 0.21 |
| (1,387) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD11 | 10 | 0.21 |
| (1,387) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD13 | 10 | 0.21 |
| (1,387) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD12 | 10 | 0.21 |
| (1,37) | 1:B:86:GLY:H | 1:B:85:LEU:HB3 | 1 | 0.21 |
| (1,230) | 1:B:-6:VAL:HB | 1:B:-6:VAL:HA | 3 | 0.21 |
| (1,215) | 1:B:6:PRO:HB2 | 1:B:6:PRO:HA | 8 | 0.21 |
| (1,1318) | 1:B:43:ILE:H | 1:B:39:ARG:HG2 | 10 | 0.21 |
| (1,1252) | 1:B:19:THR:H | 1:B:18:MET:HG3 | 8 | 0.21 |
| (1,1154) | 1:B:93:PHE:H | 1:B:92:ASP:HB2 | 4 | 0.21 |
| (1,1152) | 1:B:93:PHE:H | 1:B:90:GLY:HA3 | 3 | 0.21 |
| (1,1013) | 1:B:50:CYS:H | 1:B:53:LEU:HD22 | 1 | 0.21 |
| (1,1013) | 1:B:50:CYS:H | 1:B:53:LEU:HD21 | 1 | 0.21 |
| (1,1013) | 1:B:50:CYS:H | 1:B:53:LEU:HD23 | 1 | 0.21 |
| (1,1006) | 1:B:94:ALA:H | 1:B:96:LYS:HB3 | 5 | 0.21 |
| (2,968) | 1:B:9:MET:HB3 | 1:B:14:TRP:HB2 | 9 | 0.2 |
| (2,968) | 1:B:87:GLU:HG3 | 1:B:91:LYS:HE2 | 9 | 0.2 |
| (2,964) | 1:B:7:ASN:HB3 | 1:B:8:GLU:HG2 | 8 | 0.2 |
| (2,964) | 1:B:7:ASN:HB3 | 1:B:8:GLU:HG3 | 8 | 0.2 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|-----------------|-----------------|----------|---------------|
| (2,964) | 1:B:16:ASN:HB2 | 1:B:15:LEU:HB3 | 8 | 0.2 |
| (2,964) | 1:B:15:LEU:HG | 1:B:16:ASN:HB2 | 8 | 0.2 |
| (2,841) | 1:B:20:PRO:HD3 | 1:B:18:MET:HA | 3 | 0.2 |
| (2,841) | 1:B:20:PRO:HD3 | 1:B:20:PRO:HA | 3 | 0.2 |
| (2,841) | 1:B:20:PRO:HD3 | 1:B:18:MET:HA | 6 | 0.2 |
| (2,841) | 1:B:20:PRO:HD3 | 1:B:20:PRO:HA | 6 | 0.2 |
| (2,839) | 1:B:23:PRO:HB3 | 1:B:55:PRO:HD2 | 1 | 0.2 |
| (2,839) | 1:B:20:PRO:HB2 | 1:B:20:PRO:HD2 | 1 | 0.2 |
| (2,688) | 1:B:91:LYS:HA | 1:B:91:LYS:HE2 | 5 | 0.2 |
| (2,688) | 1:B:91:LYS:HA | 1:B:91:LYS:HE3 | 5 | 0.2 |
| (2,688) | 1:B:38:LYS:HA | 1:B:38:LYS:HE2 | 5 | 0.2 |
| (2,688) | 1:B:38:LYS:HA | 1:B:38:LYS:HE3 | 5 | 0.2 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:65:LEU:HB2 | 9 | 0.2 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:65:LEU:HB2 | 9 | 0.2 |
| (2,682) | 1:B:80:THR:HG21 | 1:B:65:LEU:HB2 | 9 | 0.2 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:69:MET:HG3 | 9 | 0.2 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:69:MET:HG3 | 9 | 0.2 |
| (2,682) | 1:B:80:THR:HG21 | 1:B:69:MET:HG3 | 9 | 0.2 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:70:PRO:HG2 | 9 | 0.2 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:70:PRO:HG2 | 9 | 0.2 |
| (2,682) | 1:B:80:THR:HG21 | 1:B:70:PRO:HG2 | 9 | 0.2 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:83:ARG:HB2 | 9 | 0.2 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:83:ARG:HB2 | 9 | 0.2 |
| (2,682) | 1:B:80:THR:HG21 | 1:B:83:ARG:HB2 | 9 | 0.2 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:83:ARG:HB3 | 9 | 0.2 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:83:ARG:HB3 | 9 | 0.2 |
| (2,682) | 1:B:80:THR:HG21 | 1:B:83:ARG:HB3 | 9 | 0.2 |
| (2,652) | 1:B:86:GLY:H | 1:B:22:LEU:HD11 | 2 | 0.2 |
| (2,652) | 1:B:86:GLY:H | 1:B:22:LEU:HD12 | 2 | 0.2 |
| (2,652) | 1:B:86:GLY:H | 1:B:22:LEU:HD13 | 2 | 0.2 |
| (2,652) | 1:B:36:LEU:H | 1:B:36:LEU:HD12 | 2 | 0.2 |
| (2,652) | 1:B:36:LEU:H | 1:B:36:LEU:HD11 | 2 | 0.2 |
| (2,652) | 1:B:36:LEU:H | 1:B:36:LEU:HD13 | 2 | 0.2 |
| (2,652) | 1:B:86:GLY:H | 1:B:22:LEU:HD11 | 10 | 0.2 |
| (2,652) | 1:B:86:GLY:H | 1:B:22:LEU:HD12 | 10 | 0.2 |
| (2,652) | 1:B:86:GLY:H | 1:B:22:LEU:HD13 | 10 | 0.2 |
| (2,652) | 1:B:36:LEU:H | 1:B:36:LEU:HD12 | 10 | 0.2 |
| (2,652) | 1:B:36:LEU:H | 1:B:36:LEU:HD11 | 10 | 0.2 |
| (2,652) | 1:B:36:LEU:H | 1:B:36:LEU:HD13 | 10 | 0.2 |
| (2,534) | 1:B:96:LYS:HG2 | 1:B:96:LYS:HE3 | 7 | 0.2 |
| (2,534) | 1:B:96:LYS:HG2 | 1:B:96:LYS:HE2 | 7 | 0.2 |
| (2,534) | 1:B:96:LYS:HG2 | 1:B:96:LYS:HE3 | 8 | 0.2 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|----------------|-----------------|----------|---------------|
| (2,534) | 1:B:96:LYS:HG2 | 1:B:96:LYS:HE2 | 8 | 0.2 |
| (2,490) | 1:B:39:ARG:HG3 | 1:B:39:ARG:H | 3 | 0.2 |
| (2,490) | 1:B:99:ILE:H | 1:B:39:ARG:HG3 | 3 | 0.2 |
| (2,490) | 1:B:72:LYS:H | 1:B:70:PRO:HG3 | 3 | 0.2 |
| (2,490) | 1:B:70:PRO:HG3 | 1:B:81:TRP:HZ2 | 3 | 0.2 |
| (2,490) | 1:B:81:TRP:HE3 | 1:B:85:LEU:HG | 3 | 0.2 |
| (2,490) | 1:B:39:ARG:HG3 | 1:B:39:ARG:H | 5 | 0.2 |
| (2,490) | 1:B:99:ILE:H | 1:B:39:ARG:HG3 | 5 | 0.2 |
| (2,490) | 1:B:72:LYS:H | 1:B:70:PRO:HG3 | 5 | 0.2 |
| (2,490) | 1:B:70:PRO:HG3 | 1:B:81:TRP:HZ2 | 5 | 0.2 |
| (2,490) | 1:B:81:TRP:HE3 | 1:B:85:LEU:HG | 5 | 0.2 |
| (2,490) | 1:B:39:ARG:HG3 | 1:B:39:ARG:H | 10 | 0.2 |
| (2,490) | 1:B:99:ILE:H | 1:B:39:ARG:HG3 | 10 | 0.2 |
| (2,490) | 1:B:72:LYS:H | 1:B:70:PRO:HG3 | 10 | 0.2 |
| (2,490) | 1:B:70:PRO:HG3 | 1:B:81:TRP:HZ2 | 10 | 0.2 |
| (2,490) | 1:B:81:TRP:HE3 | 1:B:85:LEU:HG | 10 | 0.2 |
| (2,486) | 1:B:57:SER:HB2 | 1:B:54:ILE:HG21 | 9 | 0.2 |
| (2,486) | 1:B:57:SER:HB2 | 1:B:54:ILE:HG22 | 9 | 0.2 |
| (2,486) | 1:B:57:SER:HB2 | 1:B:54:ILE:HG23 | 9 | 0.2 |
| (2,486) | 1:B:57:SER:HB2 | 1:B:89:ILE:HD11 | 9 | 0.2 |
| (2,486) | 1:B:57:SER:HB2 | 1:B:89:ILE:HD13 | 9 | 0.2 |
| (2,486) | 1:B:57:SER:HB2 | 1:B:89:ILE:HD12 | 9 | 0.2 |
| (2,409) | 1:B:56:GLU:HG2 | 1:B:96:LYS:HD3 | 10 | 0.2 |
| (2,409) | 1:B:97:HIS:HB3 | 1:B:96:LYS:HD3 | 10 | 0.2 |
| (2,409) | 1:B:56:GLU:HG2 | 1:B:96:LYS:HD2 | 10 | 0.2 |
| (2,409) | 1:B:97:HIS:HB3 | 1:B:96:LYS:HD2 | 10 | 0.2 |
| (2,266) | 1:B:11:LYS:HB3 | 1:B:66:TYR:HD1 | 6 | 0.2 |
| (2,266) | 1:B:11:LYS:HB3 | 1:B:66:TYR:HD2 | 6 | 0.2 |
| (2,266) | 1:B:45:MET:HG3 | 1:B:40:PHE:HE1 | 6 | 0.2 |
| (2,266) | 1:B:45:MET:HG3 | 1:B:40:PHE:HE2 | 6 | 0.2 |
| (2,266) | 1:B:45:MET:HG3 | 1:B:93:PHE:HE2 | 6 | 0.2 |
| (2,266) | 1:B:45:MET:HG3 | 1:B:93:PHE:HE1 | 6 | 0.2 |
| (2,1474) | 1:B:65:LEU:H | 1:B:60:LYS:HG3 | 3 | 0.2 |
| (2,1474) | 1:B:63:ASP:H | 1:B:59:LYS:HD3 | 3 | 0.2 |
| (2,1474) | 1:B:63:ASP:H | 1:B:60:LYS:HD3 | 3 | 0.2 |
| (2,1474) | 1:B:63:ASP:H | 1:B:60:LYS:HG3 | 3 | 0.2 |
| (2,1414) | 1:B:41:ASP:H | 1:B:42:GLU:HG3 | 7 | 0.2 |
| (2,1414) | 1:B:41:ASP:H | 1:B:30:PHE:HB2 | 7 | 0.2 |
| (2,124) | 1:B:39:ARG:H | 1:B:40:PHE:HB3 | 3 | 0.2 |
| (2,124) | 1:B:43:ILE:H | 1:B:40:PHE:HB3 | 3 | 0.2 |
| (2,119) | 1:B:47:TYR:HB2 | 1:B:46:THR:HA | 4 | 0.2 |
| (2,119) | 1:B:47:TYR:HB2 | 1:B:46:THR:HB | 4 | 0.2 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,1122) | 1:B:51:VAL:HG13 | 1:B:23:PRO:HD3 | 2 | 0.2 |
| (2,1122) | 1:B:51:VAL:HG11 | 1:B:23:PRO:HD3 | 2 | 0.2 |
| (2,1122) | 1:B:51:VAL:HG12 | 1:B:23:PRO:HD3 | 2 | 0.2 |
| (2,1122) | 1:B:51:VAL:HG13 | 1:B:55:PRO:HD2 | 2 | 0.2 |
| (2,1122) | 1:B:51:VAL:HG11 | 1:B:55:PRO:HD2 | 2 | 0.2 |
| (2,1122) | 1:B:51:VAL:HG12 | 1:B:55:PRO:HD2 | 2 | 0.2 |
| (2,1122) | 1:B:51:VAL:HG21 | 1:B:55:PRO:HD2 | 2 | 0.2 |
| (2,1122) | 1:B:51:VAL:HG23 | 1:B:55:PRO:HD2 | 2 | 0.2 |
| (2,1122) | 1:B:51:VAL:HG22 | 1:B:55:PRO:HD2 | 2 | 0.2 |
| (2,1055) | 1:B:30:PHE:H | 1:B:31:ILE:HG12 | 6 | 0.2 |
| (2,1055) | 1:B:32:GLN:H | 1:B:31:ILE:HG12 | 6 | 0.2 |
| (2,1030) | 1:B:44:LYS:HD3 | 1:B:41:ASP:HB2 | 2 | 0.2 |
| (2,1030) | 1:B:44:LYS:HD2 | 1:B:41:ASP:HB2 | 2 | 0.2 |
| (2,1030) | 1:B:54:ILE:HG12 | 1:B:27:CYS:HB3 | 2 | 0.2 |
| (2,1013) | 1:B:18:MET:HG2 | 1:B:15:LEU:HA | 8 | 0.2 |
| (2,1013) | 1:B:18:MET:HG2 | 1:B:20:PRO:HD3 | 8 | 0.2 |
| (1,753) | 1:B:54:ILE:HA | 1:B:53:LEU:HB3 | 7 | 0.2 |
| (1,747) | 1:B:37:LYS:HB2 | 1:B:34:PRO:HA | 7 | 0.2 |
| (1,568) | 1:B:89:ILE:HG23 | 1:B:57:SER:HB2 | 2 | 0.2 |
| (1,568) | 1:B:89:ILE:HG21 | 1:B:57:SER:HB2 | 2 | 0.2 |
| (1,568) | 1:B:89:ILE:HG22 | 1:B:57:SER:HB2 | 2 | 0.2 |
| (1,394) | 1:B:99:ILE:HG12 | 1:B:95:GLU:HA | 6 | 0.2 |
| (1,380) | 1:B:81:TRP:HE1 | 1:B:70:PRO:HG2 | 6 | 0.2 |
| (1,379) | 1:B:57:SER:HB2 | 1:B:54:ILE:HD12 | 1 | 0.2 |
| (1,379) | 1:B:57:SER:HB2 | 1:B:54:ILE:HD11 | 1 | 0.2 |
| (1,379) | 1:B:57:SER:HB2 | 1:B:54:ILE:HD13 | 1 | 0.2 |
| (1,373) | 1:B:92:ASP:HB2 | 1:B:57:SER:HB3 | 3 | 0.2 |
| (1,373) | 1:B:92:ASP:HB2 | 1:B:57:SER:HB3 | 7 | 0.2 |
| (1,166) | 1:B:54:ILE:HB | 1:B:55:PRO:HD2 | 2 | 0.2 |
| (2,990) | 1:B:38:LYS:HB2 | 1:B:39:ARG:HD3 | 7 | 0.19 |
| (2,990) | 1:B:38:LYS:HB3 | 1:B:39:ARG:HD3 | 7 | 0.19 |
| (2,990) | 1:B:89:ILE:HA | 1:B:91:LYS:HB2 | 7 | 0.19 |
| (2,990) | 1:B:91:LYS:HB3 | 1:B:88:CYS:HB3 | 7 | 0.19 |
| (2,990) | 1:B:89:ILE:HA | 1:B:91:LYS:HB3 | 7 | 0.19 |
| (2,827) | 1:B:73:ILE:HG22 | 1:B:74:ASN:HB2 | 8 | 0.19 |
| (2,827) | 1:B:73:ILE:HG21 | 1:B:74:ASN:HB2 | 8 | 0.19 |
| (2,827) | 1:B:73:ILE:HG23 | 1:B:74:ASN:HB2 | 8 | 0.19 |
| (2,827) | 1:B:73:ILE:HG22 | 1:B:81:TRP:HB3 | 8 | 0.19 |
| (2,827) | 1:B:73:ILE:HG21 | 1:B:81:TRP:HB3 | 8 | 0.19 |
| (2,827) | 1:B:73:ILE:HG23 | 1:B:81:TRP:HB3 | 8 | 0.19 |
| (2,827) | 1:B:73:ILE:HG22 | 1:B:74:ASN:HB2 | 10 | 0.19 |
| (2,827) | 1:B:73:ILE:HG21 | 1:B:74:ASN:HB2 | 10 | 0.19 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|-----------------|-----------------|----------|---------------|
| (2,827) | 1:B:73:ILE:HG23 | 1:B:74:ASN:HB2 | 10 | 0.19 |
| (2,827) | 1:B:73:ILE:HG22 | 1:B:81:TRP:HB3 | 10 | 0.19 |
| (2,827) | 1:B:73:ILE:HG21 | 1:B:81:TRP:HB3 | 10 | 0.19 |
| (2,827) | 1:B:73:ILE:HG23 | 1:B:81:TRP:HB3 | 10 | 0.19 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:65:LEU:HB2 | 8 | 0.19 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:65:LEU:HB2 | 8 | 0.19 |
| (2,682) | 1:B:80:THR:HG21 | 1:B:65:LEU:HB2 | 8 | 0.19 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:69:MET:HG3 | 8 | 0.19 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:69:MET:HG3 | 8 | 0.19 |
| (2,682) | 1:B:80:THR:HG21 | 1:B:69:MET:HG3 | 8 | 0.19 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:70:PRO:HG2 | 8 | 0.19 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:70:PRO:HG2 | 8 | 0.19 |
| (2,682) | 1:B:80:THR:HG21 | 1:B:70:PRO:HG2 | 8 | 0.19 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:83:ARG:HB2 | 8 | 0.19 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:83:ARG:HB2 | 8 | 0.19 |
| (2,682) | 1:B:80:THR:HG21 | 1:B:83:ARG:HB2 | 8 | 0.19 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:83:ARG:HB3 | 8 | 0.19 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:83:ARG:HB3 | 8 | 0.19 |
| (2,682) | 1:B:80:THR:HG21 | 1:B:83:ARG:HB3 | 8 | 0.19 |
| (2,667) | 1:B:22:LEU:HD11 | 1:B:14:TRP:H2 | 8 | 0.19 |
| (2,667) | 1:B:22:LEU:HD12 | 1:B:14:TRP:H2 | 8 | 0.19 |
| (2,667) | 1:B:22:LEU:HD13 | 1:B:14:TRP:H2 | 8 | 0.19 |
| (2,667) | 1:B:25:LEU:H | 1:B:22:LEU:HD11 | 8 | 0.19 |
| (2,667) | 1:B:25:LEU:H | 1:B:22:LEU:HD12 | 8 | 0.19 |
| (2,667) | 1:B:25:LEU:H | 1:B:22:LEU:HD13 | 8 | 0.19 |
| (2,667) | 1:B:36:LEU:HD12 | 1:B:39:ARG:H | 8 | 0.19 |
| (2,667) | 1:B:36:LEU:HD11 | 1:B:39:ARG:H | 8 | 0.19 |
| (2,667) | 1:B:36:LEU:HD13 | 1:B:39:ARG:H | 8 | 0.19 |
| (2,667) | 1:B:98:LEU:HD13 | 1:B:39:ARG:H | 8 | 0.19 |
