



Full wwPDB NMR Structure Validation Report ⓘ

Jun 4, 2023 – 05:02 PM EDT

PDB ID : 2LGV
BMRB ID : 17824
Title : Rbx1
Authors : Spratt, D.E.; Shaw, G.S.
Deposited on : 2011-08-02

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

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

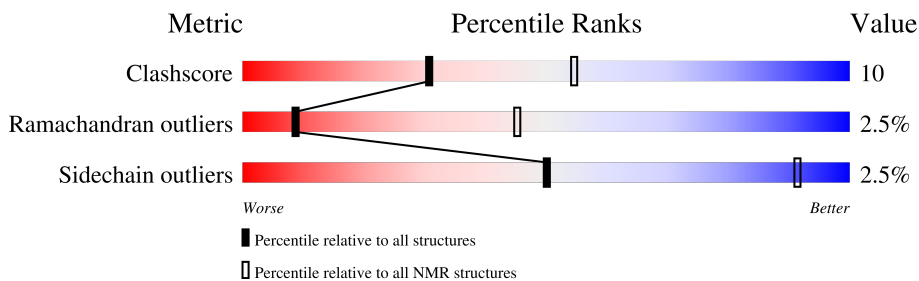
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

SOLUTION NMR

The overall completeness of chemical shifts assignment is 84%.

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 $\leq 5\%$

| Mol | Chain | Length | Quality of chain |
|-----|-------|--------|------------------|
| 1 | A | 100 | |

2 Ensemble composition and analysis i

This entry contains 20 models. Model 3 is the overall representative, medoid model (most similar to other models). The authors have identified model 1 as representative, based on the following criterion: *closest to the average*.

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

| Well-defined (core) protein residues | | | |
|--------------------------------------|----------------------------|-------------------|--------------|
| Well-defined core | Residue range (total) | Backbone RMSD (Å) | Medoid model |
| 1 | A:40-A:57, A:67-A:104 (56) | 0.39 | 3 |

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

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

The models can be grouped into 4 clusters and 1 single-model cluster was found.

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

3 Entry composition

There are 2 unique types of molecules in this entry. The entry contains 1507 atoms, of which 724 are hydrogens and 0 are deuteriums.

- Molecule 1 is a protein called E3 ubiquitin-protein ligase RBX1.

| Mol | Chain | Residues | Atoms | | | | | | Trace |
|-----|-------|----------|-------|-----|-----|-----|-----|---|-------|
| | | | Total | C | H | N | O | S | |
| 1 | A | 100 | 1504 | 479 | 724 | 147 | 145 | 9 | 0 |

There are 7 discrepancies between the modelled and reference sequences:

| Chain | Residue | Modelled | Actual | Comment | Reference |
|-------|---------|----------|--------|---------------------|------------|
| A | 9 | GLY | - | expression tag | UNP P62877 |
| A | 10 | GLY | - | expression tag | UNP P62877 |
| A | 11 | GLY | - | expression tag | UNP P62877 |
| A | 27 | SER | TRP | engineered mutation | UNP P62877 |
| A | 30 | SER | VAL | engineered mutation | UNP P62877 |
| A | 32 | GLN | LEU | engineered mutation | UNP P62877 |
| A | 33 | SER | TRP | engineered mutation | UNP P62877 |

- Molecule 2 is ZINC ION (three-letter code: ZN) (formula: Zn).

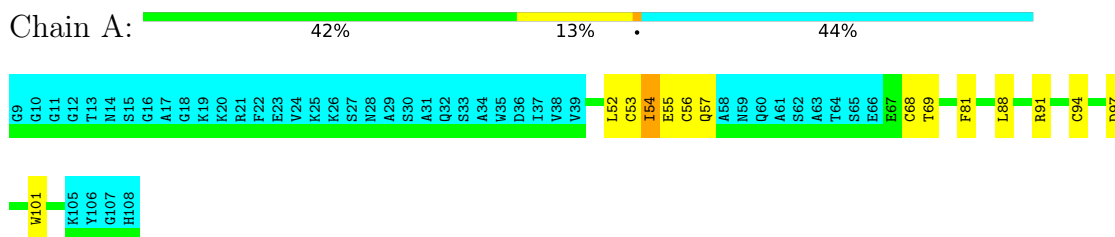
| Mol | Chain | Residues | Atoms | |
|-----|-------|----------|-------|----|
| | | | Total | Zn |
| 2 | A | 3 | 3 | 3 |

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: E3 ubiquitin-protein ligase RBX1

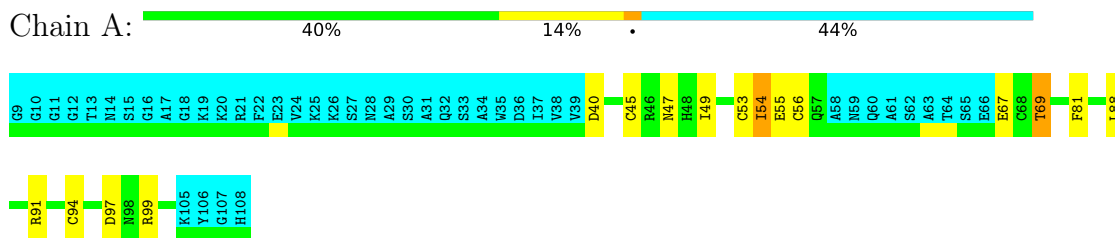


4.2 Scores per residue for each member of the ensemble

Colouring as in section 4.1 above.

4.2.1 Score per residue for model 1

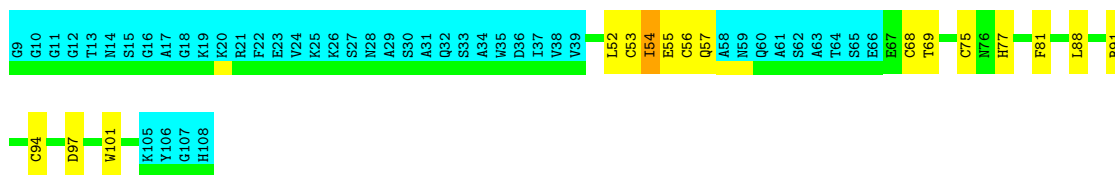
- Molecule 1: E3 ubiquitin-protein ligase RBX1



4.2.2 Score per residue for model 2

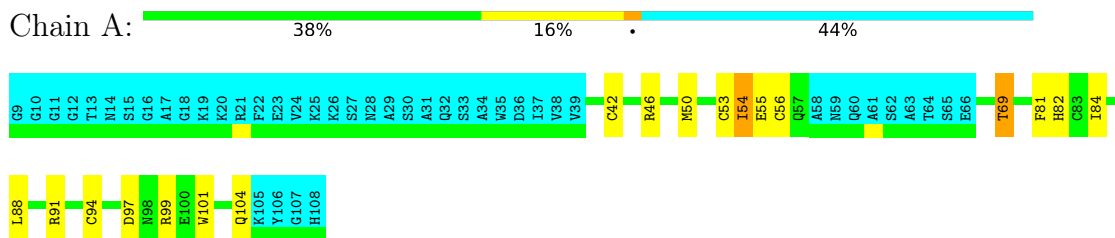
- Molecule 1: E3 ubiquitin-protein ligase RBX1





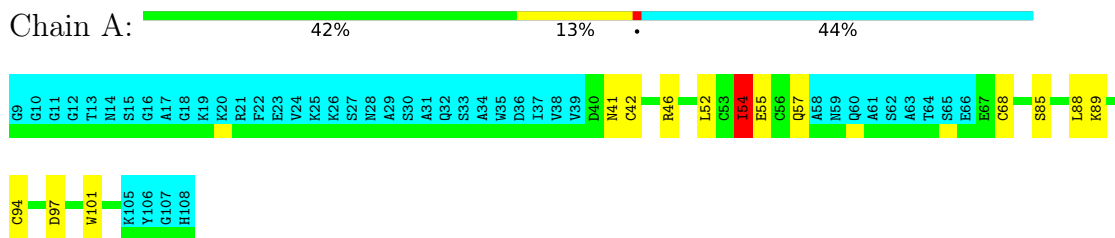
4.2.3 Score per residue for model 3 (medoid)

- Molecule 1: E3 ubiquitin-protein ligase RBX1



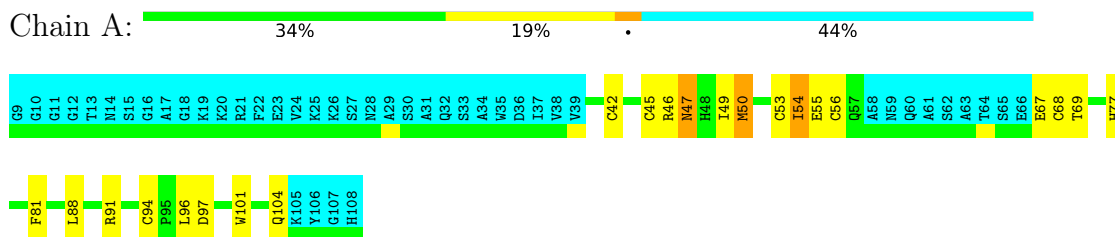
4.2.4 Score per residue for model 4

- Molecule 1: E3 ubiquitin-protein ligase RBX1



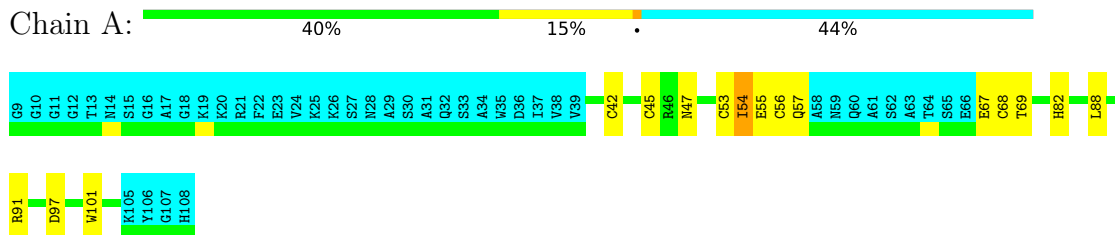
4.2.5 Score per residue for model 5

- Molecule 1: E3 ubiquitin-protein ligase RBX1



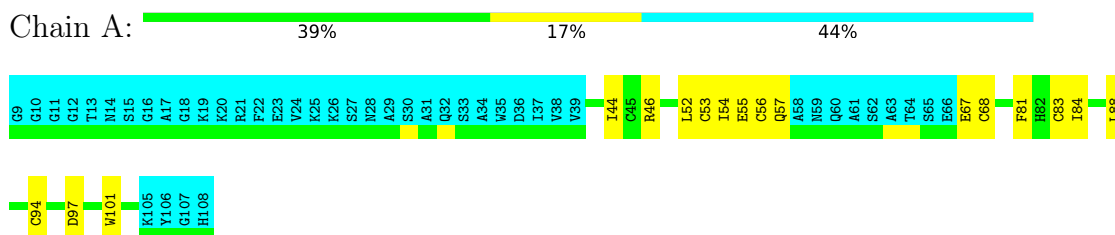
4.2.6 Score per residue for model 6

- Molecule 1: E3 ubiquitin-protein ligase RBX1



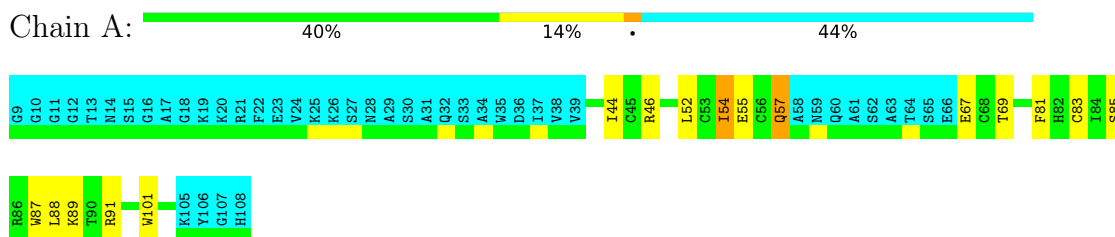
4.2.7 Score per residue for model 7

- Molecule 1: E3 ubiquitin-protein ligase RBX1



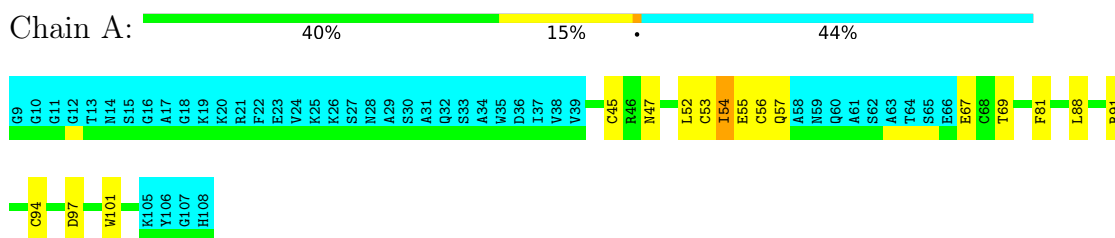
4.2.8 Score per residue for model 8

- Molecule 1: E3 ubiquitin-protein ligase RBX1



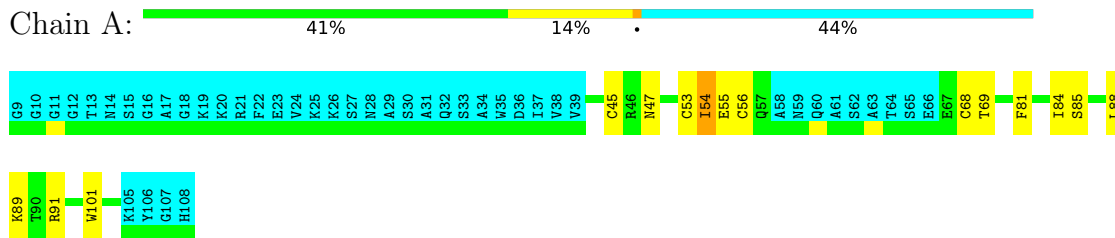
4.2.9 Score per residue for model 9

- Molecule 1: E3 ubiquitin-protein ligase RBX1



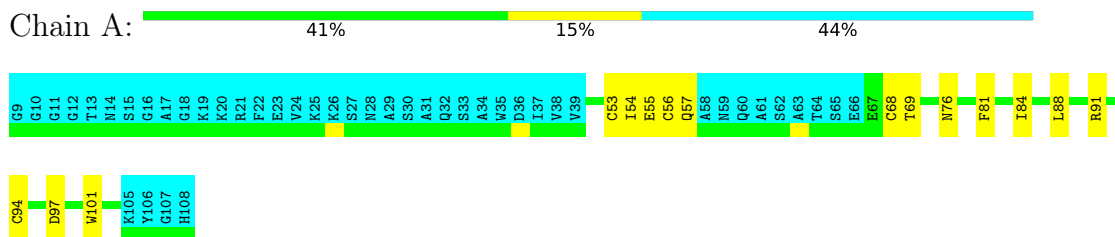
4.2.10 Score per residue for model 10

- Molecule 1: E3 ubiquitin-protein ligase RBX1



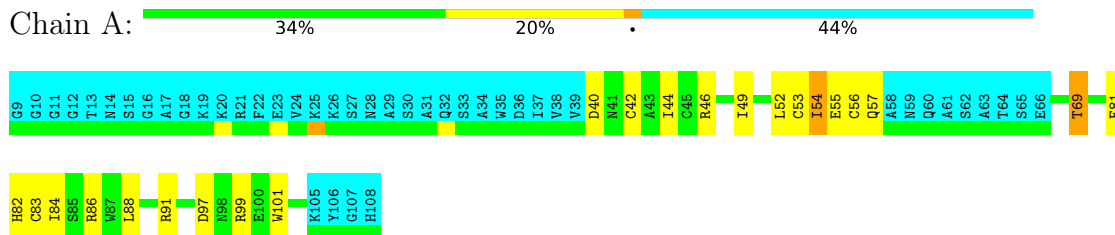
4.2.11 Score per residue for model 11

- Molecule 1: E3 ubiquitin-protein ligase RBX1



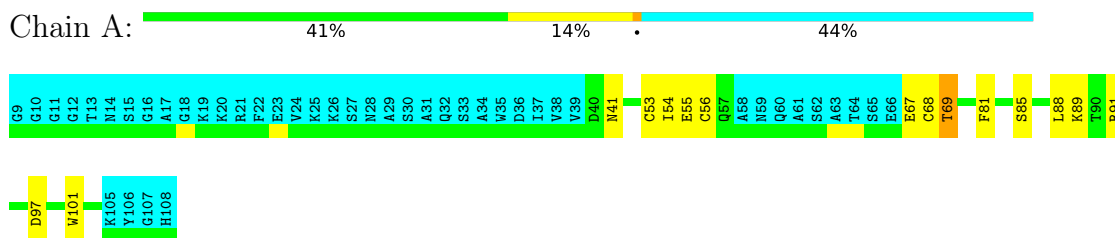
4.2.12 Score per residue for model 12

- Molecule 1: E3 ubiquitin-protein ligase RBX1



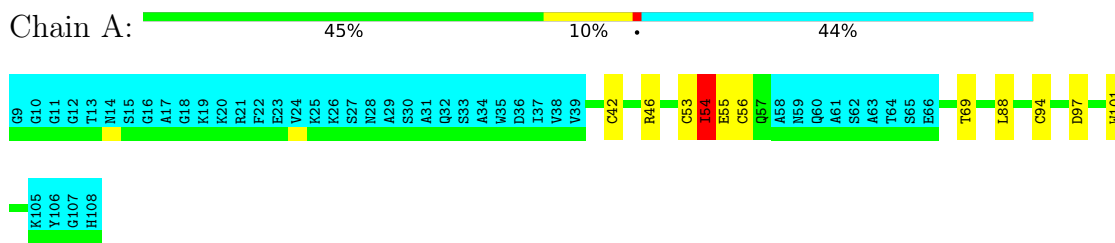
4.2.13 Score per residue for model 13

- Molecule 1: E3 ubiquitin-protein ligase RBX1



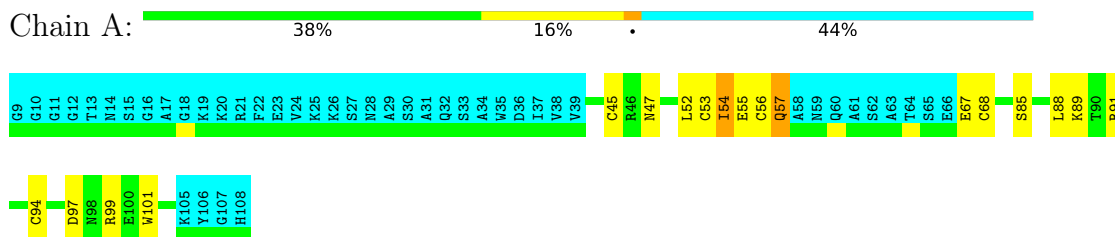
4.2.14 Score per residue for model 14

- Molecule 1: E3 ubiquitin-protein ligase RBX1



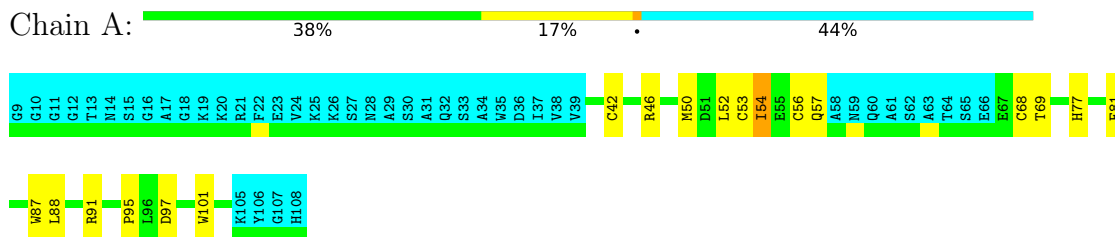
4.2.15 Score per residue for model 15

- Molecule 1: E3 ubiquitin-protein ligase RBX1



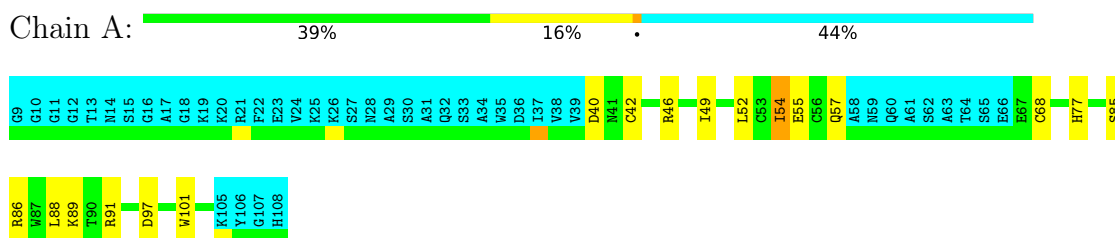
4.2.16 Score per residue for model 16

- Molecule 1: E3 ubiquitin-protein ligase RBX1



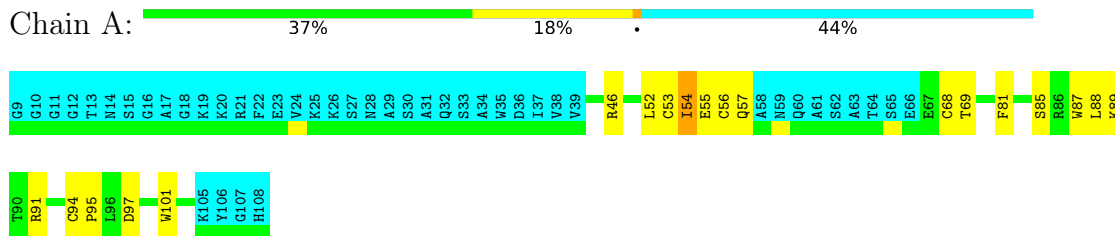
4.2.17 Score per residue for model 17

- Molecule 1: E3 ubiquitin-protein ligase RBX1



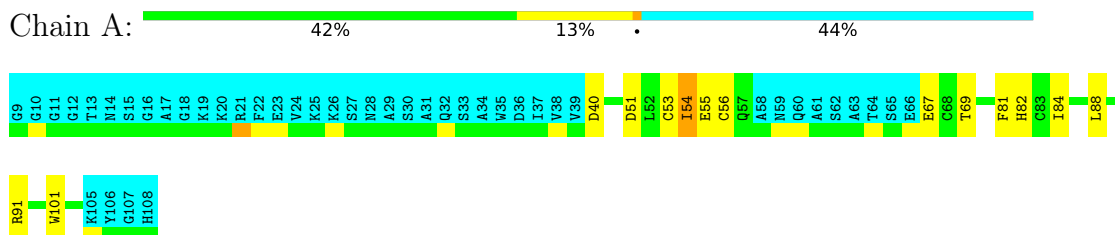
4.2.18 Score per residue for model 18

- Molecule 1: E3 ubiquitin-protein ligase RBX1



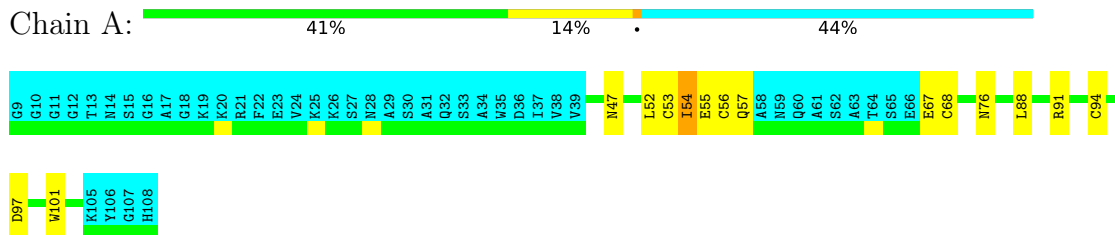
4.2.19 Score per residue for model 19

- Molecule 1: E3 ubiquitin-protein ligase RBX1



4.2.20 Score per residue for model 20

- Molecule 1: E3 ubiquitin-protein ligase RBX1



5 Refinement protocol and experimental data overview

The models were refined using the following method: *DGSA-distance geometry simulated annealing, torsion angle dynamics*.

Of the 20 calculated structures, 20 were deposited, based on the following criterion: *target function*.

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

| Software name | Classification | Version |
|---------------|-----------------------|-----------|
| CYANA | structure solution | 2.1 |
| X-PLOR NIH | refinement | |
| TALOS | geometry optimization | TALOSPlus |
| Procheck | refinement | |

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

| | |
|--|----------------|
| Chemical shift file(s) | working_cs.cif |
| Number of chemical shift lists | 1 |
| Total number of shifts | 848 |
| Number of shifts mapped to atoms | 848 |
| Number of unparsed shifts | 0 |
| Number of shifts with mapping errors | 0 |
| Number of shifts with mapping warnings | 0 |
| Assignment completeness (well-defined parts) | 84% |

6 Model quality i

6.1 Standard geometry i

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

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 | A | 466 | 423 | 423 | 9±2 |
| All | All | 9380 | 8460 | 8461 | 174 |

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 10.

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

| Atom-1 | Atom-2 | Clash(Å) | Distance(Å) | Models | |
|-----------------|-----------------|----------|-------------|--------|-------|
| | | | | Worst | Total |
| 1:A:52:LEU:HD13 | 1:A:57:GLN:HA | 0.81 | 1.50 | 4 | 10 |
| 1:A:88:LEU:HA | 1:A:91:ARG:O | 0.62 | 1.94 | 9 | 17 |
| 1:A:53:CYS:HB2 | 1:A:56:CYS:SG | 0.60 | 2.36 | 10 | 17 |
| 1:A:42:CYS:O | 1:A:46:ARG:HA | 0.58 | 1.98 | 17 | 7 |
| 1:A:54:ILE:HG13 | 1:A:55:GLU:N | 0.57 | 2.15 | 11 | 3 |
| 1:A:85:SER:O | 1:A:89:LYS:HG3 | 0.57 | 1.99 | 10 | 2 |
| 1:A:52:LEU:CD1 | 1:A:57:GLN:HA | 0.57 | 2.28 | 17 | 2 |
| 1:A:45:CYS:SG | 1:A:47:ASN:HB2 | 0.57 | 2.39 | 6 | 5 |
| 1:A:94:CYS:HB2 | 1:A:97:ASP:HB2 | 0.57 | 1.76 | 2 | 12 |
| 1:A:85:SER:O | 1:A:89:LYS:HG2 | 0.56 | 2.00 | 13 | 5 |
| 1:A:88:LEU:HD11 | 1:A:101:TRP:CD1 | 0.55 | 2.37 | 17 | 19 |
| 1:A:68:CYS:O | 1:A:69:THR:HG23 | 0.54 | 2.02 | 11 | 4 |

Continued on next page...

Continued from previous page...

| Atom-1 | Atom-2 | Clash(Å) | Distance(Å) | Models | |
|-----------------|-----------------|----------|-------------|--------|-------|
| | | | | Worst | Total |
| 1:A:69:THR:HB | 1:A:81:PHE:HB3 | 0.54 | 1.80 | 11 | 13 |
| 1:A:69:THR:OG1 | 1:A:82:HIS:HB2 | 0.53 | 2.04 | 6 | 3 |
| 1:A:54:ILE:HG13 | 1:A:55:GLU:H | 0.53 | 1.63 | 13 | 17 |
| 1:A:40:ASP:C | 1:A:49:ILE:HB | 0.52 | 2.24 | 1 | 3 |
| 1:A:94:CYS:CB | 1:A:97:ASP:HB2 | 0.51 | 2.35 | 2 | 8 |
| 1:A:97:ASP:HB3 | 1:A:99:ARG:HB3 | 0.48 | 1.84 | 3 | 1 |
| 1:A:54:ILE:O | 1:A:57:GLN:HG2 | 0.47 | 2.10 | 17 | 1 |
| 1:A:81:PHE:HA | 1:A:84:ILE:HG22 | 0.47 | 1.86 | 7 | 6 |
| 1:A:77:HIS:CE1 | 1:A:97:ASP:OD2 | 0.47 | 2.68 | 16 | 2 |
| 1:A:75:CYS:SG | 1:A:77:HIS:HB2 | 0.46 | 2.51 | 2 | 1 |
| 1:A:44:ILE:HB | 1:A:83:CYS:HB3 | 0.46 | 1.88 | 12 | 3 |
| 1:A:52:LEU:HD13 | 1:A:57:GLN:HB3 | 0.46 | 1.86 | 18 | 1 |
| 1:A:97:ASP:HB3 | 1:A:99:ARG:HG2 | 0.45 | 1.87 | 15 | 2 |
| 1:A:87:TRP:CZ2 | 1:A:95:PRO:HA | 0.45 | 2.47 | 18 | 2 |
| 1:A:97:ASP:HB3 | 1:A:99:ARG:CG | 0.43 | 2.44 | 15 | 1 |
| 1:A:42:CYS:HB3 | 1:A:45:CYS:SG | 0.42 | 2.53 | 6 | 1 |
| 1:A:49:ILE:HG23 | 1:A:50:MET:SD | 0.42 | 2.55 | 5 | 1 |
| 1:A:45:CYS:SG | 1:A:47:ASN:HB3 | 0.41 | 2.54 | 15 | 1 |
| 1:A:97:ASP:HB3 | 1:A:99:ARG:CB | 0.41 | 2.45 | 3 | 1 |
| 1:A:77:HIS:CE1 | 1:A:96:LEU:HB2 | 0.41 | 2.49 | 5 | 1 |
| 1:A:83:CYS:O | 1:A:86:ARG:HB3 | 0.40 | 2.17 | 12 | 1 |
| 1:A:87:TRP:CZ2 | 1:A:91:ARG:HG3 | 0.40 | 2.51 | 8 | 1 |

6.3 Torsion angles [i](#)

6.3.1 Protein backbone [i](#)

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

| Mol | Chain | Analysed | Favoured | Allowed | Outliers | Percentiles | |
|-----|-------|-----------------|--------------|------------|------------|-------------|----|
| 1 | A | 56/100 (56%) | 51±1 (90±2%) | 4±1 (7±2%) | 1±1 (2±1%) | 9 | 45 |
| All | All | 1120/2000 (56%) | 1012 (90%) | 80 (7%) | 28 (2%) | 9 | 45 |

All 3 unique Ramachandran outliers are listed below. They are sorted by the frequency of occurrence in the ensemble.

| Mol | Chain | Res | Type | Models (Total) |
|-----|-------|-----|------|----------------|
| 1 | A | 54 | ILE | 17 |
| 1 | A | 68 | CYS | 9 |
| 1 | A | 46 | ARG | 2 |

6.3.2 Protein sidechains [i](#)

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

| Mol | Chain | Analysed | Rotameric | Outliers | Percentiles | |
|-----|-------|-----------------|--------------|------------|-------------|----|
| 1 | A | 52/82 (63%) | 51±1 (98±2%) | 1±1 (2±2%) | 50 | 91 |
| All | All | 1040/1640 (63%) | 1014 (98%) | 26 (2%) | 50 | 91 |

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 | A | 69 | THR | 5 |
| 1 | A | 57 | GLN | 4 |
| 1 | A | 50 | MET | 3 |
| 1 | A | 54 | ILE | 3 |
| 1 | A | 104 | GLN | 2 |
| 1 | A | 41 | ASN | 2 |
| 1 | A | 47 | ASN | 2 |
| 1 | A | 97 | ASP | 2 |
| 1 | A | 76 | ASN | 2 |
| 1 | A | 99 | ARG | 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](#)

Of 3 ligands modelled in this entry, 3 are monoatomic - leaving 0 for Mogul analysis.

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 84% for the well-defined parts and 65% for the entire structure.

7.1 Chemical shift list 1

File name: working_cs.cif

Chemical shift list name: *assigned_chem_shift_list_1*

7.1.1 Bookkeeping i

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

| | |
|---|-----|
| Total number of shifts | 848 |
| Number of shifts mapped to atoms | 848 |
| Number of unparsed shifts | 0 |
| Number of shifts with mapping errors | 0 |
| Number of shifts with mapping warnings | 0 |
| Number of shift outliers (ShiftChecker) | 4 |

7.1.2 Chemical shift referencing i

The following table shows the suggested chemical shift referencing corrections.

| Nucleus | # values | Correction \pm precision, ppm | Suggested action |
|------------------------|----------|---------------------------------|-------------------------|
| $^{13}\text{C}_\alpha$ | 74 | -0.66 ± 0.30 | Should be applied |
| $^{13}\text{C}_\beta$ | 72 | -0.16 ± 0.08 | None needed (< 0.5 ppm) |
| $^{13}\text{C}'$ | 71 | -0.13 ± 0.12 | None needed (< 0.5 ppm) |
| ^{15}N | 72 | 0.03 ± 0.36 | None needed (< 0.5 ppm) |

7.1.3 Completeness of resonance assignments i

The following table shows the completeness of the chemical shift assignments for the well-defined regions of the structure. The overall completeness is 84%, i.e. 654 atoms were assigned a chemical shift out of a possible 777. 0 out of 6 assigned methyl groups (LEU and VAL) were assigned stereospecifically.

| | Total | ^1H | ^{13}C | ^{15}N |
|-----------|---------------|---------------|-----------------|-----------------|
| Backbone | 275/279 (99%) | 111/112 (99%) | 110/112 (98%) | 54/55 (98%) |
| Sidechain | 311/404 (77%) | 206/260 (79%) | 105/124 (85%) | 0/20 (0%) |

Continued on next page...

Continued from previous page...

| | Total | ¹ H | ¹³ C | ¹⁵ N |
|----------|---------------|----------------|-----------------|-----------------|
| Aromatic | 68/94 (72%) | 34/49 (69%) | 31/38 (82%) | 3/7 (43%) |
| Overall | 654/777 (84%) | 351/421 (83%) | 246/274 (90%) | 57/82 (70%) |

The following table shows the completeness of the chemical shift assignments for the full structure. The overall completeness is 65%, i.e. 848 atoms were assigned a chemical shift out of a possible 1297. 0 out of 9 assigned methyl groups (LEU and VAL) were assigned stereospecifically.

| | Total | ¹ H | ¹³ C | ¹⁵ N |
|-----------|----------------|----------------|-----------------|-----------------|
| Backbone | 365/506 (72%) | 148/207 (71%) | 145/200 (72%) | 72/99 (73%) |
| Sidechain | 394/659 (60%) | 259/424 (61%) | 134/202 (66%) | 1/33 (3%) |
| Aromatic | 89/132 (67%) | 44/68 (65%) | 42/55 (76%) | 3/9 (33%) |
| Overall | 848/1297 (65%) | 451/699 (65%) | 321/457 (70%) | 76/141 (54%) |

7.1.4 Statistically unusual chemical shifts [i](#)

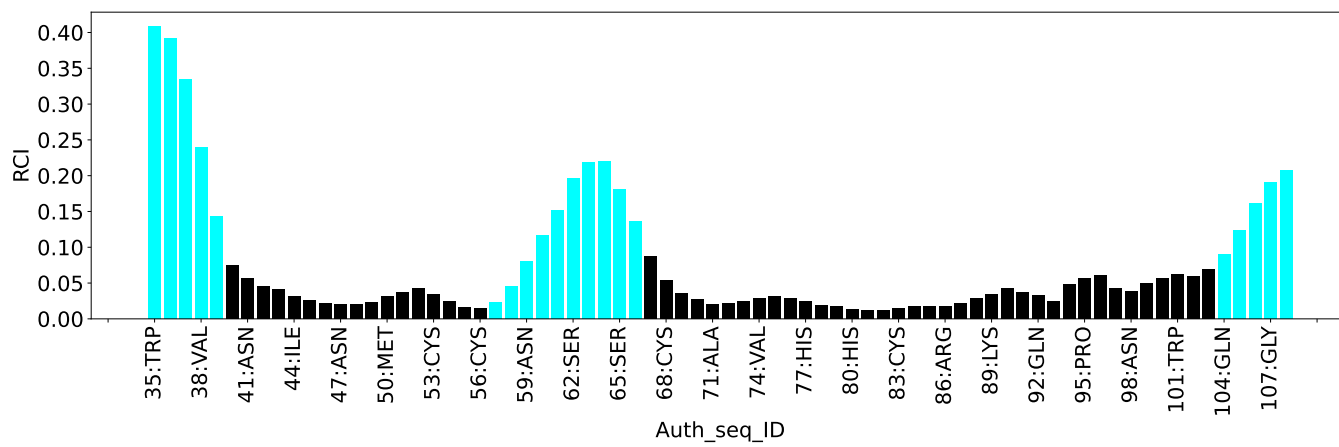
The following table lists the statistically unusual chemical shifts. These are statistical measures, and large deviations from the mean do not necessarily imply incorrect assignments. Molecules containing paramagnetic centres or hemes are expected to give rise to anomalous chemical shifts.

| List Id | Chain | Res | Type | Atom | Shift, ppm | Expected range, ppm | Z-score |
|---------|-------|-----|------|------|------------|---------------------|---------|
| 1 | A | 95 | PRO | HG2 | -0.37 | 0.41 – 3.45 | -7.6 |
| 1 | A | 78 | ALA | HB1 | -0.23 | 0.14 – 2.58 | -6.5 |
| 1 | A | 78 | ALA | HB2 | -0.23 | 0.14 – 2.58 | -6.5 |
| 1 | A | 78 | ALA | HB3 | -0.23 | 0.14 – 2.58 | -6.5 |

7.1.5 Random Coil Index (RCI) plots [i](#)

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

Random coil index (RCI) for chain A:



8 NMR restraints analysis

8.1 Conformationally restricting restraints

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

| Description | Value |
|--|-------|
| Total distance restraints | 1340 |
| Intra-residue ($ i-j =0$) | 295 |
| Sequential ($ i-j =1$) | 340 |
| Medium range ($ i-j >1$ and $ i-j <5$) | 266 |
| Long range ($ i-j \geq 5$) | 404 |
| Inter-chain | 0 |
| Hydrogen bond restraints | 20 |
| Disulfide bond restraints | 15 |
| Total dihedral-angle restraints | 0 |
| Number of unmapped restraints | 0 |
| Number of restraints per residue | 13.4 |
| Number of long range restraints per residue ¹ | 4.2 |

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

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

8.2.1 Average number of distance violations per model

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

| Bins (Å) | Average number of violations per model | Max (Å) |
|------------------|--|---------|
| 0.1-0.2 (Small) | 58.9 | 0.2 |
| 0.2-0.5 (Medium) | 26.7 | 0.5 |
| >0.5 (Large) | 29.2 | 3.87 |

8.2.2 Average number of dihedral-angle violations per model

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

9 Distance violation analysis

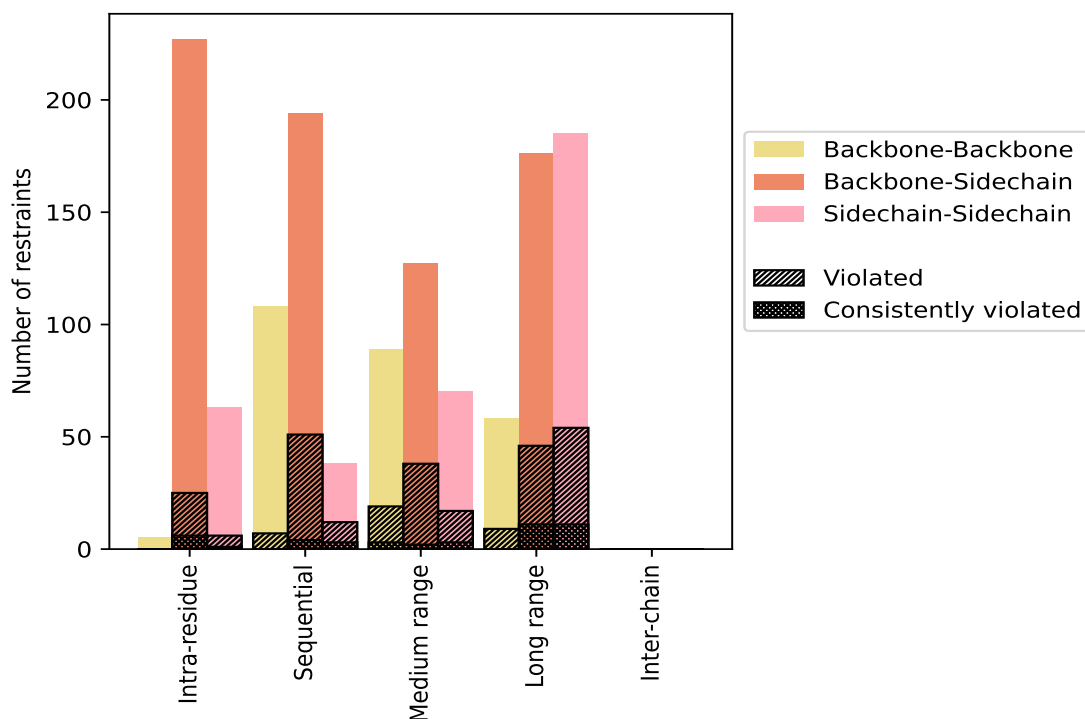
9.1 Summary of distance violations

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

| Restrains type | Count | % ¹ | Violated ³ | | | Consistently Violated ⁴ | | |
|---|-------------|----------------|-----------------------|----------------|----------------|------------------------------------|----------------|----------------|
| | | | Count | % ² | % ¹ | Count | % ² | % ¹ |
| Intra-residue ($i-j =0$) | 295 | 22.0 | 31 | 10.5 | 2.3 | 7 | 2.4 | 0.5 |
| Backbone-Backbone | 5 | 0.4 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 |
| Backbone-Sidechain | 227 | 16.9 | 25 | 11.0 | 1.9 | 6 | 2.6 | 0.4 |
| Sidechain-Sidechain | 63 | 4.7 | 6 | 9.5 | 0.4 | 1 | 1.6 | 0.1 |
| Sequential ($i-j =1$) | 340 | 25.4 | 70 | 20.6 | 5.2 | 7 | 2.1 | 0.5 |
| Backbone-Backbone | 108 | 8.1 | 7 | 6.5 | 0.5 | 0 | 0.0 | 0.0 |
| Backbone-Sidechain | 194 | 14.5 | 51 | 26.3 | 3.8 | 4 | 2.1 | 0.3 |
| Sidechain-Sidechain | 38 | 2.8 | 12 | 31.6 | 0.9 | 3 | 7.9 | 0.2 |
| Medium range ($i-j >1$ & $i-j <5$) | 266 | 19.9 | 69 | 25.9 | 5.1 | 7 | 2.6 | 0.5 |
| Backbone-Backbone | 73 | 5.4 | 16 | 21.9 | 1.2 | 2 | 2.7 | 0.1 |
| Backbone-Sidechain | 127 | 9.5 | 38 | 29.9 | 2.8 | 2 | 1.6 | 0.1 |
| Sidechain-Sidechain | 66 | 4.9 | 15 | 22.7 | 1.1 | 3 | 4.5 | 0.2 |
| Long range ($i-j \geq 5$) | 404 | 30.1 | 102 | 25.2 | 7.6 | 22 | 5.4 | 1.6 |
| Backbone-Backbone | 54 | 4.0 | 9 | 16.7 | 0.7 | 0 | 0.0 | 0.0 |
| Backbone-Sidechain | 176 | 13.1 | 46 | 26.1 | 3.4 | 11 | 6.2 | 0.8 |
| Sidechain-Sidechain | 174 | 13.0 | 47 | 27.0 | 3.5 | 11 | 6.3 | 0.8 |
| 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 | 20 | 1.5 | 3 | 15.0 | 0.2 | 1 | 5.0 | 0.1 |
| Disulfide bond | 15 | 1.1 | 9 | 60.0 | 0.7 | 0 | 0.0 | 0.0 |
| Total | 1340 | 100.0 | 284 | 21.2 | 21.2 | 44 | 3.3 | 3.3 |
| Backbone-Backbone | 260 | 19.4 | 35 | 13.5 | 2.6 | 3 | 1.2 | 0.2 |
| Backbone-Sidechain | 724 | 54.0 | 160 | 22.1 | 11.9 | 23 | 3.2 | 1.7 |
| Sidechain-Sidechain | 356 | 26.6 | 89 | 25.0 | 6.6 | 18 | 5.1 | 1.3 |