| (2,667) | 1:B:98:LEU:HD11 | 1:B:39:ARG:H | 8 | 0.19 |
| (2,667) | 1:B:98:LEU:HD12 | 1:B:39:ARG:H | 8 | 0.19 |
| (2,667) | 1:B:99:ILE:H | 1:B:98:LEU:HD13 | 8 | 0.19 |
| (2,667) | 1:B:99:ILE:H | 1:B:98:LEU:HD11 | 8 | 0.19 |
| (2,667) | 1:B:99:ILE:H | 1:B:98:LEU:HD12 | 8 | 0.19 |
| (2,534) | 1:B:96:LYS:HG2 | 1:B:96:LYS:HE3 | 9 | 0.19 |
| (2,534) | 1:B:96:LYS:HG2 | 1:B:96:LYS:HE2 | 9 | 0.19 |
| (2,490) | 1:B:39:ARG:HG3 | 1:B:39:ARG:H | 7 | 0.19 |
| (2,490) | 1:B:99:ILE:H | 1:B:39:ARG:HG3 | 7 | 0.19 |
| (2,490) | 1:B:72:LYS:H | 1:B:70:PRO:HG3 | 7 | 0.19 |
| (2,490) | 1:B:70:PRO:HG3 | 1:B:81:TRP:H2 | 7 | 0.19 |
| (2,490) | 1:B:81:TRP:HE3 | 1:B:85:LEU:HG | 7 | 0.19 |
| (2,453) | 1:B:6:PRO:HG2 | 1:B:5:ASN:HB2 | 5 | 0.19 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|----------------|-----------------|----------|---------------|
| (2,453) | 1:B:6:PRO:HG3 | 1:B:5:ASN:HB2 | 5 | 0.19 |
| (2,453) | 1:B:15:LEU:HG | 1:B:66:TYR:HB3 | 5 | 0.19 |
| (2,453) | 1:B:62:GLN:HB3 | 1:B:63:ASP:HB3 | 5 | 0.19 |
| (2,453) | 1:B:62:GLN:HB3 | 1:B:66:TYR:HB3 | 5 | 0.19 |
| (2,453) | 1:B:65:LEU:HG | 1:B:66:TYR:HB3 | 5 | 0.19 |
| (2,44) | 1:B:61:CYS:HB3 | 1:B:88:CYS:HB2 | 4 | 0.19 |
| (2,44) | 1:B:92:ASP:HB2 | 1:B:93:PHE:HB3 | 4 | 0.19 |
| (2,44) | 1:B:92:ASP:HB2 | 1:B:93:PHE:HB2 | 4 | 0.19 |
| (2,44) | 1:B:61:CYS:HB3 | 1:B:88:CYS:HB2 | 9 | 0.19 |
| (2,44) | 1:B:92:ASP:HB2 | 1:B:93:PHE:HB3 | 9 | 0.19 |
| (2,44) | 1:B:92:ASP:HB2 | 1:B:93:PHE:HB2 | 9 | 0.19 |
| (2,189) | 1:B:60:LYS:HB3 | 1:B:60:LYS:HD3 | 1 | 0.19 |
| (2,189) | 1:B:60:LYS:HB3 | 1:B:60:LYS:HG3 | 1 | 0.19 |
| (2,189) | 1:B:60:LYS:HB3 | 1:B:60:LYS:HD3 | 2 | 0.19 |
| (2,189) | 1:B:60:LYS:HB3 | 1:B:60:LYS:HG3 | 2 | 0.19 |
| (2,189) | 1:B:60:LYS:HB3 | 1:B:60:LYS:HD3 | 4 | 0.19 |
| (2,189) | 1:B:60:LYS:HB3 | 1:B:60:LYS:HG3 | 4 | 0.19 |
| (2,189) | 1:B:60:LYS:HB3 | 1:B:60:LYS:HD3 | 6 | 0.19 |
| (2,189) | 1:B:60:LYS:HB3 | 1:B:60:LYS:HG3 | 6 | 0.19 |
| (2,189) | 1:B:60:LYS:HB3 | 1:B:60:LYS:HD3 | 7 | 0.19 |
| (2,189) | 1:B:60:LYS:HB3 | 1:B:60:LYS:HG3 | 7 | 0.19 |
| (2,189) | 1:B:60:LYS:HB3 | 1:B:60:LYS:HD3 | 8 | 0.19 |
| (2,189) | 1:B:60:LYS:HB3 | 1:B:60:LYS:HG3 | 8 | 0.19 |
| (2,189) | 1:B:60:LYS:HB3 | 1:B:60:LYS:HD3 | 10 | 0.19 |
| (2,189) | 1:B:60:LYS:HB3 | 1:B:60:LYS:HG3 | 10 | 0.19 |
| (2,1128) | 1:B:99:ILE:HA | 1:B:99:ILE:HG13 | 4 | 0.19 |
| (2,1128) | 1:B:99:ILE:HA | 1:B:101:LYS:HG3 | 4 | 0.19 |
| (2,1083) | 1:B:45:MET:HB3 | 1:B:53:LEU:HD11 | 3 | 0.19 |
| (2,1083) | 1:B:45:MET:HB3 | 1:B:53:LEU:HD12 | 3 | 0.19 |
| (2,1083) | 1:B:45:MET:HB3 | 1:B:53:LEU:HD13 | 3 | 0.19 |
| (2,1083) | 1:B:45:MET:HG2 | 1:B:53:LEU:HD11 | 3 | 0.19 |
| (2,1083) | 1:B:45:MET:HG2 | 1:B:53:LEU:HD12 | 3 | 0.19 |
| (2,1083) | 1:B:45:MET:HG2 | 1:B:53:LEU:HD13 | 3 | 0.19 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:36:LEU:HD12 | 4 | 0.19 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:36:LEU:HD11 | 4 | 0.19 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:36:LEU:HD13 | 4 | 0.19 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:36:LEU:HD21 | 4 | 0.19 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:36:LEU:HD23 | 4 | 0.19 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:36:LEU:HD22 | 4 | 0.19 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:98:LEU:HD13 | 4 | 0.19 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:98:LEU:HD11 | 4 | 0.19 |
| (2,108) | 1:B:30:PHE:HB2 | 1:B:98:LEU:HD12 | 4 | 0.19 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|----------------|----------|---------------|
| (2,1062) | 1:B:60:LYS:HB2 | 1:B:57:SER:HB3 | 7 | 0.19 |
| (2,1062) | 1:B:57:SER:HB3 | 1:B:89:ILE:HB | 7 | 0.19 |
| (2,1020) | 1:B:92:ASP:HB3 | 1:B:60:LYS:HD2 | 3 | 0.19 |
| (2,1020) | 1:B:92:ASP:HB2 | 1:B:60:LYS:HD3 | 3 | 0.19 |
| (2,1020) | 1:B:92:ASP:HB3 | 1:B:60:LYS:HD3 | 3 | 0.19 |
| (1,742) | 1:B:72:LYS:HG2 | 1:B:71:ASP:HB3 | 1 | 0.19 |
| (1,742) | 1:B:72:LYS:HG2 | 1:B:71:ASP:HB3 | 10 | 0.19 |
| (1,399) | 1:B:55:PRO:HG3 | 1:B:52:THR:HA | 6 | 0.19 |
| (1,399) | 1:B:55:PRO:HG3 | 1:B:52:THR:HA | 10 | 0.19 |
| (1,380) | 1:B:81:TRP:HE1 | 1:B:70:PRO:HG2 | 3 | 0.19 |
| (1,360) | 1:B:20:PRO:HB2 | 1:B:20:PRO:HA | 1 | 0.19 |
| (1,360) | 1:B:20:PRO:HB2 | 1:B:20:PRO:HA | 2 | 0.19 |
| (1,360) | 1:B:20:PRO:HB2 | 1:B:20:PRO:HA | 3 | 0.19 |
| (1,360) | 1:B:20:PRO:HB2 | 1:B:20:PRO:HA | 4 | 0.19 |
| (1,360) | 1:B:20:PRO:HB2 | 1:B:20:PRO:HA | 5 | 0.19 |
| (1,360) | 1:B:20:PRO:HB2 | 1:B:20:PRO:HA | 6 | 0.19 |
| (1,360) | 1:B:20:PRO:HB2 | 1:B:20:PRO:HA | 7 | 0.19 |
| (1,360) | 1:B:20:PRO:HB2 | 1:B:20:PRO:HA | 8 | 0.19 |
| (1,360) | 1:B:20:PRO:HB2 | 1:B:20:PRO:HA | 9 | 0.19 |
| (1,360) | 1:B:20:PRO:HB2 | 1:B:20:PRO:HA | 10 | 0.19 |
| (1,1154) | 1:B:93:PHE:H | 1:B:92:ASP:HB2 | 1 | 0.19 |
| (1,1035) | 1:B:42:GLU:H | 1:B:41:ASP:HB2 | 2 | 0.19 |
| (2,952) | 1:B:47:TYR:HB2 | 1:B:49:GLN:HB2 | 8 | 0.18 |
| (2,952) | 1:B:47:TYR:HB2 | 1:B:49:GLN:HB3 | 8 | 0.18 |
| (2,952) | 1:B:50:CYS:HB3 | 1:B:49:GLN:HB2 | 8 | 0.18 |
| (2,952) | 1:B:50:CYS:HB3 | 1:B:49:GLN:HB3 | 8 | 0.18 |
| (2,952) | 1:B:66:TYR:HB3 | 1:B:11:LYS:HE3 | 8 | 0.18 |
| (2,952) | 1:B:66:TYR:HB3 | 1:B:62:GLN:HB2 | 8 | 0.18 |
| (2,932) | 1:B:-1:LYS:HE2 | 1:B:-1:LYS:HB2 | 3 | 0.18 |
| (2,932) | 1:B:44:LYS:HE3 | 1:B:44:LYS:HB2 | 3 | 0.18 |
| (2,932) | 1:B:44:LYS:HE2 | 1:B:44:LYS:HB2 | 3 | 0.18 |
| (2,932) | 1:B:60:LYS:HE3 | 1:B:60:LYS:HB2 | 3 | 0.18 |
| (2,874) | 1:B:26:ILE:HD13 | 1:B:23:PRO:HA | 10 | 0.18 |
| (2,874) | 1:B:26:ILE:HD11 | 1:B:23:PRO:HA | 10 | 0.18 |
| (2,874) | 1:B:26:ILE:HD12 | 1:B:23:PRO:HA | 10 | 0.18 |
| (2,874) | 1:B:26:ILE:HD13 | 1:B:90:GLY:HA3 | 10 | 0.18 |
| (2,874) | 1:B:26:ILE:HD11 | 1:B:90:GLY:HA3 | 10 | 0.18 |
| (2,874) | 1:B:26:ILE:HD12 | 1:B:90:GLY:HA3 | 10 | 0.18 |
| (2,839) | 1:B:23:PRO:HB3 | 1:B:55:PRO:HD2 | 7 | 0.18 |
| (2,839) | 1:B:20:PRO:HB2 | 1:B:20:PRO:HD2 | 7 | 0.18 |
| (2,715) | 1:B:51:VAL:HG13 | 1:B:24:ASP:HB3 | 10 | 0.18 |
| (2,715) | 1:B:51:VAL:HG11 | 1:B:24:ASP:HB3 | 10 | 0.18 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|-----------------|-----------------|----------|---------------|
| (2,715) | 1:B:51:VAL:HG12 | 1:B:24:ASP:HB3 | 10 | 0.18 |
| (2,715) | 1:B:51:VAL:HG13 | 1:B:27:CYS:HB3 | 10 | 0.18 |
| (2,715) | 1:B:51:VAL:HG11 | 1:B:27:CYS:HB3 | 10 | 0.18 |
| (2,715) | 1:B:51:VAL:HG12 | 1:B:27:CYS:HB3 | 10 | 0.18 |
| (2,715) | 1:B:51:VAL:HG21 | 1:B:48:GLU:HG3 | 10 | 0.18 |
| (2,715) | 1:B:51:VAL:HG23 | 1:B:48:GLU:HG3 | 10 | 0.18 |
| (2,715) | 1:B:51:VAL:HG22 | 1:B:48:GLU:HG3 | 10 | 0.18 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:65:LEU:HB2 | 4 | 0.18 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:65:LEU:HB2 | 4 | 0.18 |
| (2,682) | 1:B:80:THR:HG21 | 1:B:65:LEU:HB2 | 4 | 0.18 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:69:MET:HG3 | 4 | 0.18 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:69:MET:HG3 | 4 | 0.18 |
| (2,682) | 1:B:80:THR:HG21 | 1:B:69:MET:HG3 | 4 | 0.18 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:70:PRO:HG2 | 4 | 0.18 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:70:PRO:HG2 | 4 | 0.18 |
| (2,682) | 1:B:80:THR:HG21 | 1:B:70:PRO:HG2 | 4 | 0.18 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:83:ARG:HB2 | 4 | 0.18 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:83:ARG:HB2 | 4 | 0.18 |
| (2,682) | 1:B:80:THR:HG21 | 1:B:83:ARG:HB2 | 4 | 0.18 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:83:ARG:HB3 | 4 | 0.18 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:83:ARG:HB3 | 4 | 0.18 |
| (2,682) | 1:B:80:THR:HG21 | 1:B:83:ARG:HB3 | 4 | 0.18 |
| (2,65) | 1:B:72:LYS:HE3 | 1:B:72:LYS:HG3 | 6 | 0.18 |
| (2,65) | 1:B:72:LYS:HE2 | 1:B:72:LYS:HG3 | 6 | 0.18 |
| (2,65) | 1:B:72:LYS:HE3 | 1:B:72:LYS:HG3 | 9 | 0.18 |
| (2,65) | 1:B:72:LYS:HE2 | 1:B:72:LYS:HG3 | 9 | 0.18 |
| (2,565) | 1:B:15:LEU:HD23 | 1:B:62:GLN:HA | 5 | 0.18 |
| (2,565) | 1:B:15:LEU:HD21 | 1:B:62:GLN:HA | 5 | 0.18 |
| (2,565) | 1:B:15:LEU:HD22 | 1:B:62:GLN:HA | 5 | 0.18 |
| (2,565) | 1:B:19:THR:HA | 1:B:22:LEU:HD23 | 5 | 0.18 |
| (2,565) | 1:B:19:THR:HA | 1:B:22:LEU:HD21 | 5 | 0.18 |
| (2,565) | 1:B:19:THR:HA | 1:B:22:LEU:HD22 | 5 | 0.18 |
| (2,565) | 1:B:36:LEU:HD21 | 1:B:29:GLY:HA3 | 5 | 0.18 |
| (2,565) | 1:B:36:LEU:HD23 | 1:B:29:GLY:HA3 | 5 | 0.18 |
| (2,565) | 1:B:36:LEU:HD22 | 1:B:29:GLY:HA3 | 5 | 0.18 |
| (2,565) | 1:B:85:LEU:HD11 | 1:B:62:GLN:HA | 5 | 0.18 |
| (2,565) | 1:B:85:LEU:HD12 | 1:B:62:GLN:HA | 5 | 0.18 |
| (2,565) | 1:B:85:LEU:HD13 | 1:B:62:GLN:HA | 5 | 0.18 |
| (2,490) | 1:B:39:ARG:HG3 | 1:B:39:ARG:H | 4 | 0.18 |
| (2,490) | 1:B:99:ILE:H | 1:B:39:ARG:HG3 | 4 | 0.18 |
| (2,490) | 1:B:72:LYS:H | 1:B:70:PRO:HG3 | 4 | 0.18 |
| (2,490) | 1:B:70:PRO:HG3 | 1:B:81:TRP:HZ2 | 4 | 0.18 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|----------------|-----------------|----------|---------------|
| (2,490) | 1:B:81:TRP:HE3 | 1:B:85:LEU:HG | 4 | 0.18 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:85:LEU:HD23 | 1 | 0.18 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:85:LEU:HD21 | 1 | 0.18 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:85:LEU:HD22 | 1 | 0.18 |
| (2,282) | 1:B:60:LYS:HD3 | 1:B:89:ILE:HG23 | 1 | 0.18 |
| (2,282) | 1:B:60:LYS:HD3 | 1:B:89:ILE:HG21 | 1 | 0.18 |
| (2,282) | 1:B:60:LYS:HD3 | 1:B:89:ILE:HG22 | 1 | 0.18 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:21:LEU:HD11 | 1 | 0.18 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:21:LEU:HD13 | 1 | 0.18 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:21:LEU:HD12 | 1 | 0.18 |
| (2,266) | 1:B:11:LYS:HB3 | 1:B:66:TYR:HD1 | 5 | 0.18 |
| (2,266) | 1:B:11:LYS:HB3 | 1:B:66:TYR:HD2 | 5 | 0.18 |
| (2,266) | 1:B:45:MET:HG3 | 1:B:40:PHE:HE1 | 5 | 0.18 |
| (2,266) | 1:B:45:MET:HG3 | 1:B:40:PHE:HE2 | 5 | 0.18 |
| (2,266) | 1:B:45:MET:HG3 | 1:B:93:PHE:HE2 | 5 | 0.18 |
| (2,266) | 1:B:45:MET:HG3 | 1:B:93:PHE:HE1 | 5 | 0.18 |
| (2,211) | 1:B:34:PRO:HB2 | 1:B:37:LYS:H | 2 | 0.18 |
| (2,211) | 1:B:38:LYS:HB3 | 1:B:37:LYS:H | 2 | 0.18 |
| (2,211) | 1:B:67:ALA:H | 1:B:69:MET:HG3 | 2 | 0.18 |
| (2,211) | 1:B:93:PHE:H | 1:B:91:LYS:HB2 | 2 | 0.18 |
| (2,211) | 1:B:93:PHE:H | 1:B:91:LYS:HB3 | 2 | 0.18 |
| (2,211) | 1:B:34:PRO:HB2 | 1:B:37:LYS:H | 5 | 0.18 |
| (2,211) | 1:B:38:LYS:HB3 | 1:B:37:LYS:H | 5 | 0.18 |
| (2,211) | 1:B:67:ALA:H | 1:B:69:MET:HG3 | 5 | 0.18 |
| (2,211) | 1:B:93:PHE:H | 1:B:91:LYS:HB2 | 5 | 0.18 |
| (2,211) | 1:B:93:PHE:H | 1:B:91:LYS:HB3 | 5 | 0.18 |
| (2,144) | 1:B:56:GLU:HG3 | 1:B:53:LEU:HG | 7 | 0.18 |
| (2,144) | 1:B:87:GLU:HG3 | 1:B:83:ARG:HG3 | 7 | 0.18 |
| (2,144) | 1:B:87:GLU:HG3 | 1:B:85:LEU:HG | 7 | 0.18 |
| (2,144) | 1:B:87:GLU:HG3 | 1:B:91:LYS:HD3 | 7 | 0.18 |
| (2,144) | 1:B:87:GLU:HG3 | 1:B:91:LYS:HD2 | 7 | 0.18 |
| (2,144) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HB | 7 | 0.18 |
| (2,1422) | 1:B:41:ASP:H | 1:B:44:LYS:HG3 | 7 | 0.18 |
| (2,1422) | 1:B:41:ASP:H | 1:B:45:MET:HB2 | 7 | 0.18 |
| (2,1414) | 1:B:41:ASP:H | 1:B:42:GLU:HG3 | 10 | 0.18 |
| (2,1414) | 1:B:41:ASP:H | 1:B:30:PHE:HB2 | 10 | 0.18 |
| (2,124) | 1:B:39:ARG:H | 1:B:40:PHE:HB3 | 2 | 0.18 |
| (2,124) | 1:B:43:ILE:H | 1:B:40:PHE:HB3 | 2 | 0.18 |
| (1,753) | 1:B:54:ILE:HA | 1:B:53:LEU:HB3 | 2 | 0.18 |
| (1,742) | 1:B:72:LYS:HG2 | 1:B:71:ASP:HB3 | 2 | 0.18 |
| (1,742) | 1:B:72:LYS:HG2 | 1:B:71:ASP:HB3 | 3 | 0.18 |
| (1,742) | 1:B:72:LYS:HG2 | 1:B:71:ASP:HB3 | 5 | 0.18 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,500) | 1:B:36:LEU:HD12 | 1:B:36:LEU:HA | 6 | 0.18 |
| (1,500) | 1:B:36:LEU:HD11 | 1:B:36:LEU:HA | 6 | 0.18 |
| (1,500) | 1:B:36:LEU:HD13 | 1:B:36:LEU:HA | 6 | 0.18 |
| (1,500) | 1:B:36:LEU:HD12 | 1:B:36:LEU:HA | 7 | 0.18 |
| (1,500) | 1:B:36:LEU:HD11 | 1:B:36:LEU:HA | 7 | 0.18 |
| (1,500) | 1:B:36:LEU:HD13 | 1:B:36:LEU:HA | 7 | 0.18 |
| (1,319) | 1:B:31:ILE:HB | 1:B:31:ILE:HG12 | 1 | 0.18 |
| (1,319) | 1:B:31:ILE:HB | 1:B:31:ILE:HG12 | 2 | 0.18 |
| (1,319) | 1:B:31:ILE:HB | 1:B:31:ILE:HG12 | 3 | 0.18 |
| (1,319) | 1:B:31:ILE:HB | 1:B:31:ILE:HG12 | 4 | 0.18 |
| (1,319) | 1:B:31:ILE:HB | 1:B:31:ILE:HG12 | 5 | 0.18 |
| (1,319) | 1:B:31:ILE:HB | 1:B:31:ILE:HG12 | 6 | 0.18 |
| (1,319) | 1:B:31:ILE:HB | 1:B:31:ILE:HG12 | 8 | 0.18 |
| (1,319) | 1:B:31:ILE:HB | 1:B:31:ILE:HG12 | 10 | 0.18 |
| (1,215) | 1:B:6:PRO:HB2 | 1:B:6:PRO:HA | 9 | 0.18 |
| (1,187) | 1:B:97:HIS:H | 1:B:96:LYS:HB3 | 9 | 0.18 |
| (1,1307) | 1:B:31:ILE:H | 1:B:30:PHE:HB3 | 3 | 0.18 |
| (1,1035) | 1:B:42:GLU:H | 1:B:41:ASP:HB2 | 4 | 0.18 |
| (2,988) | 1:B:-1:LYS:HB2 | 1:B:0:MET:HG3 | 4 | 0.17 |
| (2,988) | 1:B:-1:LYS:HB2 | 1:B:0:MET:HG2 | 4 | 0.17 |
| (2,988) | 1:B:59:LYS:HB2 | 1:B:55:PRO:HB3 | 4 | 0.17 |
| (2,988) | 1:B:59:LYS:HB2 | 1:B:62:GLN:HG2 | 4 | 0.17 |
| (2,988) | 1:B:59:LYS:HB3 | 1:B:62:GLN:HG2 | 4 | 0.17 |
| (2,988) | 1:B:60:LYS:HB2 | 1:B:64:GLU:HG2 | 4 | 0.17 |
| (2,988) | 1:B:60:LYS:HB2 | 1:B:64:GLU:HG3 | 4 | 0.17 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:65:LEU:HB2 | 3 | 0.17 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:65:LEU:HB2 | 3 | 0.17 |
| (2,682) | 1:B:80:THR:HG21 | 1:B:65:LEU:HB2 | 3 | 0.17 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:69:MET:HG3 | 3 | 0.17 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:69:MET:HG3 | 3 | 0.17 |
| (2,682) | 1:B:80:THR:HG21 | 1:B:69:MET:HG3 | 3 | 0.17 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:70:PRO:HG2 | 3 | 0.17 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:70:PRO:HG2 | 3 | 0.17 |
| (2,682) | 1:B:80:THR:HG21 | 1:B:70:PRO:HG2 | 3 | 0.17 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:83:ARG:HB2 | 3 | 0.17 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:83:ARG:HB2 | 3 | 0.17 |
| (2,682) | 1:B:80:THR:HG21 | 1:B:83:ARG:HB2 | 3 | 0.17 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:83:ARG:HB3 | 3 | 0.17 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:83:ARG:HB3 | 3 | 0.17 |
| (2,682) | 1:B:80:THR:HG21 | 1:B:83:ARG:HB3 | 3 | 0.17 |
| (2,652) | 1:B:86:GLY:H | 1:B:22:LEU:HD11 | 3 | 0.17 |
| (2,652) | 1:B:86:GLY:H | 1:B:22:LEU:HD12 | 3 | 0.17 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|----------------|-----------------|----------|---------------|
| (2,652) | 1:B:86:GLY:H | 1:B:22:LEU:HD13 | 3 | 0.17 |
| (2,652) | 1:B:36:LEU:H | 1:B:36:LEU:HD12 | 3 | 0.17 |
| (2,652) | 1:B:36:LEU:H | 1:B:36:LEU:HD11 | 3 | 0.17 |
| (2,652) | 1:B:36:LEU:H | 1:B:36:LEU:HD13 | 3 | 0.17 |
| (2,65) | 1:B:72:LYS:HE3 | 1:B:72:LYS:HG3 | 2 | 0.17 |
| (2,65) | 1:B:72:LYS:HE2 | 1:B:72:LYS:HG3 | 2 | 0.17 |
| (2,584) | 1:B:67:ALA:H | 1:B:66:TYR:HA | 10 | 0.17 |
| (2,584) | 1:B:85:LEU:H | 1:B:84:SER:HB2 | 10 | 0.17 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:43:ILE:HG23 | 4 | 0.17 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:43:ILE:HG21 | 4 | 0.17 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:43:ILE:HG22 | 4 | 0.17 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:45:MET:HE2 | 4 | 0.17 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:45:MET:HE1 | 4 | 0.17 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:45:MET:HE3 | 4 | 0.17 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:98:LEU:HD13 | 4 | 0.17 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:98:LEU:HD11 | 4 | 0.17 |
| (2,297) | 1:B:42:GLU:HB2 | 1:B:98:LEU:HD12 | 4 | 0.17 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:15:LEU:HD23 | 4 | 0.17 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:15:LEU:HD21 | 4 | 0.17 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:15:LEU:HD22 | 4 | 0.17 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:85:LEU:HD11 | 4 | 0.17 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:85:LEU:HD12 | 4 | 0.17 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:85:LEU:HD13 | 4 | 0.17 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:89:ILE:HD11 | 4 | 0.17 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:89:ILE:HD13 | 4 | 0.17 |
| (2,297) | 1:B:64:GLU:HB3 | 1:B:89:ILE:HD12 | 4 | 0.17 |
| (2,1517) | 1:B:61:CYS:H | 1:B:60:LYS:HD3 | 8 | 0.17 |
| (2,1517) | 1:B:61:CYS:H | 1:B:60:LYS:HG3 | 8 | 0.17 |
| (2,1385) | 1:B:64:GLU:H | 1:B:60:LYS:HD2 | 1 | 0.17 |
| (2,1385) | 1:B:64:GLU:H | 1:B:60:LYS:HG3 | 1 | 0.17 |
| (2,1214) | 1:B:36:LEU:H | 1:B:38:LYS:HB2 | 7 | 0.17 |
| (2,1214) | 1:B:36:LEU:H | 1:B:38:LYS:HB3 | 7 | 0.17 |
| (2,1055) | 1:B:30:PHE:H | 1:B:31:ILE:HG12 | 1 | 0.17 |
| (2,1055) | 1:B:32:GLN:H | 1:B:31:ILE:HG12 | 1 | 0.17 |
| (2,1055) | 1:B:30:PHE:H | 1:B:31:ILE:HG12 | 4 | 0.17 |
| (2,1055) | 1:B:32:GLN:H | 1:B:31:ILE:HG12 | 4 | 0.17 |
| (2,1055) | 1:B:30:PHE:H | 1:B:31:ILE:HG12 | 9 | 0.17 |
| (2,1055) | 1:B:32:GLN:H | 1:B:31:ILE:HG12 | 9 | 0.17 |
| (1,834) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB1 | 10 | 0.17 |
| (1,834) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB3 | 10 | 0.17 |
| (1,834) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB2 | 10 | 0.17 |
| (1,747) | 1:B:37:LYS:HB2 | 1:B:34:PRO:HA | 8 | 0.17 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,742) | 1:B:72:LYS:HG2 | 1:B:71:ASP:HB3 | 9 | 0.17 |
| (1,715) | 1:B:82:GLY:HA2 | 1:B:14:TRP:HZ2 | 6 | 0.17 |
| (1,568) | 1:B:89:ILE:HG23 | 1:B:57:SER:HB2 | 9 | 0.17 |
| (1,568) | 1:B:89:ILE:HG21 | 1:B:57:SER:HB2 | 9 | 0.17 |
| (1,568) | 1:B:89:ILE:HG22 | 1:B:57:SER:HB2 | 9 | 0.17 |
| (1,500) | 1:B:36:LEU:HD12 | 1:B:36:LEU:HA | 5 | 0.17 |
| (1,500) | 1:B:36:LEU:HD11 | 1:B:36:LEU:HA | 5 | 0.17 |
| (1,500) | 1:B:36:LEU:HD13 | 1:B:36:LEU:HA | 5 | 0.17 |
| (1,400) | 1:B:28:LYS:HG3 | 1:B:28:LYS:HA | 10 | 0.17 |
| (1,398) | 1:B:52:THR:HA | 1:B:55:PRO:HD3 | 7 | 0.17 |
| (1,37) | 1:B:86:GLY:H | 1:B:85:LEU:HB3 | 3 | 0.17 |
| (1,319) | 1:B:31:ILE:HB | 1:B:31:ILE:HG12 | 7 | 0.17 |
| (1,319) | 1:B:31:ILE:HB | 1:B:31:ILE:HG12 | 9 | 0.17 |
| (1,1318) | 1:B:43:ILE:H | 1:B:39:ARG:HG2 | 4 | 0.17 |
| (1,1269) | 1:B:10:THR:H | 1:B:72:LYS:HG3 | 9 | 0.17 |
| (1,1154) | 1:B:93:PHE:H | 1:B:92:ASP:HB2 | 2 | 0.17 |
| (1,1154) | 1:B:93:PHE:H | 1:B:92:ASP:HB2 | 3 | 0.17 |
| (1,1154) | 1:B:93:PHE:H | 1:B:92:ASP:HB2 | 5 | 0.17 |
| (1,1154) | 1:B:93:PHE:H | 1:B:92:ASP:HB2 | 7 | 0.17 |
| (1,1021) | 1:B:40:PHE:H | 1:B:39:ARG:HG2 | 4 | 0.17 |
| (2,964) | 1:B:7:ASN:HB3 | 1:B:8:GLU:HG2 | 3 | 0.16 |
| (2,964) | 1:B:7:ASN:HB3 | 1:B:8:GLU:HG3 | 3 | 0.16 |
| (2,964) | 1:B:16:ASN:HB2 | 1:B:15:LEU:HB3 | 3 | 0.16 |
| (2,964) | 1:B:15:LEU:HG | 1:B:16:ASN:HB2 | 3 | 0.16 |
| (2,964) | 1:B:7:ASN:HB3 | 1:B:8:GLU:HG2 | 7 | 0.16 |
| (2,964) | 1:B:7:ASN:HB3 | 1:B:8:GLU:HG3 | 7 | 0.16 |
| (2,964) | 1:B:16:ASN:HB2 | 1:B:15:LEU:HB3 | 7 | 0.16 |
| (2,964) | 1:B:15:LEU:HG | 1:B:16:ASN:HB2 | 7 | 0.16 |
| (2,947) | 1:B:41:ASP:HB3 | 1:B:37:LYS:HD2 | 8 | 0.16 |
| (2,947) | 1:B:37:LYS:HG3 | 1:B:41:ASP:HB3 | 8 | 0.16 |
| (2,947) | 1:B:37:LYS:HG2 | 1:B:41:ASP:HB3 | 8 | 0.16 |
| (2,946) | 1:B:41:ASP:HB3 | 1:B:42:GLU:HG2 | 1 | 0.16 |
| (2,946) | 1:B:63:ASP:HB3 | 1:B:64:GLU:HB3 | 1 | 0.16 |
| (2,946) | 1:B:66:TYR:HB3 | 1:B:62:GLN:HG3 | 1 | 0.16 |
| (2,943) | 1:B:-2:ASP:HB3 | 1:B:-1:LYS:HD3 | 2 | 0.16 |
| (2,943) | 1:B:13:ALA:HB1 | 1:B:12:ASP:HB2 | 2 | 0.16 |
| (2,943) | 1:B:13:ALA:HB2 | 1:B:12:ASP:HB2 | 2 | 0.16 |
| (2,943) | 1:B:13:ALA:HB3 | 1:B:12:ASP:HB2 | 2 | 0.16 |
| (2,943) | 1:B:27:CYS:HB3 | 1:B:26:ILE:HG12 | 2 | 0.16 |
| (2,943) | 1:B:27:CYS:HB3 | 1:B:28:LYS:HD2 | 2 | 0.16 |
| (2,943) | 1:B:27:CYS:HB3 | 1:B:28:LYS:HD3 | 2 | 0.16 |
| (2,943) | 1:B:27:CYS:HB3 | 1:B:45:MET:HG2 | 2 | 0.16 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|-----------------|-----------------|----------|---------------|
| (2,943) | 1:B:35:ASP:HB3 | 1:B:38:LYS:HG2 | 2 | 0.16 |
| (2,943) | 1:B:71:ASP:HB2 | 1:B:72:LYS:HB2 | 2 | 0.16 |
| (2,943) | 1:B:71:ASP:HB2 | 1:B:72:LYS:HD2 | 2 | 0.16 |
| (2,943) | 1:B:71:ASP:HB2 | 1:B:72:LYS:HD3 | 2 | 0.16 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:65:LEU:HB2 | 7 | 0.16 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:65:LEU:HB2 | 7 | 0.16 |
| (2,682) | 1:B:80:THR:HG21 | 1:B:65:LEU:HB2 | 7 | 0.16 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:69:MET:HG3 | 7 | 0.16 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:69:MET:HG3 | 7 | 0.16 |
| (2,682) | 1:B:80:THR:HG21 | 1:B:69:MET:HG3 | 7 | 0.16 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:70:PRO:HG2 | 7 | 0.16 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:70:PRO:HG2 | 7 | 0.16 |
| (2,682) | 1:B:80:THR:HG21 | 1:B:70:PRO:HG2 | 7 | 0.16 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:83:ARG:HB2 | 7 | 0.16 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:83:ARG:HB2 | 7 | 0.16 |
| (2,682) | 1:B:80:THR:HG21 | 1:B:83:ARG:HB2 | 7 | 0.16 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:83:ARG:HB3 | 7 | 0.16 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:83:ARG:HB3 | 7 | 0.16 |
| (2,682) | 1:B:80:THR:HG21 | 1:B:83:ARG:HB3 | 7 | 0.16 |
| (2,667) | 1:B:22:LEU:HD11 | 1:B:14:TRP:H2 | 9 | 0.16 |
| (2,667) | 1:B:22:LEU:HD12 | 1:B:14:TRP:H2 | 9 | 0.16 |
| (2,667) | 1:B:22:LEU:HD13 | 1:B:14:TRP:H2 | 9 | 0.16 |
| (2,667) | 1:B:25:LEU:H | 1:B:22:LEU:HD11 | 9 | 0.16 |
| (2,667) | 1:B:25:LEU:H | 1:B:22:LEU:HD12 | 9 | 0.16 |
| (2,667) | 1:B:25:LEU:H | 1:B:22:LEU:HD13 | 9 | 0.16 |
| (2,667) | 1:B:36:LEU:HD12 | 1:B:39:ARG:H | 9 | 0.16 |
| (2,667) | 1:B:36:LEU:HD11 | 1:B:39:ARG:H | 9 | 0.16 |
| (2,667) | 1:B:36:LEU:HD13 | 1:B:39:ARG:H | 9 | 0.16 |
| (2,667) | 1:B:98:LEU:HD13 | 1:B:39:ARG:H | 9 | 0.16 |
| (2,667) | 1:B:98:LEU:HD11 | 1:B:39:ARG:H | 9 | 0.16 |
| (2,667) | 1:B:98:LEU:HD12 | 1:B:39:ARG:H | 9 | 0.16 |
| (2,667) | 1:B:99:ILE:H | 1:B:98:LEU:HD13 | 9 | 0.16 |