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 disulfid 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 | 14 | 27 | 19 | 57 | 0 | 117 | 0.6 | 3.6 | 0.84 | 0.18 |
| 2 | 12 | 22 | 23 | 49 | 0 | 106 | 0.7 | 3.77 | 0.96 | 0.2 |
| 3 | 14 | 28 | 22 | 49 | 0 | 113 | 0.63 | 3.55 | 0.87 | 0.19 |
| 4 | 14 | 29 | 22 | 48 | 0 | 113 | 0.68 | 3.76 | 0.9 | 0.18 |
| 5 | 14 | 29 | 25 | 51 | 0 | 119 | 0.66 | 3.55 | 0.9 | 0.19 |
| 6 | 15 | 27 | 23 | 49 | 0 | 114 | 0.62 | 3.59 | 0.82 | 0.23 |
| 7 | 12 | 28 | 26 | 52 | 0 | 118 | 0.64 | 3.63 | 0.9 | 0.18 |
| 8 | 16 | 30 | 30 | 50 | 0 | 126 | 0.68 | 3.75 | 0.96 | 0.18 |
| 9 | 14 | 31 | 27 | 48 | 0 | 120 | 0.62 | 3.87 | 0.91 | 0.2 |
| 10 | 16 | 31 | 20 | 51 | 0 | 118 | 0.65 | 3.68 | 0.84 | 0.22 |
| 11 | 13 | 24 | 21 | 54 | 0 | 112 | 0.63 | 3.61 | 0.84 | 0.2 |

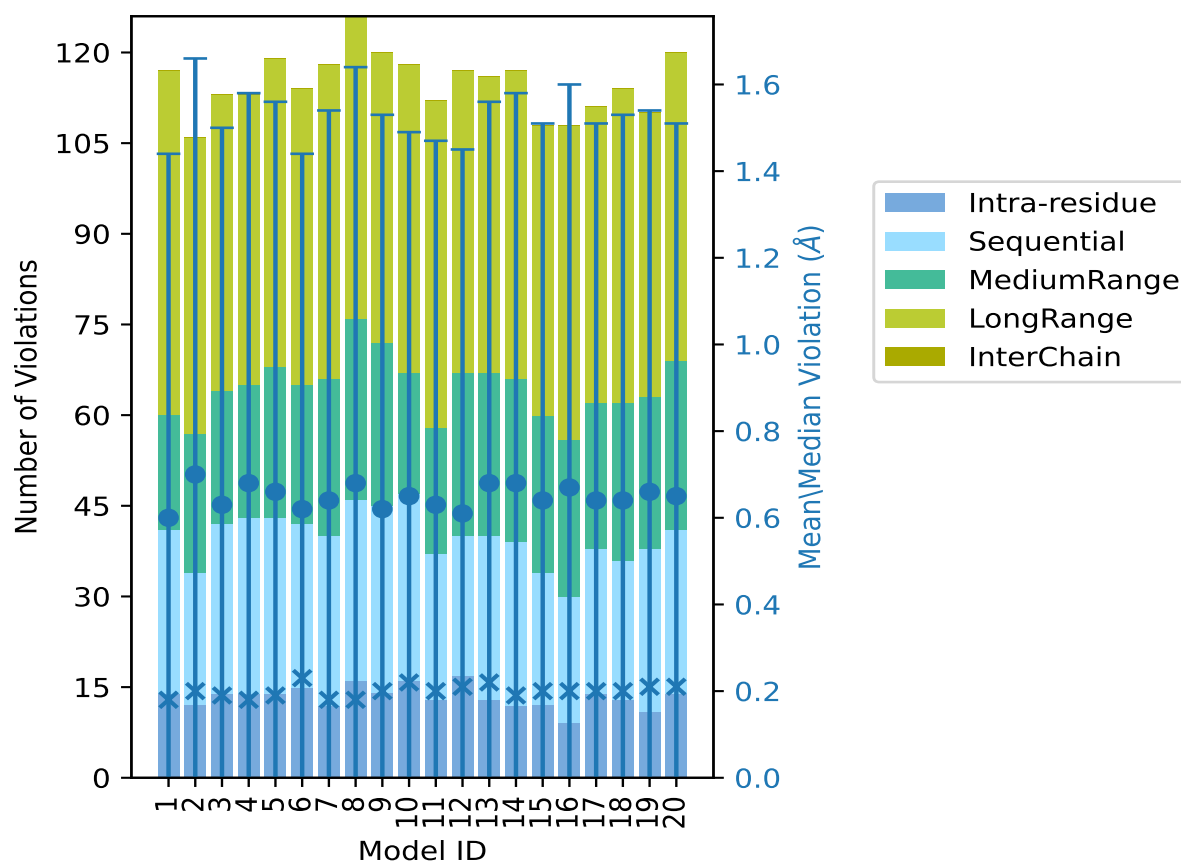
Continued on next page...

Continued from previous page...

| Model ID | Number of violations | | | | | Total | Mean (Å) | Max (Å) | SD ⁶ (Å) | Median (Å) |
|----------|----------------------|-----------------|-----------------|-----------------|-----------------|-------|----------|---------|---------------------|------------|
| | IR ¹ | SQ ² | MR ³ | LR ⁴ | IC ⁵ | | | | | |
| 12 | 17 | 23 | 27 | 50 | 0 | 117 | 0.61 | 3.69 | 0.84 | 0.21 |
| 13 | 13 | 27 | 27 | 49 | 0 | 116 | 0.68 | 3.74 | 0.88 | 0.22 |
| 14 | 12 | 27 | 27 | 51 | 0 | 117 | 0.68 | 3.73 | 0.9 | 0.19 |
| 15 | 12 | 22 | 26 | 48 | 0 | 108 | 0.64 | 3.76 | 0.87 | 0.2 |
| 16 | 9 | 21 | 26 | 52 | 0 | 108 | 0.67 | 3.75 | 0.93 | 0.2 |
| 17 | 14 | 24 | 24 | 49 | 0 | 111 | 0.64 | 3.74 | 0.87 | 0.2 |
| 18 | 13 | 23 | 26 | 52 | 0 | 114 | 0.64 | 3.64 | 0.89 | 0.2 |
| 19 | 11 | 27 | 25 | 47 | 0 | 110 | 0.66 | 3.85 | 0.88 | 0.21 |
| 20 | 14 | 27 | 28 | 51 | 0 | 120 | 0.65 | 3.63 | 0.86 | 0.21 |

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

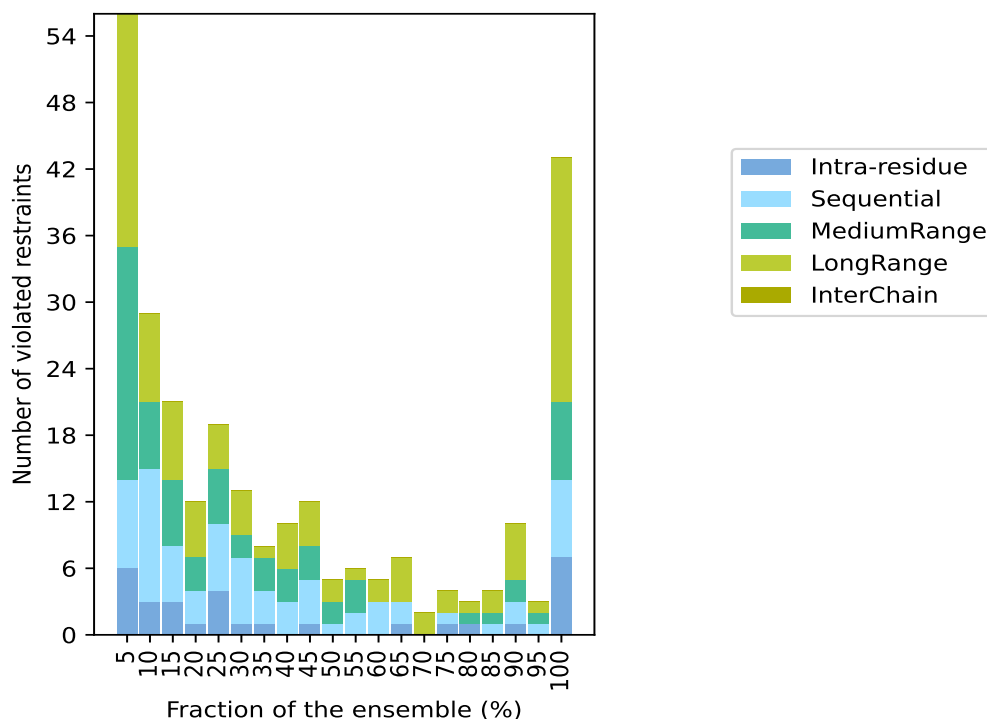
9.3 Distance violation statistics for the ensemble

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, 1033(IR:264, SQ:270, MR:197, LR:302, IC:0) restraints are not violated in the ensemble.

| Number of violated restraints | | | | | | Fraction of the ensemble | |
|-------------------------------|-----------------|-----------------|-----------------|-----------------|-------|--------------------------|-------|
| IR ¹ | SQ ² | MR ³ | LR ⁴ | IC ⁵ | Total | Count ⁶ | % |
| 6 | 8 | 21 | 21 | 0 | 56 | 1 | 5.0 |
| 3 | 12 | 6 | 8 | 0 | 29 | 2 | 10.0 |
| 3 | 5 | 6 | 7 | 0 | 21 | 3 | 15.0 |
| 1 | 3 | 3 | 5 | 0 | 12 | 4 | 20.0 |
| 4 | 6 | 5 | 4 | 0 | 19 | 5 | 25.0 |
| 1 | 6 | 2 | 4 | 0 | 13 | 6 | 30.0 |
| 1 | 3 | 3 | 1 | 0 | 8 | 7 | 35.0 |
| 0 | 3 | 3 | 4 | 0 | 10 | 8 | 40.0 |
| 1 | 4 | 3 | 4 | 0 | 12 | 9 | 45.0 |
| 0 | 1 | 2 | 2 | 0 | 5 | 10 | 50.0 |
| 0 | 2 | 3 | 1 | 0 | 6 | 11 | 55.0 |
| 0 | 3 | 0 | 2 | 0 | 5 | 12 | 60.0 |
| 1 | 2 | 0 | 4 | 0 | 7 | 13 | 65.0 |
| 0 | 0 | 0 | 2 | 0 | 2 | 14 | 70.0 |
| 1 | 1 | 0 | 2 | 0 | 4 | 15 | 75.0 |
| 1 | 0 | 1 | 1 | 0 | 3 | 16 | 80.0 |
| 0 | 1 | 1 | 2 | 0 | 4 | 17 | 85.0 |
| 1 | 2 | 2 | 5 | 0 | 10 | 18 | 90.0 |
| 0 | 1 | 1 | 1 | 0 | 3 | 19 | 95.0 |
| 7 | 7 | 7 | 22 | 0 | 43 | 20 | 100.0 |

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

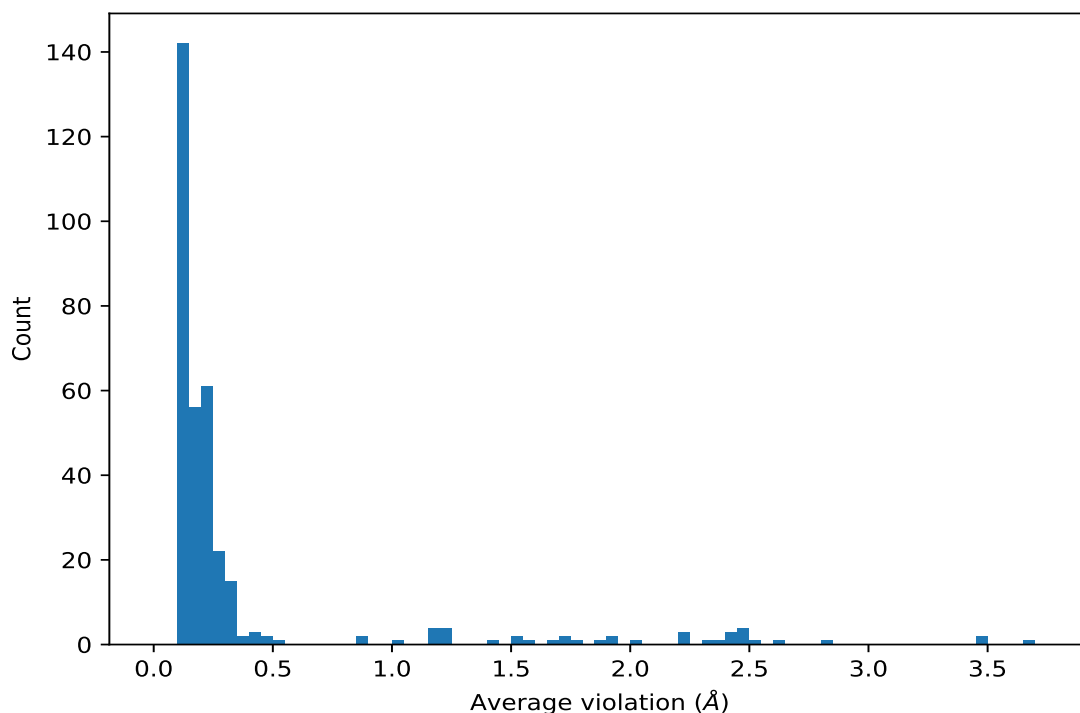
9.3.1 Bar graph : Distance violation statistics for the ensemble [i](#)



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) |
|----------|-----------------|-----------------|---------------------|----------|---------------------|------------|
| (1,738) | 1:A:73:GLY:H | 1:A:79:PHE:HD1 | 20 | 3.68 | 0.08 | 3.68 |
| (1,552) | 1:A:73:GLY:H | 1:A:79:PHE:HE1 | 20 | 3.46 | 0.09 | 3.48 |
| (1,341) | 1:A:44:ILE:H | 1:A:79:PHE:HD2 | 20 | 3.45 | 0.18 | 3.42 |
| (1,702) | 1:A:72:TRP:H | 1:A:103:PHE:HD2 | 20 | 2.84 | 0.26 | 2.8 |
| (1,1) | 1:A:43:ALA:H | 1:A:79:PHE:HD2 | 20 | 2.65 | 0.24 | 2.56 |
| (1,1296) | 1:A:44:ILE:HG12 | 1:A:79:PHE:HD2 | 20 | 2.53 | 0.2 | 2.54 |
| (1,676) | 1:A:44:ILE:H | 1:A:79:PHE:HE2 | 20 | 2.49 | 0.19 | 2.45 |
| (1,1096) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HD2 | 20 | 2.47 | 0.31 | 2.4 |
| (1,1096) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HD2 | 20 | 2.47 | 0.31 | 2.4 |
| (1,1096) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HD2 | 20 | 2.47 | 0.31 | 2.4 |
| (1,773) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HE2 | 20 | 2.44 | 0.27 | 2.37 |
| (1,773) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HE2 | 20 | 2.44 | 0.27 | 2.37 |
| (1,773) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HE2 | 20 | 2.44 | 0.27 | 2.37 |
| (1,666) | 1:A:43:ALA:H | 1:A:79:PHE:HE2 | 20 | 2.39 | 0.23 | 2.32 |
| (1,1305) | 1:A:44:ILE:HB | 1:A:79:PHE:HD2 | 20 | 2.32 | 0.16 | 2.31 |
| (1,1231) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HD2 | 20 | 2.24 | 0.21 | 2.22 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Models ¹ | Mean (Å) | SD ¹ (Å) | Median (Å) |
|----------|-----------------|-----------------|---------------------|----------|---------------------|------------|
| (1,1231) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HD2 | 20 | 2.24 | 0.21 | 2.22 |
| (1,1231) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HD2 | 20 | 2.24 | 0.21 | 2.22 |
| (1,863) | 1:A:42:CYS:HA | 1:A:79:PHE:HD2 | 20 | 2.02 | 0.16 | 2.02 |
| (1,1099) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HG13 | 20 | 1.94 | 0.13 | 1.97 |
| (1,1243) | 1:A:81:PHE:HD1 | 1:A:103:PHE:HE2 | 20 | 1.91 | 0.31 | 1.88 |
| (1,1219) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HE2 | 20 | 1.87 | 0.2 | 1.84 |
| (1,1220) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HD2 | 20 | 1.75 | 0.13 | 1.72 |
| (1,415) | 1:A:103:PHE:HD2 | 1:A:104:GLN:H | 20 | 1.73 | 0.06 | 1.74 |
| (1,1238) | 1:A:44:ILE:HG13 | 1:A:79:PHE:HD2 | 20 | 1.56 | 0.18 | 1.56 |
| (1,1304) | 1:A:79:PHE:HE1 | 1:A:94:CYS:HA | 20 | 1.54 | 0.14 | 1.57 |
| (1,982) | 1:A:79:PHE:HD2 | 1:A:83:CYS:HB2 | 20 | 1.43 | 0.09 | 1.42 |
| (1,1095) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HE2 | 20 | 1.23 | 0.32 | 1.18 |
| (1,1095) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HE2 | 20 | 1.23 | 0.32 | 1.18 |
| (1,1095) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HE2 | 20 | 1.23 | 0.32 | 1.18 |
| (1,524) | 1:A:79:PHE:HD2 | 1:A:80:HIS:H | 20 | 1.22 | 0.04 | 1.21 |
| (1,113) | 1:A:103:PHE:H | 1:A:103:PHE:HD1 | 20 | 1.2 | 0.07 | 1.21 |
| (1,1034) | 1:A:84:ILE:HG21 | 1:A:103:PHE:HE2 | 20 | 1.19 | 0.23 | 1.18 |
| (1,1034) | 1:A:84:ILE:HG22 | 1:A:103:PHE:HE2 | 20 | 1.19 | 0.23 | 1.18 |
| (1,1034) | 1:A:84:ILE:HG23 | 1:A:103:PHE:HE2 | 20 | 1.19 | 0.23 | 1.18 |
| (1,371) | 1:A:79:PHE:H | 1:A:79:PHE:HD1 | 20 | 1.01 | 0.05 | 1.02 |
| (1,1248) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HB3 | 20 | 0.87 | 0.13 | 0.93 |
| (1,858) | 1:A:103:PHE:HA | 1:A:103:PHE:HE2 | 20 | 0.5 | 0.05 | 0.49 |
| (1,1228) | 1:A:103:PHE:HA | 1:A:103:PHE:HD2 | 20 | 0.39 | 0.06 | 0.38 |
| (1,1235) | 1:A:79:PHE:HA | 1:A:79:PHE:HD2 | 20 | 0.34 | 0.04 | 0.34 |
| (1,588) | 1:A:54:ILE:HD11 | 1:A:56:CYS:H | 20 | 0.26 | 0.13 | 0.22 |
| (1,588) | 1:A:54:ILE:HD12 | 1:A:56:CYS:H | 20 | 0.26 | 0.13 | 0.22 |
| (1,588) | 1:A:54:ILE:HD13 | 1:A:56:CYS:H | 20 | 0.26 | 0.13 | 0.22 |
| (1,390) | 1:A:72:TRP:HB2 | 1:A:73:GLY:H | 20 | 0.26 | 0.03 | 0.27 |
| (1,39) | 1:A:88:LEU:HD21 | 1:A:101:TRP:H | 20 | 0.25 | 0.08 | 0.23 |
| (1,39) | 1:A:88:LEU:HD22 | 1:A:101:TRP:H | 20 | 0.25 | 0.08 | 0.23 |
| (1,39) | 1:A:88:LEU:HD23 | 1:A:101:TRP:H | 20 | 0.25 | 0.08 | 0.23 |
| (1,741) | 1:A:54:ILE:HG12 | 1:A:56:CYS:H | 20 | 0.24 | 0.04 | 0.24 |
| (2,19) | 1:A:86:ARG:O | 1:A:90:THR:H | 20 | 0.22 | 0.05 | 0.2 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG21 | 20 | 0.22 | 0.05 | 0.22 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG22 | 20 | 0.22 | 0.05 | 0.22 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG23 | 20 | 0.22 | 0.05 | 0.22 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD11 | 20 | 0.21 | 0.03 | 0.22 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD12 | 20 | 0.21 | 0.03 | 0.22 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD13 | 20 | 0.21 | 0.03 | 0.22 |
| (1,630) | 1:A:43:ALA:H | 1:A:44:ILE:HG12 | 20 | 0.21 | 0.03 | 0.22 |
| (1,161) | 1:A:72:TRP:H | 1:A:72:TRP:HB3 | 20 | 0.2 | 0.02 | 0.2 |
| (1,979) | 1:A:79:PHE:HB3 | 1:A:80:HIS:HB3 | 20 | 0.19 | 0.03 | 0.2 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Models ¹ | Mean (Å) | SD ¹ (Å) | Median (Å) |
|----------|-----------------|-----------------|---------------------|----------|---------------------|------------|
| (1,648) | 1:A:42:CYS:HB2 | 1:A:47:ASN:H | 20 | 0.19 | 0.05 | 0.18 |
| (1,679) | 1:A:44:ILE:H | 1:A:47:ASN:H | 20 | 0.19 | 0.05 | 0.18 |
| (1,528) | 1:A:80:HIS:H | 1:A:82:HIS:H | 20 | 0.17 | 0.01 | 0.17 |
| (1,1236) | 1:A:79:PHE:HB2 | 1:A:79:PHE:HD1 | 20 | 0.15 | 0.01 | 0.15 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD21 | 19 | 0.33 | 0.08 | 0.35 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD22 | 19 | 0.33 | 0.08 | 0.35 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD23 | 19 | 0.33 | 0.08 | 0.35 |
| (1,20) | 1:A:67:GLU:H | 1:A:68:CYS:H | 19 | 0.26 | 0.06 | 0.24 |
| (1,1090) | 1:A:95:PRO:HD3 | 1:A:97:ASP:H | 19 | 0.2 | 0.07 | 0.17 |
| (1,1098) | 1:A:79:PHE:HE2 | 1:A:95:PRO:HB2 | 18 | 0.89 | 0.49 | 1.02 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD11 | 18 | 0.32 | 0.07 | 0.33 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD12 | 18 | 0.32 | 0.07 | 0.33 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD13 | 18 | 0.32 | 0.07 | 0.33 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD11 | 18 | 0.32 | 0.07 | 0.33 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD12 | 18 | 0.32 | 0.07 | 0.33 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD13 | 18 | 0.32 | 0.07 | 0.33 |
| (1,726) | 1:A:56:CYS:HA | 1:A:59:ASN:HD22 | 18 | 0.22 | 0.06 | 0.22 |
| (1,86) | 1:A:108:HIS:H | 1:A:108:HIS:HE1 | 18 | 0.21 | 0.08 | 0.2 |
| (1,1006) | 1:A:88:LEU:HD11 | 1:A:101:TRP:HH2 | 18 | 0.2 | 0.04 | 0.2 |
| (1,1006) | 1:A:88:LEU:HD12 | 1:A:101:TRP:HH2 | 18 | 0.2 | 0.04 | 0.2 |
| (1,1006) | 1:A:88:LEU:HD13 | 1:A:101:TRP:HH2 | 18 | 0.2 | 0.04 | 0.2 |
| (1,628) | 1:A:42:CYS:HB2 | 1:A:43:ALA:H | 18 | 0.16 | 0.02 | 0.17 |
| (1,973) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HB2 | 18 | 0.16 | 0.03 | 0.16 |
| (1,623) | 1:A:44:ILE:H | 1:A:83:CYS:HB2 | 18 | 0.15 | 0.02 | 0.15 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD11 | 18 | 0.14 | 0.02 | 0.13 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD12 | 18 | 0.14 | 0.02 | 0.13 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD13 | 18 | 0.14 | 0.02 | 0.13 |
| (1,209) | 1:A:80:HIS:H | 1:A:84:ILE:H | 18 | 0.13 | 0.02 | 0.12 |
| (1,1054) | 1:A:49:ILE:HD11 | 1:A:50:MET:HA | 17 | 0.22 | 0.1 | 0.18 |
| (1,1054) | 1:A:49:ILE:HD12 | 1:A:50:MET:HA | 17 | 0.22 | 0.1 | 0.18 |
| (1,1054) | 1:A:49:ILE:HD13 | 1:A:50:MET:HA | 17 | 0.22 | 0.1 | 0.18 |
| (1,1310) | 1:A:56:CYS:SG | 1:A:82:HIS:ND1 | 17 | 0.21 | 0.06 | 0.2 |
| (1,689) | 1:A:55:GLU:HB2 | 1:A:59:ASN:H | 17 | 0.18 | 0.05 | 0.18 |
| (1,730) | 1:A:87:TRP:HE1 | 1:A:101:TRP:HE3 | 17 | 0.16 | 0.04 | 0.15 |
| (1,521) | 1:A:70:VAL:HG11 | 1:A:81:PHE:H | 17 | 0.16 | 0.05 | 0.14 |
| (1,521) | 1:A:70:VAL:HG12 | 1:A:81:PHE:H | 17 | 0.16 | 0.05 | 0.14 |
| (1,521) | 1:A:70:VAL:HG13 | 1:A:81:PHE:H | 17 | 0.16 | 0.05 | 0.14 |
| (1,331) | 1:A:96:LEU:H | 1:A:98:ASN:H | 16 | 0.23 | 0.1 | 0.22 |
| (1,1259) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HD1 | 16 | 0.16 | 0.04 | 0.15 |
| (1,1275) | 1:A:87:TRP:HB3 | 1:A:87:TRP:HE3 | 16 | 0.11 | 0.01 | 0.11 |
| (1,1045) | 1:A:54:ILE:HG21 | 1:A:55:GLU:HG2 | 15 | 0.23 | 0.08 | 0.24 |
| (1,1045) | 1:A:54:ILE:HG22 | 1:A:55:GLU:HG2 | 15 | 0.23 | 0.08 | 0.24 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Models ¹ | Mean (Å) | SD ¹ (Å) | Median (Å) |
|----------|-----------------|-----------------|---------------------|----------|---------------------|------------|
| (1,1045) | 1:A:54:ILE:HG23 | 1:A:55:GLU:HG2 | 15 | 0.23 | 0.08 | 0.24 |
| (1,349) | 1:A:76:ASN:H | 1:A:76:ASN:HB3 | 15 | 0.16 | 0.09 | 0.13 |
| (1,708) | 1:A:73:GLY:HA3 | 1:A:79:PHE:H | 15 | 0.15 | 0.03 | 0.15 |
| (1,800) | 1:A:74:VAL:HG11 | 1:A:104:GLN:HB3 | 15 | 0.14 | 0.03 | 0.13 |
| (1,800) | 1:A:74:VAL:HG12 | 1:A:104:GLN:HB3 | 15 | 0.14 | 0.03 | 0.13 |
| (1,800) | 1:A:74:VAL:HG13 | 1:A:104:GLN:HB3 | 15 | 0.14 | 0.03 | 0.13 |
| (1,800) | 1:A:74:VAL:HG21 | 1:A:104:GLN:HB3 | 15 | 0.14 | 0.03 | 0.13 |
| (1,800) | 1:A:74:VAL:HG22 | 1:A:104:GLN:HB3 | 15 | 0.14 | 0.03 | 0.13 |
| (1,800) | 1:A:74:VAL:HG23 | 1:A:104:GLN:HB3 | 15 | 0.14 | 0.03 | 0.13 |
| (1,715) | 1:A:94:CYS:H | 1:A:99:ARG:HG2 | 14 | 0.26 | 0.08 | 0.26 |
| (1,715) | 1:A:94:CYS:H | 1:A:99:ARG:HG3 | 14 | 0.26 | 0.08 | 0.26 |
| (1,446) | 1:A:94:CYS:H | 1:A:101:TRP:HB3 | 14 | 0.16 | 0.03 | 0.16 |
| (3,5) | 1:A:53:CYS:SG | 1:A:68:CYS:SG | 14 | 0.15 | 0.04 | 0.15 |
| (1,927) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HB | 13 | 0.2 | 0.05 | 0.21 |
| (1,585) | 1:A:52:LEU:HA | 1:A:57:GLN:H | 13 | 0.16 | 0.02 | 0.16 |
| (1,1221) | 1:A:68:CYS:HB2 | 1:A:80:HIS:HE1 | 13 | 0.15 | 0.03 | 0.14 |
| (1,1221) | 1:A:68:CYS:HB3 | 1:A:80:HIS:HE1 | 13 | 0.15 | 0.03 | 0.14 |
| (1,610) | 1:A:46:ARG:HB2 | 1:A:47:ASN:H | 13 | 0.14 | 0.02 | 0.13 |
| (1,926) | 1:A:79:PHE:H | 1:A:84:ILE:HB | 13 | 0.13 | 0.01 | 0.12 |
| (1,1211) | 1:A:93:VAL:HG11 | 1:A:94:CYS:HA | 13 | 0.12 | 0.01 | 0.12 |
| (1,1211) | 1:A:93:VAL:HG12 | 1:A:94:CYS:HA | 13 | 0.12 | 0.01 | 0.12 |
| (1,1211) | 1:A:93:VAL:HG13 | 1:A:94:CYS:HA | 13 | 0.12 | 0.01 | 0.12 |
| (1,1272) | 1:A:101:TRP:HB3 | 1:A:101:TRP:HE3 | 13 | 0.12 | 0.01 | 0.11 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD11 | 12 | 0.21 | 0.06 | 0.22 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD12 | 12 | 0.21 | 0.06 | 0.22 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD13 | 12 | 0.21 | 0.06 | 0.22 |
| (1,681) | 1:A:47:ASN:H | 1:A:53:CYS:HA | 12 | 0.17 | 0.05 | 0.14 |
| (1,313) | 1:A:82:HIS:HD2 | 1:A:83:CYS:H | 12 | 0.16 | 0.05 | 0.15 |
| (1,1012) | 1:A:96:LEU:HD11 | 1:A:97:ASP:HB2 | 12 | 0.15 | 0.03 | 0.15 |
| (1,1012) | 1:A:96:LEU:HD12 | 1:A:97:ASP:HB2 | 12 | 0.15 | 0.03 | 0.15 |
| (1,1012) | 1:A:96:LEU:HD13 | 1:A:97:ASP:HB2 | 12 | 0.15 | 0.03 | 0.15 |
| (1,348) | 1:A:76:ASN:H | 1:A:77:HIS:HB2 | 12 | 0.13 | 0.02 | 0.13 |
| (1,531) | 1:A:39:VAL:HG11 | 1:A:79:PHE:H | 11 | 0.22 | 0.07 | 0.24 |
| (1,531) | 1:A:39:VAL:HG12 | 1:A:79:PHE:H | 11 | 0.22 | 0.07 | 0.24 |
| (1,531) | 1:A:39:VAL:HG13 | 1:A:79:PHE:H | 11 | 0.22 | 0.07 | 0.24 |
| (1,725) | 1:A:55:GLU:HB3 | 1:A:59:ASN:HD22 | 11 | 0.17 | 0.05 | 0.16 |
| (1,854) | 1:A:87:TRP:HA | 1:A:91:ARG:HG2 | 11 | 0.16 | 0.04 | 0.14 |
| (1,976) | 1:A:74:VAL:HB | 1:A:75:CYS:HB2 | 11 | 0.16 | 0.03 | 0.16 |
| (1,265) | 1:A:56:CYS:HB3 | 1:A:57:GLN:H | 11 | 0.13 | 0.02 | 0.12 |
| (1,310) | 1:A:80:HIS:H | 1:A:83:CYS:H | 11 | 0.12 | 0.01 | 0.12 |
| (1,675) | 1:A:42:CYS:H | 1:A:48:HIS:HD2 | 10 | 0.2 | 0.06 | 0.17 |
| (1,581) | 1:A:52:LEU:HD21 | 1:A:58:ALA:H | 10 | 0.17 | 0.04 | 0.16 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Models ¹ | Mean (Å) | SD ¹ (Å) | Median (Å) |
|----------|-----------------|-----------------|---------------------|----------|---------------------|------------|
| (1,581) | 1:A:52:LEU:HD22 | 1:A:58:ALA:H | 10 | 0.17 | 0.04 | 0.16 |
| (1,581) | 1:A:52:LEU:HD23 | 1:A:58:ALA:H | 10 | 0.17 | 0.04 | 0.16 |
| (1,550) | 1:A:73:GLY:H | 1:A:76:ASN:H | 10 | 0.16 | 0.03 | 0.16 |
| (1,285) | 1:A:42:CYS:HB2 | 1:A:45:CYS:H | 10 | 0.15 | 0.03 | 0.15 |
| (1,1307) | 1:A:45:CYS:SG | 1:A:80:HIS:ND1 | 10 | 0.15 | 0.04 | 0.14 |
| (1,500) | 1:A:84:ILE:HG12 | 1:A:85:SER:H | 10 | 0.14 | 0.01 | 0.13 |
| (1,962) | 1:A:49:ILE:HD11 | 1:A:50:MET:HB3 | 9 | 0.29 | 0.03 | 0.28 |
| (1,962) | 1:A:49:ILE:HD12 | 1:A:50:MET:HB3 | 9 | 0.29 | 0.03 | 0.28 |
| (1,962) | 1:A:49:ILE:HD13 | 1:A:50:MET:HB3 | 9 | 0.29 | 0.03 | 0.28 |
| (1,1224) | 1:A:77:HIS:HE1 | 1:A:97:ASP:HB3 | 9 | 0.24 | 0.1 | 0.25 |
| (1,1312) | 1:A:75:CYS:SG | 1:A:77:HIS:ND1 | 9 | 0.21 | 0.09 | 0.19 |
| (1,99) | 1:A:54:ILE:HG21 | 1:A:55:GLU:H | 9 | 0.18 | 0.05 | 0.21 |
| (1,99) | 1:A:54:ILE:HG22 | 1:A:55:GLU:H | 9 | 0.18 | 0.05 | 0.21 |
| (1,99) | 1:A:54:ILE:HG23 | 1:A:55:GLU:H | 9 | 0.18 | 0.05 | 0.21 |
| (1,1281) | 1:A:49:ILE:HA | 1:A:80:HIS:HD2 | 9 | 0.16 | 0.04 | 0.17 |
| (1,103) | 1:A:47:ASN:HB2 | 1:A:48:HIS:H | 9 | 0.15 | 0.03 | 0.15 |
| (1,747) | 1:A:52:LEU:HA | 1:A:65:SER:HA | 9 | 0.15 | 0.04 | 0.15 |
| (1,844) | 1:A:54:ILE:HA | 1:A:55:GLU:HG2 | 9 | 0.15 | 0.03 | 0.15 |
| (1,267) | 1:A:57:GLN:H | 1:A:57:GLN:HG2 | 9 | 0.15 | 0.03 | 0.14 |
| (1,250) | 1:A:55:GLU:HA | 1:A:58:ALA:H | 9 | 0.15 | 0.02 | 0.15 |
| (1,482) | 1:A:88:LEU:H | 1:A:90:THR:HG21 | 9 | 0.15 | 0.02 | 0.14 |
| (1,482) | 1:A:88:LEU:H | 1:A:90:THR:HG22 | 9 | 0.15 | 0.02 | 0.14 |
| (1,482) | 1:A:88:LEU:H | 1:A:90:THR:HG23 | 9 | 0.15 | 0.02 | 0.14 |
| (1,1160) | 1:A:72:TRP:HB3 | 1:A:74:VAL:HA | 9 | 0.15 | 0.02 | 0.14 |
| (1,564) | 1:A:71:ALA:H | 1:A:81:PHE:HB3 | 9 | 0.13 | 0.02 | 0.13 |
| (1,1232) | 1:A:105:LYS:HA | 1:A:106:TYR:HD1 | 8 | 1.71 | 0.58 | 1.81 |
| (1,1140) | 1:A:106:TYR:HD2 | 1:A:107:GLY:HA2 | 8 | 1.68 | 0.72 | 1.81 |
| (1,1141) | 1:A:106:TYR:HD2 | 1:A:107:GLY:HA3 | 8 | 1.54 | 0.63 | 1.74 |
| (1,441) | 1:A:95:PRO:HG2 | 1:A:97:ASP:H | 8 | 0.27 | 0.02 | 0.27 |
| (1,441) | 1:A:95:PRO:HG3 | 1:A:97:ASP:H | 8 | 0.27 | 0.02 | 0.27 |
| (1,880) | 1:A:43:ALA:HA | 1:A:46:ARG:HD2 | 8 | 0.22 | 0.08 | 0.2 |
| (1,880) | 1:A:43:ALA:HA | 1:A:46:ARG:HD3 | 8 | 0.22 | 0.08 | 0.2 |
| (1,1016) | 1:A:52:LEU:HD11 | 1:A:57:GLN:HG2 | 8 | 0.21 | 0.05 | 0.21 |
| (1,1016) | 1:A:52:LEU:HD12 | 1:A:57:GLN:HG2 | 8 | 0.21 | 0.05 | 0.21 |
| (1,1016) | 1:A:52:LEU:HD13 | 1:A:57:GLN:HG2 | 8 | 0.21 | 0.05 | 0.21 |
| (1,1291) | 1:A:87:TRP:HZ2 | 1:A:95:PRO:HB2 | 8 | 0.2 | 0.03 | 0.2 |
| (1,695) | 1:A:68:CYS:H | 1:A:80:HIS:HE1 | 8 | 0.19 | 0.05 | 0.2 |
| (1,1128) | 1:A:84:ILE:HG21 | 1:A:88:LEU:HB3 | 8 | 0.15 | 0.03 | 0.14 |
| (1,1128) | 1:A:84:ILE:HG22 | 1:A:88:LEU:HB3 | 8 | 0.15 | 0.03 | 0.14 |
| (1,1128) | 1:A:84:ILE:HG23 | 1:A:88:LEU:HB3 | 8 | 0.15 | 0.03 | 0.14 |
| (1,1126) | 1:A:79:PHE:HB3 | 1:A:84:ILE:HG21 | 8 | 0.13 | 0.01 | 0.12 |
| (1,1126) | 1:A:79:PHE:HB3 | 1:A:84:ILE:HG22 | 8 | 0.13 | 0.01 | 0.12 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Models ¹ | Mean (Å) | SD ¹ (Å) | Median (Å) |
|----------|-----------------|-----------------|---------------------|----------|---------------------|------------|
| (1,1126) | 1:A:79:PHE:HB3 | 1:A:84:ILE:HG23 | 8 | 0.13 | 0.01 | 0.12 |
| (1,1050) | 1:A:37:ILE:HD11 | 1:A:38:VAL:HA | 7 | 0.22 | 0.09 | 0.21 |
| (1,1050) | 1:A:37:ILE:HD12 | 1:A:38:VAL:HA | 7 | 0.22 | 0.09 | 0.21 |
| (1,1050) | 1:A:37:ILE:HD13 | 1:A:38:VAL:HA | 7 | 0.22 | 0.09 | 0.21 |
| (1,1288) | 1:A:82:HIS:HD2 | 1:A:86:ARG:H | 7 | 0.16 | 0.07 | 0.12 |
| (2,20) | 1:A:86:ARG:O | 1:A:90:THR:N | 7 | 0.15 | 0.03 | 0.15 |
| (1,21) | 1:A:65:SER:HA | 1:A:68:CYS:H | 7 | 0.14 | 0.03 | 0.13 |
| (1,1268) | 1:A:71:ALA:HA | 1:A:72:TRP:HE3 | 7 | 0.14 | 0.03 | 0.12 |
| (1,997) | 1:A:49:ILE:HG12 | 1:A:72:TRP:HZ2 | 7 | 0.13 | 0.03 | 0.11 |
| (1,452) | 1:A:92:GLN:HB3 | 1:A:93:VAL:H | 7 | 0.13 | 0.01 | 0.12 |
| (1,815) | 1:A:91:ARG:HB2 | 1:A:93:VAL:HG21 | 7 | 0.12 | 0.02 | 0.11 |
| (1,815) | 1:A:91:ARG:HB2 | 1:A:93:VAL:HG22 | 7 | 0.12 | 0.02 | 0.11 |
| (1,815) | 1:A:91:ARG:HB2 | 1:A:93:VAL:HG23 | 7 | 0.12 | 0.02 | 0.11 |
| (1,814) | 1:A:54:ILE:HG21 | 1:A:54:ILE:HG13 | 7 | 0.11 | 0.0 | 0.11 |
| (1,814) | 1:A:54:ILE:HG22 | 1:A:54:ILE:HG13 | 7 | 0.11 | 0.0 | 0.11 |
| (1,814) | 1:A:54:ILE:HG23 | 1:A:54:ILE:HG13 | 7 | 0.11 | 0.0 | 0.11 |
| (1,460) | 1:A:91:ARG:H | 1:A:92:GLN:HG3 | 6 | 0.38 | 0.13 | 0.43 |
| (1,1192) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HA | 6 | 0.32 | 0.18 | 0.24 |
| (1,1192) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HA | 6 | 0.32 | 0.18 | 0.24 |
| (1,680) | 1:A:46:ARG:H | 1:A:47:ASN:HB3 | 6 | 0.25 | 0.03 | 0.24 |
| (1,166) | 1:A:47:ASN:H | 1:A:47:ASN:HB3 | 6 | 0.22 | 0.04 | 0.2 |
| (1,122) | 1:A:99:ARG:HG2 | 1:A:100:GLU:H | 6 | 0.21 | 0.04 | 0.2 |
| (1,122) | 1:A:99:ARG:HG3 | 1:A:100:GLU:H | 6 | 0.21 | 0.04 | 0.2 |
| (1,1226) | 1:A:77:HIS:HE1 | 1:A:96:LEU:HG | 6 | 0.19 | 0.05 | 0.18 |
| (1,851) | 1:A:48:HIS:HD2 | 1:A:49:ILE:HA | 6 | 0.17 | 0.07 | 0.12 |
| (1,1073) | 1:A:64:THR:HB | 1:A:66:GLU:HB2 | 6 | 0.16 | 0.05 | 0.16 |
| (1,1080) | 1:A:94:CYS:HB3 | 1:A:101:TRP:HA | 6 | 0.16 | 0.04 | 0.14 |
| (1,920) | 1:A:94:CYS:HB2 | 1:A:98:ASN:HB2 | 6 | 0.15 | 0.03 | 0.14 |
| (1,743) | 1:A:65:SER:HB2 | 1:A:66:GLU:HB2 | 6 | 0.14 | 0.05 | 0.12 |
| (1,743) | 1:A:65:SER:HB2 | 1:A:66:GLU:HB3 | 6 | 0.14 | 0.05 | 0.12 |
| (1,253) | 1:A:57:GLN:HB2 | 1:A:58:ALA:H | 6 | 0.14 | 0.03 | 0.12 |
| (1,199) | 1:A:94:CYS:HB3 | 1:A:99:ARG:H | 6 | 0.12 | 0.02 | 0.12 |
| (1,120) | 1:A:99:ARG:HB3 | 1:A:100:GLU:H | 5 | 0.49 | 0.06 | 0.5 |
| (1,203) | 1:A:99:ARG:H | 1:A:99:ARG:HG2 | 5 | 0.43 | 0.02 | 0.43 |
| (1,203) | 1:A:99:ARG:H | 1:A:99:ARG:HG3 | 5 | 0.43 | 0.02 | 0.43 |
| (1,434) | 1:A:98:ASN:H | 1:A:99:ARG:HG2 | 5 | 0.28 | 0.03 | 0.27 |
| (1,434) | 1:A:98:ASN:H | 1:A:99:ARG:HG3 | 5 | 0.28 | 0.03 | 0.27 |
| (1,1239) | 1:A:44:ILE:HD11 | 1:A:79:PHE:HD2 | 5 | 0.22 | 0.06 | 0.2 |
| (1,1239) | 1:A:44:ILE:HD12 | 1:A:79:PHE:HD2 | 5 | 0.22 | 0.06 | 0.2 |
| (1,1239) | 1:A:44:ILE:HD13 | 1:A:79:PHE:HD2 | 5 | 0.22 | 0.06 | 0.2 |
| (1,762) | 1:A:89:LYS:HA | 1:A:89:LYS:HG3 | 5 | 0.21 | 0.02 | 0.21 |
| (1,190) | 1:A:85:SER:HB2 | 1:A:86:ARG:H | 5 | 0.2 | 0.01 | 0.2 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Models ¹ | Mean (Å) | SD ¹ (Å) | Median (Å) |
|----------|-----------------|-----------------|---------------------|----------|---------------------|------------|
| (1,1245) | 1:A:79:PHE:HE1 | 1:A:95:PRO:HD2 | 5 | 0.2 | 0.06 | 0.17 |
| (1,595) | 1:A:52:LEU:H | 1:A:65:SER:HB3 | 5 | 0.18 | 0.08 | 0.15 |
| (1,395) | 1:A:91:ARG:HD3 | 1:A:93:VAL:H | 5 | 0.16 | 0.03 | 0.15 |
| (1,618) | 1:A:45:CYS:H | 1:A:46:ARG:HB2 | 5 | 0.15 | 0.03 | 0.14 |
| (1,215) | 1:A:80:HIS:HB3 | 1:A:84:ILE:H | 5 | 0.14 | 0.01 | 0.14 |
| (1,615) | 1:A:42:CYS:HB2 | 1:A:46:ARG:H | 5 | 0.14 | 0.01 | 0.14 |
| (1,705) | 1:A:73:GLY:H | 1:A:104:GLN:HG2 | 5 | 0.14 | 0.02 | 0.13 |
| (1,705) | 1:A:73:GLY:H | 1:A:104:GLN:HG3 | 5 | 0.14 | 0.02 | 0.13 |
| (1,238) | 1:A:81:PHE:HA | 1:A:85:SER:H | 5 | 0.13 | 0.02 | 0.13 |
| (1,959) | 1:A:49:ILE:HG12 | 1:A:50:MET:HB3 | 5 | 0.13 | 0.03 | 0.13 |
| (1,1197) | 1:A:64:THR:HA | 1:A:67:GLU:HG2 | 5 | 0.13 | 0.03 | 0.13 |
| (1,150) | 1:A:91:ARG:H | 1:A:91:ARG:HB3 | 5 | 0.12 | 0.01 | 0.13 |
| (1,556) | 1:A:72:TRP:H | 1:A:72:TRP:HE3 | 5 | 0.12 | 0.02 | 0.11 |
| (1,43) | 1:A:48:HIS:HB2 | 1:A:49:ILE:H | 5 | 0.12 | 0.01 | 0.11 |
| (1,933) | 1:A:54:ILE:HG21 | 1:A:55:GLU:HG3 | 4 | 0.34 | 0.09 | 0.3 |
| (1,933) | 1:A:54:ILE:HG22 | 1:A:55:GLU:HG3 | 4 | 0.34 | 0.09 | 0.3 |
| (1,933) | 1:A:54:ILE:HG23 | 1:A:55:GLU:HG3 | 4 | 0.34 | 0.09 | 0.3 |
| (1,360) | 1:A:59:ASN:H | 1:A:59:ASN:HB3 | 4 | 0.23 | 0.0 | 0.23 |
| (1,1091) | 1:A:79:PHE:HE1 | 1:A:95:PRO:HD3 | 4 | 0.19 | 0.05 | 0.2 |
| (1,1164) | 1:A:52:LEU:HD21 | 1:A:65:SER:HB2 | 4 | 0.17 | 0.07 | 0.14 |
| (1,1164) | 1:A:52:LEU:HD22 | 1:A:65:SER:HB2 | 4 | 0.17 | 0.07 | 0.14 |
| (1,1164) | 1:A:52:LEU:HD23 | 1:A:65:SER:HB2 | 4 | 0.17 | 0.07 | 0.14 |
| (1,181) | 1:A:36:ASP:HB2 | 1:A:37:ILE:H | 4 | 0.16 | 0.03 | 0.15 |
| (1,181) | 1:A:36:ASP:HB3 | 1:A:37:ILE:H | 4 | 0.16 | 0.03 | 0.15 |
| (1,1297) | 1:A:70:VAL:HG11 | 1:A:72:TRP:HD1 | 4 | 0.14 | 0.02 | 0.14 |
| (1,1297) | 1:A:70:VAL:HG12 | 1:A:72:TRP:HD1 | 4 | 0.14 | 0.02 | 0.14 |
| (1,1297) | 1:A:70:VAL:HG13 | 1:A:72:TRP:HD1 | 4 | 0.14 | 0.02 | 0.14 |
| (1,165) | 1:A:45:CYS:HB2 | 1:A:47:ASN:H | 4 | 0.14 | 0.02 | 0.14 |
| (1,812) | 1:A:55:GLU:HB2 | 1:A:58:ALA:HB1 | 4 | 0.14 | 0.03 | 0.12 |
| (1,812) | 1:A:55:GLU:HB2 | 1:A:58:ALA:HB2 | 4 | 0.14 | 0.03 | 0.12 |
| (1,812) | 1:A:55:GLU:HB2 | 1:A:58:ALA:HB3 | 4 | 0.14 | 0.03 | 0.12 |
| (1,812) | 1:A:55:GLU:HB3 | 1:A:58:ALA:HB1 | 4 | 0.14 | 0.03 | 0.12 |
| (1,812) | 1:A:55:GLU:HB3 | 1:A:58:ALA:HB2 | 4 | 0.14 | 0.03 | 0.12 |
| (1,812) | 1:A:55:GLU:HB3 | 1:A:58:ALA:HB3 | 4 | 0.14 | 0.03 | 0.12 |
| (1,951) | 1:A:77:HIS:HB2 | 1:A:96:LEU:HD11 | 4 | 0.13 | 0.01 | 0.13 |
| (1,951) | 1:A:77:HIS:HB2 | 1:A:96:LEU:HD12 | 4 | 0.13 | 0.01 | 0.13 |
| (1,951) | 1:A:77:HIS:HB2 | 1:A:96:LEU:HD13 | 4 | 0.13 | 0.01 | 0.13 |
| (1,530) | 1:A:70:VAL:HA | 1:A:79:PHE:H | 4 | 0.13 | 0.01 | 0.13 |
| (1,553) | 1:A:73:GLY:H | 1:A:104:GLN:HB2 | 4 | 0.12 | 0.02 | 0.12 |
| (1,146) | 1:A:90:THR:HB | 1:A:91:ARG:H | 4 | 0.12 | 0.01 | 0.12 |
| (2,5) | 1:A:73:GLY:O | 1:A:77:HIS:H | 4 | 0.12 | 0.01 | 0.11 |
| (1,848) | 1:A:85:SER:HB2 | 1:A:86:ARG:HG2 | 3 | 0.43 | 0.03 | 0.42 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Models ¹ | Mean (Å) | SD ¹ (Å) | Median (Å) |
|----------|-----------------|-----------------|---------------------|----------|---------------------|------------|
| (1,195) | 1:A:86:ARG:H | 1:A:86:ARG:HG3 | 3 | 0.27 | 0.06 | 0.28 |
| (1,194) | 1:A:86:ARG:H | 1:A:86:ARG:HG2 | 3 | 0.24 | 0.01 | 0.24 |
| (1,611) | 1:A:46:ARG:HG2 | 1:A:47:ASN:H | 3 | 0.24 | 0.03 | 0.23 |
| (1,438) | 1:A:97:ASP:H | 1:A:99:ARG:HG2 | 3 | 0.22 | 0.0 | 0.22 |
| (1,438) | 1:A:97:ASP:H | 1:A:99:ARG:HG3 | 3 | 0.22 | 0.0 | 0.22 |
| (1,643) | 1:A:37:ILE:HG12 | 1:A:38:VAL:H | 3 | 0.18 | 0.07 | 0.16 |
| (1,1266) | 1:A:35:TRP:HA | 1:A:35:TRP:HE3 | 3 | 0.18 | 0.04 | 0.16 |
| (1,83) | 1:A:86:ARG:HG3 | 1:A:87:TRP:H | 3 | 0.17 | 0.05 | 0.17 |
| (1,721) | 1:A:58:ALA:HB1 | 1:A:59:ASN:HD21 | 3 | 0.17 | 0.04 | 0.19 |
| (1,721) | 1:A:58:ALA:HB2 | 1:A:59:ASN:HD21 | 3 | 0.17 | 0.04 | 0.19 |
| (1,721) | 1:A:58:ALA:HB3 | 1:A:59:ASN:HD21 | 3 | 0.17 | 0.04 | 0.19 |
| (1,1167) | 1:A:40:ASP:HB2 | 1:A:48:HIS:HE1 | 3 | 0.16 | 0.03 | 0.15 |
| (1,1167) | 1:A:40:ASP:HB3 | 1:A:48:HIS:HE1 | 3 | 0.16 | 0.03 | 0.15 |
| (1,1044) | 1:A:41:ASN:H | 1:A:43:ALA:HB1 | 3 | 0.15 | 0.01 | 0.15 |
| (1,1044) | 1:A:41:ASN:H | 1:A:43:ALA:HB2 | 3 | 0.15 | 0.01 | 0.15 |
| (1,1044) | 1:A:41:ASN:H | 1:A:43:ALA:HB3 | 3 | 0.15 | 0.01 | 0.15 |
| (1,29) | 1:A:75:CYS:HB3 | 1:A:102:GLU:H | 3 | 0.14 | 0.0 | 0.14 |
| (1,597) | 1:A:51:ASP:H | 1:A:70:VAL:HG11 | 3 | 0.14 | 0.03 | 0.13 |
| (1,597) | 1:A:51:ASP:H | 1:A:70:VAL:HG12 | 3 | 0.14 | 0.03 | 0.13 |
| (1,597) | 1:A:51:ASP:H | 1:A:70:VAL:HG13 | 3 | 0.14 | 0.03 | 0.13 |
| (1,144) | 1:A:89:LYS:H | 1:A:91:ARG:H | 3 | 0.13 | 0.02 | 0.12 |
| (1,445) | 1:A:94:CYS:H | 1:A:97:ASP:HB2 | 3 | 0.13 | 0.0 | 0.13 |
| (1,507) | 1:A:44:ILE:HB | 1:A:83:CYS:H | 3 | 0.12 | 0.02 | 0.11 |
| (1,731) | 1:A:44:ILE:HG21 | 1:A:83:CYS:H | 3 | 0.12 | 0.0 | 0.12 |
| (1,731) | 1:A:44:ILE:HG22 | 1:A:83:CYS:H | 3 | 0.12 | 0.0 | 0.12 |
| (1,731) | 1:A:44:ILE:HG23 | 1:A:83:CYS:H | 3 | 0.12 | 0.0 | 0.12 |
| (1,283) | 1:A:73:GLY:HA2 | 1:A:77:HIS:H | 3 | 0.12 | 0.01 | 0.12 |
| (1,969) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HB3 | 3 | 0.12 | 0.01 | 0.12 |
| (1,783) | 1:A:79:PHE:H | 1:A:84:ILE:HG21 | 3 | 0.12 | 0.01 | 0.11 |
| (1,783) | 1:A:79:PHE:H | 1:A:84:ILE:HG22 | 3 | 0.12 | 0.01 | 0.11 |
| (1,783) | 1:A:79:PHE:H | 1:A:84:ILE:HG23 | 3 | 0.12 | 0.01 | 0.11 |
| (1,1263) | 1:A:70:VAL:HB | 1:A:72:TRP:HZ3 | 3 | 0.11 | 0.0 | 0.11 |
| (1,688) | 1:A:59:ASN:H | 1:A:60:GLN:HB2 | 2 | 0.46 | 0.02 | 0.46 |
| (1,612) | 1:A:46:ARG:HG3 | 1:A:47:ASN:H | 2 | 0.27 | 0.06 | 0.27 |
| (1,497) | 1:A:85:SER:H | 1:A:86:ARG:HG2 | 2 | 0.26 | 0.13 | 0.26 |
| (1,497) | 1:A:85:SER:H | 1:A:86:ARG:HG3 | 2 | 0.26 | 0.13 | 0.26 |
| (1,186) | 1:A:37:ILE:H | 1:A:37:ILE:HG13 | 2 | 0.22 | 0.04 | 0.22 |
| (1,141) | 1:A:38:VAL:HB | 1:A:40:ASP:H | 2 | 0.21 | 0.03 | 0.21 |
| (1,36) | 1:A:100:GLU:HG2 | 1:A:101:TRP:H | 2 | 0.2 | 0.02 | 0.2 |
| (1,36) | 1:A:100:GLU:HG3 | 1:A:101:TRP:H | 2 | 0.2 | 0.02 | 0.2 |
| (1,1021) | 1:A:71:ALA:HB1 | 1:A:106:TYR:HB2 | 2 | 0.19 | 0.05 | 0.19 |
| (1,1021) | 1:A:71:ALA:HB2 | 1:A:106:TYR:HB2 | 2 | 0.19 | 0.05 | 0.19 |