| (2,667) | 1:B:99:ILE:H | 1:B:98:LEU:HD11 | 9 | 0.16 |
| (2,667) | 1:B:99:ILE:H | 1:B:98:LEU:HD12 | 9 | 0.16 |
| (2,638) | 1:B:98:LEU:HB2 | 1:B:98:LEU:HD21 | 5 | 0.16 |
| (2,638) | 1:B:98:LEU:HB2 | 1:B:98:LEU:HD22 | 5 | 0.16 |
| (2,638) | 1:B:98:LEU:HB2 | 1:B:98:LEU:HD23 | 5 | 0.16 |
| (2,638) | 1:B:43:ILE:HG12 | 1:B:98:LEU:HD21 | 5 | 0.16 |
| (2,638) | 1:B:43:ILE:HG12 | 1:B:98:LEU:HD22 | 5 | 0.16 |
| (2,638) | 1:B:43:ILE:HG12 | 1:B:98:LEU:HD23 | 5 | 0.16 |
| (2,58) | 1:B:85:LEU:HB2 | 1:B:88:CYS:H | 1 | 0.16 |
| (2,58) | 1:B:83:ARG:H | 1:B:85:LEU:HB3 | 1 | 0.16 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|-----------------|-----------------|----------|---------------|
| (2,58) | 1:B:85:LEU:HB3 | 1:B:88:CYS:H | 1 | 0.16 |
| (2,565) | 1:B:15:LEU:HD23 | 1:B:62:GLN:HA | 7 | 0.16 |
| (2,565) | 1:B:15:LEU:HD21 | 1:B:62:GLN:HA | 7 | 0.16 |
| (2,565) | 1:B:15:LEU:HD22 | 1:B:62:GLN:HA | 7 | 0.16 |
| (2,565) | 1:B:19:THR:HA | 1:B:22:LEU:HD23 | 7 | 0.16 |
| (2,565) | 1:B:19:THR:HA | 1:B:22:LEU:HD21 | 7 | 0.16 |
| (2,565) | 1:B:19:THR:HA | 1:B:22:LEU:HD22 | 7 | 0.16 |
| (2,565) | 1:B:36:LEU:HD21 | 1:B:29:GLY:HA3 | 7 | 0.16 |
| (2,565) | 1:B:36:LEU:HD23 | 1:B:29:GLY:HA3 | 7 | 0.16 |
| (2,565) | 1:B:36:LEU:HD22 | 1:B:29:GLY:HA3 | 7 | 0.16 |
| (2,565) | 1:B:85:LEU:HD11 | 1:B:62:GLN:HA | 7 | 0.16 |
| (2,565) | 1:B:85:LEU:HD12 | 1:B:62:GLN:HA | 7 | 0.16 |
| (2,565) | 1:B:85:LEU:HD13 | 1:B:62:GLN:HA | 7 | 0.16 |
| (2,561) | 1:B:29:GLY:H | 1:B:36:LEU:HD21 | 6 | 0.16 |
| (2,561) | 1:B:29:GLY:H | 1:B:36:LEU:HD23 | 6 | 0.16 |
| (2,561) | 1:B:29:GLY:H | 1:B:36:LEU:HD22 | 6 | 0.16 |
| (2,561) | 1:B:36:LEU:HD21 | 1:B:32:GLN:H | 6 | 0.16 |
| (2,561) | 1:B:36:LEU:HD23 | 1:B:32:GLN:H | 6 | 0.16 |
| (2,561) | 1:B:36:LEU:HD22 | 1:B:32:GLN:H | 6 | 0.16 |
| (2,561) | 1:B:43:ILE:H | 1:B:45:MET:HE2 | 6 | 0.16 |
| (2,561) | 1:B:43:ILE:H | 1:B:45:MET:HE1 | 6 | 0.16 |
| (2,561) | 1:B:43:ILE:H | 1:B:45:MET:HE3 | 6 | 0.16 |
| (2,561) | 1:B:99:ILE:H | 1:B:45:MET:HE2 | 6 | 0.16 |
| (2,561) | 1:B:99:ILE:H | 1:B:45:MET:HE1 | 6 | 0.16 |
| (2,561) | 1:B:99:ILE:H | 1:B:45:MET:HE3 | 6 | 0.16 |
| (2,561) | 1:B:85:LEU:HD11 | 1:B:14:TRP:HZ2 | 6 | 0.16 |
| (2,561) | 1:B:85:LEU:HD12 | 1:B:14:TRP:HZ2 | 6 | 0.16 |
| (2,561) | 1:B:85:LEU:HD13 | 1:B:14:TRP:HZ2 | 6 | 0.16 |
| (2,561) | 1:B:18:MET:H | 1:B:85:LEU:HD11 | 6 | 0.16 |
| (2,561) | 1:B:18:MET:H | 1:B:85:LEU:HD12 | 6 | 0.16 |
| (2,561) | 1:B:18:MET:H | 1:B:85:LEU:HD13 | 6 | 0.16 |
| (2,561) | 1:B:15:LEU:HD23 | 1:B:14:TRP:HZ2 | 6 | 0.16 |
| (2,561) | 1:B:15:LEU:HD21 | 1:B:14:TRP:HZ2 | 6 | 0.16 |
| (2,561) | 1:B:15:LEU:HD22 | 1:B:14:TRP:HZ2 | 6 | 0.16 |
| (2,561) | 1:B:18:MET:H | 1:B:15:LEU:HD23 | 6 | 0.16 |
| (2,561) | 1:B:18:MET:H | 1:B:15:LEU:HD21 | 6 | 0.16 |
| (2,561) | 1:B:18:MET:H | 1:B:15:LEU:HD22 | 6 | 0.16 |
| (2,561) | 1:B:22:LEU:HD23 | 1:B:14:TRP:HZ2 | 6 | 0.16 |
| (2,561) | 1:B:22:LEU:HD21 | 1:B:14:TRP:HZ2 | 6 | 0.16 |
| (2,561) | 1:B:22:LEU:HD22 | 1:B:14:TRP:HZ2 | 6 | 0.16 |
| (2,486) | 1:B:57:SER:HB2 | 1:B:54:ILE:HG21 | 2 | 0.16 |
| (2,486) | 1:B:57:SER:HB2 | 1:B:54:ILE:HG22 | 2 | 0.16 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|----------------|-----------------|----------|---------------|
| (2,486) | 1:B:57:SER:HB2 | 1:B:54:ILE:HG23 | 2 | 0.16 |
| (2,486) | 1:B:57:SER:HB2 | 1:B:89:ILE:HD11 | 2 | 0.16 |
| (2,486) | 1:B:57:SER:HB2 | 1:B:89:ILE:HD13 | 2 | 0.16 |
| (2,486) | 1:B:57:SER:HB2 | 1:B:89:ILE:HD12 | 2 | 0.16 |
| (2,44) | 1:B:61:CYS:HB3 | 1:B:88:CYS:HB2 | 8 | 0.16 |
| (2,44) | 1:B:92:ASP:HB2 | 1:B:93:PHE:HB3 | 8 | 0.16 |
| (2,44) | 1:B:92:ASP:HB2 | 1:B:93:PHE:HB2 | 8 | 0.16 |
| (2,434) | 1:B:51:VAL:HA | 1:B:24:ASP:HA | 6 | 0.16 |
| (2,434) | 1:B:51:VAL:HA | 1:B:52:THR:HB | 6 | 0.16 |
| (2,434) | 1:B:51:VAL:HA | 1:B:54:ILE:HA | 6 | 0.16 |
| (2,4) | 1:B:53:LEU:HB2 | 1:B:49:GLN:HG3 | 6 | 0.16 |
| (2,4) | 1:B:53:LEU:HB2 | 1:B:56:GLU:HG3 | 6 | 0.16 |
| (2,4) | 1:B:65:LEU:HB2 | 1:B:64:GLU:HB3 | 6 | 0.16 |
| (2,392) | 1:B:48:GLU:HB3 | 1:B:47:TYR:H | 5 | 0.16 |
| (2,392) | 1:B:49:GLN:HB2 | 1:B:47:TYR:H | 5 | 0.16 |
| (2,392) | 1:B:49:GLN:HB3 | 1:B:47:TYR:H | 5 | 0.16 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:85:LEU:HD23 | 10 | 0.16 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:85:LEU:HD21 | 10 | 0.16 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:85:LEU:HD22 | 10 | 0.16 |
| (2,282) | 1:B:60:LYS:HD3 | 1:B:89:ILE:HG23 | 10 | 0.16 |
| (2,282) | 1:B:60:LYS:HD3 | 1:B:89:ILE:HG21 | 10 | 0.16 |
| (2,282) | 1:B:60:LYS:HD3 | 1:B:89:ILE:HG22 | 10 | 0.16 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:21:LEU:HD11 | 10 | 0.16 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:21:LEU:HD13 | 10 | 0.16 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:21:LEU:HD12 | 10 | 0.16 |
| (2,272) | 1:B:19:THR:HA | 1:B:20:PRO:HG2 | 8 | 0.16 |
| (2,272) | 1:B:19:THR:HA | 1:B:20:PRO:HG3 | 8 | 0.16 |
| (2,272) | 1:B:21:LEU:HB2 | 1:B:19:THR:HA | 8 | 0.16 |
| (2,272) | 1:B:19:THR:HA | 1:B:55:PRO:HG2 | 8 | 0.16 |
| (2,272) | 1:B:85:LEU:HB3 | 1:B:19:THR:HA | 8 | 0.16 |
| (2,272) | 1:B:85:LEU:HB2 | 1:B:19:THR:HA | 8 | 0.16 |
| (2,272) | 1:B:80:THR:HB | 1:B:70:PRO:HG2 | 8 | 0.16 |
| (2,266) | 1:B:11:LYS:HB3 | 1:B:66:TYR:HD1 | 8 | 0.16 |
| (2,266) | 1:B:11:LYS:HB3 | 1:B:66:TYR:HD2 | 8 | 0.16 |
| (2,266) | 1:B:45:MET:HG3 | 1:B:40:PHE:HE1 | 8 | 0.16 |
| (2,266) | 1:B:45:MET:HG3 | 1:B:40:PHE:HE2 | 8 | 0.16 |
| (2,266) | 1:B:45:MET:HG3 | 1:B:93:PHE:HE2 | 8 | 0.16 |
| (2,266) | 1:B:45:MET:HG3 | 1:B:93:PHE:HE1 | 8 | 0.16 |
| (2,221) | 1:B:69:MET:HB2 | 1:B:11:LYS:HA | 3 | 0.16 |
| (2,221) | 1:B:69:MET:HB2 | 1:B:67:ALA:HA | 3 | 0.16 |
| (2,221) | 1:B:69:MET:HB2 | 1:B:68:SER:HB2 | 3 | 0.16 |
| (2,188) | 1:B:0:MET:HB3 | 1:B:-1:LYS:H | 10 | 0.16 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,188) | 1:B:0:MET:HB2 | 1:B:-1:LYS:H | 10 | 0.16 |
| (2,1523) | 1:B:56:GLU:H | 1:B:23:PRO:HG2 | 7 | 0.16 |
| (2,1523) | 1:B:56:GLU:H | 1:B:59:LYS:HD3 | 7 | 0.16 |
| (2,1523) | 1:B:56:GLU:H | 1:B:60:LYS:HD3 | 7 | 0.16 |
| (2,1414) | 1:B:41:ASP:H | 1:B:42:GLU:HG3 | 3 | 0.16 |
| (2,1414) | 1:B:41:ASP:H | 1:B:30:PHE:HB2 | 3 | 0.16 |
| (2,1214) | 1:B:36:LEU:H | 1:B:38:LYS:HB2 | 6 | 0.16 |
| (2,1214) | 1:B:36:LEU:H | 1:B:38:LYS:HB3 | 6 | 0.16 |
| (2,119) | 1:B:47:TYR:HB2 | 1:B:46:THR:HA | 8 | 0.16 |
| (2,119) | 1:B:47:TYR:HB2 | 1:B:46:THR:HB | 8 | 0.16 |
| (2,1138) | 1:B:38:LYS:HG2 | 1:B:36:LEU:HA | 9 | 0.16 |
| (2,1138) | 1:B:36:LEU:HA | 1:B:98:LEU:HB2 | 9 | 0.16 |
| (2,1128) | 1:B:99:ILE:HA | 1:B:99:ILE:HG13 | 8 | 0.16 |
| (2,1128) | 1:B:99:ILE:HA | 1:B:101:LYS:HG3 | 8 | 0.16 |
| (2,1051) | 1:B:51:VAL:HG13 | 1:B:48:GLU:HB2 | 9 | 0.16 |
| (2,1051) | 1:B:51:VAL:HG11 | 1:B:48:GLU:HB2 | 9 | 0.16 |
| (2,1051) | 1:B:51:VAL:HG12 | 1:B:48:GLU:HB2 | 9 | 0.16 |
| (2,1051) | 1:B:51:VAL:HG21 | 1:B:48:GLU:HB2 | 9 | 0.16 |
| (2,1051) | 1:B:51:VAL:HG23 | 1:B:48:GLU:HB2 | 9 | 0.16 |
| (2,1051) | 1:B:51:VAL:HG22 | 1:B:48:GLU:HB2 | 9 | 0.16 |
| (2,1051) | 1:B:51:VAL:HG21 | 1:B:55:PRO:HG2 | 9 | 0.16 |
| (2,1051) | 1:B:51:VAL:HG23 | 1:B:55:PRO:HG2 | 9 | 0.16 |
| (2,1051) | 1:B:51:VAL:HG22 | 1:B:55:PRO:HG2 | 9 | 0.16 |
| (2,101) | 1:B:41:ASP:HB2 | 1:B:42:GLU:HA | 7 | 0.16 |
| (2,101) | 1:B:63:ASP:HB2 | 1:B:60:LYS:HA | 7 | 0.16 |
| (2,101) | 1:B:74:ASN:HB2 | 1:B:75:SER:HA | 7 | 0.16 |
| (2,101) | 1:B:41:ASP:HB2 | 1:B:42:GLU:HA | 10 | 0.16 |
| (2,101) | 1:B:63:ASP:HB2 | 1:B:60:LYS:HA | 10 | 0.16 |
| (2,101) | 1:B:74:ASN:HB2 | 1:B:75:SER:HA | 10 | 0.16 |
| (1,93) | 1:B:30:PHE:HB2 | 1:B:36:LEU:HB3 | 2 | 0.16 |
| (1,814) | 1:B:33:ASP:HB2 | 1:B:30:PHE:HA | 10 | 0.16 |
| (1,742) | 1:B:72:LYS:HG2 | 1:B:71:ASP:HB3 | 6 | 0.16 |
| (1,598) | 1:B:26:ILE:HG21 | 1:B:90:GLY:HA3 | 3 | 0.16 |
| (1,598) | 1:B:26:ILE:HG22 | 1:B:90:GLY:HA3 | 3 | 0.16 |
| (1,598) | 1:B:26:ILE:HG23 | 1:B:90:GLY:HA3 | 3 | 0.16 |
| (1,565) | 1:B:71:ASP:HA | 1:B:11:LYS:HD3 | 5 | 0.16 |
| (1,485) | 1:B:98:LEU:HD21 | 1:B:40:PHE:HB3 | 10 | 0.16 |
| (1,485) | 1:B:98:LEU:HD22 | 1:B:40:PHE:HB3 | 10 | 0.16 |
| (1,485) | 1:B:98:LEU:HD23 | 1:B:40:PHE:HB3 | 10 | 0.16 |
| (1,399) | 1:B:55:PRO:HG3 | 1:B:52:THR:HA | 7 | 0.16 |
| (1,398) | 1:B:52:THR:HA | 1:B:55:PRO:HD3 | 2 | 0.16 |
| (1,391) | 1:B:99:ILE:HG12 | 1:B:94:ALA:HB1 | 5 | 0.16 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,391) | 1:B:99:ILE:HG12 | 1:B:94:ALA:HB3 | 5 | 0.16 |
| (1,391) | 1:B:99:ILE:HG12 | 1:B:94:ALA:HB2 | 5 | 0.16 |
| (1,380) | 1:B:81:TRP:HE1 | 1:B:70:PRO:HG2 | 4 | 0.16 |
| (1,380) | 1:B:81:TRP:HE1 | 1:B:70:PRO:HG2 | 8 | 0.16 |
| (1,37) | 1:B:86:GLY:H | 1:B:85:LEU:HB3 | 7 | 0.16 |
| (1,1103) | 1:B:44:LYS:H | 1:B:45:MET:HB3 | 1 | 0.16 |
| (2,919) | 1:B:99:ILE:HG12 | 1:B:95:GLU:HA | 5 | 0.15 |
| (2,919) | 1:B:96:LYS:HG3 | 1:B:96:LYS:HA | 5 | 0.15 |
| (2,900) | 1:B:11:LYS:HB3 | 1:B:69:MET:HE1 | 2 | 0.15 |
| (2,900) | 1:B:11:LYS:HB3 | 1:B:69:MET:HE2 | 2 | 0.15 |
| (2,900) | 1:B:11:LYS:HB3 | 1:B:69:MET:HE3 | 2 | 0.15 |
| (2,900) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD11 | 2 | 0.15 |
| (2,900) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD13 | 2 | 0.15 |
| (2,900) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD12 | 2 | 0.15 |
| (2,759) | 1:B:12:ASP:H | 1:B:13:ALA:HB1 | 2 | 0.15 |
| (2,759) | 1:B:12:ASP:H | 1:B:13:ALA:HB2 | 2 | 0.15 |
| (2,759) | 1:B:12:ASP:H | 1:B:13:ALA:HB3 | 2 | 0.15 |
| (2,759) | 1:B:13:ALA:HB1 | 1:B:16:ASN:H | 2 | 0.15 |
| (2,759) | 1:B:13:ALA:HB2 | 1:B:16:ASN:H | 2 | 0.15 |
| (2,759) | 1:B:13:ALA:HB3 | 1:B:16:ASN:H | 2 | 0.15 |
| (2,759) | 1:B:12:ASP:H | 1:B:13:ALA:HB1 | 5 | 0.15 |
| (2,759) | 1:B:12:ASP:H | 1:B:13:ALA:HB2 | 5 | 0.15 |
| (2,759) | 1:B:12:ASP:H | 1:B:13:ALA:HB3 | 5 | 0.15 |
| (2,759) | 1:B:13:ALA:HB1 | 1:B:16:ASN:H | 5 | 0.15 |
| (2,759) | 1:B:13:ALA:HB2 | 1:B:16:ASN:H | 5 | 0.15 |
| (2,759) | 1:B:13:ALA:HB3 | 1:B:16:ASN:H | 5 | 0.15 |
| (2,65) | 1:B:72:LYS:HE3 | 1:B:72:LYS:HG3 | 3 | 0.15 |
| (2,65) | 1:B:72:LYS:HE2 | 1:B:72:LYS:HG3 | 3 | 0.15 |
| (2,58) | 1:B:85:LEU:HB2 | 1:B:88:CYS:H | 4 | 0.15 |
| (2,58) | 1:B:83:ARG:H | 1:B:85:LEU:HB3 | 4 | 0.15 |
| (2,58) | 1:B:85:LEU:HB3 | 1:B:88:CYS:H | 4 | 0.15 |
| (2,495) | 1:B:72:LYS:H | 1:B:70:PRO:HG3 | 6 | 0.15 |
| (2,495) | 1:B:70:PRO:HG3 | 1:B:74:ASN:H | 6 | 0.15 |
| (2,495) | 1:B:81:TRP:HE3 | 1:B:85:LEU:HG | 6 | 0.15 |
| (2,495) | 1:B:39:ARG:HG3 | 1:B:39:ARG:H | 6 | 0.15 |
| (2,489) | 1:B:70:PRO:HG2 | 1:B:69:MET:HA | 4 | 0.15 |
| (2,489) | 1:B:100:PRO:HG2 | 1:B:101:LYS:HE2 | 4 | 0.15 |
| (2,489) | 1:B:100:PRO:HG2 | 1:B:101:LYS:HE3 | 4 | 0.15 |
| (2,489) | 1:B:100:PRO:HG3 | 1:B:101:LYS:HE3 | 4 | 0.15 |
| (2,44) | 1:B:61:CYS:HB3 | 1:B:88:CYS:HB2 | 3 | 0.15 |
| (2,44) | 1:B:92:ASP:HB2 | 1:B:93:PHE:HB3 | 3 | 0.15 |
| (2,44) | 1:B:92:ASP:HB2 | 1:B:93:PHE:HB2 | 3 | 0.15 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,44) | 1:B:61:CYS:HB3 | 1:B:88:CYS:HB2 | 5 | 0.15 |
| (2,44) | 1:B:92:ASP:HB2 | 1:B:93:PHE:HB3 | 5 | 0.15 |
| (2,44) | 1:B:92:ASP:HB2 | 1:B:93:PHE:HB2 | 5 | 0.15 |
| (2,44) | 1:B:61:CYS:HB3 | 1:B:88:CYS:HB2 | 7 | 0.15 |
| (2,44) | 1:B:92:ASP:HB2 | 1:B:93:PHE:HB3 | 7 | 0.15 |
| (2,44) | 1:B:92:ASP:HB2 | 1:B:93:PHE:HB2 | 7 | 0.15 |
| (2,416) | 1:B:81:TRP:HB2 | 1:B:80:THR:HB | 5 | 0.15 |
| (2,416) | 1:B:81:TRP:HB2 | 1:B:84:SER:HB2 | 5 | 0.15 |
| (2,416) | 1:B:81:TRP:HB2 | 1:B:84:SER:HB3 | 5 | 0.15 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:85:LEU:HD23 | 7 | 0.15 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:85:LEU:HD21 | 7 | 0.15 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:85:LEU:HD22 | 7 | 0.15 |
| (2,282) | 1:B:60:LYS:HD3 | 1:B:89:ILE:HG23 | 7 | 0.15 |
| (2,282) | 1:B:60:LYS:HD3 | 1:B:89:ILE:HG21 | 7 | 0.15 |
| (2,282) | 1:B:60:LYS:HD3 | 1:B:89:ILE:HG22 | 7 | 0.15 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:21:LEU:HD11 | 7 | 0.15 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:21:LEU:HD13 | 7 | 0.15 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:21:LEU:HD12 | 7 | 0.15 |
| (2,281) | 1:B:18:MET:HG2 | 1:B:18:MET:HA | 9 | 0.15 |
| (2,281) | 1:B:18:MET:HG2 | 1:B:82:GLY:HA3 | 9 | 0.15 |
| (2,272) | 1:B:19:THR:HA | 1:B:20:PRO:HG2 | 5 | 0.15 |
| (2,272) | 1:B:19:THR:HA | 1:B:20:PRO:HG3 | 5 | 0.15 |
| (2,272) | 1:B:21:LEU:HB2 | 1:B:19:THR:HA | 5 | 0.15 |
| (2,272) | 1:B:19:THR:HA | 1:B:55:PRO:HG2 | 5 | 0.15 |
| (2,272) | 1:B:85:LEU:HB3 | 1:B:19:THR:HA | 5 | 0.15 |
| (2,272) | 1:B:85:LEU:HB2 | 1:B:19:THR:HA | 5 | 0.15 |
| (2,272) | 1:B:80:THR:HB | 1:B:70:PRO:HG2 | 5 | 0.15 |
| (2,211) | 1:B:34:PRO:HB2 | 1:B:37:LYS:H | 4 | 0.15 |
| (2,211) | 1:B:38:LYS:HB3 | 1:B:37:LYS:H | 4 | 0.15 |
| (2,211) | 1:B:67:ALA:H | 1:B:69:MET:HG3 | 4 | 0.15 |
| (2,211) | 1:B:93:PHE:H | 1:B:91:LYS:HB2 | 4 | 0.15 |
| (2,211) | 1:B:93:PHE:H | 1:B:91:LYS:HB3 | 4 | 0.15 |
| (2,154) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HG13 | 3 | 0.15 |
| (2,154) | 1:B:56:GLU:HG3 | 1:B:53:LEU:HB3 | 3 | 0.15 |
| (2,154) | 1:B:56:GLU:HG3 | 1:B:96:LYS:HD2 | 3 | 0.15 |
| (2,1414) | 1:B:41:ASP:H | 1:B:42:GLU:HG3 | 4 | 0.15 |
| (2,1414) | 1:B:41:ASP:H | 1:B:30:PHE:HB2 | 4 | 0.15 |
| (2,124) | 1:B:39:ARG:H | 1:B:40:PHE:HB3 | 10 | 0.15 |
| (2,124) | 1:B:43:ILE:H | 1:B:40:PHE:HB3 | 10 | 0.15 |
| (2,1128) | 1:B:99:ILE:HA | 1:B:99:ILE:HG13 | 9 | 0.15 |
| (2,1128) | 1:B:99:ILE:HA | 1:B:101:LYS:HG3 | 9 | 0.15 |
| (2,1066) | 1:B:43:ILE:HG13 | 1:B:44:LYS:H | 3 | 0.15 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,1066) | 1:B:101:LYS:H | 1:B:99:ILE:HG13 | 3 | 0.15 |
| (2,1057) | 1:B:20:PRO:HG2 | 1:B:18:MET:H | 8 | 0.15 |
| (2,1057) | 1:B:20:PRO:HG3 | 1:B:18:MET:H | 8 | 0.15 |
| (1,92) | 1:B:30:PHE:HB2 | 1:B:40:PHE:HB3 | 4 | 0.15 |
| (1,742) | 1:B:72:LYS:HG2 | 1:B:71:ASP:HB3 | 7 | 0.15 |
| (1,488) | 1:B:81:TRP:HB2 | 1:B:81:TRP:HA | 9 | 0.15 |
| (1,406) | 1:B:53:LEU:HG | 1:B:53:LEU:HA | 1 | 0.15 |
| (1,400) | 1:B:28:LYS:HG3 | 1:B:28:LYS:HA | 8 | 0.15 |
| (1,398) | 1:B:52:THR:HA | 1:B:55:PRO:HD3 | 1 | 0.15 |
| (1,394) | 1:B:99:ILE:HG12 | 1:B:95:GLU:HA | 1 | 0.15 |
| (1,37) | 1:B:86:GLY:H | 1:B:85:LEU:HB3 | 2 | 0.15 |
| (1,191) | 1:B:96:LYS:HB2 | 1:B:96:LYS:HA | 10 | 0.15 |
| (1,1154) | 1:B:93:PHE:H | 1:B:92:ASP:HB2 | 6 | 0.15 |
| (1,1154) | 1:B:93:PHE:H | 1:B:92:ASP:HB2 | 8 | 0.15 |
| (2,990) | 1:B:38:LYS:HB2 | 1:B:39:ARG:HD3 | 1 | 0.14 |
| (2,990) | 1:B:38:LYS:HB3 | 1:B:39:ARG:HD3 | 1 | 0.14 |
| (2,990) | 1:B:89:ILE:HA | 1:B:91:LYS:HB2 | 1 | 0.14 |
| (2,990) | 1:B:91:LYS:HB3 | 1:B:88:CYS:HB3 | 1 | 0.14 |
| (2,990) | 1:B:89:ILE:HA | 1:B:91:LYS:HB3 | 1 | 0.14 |
| (2,964) | 1:B:7:ASN:HB3 | 1:B:8:GLU:HG2 | 5 | 0.14 |
| (2,964) | 1:B:7:ASN:HB3 | 1:B:8:GLU:HG3 | 5 | 0.14 |
| (2,964) | 1:B:16:ASN:HB2 | 1:B:15:LEU:HB3 | 5 | 0.14 |
| (2,964) | 1:B:15:LEU:HG | 1:B:16:ASN:HB2 | 5 | 0.14 |
| (2,961) | 1:B:50:CYS:HB3 | 1:B:26:ILE:HB | 5 | 0.14 |
| (2,961) | 1:B:50:CYS:HB3 | 1:B:45:MET:HG3 | 5 | 0.14 |
| (2,961) | 1:B:50:CYS:HB3 | 1:B:53:LEU:HB2 | 5 | 0.14 |
| (2,961) | 1:B:50:CYS:HB3 | 1:B:54:ILE:HG12 | 5 | 0.14 |
| (2,961) | 1:B:66:TYR:HB3 | 1:B:11:LYS:HB3 | 5 | 0.14 |
| (2,961) | 1:B:6:PRO:HB3 | 1:B:7:ASN:HB2 | 5 | 0.14 |
| (2,874) | 1:B:26:ILE:HD13 | 1:B:23:PRO:HA | 7 | 0.14 |
| (2,874) | 1:B:26:ILE:HD11 | 1:B:23:PRO:HA | 7 | 0.14 |
| (2,874) | 1:B:26:ILE:HD12 | 1:B:23:PRO:HA | 7 | 0.14 |
| (2,874) | 1:B:26:ILE:HD13 | 1:B:90:GLY:HA3 | 7 | 0.14 |
| (2,874) | 1:B:26:ILE:HD11 | 1:B:90:GLY:HA3 | 7 | 0.14 |
| (2,874) | 1:B:26:ILE:HD12 | 1:B:90:GLY:HA3 | 7 | 0.14 |
| (2,827) | 1:B:73:ILE:HG22 | 1:B:74:ASN:HB2 | 9 | 0.14 |
| (2,827) | 1:B:73:ILE:HG21 | 1:B:74:ASN:HB2 | 9 | 0.14 |
| (2,827) | 1:B:73:ILE:HG23 | 1:B:74:ASN:HB2 | 9 | 0.14 |
| (2,827) | 1:B:73:ILE:HG22 | 1:B:81:TRP:HB3 | 9 | 0.14 |
| (2,827) | 1:B:73:ILE:HG21 | 1:B:81:TRP:HB3 | 9 | 0.14 |
| (2,827) | 1:B:73:ILE:HG23 | 1:B:81:TRP:HB3 | 9 | 0.14 |
| (2,759) | 1:B:12:ASP:H | 1:B:13:ALA:HB1 | 3 | 0.14 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|----------------|----------------|----------|---------------|
| (2,759) | 1:B:12:ASP:H | 1:B:13:ALA:HB2 | 3 | 0.14 |
| (2,759) | 1:B:12:ASP:H | 1:B:13:ALA:HB3 | 3 | 0.14 |
| (2,759) | 1:B:13:ALA:HB1 | 1:B:16:ASN:H | 3 | 0.14 |
| (2,759) | 1:B:13:ALA:HB2 | 1:B:16:ASN:H | 3 | 0.14 |
| (2,759) | 1:B:13:ALA:HB3 | 1:B:16:ASN:H | 3 | 0.14 |
| (2,759) | 1:B:12:ASP:H | 1:B:13:ALA:HB1 | 9 | 0.14 |
| (2,759) | 1:B:12:ASP:H | 1:B:13:ALA:HB2 | 9 | 0.14 |
| (2,759) | 1:B:12:ASP:H | 1:B:13:ALA:HB3 | 9 | 0.14 |
| (2,759) | 1:B:13:ALA:HB1 | 1:B:16:ASN:H | 9 | 0.14 |
| (2,759) | 1:B:13:ALA:HB2 | 1:B:16:ASN:H | 9 | 0.14 |
| (2,759) | 1:B:13:ALA:HB3 | 1:B:16:ASN:H | 9 | 0.14 |
| (2,58) | 1:B:85:LEU:HB2 | 1:B:88:CYS:H | 2 | 0.14 |
| (2,58) | 1:B:83:ARG:H | 1:B:85:LEU:HB3 | 2 | 0.14 |
| (2,58) | 1:B:85:LEU:HB3 | 1:B:88:CYS:H | 2 | 0.14 |
| (2,548) | 1:B:49:GLN:HB2 | 1:B:47:TYR:HA | 4 | 0.14 |
| (2,548) | 1:B:49:GLN:HB3 | 1:B:47:TYR:HA | 4 | 0.14 |
| (2,548) | 1:B:11:LYS:HE3 | 1:B:66:TYR:HA | 4 | 0.14 |
| (2,548) | 1:B:15:LEU:HG | 1:B:66:TYR:HA | 4 | 0.14 |
| (2,548) | 1:B:65:LEU:HG | 1:B:84:SER:HB2 | 4 | 0.14 |
| (2,548) | 1:B:65:LEU:HG | 1:B:84:SER:HB3 | 4 | 0.14 |
| (2,341) | 1:B:91:LYS:HD3 | 1:B:91:LYS:HA | 4 | 0.14 |
| (2,341) | 1:B:91:LYS:HD2 | 1:B:91:LYS:HA | 4 | 0.14 |
| (2,341) | 1:B:38:LYS:HD3 | 1:B:38:LYS:HA | 4 | 0.14 |
| (2,341) | 1:B:38:LYS:HD2 | 1:B:38:LYS:HA | 4 | 0.14 |
| (2,211) | 1:B:34:PRO:HB2 | 1:B:37:LYS:H | 8 | 0.14 |
| (2,211) | 1:B:38:LYS:HB3 | 1:B:37:LYS:H | 8 | 0.14 |
| (2,211) | 1:B:67:ALA:H | 1:B:69:MET:HG3 | 8 | 0.14 |
| (2,211) | 1:B:93:PHE:H | 1:B:91:LYS:HB2 | 8 | 0.14 |
| (2,211) | 1:B:93:PHE:H | 1:B:91:LYS:HB3 | 8 | 0.14 |
| (2,211) | 1:B:34:PRO:HB2 | 1:B:37:LYS:H | 9 | 0.14 |
| (2,211) | 1:B:38:LYS:HB3 | 1:B:37:LYS:H | 9 | 0.14 |
| (2,211) | 1:B:67:ALA:H | 1:B:69:MET:HG3 | 9 | 0.14 |
| (2,211) | 1:B:93:PHE:H | 1:B:91:LYS:HB2 | 9 | 0.14 |
| (2,211) | 1:B:93:PHE:H | 1:B:91:LYS:HB3 | 9 | 0.14 |
| (2,211) | 1:B:34:PRO:HB2 | 1:B:37:LYS:H | 10 | 0.14 |
| (2,211) | 1:B:38:LYS:HB3 | 1:B:37:LYS:H | 10 | 0.14 |
| (2,211) | 1:B:67:ALA:H | 1:B:69:MET:HG3 | 10 | 0.14 |
| (2,211) | 1:B:93:PHE:H | 1:B:91:LYS:HB2 | 10 | 0.14 |
| (2,211) | 1:B:93:PHE:H | 1:B:91:LYS:HB3 | 10 | 0.14 |
| (2,140) | 1:B:64:GLU:HG2 | 1:B:60:LYS:HG3 | 2 | 0.14 |
| (2,140) | 1:B:64:GLU:HG3 | 1:B:60:LYS:HG3 | 2 | 0.14 |
| (2,140) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB1 | 2 | 0.14 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,140) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB3 | 2 | 0.14 |
| (2,140) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB2 | 2 | 0.14 |
| (2,1273) | 1:B:62:GLN:H | 1:B:59:LYS:HB2 | 8 | 0.14 |
| (2,1273) | 1:B:62:GLN:H | 1:B:59:LYS:HB3 | 8 | 0.14 |
| (2,1273) | 1:B:62:GLN:H | 1:B:60:LYS:HB2 | 8 | 0.14 |
| (2,124) | 1:B:39:ARG:H | 1:B:40:PHE:HB3 | 1 | 0.14 |
| (2,124) | 1:B:43:ILE:H | 1:B:40:PHE:HB3 | 1 | 0.14 |
| (2,1013) | 1:B:18:MET:HG2 | 1:B:15:LEU:HA | 2 | 0.14 |
| (2,1013) | 1:B:18:MET:HG2 | 1:B:20:PRO:HD3 | 2 | 0.14 |
| (2,1013) | 1:B:18:MET:HG2 | 1:B:15:LEU:HA | 10 | 0.14 |
| (2,1013) | 1:B:18:MET:HG2 | 1:B:20:PRO:HD3 | 10 | 0.14 |
| (2,101) | 1:B:41:ASP:HB2 | 1:B:42:GLU:HA | 1 | 0.14 |
| (2,101) | 1:B:63:ASP:HB2 | 1:B:60:LYS:HA | 1 | 0.14 |
| (2,101) | 1:B:74:ASN:HB2 | 1:B:75:SER:HA | 1 | 0.14 |
| (1,771) | 1:B:43:ILE:H | 1:B:45:MET:HB3 | 1 | 0.14 |
| (1,753) | 1:B:54:ILE:HA | 1:B:53:LEU:HB3 | 3 | 0.14 |
| (1,703) | 1:B:85:LEU:HD11 | 1:B:82:GLY:HA3 | 4 | 0.14 |
| (1,703) | 1:B:85:LEU:HD12 | 1:B:82:GLY:HA3 | 4 | 0.14 |
| (1,703) | 1:B:85:LEU:HD13 | 1:B:82:GLY:HA3 | 4 | 0.14 |
| (1,699) | 1:B:82:GLY:HA3 | 1:B:14:TRP:HH2 | 10 | 0.14 |
| (1,488) | 1:B:81:TRP:HB2 | 1:B:81:TRP:HA | 1 | 0.14 |
| (1,488) | 1:B:81:TRP:HB2 | 1:B:81:TRP:HA | 2 | 0.14 |
| (1,488) | 1:B:81:TRP:HB2 | 1:B:81:TRP:HA | 3 | 0.14 |
| (1,488) | 1:B:81:TRP:HB2 | 1:B:81:TRP:HA | 4 | 0.14 |
| (1,488) | 1:B:81:TRP:HB2 | 1:B:81:TRP:HA | 5 | 0.14 |
| (1,488) | 1:B:81:TRP:HB2 | 1:B:81:TRP:HA | 6 | 0.14 |
| (1,488) | 1:B:81:TRP:HB2 | 1:B:81:TRP:HA | 7 | 0.14 |
| (1,488) | 1:B:81:TRP:HB2 | 1:B:81:TRP:HA | 8 | 0.14 |
| (1,488) | 1:B:81:TRP:HB2 | 1:B:81:TRP:HA | 10 | 0.14 |
| (1,399) | 1:B:55:PRO:HG3 | 1:B:52:THR:HA | 9 | 0.14 |
| (1,398) | 1:B:52:THR:HA | 1:B:55:PRO:HD3 | 10 | 0.14 |
| (1,387) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD11 | 3 | 0.14 |
| (1,387) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD13 | 3 | 0.14 |
| (1,387) | 1:B:70:PRO:HG3 | 1:B:73:ILE:HD12 | 3 | 0.14 |
| (1,191) | 1:B:96:LYS:HB2 | 1:B:96:LYS:HA | 1 | 0.14 |
| (1,191) | 1:B:96:LYS:HB2 | 1:B:96:LYS:HA | 5 | 0.14 |
| (1,187) | 1:B:97:HIS:H | 1:B:96:LYS:HB3 | 7 | 0.14 |
| (1,187) | 1:B:97:HIS:H | 1:B:96:LYS:HB3 | 8 | 0.14 |
| (1,1035) | 1:B:42:GLU:H | 1:B:41:ASP:HB2 | 6 | 0.14 |
| (2,990) | 1:B:38:LYS:HB2 | 1:B:39:ARG:HD3 | 9 | 0.13 |
| (2,990) | 1:B:38:LYS:HB3 | 1:B:39:ARG:HD3 | 9 | 0.13 |
| (2,990) | 1:B:89:ILE:HA | 1:B:91:LYS:HB2 | 9 | 0.13 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|-----------------|-----------------|----------|---------------|
| (2,990) | 1:B:91:LYS:HB3 | 1:B:88:CYS:HB3 | 9 | 0.13 |
| (2,990) | 1:B:89:ILE:HA | 1:B:91:LYS:HB3 | 9 | 0.13 |
| (2,968) | 1:B:9:MET:HB3 | 1:B:14:TRP:HB2 | 5 | 0.13 |
| (2,968) | 1:B:87:GLU:HG3 | 1:B:91:LYS:HE2 | 5 | 0.13 |
| (2,959) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HB3 | 10 | 0.13 |
| (2,959) | 1:B:40:PHE:HB2 | 1:B:37:LYS:HD3 | 10 | 0.13 |
| (2,959) | 1:B:88:CYS:HB2 | 1:B:89:ILE:HG13 | 10 | 0.13 |
| (2,948) | 1:B:6:PRO:HG2 | 1:B:5:ASN:HB2 | 5 | 0.13 |
| (2,948) | 1:B:6:PRO:HG3 | 1:B:5:ASN:HB2 | 5 | 0.13 |