Continued on next page...

Continued from previous page...

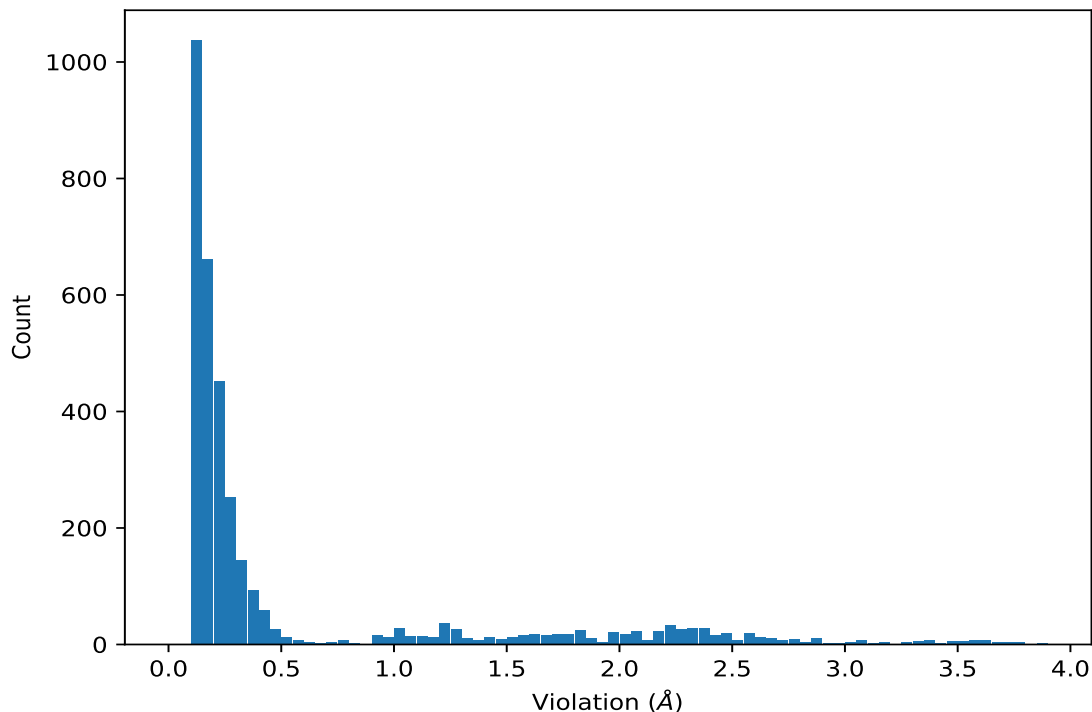
| Key | Atom-1 | Atom-2 | Models ¹ | Mean (Å) | SD ¹ (Å) | Median (Å) |
|----------|-----------------|-----------------|---------------------|----------|---------------------|------------|
| (1,1021) | 1:A:71:ALA:HB3 | 1:A:106:TYR:HB2 | 2 | 0.19 | 0.05 | 0.19 |
| (1,171) | 1:A:37:ILE:H | 1:A:38:VAL:H | 2 | 0.16 | 0.01 | 0.16 |
| (1,385) | 1:A:64:THR:H | 1:A:64:THR:HB | 2 | 0.16 | 0.03 | 0.16 |
| (1,1222) | 1:A:77:HIS:HE1 | 1:A:97:ASP:HA | 2 | 0.16 | 0.05 | 0.16 |
| (1,506) | 1:A:83:CYS:H | 1:A:86:ARG:HB2 | 2 | 0.15 | 0.01 | 0.15 |
| (1,1309) | 1:A:53:CYS:SG | 1:A:82:HIS:ND1 | 2 | 0.15 | 0.02 | 0.15 |
| (1,1005) | 1:A:77:HIS:HD2 | 1:A:96:LEU:HG | 2 | 0.15 | 0.03 | 0.15 |
| (1,587) | 1:A:56:CYS:H | 1:A:57:GLN:HG3 | 2 | 0.15 | 0.0 | 0.15 |
| (1,917) | 1:A:93:VAL:HG11 | 1:A:98:ASN:HB2 | 2 | 0.15 | 0.02 | 0.15 |
| (1,917) | 1:A:93:VAL:HG12 | 1:A:98:ASN:HB2 | 2 | 0.15 | 0.02 | 0.15 |
| (1,917) | 1:A:93:VAL:HG13 | 1:A:98:ASN:HB2 | 2 | 0.15 | 0.02 | 0.15 |
| (1,34) | 1:A:37:ILE:HA | 1:A:38:VAL:H | 2 | 0.14 | 0.02 | 0.14 |
| (1,1103) | 1:A:50:MET:HB3 | 1:A:72:TRP:HH2 | 2 | 0.13 | 0.0 | 0.13 |
| (1,450) | 1:A:93:VAL:H | 1:A:101:TRP:HB2 | 2 | 0.12 | 0.02 | 0.12 |
| (1,735) | 1:A:104:GLN:HG2 | 1:A:105:LYS:H | 2 | 0.12 | 0.01 | 0.12 |
| (1,735) | 1:A:104:GLN:HG3 | 1:A:105:LYS:H | 2 | 0.12 | 0.01 | 0.12 |
| (1,87) | 1:A:107:GLY:HA2 | 1:A:108:HIS:H | 2 | 0.12 | 0.01 | 0.12 |
| (1,276) | 1:A:52:LEU:HD21 | 1:A:57:GLN:H | 2 | 0.12 | 0.0 | 0.12 |
| (1,276) | 1:A:52:LEU:HD22 | 1:A:57:GLN:H | 2 | 0.12 | 0.0 | 0.12 |
| (1,276) | 1:A:52:LEU:HD23 | 1:A:57:GLN:H | 2 | 0.12 | 0.0 | 0.12 |
| (1,408) | 1:A:80:HIS:HA | 1:A:84:ILE:H | 2 | 0.12 | 0.01 | 0.12 |
| (1,543) | 1:A:76:ASN:H | 1:A:77:HIS:HA | 2 | 0.12 | 0.01 | 0.12 |
| (1,795) | 1:A:52:LEU:HD21 | 1:A:56:CYS:HB2 | 2 | 0.12 | 0.01 | 0.12 |
| (1,795) | 1:A:52:LEU:HD22 | 1:A:56:CYS:HB2 | 2 | 0.12 | 0.01 | 0.12 |
| (1,795) | 1:A:52:LEU:HD23 | 1:A:56:CYS:HB2 | 2 | 0.12 | 0.01 | 0.12 |
| (1,152) | 1:A:80:HIS:HB2 | 1:A:82:HIS:H | 2 | 0.12 | 0.0 | 0.12 |
| (1,486) | 1:A:87:TRP:H | 1:A:87:TRP:HD1 | 2 | 0.12 | 0.0 | 0.12 |
| (1,1151) | 1:A:43:ALA:HB1 | 1:A:46:ARG:HA | 2 | 0.12 | 0.0 | 0.12 |
| (1,1151) | 1:A:43:ALA:HB2 | 1:A:46:ARG:HA | 2 | 0.12 | 0.0 | 0.12 |
| (1,1151) | 1:A:43:ALA:HB3 | 1:A:46:ARG:HA | 2 | 0.12 | 0.0 | 0.12 |
| (1,292) | 1:A:44:ILE:HG12 | 1:A:45:CYS:H | 2 | 0.11 | 0.0 | 0.11 |
| (1,599) | 1:A:41:ASN:HB2 | 1:A:49:ILE:H | 2 | 0.11 | 0.0 | 0.11 |
| (1,629) | 1:A:43:ALA:H | 1:A:44:ILE:HG21 | 2 | 0.11 | 0.0 | 0.11 |
| (1,629) | 1:A:43:ALA:H | 1:A:44:ILE:HG22 | 2 | 0.11 | 0.0 | 0.11 |
| (1,629) | 1:A:43:ALA:H | 1:A:44:ILE:HG23 | 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) |
|---------|--------------|----------------|----------|---------------|
| (1,341) | 1:A:44:ILE:H | 1:A:79:PHE:HD2 | 9 | 3.87 |
| (1,738) | 1:A:73:GLY:H | 1:A:79:PHE:HD1 | 19 | 3.85 |
| (1,341) | 1:A:44:ILE:H | 1:A:79:PHE:HD2 | 2 | 3.77 |
| (1,738) | 1:A:73:GLY:H | 1:A:79:PHE:HD1 | 4 | 3.76 |
| (1,738) | 1:A:73:GLY:H | 1:A:79:PHE:HD1 | 15 | 3.76 |
| (1,738) | 1:A:73:GLY:H | 1:A:79:PHE:HD1 | 8 | 3.75 |
| (1,738) | 1:A:73:GLY:H | 1:A:79:PHE:HD1 | 16 | 3.75 |
| (1,738) | 1:A:73:GLY:H | 1:A:79:PHE:HD1 | 9 | 3.74 |
| (1,738) | 1:A:73:GLY:H | 1:A:79:PHE:HD1 | 13 | 3.74 |
| (1,738) | 1:A:73:GLY:H | 1:A:79:PHE:HD1 | 17 | 3.74 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|--------------|-----------------|----------|---------------|
| (1,738) | 1:A:73:GLY:H | 1:A:79:PHE:HD1 | 14 | 3.73 |
| (1,738) | 1:A:73:GLY:H | 1:A:79:PHE:HD1 | 12 | 3.69 |
| (1,738) | 1:A:73:GLY:H | 1:A:79:PHE:HD1 | 10 | 3.68 |
| (1,341) | 1:A:44:ILE:H | 1:A:79:PHE:HD2 | 8 | 3.68 |
| (1,738) | 1:A:73:GLY:H | 1:A:79:PHE:HD1 | 2 | 3.66 |
| (1,738) | 1:A:73:GLY:H | 1:A:79:PHE:HD1 | 18 | 3.64 |
| (1,738) | 1:A:73:GLY:H | 1:A:79:PHE:HD1 | 20 | 3.63 |
| (1,341) | 1:A:44:ILE:H | 1:A:79:PHE:HD2 | 7 | 3.63 |
| (1,738) | 1:A:73:GLY:H | 1:A:79:PHE:HD1 | 11 | 3.61 |
| (1,552) | 1:A:73:GLY:H | 1:A:79:PHE:HE1 | 19 | 3.61 |
| (1,738) | 1:A:73:GLY:H | 1:A:79:PHE:HD1 | 1 | 3.6 |
| (1,738) | 1:A:73:GLY:H | 1:A:79:PHE:HD1 | 7 | 3.6 |
| (1,738) | 1:A:73:GLY:H | 1:A:79:PHE:HD1 | 6 | 3.59 |
| (1,341) | 1:A:44:ILE:H | 1:A:79:PHE:HD2 | 16 | 3.59 |
| (1,552) | 1:A:73:GLY:H | 1:A:79:PHE:HE1 | 8 | 3.57 |
| (1,738) | 1:A:73:GLY:H | 1:A:79:PHE:HD1 | 3 | 3.55 |
| (1,738) | 1:A:73:GLY:H | 1:A:79:PHE:HD1 | 5 | 3.55 |
| (1,552) | 1:A:73:GLY:H | 1:A:79:PHE:HE1 | 9 | 3.55 |
| (1,552) | 1:A:73:GLY:H | 1:A:79:PHE:HE1 | 15 | 3.55 |
| (1,552) | 1:A:73:GLY:H | 1:A:79:PHE:HE1 | 16 | 3.54 |
| (1,552) | 1:A:73:GLY:H | 1:A:79:PHE:HE1 | 17 | 3.54 |
| (1,552) | 1:A:73:GLY:H | 1:A:79:PHE:HE1 | 4 | 3.53 |
| (1,552) | 1:A:73:GLY:H | 1:A:79:PHE:HE1 | 13 | 3.51 |
| (1,552) | 1:A:73:GLY:H | 1:A:79:PHE:HE1 | 14 | 3.51 |
| (1,341) | 1:A:44:ILE:H | 1:A:79:PHE:HD2 | 18 | 3.51 |
| (1,552) | 1:A:73:GLY:H | 1:A:79:PHE:HE1 | 18 | 3.49 |
| (1,341) | 1:A:44:ILE:H | 1:A:79:PHE:HD2 | 14 | 3.49 |
| (1,702) | 1:A:72:TRP:H | 1:A:103:PHE:HD2 | 5 | 3.48 |
| (1,552) | 1:A:73:GLY:H | 1:A:79:PHE:HE1 | 10 | 3.47 |
| (1,552) | 1:A:73:GLY:H | 1:A:79:PHE:HE1 | 12 | 3.47 |
| (1,341) | 1:A:44:ILE:H | 1:A:79:PHE:HD2 | 19 | 3.45 |
| (1,341) | 1:A:44:ILE:H | 1:A:79:PHE:HD2 | 17 | 3.43 |
| (1,341) | 1:A:44:ILE:H | 1:A:79:PHE:HD2 | 4 | 3.42 |
| (1,341) | 1:A:44:ILE:H | 1:A:79:PHE:HD2 | 15 | 3.41 |
| (1,552) | 1:A:73:GLY:H | 1:A:79:PHE:HE1 | 1 | 3.39 |
| (1,552) | 1:A:73:GLY:H | 1:A:79:PHE:HE1 | 2 | 3.39 |
| (1,341) | 1:A:44:ILE:H | 1:A:79:PHE:HD2 | 20 | 3.38 |
| (1,552) | 1:A:73:GLY:H | 1:A:79:PHE:HE1 | 6 | 3.37 |
| (1,552) | 1:A:73:GLY:H | 1:A:79:PHE:HE1 | 11 | 3.37 |
| (1,552) | 1:A:73:GLY:H | 1:A:79:PHE:HE1 | 7 | 3.36 |
| (1,341) | 1:A:44:ILE:H | 1:A:79:PHE:HD2 | 11 | 3.35 |
| (1,552) | 1:A:73:GLY:H | 1:A:79:PHE:HE1 | 20 | 3.34 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,341) | 1:A:44:ILE:H | 1:A:79:PHE:HD2 | 6 | 3.34 |
| (1,341) | 1:A:44:ILE:H | 1:A:79:PHE:HD2 | 10 | 3.34 |
| (1,552) | 1:A:73:GLY:H | 1:A:79:PHE:HE1 | 3 | 3.33 |
| (1,341) | 1:A:44:ILE:H | 1:A:79:PHE:HD2 | 13 | 3.33 |
| (1,552) | 1:A:73:GLY:H | 1:A:79:PHE:HE1 | 5 | 3.31 |
| (1,341) | 1:A:44:ILE:H | 1:A:79:PHE:HD2 | 1 | 3.28 |
| (1,702) | 1:A:72:TRP:H | 1:A:103:PHE:HD2 | 3 | 3.26 |
| (1,341) | 1:A:44:ILE:H | 1:A:79:PHE:HD2 | 12 | 3.26 |
| (1,702) | 1:A:72:TRP:H | 1:A:103:PHE:HD2 | 8 | 3.25 |
| (1,341) | 1:A:44:ILE:H | 1:A:79:PHE:HD2 | 5 | 3.23 |
| (1,341) | 1:A:44:ILE:H | 1:A:79:PHE:HD2 | 3 | 3.16 |
| (1,773) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HE2 | 8 | 3.15 |
| (1,773) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HE2 | 8 | 3.15 |
| (1,773) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HE2 | 8 | 3.15 |
| (1,1) | 1:A:43:ALA:H | 1:A:79:PHE:HD2 | 7 | 3.14 |
| (1,1) | 1:A:43:ALA:H | 1:A:79:PHE:HD2 | 2 | 3.13 |
| (1,1096) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HD2 | 2 | 3.09 |
| (1,1096) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HD2 | 2 | 3.09 |
| (1,1096) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HD2 | 2 | 3.09 |
| (1,1096) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HD2 | 9 | 3.05 |
| (1,1096) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HD2 | 9 | 3.05 |
| (1,1096) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HD2 | 9 | 3.05 |
| (1,1) | 1:A:43:ALA:H | 1:A:79:PHE:HD2 | 9 | 3.05 |
| (1,702) | 1:A:72:TRP:H | 1:A:103:PHE:HD2 | 13 | 3.04 |
| (1,773) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HE2 | 5 | 3.03 |
| (1,773) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HE2 | 5 | 3.03 |
| (1,773) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HE2 | 5 | 3.03 |
| (1,702) | 1:A:72:TRP:H | 1:A:103:PHE:HD2 | 16 | 2.99 |
| (1,702) | 1:A:72:TRP:H | 1:A:103:PHE:HD2 | 14 | 2.97 |
| (1,1296) | 1:A:44:ILE:HG12 | 1:A:79:PHE:HD2 | 9 | 2.95 |
| (1,702) | 1:A:72:TRP:H | 1:A:103:PHE:HD2 | 2 | 2.92 |
| (1,1) | 1:A:43:ALA:H | 1:A:79:PHE:HD2 | 8 | 2.91 |
| (1,676) | 1:A:44:ILE:H | 1:A:79:PHE:HE2 | 9 | 2.89 |
| (1,702) | 1:A:72:TRP:H | 1:A:103:PHE:HD2 | 1 | 2.87 |
| (1,1296) | 1:A:44:ILE:HG12 | 1:A:79:PHE:HD2 | 19 | 2.87 |
| (1,1096) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HD2 | 8 | 2.87 |
| (1,1096) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HD2 | 8 | 2.87 |
| (1,1096) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HD2 | 8 | 2.87 |
| (1,666) | 1:A:43:ALA:H | 1:A:79:PHE:HE2 | 7 | 2.86 |
| (1,702) | 1:A:72:TRP:H | 1:A:103:PHE:HD2 | 12 | 2.85 |
| (1,1096) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HD2 | 7 | 2.85 |
| (1,1096) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HD2 | 7 | 2.85 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1096) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HD2 | 7 | 2.85 |
| (1,702) | 1:A:72:TRP:H | 1:A:103:PHE:HD2 | 17 | 2.82 |
| (1,676) | 1:A:44:ILE:H | 1:A:79:PHE:HE2 | 2 | 2.82 |
| (1,666) | 1:A:43:ALA:H | 1:A:79:PHE:HE2 | 2 | 2.82 |
| (1,1) | 1:A:43:ALA:H | 1:A:79:PHE:HD2 | 18 | 2.81 |
| (1,702) | 1:A:72:TRP:H | 1:A:103:PHE:HD2 | 19 | 2.79 |
| (1,1296) | 1:A:44:ILE:HG12 | 1:A:79:PHE:HD2 | 8 | 2.78 |
| (1,773) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HE2 | 3 | 2.77 |
| (1,773) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HE2 | 3 | 2.77 |
| (1,773) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HE2 | 3 | 2.77 |
| (1,1) | 1:A:43:ALA:H | 1:A:79:PHE:HD2 | 14 | 2.77 |
| (1,702) | 1:A:72:TRP:H | 1:A:103:PHE:HD2 | 18 | 2.75 |
| (1,1096) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HD2 | 18 | 2.75 |
| (1,1096) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HD2 | 18 | 2.75 |
| (1,1096) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HD2 | 18 | 2.75 |
| (1,666) | 1:A:43:ALA:H | 1:A:79:PHE:HE2 | 9 | 2.74 |
| (1,1231) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HD2 | 5 | 2.74 |
| (1,1231) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HD2 | 5 | 2.74 |
| (1,1231) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HD2 | 5 | 2.74 |
| (1,676) | 1:A:44:ILE:H | 1:A:79:PHE:HE2 | 16 | 2.73 |
| (1,702) | 1:A:72:TRP:H | 1:A:103:PHE:HD2 | 6 | 2.72 |
| (1,1296) | 1:A:44:ILE:HG12 | 1:A:79:PHE:HD2 | 4 | 2.7 |
| (1,1296) | 1:A:44:ILE:HG12 | 1:A:79:PHE:HD2 | 16 | 2.69 |
| (1,676) | 1:A:44:ILE:H | 1:A:79:PHE:HE2 | 7 | 2.68 |
| (1,676) | 1:A:44:ILE:H | 1:A:79:PHE:HE2 | 8 | 2.68 |
| (1,1305) | 1:A:44:ILE:HB | 1:A:79:PHE:HD2 | 9 | 2.68 |
| (1,1243) | 1:A:81:PHE:HD1 | 1:A:103:PHE:HE2 | 8 | 2.68 |
| (1,1231) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HD2 | 8 | 2.68 |
| (1,1231) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HD2 | 8 | 2.68 |
| (1,1231) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HD2 | 8 | 2.68 |
| (1,1296) | 1:A:44:ILE:HG12 | 1:A:79:PHE:HD2 | 2 | 2.66 |
| (1,1) | 1:A:43:ALA:H | 1:A:79:PHE:HD2 | 16 | 2.66 |
| (1,1) | 1:A:43:ALA:H | 1:A:79:PHE:HD2 | 20 | 2.65 |
| (1,773) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HE2 | 13 | 2.64 |
| (1,773) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HE2 | 13 | 2.64 |
| (1,773) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HE2 | 13 | 2.64 |
| (1,702) | 1:A:72:TRP:H | 1:A:103:PHE:HD2 | 10 | 2.64 |
| (1,702) | 1:A:72:TRP:H | 1:A:103:PHE:HD2 | 15 | 2.64 |
| (1,702) | 1:A:72:TRP:H | 1:A:103:PHE:HD2 | 9 | 2.63 |
| (1,1) | 1:A:43:ALA:H | 1:A:79:PHE:HD2 | 6 | 2.63 |
| (1,702) | 1:A:72:TRP:H | 1:A:103:PHE:HD2 | 20 | 2.62 |
| (1,1296) | 1:A:44:ILE:HG12 | 1:A:79:PHE:HD2 | 12 | 2.61 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,676) | 1:A:44:ILE:H | 1:A:79:PHE:HE2 | 14 | 2.6 |
| (1,1231) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HD2 | 3 | 2.6 |
| (1,1231) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HD2 | 3 | 2.6 |
| (1,1231) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HD2 | 3 | 2.6 |
| (1,666) | 1:A:43:ALA:H | 1:A:79:PHE:HE2 | 8 | 2.59 |
| (1,1296) | 1:A:44:ILE:HG12 | 1:A:79:PHE:HD2 | 15 | 2.59 |
| (1,1096) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HD2 | 14 | 2.59 |
| (1,1096) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HD2 | 14 | 2.59 |
| (1,1096) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HD2 | 14 | 2.59 |
| (1,702) | 1:A:72:TRP:H | 1:A:103:PHE:HD2 | 4 | 2.58 |
| (1,666) | 1:A:43:ALA:H | 1:A:79:PHE:HE2 | 14 | 2.58 |
| (1,773) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HE2 | 16 | 2.57 |
| (1,773) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HE2 | 16 | 2.57 |
| (1,773) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HE2 | 16 | 2.57 |
| (1,1305) | 1:A:44:ILE:HB | 1:A:79:PHE:HD2 | 16 | 2.57 |
| (1,1) | 1:A:43:ALA:H | 1:A:79:PHE:HD2 | 1 | 2.57 |
| (1,666) | 1:A:43:ALA:H | 1:A:79:PHE:HE2 | 16 | 2.56 |
| (1,1296) | 1:A:44:ILE:HG12 | 1:A:79:PHE:HD2 | 7 | 2.56 |
| (1,1296) | 1:A:44:ILE:HG12 | 1:A:79:PHE:HD2 | 13 | 2.56 |
| (1,702) | 1:A:72:TRP:H | 1:A:103:PHE:HD2 | 7 | 2.55 |
| (1,1096) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HD2 | 4 | 2.55 |
| (1,1096) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HD2 | 4 | 2.55 |
| (1,1096) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HD2 | 4 | 2.55 |
| (1,1) | 1:A:43:ALA:H | 1:A:79:PHE:HD2 | 17 | 2.55 |
| (1,1) | 1:A:43:ALA:H | 1:A:79:PHE:HD2 | 4 | 2.54 |
| (1,1) | 1:A:43:ALA:H | 1:A:79:PHE:HD2 | 10 | 2.54 |
| (1,1) | 1:A:43:ALA:H | 1:A:79:PHE:HD2 | 11 | 2.54 |
| (1,1305) | 1:A:44:ILE:HB | 1:A:79:PHE:HD2 | 8 | 2.53 |
| (1,1) | 1:A:43:ALA:H | 1:A:79:PHE:HD2 | 15 | 2.53 |
| (1,1296) | 1:A:44:ILE:HG12 | 1:A:79:PHE:HD2 | 17 | 2.52 |
| (1,676) | 1:A:44:ILE:H | 1:A:79:PHE:HE2 | 17 | 2.5 |
| (1,676) | 1:A:44:ILE:H | 1:A:79:PHE:HE2 | 18 | 2.5 |
| (1,773) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HE2 | 2 | 2.49 |
| (1,773) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HE2 | 2 | 2.49 |
| (1,773) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HE2 | 2 | 2.49 |
| (1,666) | 1:A:43:ALA:H | 1:A:79:PHE:HE2 | 18 | 2.49 |
| (1,1140) | 1:A:106:TYR:HD2 | 1:A:107:GLY:HA2 | 4 | 2.49 |
| (1,1) | 1:A:43:ALA:H | 1:A:79:PHE:HD2 | 19 | 2.49 |
| (1,702) | 1:A:72:TRP:H | 1:A:103:PHE:HD2 | 11 | 2.48 |
| (1,676) | 1:A:44:ILE:H | 1:A:79:PHE:HE2 | 20 | 2.48 |
| (1,676) | 1:A:44:ILE:H | 1:A:79:PHE:HE2 | 19 | 2.47 |
| (1,1296) | 1:A:44:ILE:HG12 | 1:A:79:PHE:HD2 | 10 | 2.47 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1096) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HD2 | 17 | 2.47 |
| (1,1096) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HD2 | 17 | 2.47 |
| (1,1096) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HD2 | 17 | 2.47 |
| (1,1096) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HD2 | 20 | 2.47 |
| (1,1096) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HD2 | 20 | 2.47 |
| (1,1096) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HD2 | 20 | 2.47 |
| (1,773) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HE2 | 12 | 2.45 |
| (1,773) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HE2 | 12 | 2.45 |
| (1,773) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HE2 | 12 | 2.45 |
| (1,1305) | 1:A:44:ILE:HB | 1:A:79:PHE:HD2 | 2 | 2.45 |
| (1,773) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HE2 | 1 | 2.43 |
| (1,773) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HE2 | 1 | 2.43 |
| (1,773) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HE2 | 1 | 2.43 |
| (1,676) | 1:A:44:ILE:H | 1:A:79:PHE:HE2 | 4 | 2.43 |
| (1,676) | 1:A:44:ILE:H | 1:A:79:PHE:HE2 | 15 | 2.43 |
| (1,666) | 1:A:43:ALA:H | 1:A:79:PHE:HE2 | 20 | 2.43 |
| (1,1296) | 1:A:44:ILE:HG12 | 1:A:79:PHE:HD2 | 14 | 2.43 |
| (1,1296) | 1:A:44:ILE:HG12 | 1:A:79:PHE:HD2 | 18 | 2.43 |
| (1,1243) | 1:A:81:PHE:HD1 | 1:A:103:PHE:HE2 | 3 | 2.43 |
| (1,1140) | 1:A:106:TYR:HD2 | 1:A:107:GLY:HA2 | 8 | 2.43 |
| (1,1) | 1:A:43:ALA:H | 1:A:79:PHE:HD2 | 5 | 2.43 |
| (1,1096) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HD2 | 10 | 2.42 |
| (1,1096) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HD2 | 10 | 2.42 |
| (1,1096) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HD2 | 10 | 2.42 |
| (1,676) | 1:A:44:ILE:H | 1:A:79:PHE:HE2 | 11 | 2.41 |
| (1,1305) | 1:A:44:ILE:HB | 1:A:79:PHE:HD2 | 4 | 2.41 |
| (1,1219) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HE2 | 8 | 2.39 |
| (1,1305) | 1:A:44:ILE:HB | 1:A:79:PHE:HD2 | 13 | 2.38 |
| (1,1305) | 1:A:44:ILE:HB | 1:A:79:PHE:HD2 | 19 | 2.38 |
| (1,1096) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HD2 | 15 | 2.38 |
| (1,1096) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HD2 | 15 | 2.38 |
| (1,1096) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HD2 | 15 | 2.38 |
| (1,1) | 1:A:43:ALA:H | 1:A:79:PHE:HD2 | 3 | 2.38 |
| (1,773) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HE2 | 14 | 2.37 |
| (1,773) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HE2 | 14 | 2.37 |
| (1,773) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HE2 | 14 | 2.37 |
| (1,773) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HE2 | 17 | 2.37 |
| (1,773) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HE2 | 17 | 2.37 |
| (1,773) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HE2 | 17 | 2.37 |
| (1,773) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HE2 | 18 | 2.37 |
| (1,773) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HE2 | 18 | 2.37 |
| (1,773) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HE2 | 18 | 2.37 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,666) | 1:A:43:ALA:H | 1:A:79:PHE:HE2 | 17 | 2.37 |
| (1,1296) | 1:A:44:ILE:HG12 | 1:A:79:PHE:HD2 | 5 | 2.37 |
| (1,1096) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HD2 | 6 | 2.37 |
| (1,1096) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HD2 | 6 | 2.37 |
| (1,1096) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HD2 | 6 | 2.37 |
| (1,1) | 1:A:43:ALA:H | 1:A:79:PHE:HD2 | 13 | 2.37 |
| (1,773) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HE2 | 7 | 2.36 |
| (1,773) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HE2 | 7 | 2.36 |
| (1,773) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HE2 | 7 | 2.36 |
| (1,676) | 1:A:44:ILE:H | 1:A:79:PHE:HE2 | 10 | 2.36 |
| (1,1096) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HD2 | 16 | 2.36 |
| (1,1096) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HD2 | 16 | 2.36 |
| (1,1096) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HD2 | 16 | 2.36 |
| (1,1296) | 1:A:44:ILE:HG12 | 1:A:79:PHE:HD2 | 11 | 2.34 |
| (1,1231) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HD2 | 13 | 2.34 |
| (1,1231) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HD2 | 13 | 2.34 |
| (1,1231) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HD2 | 13 | 2.34 |
| (1,773) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HE2 | 19 | 2.33 |
| (1,773) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HE2 | 19 | 2.33 |
| (1,773) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HE2 | 19 | 2.33 |
| (1,676) | 1:A:44:ILE:H | 1:A:79:PHE:HE2 | 13 | 2.33 |
| (1,666) | 1:A:43:ALA:H | 1:A:79:PHE:HE2 | 1 | 2.33 |
| (1,1305) | 1:A:44:ILE:HB | 1:A:79:PHE:HD2 | 15 | 2.33 |
| (1,1305) | 1:A:44:ILE:HB | 1:A:79:PHE:HD2 | 17 | 2.33 |
| (1,676) | 1:A:44:ILE:H | 1:A:79:PHE:HE2 | 6 | 2.32 |
| (1,1305) | 1:A:44:ILE:HB | 1:A:79:PHE:HD2 | 18 | 2.32 |
| (1,863) | 1:A:42:CYS:HA | 1:A:79:PHE:HD2 | 7 | 2.31 |
| (1,666) | 1:A:43:ALA:H | 1:A:79:PHE:HE2 | 6 | 2.31 |
| (1,1296) | 1:A:44:ILE:HG12 | 1:A:79:PHE:HD2 | 20 | 2.31 |
| (1,1231) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HD2 | 16 | 2.31 |
| (1,1231) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HD2 | 16 | 2.31 |
| (1,1231) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HD2 | 16 | 2.31 |
| (1,676) | 1:A:44:ILE:H | 1:A:79:PHE:HE2 | 1 | 2.3 |
| (1,676) | 1:A:44:ILE:H | 1:A:79:PHE:HE2 | 12 | 2.3 |
| (1,666) | 1:A:43:ALA:H | 1:A:79:PHE:HE2 | 11 | 2.3 |
| (1,1305) | 1:A:44:ILE:HB | 1:A:79:PHE:HD2 | 12 | 2.3 |
| (1,1305) | 1:A:44:ILE:HB | 1:A:79:PHE:HD2 | 14 | 2.3 |
| (1,1243) | 1:A:81:PHE:HD1 | 1:A:103:PHE:HE2 | 5 | 2.3 |
| (1,1096) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HD2 | 1 | 2.3 |
| (1,1096) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HD2 | 1 | 2.3 |
| (1,1096) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HD2 | 1 | 2.3 |
| (1,1232) | 1:A:105:LYS:HA | 1:A:106:TYR:HD1 | 14 | 2.29 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,676) | 1:A:44:ILE:H | 1:A:79:PHE:HE2 | 5 | 2.28 |
| (1,1) | 1:A:43:ALA:H | 1:A:79:PHE:HD2 | 12 | 2.28 |
| (1,1305) | 1:A:44:ILE:HB | 1:A:79:PHE:HD2 | 5 | 2.27 |
| (1,1231) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HD2 | 1 | 2.27 |
| (1,1231) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HD2 | 1 | 2.27 |
| (1,1231) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HD2 | 1 | 2.27 |
| (1,1231) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HD2 | 2 | 2.27 |
| (1,1231) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HD2 | 2 | 2.27 |
| (1,1231) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HD2 | 2 | 2.27 |
| (1,1231) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HD2 | 12 | 2.27 |
| (1,1231) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HD2 | 12 | 2.27 |
| (1,1231) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HD2 | 12 | 2.27 |
| (1,1096) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HD2 | 19 | 2.27 |
| (1,1096) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HD2 | 19 | 2.27 |
| (1,1096) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HD2 | 19 | 2.27 |
| (1,863) | 1:A:42:CYS:HA | 1:A:79:PHE:HD2 | 14 | 2.26 |
| (1,666) | 1:A:43:ALA:H | 1:A:79:PHE:HE2 | 15 | 2.26 |
| (1,1296) | 1:A:44:ILE:HG12 | 1:A:79:PHE:HD2 | 1 | 2.26 |
| (1,1096) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HD2 | 11 | 2.26 |
| (1,1096) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HD2 | 11 | 2.26 |
| (1,1096) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HD2 | 11 | 2.26 |
| (1,773) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HE2 | 20 | 2.25 |
| (1,773) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HE2 | 20 | 2.25 |
| (1,773) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HE2 | 20 | 2.25 |
| (1,1296) | 1:A:44:ILE:HG12 | 1:A:79:PHE:HD2 | 6 | 2.25 |
| (1,863) | 1:A:42:CYS:HA | 1:A:79:PHE:HD2 | 2 | 2.24 |
| (1,666) | 1:A:43:ALA:H | 1:A:79:PHE:HE2 | 4 | 2.24 |
| (1,773) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HE2 | 4 | 2.23 |
| (1,773) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HE2 | 4 | 2.23 |
| (1,773) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HE2 | 4 | 2.23 |
| (1,1305) | 1:A:44:ILE:HB | 1:A:79:PHE:HD2 | 11 | 2.23 |
| (1,1231) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HD2 | 14 | 2.23 |
| (1,1231) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HD2 | 14 | 2.23 |
| (1,1231) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HD2 | 14 | 2.23 |
| (1,773) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HE2 | 10 | 2.22 |
| (1,773) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HE2 | 10 | 2.22 |
| (1,773) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HE2 | 10 | 2.22 |
| (1,773) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HE2 | 15 | 2.22 |
| (1,773) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HE2 | 15 | 2.22 |
| (1,773) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HE2 | 15 | 2.22 |
| (1,666) | 1:A:43:ALA:H | 1:A:79:PHE:HE2 | 19 | 2.22 |
| (1,1231) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HD2 | 18 | 2.22 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1231) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HD2 | 18 | 2.22 |
| (1,1231) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HD2 | 18 | 2.22 |
| (1,863) | 1:A:42:CYS:HA | 1:A:79:PHE:HD2 | 16 | 2.21 |
| (1,773) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HE2 | 11 | 2.21 |
| (1,773) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HE2 | 11 | 2.21 |
| (1,773) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HE2 | 11 | 2.21 |
| (1,666) | 1:A:43:ALA:H | 1:A:79:PHE:HE2 | 5 | 2.21 |
| (1,666) | 1:A:43:ALA:H | 1:A:79:PHE:HE2 | 10 | 2.21 |
| (1,1305) | 1:A:44:ILE:HB | 1:A:79:PHE:HD2 | 7 | 2.21 |
| (1,1231) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HD2 | 17 | 2.21 |
| (1,1231) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HD2 | 17 | 2.21 |
| (1,1231) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HD2 | 17 | 2.21 |
| (1,1141) | 1:A:106:TYR:HD2 | 1:A:107:GLY:HA3 | 5 | 2.21 |
| (1,1096) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HD2 | 3 | 2.21 |
| (1,1096) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HD2 | 3 | 2.21 |
| (1,1096) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HD2 | 3 | 2.21 |
| (1,676) | 1:A:44:ILE:H | 1:A:79:PHE:HE2 | 3 | 2.2 |
| (1,1305) | 1:A:44:ILE:HB | 1:A:79:PHE:HD2 | 10 | 2.19 |
| (1,1305) | 1:A:44:ILE:HB | 1:A:79:PHE:HD2 | 20 | 2.19 |
| (1,1296) | 1:A:44:ILE:HG12 | 1:A:79:PHE:HD2 | 3 | 2.19 |
| (1,1231) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HD2 | 19 | 2.19 |
| (1,1231) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HD2 | 19 | 2.19 |
| (1,1231) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HD2 | 19 | 2.19 |