| (2,948) | 1:B:41:ASP:HB3 | 1:B:37:LYS:HB3 | 5 | 0.13 |
| (2,948) | 1:B:41:ASP:HB3 | 1:B:37:LYS:HD3 | 5 | 0.13 |
| (2,948) | 1:B:62:GLN:HB3 | 1:B:63:ASP:HB3 | 5 | 0.13 |
| (2,948) | 1:B:66:TYR:HB3 | 1:B:11:LYS:HE3 | 5 | 0.13 |
| (2,948) | 1:B:66:TYR:HB3 | 1:B:15:LEU:HB3 | 5 | 0.13 |
| (2,948) | 1:B:15:LEU:HG | 1:B:66:TYR:HB3 | 5 | 0.13 |
| (2,948) | 1:B:62:GLN:HB3 | 1:B:66:TYR:HB3 | 5 | 0.13 |
| (2,943) | 1:B:-2:ASP:HB3 | 1:B:-1:LYS:HD3 | 1 | 0.13 |
| (2,943) | 1:B:13:ALA:HB1 | 1:B:12:ASP:HB2 | 1 | 0.13 |
| (2,943) | 1:B:13:ALA:HB2 | 1:B:12:ASP:HB2 | 1 | 0.13 |
| (2,943) | 1:B:13:ALA:HB3 | 1:B:12:ASP:HB2 | 1 | 0.13 |
| (2,943) | 1:B:27:CYS:HB3 | 1:B:26:ILE:HG12 | 1 | 0.13 |
| (2,943) | 1:B:27:CYS:HB3 | 1:B:28:LYS:HD2 | 1 | 0.13 |
| (2,943) | 1:B:27:CYS:HB3 | 1:B:28:LYS:HD3 | 1 | 0.13 |
| (2,943) | 1:B:27:CYS:HB3 | 1:B:45:MET:HG2 | 1 | 0.13 |
| (2,943) | 1:B:35:ASP:HB3 | 1:B:38:LYS:HG2 | 1 | 0.13 |
| (2,943) | 1:B:71:ASP:HB2 | 1:B:72:LYS:HB2 | 1 | 0.13 |
| (2,943) | 1:B:71:ASP:HB2 | 1:B:72:LYS:HD2 | 1 | 0.13 |
| (2,943) | 1:B:71:ASP:HB2 | 1:B:72:LYS:HD3 | 1 | 0.13 |
| (2,885) | 1:B:89:ILE:HD11 | 1:B:90:GLY:HA3 | 8 | 0.13 |
| (2,885) | 1:B:89:ILE:HD13 | 1:B:90:GLY:HA3 | 8 | 0.13 |
| (2,885) | 1:B:89:ILE:HD12 | 1:B:90:GLY:HA3 | 8 | 0.13 |
| (2,885) | 1:B:90:GLY:HA3 | 1:B:98:LEU:HD13 | 8 | 0.13 |
| (2,885) | 1:B:90:GLY:HA3 | 1:B:98:LEU:HD11 | 8 | 0.13 |
| (2,885) | 1:B:90:GLY:HA3 | 1:B:98:LEU:HD12 | 8 | 0.13 |
| (2,885) | 1:B:79:GLY:HA2 | 1:B:18:MET:HE1 | 8 | 0.13 |
| (2,885) | 1:B:79:GLY:HA2 | 1:B:18:MET:HE3 | 8 | 0.13 |
| (2,885) | 1:B:79:GLY:HA2 | 1:B:18:MET:HE2 | 8 | 0.13 |
| (2,885) | 1:B:25:LEU:HD21 | 1:B:79:GLY:HA2 | 8 | 0.13 |
| (2,885) | 1:B:25:LEU:HD22 | 1:B:79:GLY:HA2 | 8 | 0.13 |
| (2,885) | 1:B:25:LEU:HD23 | 1:B:79:GLY:HA2 | 8 | 0.13 |
| (2,885) | 1:B:85:LEU:HD11 | 1:B:79:GLY:HA2 | 8 | 0.13 |
| (2,885) | 1:B:85:LEU:HD12 | 1:B:79:GLY:HA2 | 8 | 0.13 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|-----------------|-----------------|----------|---------------|
| (2,885) | 1:B:85:LEU:HD13 | 1:B:79:GLY:HA2 | 8 | 0.13 |
| (2,885) | 1:B:79:GLY:HA3 | 1:B:18:MET:HE1 | 8 | 0.13 |
| (2,885) | 1:B:79:GLY:HA3 | 1:B:18:MET:HE3 | 8 | 0.13 |
| (2,885) | 1:B:79:GLY:HA3 | 1:B:18:MET:HE2 | 8 | 0.13 |
| (2,885) | 1:B:79:GLY:HA3 | 1:B:85:LEU:HD11 | 8 | 0.13 |
| (2,885) | 1:B:79:GLY:HA3 | 1:B:85:LEU:HD12 | 8 | 0.13 |
| (2,885) | 1:B:79:GLY:HA3 | 1:B:85:LEU:HD13 | 8 | 0.13 |
| (2,885) | 1:B:90:GLY:HA3 | 1:B:36:LEU:HD12 | 8 | 0.13 |
| (2,885) | 1:B:90:GLY:HA3 | 1:B:36:LEU:HD11 | 8 | 0.13 |
| (2,885) | 1:B:90:GLY:HA3 | 1:B:36:LEU:HD13 | 8 | 0.13 |
| (2,885) | 1:B:36:LEU:HD21 | 1:B:90:GLY:HA3 | 8 | 0.13 |
| (2,885) | 1:B:36:LEU:HD23 | 1:B:90:GLY:HA3 | 8 | 0.13 |
| (2,885) | 1:B:36:LEU:HD22 | 1:B:90:GLY:HA3 | 8 | 0.13 |
| (2,885) | 1:B:54:ILE:HG21 | 1:B:90:GLY:HA3 | 8 | 0.13 |
| (2,885) | 1:B:54:ILE:HG22 | 1:B:90:GLY:HA3 | 8 | 0.13 |
| (2,885) | 1:B:54:ILE:HG23 | 1:B:90:GLY:HA3 | 8 | 0.13 |
| (2,759) | 1:B:12:ASP:H | 1:B:13:ALA:HB1 | 8 | 0.13 |
| (2,759) | 1:B:12:ASP:H | 1:B:13:ALA:HB2 | 8 | 0.13 |
| (2,759) | 1:B:12:ASP:H | 1:B:13:ALA:HB3 | 8 | 0.13 |
| (2,759) | 1:B:13:ALA:HB1 | 1:B:16:ASN:H | 8 | 0.13 |
| (2,759) | 1:B:13:ALA:HB2 | 1:B:16:ASN:H | 8 | 0.13 |
| (2,759) | 1:B:13:ALA:HB3 | 1:B:16:ASN:H | 8 | 0.13 |
| (2,759) | 1:B:12:ASP:H | 1:B:13:ALA:HB1 | 10 | 0.13 |
| (2,759) | 1:B:12:ASP:H | 1:B:13:ALA:HB2 | 10 | 0.13 |
| (2,759) | 1:B:12:ASP:H | 1:B:13:ALA:HB3 | 10 | 0.13 |
| (2,759) | 1:B:13:ALA:HB1 | 1:B:16:ASN:H | 10 | 0.13 |
| (2,759) | 1:B:13:ALA:HB2 | 1:B:16:ASN:H | 10 | 0.13 |
| (2,759) | 1:B:13:ALA:HB3 | 1:B:16:ASN:H | 10 | 0.13 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:65:LEU:HB2 | 1 | 0.13 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:65:LEU:HB2 | 1 | 0.13 |
| (2,682) | 1:B:80:THR:HG21 | 1:B:65:LEU:HB2 | 1 | 0.13 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:69:MET:HG3 | 1 | 0.13 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:69:MET:HG3 | 1 | 0.13 |
| (2,682) | 1:B:80:THR:HG21 | 1:B:69:MET:HG3 | 1 | 0.13 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:70:PRO:HG2 | 1 | 0.13 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:70:PRO:HG2 | 1 | 0.13 |
| (2,682) | 1:B:80:THR:HG21 | 1:B:70:PRO:HG2 | 1 | 0.13 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:83:ARG:HB2 | 1 | 0.13 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:83:ARG:HB2 | 1 | 0.13 |
| (2,682) | 1:B:80:THR:HG21 | 1:B:83:ARG:HB2 | 1 | 0.13 |
| (2,682) | 1:B:80:THR:HG22 | 1:B:83:ARG:HB3 | 1 | 0.13 |
| (2,682) | 1:B:80:THR:HG23 | 1:B:83:ARG:HB3 | 1 | 0.13 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|-----------------|-----------------|----------|---------------|
| (2,682) | 1:B:80:THR:HG21 | 1:B:83:ARG:HB3 | 1 | 0.13 |
| (2,676) | 1:B:28:LYS:HA | 1:B:47:TYR:HD1 | 10 | 0.13 |
| (2,676) | 1:B:28:LYS:HA | 1:B:47:TYR:HD2 | 10 | 0.13 |
| (2,676) | 1:B:28:LYS:HA | 1:B:47:TYR:HE1 | 10 | 0.13 |
| (2,676) | 1:B:28:LYS:HA | 1:B:47:TYR:HE2 | 10 | 0.13 |
| (2,667) | 1:B:22:LEU:HD11 | 1:B:14:TRP:HZ2 | 1 | 0.13 |
| (2,667) | 1:B:22:LEU:HD12 | 1:B:14:TRP:HZ2 | 1 | 0.13 |
| (2,667) | 1:B:22:LEU:HD13 | 1:B:14:TRP:HZ2 | 1 | 0.13 |
| (2,667) | 1:B:25:LEU:H | 1:B:22:LEU:HD11 | 1 | 0.13 |
| (2,667) | 1:B:25:LEU:H | 1:B:22:LEU:HD12 | 1 | 0.13 |
| (2,667) | 1:B:25:LEU:H | 1:B:22:LEU:HD13 | 1 | 0.13 |
| (2,667) | 1:B:36:LEU:HD12 | 1:B:39:ARG:H | 1 | 0.13 |
| (2,667) | 1:B:36:LEU:HD11 | 1:B:39:ARG:H | 1 | 0.13 |
| (2,667) | 1:B:36:LEU:HD13 | 1:B:39:ARG:H | 1 | 0.13 |
| (2,667) | 1:B:98:LEU:HD13 | 1:B:39:ARG:H | 1 | 0.13 |
| (2,667) | 1:B:98:LEU:HD11 | 1:B:39:ARG:H | 1 | 0.13 |
| (2,667) | 1:B:98:LEU:HD12 | 1:B:39:ARG:H | 1 | 0.13 |
| (2,667) | 1:B:99:ILE:H | 1:B:98:LEU:HD13 | 1 | 0.13 |
| (2,667) | 1:B:99:ILE:H | 1:B:98:LEU:HD11 | 1 | 0.13 |
| (2,667) | 1:B:99:ILE:H | 1:B:98:LEU:HD12 | 1 | 0.13 |
| (2,58) | 1:B:85:LEU:HB2 | 1:B:88:CYS:H | 9 | 0.13 |
| (2,58) | 1:B:83:ARG:H | 1:B:85:LEU:HB3 | 9 | 0.13 |
| (2,58) | 1:B:85:LEU:HB3 | 1:B:88:CYS:H | 9 | 0.13 |
| (2,4) | 1:B:53:LEU:HB2 | 1:B:49:GLN:HG3 | 1 | 0.13 |
| (2,4) | 1:B:53:LEU:HB2 | 1:B:56:GLU:HG3 | 1 | 0.13 |
| (2,4) | 1:B:65:LEU:HB2 | 1:B:64:GLU:HB3 | 1 | 0.13 |
| (2,236) | 1:B:9:MET:HG3 | 1:B:10:THR:HG22 | 1 | 0.13 |
| (2,236) | 1:B:9:MET:HG3 | 1:B:10:THR:HG21 | 1 | 0.13 |
| (2,236) | 1:B:9:MET:HG3 | 1:B:10:THR:HG23 | 1 | 0.13 |
| (2,236) | 1:B:9:MET:HG3 | 1:B:18:MET:HB2 | 1 | 0.13 |
| (2,236) | 1:B:9:MET:HG3 | 1:B:18:MET:HB3 | 1 | 0.13 |
| (2,236) | 1:B:9:MET:HG3 | 1:B:72:LYS:HB3 | 1 | 0.13 |
| (2,236) | 1:B:9:MET:HG3 | 1:B:77:THR:HG21 | 1 | 0.13 |
| (2,236) | 1:B:9:MET:HG3 | 1:B:77:THR:HG22 | 1 | 0.13 |
| (2,236) | 1:B:9:MET:HG3 | 1:B:77:THR:HG23 | 1 | 0.13 |
| (2,236) | 1:B:9:MET:HG2 | 1:B:10:THR:HG22 | 1 | 0.13 |
| (2,236) | 1:B:9:MET:HG2 | 1:B:10:THR:HG21 | 1 | 0.13 |
| (2,236) | 1:B:9:MET:HG2 | 1:B:10:THR:HG23 | 1 | 0.13 |
| (2,236) | 1:B:9:MET:HG2 | 1:B:72:LYS:HB3 | 1 | 0.13 |
| (2,236) | 1:B:9:MET:HG2 | 1:B:77:THR:HG21 | 1 | 0.13 |
| (2,236) | 1:B:9:MET:HG2 | 1:B:77:THR:HG22 | 1 | 0.13 |
| (2,236) | 1:B:9:MET:HG2 | 1:B:77:THR:HG23 | 1 | 0.13 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,211) | 1:B:34:PRO:HB2 | 1:B:37:LYS:H | 3 | 0.13 |
| (2,211) | 1:B:38:LYS:HB3 | 1:B:37:LYS:H | 3 | 0.13 |
| (2,211) | 1:B:67:ALA:H | 1:B:69:MET:HG3 | 3 | 0.13 |
| (2,211) | 1:B:93:PHE:H | 1:B:91:LYS:HB2 | 3 | 0.13 |
| (2,211) | 1:B:93:PHE:H | 1:B:91:LYS:HB3 | 3 | 0.13 |
| (2,188) | 1:B:0:MET:HB3 | 1:B:-1:LYS:H | 7 | 0.13 |
| (2,188) | 1:B:0:MET:HB2 | 1:B:-1:LYS:H | 7 | 0.13 |
| (2,1523) | 1:B:56:GLU:H | 1:B:23:PRO:HG2 | 9 | 0.13 |
| (2,1523) | 1:B:56:GLU:H | 1:B:59:LYS:HD3 | 9 | 0.13 |
| (2,1523) | 1:B:56:GLU:H | 1:B:60:LYS:HD3 | 9 | 0.13 |
| (2,1517) | 1:B:61:CYS:H | 1:B:60:LYS:HD3 | 6 | 0.13 |
| (2,1517) | 1:B:61:CYS:H | 1:B:60:LYS:HG3 | 6 | 0.13 |
| (2,1517) | 1:B:61:CYS:H | 1:B:60:LYS:HD3 | 10 | 0.13 |
| (2,1517) | 1:B:61:CYS:H | 1:B:60:LYS:HG3 | 10 | 0.13 |
| (2,1422) | 1:B:41:ASP:H | 1:B:44:LYS:HG3 | 9 | 0.13 |
| (2,1422) | 1:B:41:ASP:H | 1:B:45:MET:HB2 | 9 | 0.13 |
| (2,1273) | 1:B:62:GLN:H | 1:B:59:LYS:HB2 | 1 | 0.13 |
| (2,1273) | 1:B:62:GLN:H | 1:B:59:LYS:HB3 | 1 | 0.13 |
| (2,1273) | 1:B:62:GLN:H | 1:B:60:LYS:HB2 | 1 | 0.13 |
| (2,1214) | 1:B:36:LEU:H | 1:B:38:LYS:HB2 | 3 | 0.13 |
| (2,1214) | 1:B:36:LEU:H | 1:B:38:LYS:HB3 | 3 | 0.13 |
| (2,1140) | 1:B:54:ILE:H | 1:B:89:ILE:HG23 | 6 | 0.13 |
| (2,1140) | 1:B:54:ILE:H | 1:B:89:ILE:HG21 | 6 | 0.13 |
| (2,1140) | 1:B:54:ILE:H | 1:B:89:ILE:HG22 | 6 | 0.13 |
| (2,1140) | 1:B:89:ILE:HG23 | 1:B:56:GLU:H | 6 | 0.13 |
| (2,1140) | 1:B:89:ILE:HG21 | 1:B:56:GLU:H | 6 | 0.13 |
| (2,1140) | 1:B:89:ILE:HG22 | 1:B:56:GLU:H | 6 | 0.13 |
| (2,1140) | 1:B:57:SER:H | 1:B:89:ILE:HG23 | 6 | 0.13 |
| (2,1140) | 1:B:57:SER:H | 1:B:89:ILE:HG21 | 6 | 0.13 |
| (2,1140) | 1:B:57:SER:H | 1:B:89:ILE:HG22 | 6 | 0.13 |
| (2,1062) | 1:B:60:LYS:HB2 | 1:B:57:SER:HB3 | 5 | 0.13 |
| (2,1062) | 1:B:57:SER:HB3 | 1:B:89:ILE:HB | 5 | 0.13 |
| (2,1051) | 1:B:51:VAL:HG13 | 1:B:48:GLU:HB2 | 8 | 0.13 |
| (2,1051) | 1:B:51:VAL:HG11 | 1:B:48:GLU:HB2 | 8 | 0.13 |
| (2,1051) | 1:B:51:VAL:HG12 | 1:B:48:GLU:HB2 | 8 | 0.13 |
| (2,1051) | 1:B:51:VAL:HG21 | 1:B:48:GLU:HB2 | 8 | 0.13 |
| (2,1051) | 1:B:51:VAL:HG23 | 1:B:48:GLU:HB2 | 8 | 0.13 |
| (2,1051) | 1:B:51:VAL:HG22 | 1:B:48:GLU:HB2 | 8 | 0.13 |
| (2,1051) | 1:B:51:VAL:HG21 | 1:B:55:PRO:HG2 | 8 | 0.13 |
| (2,1051) | 1:B:51:VAL:HG23 | 1:B:55:PRO:HG2 | 8 | 0.13 |
| (2,1051) | 1:B:51:VAL:HG22 | 1:B:55:PRO:HG2 | 8 | 0.13 |
| (2,1048) | 1:B:31:ILE:HG12 | 1:B:30:PHE:HA | 3 | 0.13 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,1048) | 1:B:96:LYS:HD3 | 1:B:53:LEU:HA | 3 | 0.13 |
| (2,1048) | 1:B:96:LYS:HD3 | 1:B:92:ASP:HA | 3 | 0.13 |
| (2,1048) | 1:B:53:LEU:HA | 1:B:96:LYS:HD2 | 3 | 0.13 |
| (2,1013) | 1:B:18:MET:HG2 | 1:B:15:LEU:HA | 3 | 0.13 |
| (2,1013) | 1:B:18:MET:HG2 | 1:B:20:PRO:HD3 | 3 | 0.13 |
| (2,1013) | 1:B:18:MET:HG2 | 1:B:15:LEU:HA | 5 | 0.13 |
| (2,1013) | 1:B:18:MET:HG2 | 1:B:20:PRO:HD3 | 5 | 0.13 |
| (1,834) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB1 | 5 | 0.13 |
| (1,834) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB3 | 5 | 0.13 |
| (1,834) | 1:B:95:GLU:HG2 | 1:B:94:ALA:HB2 | 5 | 0.13 |
| (1,785) | 1:B:57:SER:HB3 | 1:B:93:PHE:H | 2 | 0.13 |
| (1,753) | 1:B:54:ILE:HA | 1:B:53:LEU:HB3 | 10 | 0.13 |
| (1,500) | 1:B:36:LEU:HD12 | 1:B:36:LEU:HA | 1 | 0.13 |
| (1,500) | 1:B:36:LEU:HD11 | 1:B:36:LEU:HA | 1 | 0.13 |
| (1,500) | 1:B:36:LEU:HD13 | 1:B:36:LEU:HA | 1 | 0.13 |
| (1,249) | 1:B:52:THR:HB | 1:B:53:LEU:HD22 | 3 | 0.13 |
| (1,249) | 1:B:52:THR:HB | 1:B:53:LEU:HD21 | 3 | 0.13 |
| (1,249) | 1:B:52:THR:HB | 1:B:53:LEU:HD23 | 3 | 0.13 |
| (1,187) | 1:B:97:HIS:H | 1:B:96:LYS:HB3 | 4 | 0.13 |
| (1,1318) | 1:B:43:ILE:H | 1:B:39:ARG:HG2 | 6 | 0.13 |
| (1,1152) | 1:B:93:PHE:H | 1:B:90:GLY:HA3 | 10 | 0.13 |
| (1,1142) | 1:B:8:GLU:H | 1:B:6:PRO:HB2 | 1 | 0.13 |
| (1,1130) | 1:B:39:ARG:H | 1:B:38:LYS:HG2 | 5 | 0.13 |
| (1,1035) | 1:B:42:GLU:H | 1:B:41:ASP:HB2 | 3 | 0.13 |
| (1,1013) | 1:B:50:CYS:H | 1:B:53:LEU:HD22 | 3 | 0.13 |
| (1,1013) | 1:B:50:CYS:H | 1:B:53:LEU:HD21 | 3 | 0.13 |
| (1,1013) | 1:B:50:CYS:H | 1:B:53:LEU:HD23 | 3 | 0.13 |
| (2,990) | 1:B:38:LYS:HB2 | 1:B:39:ARG:HD3 | 3 | 0.12 |
| (2,990) | 1:B:38:LYS:HB3 | 1:B:39:ARG:HD3 | 3 | 0.12 |
| (2,990) | 1:B:89:ILE:HA | 1:B:91:LYS:HB2 | 3 | 0.12 |
| (2,990) | 1:B:91:LYS:HB3 | 1:B:88:CYS:HB3 | 3 | 0.12 |
| (2,990) | 1:B:89:ILE:HA | 1:B:91:LYS:HB3 | 3 | 0.12 |
| (2,990) | 1:B:38:LYS:HB2 | 1:B:39:ARG:HD3 | 6 | 0.12 |
| (2,990) | 1:B:38:LYS:HB3 | 1:B:39:ARG:HD3 | 6 | 0.12 |
| (2,990) | 1:B:89:ILE:HA | 1:B:91:LYS:HB2 | 6 | 0.12 |
| (2,990) | 1:B:91:LYS:HB3 | 1:B:88:CYS:HB3 | 6 | 0.12 |
| (2,990) | 1:B:89:ILE:HA | 1:B:91:LYS:HB3 | 6 | 0.12 |
| (2,964) | 1:B:7:ASN:HB3 | 1:B:8:GLU:HG2 | 4 | 0.12 |
| (2,964) | 1:B:7:ASN:HB3 | 1:B:8:GLU:HG3 | 4 | 0.12 |
| (2,964) | 1:B:16:ASN:HB2 | 1:B:15:LEU:HB3 | 4 | 0.12 |
| (2,964) | 1:B:15:LEU:HG | 1:B:16:ASN:HB2 | 4 | 0.12 |
| (2,883) | 1:B:83:ARG:HG3 | 1:B:79:GLY:HA2 | 2 | 0.12 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|----------------|-----------------|----------|---------------|
| (2,883) | 1:B:90:GLY:HA3 | 1:B:89:ILE:HB | 2 | 0.12 |
| (2,883) | 1:B:83:ARG:HG3 | 1:B:79:GLY:HA2 | 7 | 0.12 |
| (2,883) | 1:B:90:GLY:HA3 | 1:B:89:ILE:HB | 7 | 0.12 |
| (2,849) | 1:B:6:PRO:HB2 | 1:B:6:PRO:HD3 | 6 | 0.12 |
| (2,849) | 1:B:6:PRO:HB2 | 1:B:6:PRO:HD2 | 6 | 0.12 |
| (2,849) | 1:B:20:PRO:HB2 | 1:B:20:PRO:HD2 | 6 | 0.12 |
| (2,849) | 1:B:6:PRO:HB2 | 1:B:6:PRO:HD3 | 8 | 0.12 |
| (2,849) | 1:B:6:PRO:HB2 | 1:B:6:PRO:HD2 | 8 | 0.12 |
| (2,849) | 1:B:20:PRO:HB2 | 1:B:20:PRO:HD2 | 8 | 0.12 |
| (2,84) | 1:B:12:ASP:HB3 | 1:B:10:THR:HG22 | 7 | 0.12 |
| (2,84) | 1:B:12:ASP:HB3 | 1:B:10:THR:HG21 | 7 | 0.12 |
| (2,84) | 1:B:12:ASP:HB3 | 1:B:10:THR:HG23 | 7 | 0.12 |
| (2,84) | 1:B:12:ASP:HB3 | 1:B:15:LEU:HB2 | 7 | 0.12 |
| (2,84) | 1:B:71:ASP:HB3 | 1:B:72:LYS:HB3 | 7 | 0.12 |
| (2,80) | 1:B:12:ASP:HB2 | 1:B:10:THR:HB | 1 | 0.12 |
| (2,80) | 1:B:71:ASP:HB2 | 1:B:72:LYS:HA | 1 | 0.12 |
| (2,676) | 1:B:28:LYS:HA | 1:B:47:TYR:HD1 | 4 | 0.12 |
| (2,676) | 1:B:28:LYS:HA | 1:B:47:TYR:HD2 | 4 | 0.12 |
| (2,676) | 1:B:28:LYS:HA | 1:B:47:TYR:HE1 | 4 | 0.12 |
| (2,676) | 1:B:28:LYS:HA | 1:B:47:TYR:HE2 | 4 | 0.12 |
| (2,676) | 1:B:28:LYS:HA | 1:B:47:TYR:HD1 | 9 | 0.12 |
| (2,676) | 1:B:28:LYS:HA | 1:B:47:TYR:HD2 | 9 | 0.12 |
| (2,676) | 1:B:28:LYS:HA | 1:B:47:TYR:HE1 | 9 | 0.12 |
| (2,676) | 1:B:28:LYS:HA | 1:B:47:TYR:HE2 | 9 | 0.12 |
| (2,548) | 1:B:49:GLN:HB2 | 1:B:47:TYR:HA | 3 | 0.12 |
| (2,548) | 1:B:49:GLN:HB3 | 1:B:47:TYR:HA | 3 | 0.12 |
| (2,548) | 1:B:11:LYS:HE3 | 1:B:66:TYR:HA | 3 | 0.12 |
| (2,548) | 1:B:15:LEU:HG | 1:B:66:TYR:HA | 3 | 0.12 |
| (2,548) | 1:B:65:LEU:HG | 1:B:84:SER:HB2 | 3 | 0.12 |
| (2,548) | 1:B:65:LEU:HG | 1:B:84:SER:HB3 | 3 | 0.12 |
| (2,548) | 1:B:49:GLN:HB2 | 1:B:47:TYR:HA | 6 | 0.12 |
| (2,548) | 1:B:49:GLN:HB3 | 1:B:47:TYR:HA | 6 | 0.12 |
| (2,548) | 1:B:11:LYS:HE3 | 1:B:66:TYR:HA | 6 | 0.12 |
| (2,548) | 1:B:15:LEU:HG | 1:B:66:TYR:HA | 6 | 0.12 |
| (2,548) | 1:B:65:LEU:HG | 1:B:84:SER:HB2 | 6 | 0.12 |
| (2,548) | 1:B:65:LEU:HG | 1:B:84:SER:HB3 | 6 | 0.12 |
| (2,45) | 1:B:61:CYS:HB3 | 1:B:65:LEU:HG | 8 | 0.12 |
| (2,45) | 1:B:61:CYS:HB3 | 1:B:89:ILE:HG13 | 8 | 0.12 |
| (2,45) | 1:B:92:ASP:HB3 | 1:B:95:GLU:HB2 | 8 | 0.12 |
| (2,434) | 1:B:51:VAL:HA | 1:B:24:ASP:HA | 7 | 0.12 |
| (2,434) | 1:B:51:VAL:HA | 1:B:52:THR:HB | 7 | 0.12 |
| (2,434) | 1:B:51:VAL:HA | 1:B:54:ILE:HA | 7 | 0.12 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|----------------|-----------------|----------|---------------|
| (2,416) | 1:B:81:TRP:HB2 | 1:B:80:THR:HB | 2 | 0.12 |
| (2,416) | 1:B:81:TRP:HB2 | 1:B:84:SER:HB2 | 2 | 0.12 |
| (2,416) | 1:B:81:TRP:HB2 | 1:B:84:SER:HB3 | 2 | 0.12 |
| (2,392) | 1:B:48:GLU:HB3 | 1:B:47:TYR:H | 8 | 0.12 |
| (2,392) | 1:B:49:GLN:HB2 | 1:B:47:TYR:H | 8 | 0.12 |
| (2,392) | 1:B:49:GLN:HB3 | 1:B:47:TYR:H | 8 | 0.12 |
| (2,39) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD21 | 3 | 0.12 |
| (2,39) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD23 | 3 | 0.12 |
| (2,39) | 1:B:33:ASP:HB2 | 1:B:36:LEU:HD22 | 3 | 0.12 |
| (2,39) | 1:B:61:CYS:HB2 | 1:B:89:ILE:HD11 | 3 | 0.12 |
| (2,39) | 1:B:61:CYS:HB2 | 1:B:89:ILE:HD13 | 3 | 0.12 |
| (2,39) | 1:B:61:CYS:HB2 | 1:B:89:ILE:HD12 | 3 | 0.12 |
| (2,341) | 1:B:91:LYS:HD3 | 1:B:91:LYS:HA | 8 | 0.12 |
| (2,341) | 1:B:91:LYS:HD2 | 1:B:91:LYS:HA | 8 | 0.12 |
| (2,341) | 1:B:38:LYS:HD3 | 1:B:38:LYS:HA | 8 | 0.12 |
| (2,341) | 1:B:38:LYS:HD2 | 1:B:38:LYS:HA | 8 | 0.12 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:85:LEU:HD23 | 2 | 0.12 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:85:LEU:HD21 | 2 | 0.12 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:85:LEU:HD22 | 2 | 0.12 |
| (2,282) | 1:B:60:LYS:HD3 | 1:B:89:ILE:HG23 | 2 | 0.12 |
| (2,282) | 1:B:60:LYS:HD3 | 1:B:89:ILE:HG21 | 2 | 0.12 |
| (2,282) | 1:B:60:LYS:HD3 | 1:B:89:ILE:HG22 | 2 | 0.12 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:21:LEU:HD11 | 2 | 0.12 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:21:LEU:HD13 | 2 | 0.12 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:21:LEU:HD12 | 2 | 0.12 |
| (2,281) | 1:B:18:MET:HG2 | 1:B:18:MET:HA | 3 | 0.12 |
| (2,281) | 1:B:18:MET:HG2 | 1:B:82:GLY:HA3 | 3 | 0.12 |
| (2,281) | 1:B:18:MET:HG2 | 1:B:18:MET:HA | 4 | 0.12 |
| (2,281) | 1:B:18:MET:HG2 | 1:B:82:GLY:HA3 | 4 | 0.12 |
| (2,266) | 1:B:11:LYS:HB3 | 1:B:66:TYR:HD1 | 1 | 0.12 |
| (2,266) | 1:B:11:LYS:HB3 | 1:B:66:TYR:HD2 | 1 | 0.12 |
| (2,266) | 1:B:45:MET:HG3 | 1:B:40:PHE:HE1 | 1 | 0.12 |
| (2,266) | 1:B:45:MET:HG3 | 1:B:40:PHE:HE2 | 1 | 0.12 |
| (2,266) | 1:B:45:MET:HG3 | 1:B:93:PHE:HE2 | 1 | 0.12 |
| (2,266) | 1:B:45:MET:HG3 | 1:B:93:PHE:HE1 | 1 | 0.12 |
| (2,266) | 1:B:11:LYS:HB3 | 1:B:66:TYR:HD1 | 10 | 0.12 |
| (2,266) | 1:B:11:LYS:HB3 | 1:B:66:TYR:HD2 | 10 | 0.12 |
| (2,266) | 1:B:45:MET:HG3 | 1:B:40:PHE:HE1 | 10 | 0.12 |
| (2,266) | 1:B:45:MET:HG3 | 1:B:40:PHE:HE2 | 10 | 0.12 |
| (2,266) | 1:B:45:MET:HG3 | 1:B:93:PHE:HE2 | 10 | 0.12 |
| (2,266) | 1:B:45:MET:HG3 | 1:B:93:PHE:HE1 | 10 | 0.12 |
| (2,194) | 1:B:-1:LYS:HE2 | 1:B:-1:LYS:HB2 | 2 | 0.12 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,194) | 1:B:-1:LYS:HE3 | 1:B:-1:LYS:HB2 | 2 | 0.12 |
| (2,194) | 1:B:59:LYS:HE2 | 1:B:59:LYS:HB3 | 2 | 0.12 |
| (2,194) | 1:B:59:LYS:HE3 | 1:B:59:LYS:HB3 | 2 | 0.12 |
| (2,194) | 1:B:60:LYS:HE2 | 1:B:60:LYS:HB2 | 2 | 0.12 |
| (2,194) | 1:B:61:CYS:HB2 | 1:B:60:LYS:HB2 | 2 | 0.12 |
| (2,174) | 1:B:52:THR:H | 1:B:49:GLN:HG3 | 4 | 0.12 |
| (2,174) | 1:B:52:THR:H | 1:B:49:GLN:HG2 | 4 | 0.12 |
| (2,174) | 1:B:62:GLN:HG3 | 1:B:14:TRP:HE3 | 4 | 0.12 |
| (2,171) | 1:B:32:GLN:HG2 | 1:B:33:ASP:H | 10 | 0.12 |
| (2,171) | 1:B:62:GLN:HG2 | 1:B:14:TRP:HE3 | 10 | 0.12 |
| (2,171) | 1:B:62:GLN:HG3 | 1:B:14:TRP:HE3 | 10 | 0.12 |
| (2,154) | 1:B:95:GLU:HG3 | 1:B:99:ILE:HG13 | 2 | 0.12 |
| (2,154) | 1:B:56:GLU:HG3 | 1:B:53:LEU:HB3 | 2 | 0.12 |
| (2,154) | 1:B:56:GLU:HG3 | 1:B:96:LYS:HD2 | 2 | 0.12 |
| (2,1366) | 1:B:11:LYS:H | 1:B:13:ALA:HB1 | 7 | 0.12 |
| (2,1366) | 1:B:11:LYS:H | 1:B:13:ALA:HB2 | 7 | 0.12 |
| (2,1366) | 1:B:11:LYS:H | 1:B:13:ALA:HB3 | 7 | 0.12 |
| (2,1366) | 1:B:11:LYS:H | 1:B:72:LYS:HB2 | 7 | 0.12 |
| (2,1366) | 1:B:11:LYS:H | 1:B:72:LYS:HD2 | 7 | 0.12 |
| (2,1366) | 1:B:11:LYS:H | 1:B:72:LYS:HD3 | 7 | 0.12 |
| (2,1366) | 1:B:92:ASP:H | 1:B:60:LYS:HD3 | 7 | 0.12 |
| (2,1290) | 1:B:91:LYS:H | 1:B:87:GLU:HG2 | 1 | 0.12 |
| (2,1290) | 1:B:91:LYS:H | 1:B:95:GLU:HG2 | 1 | 0.12 |
| (2,1290) | 1:B:91:LYS:H | 1:B:87:GLU:HG2 | 5 | 0.12 |
| (2,1290) | 1:B:91:LYS:H | 1:B:95:GLU:HG2 | 5 | 0.12 |
| (2,1051) | 1:B:51:VAL:HG13 | 1:B:48:GLU:HB2 | 3 | 0.12 |
| (2,1051) | 1:B:51:VAL:HG11 | 1:B:48:GLU:HB2 | 3 | 0.12 |
| (2,1051) | 1:B:51:VAL:HG12 | 1:B:48:GLU:HB2 | 3 | 0.12 |
| (2,1051) | 1:B:51:VAL:HG21 | 1:B:48:GLU:HB2 | 3 | 0.12 |
| (2,1051) | 1:B:51:VAL:HG23 | 1:B:48:GLU:HB2 | 3 | 0.12 |
| (2,1051) | 1:B:51:VAL:HG22 | 1:B:48:GLU:HB2 | 3 | 0.12 |
| (2,1051) | 1:B:51:VAL:HG21 | 1:B:55:PRO:HG2 | 3 | 0.12 |
| (2,1051) | 1:B:51:VAL:HG23 | 1:B:55:PRO:HG2 | 3 | 0.12 |
| (2,1051) | 1:B:51:VAL:HG22 | 1:B:55:PRO:HG2 | 3 | 0.12 |
| (2,1051) | 1:B:51:VAL:HG13 | 1:B:48:GLU:HB2 | 5 | 0.12 |
| (2,1051) | 1:B:51:VAL:HG11 | 1:B:48:GLU:HB2 | 5 | 0.12 |
| (2,1051) | 1:B:51:VAL:HG12 | 1:B:48:GLU:HB2 | 5 | 0.12 |
| (2,1051) | 1:B:51:VAL:HG21 | 1:B:48:GLU:HB2 | 5 | 0.12 |
| (2,1051) | 1:B:51:VAL:HG23 | 1:B:48:GLU:HB2 | 5 | 0.12 |
| (2,1051) | 1:B:51:VAL:HG22 | 1:B:48:GLU:HB2 | 5 | 0.12 |
| (2,1051) | 1:B:51:VAL:HG21 | 1:B:55:PRO:HG2 | 5 | 0.12 |
| (2,1051) | 1:B:51:VAL:HG23 | 1:B:55:PRO:HG2 | 5 | 0.12 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,1051) | 1:B:51:VAL:HG22 | 1:B:55:PRO:HG2 | 5 | 0.12 |
| (2,1048) | 1:B:31:ILE:HG12 | 1:B:30:PHE:HA | 1 | 0.12 |
| (2,1048) | 1:B:96:LYS:HD3 | 1:B:53:LEU:HA | 1 | 0.12 |
| (2,1048) | 1:B:96:LYS:HD3 | 1:B:92:ASP:HA | 1 | 0.12 |
| (2,1048) | 1:B:53:LEU:HA | 1:B:96:LYS:HD2 | 1 | 0.12 |
| (2,1013) | 1:B:18:MET:HG2 | 1:B:15:LEU:HA | 6 | 0.12 |
| (2,1013) | 1:B:18:MET:HG2 | 1:B:20:PRO:HD3 | 6 | 0.12 |
| (1,93) | 1:B:30:PHE:HB2 | 1:B:36:LEU:HB3 | 9 | 0.12 |
| (1,846) | 1:B:96:LYS:HB2 | 1:B:97:HIS:HA | 3 | 0.12 |
| (1,768) | 1:B:97:HIS:HB2 | 1:B:96:LYS:HB3 | 4 | 0.12 |
| (1,747) | 1:B:37:LYS:HB2 | 1:B:34:PRO:HA | 10 | 0.12 |
| (1,704) | 1:B:91:LYS:H | 1:B:90:GLY:HA2 | 9 | 0.12 |
| (1,699) | 1:B:82:GLY:HA3 | 1:B:14:TRP:HH2 | 4 | 0.12 |
| (1,699) | 1:B:82:GLY:HA3 | 1:B:14:TRP:HH2 | 8 | 0.12 |
| (1,699) | 1:B:82:GLY:HA3 | 1:B:14:TRP:HH2 | 9 | 0.12 |
| (1,674) | 1:B:5:ASN:HA | 1:B:5:ASN:HB2 | 1 | 0.12 |
| (1,674) | 1:B:5:ASN:HA | 1:B:5:ASN:HB2 | 3 | 0.12 |
| (1,674) | 1:B:5:ASN:HA | 1:B:5:ASN:HB2 | 5 | 0.12 |
| (1,674) | 1:B:5:ASN:HA | 1:B:5:ASN:HB2 | 6 | 0.12 |
| (1,674) | 1:B:5:ASN:HA | 1:B:5:ASN:HB2 | 7 | 0.12 |
| (1,559) | 1:B:66:TYR:HB2 | 1:B:63:ASP:HA | 2 | 0.12 |
| (1,408) | 1:B:28:LYS:HG3 | 1:B:28:LYS:H | 7 | 0.12 |
| (1,1152) | 1:B:93:PHE:H | 1:B:90:GLY:HA3 | 6 | 0.12 |
| (1,1130) | 1:B:39:ARG:H | 1:B:38:LYS:HG2 | 1 | 0.12 |
| (1,1035) | 1:B:42:GLU:H | 1:B:41:ASP:HB2 | 9 | 0.12 |
| (1,1013) | 1:B:50:CYS:H | 1:B:53:LEU:HD22 | 8 | 0.12 |
| (1,1013) | 1:B:50:CYS:H | 1:B:53:LEU:HD21 | 8 | 0.12 |
| (1,1013) | 1:B:50:CYS:H | 1:B:53:LEU:HD23 | 8 | 0.12 |
| (2,968) | 1:B:9:MET:HB3 | 1:B:14:TRP:HB2 | 7 | 0.11 |
| (2,968) | 1:B:87:GLU:HG3 | 1:B:91:LYS:HE2 | 7 | 0.11 |