| (1,1096) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HD2 | 13 | 2.19 |
| (1,1096) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HD2 | 13 | 2.19 |
| (1,1096) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HD2 | 13 | 2.19 |
| (1,1231) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HD2 | 20 | 2.17 |
| (1,1231) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HD2 | 20 | 2.17 |
| (1,1231) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HD2 | 20 | 2.17 |
| (1,1219) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HE2 | 13 | 2.17 |
| (1,773) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HE2 | 9 | 2.16 |
| (1,773) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HE2 | 9 | 2.16 |
| (1,773) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HE2 | 9 | 2.16 |
| (1,1305) | 1:A:44:ILE:HB | 1:A:79:PHE:HD2 | 1 | 2.16 |
| (1,1243) | 1:A:81:PHE:HD1 | 1:A:103:PHE:HE2 | 13 | 2.16 |
| (1,1231) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HD2 | 10 | 2.16 |
| (1,1231) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HD2 | 10 | 2.16 |
| (1,1231) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HD2 | 10 | 2.16 |
| (1,1141) | 1:A:106:TYR:HD2 | 1:A:107:GLY:HA3 | 20 | 2.16 |
| (1,863) | 1:A:42:CYS:HA | 1:A:79:PHE:HD2 | 9 | 2.15 |
| (1,1099) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HG13 | 3 | 2.14 |
| (1,863) | 1:A:42:CYS:HA | 1:A:79:PHE:HD2 | 11 | 2.13 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,863) | 1:A:42:CYS:HA | 1:A:79:PHE:HD2 | 20 | 2.13 |
| (1,1140) | 1:A:106:TYR:HD2 | 1:A:107:GLY:HA2 | 5 | 2.13 |
| (1,666) | 1:A:43:ALA:H | 1:A:79:PHE:HE2 | 13 | 2.12 |
| (1,1219) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HE2 | 7 | 2.12 |
| (1,666) | 1:A:43:ALA:H | 1:A:79:PHE:HE2 | 3 | 2.1 |
| (1,773) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HE2 | 6 | 2.09 |
| (1,773) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HE2 | 6 | 2.09 |
| (1,773) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HE2 | 6 | 2.09 |
| (1,1231) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HD2 | 4 | 2.09 |
| (1,1231) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HD2 | 4 | 2.09 |
| (1,1231) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HD2 | 4 | 2.09 |
| (1,1231) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HD2 | 7 | 2.09 |
| (1,1231) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HD2 | 7 | 2.09 |
| (1,1231) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HD2 | 7 | 2.09 |
| (1,863) | 1:A:42:CYS:HA | 1:A:79:PHE:HD2 | 6 | 2.08 |
| (1,1305) | 1:A:44:ILE:HB | 1:A:79:PHE:HD2 | 6 | 2.08 |
| (1,1231) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HD2 | 11 | 2.08 |
| (1,1231) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HD2 | 11 | 2.08 |
| (1,1231) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HD2 | 11 | 2.08 |
| (1,1099) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HG13 | 6 | 2.08 |
| (1,666) | 1:A:43:ALA:H | 1:A:79:PHE:HE2 | 12 | 2.07 |
| (1,1220) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HD2 | 8 | 2.07 |
| (1,1099) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HG13 | 10 | 2.07 |
| (1,1243) | 1:A:81:PHE:HD1 | 1:A:103:PHE:HE2 | 18 | 2.06 |
| (1,1099) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HG13 | 14 | 2.06 |
| (1,1243) | 1:A:81:PHE:HD1 | 1:A:103:PHE:HE2 | 4 | 2.05 |
| (1,1099) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HG13 | 11 | 2.05 |
| (1,1099) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HG13 | 20 | 2.05 |
| (1,1243) | 1:A:81:PHE:HD1 | 1:A:103:PHE:HE2 | 16 | 2.04 |
| (1,1099) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HG13 | 5 | 2.04 |
| (1,863) | 1:A:42:CYS:HA | 1:A:79:PHE:HD2 | 1 | 2.03 |
| (1,863) | 1:A:42:CYS:HA | 1:A:79:PHE:HD2 | 5 | 2.03 |
| (1,1305) | 1:A:44:ILE:HB | 1:A:79:PHE:HD2 | 3 | 2.03 |
| (1,1219) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HE2 | 5 | 2.03 |
| (1,863) | 1:A:42:CYS:HA | 1:A:79:PHE:HD2 | 8 | 2.02 |
| (1,1096) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HD2 | 5 | 2.02 |
| (1,1096) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HD2 | 5 | 2.02 |
| (1,1096) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HD2 | 5 | 2.02 |
| (1,863) | 1:A:42:CYS:HA | 1:A:79:PHE:HD2 | 18 | 2.01 |
| (1,1231) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HD2 | 6 | 2.01 |
| (1,1231) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HD2 | 6 | 2.01 |
| (1,1231) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HD2 | 6 | 2.01 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1219) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HE2 | 18 | 2.01 |
| (1,1231) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HD2 | 15 | 2.0 |
| (1,1231) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HD2 | 15 | 2.0 |
| (1,1231) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HD2 | 15 | 2.0 |
| (1,1232) | 1:A:105:LYS:HA | 1:A:106:TYR:HD1 | 5 | 1.99 |
| (1,1232) | 1:A:105:LYS:HA | 1:A:106:TYR:HD1 | 20 | 1.99 |
| (1,1220) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HD2 | 7 | 1.99 |
| (1,1099) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HG13 | 12 | 1.99 |
| (1,1099) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HG13 | 7 | 1.98 |
| (1,1243) | 1:A:81:PHE:HD1 | 1:A:103:PHE:HE2 | 2 | 1.97 |
| (1,1231) | 1:A:71:ALA:HB1 | 1:A:103:PHE:HD2 | 9 | 1.97 |
| (1,1231) | 1:A:71:ALA:HB2 | 1:A:103:PHE:HD2 | 9 | 1.97 |
| (1,1231) | 1:A:71:ALA:HB3 | 1:A:103:PHE:HD2 | 9 | 1.97 |
| (1,1220) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HD2 | 13 | 1.97 |
| (1,1219) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HE2 | 3 | 1.97 |
| (1,1099) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HG13 | 1 | 1.97 |
| (1,1099) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HG13 | 18 | 1.97 |
| (1,1243) | 1:A:81:PHE:HD1 | 1:A:103:PHE:HE2 | 11 | 1.96 |
| (1,1238) | 1:A:44:ILE:HG13 | 1:A:79:PHE:HD2 | 9 | 1.96 |
| (1,1219) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HE2 | 19 | 1.96 |
| (1,1141) | 1:A:106:TYR:HD2 | 1:A:107:GLY:HA3 | 13 | 1.96 |
| (1,863) | 1:A:42:CYS:HA | 1:A:79:PHE:HD2 | 15 | 1.95 |
| (1,1096) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HD2 | 12 | 1.95 |
| (1,1096) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HD2 | 12 | 1.95 |
| (1,1096) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HD2 | 12 | 1.95 |
| (1,1099) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HG13 | 17 | 1.94 |
| (1,863) | 1:A:42:CYS:HA | 1:A:79:PHE:HD2 | 17 | 1.92 |
| (1,1099) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HG13 | 2 | 1.91 |
| (1,1243) | 1:A:81:PHE:HD1 | 1:A:103:PHE:HE2 | 1 | 1.9 |
| (1,863) | 1:A:42:CYS:HA | 1:A:79:PHE:HD2 | 19 | 1.88 |
| (1,1095) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HE2 | 2 | 1.88 |
| (1,1095) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HE2 | 2 | 1.88 |
| (1,1095) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HE2 | 2 | 1.88 |
| (1,1099) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HG13 | 4 | 1.87 |
| (1,863) | 1:A:42:CYS:HA | 1:A:79:PHE:HD2 | 12 | 1.86 |
| (1,1219) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HE2 | 12 | 1.86 |
| (1,863) | 1:A:42:CYS:HA | 1:A:79:PHE:HD2 | 3 | 1.85 |
| (1,1243) | 1:A:81:PHE:HD1 | 1:A:103:PHE:HE2 | 12 | 1.85 |
| (1,1220) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HD2 | 3 | 1.85 |
| (1,1219) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HE2 | 14 | 1.85 |
| (1,1219) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HE2 | 15 | 1.84 |
| (1,1219) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HE2 | 16 | 1.84 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1099) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HG13 | 13 | 1.84 |
| (1,863) | 1:A:42:CYS:HA | 1:A:79:PHE:HD2 | 10 | 1.83 |
| (1,415) | 1:A:103:PHE:HD2 | 1:A:104:GLN:H | 19 | 1.83 |
| (1,415) | 1:A:103:PHE:HD2 | 1:A:104:GLN:H | 20 | 1.83 |
| (1,1243) | 1:A:81:PHE:HD1 | 1:A:103:PHE:HE2 | 17 | 1.83 |
| (1,1220) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HD2 | 5 | 1.83 |
| (1,1220) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HD2 | 19 | 1.83 |
| (1,1095) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HE2 | 9 | 1.83 |
| (1,1095) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HE2 | 9 | 1.83 |
| (1,1095) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HE2 | 9 | 1.83 |
| (1,1219) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HE2 | 2 | 1.82 |
| (1,1140) | 1:A:106:TYR:HD2 | 1:A:107:GLY:HA2 | 14 | 1.82 |
| (1,1099) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HG13 | 15 | 1.82 |
| (1,415) | 1:A:103:PHE:HD2 | 1:A:104:GLN:H | 18 | 1.81 |
| (1,1238) | 1:A:44:ILE:HG13 | 1:A:79:PHE:HD2 | 8 | 1.81 |
| (1,1232) | 1:A:105:LYS:HA | 1:A:106:TYR:HD1 | 4 | 1.81 |
| (1,1220) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HD2 | 18 | 1.81 |
| (1,1219) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HE2 | 20 | 1.81 |
| (1,1238) | 1:A:44:ILE:HG13 | 1:A:79:PHE:HD2 | 2 | 1.8 |
| (1,1232) | 1:A:105:LYS:HA | 1:A:106:TYR:HD1 | 10 | 1.8 |
| (1,1219) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HE2 | 11 | 1.8 |
| (1,1140) | 1:A:106:TYR:HD2 | 1:A:107:GLY:HA2 | 10 | 1.8 |
| (1,1243) | 1:A:81:PHE:HD1 | 1:A:103:PHE:HE2 | 7 | 1.79 |
| (1,415) | 1:A:103:PHE:HD2 | 1:A:104:GLN:H | 15 | 1.78 |
| (1,415) | 1:A:103:PHE:HD2 | 1:A:104:GLN:H | 17 | 1.78 |
| (1,1243) | 1:A:81:PHE:HD1 | 1:A:103:PHE:HE2 | 10 | 1.78 |
| (1,1232) | 1:A:105:LYS:HA | 1:A:106:TYR:HD1 | 13 | 1.78 |
| (1,1141) | 1:A:106:TYR:HD2 | 1:A:107:GLY:HA3 | 4 | 1.78 |
| (1,1099) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HG13 | 8 | 1.78 |
| (1,863) | 1:A:42:CYS:HA | 1:A:79:PHE:HD2 | 4 | 1.77 |
| (1,863) | 1:A:42:CYS:HA | 1:A:79:PHE:HD2 | 13 | 1.77 |
| (1,415) | 1:A:103:PHE:HD2 | 1:A:104:GLN:H | 14 | 1.77 |
| (1,415) | 1:A:103:PHE:HD2 | 1:A:104:GLN:H | 9 | 1.76 |
| (1,415) | 1:A:103:PHE:HD2 | 1:A:104:GLN:H | 13 | 1.76 |
| (1,1232) | 1:A:105:LYS:HA | 1:A:106:TYR:HD1 | 8 | 1.76 |
| (1,415) | 1:A:103:PHE:HD2 | 1:A:104:GLN:H | 10 | 1.75 |
| (1,1304) | 1:A:79:PHE:HE1 | 1:A:94:CYS:HA | 20 | 1.75 |
| (1,1220) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HD2 | 12 | 1.75 |
| (1,1220) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HD2 | 20 | 1.75 |
| (1,1098) | 1:A:79:PHE:HE2 | 1:A:95:PRO:HB2 | 13 | 1.75 |
| (1,415) | 1:A:103:PHE:HD2 | 1:A:104:GLN:H | 2 | 1.74 |
| (1,415) | 1:A:103:PHE:HD2 | 1:A:104:GLN:H | 16 | 1.74 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1219) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HE2 | 1 | 1.74 |
| (1,1099) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HG13 | 16 | 1.74 |
| (1,415) | 1:A:103:PHE:HD2 | 1:A:104:GLN:H | 11 | 1.73 |
| (1,1238) | 1:A:44:ILE:HG13 | 1:A:79:PHE:HD2 | 19 | 1.73 |
| (1,1219) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HE2 | 4 | 1.73 |
| (1,1099) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HG13 | 9 | 1.73 |
| (1,1243) | 1:A:81:PHE:HD1 | 1:A:103:PHE:HE2 | 15 | 1.72 |
| (1,1243) | 1:A:81:PHE:HD1 | 1:A:103:PHE:HE2 | 20 | 1.72 |
| (1,1238) | 1:A:44:ILE:HG13 | 1:A:79:PHE:HD2 | 16 | 1.72 |
| (1,1220) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HD2 | 15 | 1.72 |
| (1,1220) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HD2 | 16 | 1.72 |
| (1,415) | 1:A:103:PHE:HD2 | 1:A:104:GLN:H | 1 | 1.71 |
| (1,1220) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HD2 | 14 | 1.71 |
| (1,1141) | 1:A:106:TYR:HD2 | 1:A:107:GLY:HA3 | 8 | 1.71 |
| (1,1099) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HG13 | 19 | 1.71 |
| (1,1304) | 1:A:79:PHE:HE1 | 1:A:94:CYS:HA | 6 | 1.7 |
| (1,1220) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HD2 | 2 | 1.69 |
| (1,1220) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HD2 | 11 | 1.69 |
| (1,1095) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HE2 | 7 | 1.69 |
| (1,1095) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HE2 | 7 | 1.69 |
| (1,1095) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HE2 | 7 | 1.69 |
| (1,415) | 1:A:103:PHE:HD2 | 1:A:104:GLN:H | 4 | 1.68 |
| (1,415) | 1:A:103:PHE:HD2 | 1:A:104:GLN:H | 6 | 1.68 |
| (1,415) | 1:A:103:PHE:HD2 | 1:A:104:GLN:H | 8 | 1.68 |
| (1,415) | 1:A:103:PHE:HD2 | 1:A:104:GLN:H | 5 | 1.67 |
| (1,415) | 1:A:103:PHE:HD2 | 1:A:104:GLN:H | 7 | 1.67 |
| (1,1238) | 1:A:44:ILE:HG13 | 1:A:79:PHE:HD2 | 7 | 1.67 |
| (1,1304) | 1:A:79:PHE:HE1 | 1:A:94:CYS:HA | 1 | 1.66 |
| (1,1304) | 1:A:79:PHE:HE1 | 1:A:94:CYS:HA | 10 | 1.66 |
| (1,1243) | 1:A:81:PHE:HD1 | 1:A:103:PHE:HE2 | 14 | 1.66 |
| (1,1220) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HD2 | 1 | 1.66 |
| (1,1220) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HD2 | 4 | 1.65 |
| (1,1219) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HE2 | 17 | 1.65 |
| (1,415) | 1:A:103:PHE:HD2 | 1:A:104:GLN:H | 12 | 1.64 |
| (1,1304) | 1:A:79:PHE:HE1 | 1:A:94:CYS:HA | 7 | 1.64 |
| (1,1238) | 1:A:44:ILE:HG13 | 1:A:79:PHE:HD2 | 4 | 1.64 |
| (1,1219) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HE2 | 6 | 1.64 |
| (1,982) | 1:A:79:PHE:HD2 | 1:A:83:CYS:HB2 | 17 | 1.63 |
| (1,1304) | 1:A:79:PHE:HE1 | 1:A:94:CYS:HA | 12 | 1.63 |
| (1,1095) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HE2 | 8 | 1.63 |
| (1,1095) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HE2 | 8 | 1.63 |
| (1,1095) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HE2 | 8 | 1.63 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1034) | 1:A:84:ILE:HG21 | 1:A:103:PHE:HE2 | 8 | 1.63 |
| (1,1034) | 1:A:84:ILE:HG22 | 1:A:103:PHE:HE2 | 8 | 1.63 |
| (1,1034) | 1:A:84:ILE:HG23 | 1:A:103:PHE:HE2 | 8 | 1.63 |
| (1,1304) | 1:A:79:PHE:HE1 | 1:A:94:CYS:HA | 14 | 1.62 |
| (1,1220) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HD2 | 6 | 1.62 |
| (1,1219) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HE2 | 9 | 1.62 |
| (1,982) | 1:A:79:PHE:HD2 | 1:A:83:CYS:HB2 | 9 | 1.61 |
| (1,1304) | 1:A:79:PHE:HE1 | 1:A:94:CYS:HA | 18 | 1.61 |
| (1,1219) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HE2 | 10 | 1.61 |
| (1,415) | 1:A:103:PHE:HD2 | 1:A:104:GLN:H | 3 | 1.59 |
| (1,1304) | 1:A:79:PHE:HE1 | 1:A:94:CYS:HA | 3 | 1.59 |
| (1,1304) | 1:A:79:PHE:HE1 | 1:A:94:CYS:HA | 5 | 1.59 |
| (1,1220) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HD2 | 10 | 1.59 |
| (1,1220) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HD2 | 17 | 1.59 |
| (1,1238) | 1:A:44:ILE:HG13 | 1:A:79:PHE:HD2 | 17 | 1.58 |
| (1,1220) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:HD2 | 9 | 1.58 |
| (1,1034) | 1:A:84:ILE:HG21 | 1:A:103:PHE:HE2 | 7 | 1.58 |
| (1,1034) | 1:A:84:ILE:HG22 | 1:A:103:PHE:HE2 | 7 | 1.58 |
| (1,1034) | 1:A:84:ILE:HG23 | 1:A:103:PHE:HE2 | 7 | 1.58 |
| (1,1238) | 1:A:44:ILE:HG13 | 1:A:79:PHE:HD2 | 15 | 1.57 |
| (1,982) | 1:A:79:PHE:HD2 | 1:A:83:CYS:HB2 | 16 | 1.56 |
| (1,1238) | 1:A:44:ILE:HG13 | 1:A:79:PHE:HD2 | 13 | 1.56 |
| (1,1304) | 1:A:79:PHE:HE1 | 1:A:94:CYS:HA | 4 | 1.55 |
| (1,1304) | 1:A:79:PHE:HE1 | 1:A:94:CYS:HA | 19 | 1.55 |
| (1,1238) | 1:A:44:ILE:HG13 | 1:A:79:PHE:HD2 | 12 | 1.55 |
| (1,1304) | 1:A:79:PHE:HE1 | 1:A:94:CYS:HA | 2 | 1.54 |
| (1,1034) | 1:A:84:ILE:HG21 | 1:A:103:PHE:HE2 | 3 | 1.53 |
| (1,1034) | 1:A:84:ILE:HG22 | 1:A:103:PHE:HE2 | 3 | 1.53 |
| (1,1034) | 1:A:84:ILE:HG23 | 1:A:103:PHE:HE2 | 3 | 1.53 |
| (1,982) | 1:A:79:PHE:HD2 | 1:A:83:CYS:HB2 | 2 | 1.52 |
| (1,1304) | 1:A:79:PHE:HE1 | 1:A:94:CYS:HA | 9 | 1.52 |
| (1,1304) | 1:A:79:PHE:HE1 | 1:A:94:CYS:HA | 8 | 1.51 |
| (1,1238) | 1:A:44:ILE:HG13 | 1:A:79:PHE:HD2 | 18 | 1.51 |
| (1,1238) | 1:A:44:ILE:HG13 | 1:A:79:PHE:HD2 | 14 | 1.5 |
| (1,1034) | 1:A:84:ILE:HG21 | 1:A:103:PHE:HE2 | 13 | 1.5 |
| (1,1034) | 1:A:84:ILE:HG22 | 1:A:103:PHE:HE2 | 13 | 1.5 |
| (1,1034) | 1:A:84:ILE:HG23 | 1:A:103:PHE:HE2 | 13 | 1.5 |
| (1,982) | 1:A:79:PHE:HD2 | 1:A:83:CYS:HB2 | 8 | 1.48 |
| (1,1095) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HE2 | 18 | 1.48 |
| (1,1095) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HE2 | 18 | 1.48 |
| (1,1095) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HE2 | 18 | 1.48 |
| (1,1243) | 1:A:81:PHE:HD1 | 1:A:103:PHE:HE2 | 19 | 1.47 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1098) | 1:A:79:PHE:HE2 | 1:A:95:PRO:HB2 | 19 | 1.47 |
| (1,982) | 1:A:79:PHE:HD2 | 1:A:83:CYS:HB2 | 3 | 1.46 |
| (1,982) | 1:A:79:PHE:HD2 | 1:A:83:CYS:HB2 | 14 | 1.45 |
| (1,1238) | 1:A:44:ILE:HG13 | 1:A:79:PHE:HD2 | 5 | 1.45 |
| (1,1238) | 1:A:44:ILE:HG13 | 1:A:79:PHE:HD2 | 10 | 1.45 |
| (1,982) | 1:A:79:PHE:HD2 | 1:A:83:CYS:HB2 | 7 | 1.44 |
| (1,982) | 1:A:79:PHE:HD2 | 1:A:83:CYS:HB2 | 15 | 1.43 |
| (1,1304) | 1:A:79:PHE:HE1 | 1:A:94:CYS:HA | 16 | 1.43 |
| (1,1243) | 1:A:81:PHE:HD1 | 1:A:103:PHE:HE2 | 6 | 1.43 |
| (1,1098) | 1:A:79:PHE:HE2 | 1:A:95:PRO:HB2 | 8 | 1.43 |
| (1,982) | 1:A:79:PHE:HD2 | 1:A:83:CYS:HB2 | 4 | 1.42 |
| (1,1304) | 1:A:79:PHE:HE1 | 1:A:94:CYS:HA | 11 | 1.42 |
| (1,1243) | 1:A:81:PHE:HD1 | 1:A:103:PHE:HE2 | 9 | 1.42 |
| (1,982) | 1:A:79:PHE:HD2 | 1:A:83:CYS:HB2 | 6 | 1.41 |
| (1,1095) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HE2 | 14 | 1.41 |
| (1,1095) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HE2 | 14 | 1.41 |
| (1,1095) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HE2 | 14 | 1.41 |
| (1,1238) | 1:A:44:ILE:HG13 | 1:A:79:PHE:HD2 | 11 | 1.39 |
| (1,1238) | 1:A:44:ILE:HG13 | 1:A:79:PHE:HD2 | 20 | 1.39 |
| (1,1140) | 1:A:106:TYR:HD2 | 1:A:107:GLY:HA2 | 20 | 1.39 |
| (1,982) | 1:A:79:PHE:HD2 | 1:A:83:CYS:HB2 | 10 | 1.38 |
| (1,982) | 1:A:79:PHE:HD2 | 1:A:83:CYS:HB2 | 13 | 1.38 |
| (1,982) | 1:A:79:PHE:HD2 | 1:A:83:CYS:HB2 | 12 | 1.37 |
| (1,982) | 1:A:79:PHE:HD2 | 1:A:83:CYS:HB2 | 19 | 1.37 |
| (1,1238) | 1:A:44:ILE:HG13 | 1:A:79:PHE:HD2 | 1 | 1.34 |
| (1,982) | 1:A:79:PHE:HD2 | 1:A:83:CYS:HB2 | 1 | 1.33 |
| (1,982) | 1:A:79:PHE:HD2 | 1:A:83:CYS:HB2 | 11 | 1.33 |
| (1,982) | 1:A:79:PHE:HD2 | 1:A:83:CYS:HB2 | 20 | 1.33 |
| (1,1238) | 1:A:44:ILE:HG13 | 1:A:79:PHE:HD2 | 6 | 1.33 |
| (1,982) | 1:A:79:PHE:HD2 | 1:A:83:CYS:HB2 | 18 | 1.32 |
| (1,1304) | 1:A:79:PHE:HE1 | 1:A:94:CYS:HA | 13 | 1.32 |
| (1,1098) | 1:A:79:PHE:HE2 | 1:A:95:PRO:HB2 | 1 | 1.31 |
| (1,982) | 1:A:79:PHE:HD2 | 1:A:83:CYS:HB2 | 5 | 1.3 |
| (1,524) | 1:A:79:PHE:HD2 | 1:A:80:HIS:H | 14 | 1.3 |
| (1,1140) | 1:A:106:TYR:HD2 | 1:A:107:GLY:HA2 | 13 | 1.3 |
| (1,113) | 1:A:103:PHE:H | 1:A:103:PHE:HD1 | 4 | 1.29 |
| (1,1304) | 1:A:79:PHE:HE1 | 1:A:94:CYS:HA | 15 | 1.28 |
| (1,113) | 1:A:103:PHE:H | 1:A:103:PHE:HD1 | 16 | 1.28 |
| (1,1095) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HE2 | 4 | 1.27 |
| (1,1095) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HE2 | 4 | 1.27 |
| (1,1095) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HE2 | 4 | 1.27 |
| (1,524) | 1:A:79:PHE:HD2 | 1:A:80:HIS:H | 11 | 1.26 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,113) | 1:A:103:PHE:H | 1:A:103:PHE:HD1 | 1 | 1.26 |
| (1,113) | 1:A:103:PHE:H | 1:A:103:PHE:HD1 | 2 | 1.26 |
| (1,1098) | 1:A:79:PHE:HE2 | 1:A:95:PRO:HB2 | 4 | 1.26 |
| (1,1095) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HE2 | 20 | 1.26 |
| (1,1095) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HE2 | 20 | 1.26 |
| (1,1095) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HE2 | 20 | 1.26 |
| (1,1034) | 1:A:84:ILE:HG21 | 1:A:103:PHE:HE2 | 16 | 1.26 |
| (1,1034) | 1:A:84:ILE:HG22 | 1:A:103:PHE:HE2 | 16 | 1.26 |
| (1,1034) | 1:A:84:ILE:HG23 | 1:A:103:PHE:HE2 | 16 | 1.26 |
| (1,524) | 1:A:79:PHE:HD2 | 1:A:80:HIS:H | 2 | 1.25 |
| (1,524) | 1:A:79:PHE:HD2 | 1:A:80:HIS:H | 7 | 1.25 |
| (1,524) | 1:A:79:PHE:HD2 | 1:A:80:HIS:H | 9 | 1.25 |
| (1,113) | 1:A:103:PHE:H | 1:A:103:PHE:HD1 | 10 | 1.25 |
| (1,113) | 1:A:103:PHE:H | 1:A:103:PHE:HD1 | 18 | 1.25 |
| (1,1095) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HE2 | 17 | 1.25 |
| (1,1095) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HE2 | 17 | 1.25 |
| (1,1095) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HE2 | 17 | 1.25 |
| (1,1034) | 1:A:84:ILE:HG21 | 1:A:103:PHE:HE2 | 5 | 1.25 |
| (1,1034) | 1:A:84:ILE:HG22 | 1:A:103:PHE:HE2 | 5 | 1.25 |
| (1,1034) | 1:A:84:ILE:HG23 | 1:A:103:PHE:HE2 | 5 | 1.25 |
| (1,524) | 1:A:79:PHE:HD2 | 1:A:80:HIS:H | 16 | 1.24 |
| (1,113) | 1:A:103:PHE:H | 1:A:103:PHE:HD1 | 11 | 1.24 |
| (1,113) | 1:A:103:PHE:H | 1:A:103:PHE:HD1 | 17 | 1.24 |
| (1,1034) | 1:A:84:ILE:HG21 | 1:A:103:PHE:HE2 | 19 | 1.24 |
| (1,1034) | 1:A:84:ILE:HG22 | 1:A:103:PHE:HE2 | 19 | 1.24 |
| (1,1034) | 1:A:84:ILE:HG23 | 1:A:103:PHE:HE2 | 19 | 1.24 |
| (1,524) | 1:A:79:PHE:HD2 | 1:A:80:HIS:H | 6 | 1.23 |
| (1,524) | 1:A:79:PHE:HD2 | 1:A:80:HIS:H | 15 | 1.23 |
| (1,1141) | 1:A:106:TYR:HD2 | 1:A:107:GLY:HA3 | 10 | 1.23 |
| (1,1095) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HE2 | 16 | 1.23 |
| (1,1095) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HE2 | 16 | 1.23 |
| (1,1095) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HE2 | 16 | 1.23 |
| (1,1034) | 1:A:84:ILE:HG21 | 1:A:103:PHE:HE2 | 20 | 1.23 |
| (1,1034) | 1:A:84:ILE:HG22 | 1:A:103:PHE:HE2 | 20 | 1.23 |
| (1,1034) | 1:A:84:ILE:HG23 | 1:A:103:PHE:HE2 | 20 | 1.23 |
| (1,524) | 1:A:79:PHE:HD2 | 1:A:80:HIS:H | 4 | 1.22 |
| (1,524) | 1:A:79:PHE:HD2 | 1:A:80:HIS:H | 17 | 1.22 |
| (1,1304) | 1:A:79:PHE:HE1 | 1:A:94:CYS:HA | 17 | 1.22 |
| (1,1238) | 1:A:44:ILE:HG13 | 1:A:79:PHE:HD2 | 3 | 1.22 |
| (1,113) | 1:A:103:PHE:H | 1:A:103:PHE:HD1 | 3 | 1.22 |
| (1,113) | 1:A:103:PHE:H | 1:A:103:PHE:HD1 | 13 | 1.22 |
| (1,1034) | 1:A:84:ILE:HG21 | 1:A:103:PHE:HE2 | 2 | 1.22 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1034) | 1:A:84:ILE:HG22 | 1:A:103:PHE:HE2 | 2 | 1.22 |
| (1,1034) | 1:A:84:ILE:HG23 | 1:A:103:PHE:HE2 | 2 | 1.22 |
| (1,524) | 1:A:79:PHE:HD2 | 1:A:80:HIS:H | 3 | 1.21 |
| (1,524) | 1:A:79:PHE:HD2 | 1:A:80:HIS:H | 5 | 1.21 |
| (1,524) | 1:A:79:PHE:HD2 | 1:A:80:HIS:H | 10 | 1.21 |
| (1,524) | 1:A:79:PHE:HD2 | 1:A:80:HIS:H | 18 | 1.21 |
| (1,524) | 1:A:79:PHE:HD2 | 1:A:80:HIS:H | 20 | 1.21 |
| (1,113) | 1:A:103:PHE:H | 1:A:103:PHE:HD1 | 5 | 1.21 |
| (1,113) | 1:A:103:PHE:H | 1:A:103:PHE:HD1 | 9 | 1.21 |
| (1,524) | 1:A:79:PHE:HD2 | 1:A:80:HIS:H | 1 | 1.2 |
| (1,113) | 1:A:103:PHE:H | 1:A:103:PHE:HD1 | 12 | 1.2 |
| (1,113) | 1:A:103:PHE:H | 1:A:103:PHE:HD1 | 20 | 1.2 |
| (1,1034) | 1:A:84:ILE:HG21 | 1:A:103:PHE:HE2 | 1 | 1.2 |
| (1,1034) | 1:A:84:ILE:HG22 | 1:A:103:PHE:HE2 | 1 | 1.2 |
| (1,1034) | 1:A:84:ILE:HG23 | 1:A:103:PHE:HE2 | 1 | 1.2 |
| (1,524) | 1:A:79:PHE:HD2 | 1:A:80:HIS:H | 12 | 1.18 |
| (1,113) | 1:A:103:PHE:H | 1:A:103:PHE:HD1 | 8 | 1.18 |
| (1,113) | 1:A:103:PHE:H | 1:A:103:PHE:HD1 | 15 | 1.18 |
| (1,524) | 1:A:79:PHE:HD2 | 1:A:80:HIS:H | 8 | 1.16 |
| (1,524) | 1:A:79:PHE:HD2 | 1:A:80:HIS:H | 13 | 1.16 |
| (1,1034) | 1:A:84:ILE:HG21 | 1:A:103:PHE:HE2 | 12 | 1.16 |
| (1,1034) | 1:A:84:ILE:HG22 | 1:A:103:PHE:HE2 | 12 | 1.16 |
| (1,1034) | 1:A:84:ILE:HG23 | 1:A:103:PHE:HE2 | 12 | 1.16 |
| (1,113) | 1:A:103:PHE:H | 1:A:103:PHE:HD1 | 19 | 1.15 |
| (1,1034) | 1:A:84:ILE:HG21 | 1:A:103:PHE:HE2 | 11 | 1.15 |
| (1,1034) | 1:A:84:ILE:HG22 | 1:A:103:PHE:HE2 | 11 | 1.15 |
| (1,1034) | 1:A:84:ILE:HG23 | 1:A:103:PHE:HE2 | 11 | 1.15 |
| (1,524) | 1:A:79:PHE:HD2 | 1:A:80:HIS:H | 19 | 1.13 |
| (1,1098) | 1:A:79:PHE:HE2 | 1:A:95:PRO:HB2 | 12 | 1.13 |
| (1,1095) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HE2 | 10 | 1.13 |
| (1,1095) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HE2 | 10 | 1.13 |
| (1,1095) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HE2 | 10 | 1.13 |
| (1,1034) | 1:A:84:ILE:HG21 | 1:A:103:PHE:HE2 | 15 | 1.13 |
| (1,1034) | 1:A:84:ILE:HG22 | 1:A:103:PHE:HE2 | 15 | 1.13 |
| (1,1034) | 1:A:84:ILE:HG23 | 1:A:103:PHE:HE2 | 15 | 1.13 |
| (1,113) | 1:A:103:PHE:H | 1:A:103:PHE:HD1 | 6 | 1.12 |
| (1,1098) | 1:A:79:PHE:HE2 | 1:A:95:PRO:HB2 | 2 | 1.12 |
| (1,1098) | 1:A:79:PHE:HE2 | 1:A:95:PRO:HB2 | 14 | 1.11 |
| (1,1095) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HE2 | 15 | 1.1 |
| (1,1095) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HE2 | 15 | 1.1 |
| (1,1095) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HE2 | 15 | 1.1 |
| (1,371) | 1:A:79:PHE:H | 1:A:79:PHE:HD1 | 4 | 1.09 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,371) | 1:A:79:PHE:H | 1:A:79:PHE:HD1 | 8 | 1.09 |
| (1,371) | 1:A:79:PHE:H | 1:A:79:PHE:HD1 | 15 | 1.09 |
| (1,1034) | 1:A:84:ILE:HG21 | 1:A:103:PHE:HE2 | 14 | 1.09 |
| (1,1034) | 1:A:84:ILE:HG22 | 1:A:103:PHE:HE2 | 14 | 1.09 |
| (1,1034) | 1:A:84:ILE:HG23 | 1:A:103:PHE:HE2 | 14 | 1.09 |
| (1,371) | 1:A:79:PHE:H | 1:A:79:PHE:HD1 | 9 | 1.08 |
| (1,113) | 1:A:103:PHE:H | 1:A:103:PHE:HD1 | 14 | 1.07 |
| (1,1034) | 1:A:84:ILE:HG21 | 1:A:103:PHE:HE2 | 4 | 1.07 |
| (1,1034) | 1:A:84:ILE:HG22 | 1:A:103:PHE:HE2 | 4 | 1.07 |
| (1,1034) | 1:A:84:ILE:HG23 | 1:A:103:PHE:HE2 | 4 | 1.07 |
| (1,1095) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HE2 | 6 | 1.06 |
| (1,1095) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HE2 | 6 | 1.06 |
| (1,1095) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HE2 | 6 | 1.06 |
| (1,1098) | 1:A:79:PHE:HE2 | 1:A:95:PRO:HB2 | 10 | 1.05 |
| (1,1141) | 1:A:106:TYR:HD2 | 1:A:107:GLY:HA3 | 14 | 1.04 |
| (1,1095) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HE2 | 1 | 1.04 |
| (1,1095) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HE2 | 1 | 1.04 |
| (1,1095) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HE2 | 1 | 1.04 |
| (1,371) | 1:A:79:PHE:H | 1:A:79:PHE:HD1 | 12 | 1.03 |
| (1,371) | 1:A:79:PHE:H | 1:A:79:PHE:HD1 | 13 | 1.03 |
| (1,371) | 1:A:79:PHE:H | 1:A:79:PHE:HD1 | 16 | 1.03 |
| (1,371) | 1:A:79:PHE:H | 1:A:79:PHE:HD1 | 17 | 1.03 |
| (1,371) | 1:A:79:PHE:H | 1:A:79:PHE:HD1 | 19 | 1.03 |
| (1,1248) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HB3 | 10 | 1.03 |
| (1,1095) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HE2 | 19 | 1.03 |
| (1,1095) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HE2 | 19 | 1.03 |
| (1,1095) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HE2 | 19 | 1.03 |
| (1,1034) | 1:A:84:ILE:HG21 | 1:A:103:PHE:HE2 | 18 | 1.03 |
| (1,1034) | 1:A:84:ILE:HG22 | 1:A:103:PHE:HE2 | 18 | 1.03 |
| (1,1034) | 1:A:84:ILE:HG23 | 1:A:103:PHE:HE2 | 18 | 1.03 |
| (1,371) | 1:A:79:PHE:H | 1:A:79:PHE:HD1 | 2 | 1.02 |
| (1,1248) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HB3 | 12 | 1.02 |
| (1,1248) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HB3 | 18 | 1.02 |
| (1,113) | 1:A:103:PHE:H | 1:A:103:PHE:HD1 | 7 | 1.02 |
| (1,371) | 1:A:79:PHE:H | 1:A:79:PHE:HD1 | 18 | 1.01 |
| (1,1034) | 1:A:84:ILE:HG21 | 1:A:103:PHE:HE2 | 10 | 1.01 |
| (1,1034) | 1:A:84:ILE:HG22 | 1:A:103:PHE:HE2 | 10 | 1.01 |
| (1,1034) | 1:A:84:ILE:HG23 | 1:A:103:PHE:HE2 | 10 | 1.01 |
| (1,1248) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HB3 | 15 | 1.0 |
| (1,1095) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HE2 | 11 | 1.0 |
| (1,1095) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HE2 | 11 | 1.0 |
| (1,1095) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HE2 | 11 | 1.0 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,371) | 1:A:79:PHE:H | 1:A:79:PHE:HD1 | 10 | 0.99 |
| (1,1248) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HB3 | 17 | 0.99 |
| (1,1098) | 1:A:79:PHE:HE2 | 1:A:95:PRO:HB2 | 3 | 0.99 |
| (1,371) | 1:A:79:PHE:H | 1:A:79:PHE:HD1 | 5 | 0.98 |
| (1,371) | 1:A:79:PHE:H | 1:A:79:PHE:HD1 | 11 | 0.98 |
| (1,371) | 1:A:79:PHE:H | 1:A:79:PHE:HD1 | 14 | 0.98 |
| (1,371) | 1:A:79:PHE:H | 1:A:79:PHE:HD1 | 20 | 0.98 |
| (1,1248) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HB3 | 14 | 0.97 |
| (1,1034) | 1:A:84:ILE:HG21 | 1:A:103:PHE:HE2 | 17 | 0.97 |
| (1,1034) | 1:A:84:ILE:HG22 | 1:A:103:PHE:HE2 | 17 | 0.97 |
| (1,1034) | 1:A:84:ILE:HG23 | 1:A:103:PHE:HE2 | 17 | 0.97 |
| (1,1248) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HB3 | 8 | 0.95 |
| (1,1248) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HB3 | 19 | 0.94 |
| (1,1098) | 1:A:79:PHE:HE2 | 1:A:95:PRO:HB2 | 6 | 0.94 |
| (1,371) | 1:A:79:PHE:H | 1:A:79:PHE:HD1 | 3 | 0.93 |
| (1,371) | 1:A:79:PHE:H | 1:A:79:PHE:HD1 | 6 | 0.93 |
| (1,371) | 1:A:79:PHE:H | 1:A:79:PHE:HD1 | 7 | 0.93 |
| (1,1248) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HB3 | 6 | 0.93 |
| (1,1248) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HB3 | 13 | 0.93 |
| (1,1248) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HB3 | 16 | 0.93 |
| (1,371) | 1:A:79:PHE:H | 1:A:79:PHE:HD1 | 1 | 0.92 |
| (1,1098) | 1:A:79:PHE:HE2 | 1:A:95:PRO:HB2 | 7 | 0.92 |
| (1,1095) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HE2 | 3 | 0.92 |
| (1,1095) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HE2 | 3 | 0.92 |
| (1,1095) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HE2 | 3 | 0.92 |
| (1,1095) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HE2 | 13 | 0.91 |
| (1,1095) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HE2 | 13 | 0.91 |
| (1,1095) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HE2 | 13 | 0.91 |
| (1,1248) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HB3 | 20 | 0.9 |
| (1,1248) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HB3 | 11 | 0.88 |
| (1,1095) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HE2 | 5 | 0.81 |
| (1,1095) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HE2 | 5 | 0.81 |
| (1,1095) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HE2 | 5 | 0.81 |
| (1,1034) | 1:A:84:ILE:HG21 | 1:A:103:PHE:HE2 | 9 | 0.78 |
| (1,1034) | 1:A:84:ILE:HG22 | 1:A:103:PHE:HE2 | 9 | 0.78 |
| (1,1034) | 1:A:84:ILE:HG23 | 1:A:103:PHE:HE2 | 9 | 0.78 |
| (1,1034) | 1:A:84:ILE:HG21 | 1:A:103:PHE:HE2 | 6 | 0.77 |
| (1,1034) | 1:A:84:ILE:HG22 | 1:A:103:PHE:HE2 | 6 | 0.77 |
| (1,1034) | 1:A:84:ILE:HG23 | 1:A:103:PHE:HE2 | 6 | 0.77 |
| (1,1248) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HB3 | 2 | 0.76 |
| (1,1248) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HB3 | 7 | 0.75 |
| (1,1248) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HB3 | 5 | 0.74 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1248) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HB3 | 9 | 0.71 |
| (1,1095) | 1:A:43:ALA:HB1 | 1:A:79:PHE:HE2 | 12 | 0.71 |
| (1,1095) | 1:A:43:ALA:HB2 | 1:A:79:PHE:HE2 | 12 | 0.71 |
| (1,1095) | 1:A:43:ALA:HB3 | 1:A:79:PHE:HE2 | 12 | 0.71 |
| (1,1248) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HB3 | 3 | 0.69 |
| (1,1248) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HB3 | 1 | 0.66 |
| (1,858) | 1:A:103:PHE:HA | 1:A:103:PHE:HE2 | 14 | 0.61 |
| (1,1192) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HA | 11 | 0.61 |
| (1,1192) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HA | 11 | 0.61 |
| (1,1248) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HB3 | 4 | 0.6 |
| (1,120) | 1:A:99:ARG:HB3 | 1:A:100:GLU:H | 10 | 0.59 |
| (1,858) | 1:A:103:PHE:HA | 1:A:103:PHE:HE2 | 19 | 0.58 |
| (1,588) | 1:A:54:ILE:HD11 | 1:A:56:CYS:H | 7 | 0.58 |
| (1,588) | 1:A:54:ILE:HD12 | 1:A:56:CYS:H | 7 | 0.58 |
| (1,588) | 1:A:54:ILE:HD13 | 1:A:56:CYS:H | 7 | 0.58 |
| (1,858) | 1:A:103:PHE:HA | 1:A:103:PHE:HE2 | 7 | 0.57 |
| (1,858) | 1:A:103:PHE:HA | 1:A:103:PHE:HE2 | 15 | 0.56 |
| (1,858) | 1:A:103:PHE:HA | 1:A:103:PHE:HE2 | 20 | 0.55 |
| (1,588) | 1:A:54:ILE:HD11 | 1:A:56:CYS:H | 11 | 0.54 |
| (1,588) | 1:A:54:ILE:HD12 | 1:A:56:CYS:H | 11 | 0.54 |
| (1,588) | 1:A:54:ILE:HD13 | 1:A:56:CYS:H | 11 | 0.54 |
| (1,1228) | 1:A:103:PHE:HA | 1:A:103:PHE:HD2 | 14 | 0.53 |
| (1,858) | 1:A:103:PHE:HA | 1:A:103:PHE:HE2 | 18 | 0.52 |
| (1,460) | 1:A:91:ARG:H | 1:A:92:GLN:HG3 | 10 | 0.51 |
| (1,858) | 1:A:103:PHE:HA | 1:A:103:PHE:HE2 | 6 | 0.5 |
| (1,858) | 1:A:103:PHE:HA | 1:A:103:PHE:HE2 | 13 | 0.5 |
| (1,460) | 1:A:91:ARG:H | 1:A:92:GLN:HG3 | 11 | 0.5 |
| (1,120) | 1:A:99:ARG:HB3 | 1:A:100:GLU:H | 3 | 0.5 |
| (1,120) | 1:A:99:ARG:HB3 | 1:A:100:GLU:H | 20 | 0.5 |
| (1,1192) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HA | 1 | 0.5 |
| (1,1192) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HA | 1 | 0.5 |
| (1,933) | 1:A:54:ILE:HG21 | 1:A:55:GLU:HG3 | 13 | 0.49 |
| (1,933) | 1:A:54:ILE:HG22 | 1:A:55:GLU:HG3 | 13 | 0.49 |
| (1,933) | 1:A:54:ILE:HG23 | 1:A:55:GLU:HG3 | 13 | 0.49 |
| (1,858) | 1:A:103:PHE:HA | 1:A:103:PHE:HE2 | 2 | 0.49 |
| (1,858) | 1:A:103:PHE:HA | 1:A:103:PHE:HE2 | 9 | 0.49 |
| (1,858) | 1:A:103:PHE:HA | 1:A:103:PHE:HE2 | 17 | 0.49 |
| (1,688) | 1:A:59:ASN:H | 1:A:60:GLN:HB2 | 6 | 0.49 |
| (1,1228) | 1:A:103:PHE:HA | 1:A:103:PHE:HD2 | 19 | 0.49 |
| (1,858) | 1:A:103:PHE:HA | 1:A:103:PHE:HE2 | 11 | 0.48 |
| (1,858) | 1:A:103:PHE:HA | 1:A:103:PHE:HE2 | 16 | 0.48 |
| (1,848) | 1:A:85:SER:HB2 | 1:A:86:ARG:HG2 | 6 | 0.47 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,349) | 1:A:76:ASN:H | 1:A:76:ASN:HB3 | 11 | 0.47 |
| (1,858) | 1:A:103:PHE:HA | 1:A:103:PHE:HE2 | 5 | 0.46 |
| (1,858) | 1:A:103:PHE:HA | 1:A:103:PHE:HE2 | 10 | 0.46 |
| (1,331) | 1:A:96:LEU:H | 1:A:98:ASN:H | 13 | 0.46 |
| (1,203) | 1:A:99:ARG:H | 1:A:99:ARG:HG2 | 13 | 0.46 |
| (1,203) | 1:A:99:ARG:H | 1:A:99:ARG:HG3 | 13 | 0.46 |
| (1,203) | 1:A:99:ARG:H | 1:A:99:ARG:HG2 | 17 | 0.46 |
| (1,203) | 1:A:99:ARG:H | 1:A:99:ARG:HG3 | 17 | 0.46 |
| (1,1228) | 1:A:103:PHE:HA | 1:A:103:PHE:HD2 | 7 | 0.46 |
| (1,120) | 1:A:99:ARG:HB3 | 1:A:100:GLU:H | 13 | 0.46 |
| (1,1098) | 1:A:79:PHE:HE2 | 1:A:95:PRO:HB2 | 15 | 0.46 |
| (1,858) | 1:A:103:PHE:HA | 1:A:103:PHE:HE2 | 1 | 0.45 |
| (1,858) | 1:A:103:PHE:HA | 1:A:103:PHE:HE2 | 12 | 0.45 |
| (1,460) | 1:A:91:ARG:H | 1:A:92:GLN:HG3 | 19 | 0.45 |
| (1,1228) | 1:A:103:PHE:HA | 1:A:103:PHE:HD2 | 20 | 0.45 |
| (1,858) | 1:A:103:PHE:HA | 1:A:103:PHE:HE2 | 4 | 0.44 |
| (1,858) | 1:A:103:PHE:HA | 1:A:103:PHE:HE2 | 8 | 0.44 |
| (1,688) | 1:A:59:ASN:H | 1:A:60:GLN:HB2 | 9 | 0.44 |
| (1,588) | 1:A:54:ILE:HD11 | 1:A:56:CYS:H | 13 | 0.44 |
| (1,588) | 1:A:54:ILE:HD12 | 1:A:56:CYS:H | 13 | 0.44 |
| (1,588) | 1:A:54:ILE:HD13 | 1:A:56:CYS:H | 13 | 0.44 |
| (1,1228) | 1:A:103:PHE:HA | 1:A:103:PHE:HD2 | 15 | 0.44 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD11 | 3 | 0.44 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD12 | 3 | 0.44 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD13 | 3 | 0.44 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD11 | 3 | 0.44 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD12 | 3 | 0.44 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD13 | 3 | 0.44 |
| (1,715) | 1:A:94:CYS:H | 1:A:99:ARG:HG2 | 19 | 0.43 |
| (1,715) | 1:A:94:CYS:H | 1:A:99:ARG:HG3 | 19 | 0.43 |
| (1,203) | 1:A:99:ARG:H | 1:A:99:ARG:HG2 | 3 | 0.43 |
| (1,203) | 1:A:99:ARG:H | 1:A:99:ARG:HG3 | 3 | 0.43 |
| (1,1228) | 1:A:103:PHE:HA | 1:A:103:PHE:HD2 | 6 | 0.43 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD11 | 11 | 0.43 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD12 | 11 | 0.43 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD13 | 11 | 0.43 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD11 | 11 | 0.43 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD12 | 11 | 0.43 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD13 | 11 | 0.43 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD21 | 11 | 0.43 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD22 | 11 | 0.43 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD23 | 11 | 0.43 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,848) | 1:A:85:SER:HB2 | 1:A:86:ARG:HG2 | 10 | 0.42 |
| (1,203) | 1:A:99:ARG:H | 1:A:99:ARG:HG2 | 20 | 0.42 |
| (1,203) | 1:A:99:ARG:H | 1:A:99:ARG:HG3 | 20 | 0.42 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD21 | 5 | 0.42 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD22 | 5 | 0.42 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD23 | 5 | 0.42 |
| (1,848) | 1:A:85:SER:HB2 | 1:A:86:ARG:HG2 | 12 | 0.41 |
| (1,460) | 1:A:91:ARG:H | 1:A:92:GLN:HG3 | 9 | 0.41 |
| (1,1312) | 1:A:75:CYS:SG | 1:A:77:HIS:ND1 | 6 | 0.41 |
| (1,1235) | 1:A:79:PHE:HA | 1:A:79:PHE:HD2 | 7 | 0.41 |
| (1,1228) | 1:A:103:PHE:HA | 1:A:103:PHE:HD2 | 18 | 0.41 |
| (1,1054) | 1:A:49:ILE:HD11 | 1:A:50:MET:HA | 15 | 0.41 |
| (1,1054) | 1:A:49:ILE:HD12 | 1:A:50:MET:HA | 15 | 0.41 |
| (1,1054) | 1:A:49:ILE:HD13 | 1:A:50:MET:HA | 15 | 0.41 |
| (1,1050) | 1:A:37:ILE:HD11 | 1:A:38:VAL:HA | 14 | 0.41 |
| (1,1050) | 1:A:37:ILE:HD12 | 1:A:38:VAL:HA | 14 | 0.41 |
| (1,1050) | 1:A:37:ILE:HD13 | 1:A:38:VAL:HA | 14 | 0.41 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD21 | 1 | 0.41 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD22 | 1 | 0.41 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD23 | 1 | 0.41 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD21 | 3 | 0.41 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD22 | 3 | 0.41 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD23 | 3 | 0.41 |
| (1,39) | 1:A:88:LEU:HD21 | 1:A:101:TRP:H | 8 | 0.4 |
| (1,39) | 1:A:88:LEU:HD22 | 1:A:101:TRP:H | 8 | 0.4 |
| (1,39) | 1:A:88:LEU:HD23 | 1:A:101:TRP:H | 8 | 0.4 |
| (1,203) | 1:A:99:ARG:H | 1:A:99:ARG:HG2 | 10 | 0.4 |
| (1,203) | 1:A:99:ARG:H | 1:A:99:ARG:HG3 | 10 | 0.4 |
| (1,1224) | 1:A:77:HIS:HE1 | 1:A:97:ASP:HB3 | 16 | 0.4 |
| (1,120) | 1:A:99:ARG:HB3 | 1:A:100:GLU:H | 17 | 0.4 |
| (1,1054) | 1:A:49:ILE:HD11 | 1:A:50:MET:HA | 5 | 0.4 |
| (1,1054) | 1:A:49:ILE:HD12 | 1:A:50:MET:HA | 5 | 0.4 |
| (1,1054) | 1:A:49:ILE:HD13 | 1:A:50:MET:HA | 5 | 0.4 |
| (1,858) | 1:A:103:PHE:HA | 1:A:103:PHE:HE2 | 3 | 0.39 |
| (1,497) | 1:A:85:SER:H | 1:A:86:ARG:HG2 | 6 | 0.39 |
| (1,497) | 1:A:85:SER:H | 1:A:86:ARG:HG3 | 6 | 0.39 |
| (1,331) | 1:A:96:LEU:H | 1:A:98:ASN:H | 8 | 0.39 |
| (1,1228) | 1:A:103:PHE:HA | 1:A:103:PHE:HD2 | 13 | 0.39 |
| (1,1228) | 1:A:103:PHE:HA | 1:A:103:PHE:HD2 | 17 | 0.39 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD11 | 14 | 0.39 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD12 | 14 | 0.39 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD13 | 14 | 0.39 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD11 | 14 | 0.39 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD12 | 14 | 0.39 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD13 | 14 | 0.39 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD21 | 4 | 0.39 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD22 | 4 | 0.39 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD23 | 4 | 0.39 |
| (1,20) | 1:A:67:GLU:H | 1:A:68:CYS:H | 8 | 0.38 |
| (1,1235) | 1:A:79:PHE:HA | 1:A:79:PHE:HD2 | 1 | 0.38 |
| (1,1235) | 1:A:79:PHE:HA | 1:A:79:PHE:HD2 | 3 | 0.38 |
| (1,1235) | 1:A:79:PHE:HA | 1:A:79:PHE:HD2 | 5 | 0.38 |
| (1,1235) | 1:A:79:PHE:HA | 1:A:79:PHE:HD2 | 6 | 0.38 |
| (1,1235) | 1:A:79:PHE:HA | 1:A:79:PHE:HD2 | 20 | 0.38 |
| (1,1228) | 1:A:103:PHE:HA | 1:A:103:PHE:HD2 | 9 | 0.38 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD11 | 13 | 0.38 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD12 | 13 | 0.38 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD13 | 13 | 0.38 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD11 | 13 | 0.38 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD12 | 13 | 0.38 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD13 | 13 | 0.38 |
| (1,1045) | 1:A:54:ILE:HG21 | 1:A:55:GLU:HG2 | 7 | 0.38 |
| (1,1045) | 1:A:54:ILE:HG22 | 1:A:55:GLU:HG2 | 7 | 0.38 |
| (1,1045) | 1:A:54:ILE:HG23 | 1:A:55:GLU:HG2 | 7 | 0.38 |
| (1,1235) | 1:A:79:PHE:HA | 1:A:79:PHE:HD2 | 11 | 0.37 |
| (1,1228) | 1:A:103:PHE:HA | 1:A:103:PHE:HD2 | 2 | 0.37 |
| (1,1224) | 1:A:77:HIS:HE1 | 1:A:97:ASP:HB3 | 17 | 0.37 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD21 | 12 | 0.37 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD22 | 12 | 0.37 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD23 | 12 | 0.37 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD21 | 14 | 0.37 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD22 | 14 | 0.37 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD23 | 14 | 0.37 |
| (1,86) | 1:A:108:HIS:H | 1:A:108:HIS:HE1 | 8 | 0.36 |
| (1,39) | 1:A:88:LEU:HD21 | 1:A:101:TRP:H | 10 | 0.36 |
| (1,39) | 1:A:88:LEU:HD22 | 1:A:101:TRP:H | 10 | 0.36 |
| (1,39) | 1:A:88:LEU:HD23 | 1:A:101:TRP:H | 10 | 0.36 |
| (1,39) | 1:A:88:LEU:HD21 | 1:A:101:TRP:H | 17 | 0.36 |
| (1,39) | 1:A:88:LEU:HD22 | 1:A:101:TRP:H | 17 | 0.36 |
| (1,39) | 1:A:88:LEU:HD23 | 1:A:101:TRP:H | 17 | 0.36 |
| (1,1235) | 1:A:79:PHE:HA | 1:A:79:PHE:HD2 | 14 | 0.36 |
| (1,1228) | 1:A:103:PHE:HA | 1:A:103:PHE:HD2 | 12 | 0.36 |
| (1,1228) | 1:A:103:PHE:HA | 1:A:103:PHE:HD2 | 16 | 0.36 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD11 | 5 | 0.36 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD12 | 5 | 0.36 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD13 | 5 | 0.36 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD11 | 5 | 0.36 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD12 | 5 | 0.36 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD13 | 5 | 0.36 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD11 | 16 | 0.36 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD12 | 16 | 0.36 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD13 | 16 | 0.36 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD11 | 16 | 0.36 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD12 | 16 | 0.36 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD13 | 16 | 0.36 |
| (1,1045) | 1:A:54:ILE:HG21 | 1:A:55:GLU:HG2 | 11 | 0.36 |
| (1,1045) | 1:A:54:ILE:HG22 | 1:A:55:GLU:HG2 | 11 | 0.36 |
| (1,1045) | 1:A:54:ILE:HG23 | 1:A:55:GLU:HG2 | 11 | 0.36 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD21 | 9 | 0.36 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD22 | 9 | 0.36 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD23 | 9 | 0.36 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD21 | 17 | 0.36 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD22 | 17 | 0.36 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD23 | 17 | 0.36 |
| (1,962) | 1:A:49:ILE:HD11 | 1:A:50:MET:HB3 | 4 | 0.35 |
| (1,962) | 1:A:49:ILE:HD12 | 1:A:50:MET:HB3 | 4 | 0.35 |
| (1,962) | 1:A:49:ILE:HD13 | 1:A:50:MET:HB3 | 4 | 0.35 |
| (1,86) | 1:A:108:HIS:H | 1:A:108:HIS:HE1 | 19 | 0.35 |
| (1,675) | 1:A:42:CYS:H | 1:A:48:HIS:HD2 | 13 | 0.35 |
| (1,588) | 1:A:54:ILE:HD11 | 1:A:56:CYS:H | 19 | 0.35 |
| (1,588) | 1:A:54:ILE:HD12 | 1:A:56:CYS:H | 19 | 0.35 |
| (1,588) | 1:A:54:ILE:HD13 | 1:A:56:CYS:H | 19 | 0.35 |
| (1,1235) | 1:A:79:PHE:HA | 1:A:79:PHE:HD2 | 10 | 0.35 |
| (1,1235) | 1:A:79:PHE:HA | 1:A:79:PHE:HD2 | 18 | 0.35 |
| (1,1228) | 1:A:103:PHE:HA | 1:A:103:PHE:HD2 | 1 | 0.35 |
| (1,1228) | 1:A:103:PHE:HA | 1:A:103:PHE:HD2 | 5 | 0.35 |
| (1,1228) | 1:A:103:PHE:HA | 1:A:103:PHE:HD2 | 10 | 0.35 |
| (1,1228) | 1:A:103:PHE:HA | 1:A:103:PHE:HD2 | 11 | 0.35 |
| (1,1054) | 1:A:49:ILE:HD11 | 1:A:50:MET:HA | 3 | 0.35 |
| (1,1054) | 1:A:49:ILE:HD12 | 1:A:50:MET:HA | 3 | 0.35 |
| (1,1054) | 1:A:49:ILE:HD13 | 1:A:50:MET:HA | 3 | 0.35 |
| (1,1054) | 1:A:49:ILE:HD11 | 1:A:50:MET:HA | 16 | 0.35 |
| (1,1054) | 1:A:49:ILE:HD12 | 1:A:50:MET:HA | 16 | 0.35 |
| (1,1054) | 1:A:49:ILE:HD13 | 1:A:50:MET:HA | 16 | 0.35 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD21 | 6 | 0.35 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD22 | 6 | 0.35 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD23 | 6 | 0.35 |
| (1,880) | 1:A:43:ALA:HA | 1:A:46:ARG:HD2 | 2 | 0.34 |
| (1,880) | 1:A:43:ALA:HA | 1:A:46:ARG:HD3 | 2 | 0.34 |
| (1,726) | 1:A:56:CYS:HA | 1:A:59:ASN:HD22 | 14 | 0.34 |
| (1,715) | 1:A:94:CYS:H | 1:A:99:ARG:HG2 | 2 | 0.34 |
| (1,715) | 1:A:94:CYS:H | 1:A:99:ARG:HG3 | 2 | 0.34 |
| (1,715) | 1:A:94:CYS:H | 1:A:99:ARG:HG2 | 16 | 0.34 |
| (1,715) | 1:A:94:CYS:H | 1:A:99:ARG:HG3 | 16 | 0.34 |
| (1,531) | 1:A:39:VAL:HG11 | 1:A:79:PHE:H | 19 | 0.34 |
| (1,531) | 1:A:39:VAL:HG12 | 1:A:79:PHE:H | 19 | 0.34 |
| (1,531) | 1:A:39:VAL:HG13 | 1:A:79:PHE:H | 19 | 0.34 |
| (1,20) | 1:A:67:GLU:H | 1:A:68:CYS:H | 4 | 0.34 |
| (1,20) | 1:A:67:GLU:H | 1:A:68:CYS:H | 11 | 0.34 |
| (1,195) | 1:A:86:ARG:H | 1:A:86:ARG:HG3 | 6 | 0.34 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD11 | 6 | 0.34 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD12 | 6 | 0.34 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD13 | 6 | 0.34 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD11 | 6 | 0.34 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD12 | 6 | 0.34 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD13 | 6 | 0.34 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD11 | 10 | 0.34 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD12 | 10 | 0.34 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD13 | 10 | 0.34 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD11 | 10 | 0.34 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD12 | 10 | 0.34 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD13 | 10 | 0.34 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD11 | 15 | 0.34 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD12 | 15 | 0.34 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD13 | 15 | 0.34 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD11 | 15 | 0.34 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD12 | 15 | 0.34 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD13 | 15 | 0.34 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD21 | 18 | 0.34 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD22 | 18 | 0.34 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD23 | 18 | 0.34 |
| (2,19) | 1:A:86:ARG:O | 1:A:90:THR:H | 10 | 0.33 |
| (1,880) | 1:A:43:ALA:HA | 1:A:46:ARG:HD2 | 4 | 0.33 |
| (1,880) | 1:A:43:ALA:HA | 1:A:46:ARG:HD3 | 4 | 0.33 |
| (1,741) | 1:A:54:ILE:HG12 | 1:A:56:CYS:H | 4 | 0.33 |
| (1,612) | 1:A:46:ARG:HG3 | 1:A:47:ASN:H | 6 | 0.33 |
| (1,595) | 1:A:52:LEU:H | 1:A:65:SER:HB3 | 20 | 0.33 |
| (1,434) | 1:A:98:ASN:H | 1:A:99:ARG:HG2 | 17 | 0.33 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,434) | 1:A:98:ASN:H | 1:A:99:ARG:HG3 | 17 | 0.33 |
| (1,331) | 1:A:96:LEU:H | 1:A:98:ASN:H | 16 | 0.33 |
| (1,1288) | 1:A:82:HIS:HD2 | 1:A:86:ARG:H | 8 | 0.33 |
| (1,1235) | 1:A:79:PHE:HA | 1:A:79:PHE:HD2 | 2 | 0.33 |
| (1,1235) | 1:A:79:PHE:HA | 1:A:79:PHE:HD2 | 12 | 0.33 |
| (1,1090) | 1:A:95:PRO:HD3 | 1:A:97:ASP:H | 13 | 0.33 |
| (1,962) | 1:A:49:ILE:HD11 | 1:A:50:MET:HB3 | 18 | 0.32 |
| (1,962) | 1:A:49:ILE:HD12 | 1:A:50:MET:HB3 | 18 | 0.32 |
| (1,962) | 1:A:49:ILE:HD13 | 1:A:50:MET:HB3 | 18 | 0.32 |
| (1,715) | 1:A:94:CYS:H | 1:A:99:ARG:HG2 | 4 | 0.32 |
| (1,715) | 1:A:94:CYS:H | 1:A:99:ARG:HG3 | 4 | 0.32 |
| (1,715) | 1:A:94:CYS:H | 1:A:99:ARG:HG2 | 14 | 0.32 |
| (1,715) | 1:A:94:CYS:H | 1:A:99:ARG:HG3 | 14 | 0.32 |
| (1,588) | 1:A:54:ILE:HD11 | 1:A:56:CYS:H | 20 | 0.32 |
| (1,588) | 1:A:54:ILE:HD12 | 1:A:56:CYS:H | 20 | 0.32 |
| (1,588) | 1:A:54:ILE:HD13 | 1:A:56:CYS:H | 20 | 0.32 |
| (1,331) | 1:A:96:LEU:H | 1:A:98:ASN:H | 17 | 0.32 |
| (1,20) | 1:A:67:GLU:H | 1:A:68:CYS:H | 9 | 0.32 |
| (1,1310) | 1:A:56:CYS:SG | 1:A:82:HIS:ND1 | 6 | 0.32 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD11 | 3 | 0.32 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD12 | 3 | 0.32 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD13 | 3 | 0.32 |
| (1,1235) | 1:A:79:PHE:HA | 1:A:79:PHE:HD2 | 13 | 0.32 |
| (1,1235) | 1:A:79:PHE:HA | 1:A:79:PHE:HD2 | 17 | 0.32 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG21 | 19 | 0.32 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG22 | 19 | 0.32 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG23 | 19 | 0.32 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD11 | 12 | 0.32 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD12 | 12 | 0.32 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD13 | 12 | 0.32 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD11 | 12 | 0.32 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD12 | 12 | 0.32 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD13 | 12 | 0.32 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD21 | 10 | 0.32 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD22 | 10 | 0.32 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD23 | 10 | 0.32 |
| (1,927) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HB | 3 | 0.31 |
| (1,851) | 1:A:48:HIS:HD2 | 1:A:49:ILE:HA | 18 | 0.31 |
| (1,588) | 1:A:54:ILE:HD11 | 1:A:56:CYS:H | 17 | 0.31 |
| (1,588) | 1:A:54:ILE:HD12 | 1:A:56:CYS:H | 17 | 0.31 |
| (1,588) | 1:A:54:ILE:HD13 | 1:A:56:CYS:H | 17 | 0.31 |
| (1,531) | 1:A:39:VAL:HG11 | 1:A:79:PHE:H | 6 | 0.31 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,531) | 1:A:39:VAL:HG12 | 1:A:79:PHE:H | 6 | 0.31 |
| (1,531) | 1:A:39:VAL:HG13 | 1:A:79:PHE:H | 6 | 0.31 |
| (1,39) | 1:A:88:LEU:HD21 | 1:A:101:TRP:H | 6 | 0.31 |
| (1,39) | 1:A:88:LEU:HD22 | 1:A:101:TRP:H | 6 | 0.31 |
| (1,39) | 1:A:88:LEU:HD23 | 1:A:101:TRP:H | 6 | 0.31 |
| (1,39) | 1:A:88:LEU:HD21 | 1:A:101:TRP:H | 13 | 0.31 |
| (1,39) | 1:A:88:LEU:HD22 | 1:A:101:TRP:H | 13 | 0.31 |
| (1,39) | 1:A:88:LEU:HD23 | 1:A:101:TRP:H | 13 | 0.31 |
| (1,20) | 1:A:67:GLU:H | 1:A:68:CYS:H | 10 | 0.31 |
| (1,20) | 1:A:67:GLU:H | 1:A:68:CYS:H | 20 | 0.31 |
| (1,1235) | 1:A:79:PHE:HA | 1:A:79:PHE:HD2 | 16 | 0.31 |
| (1,1228) | 1:A:103:PHE:HA | 1:A:103:PHE:HD2 | 4 | 0.31 |
| (1,1228) | 1:A:103:PHE:HA | 1:A:103:PHE:HD2 | 8 | 0.31 |
| (1,1224) | 1:A:77:HIS:HE1 | 1:A:97:ASP:HB3 | 10 | 0.31 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD11 | 19 | 0.31 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD12 | 19 | 0.31 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD13 | 19 | 0.31 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD11 | 19 | 0.31 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD12 | 19 | 0.31 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD13 | 19 | 0.31 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD21 | 2 | 0.31 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD22 | 2 | 0.31 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD23 | 2 | 0.31 |
| (1,962) | 1:A:49:ILE:HD11 | 1:A:50:MET:HB3 | 12 | 0.3 |
| (1,962) | 1:A:49:ILE:HD12 | 1:A:50:MET:HB3 | 12 | 0.3 |
| (1,962) | 1:A:49:ILE:HD13 | 1:A:50:MET:HB3 | 12 | 0.3 |
| (1,962) | 1:A:49:ILE:HD11 | 1:A:50:MET:HB3 | 14 | 0.3 |
| (1,962) | 1:A:49:ILE:HD12 | 1:A:50:MET:HB3 | 14 | 0.3 |
| (1,962) | 1:A:49:ILE:HD13 | 1:A:50:MET:HB3 | 14 | 0.3 |
| (1,933) | 1:A:54:ILE:HG21 | 1:A:55:GLU:HG3 | 14 | 0.3 |