| (2,849) | 1:B:6:PRO:HB2 | 1:B:6:PRO:HD3 | 2 | 0.11 |
| (2,849) | 1:B:6:PRO:HB2 | 1:B:6:PRO:HD2 | 2 | 0.11 |
| (2,849) | 1:B:20:PRO:HB2 | 1:B:20:PRO:HD2 | 2 | 0.11 |
| (2,849) | 1:B:6:PRO:HB2 | 1:B:6:PRO:HD3 | 4 | 0.11 |
| (2,849) | 1:B:6:PRO:HB2 | 1:B:6:PRO:HD2 | 4 | 0.11 |
| (2,849) | 1:B:20:PRO:HB2 | 1:B:20:PRO:HD2 | 4 | 0.11 |
| (2,849) | 1:B:6:PRO:HB2 | 1:B:6:PRO:HD3 | 9 | 0.11 |
| (2,849) | 1:B:6:PRO:HB2 | 1:B:6:PRO:HD2 | 9 | 0.11 |
| (2,849) | 1:B:20:PRO:HB2 | 1:B:20:PRO:HD2 | 9 | 0.11 |
| (2,80) | 1:B:12:ASP:HB2 | 1:B:10:THR:HB | 4 | 0.11 |
| (2,80) | 1:B:71:ASP:HB2 | 1:B:72:LYS:HA | 4 | 0.11 |
| (2,759) | 1:B:12:ASP:H | 1:B:13:ALA:HB1 | 1 | 0.11 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|-----------------|-----------------|----------|---------------|
| (2,759) | 1:B:12:ASP:H | 1:B:13:ALA:HB2 | 1 | 0.11 |
| (2,759) | 1:B:12:ASP:H | 1:B:13:ALA:HB3 | 1 | 0.11 |
| (2,759) | 1:B:13:ALA:HB1 | 1:B:16:ASN:H | 1 | 0.11 |
| (2,759) | 1:B:13:ALA:HB2 | 1:B:16:ASN:H | 1 | 0.11 |
| (2,759) | 1:B:13:ALA:HB3 | 1:B:16:ASN:H | 1 | 0.11 |
| (2,667) | 1:B:22:LEU:HD11 | 1:B:14:TRP:HZ2 | 3 | 0.11 |
| (2,667) | 1:B:22:LEU:HD12 | 1:B:14:TRP:HZ2 | 3 | 0.11 |
| (2,667) | 1:B:22:LEU:HD13 | 1:B:14:TRP:HZ2 | 3 | 0.11 |
| (2,667) | 1:B:25:LEU:H | 1:B:22:LEU:HD11 | 3 | 0.11 |
| (2,667) | 1:B:25:LEU:H | 1:B:22:LEU:HD12 | 3 | 0.11 |
| (2,667) | 1:B:25:LEU:H | 1:B:22:LEU:HD13 | 3 | 0.11 |
| (2,667) | 1:B:36:LEU:HD12 | 1:B:39:ARG:H | 3 | 0.11 |
| (2,667) | 1:B:36:LEU:HD11 | 1:B:39:ARG:H | 3 | 0.11 |
| (2,667) | 1:B:36:LEU:HD13 | 1:B:39:ARG:H | 3 | 0.11 |
| (2,667) | 1:B:98:LEU:HD13 | 1:B:39:ARG:H | 3 | 0.11 |
| (2,667) | 1:B:98:LEU:HD11 | 1:B:39:ARG:H | 3 | 0.11 |
| (2,667) | 1:B:98:LEU:HD12 | 1:B:39:ARG:H | 3 | 0.11 |
| (2,667) | 1:B:99:ILE:H | 1:B:98:LEU:HD13 | 3 | 0.11 |
| (2,667) | 1:B:99:ILE:H | 1:B:98:LEU:HD11 | 3 | 0.11 |
| (2,667) | 1:B:99:ILE:H | 1:B:98:LEU:HD12 | 3 | 0.11 |
| (2,667) | 1:B:22:LEU:HD11 | 1:B:14:TRP:HZ2 | 6 | 0.11 |
| (2,667) | 1:B:22:LEU:HD12 | 1:B:14:TRP:HZ2 | 6 | 0.11 |
| (2,667) | 1:B:22:LEU:HD13 | 1:B:14:TRP:HZ2 | 6 | 0.11 |
| (2,667) | 1:B:25:LEU:H | 1:B:22:LEU:HD11 | 6 | 0.11 |
| (2,667) | 1:B:25:LEU:H | 1:B:22:LEU:HD12 | 6 | 0.11 |
| (2,667) | 1:B:25:LEU:H | 1:B:22:LEU:HD13 | 6 | 0.11 |
| (2,667) | 1:B:36:LEU:HD12 | 1:B:39:ARG:H | 6 | 0.11 |
| (2,667) | 1:B:36:LEU:HD11 | 1:B:39:ARG:H | 6 | 0.11 |
| (2,667) | 1:B:36:LEU:HD13 | 1:B:39:ARG:H | 6 | 0.11 |
| (2,667) | 1:B:98:LEU:HD13 | 1:B:39:ARG:H | 6 | 0.11 |
| (2,667) | 1:B:98:LEU:HD11 | 1:B:39:ARG:H | 6 | 0.11 |
| (2,667) | 1:B:98:LEU:HD12 | 1:B:39:ARG:H | 6 | 0.11 |
| (2,667) | 1:B:99:ILE:H | 1:B:98:LEU:HD13 | 6 | 0.11 |
| (2,667) | 1:B:99:ILE:H | 1:B:98:LEU:HD11 | 6 | 0.11 |
| (2,667) | 1:B:99:ILE:H | 1:B:98:LEU:HD12 | 6 | 0.11 |
| (2,455) | 1:B:59:LYS:HD2 | 1:B:62:GLN:HB3 | 10 | 0.11 |
| (2,455) | 1:B:65:LEU:HG | 1:B:65:LEU:HB3 | 10 | 0.11 |
| (2,45) | 1:B:61:CYS:HB3 | 1:B:65:LEU:HG | 1 | 0.11 |
| (2,45) | 1:B:61:CYS:HB3 | 1:B:89:ILE:HG13 | 1 | 0.11 |
| (2,45) | 1:B:92:ASP:HB3 | 1:B:95:GLU:HB2 | 1 | 0.11 |
| (2,434) | 1:B:51:VAL:HA | 1:B:24:ASP:HA | 10 | 0.11 |
| (2,434) | 1:B:51:VAL:HA | 1:B:52:THR:HB | 10 | 0.11 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|-----------------|-----------------|----------|---------------|
| (2,434) | 1:B:51:VAL:HA | 1:B:54:ILE:HA | 10 | 0.11 |
| (2,411) | 1:B:26:ILE:HG13 | 1:B:23:PRO:HB3 | 8 | 0.11 |
| (2,411) | 1:B:30:PHE:HB2 | 1:B:31:ILE:HG12 | 8 | 0.11 |
| (2,411) | 1:B:31:ILE:HG12 | 1:B:32:GLN:HG3 | 8 | 0.11 |
| (2,409) | 1:B:56:GLU:HG2 | 1:B:96:LYS:HD3 | 7 | 0.11 |
| (2,409) | 1:B:97:HIS:HB3 | 1:B:96:LYS:HD3 | 7 | 0.11 |
| (2,409) | 1:B:56:GLU:HG2 | 1:B:96:LYS:HD2 | 7 | 0.11 |
| (2,409) | 1:B:97:HIS:HB3 | 1:B:96:LYS:HD2 | 7 | 0.11 |
| (2,364) | 1:B:23:PRO:HG3 | 1:B:51:VAL:HG13 | 7 | 0.11 |
| (2,364) | 1:B:23:PRO:HG3 | 1:B:51:VAL:HG11 | 7 | 0.11 |
| (2,364) | 1:B:23:PRO:HG3 | 1:B:51:VAL:HG12 | 7 | 0.11 |
| (2,364) | 1:B:23:PRO:HG3 | 1:B:51:VAL:HG21 | 7 | 0.11 |
| (2,364) | 1:B:23:PRO:HG3 | 1:B:51:VAL:HG23 | 7 | 0.11 |
| (2,364) | 1:B:23:PRO:HG3 | 1:B:51:VAL:HG22 | 7 | 0.11 |
| (2,364) | 1:B:55:PRO:HG3 | 1:B:51:VAL:HG21 | 7 | 0.11 |
| (2,364) | 1:B:55:PRO:HG3 | 1:B:51:VAL:HG23 | 7 | 0.11 |
| (2,364) | 1:B:55:PRO:HG3 | 1:B:51:VAL:HG22 | 7 | 0.11 |
| (2,341) | 1:B:91:LYS:HD3 | 1:B:91:LYS:HA | 1 | 0.11 |
| (2,341) | 1:B:91:LYS:HD2 | 1:B:91:LYS:HA | 1 | 0.11 |
| (2,341) | 1:B:38:LYS:HD3 | 1:B:38:LYS:HA | 1 | 0.11 |
| (2,341) | 1:B:38:LYS:HD2 | 1:B:38:LYS:HA | 1 | 0.11 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:85:LEU:HD23 | 5 | 0.11 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:85:LEU:HD21 | 5 | 0.11 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:85:LEU:HD22 | 5 | 0.11 |
| (2,282) | 1:B:60:LYS:HD3 | 1:B:89:ILE:HG23 | 5 | 0.11 |
| (2,282) | 1:B:60:LYS:HD3 | 1:B:89:ILE:HG21 | 5 | 0.11 |
| (2,282) | 1:B:60:LYS:HD3 | 1:B:89:ILE:HG22 | 5 | 0.11 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:21:LEU:HD11 | 5 | 0.11 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:21:LEU:HD13 | 5 | 0.11 |
| (2,282) | 1:B:18:MET:HG2 | 1:B:21:LEU:HD12 | 5 | 0.11 |
| (2,266) | 1:B:11:LYS:HB3 | 1:B:66:TYR:HD1 | 2 | 0.11 |
| (2,266) | 1:B:11:LYS:HB3 | 1:B:66:TYR:HD2 | 2 | 0.11 |
| (2,266) | 1:B:45:MET:HG3 | 1:B:40:PHE:HE1 | 2 | 0.11 |
| (2,266) | 1:B:45:MET:HG3 | 1:B:40:PHE:HE2 | 2 | 0.11 |
| (2,266) | 1:B:45:MET:HG3 | 1:B:93:PHE:HE2 | 2 | 0.11 |
| (2,266) | 1:B:45:MET:HG3 | 1:B:93:PHE:HE1 | 2 | 0.11 |
| (2,174) | 1:B:52:THR:H | 1:B:49:GLN:HG3 | 2 | 0.11 |
| (2,174) | 1:B:52:THR:H | 1:B:49:GLN:HG2 | 2 | 0.11 |
| (2,174) | 1:B:62:GLN:HG3 | 1:B:14:TRP:HE3 | 2 | 0.11 |
| (2,171) | 1:B:32:GLN:HG2 | 1:B:33:ASP:H | 2 | 0.11 |
| (2,171) | 1:B:62:GLN:HG2 | 1:B:14:TRP:HE3 | 2 | 0.11 |
| (2,171) | 1:B:62:GLN:HG3 | 1:B:14:TRP:HE3 | 2 | 0.11 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,1517) | 1:B:61:CYS:H | 1:B:60:LYS:HD3 | 1 | 0.11 |
| (2,1517) | 1:B:61:CYS:H | 1:B:60:LYS:HG3 | 1 | 0.11 |
| (2,1385) | 1:B:64:GLU:H | 1:B:60:LYS:HD2 | 6 | 0.11 |
| (2,1385) | 1:B:64:GLU:H | 1:B:60:LYS:HG3 | 6 | 0.11 |
| (2,1385) | 1:B:64:GLU:H | 1:B:60:LYS:HD2 | 8 | 0.11 |
| (2,1385) | 1:B:64:GLU:H | 1:B:60:LYS:HG3 | 8 | 0.11 |
| (2,1273) | 1:B:62:GLN:H | 1:B:59:LYS:HB2 | 2 | 0.11 |
| (2,1273) | 1:B:62:GLN:H | 1:B:59:LYS:HB3 | 2 | 0.11 |
| (2,1273) | 1:B:62:GLN:H | 1:B:60:LYS:HB2 | 2 | 0.11 |
| (2,1273) | 1:B:62:GLN:H | 1:B:59:LYS:HB2 | 6 | 0.11 |
| (2,1273) | 1:B:62:GLN:H | 1:B:59:LYS:HB3 | 6 | 0.11 |
| (2,1273) | 1:B:62:GLN:H | 1:B:60:LYS:HB2 | 6 | 0.11 |
| (2,124) | 1:B:39:ARG:H | 1:B:40:PHE:HB3 | 4 | 0.11 |
| (2,124) | 1:B:43:ILE:H | 1:B:40:PHE:HB3 | 4 | 0.11 |
| (2,1140) | 1:B:54:ILE:H | 1:B:89:ILE:HG23 | 7 | 0.11 |
| (2,1140) | 1:B:54:ILE:H | 1:B:89:ILE:HG21 | 7 | 0.11 |
| (2,1140) | 1:B:54:ILE:H | 1:B:89:ILE:HG22 | 7 | 0.11 |
| (2,1140) | 1:B:89:ILE:HG23 | 1:B:56:GLU:H | 7 | 0.11 |
| (2,1140) | 1:B:89:ILE:HG21 | 1:B:56:GLU:H | 7 | 0.11 |
| (2,1140) | 1:B:89:ILE:HG22 | 1:B:56:GLU:H | 7 | 0.11 |
| (2,1140) | 1:B:57:SER:H | 1:B:89:ILE:HG23 | 7 | 0.11 |
| (2,1140) | 1:B:57:SER:H | 1:B:89:ILE:HG21 | 7 | 0.11 |
| (2,1140) | 1:B:57:SER:H | 1:B:89:ILE:HG22 | 7 | 0.11 |
| (2,1139) | 1:B:61:CYS:H | 1:B:89:ILE:HG23 | 1 | 0.11 |
| (2,1139) | 1:B:61:CYS:H | 1:B:89:ILE:HG21 | 1 | 0.11 |
| (2,1139) | 1:B:61:CYS:H | 1:B:89:ILE:HG22 | 1 | 0.11 |
| (2,1139) | 1:B:92:ASP:H | 1:B:89:ILE:HG23 | 1 | 0.11 |
| (2,1139) | 1:B:92:ASP:H | 1:B:89:ILE:HG21 | 1 | 0.11 |
| (2,1139) | 1:B:92:ASP:H | 1:B:89:ILE:HG22 | 1 | 0.11 |
| (2,1123) | 1:B:23:PRO:HG3 | 1:B:51:VAL:HG13 | 7 | 0.11 |
| (2,1123) | 1:B:23:PRO:HG3 | 1:B:51:VAL:HG11 | 7 | 0.11 |
| (2,1123) | 1:B:23:PRO:HG3 | 1:B:51:VAL:HG12 | 7 | 0.11 |
| (2,1123) | 1:B:55:PRO:HG3 | 1:B:51:VAL:HG13 | 7 | 0.11 |
| (2,1123) | 1:B:55:PRO:HG3 | 1:B:51:VAL:HG11 | 7 | 0.11 |
| (2,1123) | 1:B:55:PRO:HG3 | 1:B:51:VAL:HG12 | 7 | 0.11 |
| (2,1123) | 1:B:23:PRO:HG3 | 1:B:51:VAL:HG21 | 7 | 0.11 |
| (2,1123) | 1:B:23:PRO:HG3 | 1:B:51:VAL:HG23 | 7 | 0.11 |
| (2,1123) | 1:B:23:PRO:HG3 | 1:B:51:VAL:HG22 | 7 | 0.11 |
| (2,1123) | 1:B:55:PRO:HG3 | 1:B:51:VAL:HG21 | 7 | 0.11 |
| (2,1123) | 1:B:55:PRO:HG3 | 1:B:51:VAL:HG23 | 7 | 0.11 |
| (2,1123) | 1:B:55:PRO:HG3 | 1:B:51:VAL:HG22 | 7 | 0.11 |
| (2,1013) | 1:B:18:MET:HG2 | 1:B:15:LEU:HA | 4 | 0.11 |

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| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,1013) | 1:B:18:MET:HG2 | 1:B:20:PRO:HD3 | 4 | 0.11 |
| (2,1013) | 1:B:18:MET:HG2 | 1:B:15:LEU:HA | 7 | 0.11 |
| (2,1013) | 1:B:18:MET:HG2 | 1:B:20:PRO:HD3 | 7 | 0.11 |
| (2,1005) | 1:B:9:MET:HG3 | 1:B:8:GLU:HG2 | 4 | 0.11 |
| (2,1005) | 1:B:9:MET:HG3 | 1:B:8:GLU:HG3 | 4 | 0.11 |
| (2,1005) | 1:B:9:MET:HG2 | 1:B:8:GLU:HG2 | 4 | 0.11 |
| (2,1005) | 1:B:9:MET:HG2 | 1:B:8:GLU:HG3 | 4 | 0.11 |
| (1,93) | 1:B:30:PHE:HB2 | 1:B:36:LEU:HB3 | 8 | 0.11 |
| (1,846) | 1:B:96:LYS:HB2 | 1:B:97:HIS:HA | 7 | 0.11 |
| (1,826) | 1:B:91:LYS:H | 1:B:89:ILE:HG23 | 9 | 0.11 |
| (1,826) | 1:B:91:LYS:H | 1:B:89:ILE:HG21 | 9 | 0.11 |
| (1,826) | 1:B:91:LYS:H | 1:B:89:ILE:HG22 | 9 | 0.11 |
| (1,740) | 1:B:11:LYS:HB3 | 1:B:11:LYS:HE2 | 5 | 0.11 |
| (1,674) | 1:B:5:ASN:HA | 1:B:5:ASN:HB2 | 8 | 0.11 |
| (1,500) | 1:B:36:LEU:HD12 | 1:B:36:LEU:HA | 4 | 0.11 |
| (1,500) | 1:B:36:LEU:HD11 | 1:B:36:LEU:HA | 4 | 0.11 |
| (1,500) | 1:B:36:LEU:HD13 | 1:B:36:LEU:HA | 4 | 0.11 |
| (1,430) | 1:B:47:TYR:HB3 | 1:B:47:TYR:HA | 1 | 0.11 |
| (1,430) | 1:B:47:TYR:HB3 | 1:B:47:TYR:HA | 2 | 0.11 |
| (1,430) | 1:B:47:TYR:HB3 | 1:B:47:TYR:HA | 3 | 0.11 |
| (1,430) | 1:B:47:TYR:HB3 | 1:B:47:TYR:HA | 6 | 0.11 |
| (1,430) | 1:B:47:TYR:HB3 | 1:B:47:TYR:HA | 7 | 0.11 |
| (1,430) | 1:B:47:TYR:HB3 | 1:B:47:TYR:HA | 8 | 0.11 |
| (1,430) | 1:B:47:TYR:HB3 | 1:B:47:TYR:HA | 10 | 0.11 |
| (1,406) | 1:B:53:LEU:HG | 1:B:53:LEU:HA | 8 | 0.11 |
| (1,406) | 1:B:53:LEU:HG | 1:B:53:LEU:HA | 9 | 0.11 |
| (1,400) | 1:B:28:LYS:HG3 | 1:B:28:LYS:HA | 7 | 0.11 |
| (1,380) | 1:B:81:TRP:HE1 | 1:B:70:PRO:HG2 | 9 | 0.11 |
| (1,380) | 1:B:81:TRP:HE1 | 1:B:70:PRO:HG2 | 10 | 0.11 |
| (1,37) | 1:B:86:GLY:H | 1:B:85:LEU:HB3 | 9 | 0.11 |
| (1,325) | 1:B:81:TRP:HB3 | 1:B:81:TRP:HD1 | 2 | 0.11 |
| (1,325) | 1:B:81:TRP:HB3 | 1:B:81:TRP:HD1 | 6 | 0.11 |
| (1,191) | 1:B:96:LYS:HB2 | 1:B:96:LYS:HA | 2 | 0.11 |
| (1,191) | 1:B:96:LYS:HB2 | 1:B:96:LYS:HA | 6 | 0.11 |
| (1,1130) | 1:B:39:ARG:H | 1:B:38:LYS:HG2 | 4 | 0.11 |
| (1,1130) | 1:B:39:ARG:H | 1:B:38:LYS:HG2 | 8 | 0.11 |
| (1,1013) | 1:B:50:CYS:H | 1:B:53:LEU:HD22 | 9 | 0.11 |
| (1,1013) | 1:B:50:CYS:H | 1:B:53:LEU:HD21 | 9 | 0.11 |
| (1,1013) | 1:B:50:CYS:H | 1:B:53:LEU:HD23 | 9 | 0.11 |

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

No dihedral-angle restraints found