| (1,933) | 1:A:54:ILE:HG22 | 1:A:55:GLU:HG3 | 14 | 0.3 |
| (1,933) | 1:A:54:ILE:HG23 | 1:A:55:GLU:HG3 | 14 | 0.3 |
| (1,86) | 1:A:108:HIS:H | 1:A:108:HIS:HE1 | 18 | 0.3 |
| (1,741) | 1:A:54:ILE:HG12 | 1:A:56:CYS:H | 1 | 0.3 |
| (1,726) | 1:A:56:CYS:HA | 1:A:59:ASN:HD22 | 19 | 0.3 |
| (1,715) | 1:A:94:CYS:H | 1:A:99:ARG:HG2 | 7 | 0.3 |
| (1,715) | 1:A:94:CYS:H | 1:A:99:ARG:HG3 | 7 | 0.3 |
| (1,680) | 1:A:46:ARG:H | 1:A:47:ASN:HB3 | 10 | 0.3 |
| (1,390) | 1:A:72:TRP:HB2 | 1:A:73:GLY:H | 4 | 0.3 |
| (1,390) | 1:A:72:TRP:HB2 | 1:A:73:GLY:H | 10 | 0.3 |
| (1,390) | 1:A:72:TRP:HB2 | 1:A:73:GLY:H | 19 | 0.3 |
| (1,39) | 1:A:88:LEU:HD21 | 1:A:101:TRP:H | 14 | 0.3 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,39) | 1:A:88:LEU:HD22 | 1:A:101:TRP:H | 14 | 0.3 |
| (1,39) | 1:A:88:LEU:HD23 | 1:A:101:TRP:H | 14 | 0.3 |
| (1,39) | 1:A:88:LEU:HD21 | 1:A:101:TRP:H | 20 | 0.3 |
| (1,39) | 1:A:88:LEU:HD22 | 1:A:101:TRP:H | 20 | 0.3 |
| (1,39) | 1:A:88:LEU:HD23 | 1:A:101:TRP:H | 20 | 0.3 |
| (1,20) | 1:A:67:GLU:H | 1:A:68:CYS:H | 5 | 0.3 |
| (1,20) | 1:A:67:GLU:H | 1:A:68:CYS:H | 16 | 0.3 |
| (1,1311) | 1:A:68:CYS:SG | 1:A:82:HIS:ND1 | 1 | 0.3 |
| (1,1310) | 1:A:56:CYS:SG | 1:A:82:HIS:ND1 | 7 | 0.3 |
| (1,1310) | 1:A:56:CYS:SG | 1:A:82:HIS:ND1 | 14 | 0.3 |
| (1,1239) | 1:A:44:ILE:HD11 | 1:A:79:PHE:HD2 | 9 | 0.3 |
| (1,1239) | 1:A:44:ILE:HD12 | 1:A:79:PHE:HD2 | 9 | 0.3 |
| (1,1239) | 1:A:44:ILE:HD13 | 1:A:79:PHE:HD2 | 9 | 0.3 |
| (1,1235) | 1:A:79:PHE:HA | 1:A:79:PHE:HD2 | 9 | 0.3 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG21 | 11 | 0.3 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG22 | 11 | 0.3 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG23 | 11 | 0.3 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD21 | 7 | 0.3 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD22 | 7 | 0.3 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD23 | 7 | 0.3 |
| (2,19) | 1:A:86:ARG:O | 1:A:90:THR:H | 5 | 0.29 |
| (2,19) | 1:A:86:ARG:O | 1:A:90:THR:H | 13 | 0.29 |
| (1,933) | 1:A:54:ILE:HG21 | 1:A:55:GLU:HG3 | 2 | 0.29 |
| (1,933) | 1:A:54:ILE:HG22 | 1:A:55:GLU:HG3 | 2 | 0.29 |
| (1,933) | 1:A:54:ILE:HG23 | 1:A:55:GLU:HG3 | 2 | 0.29 |
| (1,933) | 1:A:54:ILE:HG21 | 1:A:55:GLU:HG3 | 19 | 0.29 |
| (1,933) | 1:A:54:ILE:HG22 | 1:A:55:GLU:HG3 | 19 | 0.29 |
| (1,933) | 1:A:54:ILE:HG23 | 1:A:55:GLU:HG3 | 19 | 0.29 |
| (1,86) | 1:A:108:HIS:H | 1:A:108:HIS:HE1 | 5 | 0.29 |
| (1,86) | 1:A:108:HIS:H | 1:A:108:HIS:HE1 | 6 | 0.29 |
| (1,695) | 1:A:68:CYS:H | 1:A:80:HIS:HE1 | 20 | 0.29 |
| (1,648) | 1:A:42:CYS:HB2 | 1:A:47:ASN:H | 19 | 0.29 |
| (1,531) | 1:A:39:VAL:HG11 | 1:A:79:PHE:H | 14 | 0.29 |
| (1,531) | 1:A:39:VAL:HG12 | 1:A:79:PHE:H | 14 | 0.29 |
| (1,531) | 1:A:39:VAL:HG13 | 1:A:79:PHE:H | 14 | 0.29 |
| (1,521) | 1:A:70:VAL:HG11 | 1:A:81:PHE:H | 8 | 0.29 |
| (1,521) | 1:A:70:VAL:HG12 | 1:A:81:PHE:H | 8 | 0.29 |
| (1,521) | 1:A:70:VAL:HG13 | 1:A:81:PHE:H | 8 | 0.29 |
| (1,441) | 1:A:95:PRO:HG2 | 1:A:97:ASP:H | 15 | 0.29 |
| (1,441) | 1:A:95:PRO:HG3 | 1:A:97:ASP:H | 15 | 0.29 |
| (1,441) | 1:A:95:PRO:HG2 | 1:A:97:ASP:H | 17 | 0.29 |
| (1,441) | 1:A:95:PRO:HG3 | 1:A:97:ASP:H | 17 | 0.29 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,441) | 1:A:95:PRO:HG2 | 1:A:97:ASP:H | 18 | 0.29 |
| (1,441) | 1:A:95:PRO:HG3 | 1:A:97:ASP:H | 18 | 0.29 |
| (1,390) | 1:A:72:TRP:HB2 | 1:A:73:GLY:H | 14 | 0.29 |
| (1,390) | 1:A:72:TRP:HB2 | 1:A:73:GLY:H | 20 | 0.29 |
| (1,313) | 1:A:82:HIS:HD2 | 1:A:83:CYS:H | 16 | 0.29 |
| (1,20) | 1:A:67:GLU:H | 1:A:68:CYS:H | 17 | 0.29 |
| (1,1245) | 1:A:79:PHE:HE1 | 1:A:95:PRO:HD2 | 6 | 0.29 |
| (1,1235) | 1:A:79:PHE:HA | 1:A:79:PHE:HD2 | 4 | 0.29 |
| (1,1224) | 1:A:77:HIS:HE1 | 1:A:97:ASP:HB3 | 20 | 0.29 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG21 | 5 | 0.29 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG22 | 5 | 0.29 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG23 | 5 | 0.29 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG21 | 9 | 0.29 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG22 | 9 | 0.29 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG23 | 9 | 0.29 |
| (1,1164) | 1:A:52:LEU:HD21 | 1:A:65:SER:HB2 | 12 | 0.29 |
| (1,1164) | 1:A:52:LEU:HD22 | 1:A:65:SER:HB2 | 12 | 0.29 |
| (1,1164) | 1:A:52:LEU:HD23 | 1:A:65:SER:HB2 | 12 | 0.29 |
| (1,1090) | 1:A:95:PRO:HD3 | 1:A:97:ASP:H | 2 | 0.29 |
| (1,1090) | 1:A:95:PRO:HD3 | 1:A:97:ASP:H | 4 | 0.29 |
| (1,1090) | 1:A:95:PRO:HD3 | 1:A:97:ASP:H | 14 | 0.29 |
| (1,1045) | 1:A:54:ILE:HG21 | 1:A:55:GLU:HG2 | 17 | 0.29 |
| (1,1045) | 1:A:54:ILE:HG22 | 1:A:55:GLU:HG2 | 17 | 0.29 |
| (1,1045) | 1:A:54:ILE:HG23 | 1:A:55:GLU:HG2 | 17 | 0.29 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD21 | 13 | 0.29 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD22 | 13 | 0.29 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD23 | 13 | 0.29 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD21 | 15 | 0.29 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD22 | 15 | 0.29 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD23 | 15 | 0.29 |
| (1,962) | 1:A:49:ILE:HD11 | 1:A:50:MET:HB3 | 6 | 0.28 |
| (1,962) | 1:A:49:ILE:HD12 | 1:A:50:MET:HB3 | 6 | 0.28 |
| (1,962) | 1:A:49:ILE:HD13 | 1:A:50:MET:HB3 | 6 | 0.28 |
| (1,962) | 1:A:49:ILE:HD11 | 1:A:50:MET:HB3 | 8 | 0.28 |
| (1,962) | 1:A:49:ILE:HD12 | 1:A:50:MET:HB3 | 8 | 0.28 |
| (1,962) | 1:A:49:ILE:HD13 | 1:A:50:MET:HB3 | 8 | 0.28 |
| (1,877) | 1:A:60:GLN:HA | 1:A:61:ALA:HB1 | 18 | 0.28 |
| (1,877) | 1:A:60:GLN:HA | 1:A:61:ALA:HB2 | 18 | 0.28 |
| (1,877) | 1:A:60:GLN:HA | 1:A:61:ALA:HB3 | 18 | 0.28 |
| (1,726) | 1:A:56:CYS:HA | 1:A:59:ASN:HD22 | 5 | 0.28 |
| (1,689) | 1:A:55:GLU:HB2 | 1:A:59:ASN:H | 13 | 0.28 |
| (1,681) | 1:A:47:ASN:H | 1:A:53:CYS:HA | 8 | 0.28 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,643) | 1:A:37:ILE:HG12 | 1:A:38:VAL:H | 8 | 0.28 |
| (1,611) | 1:A:46:ARG:HG2 | 1:A:47:ASN:H | 19 | 0.28 |
| (1,588) | 1:A:54:ILE:HD11 | 1:A:56:CYS:H | 4 | 0.28 |
| (1,588) | 1:A:54:ILE:HD12 | 1:A:56:CYS:H | 4 | 0.28 |
| (1,588) | 1:A:54:ILE:HD13 | 1:A:56:CYS:H | 4 | 0.28 |
| (1,441) | 1:A:95:PRO:HG2 | 1:A:97:ASP:H | 20 | 0.28 |
| (1,441) | 1:A:95:PRO:HG3 | 1:A:97:ASP:H | 20 | 0.28 |
| (1,434) | 1:A:98:ASN:H | 1:A:99:ARG:HG2 | 13 | 0.28 |
| (1,434) | 1:A:98:ASN:H | 1:A:99:ARG:HG3 | 13 | 0.28 |
| (1,390) | 1:A:72:TRP:HB2 | 1:A:73:GLY:H | 2 | 0.28 |
| (1,390) | 1:A:72:TRP:HB2 | 1:A:73:GLY:H | 9 | 0.28 |
| (1,390) | 1:A:72:TRP:HB2 | 1:A:73:GLY:H | 15 | 0.28 |
| (1,39) | 1:A:88:LEU:HD21 | 1:A:101:TRP:H | 9 | 0.28 |
| (1,39) | 1:A:88:LEU:HD22 | 1:A:101:TRP:H | 9 | 0.28 |
| (1,39) | 1:A:88:LEU:HD23 | 1:A:101:TRP:H | 9 | 0.28 |
| (1,39) | 1:A:88:LEU:HD21 | 1:A:101:TRP:H | 19 | 0.28 |
| (1,39) | 1:A:88:LEU:HD22 | 1:A:101:TRP:H | 19 | 0.28 |
| (1,39) | 1:A:88:LEU:HD23 | 1:A:101:TRP:H | 19 | 0.28 |
| (1,195) | 1:A:86:ARG:H | 1:A:86:ARG:HG3 | 12 | 0.28 |
| (1,166) | 1:A:47:ASN:H | 1:A:47:ASN:HB3 | 10 | 0.28 |
| (1,1312) | 1:A:75:CYS:SG | 1:A:77:HIS:ND1 | 12 | 0.28 |
| (1,1235) | 1:A:79:PHE:HA | 1:A:79:PHE:HD2 | 8 | 0.28 |
| (1,1235) | 1:A:79:PHE:HA | 1:A:79:PHE:HD2 | 15 | 0.28 |
| (1,1235) | 1:A:79:PHE:HA | 1:A:79:PHE:HD2 | 19 | 0.28 |
| (1,1228) | 1:A:103:PHE:HA | 1:A:103:PHE:HD2 | 3 | 0.28 |
| (1,1090) | 1:A:95:PRO:HD3 | 1:A:97:ASP:H | 1 | 0.28 |
| (1,1090) | 1:A:95:PRO:HD3 | 1:A:97:ASP:H | 12 | 0.28 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD11 | 2 | 0.28 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD12 | 2 | 0.28 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD13 | 2 | 0.28 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD11 | 2 | 0.28 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD12 | 2 | 0.28 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD13 | 2 | 0.28 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD11 | 4 | 0.28 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD12 | 4 | 0.28 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD13 | 4 | 0.28 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD11 | 4 | 0.28 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD12 | 4 | 0.28 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD13 | 4 | 0.28 |
| (1,1016) | 1:A:52:LEU:HD11 | 1:A:57:GLN:HG2 | 17 | 0.28 |
| (1,1016) | 1:A:52:LEU:HD12 | 1:A:57:GLN:HG2 | 17 | 0.28 |
| (1,1016) | 1:A:52:LEU:HD13 | 1:A:57:GLN:HG2 | 17 | 0.28 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (2,19) | 1:A:86:ARG:O | 1:A:90:THR:H | 4 | 0.27 |
| (2,19) | 1:A:86:ARG:O | 1:A:90:THR:H | 12 | 0.27 |
| (1,962) | 1:A:49:ILE:HD11 | 1:A:50:MET:HB3 | 9 | 0.27 |
| (1,962) | 1:A:49:ILE:HD12 | 1:A:50:MET:HB3 | 9 | 0.27 |
| (1,962) | 1:A:49:ILE:HD13 | 1:A:50:MET:HB3 | 9 | 0.27 |
| (1,86) | 1:A:108:HIS:H | 1:A:108:HIS:HE1 | 9 | 0.27 |
| (1,741) | 1:A:54:ILE:HG12 | 1:A:56:CYS:H | 8 | 0.27 |
| (1,741) | 1:A:54:ILE:HG12 | 1:A:56:CYS:H | 18 | 0.27 |
| (1,726) | 1:A:56:CYS:HA | 1:A:59:ASN:HD22 | 4 | 0.27 |
| (1,726) | 1:A:56:CYS:HA | 1:A:59:ASN:HD22 | 17 | 0.27 |
| (1,725) | 1:A:55:GLU:HB3 | 1:A:59:ASN:HD22 | 11 | 0.27 |
| (1,715) | 1:A:94:CYS:H | 1:A:99:ARG:HG2 | 9 | 0.27 |
| (1,715) | 1:A:94:CYS:H | 1:A:99:ARG:HG3 | 9 | 0.27 |
| (1,679) | 1:A:44:ILE:H | 1:A:47:ASN:H | 11 | 0.27 |
| (1,675) | 1:A:42:CYS:H | 1:A:48:HIS:HD2 | 4 | 0.27 |
| (1,648) | 1:A:42:CYS:HB2 | 1:A:47:ASN:H | 6 | 0.27 |
| (1,434) | 1:A:98:ASN:H | 1:A:99:ARG:HG2 | 20 | 0.27 |
| (1,434) | 1:A:98:ASN:H | 1:A:99:ARG:HG3 | 20 | 0.27 |
| (1,390) | 1:A:72:TRP:HB2 | 1:A:73:GLY:H | 6 | 0.27 |
| (1,390) | 1:A:72:TRP:HB2 | 1:A:73:GLY:H | 7 | 0.27 |
| (1,390) | 1:A:72:TRP:HB2 | 1:A:73:GLY:H | 16 | 0.27 |
| (1,1291) | 1:A:87:TRP:HZ2 | 1:A:95:PRO:HB2 | 9 | 0.27 |
| (1,1259) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HD1 | 18 | 0.27 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD11 | 6 | 0.27 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD12 | 6 | 0.27 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD13 | 6 | 0.27 |
| (1,1239) | 1:A:44:ILE:HD11 | 1:A:79:PHE:HD2 | 19 | 0.27 |
| (1,1239) | 1:A:44:ILE:HD12 | 1:A:79:PHE:HD2 | 19 | 0.27 |
| (1,1239) | 1:A:44:ILE:HD13 | 1:A:79:PHE:HD2 | 19 | 0.27 |
| (1,122) | 1:A:99:ARG:HG2 | 1:A:100:GLU:H | 6 | 0.27 |
| (1,122) | 1:A:99:ARG:HG3 | 1:A:100:GLU:H | 6 | 0.27 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG21 | 10 | 0.27 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG22 | 10 | 0.27 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG23 | 10 | 0.27 |
| (1,1090) | 1:A:95:PRO:HD3 | 1:A:97:ASP:H | 8 | 0.27 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD11 | 9 | 0.27 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD12 | 9 | 0.27 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD13 | 9 | 0.27 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD11 | 9 | 0.27 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD12 | 9 | 0.27 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD13 | 9 | 0.27 |
| (1,1045) | 1:A:54:ILE:HG21 | 1:A:55:GLU:HG2 | 5 | 0.27 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1045) | 1:A:54:ILE:HG22 | 1:A:55:GLU:HG2 | 5 | 0.27 |
| (1,1045) | 1:A:54:ILE:HG23 | 1:A:55:GLU:HG2 | 5 | 0.27 |
| (1,1045) | 1:A:54:ILE:HG21 | 1:A:55:GLU:HG2 | 16 | 0.27 |
| (1,1045) | 1:A:54:ILE:HG22 | 1:A:55:GLU:HG2 | 16 | 0.27 |
| (1,1045) | 1:A:54:ILE:HG23 | 1:A:55:GLU:HG2 | 16 | 0.27 |
| (1,1045) | 1:A:54:ILE:HG21 | 1:A:55:GLU:HG2 | 18 | 0.27 |
| (1,1045) | 1:A:54:ILE:HG22 | 1:A:55:GLU:HG2 | 18 | 0.27 |
| (1,1045) | 1:A:54:ILE:HG23 | 1:A:55:GLU:HG2 | 18 | 0.27 |
| (1,1016) | 1:A:52:LEU:HD11 | 1:A:57:GLN:HG2 | 8 | 0.27 |
| (1,1016) | 1:A:52:LEU:HD12 | 1:A:57:GLN:HG2 | 8 | 0.27 |
| (1,1016) | 1:A:52:LEU:HD13 | 1:A:57:GLN:HG2 | 8 | 0.27 |
| (1,1006) | 1:A:88:LEU:HD11 | 1:A:101:TRP:HH2 | 7 | 0.27 |
| (1,1006) | 1:A:88:LEU:HD12 | 1:A:101:TRP:HH2 | 7 | 0.27 |
| (1,1006) | 1:A:88:LEU:HD13 | 1:A:101:TRP:HH2 | 7 | 0.27 |
| (1,1006) | 1:A:88:LEU:HD11 | 1:A:101:TRP:HH2 | 17 | 0.27 |
| (1,1006) | 1:A:88:LEU:HD12 | 1:A:101:TRP:HH2 | 17 | 0.27 |
| (1,1006) | 1:A:88:LEU:HD13 | 1:A:101:TRP:HH2 | 17 | 0.27 |
| (2,19) | 1:A:86:ARG:O | 1:A:90:THR:H | 11 | 0.26 |
| (1,741) | 1:A:54:ILE:HG12 | 1:A:56:CYS:H | 2 | 0.26 |
| (1,741) | 1:A:54:ILE:HG12 | 1:A:56:CYS:H | 6 | 0.26 |
| (1,741) | 1:A:54:ILE:HG12 | 1:A:56:CYS:H | 10 | 0.26 |
| (1,741) | 1:A:54:ILE:HG12 | 1:A:56:CYS:H | 14 | 0.26 |
| (1,741) | 1:A:54:ILE:HG12 | 1:A:56:CYS:H | 20 | 0.26 |
| (1,730) | 1:A:87:TRP:HE1 | 1:A:101:TRP:HE3 | 13 | 0.26 |
| (1,715) | 1:A:94:CYS:H | 1:A:99:ARG:HG2 | 1 | 0.26 |
| (1,715) | 1:A:94:CYS:H | 1:A:99:ARG:HG3 | 1 | 0.26 |
| (1,689) | 1:A:55:GLU:HB2 | 1:A:59:ASN:H | 17 | 0.26 |
| (1,680) | 1:A:46:ARG:H | 1:A:47:ASN:HB3 | 1 | 0.26 |
| (1,679) | 1:A:44:ILE:H | 1:A:47:ASN:H | 14 | 0.26 |
| (1,531) | 1:A:39:VAL:HG11 | 1:A:79:PHE:H | 1 | 0.26 |
| (1,531) | 1:A:39:VAL:HG12 | 1:A:79:PHE:H | 1 | 0.26 |
| (1,531) | 1:A:39:VAL:HG13 | 1:A:79:PHE:H | 1 | 0.26 |
| (1,441) | 1:A:95:PRO:HG2 | 1:A:97:ASP:H | 5 | 0.26 |
| (1,441) | 1:A:95:PRO:HG3 | 1:A:97:ASP:H | 5 | 0.26 |
| (1,441) | 1:A:95:PRO:HG2 | 1:A:97:ASP:H | 11 | 0.26 |
| (1,441) | 1:A:95:PRO:HG3 | 1:A:97:ASP:H | 11 | 0.26 |
| (1,434) | 1:A:98:ASN:H | 1:A:99:ARG:HG2 | 3 | 0.26 |
| (1,434) | 1:A:98:ASN:H | 1:A:99:ARG:HG3 | 3 | 0.26 |
| (1,390) | 1:A:72:TRP:HB2 | 1:A:73:GLY:H | 3 | 0.26 |
| (1,390) | 1:A:72:TRP:HB2 | 1:A:73:GLY:H | 18 | 0.26 |
| (1,331) | 1:A:96:LEU:H | 1:A:98:ASN:H | 11 | 0.26 |
| (1,186) | 1:A:37:ILE:H | 1:A:37:ILE:HG13 | 17 | 0.26 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,166) | 1:A:47:ASN:H | 1:A:47:ASN:HB3 | 1 | 0.26 |
| (1,1312) | 1:A:75:CYS:SG | 1:A:77:HIS:ND1 | 15 | 0.26 |
| (1,1310) | 1:A:56:CYS:SG | 1:A:82:HIS:ND1 | 13 | 0.26 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD11 | 17 | 0.26 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD12 | 17 | 0.26 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD13 | 17 | 0.26 |
| (1,1226) | 1:A:77:HIS:HE1 | 1:A:96:LEU:HG | 6 | 0.26 |
| (1,1098) | 1:A:79:PHE:HE2 | 1:A:95:PRO:HB2 | 9 | 0.26 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD11 | 1 | 0.26 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD12 | 1 | 0.26 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD13 | 1 | 0.26 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD11 | 1 | 0.26 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD12 | 1 | 0.26 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD13 | 1 | 0.26 |
| (1,1045) | 1:A:54:ILE:HG21 | 1:A:55:GLU:HG2 | 15 | 0.26 |
| (1,1045) | 1:A:54:ILE:HG22 | 1:A:55:GLU:HG2 | 15 | 0.26 |
| (1,1045) | 1:A:54:ILE:HG23 | 1:A:55:GLU:HG2 | 15 | 0.26 |
| (1,979) | 1:A:79:PHE:HB3 | 1:A:80:HIS:HB3 | 16 | 0.25 |
| (1,962) | 1:A:49:ILE:HD11 | 1:A:50:MET:HB3 | 2 | 0.25 |
| (1,962) | 1:A:49:ILE:HD12 | 1:A:50:MET:HB3 | 2 | 0.25 |
| (1,962) | 1:A:49:ILE:HD13 | 1:A:50:MET:HB3 | 2 | 0.25 |
| (1,962) | 1:A:49:ILE:HD11 | 1:A:50:MET:HB3 | 17 | 0.25 |
| (1,962) | 1:A:49:ILE:HD12 | 1:A:50:MET:HB3 | 17 | 0.25 |
| (1,962) | 1:A:49:ILE:HD13 | 1:A:50:MET:HB3 | 17 | 0.25 |
| (1,927) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HB | 14 | 0.25 |
| (1,762) | 1:A:89:LYS:HA | 1:A:89:LYS:HG3 | 13 | 0.25 |
| (1,743) | 1:A:65:SER:HB2 | 1:A:66:GLU:HB2 | 12 | 0.25 |
| (1,743) | 1:A:65:SER:HB2 | 1:A:66:GLU:HB3 | 12 | 0.25 |
| (1,741) | 1:A:54:ILE:HG12 | 1:A:56:CYS:H | 5 | 0.25 |
| (1,725) | 1:A:55:GLU:HB3 | 1:A:59:ASN:HD22 | 3 | 0.25 |
| (1,679) | 1:A:44:ILE:H | 1:A:47:ASN:H | 19 | 0.25 |
| (1,630) | 1:A:43:ALA:H | 1:A:44:ILE:HG12 | 5 | 0.25 |
| (1,630) | 1:A:43:ALA:H | 1:A:44:ILE:HG12 | 19 | 0.25 |
| (1,588) | 1:A:54:ILE:HD11 | 1:A:56:CYS:H | 3 | 0.25 |
| (1,588) | 1:A:54:ILE:HD12 | 1:A:56:CYS:H | 3 | 0.25 |
| (1,588) | 1:A:54:ILE:HD13 | 1:A:56:CYS:H | 3 | 0.25 |
| (1,531) | 1:A:39:VAL:HG11 | 1:A:79:PHE:H | 8 | 0.25 |
| (1,531) | 1:A:39:VAL:HG12 | 1:A:79:PHE:H | 8 | 0.25 |
| (1,531) | 1:A:39:VAL:HG13 | 1:A:79:PHE:H | 8 | 0.25 |
| (1,521) | 1:A:70:VAL:HG11 | 1:A:81:PHE:H | 5 | 0.25 |
| (1,521) | 1:A:70:VAL:HG12 | 1:A:81:PHE:H | 5 | 0.25 |
| (1,521) | 1:A:70:VAL:HG13 | 1:A:81:PHE:H | 5 | 0.25 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,390) | 1:A:72:TRP:HB2 | 1:A:73:GLY:H | 11 | 0.25 |
| (1,390) | 1:A:72:TRP:HB2 | 1:A:73:GLY:H | 12 | 0.25 |
| (1,390) | 1:A:72:TRP:HB2 | 1:A:73:GLY:H | 13 | 0.25 |
| (1,390) | 1:A:72:TRP:HB2 | 1:A:73:GLY:H | 17 | 0.25 |
| (1,194) | 1:A:86:ARG:H | 1:A:86:ARG:HG2 | 10 | 0.25 |
| (1,1310) | 1:A:56:CYS:SG | 1:A:82:HIS:ND1 | 19 | 0.25 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD11 | 7 | 0.25 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD12 | 7 | 0.25 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD13 | 7 | 0.25 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD11 | 10 | 0.25 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD12 | 10 | 0.25 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD13 | 10 | 0.25 |
| (1,1224) | 1:A:77:HIS:HE1 | 1:A:97:ASP:HB3 | 12 | 0.25 |
| (1,122) | 1:A:99:ARG:HG2 | 1:A:100:GLU:H | 12 | 0.25 |
| (1,122) | 1:A:99:ARG:HG3 | 1:A:100:GLU:H | 12 | 0.25 |
| (1,1091) | 1:A:79:PHE:HE1 | 1:A:95:PRO:HD3 | 6 | 0.25 |
| (1,1090) | 1:A:95:PRO:HD3 | 1:A:97:ASP:H | 10 | 0.25 |
| (1,1073) | 1:A:64:THR:HB | 1:A:66:GLU:HB2 | 8 | 0.25 |
| (1,1016) | 1:A:52:LEU:HD11 | 1:A:57:GLN:HG2 | 16 | 0.25 |
| (1,1016) | 1:A:52:LEU:HD12 | 1:A:57:GLN:HG2 | 16 | 0.25 |
| (1,1016) | 1:A:52:LEU:HD13 | 1:A:57:GLN:HG2 | 16 | 0.25 |
| (3,5) | 1:A:53:CYS:SG | 1:A:68:CYS:SG | 20 | 0.24 |
| (2,19) | 1:A:86:ARG:O | 1:A:90:THR:H | 3 | 0.24 |
| (2,19) | 1:A:86:ARG:O | 1:A:90:THR:H | 19 | 0.24 |
| (1,99) | 1:A:54:ILE:HG21 | 1:A:55:GLU:H | 7 | 0.24 |
| (1,99) | 1:A:54:ILE:HG22 | 1:A:55:GLU:H | 7 | 0.24 |
| (1,99) | 1:A:54:ILE:HG23 | 1:A:55:GLU:H | 7 | 0.24 |
| (1,979) | 1:A:79:PHE:HB3 | 1:A:80:HIS:HB3 | 17 | 0.24 |
| (1,973) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HB2 | 18 | 0.24 |
| (1,927) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HB | 10 | 0.24 |
| (1,741) | 1:A:54:ILE:HG12 | 1:A:56:CYS:H | 3 | 0.24 |
| (1,730) | 1:A:87:TRP:HE1 | 1:A:101:TRP:HE3 | 19 | 0.24 |
| (1,726) | 1:A:56:CYS:HA | 1:A:59:ASN:HD22 | 15 | 0.24 |
| (1,689) | 1:A:55:GLU:HB2 | 1:A:59:ASN:H | 6 | 0.24 |
| (1,680) | 1:A:46:ARG:H | 1:A:47:ASN:HB3 | 9 | 0.24 |
| (1,680) | 1:A:46:ARG:H | 1:A:47:ASN:HB3 | 20 | 0.24 |
| (1,679) | 1:A:44:ILE:H | 1:A:47:ASN:H | 12 | 0.24 |
| (1,679) | 1:A:44:ILE:H | 1:A:47:ASN:H | 20 | 0.24 |
| (1,648) | 1:A:42:CYS:HB2 | 1:A:47:ASN:H | 10 | 0.24 |
| (1,648) | 1:A:42:CYS:HB2 | 1:A:47:ASN:H | 15 | 0.24 |
| (1,630) | 1:A:43:ALA:H | 1:A:44:ILE:HG12 | 12 | 0.24 |
| (1,588) | 1:A:54:ILE:HD11 | 1:A:56:CYS:H | 16 | 0.24 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,588) | 1:A:54:ILE:HD12 | 1:A:56:CYS:H | 16 | 0.24 |
| (1,588) | 1:A:54:ILE:HD13 | 1:A:56:CYS:H | 16 | 0.24 |
| (1,581) | 1:A:52:LEU:HD21 | 1:A:58:ALA:H | 5 | 0.24 |
| (1,581) | 1:A:52:LEU:HD22 | 1:A:58:ALA:H | 5 | 0.24 |
| (1,581) | 1:A:52:LEU:HD23 | 1:A:58:ALA:H | 5 | 0.24 |
| (1,531) | 1:A:39:VAL:HG11 | 1:A:79:PHE:H | 18 | 0.24 |
| (1,531) | 1:A:39:VAL:HG12 | 1:A:79:PHE:H | 18 | 0.24 |
| (1,531) | 1:A:39:VAL:HG13 | 1:A:79:PHE:H | 18 | 0.24 |
| (1,441) | 1:A:95:PRO:HG2 | 1:A:97:ASP:H | 9 | 0.24 |
| (1,441) | 1:A:95:PRO:HG3 | 1:A:97:ASP:H | 9 | 0.24 |
| (1,434) | 1:A:98:ASN:H | 1:A:99:ARG:HG2 | 10 | 0.24 |
| (1,434) | 1:A:98:ASN:H | 1:A:99:ARG:HG3 | 10 | 0.24 |
| (1,39) | 1:A:88:LEU:HD21 | 1:A:101:TRP:H | 15 | 0.24 |
| (1,39) | 1:A:88:LEU:HD22 | 1:A:101:TRP:H | 15 | 0.24 |
| (1,39) | 1:A:88:LEU:HD23 | 1:A:101:TRP:H | 15 | 0.24 |
| (1,360) | 1:A:59:ASN:H | 1:A:59:ASN:HB3 | 13 | 0.24 |
| (1,331) | 1:A:96:LEU:H | 1:A:98:ASN:H | 20 | 0.24 |
| (1,20) | 1:A:67:GLU:H | 1:A:68:CYS:H | 18 | 0.24 |
| (1,194) | 1:A:86:ARG:H | 1:A:86:ARG:HG2 | 12 | 0.24 |
| (1,141) | 1:A:38:VAL:HB | 1:A:40:ASP:H | 6 | 0.24 |
| (1,1310) | 1:A:56:CYS:SG | 1:A:82:HIS:ND1 | 2 | 0.24 |
| (1,1307) | 1:A:45:CYS:SG | 1:A:80:HIS:ND1 | 19 | 0.24 |
| (1,1281) | 1:A:49:ILE:HA | 1:A:80:HIS:HD2 | 14 | 0.24 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD11 | 2 | 0.24 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD12 | 2 | 0.24 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD13 | 2 | 0.24 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD11 | 4 | 0.24 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD12 | 4 | 0.24 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD13 | 4 | 0.24 |
| (1,1245) | 1:A:79:PHE:HE1 | 1:A:95:PRO:HD2 | 10 | 0.24 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD11 | 5 | 0.24 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD12 | 5 | 0.24 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD13 | 5 | 0.24 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD11 | 20 | 0.24 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD12 | 20 | 0.24 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD13 | 20 | 0.24 |
| (1,1192) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HA | 12 | 0.24 |
| (1,1192) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HA | 12 | 0.24 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG21 | 2 | 0.24 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG22 | 2 | 0.24 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG23 | 2 | 0.24 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG21 | 6 | 0.24 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG22 | 6 | 0.24 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG23 | 6 | 0.24 |
| (1,1141) | 1:A:106:TYR:HD2 | 1:A:107:GLY:HA3 | 7 | 0.24 |
| (1,1054) | 1:A:49:ILE:HD11 | 1:A:50:MET:HA | 6 | 0.24 |
| (1,1054) | 1:A:49:ILE:HD12 | 1:A:50:MET:HA | 6 | 0.24 |
| (1,1054) | 1:A:49:ILE:HD13 | 1:A:50:MET:HA | 6 | 0.24 |
| (1,1050) | 1:A:37:ILE:HD11 | 1:A:38:VAL:HA | 2 | 0.24 |
| (1,1050) | 1:A:37:ILE:HD12 | 1:A:38:VAL:HA | 2 | 0.24 |
| (1,1050) | 1:A:37:ILE:HD13 | 1:A:38:VAL:HA | 2 | 0.24 |
| (1,1045) | 1:A:54:ILE:HG21 | 1:A:55:GLU:HG2 | 9 | 0.24 |
| (1,1045) | 1:A:54:ILE:HG22 | 1:A:55:GLU:HG2 | 9 | 0.24 |
| (1,1045) | 1:A:54:ILE:HG23 | 1:A:55:GLU:HG2 | 9 | 0.24 |
| (1,1021) | 1:A:71:ALA:HB1 | 1:A:106:TYR:HB2 | 5 | 0.24 |
| (1,1021) | 1:A:71:ALA:HB2 | 1:A:106:TYR:HB2 | 5 | 0.24 |
| (1,1021) | 1:A:71:ALA:HB3 | 1:A:106:TYR:HB2 | 5 | 0.24 |
| (1,1006) | 1:A:88:LEU:HD11 | 1:A:101:TRP:HH2 | 4 | 0.24 |
| (1,1006) | 1:A:88:LEU:HD12 | 1:A:101:TRP:HH2 | 4 | 0.24 |
| (1,1006) | 1:A:88:LEU:HD13 | 1:A:101:TRP:HH2 | 4 | 0.24 |
| (1,1006) | 1:A:88:LEU:HD11 | 1:A:101:TRP:HH2 | 9 | 0.24 |
| (1,1006) | 1:A:88:LEU:HD12 | 1:A:101:TRP:HH2 | 9 | 0.24 |
| (1,1006) | 1:A:88:LEU:HD13 | 1:A:101:TRP:HH2 | 9 | 0.24 |
| (2,19) | 1:A:86:ARG:O | 1:A:90:THR:H | 18 | 0.23 |
| (1,979) | 1:A:79:PHE:HB3 | 1:A:80:HIS:HB3 | 3 | 0.23 |
| (1,927) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HB | 6 | 0.23 |
| (1,927) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HB | 11 | 0.23 |
| (1,86) | 1:A:108:HIS:H | 1:A:108:HIS:HE1 | 7 | 0.23 |
| (1,854) | 1:A:87:TRP:HA | 1:A:91:ARG:HG2 | 15 | 0.23 |
| (1,83) | 1:A:86:ARG:HG3 | 1:A:87:TRP:H | 7 | 0.23 |
| (1,747) | 1:A:52:LEU:HA | 1:A:65:SER:HA | 1 | 0.23 |
| (1,726) | 1:A:56:CYS:HA | 1:A:59:ASN:HD22 | 2 | 0.23 |
| (1,726) | 1:A:56:CYS:HA | 1:A:59:ASN:HD22 | 7 | 0.23 |
| (1,689) | 1:A:55:GLU:HB2 | 1:A:59:ASN:H | 8 | 0.23 |
| (1,681) | 1:A:47:ASN:H | 1:A:53:CYS:HA | 5 | 0.23 |
| (1,681) | 1:A:47:ASN:H | 1:A:53:CYS:HA | 15 | 0.23 |
| (1,680) | 1:A:46:ARG:H | 1:A:47:ASN:HB3 | 5 | 0.23 |
| (1,679) | 1:A:44:ILE:H | 1:A:47:ASN:H | 16 | 0.23 |
| (1,675) | 1:A:42:CYS:H | 1:A:48:HIS:HD2 | 2 | 0.23 |
| (1,648) | 1:A:42:CYS:HB2 | 1:A:47:ASN:H | 2 | 0.23 |
| (1,648) | 1:A:42:CYS:HB2 | 1:A:47:ASN:H | 18 | 0.23 |
| (1,630) | 1:A:43:ALA:H | 1:A:44:ILE:HG12 | 1 | 0.23 |
| (1,630) | 1:A:43:ALA:H | 1:A:44:ILE:HG12 | 7 | 0.23 |
| (1,630) | 1:A:43:ALA:H | 1:A:44:ILE:HG12 | 10 | 0.23 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,630) | 1:A:43:ALA:H | 1:A:44:ILE:HG12 | 13 | 0.23 |
| (1,630) | 1:A:43:ALA:H | 1:A:44:ILE:HG12 | 15 | 0.23 |
| (1,611) | 1:A:46:ARG:HG2 | 1:A:47:ASN:H | 10 | 0.23 |
| (1,588) | 1:A:54:ILE:HD11 | 1:A:56:CYS:H | 9 | 0.23 |
| (1,588) | 1:A:54:ILE:HD12 | 1:A:56:CYS:H | 9 | 0.23 |
| (1,588) | 1:A:54:ILE:HD13 | 1:A:56:CYS:H | 9 | 0.23 |
| (1,460) | 1:A:91:ARG:H | 1:A:92:GLN:HG3 | 13 | 0.23 |
| (1,360) | 1:A:59:ASN:H | 1:A:59:ASN:HB3 | 2 | 0.23 |
| (1,360) | 1:A:59:ASN:H | 1:A:59:ASN:HB3 | 8 | 0.23 |
| (1,360) | 1:A:59:ASN:H | 1:A:59:ASN:HB3 | 12 | 0.23 |
| (1,194) | 1:A:86:ARG:H | 1:A:86:ARG:HG2 | 6 | 0.23 |
| (1,161) | 1:A:72:TRP:H | 1:A:72:TRP:HB3 | 1 | 0.23 |
| (1,161) | 1:A:72:TRP:H | 1:A:72:TRP:HB3 | 11 | 0.23 |
| (1,1291) | 1:A:87:TRP:HZ2 | 1:A:95:PRO:HB2 | 15 | 0.23 |
| (1,1266) | 1:A:35:TRP:HA | 1:A:35:TRP:HE3 | 2 | 0.23 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD11 | 6 | 0.23 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD12 | 6 | 0.23 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD13 | 6 | 0.23 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD11 | 9 | 0.23 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD12 | 9 | 0.23 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD13 | 9 | 0.23 |
| (1,1232) | 1:A:105:LYS:HA | 1:A:106:TYR:HD1 | 7 | 0.23 |
| (1,1192) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HA | 13 | 0.23 |
| (1,1192) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HA | 13 | 0.23 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG21 | 17 | 0.23 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG22 | 17 | 0.23 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG23 | 17 | 0.23 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG21 | 18 | 0.23 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG22 | 18 | 0.23 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG23 | 18 | 0.23 |
| (1,1091) | 1:A:79:PHE:HE1 | 1:A:95:PRO:HD3 | 20 | 0.23 |
| (1,1080) | 1:A:94:CYS:HB3 | 1:A:101:TRP:HA | 18 | 0.23 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD11 | 20 | 0.23 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD12 | 20 | 0.23 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD13 | 20 | 0.23 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD11 | 20 | 0.23 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD12 | 20 | 0.23 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD13 | 20 | 0.23 |
| (1,1054) | 1:A:49:ILE:HD11 | 1:A:50:MET:HA | 14 | 0.23 |
| (1,1054) | 1:A:49:ILE:HD12 | 1:A:50:MET:HA | 14 | 0.23 |
| (1,1054) | 1:A:49:ILE:HD13 | 1:A:50:MET:HA | 14 | 0.23 |
| (1,1050) | 1:A:37:ILE:HD11 | 1:A:38:VAL:HA | 8 | 0.23 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1050) | 1:A:37:ILE:HD12 | 1:A:38:VAL:HA | 8 | 0.23 |
| (1,1050) | 1:A:37:ILE:HD13 | 1:A:38:VAL:HA | 8 | 0.23 |
| (1,1016) | 1:A:52:LEU:HD11 | 1:A:57:GLN:HG2 | 12 | 0.23 |
| (1,1016) | 1:A:52:LEU:HD12 | 1:A:57:GLN:HG2 | 12 | 0.23 |
| (1,1016) | 1:A:52:LEU:HD13 | 1:A:57:GLN:HG2 | 12 | 0.23 |
| (1,99) | 1:A:54:ILE:HG21 | 1:A:55:GLU:H | 9 | 0.22 |
| (1,99) | 1:A:54:ILE:HG22 | 1:A:55:GLU:H | 9 | 0.22 |
| (1,99) | 1:A:54:ILE:HG23 | 1:A:55:GLU:H | 9 | 0.22 |
| (1,99) | 1:A:54:ILE:HG21 | 1:A:55:GLU:H | 11 | 0.22 |
| (1,99) | 1:A:54:ILE:HG22 | 1:A:55:GLU:H | 11 | 0.22 |
| (1,99) | 1:A:54:ILE:HG23 | 1:A:55:GLU:H | 11 | 0.22 |
| (1,979) | 1:A:79:PHE:HB3 | 1:A:80:HIS:HB3 | 11 | 0.22 |
| (1,979) | 1:A:79:PHE:HB3 | 1:A:80:HIS:HB3 | 14 | 0.22 |
| (1,927) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HB | 20 | 0.22 |
| (1,880) | 1:A:43:ALA:HA | 1:A:46:ARG:HD2 | 15 | 0.22 |
| (1,880) | 1:A:43:ALA:HA | 1:A:46:ARG:HD3 | 15 | 0.22 |
| (1,854) | 1:A:87:TRP:HA | 1:A:91:ARG:HG2 | 10 | 0.22 |
| (1,851) | 1:A:48:HIS:HD2 | 1:A:49:ILE:HA | 17 | 0.22 |
| (1,762) | 1:A:89:LYS:HA | 1:A:89:LYS:HG3 | 15 | 0.22 |
| (1,726) | 1:A:56:CYS:HA | 1:A:59:ASN:HD22 | 20 | 0.22 |
| (1,725) | 1:A:55:GLU:HB3 | 1:A:59:ASN:HD22 | 18 | 0.22 |
| (1,715) | 1:A:94:CYS:H | 1:A:99:ARG:HG2 | 11 | 0.22 |
| (1,715) | 1:A:94:CYS:H | 1:A:99:ARG:HG3 | 11 | 0.22 |
| (1,695) | 1:A:68:CYS:H | 1:A:80:HIS:HE1 | 6 | 0.22 |
| (1,695) | 1:A:68:CYS:H | 1:A:80:HIS:HE1 | 18 | 0.22 |
| (1,630) | 1:A:43:ALA:H | 1:A:44:ILE:HG12 | 6 | 0.22 |
| (1,630) | 1:A:43:ALA:H | 1:A:44:ILE:HG12 | 11 | 0.22 |
| (1,630) | 1:A:43:ALA:H | 1:A:44:ILE:HG12 | 18 | 0.22 |
| (1,596) | 1:A:49:ILE:HG21 | 1:A:51:ASP:H | 19 | 0.22 |
| (1,596) | 1:A:49:ILE:HG22 | 1:A:51:ASP:H | 19 | 0.22 |
| (1,596) | 1:A:49:ILE:HG23 | 1:A:51:ASP:H | 19 | 0.22 |
| (1,588) | 1:A:54:ILE:HD11 | 1:A:56:CYS:H | 10 | 0.22 |
| (1,588) | 1:A:54:ILE:HD12 | 1:A:56:CYS:H | 10 | 0.22 |
| (1,588) | 1:A:54:ILE:HD13 | 1:A:56:CYS:H | 10 | 0.22 |
| (1,521) | 1:A:70:VAL:HG11 | 1:A:81:PHE:H | 9 | 0.22 |
| (1,521) | 1:A:70:VAL:HG12 | 1:A:81:PHE:H | 9 | 0.22 |
| (1,521) | 1:A:70:VAL:HG13 | 1:A:81:PHE:H | 9 | 0.22 |
| (1,446) | 1:A:94:CYS:H | 1:A:101:TRP:HB3 | 14 | 0.22 |
| (1,441) | 1:A:95:PRO:HG2 | 1:A:97:ASP:H | 16 | 0.22 |
| (1,441) | 1:A:95:PRO:HG3 | 1:A:97:ASP:H | 16 | 0.22 |
| (1,438) | 1:A:97:ASP:H | 1:A:99:ARG:HG2 | 3 | 0.22 |
| (1,438) | 1:A:97:ASP:H | 1:A:99:ARG:HG3 | 3 | 0.22 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,438) | 1:A:97:ASP:H | 1:A:99:ARG:HG2 | 20 | 0.22 |
| (1,438) | 1:A:97:ASP:H | 1:A:99:ARG:HG3 | 20 | 0.22 |
| (1,39) | 1:A:88:LEU:HD21 | 1:A:101:TRP:H | 1 | 0.22 |
| (1,39) | 1:A:88:LEU:HD22 | 1:A:101:TRP:H | 1 | 0.22 |
| (1,39) | 1:A:88:LEU:HD23 | 1:A:101:TRP:H | 1 | 0.22 |
| (1,39) | 1:A:88:LEU:HD21 | 1:A:101:TRP:H | 12 | 0.22 |
| (1,39) | 1:A:88:LEU:HD22 | 1:A:101:TRP:H | 12 | 0.22 |
| (1,39) | 1:A:88:LEU:HD23 | 1:A:101:TRP:H | 12 | 0.22 |
| (1,39) | 1:A:88:LEU:HD21 | 1:A:101:TRP:H | 18 | 0.22 |
| (1,39) | 1:A:88:LEU:HD22 | 1:A:101:TRP:H | 18 | 0.22 |
| (1,39) | 1:A:88:LEU:HD23 | 1:A:101:TRP:H | 18 | 0.22 |
| (1,36) | 1:A:100:GLU:HG2 | 1:A:101:TRP:H | 19 | 0.22 |
| (1,36) | 1:A:100:GLU:HG3 | 1:A:101:TRP:H | 19 | 0.22 |
| (1,331) | 1:A:96:LEU:H | 1:A:98:ASN:H | 10 | 0.22 |
| (1,331) | 1:A:96:LEU:H | 1:A:98:ASN:H | 15 | 0.22 |
| (1,20) | 1:A:67:GLU:H | 1:A:68:CYS:H | 1 | 0.22 |
| (1,20) | 1:A:67:GLU:H | 1:A:68:CYS:H | 2 | 0.22 |
| (1,20) | 1:A:67:GLU:H | 1:A:68:CYS:H | 7 | 0.22 |
| (1,20) | 1:A:67:GLU:H | 1:A:68:CYS:H | 12 | 0.22 |
| (1,20) | 1:A:67:GLU:H | 1:A:68:CYS:H | 13 | 0.22 |
| (1,20) | 1:A:67:GLU:H | 1:A:68:CYS:H | 15 | 0.22 |
| (1,161) | 1:A:72:TRP:H | 1:A:72:TRP:HB3 | 7 | 0.22 |
| (1,161) | 1:A:72:TRP:H | 1:A:72:TRP:HB3 | 9 | 0.22 |
| (1,161) | 1:A:72:TRP:H | 1:A:72:TRP:HB3 | 10 | 0.22 |
| (1,161) | 1:A:72:TRP:H | 1:A:72:TRP:HB3 | 13 | 0.22 |
| (1,1310) | 1:A:56:CYS:SG | 1:A:82:HIS:ND1 | 3 | 0.22 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD11 | 11 | 0.22 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD12 | 11 | 0.22 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD13 | 11 | 0.22 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD11 | 12 | 0.22 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD12 | 12 | 0.22 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD13 | 12 | 0.22 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD11 | 14 | 0.22 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD12 | 14 | 0.22 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD13 | 14 | 0.22 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD11 | 15 | 0.22 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD12 | 15 | 0.22 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD13 | 15 | 0.22 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD11 | 16 | 0.22 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD12 | 16 | 0.22 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD13 | 16 | 0.22 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD11 | 20 | 0.22 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD12 | 20 | 0.22 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD13 | 20 | 0.22 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD11 | 11 | 0.22 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD12 | 11 | 0.22 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD13 | 11 | 0.22 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD11 | 14 | 0.22 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD12 | 14 | 0.22 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD13 | 14 | 0.22 |
| (1,1226) | 1:A:77:HIS:HE1 | 1:A:96:LEU:HG | 19 | 0.22 |
| (1,122) | 1:A:99:ARG:HG2 | 1:A:100:GLU:H | 5 | 0.22 |
| (1,122) | 1:A:99:ARG:HG3 | 1:A:100:GLU:H | 5 | 0.22 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG21 | 12 | 0.22 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG22 | 12 | 0.22 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG23 | 12 | 0.22 |
| (1,1098) | 1:A:79:PHE:HE2 | 1:A:95:PRO:HB2 | 16 | 0.22 |
| (1,1054) | 1:A:49:ILE:HD11 | 1:A:50:MET:HA | 2 | 0.22 |
| (1,1054) | 1:A:49:ILE:HD12 | 1:A:50:MET:HA | 2 | 0.22 |
| (1,1054) | 1:A:49:ILE:HD13 | 1:A:50:MET:HA | 2 | 0.22 |
| (1,1054) | 1:A:49:ILE:HD11 | 1:A:50:MET:HA | 12 | 0.22 |
| (1,1054) | 1:A:49:ILE:HD12 | 1:A:50:MET:HA | 12 | 0.22 |
| (1,1054) | 1:A:49:ILE:HD13 | 1:A:50:MET:HA | 12 | 0.22 |
| (1,103) | 1:A:47:ASN:HB2 | 1:A:48:HIS:H | 13 | 0.22 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD21 | 16 | 0.22 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD22 | 16 | 0.22 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD23 | 16 | 0.22 |
| (1,1006) | 1:A:88:LEU:HD11 | 1:A:101:TRP:HH2 | 3 | 0.22 |
| (1,1006) | 1:A:88:LEU:HD12 | 1:A:101:TRP:HH2 | 3 | 0.22 |
| (1,1006) | 1:A:88:LEU:HD13 | 1:A:101:TRP:HH2 | 3 | 0.22 |
| (1,1006) | 1:A:88:LEU:HD11 | 1:A:101:TRP:HH2 | 11 | 0.22 |
| (1,1006) | 1:A:88:LEU:HD12 | 1:A:101:TRP:HH2 | 11 | 0.22 |
| (1,1006) | 1:A:88:LEU:HD13 | 1:A:101:TRP:HH2 | 11 | 0.22 |
| (3,5) | 1:A:53:CYS:SG | 1:A:68:CYS:SG | 4 | 0.21 |
| (2,19) | 1:A:86:ARG:O | 1:A:90:THR:H | 16 | 0.21 |
| (1,99) | 1:A:54:ILE:HG21 | 1:A:55:GLU:H | 13 | 0.21 |
| (1,99) | 1:A:54:ILE:HG22 | 1:A:55:GLU:H | 13 | 0.21 |
| (1,99) | 1:A:54:ILE:HG23 | 1:A:55:GLU:H | 13 | 0.21 |
| (1,99) | 1:A:54:ILE:HG21 | 1:A:55:GLU:H | 19 | 0.21 |
| (1,99) | 1:A:54:ILE:HG22 | 1:A:55:GLU:H | 19 | 0.21 |
| (1,99) | 1:A:54:ILE:HG23 | 1:A:55:GLU:H | 19 | 0.21 |
| (1,979) | 1:A:79:PHE:HB3 | 1:A:80:HIS:HB3 | 5 | 0.21 |
| (1,979) | 1:A:79:PHE:HB3 | 1:A:80:HIS:HB3 | 9 | 0.21 |
| (1,979) | 1:A:79:PHE:HB3 | 1:A:80:HIS:HB3 | 12 | 0.21 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|-----------------|-----------------|----------|---------------|
| (1,976) | 1:A:74:VAL:HB | 1:A:75:CYS:HB2 | 7 | 0.21 |
| (1,973) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HB2 | 8 | 0.21 |
| (1,927) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HB | 12 | 0.21 |
| (1,920) | 1:A:94:CYS:HB2 | 1:A:98:ASN:HB2 | 13 | 0.21 |
| (1,880) | 1:A:43:ALA:HA | 1:A:46:ARG:HD2 | 1 | 0.21 |
| (1,880) | 1:A:43:ALA:HA | 1:A:46:ARG:HD3 | 1 | 0.21 |
| (1,86) | 1:A:108:HIS:H | 1:A:108:HIS:HE1 | 10 | 0.21 |
| (1,86) | 1:A:108:HIS:H | 1:A:108:HIS:HE1 | 20 | 0.21 |
| (1,854) | 1:A:87:TRP:HA | 1:A:91:ARG:HG2 | 12 | 0.21 |
| (1,844) | 1:A:54:ILE:HA | 1:A:55:GLU:HG2 | 16 | 0.21 |
| (1,762) | 1:A:89:LYS:HA | 1:A:89:LYS:HG3 | 8 | 0.21 |
| (1,762) | 1:A:89:LYS:HA | 1:A:89:LYS:HG3 | 18 | 0.21 |
| (1,741) | 1:A:54:ILE:HG12 | 1:A:56:CYS:H | 7 | 0.21 |
| (1,741) | 1:A:54:ILE:HG12 | 1:A:56:CYS:H | 16 | 0.21 |
| (1,730) | 1:A:87:TRP:HE1 | 1:A:101:TRP:HE3 | 15 | 0.21 |
| (1,726) | 1:A:56:CYS:HA | 1:A:59:ASN:HD22 | 1 | 0.21 |
| (1,726) | 1:A:56:CYS:HA | 1:A:59:ASN:HD22 | 18 | 0.21 |
| (1,721) | 1:A:58:ALA:HB1 | 1:A:59:ASN:HD21 | 1 | 0.21 |
| (1,721) | 1:A:58:ALA:HB2 | 1:A:59:ASN:HD21 | 1 | 0.21 |
| (1,721) | 1:A:58:ALA:HB3 | 1:A:59:ASN:HD21 | 1 | 0.21 |
| (1,695) | 1:A:68:CYS:H | 1:A:80:HIS:HE1 | 14 | 0.21 |
| (1,689) | 1:A:55:GLU:HB2 | 1:A:59:ASN:H | 2 | 0.21 |
| (1,680) | 1:A:46:ARG:H | 1:A:47:ASN:HB3 | 6 | 0.21 |
| (1,679) | 1:A:44:ILE:H | 1:A:47:ASN:H | 5 | 0.21 |
| (1,679) | 1:A:44:ILE:H | 1:A:47:ASN:H | 7 | 0.21 |
| (1,630) | 1:A:43:ALA:H | 1:A:44:ILE:HG12 | 20 | 0.21 |
| (1,628) | 1:A:42:CYS:HB2 | 1:A:43:ALA:H | 7 | 0.21 |
| (1,623) | 1:A:44:ILE:H | 1:A:83:CYS:HB2 | 18 | 0.21 |
| (1,612) | 1:A:46:ARG:HG3 | 1:A:47:ASN:H | 8 | 0.21 |
| (1,611) | 1:A:46:ARG:HG2 | 1:A:47:ASN:H | 14 | 0.21 |
| (1,588) | 1:A:54:ILE:HD11 | 1:A:56:CYS:H | 8 | 0.21 |
| (1,588) | 1:A:54:ILE:HD12 | 1:A:56:CYS:H | 8 | 0.21 |
| (1,588) | 1:A:54:ILE:HD13 | 1:A:56:CYS:H | 8 | 0.21 |
| (1,581) | 1:A:52:LEU:HD21 | 1:A:58:ALA:H | 16 | 0.21 |
| (1,581) | 1:A:52:LEU:HD22 | 1:A:58:ALA:H | 16 | 0.21 |
| (1,581) | 1:A:52:LEU:HD23 | 1:A:58:ALA:H | 16 | 0.21 |
| (1,438) | 1:A:97:ASP:H | 1:A:99:ARG:HG2 | 17 | 0.21 |
| (1,438) | 1:A:97:ASP:H | 1:A:99:ARG:HG3 | 17 | 0.21 |
| (1,395) | 1:A:91:ARG:HD3 | 1:A:93:VAL:H | 9 | 0.21 |
| (1,390) | 1:A:72:TRP:HB2 | 1:A:73:GLY:H | 1 | 0.21 |
| (1,39) | 1:A:88:LEU:HD21 | 1:A:101:TRP:H | 11 | 0.21 |
| (1,39) | 1:A:88:LEU:HD22 | 1:A:101:TRP:H | 11 | 0.21 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,39) | 1:A:88:LEU:HD23 | 1:A:101:TRP:H | 11 | 0.21 |
| (1,331) | 1:A:96:LEU:H | 1:A:98:ASN:H | 19 | 0.21 |
| (1,313) | 1:A:82:HIS:HD2 | 1:A:83:CYS:H | 19 | 0.21 |
| (1,285) | 1:A:42:CYS:HB2 | 1:A:45:CYS:H | 9 | 0.21 |
| (1,267) | 1:A:57:GLN:H | 1:A:57:GLN:HG2 | 12 | 0.21 |
| (1,20) | 1:A:67:GLU:H | 1:A:68:CYS:H | 19 | 0.21 |
| (1,190) | 1:A:85:SER:HB2 | 1:A:86:ARG:H | 9 | 0.21 |
| (1,190) | 1:A:85:SER:HB2 | 1:A:86:ARG:H | 19 | 0.21 |
| (1,166) | 1:A:47:ASN:H | 1:A:47:ASN:HB3 | 20 | 0.21 |
| (1,161) | 1:A:72:TRP:H | 1:A:72:TRP:HB3 | 6 | 0.21 |
| (1,161) | 1:A:72:TRP:H | 1:A:72:TRP:HB3 | 17 | 0.21 |
| (1,161) | 1:A:72:TRP:H | 1:A:72:TRP:HB3 | 18 | 0.21 |
| (1,161) | 1:A:72:TRP:H | 1:A:72:TRP:HB3 | 19 | 0.21 |
| (1,1312) | 1:A:75:CYS:SG | 1:A:77:HIS:ND1 | 18 | 0.21 |
| (1,1310) | 1:A:56:CYS:SG | 1:A:82:HIS:ND1 | 20 | 0.21 |
| (1,1291) | 1:A:87:TRP:HZ2 | 1:A:95:PRO:HB2 | 18 | 0.21 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD11 | 1 | 0.21 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD12 | 1 | 0.21 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD13 | 1 | 0.21 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD11 | 10 | 0.21 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD12 | 10 | 0.21 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD13 | 10 | 0.21 |
| (1,1221) | 1:A:68:CYS:HB2 | 1:A:80:HIS:HE1 | 10 | 0.21 |
| (1,1221) | 1:A:68:CYS:HB3 | 1:A:80:HIS:HE1 | 10 | 0.21 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG21 | 3 | 0.21 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG22 | 3 | 0.21 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG23 | 3 | 0.21 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG21 | 16 | 0.21 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG22 | 16 | 0.21 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG23 | 16 | 0.21 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG21 | 20 | 0.21 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG22 | 20 | 0.21 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG23 | 20 | 0.21 |
| (1,1128) | 1:A:84:ILE:HG21 | 1:A:88:LEU:HB3 | 17 | 0.21 |
| (1,1128) | 1:A:84:ILE:HG22 | 1:A:88:LEU:HB3 | 17 | 0.21 |
| (1,1128) | 1:A:84:ILE:HG23 | 1:A:88:LEU:HB3 | 17 | 0.21 |
| (1,1090) | 1:A:95:PRO:HD3 | 1:A:97:ASP:H | 19 | 0.21 |
| (1,1050) | 1:A:37:ILE:HD11 | 1:A:38:VAL:HA | 5 | 0.21 |
| (1,1050) | 1:A:37:ILE:HD12 | 1:A:38:VAL:HA | 5 | 0.21 |
| (1,1050) | 1:A:37:ILE:HD13 | 1:A:38:VAL:HA | 5 | 0.21 |
| (1,1006) | 1:A:88:LEU:HD11 | 1:A:101:TRP:HH2 | 15 | 0.21 |
| (1,1006) | 1:A:88:LEU:HD12 | 1:A:101:TRP:HH2 | 15 | 0.21 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1006) | 1:A:88:LEU:HD13 | 1:A:101:TRP:HH2 | 15 | 0.21 |
| (1,1006) | 1:A:88:LEU:HD11 | 1:A:101:TRP:HH2 | 16 | 0.21 |
| (1,1006) | 1:A:88:LEU:HD12 | 1:A:101:TRP:HH2 | 16 | 0.21 |
| (1,1006) | 1:A:88:LEU:HD13 | 1:A:101:TRP:HH2 | 16 | 0.21 |
| (3,5) | 1:A:53:CYS:SG | 1:A:68:CYS:SG | 1 | 0.2 |
| (2,20) | 1:A:86:ARG:O | 1:A:90:THR:N | 10 | 0.2 |
| (2,19) | 1:A:86:ARG:O | 1:A:90:THR:H | 8 | 0.2 |
| (2,19) | 1:A:86:ARG:O | 1:A:90:THR:H | 20 | 0.2 |
| (1,979) | 1:A:79:PHE:HB3 | 1:A:80:HIS:HB3 | 7 | 0.2 |
| (1,979) | 1:A:79:PHE:HB3 | 1:A:80:HIS:HB3 | 20 | 0.2 |
| (1,880) | 1:A:43:ALA:HA | 1:A:46:ARG:HD2 | 3 | 0.2 |
| (1,880) | 1:A:43:ALA:HA | 1:A:46:ARG:HD3 | 3 | 0.2 |
| (1,86) | 1:A:108:HIS:H | 1:A:108:HIS:HE1 | 13 | 0.2 |
| (1,741) | 1:A:54:ILE:HG12 | 1:A:56:CYS:H | 9 | 0.2 |
| (1,741) | 1:A:54:ILE:HG12 | 1:A:56:CYS:H | 11 | 0.2 |
| (1,726) | 1:A:56:CYS:HA | 1:A:59:ASN:HD22 | 9 | 0.2 |
| (1,715) | 1:A:94:CYS:H | 1:A:99:ARG:HG2 | 15 | 0.2 |
| (1,715) | 1:A:94:CYS:H | 1:A:99:ARG:HG3 | 15 | 0.2 |
| (1,715) | 1:A:94:CYS:H | 1:A:99:ARG:HG2 | 18 | 0.2 |
| (1,715) | 1:A:94:CYS:H | 1:A:99:ARG:HG3 | 18 | 0.2 |
| (1,689) | 1:A:55:GLU:HB2 | 1:A:59:ASN:H | 9 | 0.2 |
| (1,681) | 1:A:47:ASN:H | 1:A:53:CYS:HA | 3 | 0.2 |
| (1,679) | 1:A:44:ILE:H | 1:A:47:ASN:H | 6 | 0.2 |
| (1,675) | 1:A:42:CYS:H | 1:A:48:HIS:HD2 | 5 | 0.2 |
| (1,648) | 1:A:42:CYS:HB2 | 1:A:47:ASN:H | 1 | 0.2 |
| (1,648) | 1:A:42:CYS:HB2 | 1:A:47:ASN:H | 3 | 0.2 |
| (1,648) | 1:A:42:CYS:HB2 | 1:A:47:ASN:H | 11 | 0.2 |
| (1,618) | 1:A:45:CYS:H | 1:A:46:ARG:HB2 | 6 | 0.2 |
| (1,588) | 1:A:54:ILE:HD11 | 1:A:56:CYS:H | 18 | 0.2 |
| (1,588) | 1:A:54:ILE:HD12 | 1:A:56:CYS:H | 18 | 0.2 |
| (1,588) | 1:A:54:ILE:HD13 | 1:A:56:CYS:H | 18 | 0.2 |
| (1,585) | 1:A:52:LEU:HA | 1:A:57:GLN:H | 6 | 0.2 |
| (1,581) | 1:A:52:LEU:HD21 | 1:A:58:ALA:H | 11 | 0.2 |
| (1,581) | 1:A:52:LEU:HD22 | 1:A:58:ALA:H | 11 | 0.2 |
| (1,581) | 1:A:52:LEU:HD23 | 1:A:58:ALA:H | 11 | 0.2 |
| (1,550) | 1:A:73:GLY:H | 1:A:76:ASN:H | 12 | 0.2 |
| (1,446) | 1:A:94:CYS:H | 1:A:101:TRP:HB3 | 2 | 0.2 |
| (1,390) | 1:A:72:TRP:HB2 | 1:A:73:GLY:H | 5 | 0.2 |
| (1,390) | 1:A:72:TRP:HB2 | 1:A:73:GLY:H | 8 | 0.2 |
| (1,39) | 1:A:88:LEU:HD21 | 1:A:101:TRP:H | 3 | 0.2 |
| (1,39) | 1:A:88:LEU:HD22 | 1:A:101:TRP:H | 3 | 0.2 |
| (1,39) | 1:A:88:LEU:HD23 | 1:A:101:TRP:H | 3 | 0.2 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,39) | 1:A:88:LEU:HD21 | 1:A:101:TRP:H | 4 | 0.2 |
| (1,39) | 1:A:88:LEU:HD22 | 1:A:101:TRP:H | 4 | 0.2 |
| (1,39) | 1:A:88:LEU:HD23 | 1:A:101:TRP:H | 4 | 0.2 |
| (1,195) | 1:A:86:ARG:H | 1:A:86:ARG:HG3 | 10 | 0.2 |
| (1,190) | 1:A:85:SER:HB2 | 1:A:86:ARG:H | 2 | 0.2 |
| (1,190) | 1:A:85:SER:HB2 | 1:A:86:ARG:H | 15 | 0.2 |
| (1,181) | 1:A:36:ASP:HB2 | 1:A:37:ILE:H | 2 | 0.2 |
| (1,181) | 1:A:36:ASP:HB3 | 1:A:37:ILE:H | 2 | 0.2 |
| (1,166) | 1:A:47:ASN:H | 1:A:47:ASN:HB3 | 9 | 0.2 |
| (1,161) | 1:A:72:TRP:H | 1:A:72:TRP:HB3 | 12 | 0.2 |
| (1,161) | 1:A:72:TRP:H | 1:A:72:TRP:HB3 | 15 | 0.2 |
| (1,161) | 1:A:72:TRP:H | 1:A:72:TRP:HB3 | 16 | 0.2 |
| (1,1310) | 1:A:56:CYS:SG | 1:A:82:HIS:ND1 | 15 | 0.2 |
| (1,1307) | 1:A:45:CYS:SG | 1:A:80:HIS:ND1 | 10 | 0.2 |
| (1,1291) | 1:A:87:TRP:HZ2 | 1:A:95:PRO:HB2 | 16 | 0.2 |
| (1,1281) | 1:A:49:ILE:HA | 1:A:80:HIS:HD2 | 2 | 0.2 |
| (1,1259) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HD1 | 3 | 0.2 |
| (1,1259) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HD1 | 12 | 0.2 |
| (1,1239) | 1:A:44:ILE:HD11 | 1:A:79:PHE:HD2 | 16 | 0.2 |
| (1,1239) | 1:A:44:ILE:HD12 | 1:A:79:PHE:HD2 | 16 | 0.2 |
| (1,1239) | 1:A:44:ILE:HD13 | 1:A:79:PHE:HD2 | 16 | 0.2 |
| (1,1222) | 1:A:77:HIS:HE1 | 1:A:97:ASP:HA | 8 | 0.2 |
| (1,1198) | 1:A:64:THR:HA | 1:A:67:GLU:HG3 | 20 | 0.2 |
| (1,1194) | 1:A:41:ASN:HB2 | 1:A:43:ALA:HB1 | 18 | 0.2 |
| (1,1194) | 1:A:41:ASN:HB2 | 1:A:43:ALA:HB2 | 18 | 0.2 |
| (1,1194) | 1:A:41:ASN:HB2 | 1:A:43:ALA:HB3 | 18 | 0.2 |
| (1,1167) | 1:A:40:ASP:HB2 | 1:A:48:HIS:HE1 | 12 | 0.2 |
| (1,1167) | 1:A:40:ASP:HB3 | 1:A:48:HIS:HE1 | 12 | 0.2 |
| (1,1098) | 1:A:79:PHE:HE2 | 1:A:95:PRO:HB2 | 17 | 0.2 |
| (1,1098) | 1:A:79:PHE:HE2 | 1:A:95:PRO:HB2 | 20 | 0.2 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD11 | 7 | 0.2 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD12 | 7 | 0.2 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD13 | 7 | 0.2 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD11 | 7 | 0.2 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD12 | 7 | 0.2 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD13 | 7 | 0.2 |
| (1,1050) | 1:A:37:ILE:HD11 | 1:A:38:VAL:HA | 1 | 0.2 |
| (1,1050) | 1:A:37:ILE:HD12 | 1:A:38:VAL:HA | 1 | 0.2 |
| (1,1050) | 1:A:37:ILE:HD13 | 1:A:38:VAL:HA | 1 | 0.2 |
| (1,1012) | 1:A:96:LEU:HD11 | 1:A:97:ASP:HB2 | 16 | 0.2 |
| (1,1012) | 1:A:96:LEU:HD12 | 1:A:97:ASP:HB2 | 16 | 0.2 |
| (1,1012) | 1:A:96:LEU:HD13 | 1:A:97:ASP:HB2 | 16 | 0.2 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1012) | 1:A:96:LEU:HD11 | 1:A:97:ASP:HB2 | 17 | 0.2 |
| (1,1012) | 1:A:96:LEU:HD12 | 1:A:97:ASP:HB2 | 17 | 0.2 |
| (1,1012) | 1:A:96:LEU:HD13 | 1:A:97:ASP:HB2 | 17 | 0.2 |
| (1,1006) | 1:A:88:LEU:HD11 | 1:A:101:TRP:HH2 | 2 | 0.2 |
| (1,1006) | 1:A:88:LEU:HD12 | 1:A:101:TRP:HH2 | 2 | 0.2 |
| (1,1006) | 1:A:88:LEU:HD13 | 1:A:101:TRP:HH2 | 2 | 0.2 |
| (1,1006) | 1:A:88:LEU:HD11 | 1:A:101:TRP:HH2 | 13 | 0.2 |
| (1,1006) | 1:A:88:LEU:HD12 | 1:A:101:TRP:HH2 | 13 | 0.2 |
| (1,1006) | 1:A:88:LEU:HD13 | 1:A:101:TRP:HH2 | 13 | 0.2 |
| (1,1006) | 1:A:88:LEU:HD11 | 1:A:101:TRP:HH2 | 20 | 0.2 |
| (1,1006) | 1:A:88:LEU:HD12 | 1:A:101:TRP:HH2 | 20 | 0.2 |
| (1,1006) | 1:A:88:LEU:HD13 | 1:A:101:TRP:HH2 | 20 | 0.2 |
| (2,19) | 1:A:86:ARG:O | 1:A:90:THR:H | 2 | 0.19 |
| (2,19) | 1:A:86:ARG:O | 1:A:90:THR:H | 15 | 0.19 |
| (1,997) | 1:A:49:ILE:HG12 | 1:A:72:TRP:HZ2 | 15 | 0.19 |
| (1,979) | 1:A:79:PHE:HB3 | 1:A:80:HIS:HB3 | 10 | 0.19 |
| (1,979) | 1:A:79:PHE:HB3 | 1:A:80:HIS:HB3 | 15 | 0.19 |
| (1,973) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HB2 | 5 | 0.19 |
| (1,973) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HB2 | 11 | 0.19 |
| (1,959) | 1:A:49:ILE:HG12 | 1:A:50:MET:HB3 | 16 | 0.19 |
| (1,800) | 1:A:74:VAL:HG11 | 1:A:104:GLN:HB3 | 3 | 0.19 |
| (1,800) | 1:A:74:VAL:HG12 | 1:A:104:GLN:HB3 | 3 | 0.19 |
| (1,800) | 1:A:74:VAL:HG13 | 1:A:104:GLN:HB3 | 3 | 0.19 |
| (1,800) | 1:A:74:VAL:HG21 | 1:A:104:GLN:HB3 | 3 | 0.19 |
| (1,800) | 1:A:74:VAL:HG22 | 1:A:104:GLN:HB3 | 3 | 0.19 |
| (1,800) | 1:A:74:VAL:HG23 | 1:A:104:GLN:HB3 | 3 | 0.19 |
| (1,794) | 1:A:52:LEU:HD21 | 1:A:68:CYS:HB3 | 18 | 0.19 |
| (1,794) | 1:A:52:LEU:HD22 | 1:A:68:CYS:HB3 | 18 | 0.19 |
| (1,794) | 1:A:52:LEU:HD23 | 1:A:68:CYS:HB3 | 18 | 0.19 |
| (1,747) | 1:A:52:LEU:HA | 1:A:65:SER:HA | 10 | 0.19 |
| (1,741) | 1:A:54:ILE:HG12 | 1:A:56:CYS:H | 12 | 0.19 |
| (1,741) | 1:A:54:ILE:HG12 | 1:A:56:CYS:H | 17 | 0.19 |
| (1,741) | 1:A:54:ILE:HG12 | 1:A:56:CYS:H | 19 | 0.19 |
| (1,726) | 1:A:56:CYS:HA | 1:A:59:ASN:HD22 | 16 | 0.19 |
| (1,721) | 1:A:58:ALA:HB1 | 1:A:59:ASN:HD21 | 5 | 0.19 |
| (1,721) | 1:A:58:ALA:HB2 | 1:A:59:ASN:HD21 | 5 | 0.19 |
| (1,721) | 1:A:58:ALA:HB3 | 1:A:59:ASN:HD21 | 5 | 0.19 |
| (1,715) | 1:A:94:CYS:H | 1:A:99:ARG:HG2 | 5 | 0.19 |
| (1,715) | 1:A:94:CYS:H | 1:A:99:ARG:HG3 | 5 | 0.19 |
| (1,708) | 1:A:73:GLY:HA3 | 1:A:79:PHE:H | 1 | 0.19 |
| (1,708) | 1:A:73:GLY:HA3 | 1:A:79:PHE:H | 13 | 0.19 |
| (1,689) | 1:A:55:GLU:HB2 | 1:A:59:ASN:H | 14 | 0.19 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,689) | 1:A:55:GLU:HB2 | 1:A:59:ASN:H | 20 | 0.19 |
| (1,679) | 1:A:44:ILE:H | 1:A:47:ASN:H | 10 | 0.19 |
| (1,648) | 1:A:42:CYS:HB2 | 1:A:47:ASN:H | 4 | 0.19 |
| (1,630) | 1:A:43:ALA:H | 1:A:44:ILE:HG12 | 3 | 0.19 |
| (1,630) | 1:A:43:ALA:H | 1:A:44:ILE:HG12 | 16 | 0.19 |
| (1,628) | 1:A:42:CYS:HB2 | 1:A:43:ALA:H | 2 | 0.19 |
| (1,600) | 1:A:41:ASN:HB3 | 1:A:49:ILE:H | 18 | 0.19 |
| (1,588) | 1:A:54:ILE:HD11 | 1:A:56:CYS:H | 5 | 0.19 |
| (1,588) | 1:A:54:ILE:HD12 | 1:A:56:CYS:H | 5 | 0.19 |
| (1,588) | 1:A:54:ILE:HD13 | 1:A:56:CYS:H | 5 | 0.19 |
| (1,588) | 1:A:54:ILE:HD11 | 1:A:56:CYS:H | 6 | 0.19 |
| (1,588) | 1:A:54:ILE:HD12 | 1:A:56:CYS:H | 6 | 0.19 |
| (1,588) | 1:A:54:ILE:HD13 | 1:A:56:CYS:H | 6 | 0.19 |
| (1,585) | 1:A:52:LEU:HA | 1:A:57:GLN:H | 14 | 0.19 |
| (1,550) | 1:A:73:GLY:H | 1:A:76:ASN:H | 6 | 0.19 |
| (1,528) | 1:A:80:HIS:H | 1:A:82:HIS:H | 2 | 0.19 |
| (1,528) | 1:A:80:HIS:H | 1:A:82:HIS:H | 4 | 0.19 |
| (1,528) | 1:A:80:HIS:H | 1:A:82:HIS:H | 9 | 0.19 |
| (1,528) | 1:A:80:HIS:H | 1:A:82:HIS:H | 18 | 0.19 |
| (1,521) | 1:A:70:VAL:HG11 | 1:A:81:PHE:H | 19 | 0.19 |
| (1,521) | 1:A:70:VAL:HG12 | 1:A:81:PHE:H | 19 | 0.19 |
| (1,521) | 1:A:70:VAL:HG13 | 1:A:81:PHE:H | 19 | 0.19 |
| (1,482) | 1:A:88:LEU:H | 1:A:90:THR:HG21 | 6 | 0.19 |
| (1,482) | 1:A:88:LEU:H | 1:A:90:THR:HG22 | 6 | 0.19 |
| (1,482) | 1:A:88:LEU:H | 1:A:90:THR:HG23 | 6 | 0.19 |
| (1,460) | 1:A:91:ARG:H | 1:A:92:GLN:HG3 | 14 | 0.19 |
| (1,385) | 1:A:64:THR:H | 1:A:64:THR:HB | 3 | 0.19 |
| (1,36) | 1:A:100:GLU:HG2 | 1:A:101:TRP:H | 2 | 0.19 |
| (1,36) | 1:A:100:GLU:HG3 | 1:A:101:TRP:H | 2 | 0.19 |
| (1,253) | 1:A:57:GLN:HB2 | 1:A:58:ALA:H | 8 | 0.19 |
| (1,21) | 1:A:65:SER:HA | 1:A:68:CYS:H | 18 | 0.19 |
| (1,190) | 1:A:85:SER:HB2 | 1:A:86:ARG:H | 14 | 0.19 |
| (1,161) | 1:A:72:TRP:H | 1:A:72:TRP:HB3 | 3 | 0.19 |
| (1,161) | 1:A:72:TRP:H | 1:A:72:TRP:HB3 | 4 | 0.19 |
| (1,161) | 1:A:72:TRP:H | 1:A:72:TRP:HB3 | 14 | 0.19 |
| (1,1312) | 1:A:75:CYS:SG | 1:A:77:HIS:ND1 | 14 | 0.19 |
| (1,1310) | 1:A:56:CYS:SG | 1:A:82:HIS:ND1 | 18 | 0.19 |
| (1,1291) | 1:A:87:TRP:HZ2 | 1:A:95:PRO:HB2 | 5 | 0.19 |
| (1,1291) | 1:A:87:TRP:HZ2 | 1:A:95:PRO:HB2 | 11 | 0.19 |
| (1,1268) | 1:A:71:ALA:HA | 1:A:72:TRP:HE3 | 20 | 0.19 |
| (1,1259) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HD1 | 5 | 0.19 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD11 | 5 | 0.19 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD12 | 5 | 0.19 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD13 | 5 | 0.19 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD11 | 13 | 0.19 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD12 | 13 | 0.19 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD13 | 13 | 0.19 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD11 | 19 | 0.19 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD12 | 19 | 0.19 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD13 | 19 | 0.19 |
| (1,1221) | 1:A:68:CYS:HB2 | 1:A:80:HIS:HE1 | 8 | 0.19 |
| (1,1221) | 1:A:68:CYS:HB3 | 1:A:80:HIS:HE1 | 8 | 0.19 |
| (1,1192) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HA | 15 | 0.19 |
| (1,1192) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HA | 15 | 0.19 |
| (1,1160) | 1:A:72:TRP:HB3 | 1:A:74:VAL:HA | 14 | 0.19 |
| (1,1045) | 1:A:54:ILE:HG21 | 1:A:55:GLU:HG2 | 12 | 0.19 |
| (1,1045) | 1:A:54:ILE:HG22 | 1:A:55:GLU:HG2 | 12 | 0.19 |
| (1,1045) | 1:A:54:ILE:HG23 | 1:A:55:GLU:HG2 | 12 | 0.19 |
| (1,1016) | 1:A:52:LEU:HD11 | 1:A:57:GLN:HG2 | 2 | 0.19 |
| (1,1016) | 1:A:52:LEU:HD12 | 1:A:57:GLN:HG2 | 2 | 0.19 |
| (1,1016) | 1:A:52:LEU:HD13 | 1:A:57:GLN:HG2 | 2 | 0.19 |
| (1,1012) | 1:A:96:LEU:HD11 | 1:A:97:ASP:HB2 | 20 | 0.19 |
| (1,1012) | 1:A:96:LEU:HD12 | 1:A:97:ASP:HB2 | 20 | 0.19 |
| (1,1012) | 1:A:96:LEU:HD13 | 1:A:97:ASP:HB2 | 20 | 0.19 |
| (2,19) | 1:A:86:ARG:O | 1:A:90:THR:H | 1 | 0.18 |
| (2,19) | 1:A:86:ARG:O | 1:A:90:THR:H | 9 | 0.18 |
| (1,997) | 1:A:49:ILE:HG12 | 1:A:72:TRP:HZ2 | 11 | 0.18 |
| (1,979) | 1:A:79:PHE:HB3 | 1:A:80:HIS:HB3 | 1 | 0.18 |
| (1,979) | 1:A:79:PHE:HB3 | 1:A:80:HIS:HB3 | 4 | 0.18 |
| (1,976) | 1:A:74:VAL:HB | 1:A:75:CYS:HB2 | 2 | 0.18 |
| (1,976) | 1:A:74:VAL:HB | 1:A:75:CYS:HB2 | 20 | 0.18 |
| (1,973) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HB2 | 13 | 0.18 |
| (1,844) | 1:A:54:ILE:HA | 1:A:55:GLU:HG2 | 5 | 0.18 |
| (1,841) | 1:A:56:CYS:HA | 1:A:61:ALA:HB1 | 9 | 0.18 |
| (1,841) | 1:A:56:CYS:HA | 1:A:61:ALA:HB2 | 9 | 0.18 |
| (1,841) | 1:A:56:CYS:HA | 1:A:61:ALA:HB3 | 9 | 0.18 |
| (1,812) | 1:A:55:GLU:HB2 | 1:A:58:ALA:HB1 | 7 | 0.18 |
| (1,812) | 1:A:55:GLU:HB2 | 1:A:58:ALA:HB2 | 7 | 0.18 |
| (1,812) | 1:A:55:GLU:HB2 | 1:A:58:ALA:HB3 | 7 | 0.18 |
| (1,812) | 1:A:55:GLU:HB3 | 1:A:58:ALA:HB1 | 7 | 0.18 |
| (1,812) | 1:A:55:GLU:HB3 | 1:A:58:ALA:HB2 | 7 | 0.18 |
| (1,812) | 1:A:55:GLU:HB3 | 1:A:58:ALA:HB3 | 7 | 0.18 |
| (1,800) | 1:A:74:VAL:HG11 | 1:A:104:GLN:HB3 | 4 | 0.18 |
| (1,800) | 1:A:74:VAL:HG12 | 1:A:104:GLN:HB3 | 4 | 0.18 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|-----------------|-----------------|----------|---------------|
| (1,800) | 1:A:74:VAL:HG13 | 1:A:104:GLN:HB3 | 4 | 0.18 |
| (1,800) | 1:A:74:VAL:HG21 | 1:A:104:GLN:HB3 | 4 | 0.18 |
| (1,800) | 1:A:74:VAL:HG22 | 1:A:104:GLN:HB3 | 4 | 0.18 |
| (1,800) | 1:A:74:VAL:HG23 | 1:A:104:GLN:HB3 | 4 | 0.18 |
| (1,800) | 1:A:74:VAL:HG11 | 1:A:104:GLN:HB3 | 7 | 0.18 |
| (1,800) | 1:A:74:VAL:HG12 | 1:A:104:GLN:HB3 | 7 | 0.18 |
| (1,800) | 1:A:74:VAL:HG13 | 1:A:104:GLN:HB3 | 7 | 0.18 |
| (1,800) | 1:A:74:VAL:HG21 | 1:A:104:GLN:HB3 | 7 | 0.18 |
| (1,800) | 1:A:74:VAL:HG22 | 1:A:104:GLN:HB3 | 7 | 0.18 |
| (1,800) | 1:A:74:VAL:HG23 | 1:A:104:GLN:HB3 | 7 | 0.18 |
| (1,800) | 1:A:74:VAL:HG11 | 1:A:104:GLN:HB3 | 11 | 0.18 |
| (1,800) | 1:A:74:VAL:HG12 | 1:A:104:GLN:HB3 | 11 | 0.18 |
| (1,800) | 1:A:74:VAL:HG13 | 1:A:104:GLN:HB3 | 11 | 0.18 |
| (1,800) | 1:A:74:VAL:HG21 | 1:A:104:GLN:HB3 | 11 | 0.18 |
| (1,800) | 1:A:74:VAL:HG22 | 1:A:104:GLN:HB3 | 11 | 0.18 |
| (1,800) | 1:A:74:VAL:HG23 | 1:A:104:GLN:HB3 | 11 | 0.18 |
| (1,800) | 1:A:74:VAL:HG11 | 1:A:104:GLN:HB3 | 19 | 0.18 |
| (1,800) | 1:A:74:VAL:HG12 | 1:A:104:GLN:HB3 | 19 | 0.18 |
| (1,800) | 1:A:74:VAL:HG13 | 1:A:104:GLN:HB3 | 19 | 0.18 |
| (1,800) | 1:A:74:VAL:HG21 | 1:A:104:GLN:HB3 | 19 | 0.18 |
| (1,800) | 1:A:74:VAL:HG22 | 1:A:104:GLN:HB3 | 19 | 0.18 |
| (1,800) | 1:A:74:VAL:HG23 | 1:A:104:GLN:HB3 | 19 | 0.18 |
| (1,762) | 1:A:89:LYS:HA | 1:A:89:LYS:HG3 | 4 | 0.18 |
| (1,747) | 1:A:52:LEU:HA | 1:A:65:SER:HA | 11 | 0.18 |
| (1,741) | 1:A:54:ILE:HG12 | 1:A:56:CYS:H | 15 | 0.18 |
| (1,730) | 1:A:87:TRP:HE1 | 1:A:101:TRP:HE3 | 5 | 0.18 |
| (1,726) | 1:A:56:CYS:HA | 1:A:59:ASN:HD22 | 6 | 0.18 |
| (1,725) | 1:A:55:GLU:HB3 | 1:A:59:ASN:HD22 | 9 | 0.18 |
| (1,708) | 1:A:73:GLY:HA3 | 1:A:79:PHE:H | 19 | 0.18 |
| (1,705) | 1:A:73:GLY:H | 1:A:104:GLN:HG2 | 17 | 0.18 |
| (1,705) | 1:A:73:GLY:H | 1:A:104:GLN:HG3 | 17 | 0.18 |
| (1,695) | 1:A:68:CYS:H | 1:A:80:HIS:HE1 | 13 | 0.18 |
| (1,689) | 1:A:55:GLU:HB2 | 1:A:59:ASN:H | 3 | 0.18 |
| (1,689) | 1:A:55:GLU:HB2 | 1:A:59:ASN:H | 19 | 0.18 |
| (1,679) | 1:A:44:ILE:H | 1:A:47:ASN:H | 1 | 0.18 |
| (1,675) | 1:A:42:CYS:H | 1:A:48:HIS:HD2 | 15 | 0.18 |
| (1,648) | 1:A:42:CYS:HB2 | 1:A:47:ASN:H | 9 | 0.18 |
| (1,630) | 1:A:43:ALA:H | 1:A:44:ILE:HG12 | 4 | 0.18 |
| (1,630) | 1:A:43:ALA:H | 1:A:44:ILE:HG12 | 9 | 0.18 |
| (1,628) | 1:A:42:CYS:HB2 | 1:A:43:ALA:H | 6 | 0.18 |
| (1,623) | 1:A:44:ILE:H | 1:A:83:CYS:HB2 | 1 | 0.18 |
| (1,597) | 1:A:51:ASP:H | 1:A:70:VAL:HG11 | 20 | 0.18 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,597) | 1:A:51:ASP:H | 1:A:70:VAL:HG12 | 20 | 0.18 |
| (1,597) | 1:A:51:ASP:H | 1:A:70:VAL:HG13 | 20 | 0.18 |
| (1,588) | 1:A:54:ILE:HD11 | 1:A:56:CYS:H | 14 | 0.18 |
| (1,588) | 1:A:54:ILE:HD12 | 1:A:56:CYS:H | 14 | 0.18 |
| (1,588) | 1:A:54:ILE:HD13 | 1:A:56:CYS:H | 14 | 0.18 |
| (1,585) | 1:A:52:LEU:HA | 1:A:57:GLN:H | 18 | 0.18 |
| (1,581) | 1:A:52:LEU:HD21 | 1:A:58:ALA:H | 8 | 0.18 |
| (1,581) | 1:A:52:LEU:HD22 | 1:A:58:ALA:H | 8 | 0.18 |
| (1,581) | 1:A:52:LEU:HD23 | 1:A:58:ALA:H | 8 | 0.18 |
| (1,564) | 1:A:71:ALA:H | 1:A:81:PHE:HB3 | 11 | 0.18 |
| (1,550) | 1:A:73:GLY:H | 1:A:76:ASN:H | 4 | 0.18 |
| (1,550) | 1:A:73:GLY:H | 1:A:76:ASN:H | 15 | 0.18 |
| (1,528) | 1:A:80:HIS:H | 1:A:82:HIS:H | 7 | 0.18 |
| (1,528) | 1:A:80:HIS:H | 1:A:82:HIS:H | 8 | 0.18 |
| (1,482) | 1:A:88:LEU:H | 1:A:90:THR:HG21 | 7 | 0.18 |
| (1,482) | 1:A:88:LEU:H | 1:A:90:THR:HG22 | 7 | 0.18 |
| (1,482) | 1:A:88:LEU:H | 1:A:90:THR:HG23 | 7 | 0.18 |
| (1,446) | 1:A:94:CYS:H | 1:A:101:TRP:HB3 | 4 | 0.18 |
| (1,446) | 1:A:94:CYS:H | 1:A:101:TRP:HB3 | 7 | 0.18 |
| (1,446) | 1:A:94:CYS:H | 1:A:101:TRP:HB3 | 19 | 0.18 |
| (1,39) | 1:A:88:LEU:HD21 | 1:A:101:TRP:H | 16 | 0.18 |
| (1,39) | 1:A:88:LEU:HD22 | 1:A:101:TRP:H | 16 | 0.18 |
| (1,39) | 1:A:88:LEU:HD23 | 1:A:101:TRP:H | 16 | 0.18 |
| (1,349) | 1:A:76:ASN:H | 1:A:76:ASN:HB3 | 20 | 0.18 |
| (1,313) | 1:A:82:HIS:HD2 | 1:A:83:CYS:H | 13 | 0.18 |
| (1,313) | 1:A:82:HIS:HD2 | 1:A:83:CYS:H | 20 | 0.18 |
| (1,250) | 1:A:55:GLU:HA | 1:A:58:ALA:H | 5 | 0.18 |
| (1,238) | 1:A:81:PHE:HA | 1:A:85:SER:H | 6 | 0.18 |
| (1,21) | 1:A:65:SER:HA | 1:A:68:CYS:H | 4 | 0.18 |
| (1,209) | 1:A:80:HIS:H | 1:A:84:ILE:H | 14 | 0.18 |
| (1,166) | 1:A:47:ASN:H | 1:A:47:ASN:HB3 | 6 | 0.18 |
| (1,161) | 1:A:72:TRP:H | 1:A:72:TRP:HB3 | 2 | 0.18 |
| (1,161) | 1:A:72:TRP:H | 1:A:72:TRP:HB3 | 5 | 0.18 |
| (1,161) | 1:A:72:TRP:H | 1:A:72:TRP:HB3 | 20 | 0.18 |
| (1,141) | 1:A:38:VAL:HB | 1:A:40:ASP:H | 18 | 0.18 |
| (1,1307) | 1:A:45:CYS:SG | 1:A:80:HIS:ND1 | 4 | 0.18 |
| (1,1281) | 1:A:49:ILE:HA | 1:A:80:HIS:HD2 | 4 | 0.18 |
| (1,1268) | 1:A:71:ALA:HA | 1:A:72:TRP:HE3 | 19 | 0.18 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD11 | 3 | 0.18 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD12 | 3 | 0.18 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD13 | 3 | 0.18 |
| (1,1239) | 1:A:44:ILE:HD11 | 1:A:79:PHE:HD2 | 4 | 0.18 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1239) | 1:A:44:ILE:HD12 | 1:A:79:PHE:HD2 | 4 | 0.18 |
| (1,1239) | 1:A:44:ILE:HD13 | 1:A:79:PHE:HD2 | 4 | 0.18 |
| (1,1226) | 1:A:77:HIS:HE1 | 1:A:96:LEU:HG | 8 | 0.18 |
| (1,1226) | 1:A:77:HIS:HE1 | 1:A:96:LEU:HG | 14 | 0.18 |
| (1,1224) | 1:A:77:HIS:HE1 | 1:A:97:ASP:HB3 | 14 | 0.18 |
| (1,1221) | 1:A:68:CYS:HB2 | 1:A:80:HIS:HE1 | 9 | 0.18 |
| (1,1221) | 1:A:68:CYS:HB3 | 1:A:80:HIS:HE1 | 9 | 0.18 |
| (1,122) | 1:A:99:ARG:HG2 | 1:A:100:GLU:H | 18 | 0.18 |
| (1,122) | 1:A:99:ARG:HG3 | 1:A:100:GLU:H | 18 | 0.18 |
| (1,1197) | 1:A:64:THR:HA | 1:A:67:GLU:HG2 | 20 | 0.18 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG21 | 1 | 0.18 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG22 | 1 | 0.18 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG23 | 1 | 0.18 |
| (1,1091) | 1:A:79:PHE:HE1 | 1:A:95:PRO:HD3 | 10 | 0.18 |
| (1,1080) | 1:A:94:CYS:HB3 | 1:A:101:TRP:HA | 12 | 0.18 |
| (1,1054) | 1:A:49:ILE:HD11 | 1:A:50:MET:HA | 13 | 0.18 |
| (1,1054) | 1:A:49:ILE:HD12 | 1:A:50:MET:HA | 13 | 0.18 |
| (1,1054) | 1:A:49:ILE:HD13 | 1:A:50:MET:HA | 13 | 0.18 |
| (1,1054) | 1:A:49:ILE:HD11 | 1:A:50:MET:HA | 18 | 0.18 |
| (1,1054) | 1:A:49:ILE:HD12 | 1:A:50:MET:HA | 18 | 0.18 |
| (1,1054) | 1:A:49:ILE:HD13 | 1:A:50:MET:HA | 18 | 0.18 |
| (1,1045) | 1:A:54:ILE:HG21 | 1:A:55:GLU:HG2 | 8 | 0.18 |
| (1,1045) | 1:A:54:ILE:HG22 | 1:A:55:GLU:HG2 | 8 | 0.18 |
| (1,1045) | 1:A:54:ILE:HG23 | 1:A:55:GLU:HG2 | 8 | 0.18 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD21 | 8 | 0.18 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD22 | 8 | 0.18 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD23 | 8 | 0.18 |
| (1,1012) | 1:A:96:LEU:HD11 | 1:A:97:ASP:HB2 | 10 | 0.18 |
| (1,1012) | 1:A:96:LEU:HD12 | 1:A:97:ASP:HB2 | 10 | 0.18 |
| (1,1012) | 1:A:96:LEU:HD13 | 1:A:97:ASP:HB2 | 10 | 0.18 |
| (1,1012) | 1:A:96:LEU:HD11 | 1:A:97:ASP:HB2 | 12 | 0.18 |
| (1,1012) | 1:A:96:LEU:HD12 | 1:A:97:ASP:HB2 | 12 | 0.18 |
| (1,1012) | 1:A:96:LEU:HD13 | 1:A:97:ASP:HB2 | 12 | 0.18 |
| (1,1005) | 1:A:77:HIS:HD2 | 1:A:96:LEU:HG | 7 | 0.18 |
| (3,5) | 1:A:53:CYS:SG | 1:A:68:CYS:SG | 2 | 0.17 |
| (3,1) | 1:A:42:CYS:SG | 1:A:45:CYS:SG | 14 | 0.17 |
| (2,19) | 1:A:86:ARG:O | 1:A:90:THR:H | 14 | 0.17 |
| (2,19) | 1:A:86:ARG:O | 1:A:90:THR:H | 17 | 0.17 |
| (1,979) | 1:A:79:PHE:HB3 | 1:A:80:HIS:HB3 | 2 | 0.17 |
| (1,976) | 1:A:74:VAL:HB | 1:A:75:CYS:HB2 | 3 | 0.17 |
| (1,976) | 1:A:74:VAL:HB | 1:A:75:CYS:HB2 | 11 | 0.17 |
| (1,973) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HB2 | 4 | 0.17 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|-----------------|-----------------|----------|---------------|
| (1,973) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HB2 | 15 | 0.17 |
| (1,927) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HB | 5 | 0.17 |
| (1,927) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HB | 17 | 0.17 |
| (1,844) | 1:A:54:ILE:HA | 1:A:55:GLU:HG2 | 1 | 0.17 |
| (1,844) | 1:A:54:ILE:HA | 1:A:55:GLU:HG2 | 4 | 0.17 |
| (1,83) | 1:A:86:ARG:HG3 | 1:A:87:TRP:H | 18 | 0.17 |
| (1,741) | 1:A:54:ILE:HG12 | 1:A:56:CYS:H | 13 | 0.17 |
| (1,734) | 1:A:105:LYS:H | 1:A:105:LYS:HB2 | 17 | 0.17 |
| (1,730) | 1:A:87:TRP:HE1 | 1:A:101:TRP:HE3 | 10 | 0.17 |
| (1,730) | 1:A:87:TRP:HE1 | 1:A:101:TRP:HE3 | 16 | 0.17 |
| (1,730) | 1:A:87:TRP:HE1 | 1:A:101:TRP:HE3 | 17 | 0.17 |
| (1,708) | 1:A:73:GLY:HA3 | 1:A:79:PHE:H | 7 | 0.17 |
| (1,708) | 1:A:73:GLY:HA3 | 1:A:79:PHE:H | 11 | 0.17 |
| (1,708) | 1:A:73:GLY:HA3 | 1:A:79:PHE:H | 18 | 0.17 |
| (1,695) | 1:A:68:CYS:H | 1:A:80:HIS:HE1 | 1 | 0.17 |
| (1,681) | 1:A:47:ASN:H | 1:A:53:CYS:HA | 12 | 0.17 |
| (1,679) | 1:A:44:ILE:H | 1:A:47:ASN:H | 17 | 0.17 |
| (1,648) | 1:A:42:CYS:HB2 | 1:A:47:ASN:H | 17 | 0.17 |
| (1,648) | 1:A:42:CYS:HB2 | 1:A:47:ASN:H | 20 | 0.17 |
| (1,630) | 1:A:43:ALA:H | 1:A:44:ILE:HG12 | 2 | 0.17 |
| (1,630) | 1:A:43:ALA:H | 1:A:44:ILE:HG12 | 8 | 0.17 |
| (1,628) | 1:A:42:CYS:HB2 | 1:A:43:ALA:H | 3 | 0.17 |
| (1,628) | 1:A:42:CYS:HB2 | 1:A:43:ALA:H | 8 | 0.17 |
| (1,628) | 1:A:42:CYS:HB2 | 1:A:43:ALA:H | 9 | 0.17 |
| (1,628) | 1:A:42:CYS:HB2 | 1:A:43:ALA:H | 10 | 0.17 |
| (1,628) | 1:A:42:CYS:HB2 | 1:A:43:ALA:H | 13 | 0.17 |
| (1,628) | 1:A:42:CYS:HB2 | 1:A:43:ALA:H | 15 | 0.17 |
| (1,628) | 1:A:42:CYS:HB2 | 1:A:43:ALA:H | 19 | 0.17 |
| (1,623) | 1:A:44:ILE:H | 1:A:83:CYS:HB2 | 20 | 0.17 |
| (1,610) | 1:A:46:ARG:HB2 | 1:A:47:ASN:H | 3 | 0.17 |
| (1,610) | 1:A:46:ARG:HB2 | 1:A:47:ASN:H | 18 | 0.17 |
| (1,595) | 1:A:52:LEU:H | 1:A:65:SER:HB3 | 1 | 0.17 |
| (1,585) | 1:A:52:LEU:HA | 1:A:57:GLN:H | 10 | 0.17 |
| (1,585) | 1:A:52:LEU:HA | 1:A:57:GLN:H | 19 | 0.17 |
| (1,531) | 1:A:39:VAL:HG11 | 1:A:79:PHE:H | 16 | 0.17 |
| (1,531) | 1:A:39:VAL:HG12 | 1:A:79:PHE:H | 16 | 0.17 |
| (1,531) | 1:A:39:VAL:HG13 | 1:A:79:PHE:H | 16 | 0.17 |
| (1,531) | 1:A:39:VAL:HG11 | 1:A:79:PHE:H | 17 | 0.17 |
| (1,531) | 1:A:39:VAL:HG12 | 1:A:79:PHE:H | 17 | 0.17 |
| (1,531) | 1:A:39:VAL:HG13 | 1:A:79:PHE:H | 17 | 0.17 |
| (1,528) | 1:A:80:HIS:H | 1:A:82:HIS:H | 5 | 0.17 |
| (1,528) | 1:A:80:HIS:H | 1:A:82:HIS:H | 11 | 0.17 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,528) | 1:A:80:HIS:H | 1:A:82:HIS:H | 12 | 0.17 |
| (1,528) | 1:A:80:HIS:H | 1:A:82:HIS:H | 15 | 0.17 |
| (1,528) | 1:A:80:HIS:H | 1:A:82:HIS:H | 16 | 0.17 |
| (1,528) | 1:A:80:HIS:H | 1:A:82:HIS:H | 17 | 0.17 |
| (1,528) | 1:A:80:HIS:H | 1:A:82:HIS:H | 20 | 0.17 |
| (1,500) | 1:A:84:ILE:HG12 | 1:A:85:SER:H | 6 | 0.17 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD11 | 7 | 0.17 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD12 | 7 | 0.17 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD13 | 7 | 0.17 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD11 | 20 | 0.17 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD12 | 20 | 0.17 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD13 | 20 | 0.17 |
| (1,446) | 1:A:94:CYS:H | 1:A:101:TRP:HB3 | 1 | 0.17 |
| (1,446) | 1:A:94:CYS:H | 1:A:101:TRP:HB3 | 16 | 0.17 |
| (1,349) | 1:A:76:ASN:H | 1:A:76:ASN:HB3 | 9 | 0.17 |
| (1,331) | 1:A:96:LEU:H | 1:A:98:ASN:H | 3 | 0.17 |
| (1,331) | 1:A:96:LEU:H | 1:A:98:ASN:H | 5 | 0.17 |
| (1,285) | 1:A:42:CYS:HB2 | 1:A:45:CYS:H | 5 | 0.17 |
| (1,285) | 1:A:42:CYS:HB2 | 1:A:45:CYS:H | 14 | 0.17 |
| (1,265) | 1:A:56:CYS:HB3 | 1:A:57:GLN:H | 15 | 0.17 |
| (1,250) | 1:A:55:GLU:HA | 1:A:58:ALA:H | 4 | 0.17 |
| (1,250) | 1:A:55:GLU:HA | 1:A:58:ALA:H | 15 | 0.17 |
| (1,209) | 1:A:80:HIS:H | 1:A:84:ILE:H | 6 | 0.17 |
| (1,209) | 1:A:80:HIS:H | 1:A:84:ILE:H | 15 | 0.17 |
| (1,186) | 1:A:37:ILE:H | 1:A:37:ILE:HG13 | 14 | 0.17 |
| (1,181) | 1:A:36:ASP:HB2 | 1:A:37:ILE:H | 16 | 0.17 |
| (1,181) | 1:A:36:ASP:HB3 | 1:A:37:ILE:H | 16 | 0.17 |
| (1,171) | 1:A:37:ILE:H | 1:A:38:VAL:H | 1 | 0.17 |
| (1,165) | 1:A:45:CYS:HB2 | 1:A:47:ASN:H | 7 | 0.17 |
| (1,161) | 1:A:72:TRP:H | 1:A:72:TRP:HB3 | 8 | 0.17 |
| (1,1310) | 1:A:56:CYS:SG | 1:A:82:HIS:ND1 | 5 | 0.17 |
| (1,1310) | 1:A:56:CYS:SG | 1:A:82:HIS:ND1 | 9 | 0.17 |
| (1,1309) | 1:A:53:CYS:SG | 1:A:82:HIS:ND1 | 1 | 0.17 |
| (1,1297) | 1:A:70:VAL:HG11 | 1:A:72:TRP:HD1 | 5 | 0.17 |
| (1,1297) | 1:A:70:VAL:HG12 | 1:A:72:TRP:HD1 | 5 | 0.17 |
| (1,1297) | 1:A:70:VAL:HG13 | 1:A:72:TRP:HD1 | 5 | 0.17 |
| (1,1291) | 1:A:87:TRP:HZ2 | 1:A:95:PRO:HB2 | 20 | 0.17 |
| (1,1288) | 1:A:82:HIS:HD2 | 1:A:86:ARG:H | 19 | 0.17 |
| (1,1281) | 1:A:49:ILE:HA | 1:A:80:HIS:HD2 | 11 | 0.17 |
| (1,1281) | 1:A:49:ILE:HA | 1:A:80:HIS:HD2 | 18 | 0.17 |
| (1,1259) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HD1 | 16 | 0.17 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD11 | 18 | 0.17 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD12 | 18 | 0.17 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD13 | 18 | 0.17 |
| (1,1245) | 1:A:79:PHE:HE1 | 1:A:95:PRO:HD2 | 12 | 0.17 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD11 | 12 | 0.17 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD12 | 12 | 0.17 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD13 | 12 | 0.17 |
| (1,1236) | 1:A:79:PHE:HB2 | 1:A:79:PHE:HD1 | 3 | 0.17 |
| (1,1236) | 1:A:79:PHE:HB2 | 1:A:79:PHE:HD1 | 5 | 0.17 |
| (1,1236) | 1:A:79:PHE:HB2 | 1:A:79:PHE:HD1 | 11 | 0.17 |
| (1,122) | 1:A:99:ARG:HG2 | 1:A:100:GLU:H | 15 | 0.17 |
| (1,122) | 1:A:99:ARG:HG3 | 1:A:100:GLU:H | 15 | 0.17 |
| (1,1200) | 1:A:64:THR:HA | 1:A:66:GLU:HB3 | 12 | 0.17 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG21 | 8 | 0.17 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG22 | 8 | 0.17 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG23 | 8 | 0.17 |
| (1,1160) | 1:A:72:TRP:HB3 | 1:A:74:VAL:HA | 20 | 0.17 |
| (1,1156) | 1:A:105:LYS:HA | 1:A:105:LYS:HE2 | 8 | 0.17 |
| (1,1156) | 1:A:105:LYS:HA | 1:A:105:LYS:HE3 | 8 | 0.17 |
| (1,1090) | 1:A:95:PRO:HD3 | 1:A:97:ASP:H | 6 | 0.17 |
| (1,1073) | 1:A:64:THR:HB | 1:A:66:GLU:HB2 | 18 | 0.17 |
| (1,1045) | 1:A:54:ILE:HG21 | 1:A:55:GLU:HG2 | 3 | 0.17 |
| (1,1045) | 1:A:54:ILE:HG22 | 1:A:55:GLU:HG2 | 3 | 0.17 |
| (1,1045) | 1:A:54:ILE:HG23 | 1:A:55:GLU:HG2 | 3 | 0.17 |
| (1,103) | 1:A:47:ASN:HB2 | 1:A:48:HIS:H | 4 | 0.17 |
| (1,1016) | 1:A:52:LEU:HD11 | 1:A:57:GLN:HG2 | 9 | 0.17 |
| (1,1016) | 1:A:52:LEU:HD12 | 1:A:57:GLN:HG2 | 9 | 0.17 |
| (1,1016) | 1:A:52:LEU:HD13 | 1:A:57:GLN:HG2 | 9 | 0.17 |
| (3,7) | 1:A:75:CYS:SG | 1:A:94:CYS:SG | 11 | 0.16 |
| (1,99) | 1:A:54:ILE:HG21 | 1:A:55:GLU:H | 3 | 0.16 |
| (1,99) | 1:A:54:ILE:HG22 | 1:A:55:GLU:H | 3 | 0.16 |
| (1,99) | 1:A:54:ILE:HG23 | 1:A:55:GLU:H | 3 | 0.16 |
| (1,979) | 1:A:79:PHE:HB3 | 1:A:80:HIS:HB3 | 8 | 0.16 |
| (1,976) | 1:A:74:VAL:HB | 1:A:75:CYS:HB2 | 5 | 0.16 |
| (1,973) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HB2 | 6 | 0.16 |
| (1,973) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HB2 | 9 | 0.16 |
| (1,973) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HB2 | 16 | 0.16 |
| (1,927) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HB | 1 | 0.16 |
| (1,920) | 1:A:94:CYS:HB2 | 1:A:98:ASN:HB2 | 19 | 0.16 |
| (1,917) | 1:A:93:VAL:HG11 | 1:A:98:ASN:HB2 | 1 | 0.16 |
| (1,917) | 1:A:93:VAL:HG12 | 1:A:98:ASN:HB2 | 1 | 0.16 |
| (1,917) | 1:A:93:VAL:HG13 | 1:A:98:ASN:HB2 | 1 | 0.16 |
| (1,904) | 1:A:86:ARG:HA | 1:A:89:LYS:HE2 | 2 | 0.16 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|-----------------|-----------------|----------|---------------|
| (1,882) | 1:A:71:ALA:HA | 1:A:106:TYR:HA | 7 | 0.16 |
| (1,880) | 1:A:43:ALA:HA | 1:A:46:ARG:HD2 | 13 | 0.16 |
| (1,880) | 1:A:43:ALA:HA | 1:A:46:ARG:HD3 | 13 | 0.16 |
| (1,86) | 1:A:108:HIS:H | 1:A:108:HIS:HE1 | 15 | 0.16 |
| (1,833) | 1:A:83:CYS:HA | 1:A:86:ARG:HG2 | 17 | 0.16 |
| (1,815) | 1:A:91:ARG:HB2 | 1:A:93:VAL:HG21 | 4 | 0.16 |
| (1,815) | 1:A:91:ARG:HB2 | 1:A:93:VAL:HG22 | 4 | 0.16 |
| (1,815) | 1:A:91:ARG:HB2 | 1:A:93:VAL:HG23 | 4 | 0.16 |
| (1,800) | 1:A:74:VAL:HG11 | 1:A:104:GLN:HB3 | 9 | 0.16 |
| (1,800) | 1:A:74:VAL:HG12 | 1:A:104:GLN:HB3 | 9 | 0.16 |
| (1,800) | 1:A:74:VAL:HG13 | 1:A:104:GLN:HB3 | 9 | 0.16 |
| (1,800) | 1:A:74:VAL:HG21 | 1:A:104:GLN:HB3 | 9 | 0.16 |
| (1,800) | 1:A:74:VAL:HG22 | 1:A:104:GLN:HB3 | 9 | 0.16 |
| (1,800) | 1:A:74:VAL:HG23 | 1:A:104:GLN:HB3 | 9 | 0.16 |
| (1,730) | 1:A:87:TRP:HE1 | 1:A:101:TRP:HE3 | 9 | 0.16 |
| (1,725) | 1:A:55:GLU:HB3 | 1:A:59:ASN:HD22 | 7 | 0.16 |
| (1,725) | 1:A:55:GLU:HB3 | 1:A:59:ASN:HD22 | 20 | 0.16 |
| (1,715) | 1:A:94:CYS:H | 1:A:99:ARG:HG2 | 8 | 0.16 |
| (1,715) | 1:A:94:CYS:H | 1:A:99:ARG:HG3 | 8 | 0.16 |
| (1,705) | 1:A:73:GLY:H | 1:A:104:GLN:HG2 | 1 | 0.16 |
| (1,705) | 1:A:73:GLY:H | 1:A:104:GLN:HG3 | 1 | 0.16 |
| (1,689) | 1:A:55:GLU:HB2 | 1:A:59:ASN:H | 12 | 0.16 |
| (1,675) | 1:A:42:CYS:H | 1:A:48:HIS:HD2 | 3 | 0.16 |
| (1,675) | 1:A:42:CYS:H | 1:A:48:HIS:HD2 | 9 | 0.16 |
| (1,675) | 1:A:42:CYS:H | 1:A:48:HIS:HD2 | 11 | 0.16 |
| (1,675) | 1:A:42:CYS:H | 1:A:48:HIS:HD2 | 16 | 0.16 |
| (1,648) | 1:A:42:CYS:HB2 | 1:A:47:ASN:H | 12 | 0.16 |
| (1,648) | 1:A:42:CYS:HB2 | 1:A:47:ASN:H | 14 | 0.16 |
| (1,643) | 1:A:37:ILE:HG12 | 1:A:38:VAL:H | 19 | 0.16 |
| (1,637) | 1:A:43:ALA:H | 1:A:96:LEU:HD21 | 7 | 0.16 |
| (1,637) | 1:A:43:ALA:H | 1:A:96:LEU:HD22 | 7 | 0.16 |
| (1,637) | 1:A:43:ALA:H | 1:A:96:LEU:HD23 | 7 | 0.16 |
| (1,630) | 1:A:43:ALA:H | 1:A:44:ILE:HG12 | 14 | 0.16 |
| (1,628) | 1:A:42:CYS:HB2 | 1:A:43:ALA:H | 1 | 0.16 |
| (1,628) | 1:A:42:CYS:HB2 | 1:A:43:ALA:H | 11 | 0.16 |
| (1,628) | 1:A:42:CYS:HB2 | 1:A:43:ALA:H | 18 | 0.16 |
| (1,628) | 1:A:42:CYS:HB2 | 1:A:43:ALA:H | 20 | 0.16 |
| (1,623) | 1:A:44:ILE:H | 1:A:83:CYS:HB2 | 2 | 0.16 |
| (1,623) | 1:A:44:ILE:H | 1:A:83:CYS:HB2 | 10 | 0.16 |
| (1,618) | 1:A:45:CYS:H | 1:A:46:ARG:HB2 | 2 | 0.16 |
| (1,615) | 1:A:42:CYS:HB2 | 1:A:46:ARG:H | 12 | 0.16 |
| (1,585) | 1:A:52:LEU:HA | 1:A:57:GLN:H | 3 | 0.16 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|-----------------|-----------------|----------|---------------|
| (1,585) | 1:A:52:LEU:HA | 1:A:57:GLN:H | 5 | 0.16 |
| (1,581) | 1:A:52:LEU:HD21 | 1:A:58:ALA:H | 2 | 0.16 |
| (1,581) | 1:A:52:LEU:HD22 | 1:A:58:ALA:H | 2 | 0.16 |
| (1,581) | 1:A:52:LEU:HD23 | 1:A:58:ALA:H | 2 | 0.16 |
| (1,581) | 1:A:52:LEU:HD21 | 1:A:58:ALA:H | 3 | 0.16 |
| (1,581) | 1:A:52:LEU:HD22 | 1:A:58:ALA:H | 3 | 0.16 |
| (1,581) | 1:A:52:LEU:HD23 | 1:A:58:ALA:H | 3 | 0.16 |
| (1,581) | 1:A:52:LEU:HD21 | 1:A:58:ALA:H | 15 | 0.16 |
| (1,581) | 1:A:52:LEU:HD22 | 1:A:58:ALA:H | 15 | 0.16 |
| (1,581) | 1:A:52:LEU:HD23 | 1:A:58:ALA:H | 15 | 0.16 |
| (1,550) | 1:A:73:GLY:H | 1:A:76:ASN:H | 8 | 0.16 |
| (1,550) | 1:A:73:GLY:H | 1:A:76:ASN:H | 9 | 0.16 |
| (1,528) | 1:A:80:HIS:H | 1:A:82:HIS:H | 10 | 0.16 |
| (1,528) | 1:A:80:HIS:H | 1:A:82:HIS:H | 13 | 0.16 |
| (1,528) | 1:A:80:HIS:H | 1:A:82:HIS:H | 14 | 0.16 |
| (1,521) | 1:A:70:VAL:HG11 | 1:A:81:PHE:H | 7 | 0.16 |
| (1,521) | 1:A:70:VAL:HG12 | 1:A:81:PHE:H | 7 | 0.16 |
| (1,521) | 1:A:70:VAL:HG13 | 1:A:81:PHE:H | 7 | 0.16 |
| (1,506) | 1:A:83:CYS:H | 1:A:86:ARG:HB2 | 8 | 0.16 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD11 | 11 | 0.16 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD12 | 11 | 0.16 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD13 | 11 | 0.16 |
| (1,482) | 1:A:88:LEU:H | 1:A:90:THR:HG21 | 17 | 0.16 |
| (1,482) | 1:A:88:LEU:H | 1:A:90:THR:HG22 | 17 | 0.16 |
| (1,482) | 1:A:88:LEU:H | 1:A:90:THR:HG23 | 17 | 0.16 |
| (1,451) | 1:A:91:ARG:HD2 | 1:A:93:VAL:H | 14 | 0.16 |
| (1,446) | 1:A:94:CYS:H | 1:A:101:TRP:HB3 | 11 | 0.16 |
| (1,446) | 1:A:94:CYS:H | 1:A:101:TRP:HB3 | 13 | 0.16 |
| (1,395) | 1:A:91:ARG:HD3 | 1:A:93:VAL:H | 7 | 0.16 |
| (1,349) | 1:A:76:ASN:H | 1:A:76:ASN:HB3 | 3 | 0.16 |
| (1,348) | 1:A:76:ASN:H | 1:A:77:HIS:HB2 | 11 | 0.16 |
| (1,348) | 1:A:76:ASN:H | 1:A:77:HIS:HB2 | 18 | 0.16 |
| (1,331) | 1:A:96:LEU:H | 1:A:98:ASN:H | 14 | 0.16 |
| (1,313) | 1:A:82:HIS:HD2 | 1:A:83:CYS:H | 3 | 0.16 |
| (1,285) | 1:A:42:CYS:HB2 | 1:A:45:CYS:H | 7 | 0.16 |
| (1,267) | 1:A:57:GLN:H | 1:A:57:GLN:HG2 | 1 | 0.16 |
| (1,267) | 1:A:57:GLN:H | 1:A:57:GLN:HG2 | 3 | 0.16 |
| (1,265) | 1:A:56:CYS:HB3 | 1:A:57:GLN:H | 13 | 0.16 |
| (1,265) | 1:A:56:CYS:HB3 | 1:A:57:GLN:H | 16 | 0.16 |
| (1,250) | 1:A:55:GLU:HA | 1:A:58:ALA:H | 7 | 0.16 |
| (1,215) | 1:A:80:HIS:HB3 | 1:A:84:ILE:H | 5 | 0.16 |
| (1,21) | 1:A:65:SER:HA | 1:A:68:CYS:H | 8 | 0.16 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|----------------|-----------------|----------|---------------|
| (1,20) | 1:A:67:GLU:H | 1:A:68:CYS:H | 3 | 0.16 |
| (1,199) | 1:A:94:CYS:HB3 | 1:A:99:ARG:H | 5 | 0.16 |
| (1,166) | 1:A:47:ASN:H | 1:A:47:ASN:HB3 | 5 | 0.16 |
| (1,144) | 1:A:89:LYS:H | 1:A:91:ARG:H | 12 | 0.16 |
| (1,1310) | 1:A:56:CYS:SG | 1:A:82:HIS:ND1 | 8 | 0.16 |
| (1,1310) | 1:A:56:CYS:SG | 1:A:82:HIS:ND1 | 16 | 0.16 |
| (1,1291) | 1:A:87:TRP:HZ2 | 1:A:95:PRO:HB2 | 17 | 0.16 |
| (1,1266) | 1:A:35:TRP:HA | 1:A:35:TRP:HE3 | 3 | 0.16 |
| (1,1259) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HD1 | 1 | 0.16 |
| (1,1245) | 1:A:79:PHE:HE1 | 1:A:95:PRO:HD2 | 1 | 0.16 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD11 | 1 | 0.16 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD12 | 1 | 0.16 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD13 | 1 | 0.16 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD11 | 18 | 0.16 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD12 | 18 | 0.16 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD13 | 18 | 0.16 |
| (1,1236) | 1:A:79:PHE:HB2 | 1:A:79:PHE:HD1 | 7 | 0.16 |
| (1,1236) | 1:A:79:PHE:HB2 | 1:A:79:PHE:HD1 | 10 | 0.16 |
| (1,1236) | 1:A:79:PHE:HB2 | 1:A:79:PHE:HD1 | 20 | 0.16 |
| (1,1221) | 1:A:68:CYS:HB2 | 1:A:80:HIS:HE1 | 12 | 0.16 |
| (1,1221) | 1:A:68:CYS:HB3 | 1:A:80:HIS:HE1 | 12 | 0.16 |
| (1,1221) | 1:A:68:CYS:HB2 | 1:A:80:HIS:HE1 | 16 | 0.16 |
| (1,1221) | 1:A:68:CYS:HB3 | 1:A:80:HIS:HE1 | 16 | 0.16 |
| (1,122) | 1:A:99:ARG:HG2 | 1:A:100:GLU:H | 1 | 0.16 |
| (1,122) | 1:A:99:ARG:HG3 | 1:A:100:GLU:H | 1 | 0.16 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG21 | 4 | 0.16 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG22 | 4 | 0.16 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG23 | 4 | 0.16 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG21 | 14 | 0.16 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG22 | 14 | 0.16 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG23 | 14 | 0.16 |
| (1,1160) | 1:A:72:TRP:HB3 | 1:A:74:VAL:HA | 2 | 0.16 |
| (1,1160) | 1:A:72:TRP:HB3 | 1:A:74:VAL:HA | 4 | 0.16 |
| (1,1090) | 1:A:95:PRO:HD3 | 1:A:97:ASP:H | 5 | 0.16 |
| (1,1073) | 1:A:64:THR:HB | 1:A:66:GLU:HB2 | 5 | 0.16 |
| (1,1073) | 1:A:64:THR:HB | 1:A:66:GLU:HB2 | 16 | 0.16 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD11 | 18 | 0.16 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD12 | 18 | 0.16 |
| (1,1055) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HD13 | 18 | 0.16 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD11 | 18 | 0.16 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD12 | 18 | 0.16 |
| (1,1055) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HD13 | 18 | 0.16 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1044) | 1:A:41:ASN:H | 1:A:43:ALA:HB1 | 5 | 0.16 |
| (1,1044) | 1:A:41:ASN:H | 1:A:43:ALA:HB2 | 5 | 0.16 |
| (1,1044) | 1:A:41:ASN:H | 1:A:43:ALA:HB3 | 5 | 0.16 |
| (1,103) | 1:A:47:ASN:HB2 | 1:A:48:HIS:H | 7 | 0.16 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD21 | 20 | 0.16 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD22 | 20 | 0.16 |
| (1,1025) | 1:A:79:PHE:HE2 | 1:A:96:LEU:HD23 | 20 | 0.16 |
| (1,1006) | 1:A:88:LEU:HD11 | 1:A:101:TRP:HH2 | 5 | 0.16 |
| (1,1006) | 1:A:88:LEU:HD12 | 1:A:101:TRP:HH2 | 5 | 0.16 |
| (1,1006) | 1:A:88:LEU:HD13 | 1:A:101:TRP:HH2 | 5 | 0.16 |
| (1,1006) | 1:A:88:LEU:HD11 | 1:A:101:TRP:HH2 | 6 | 0.16 |
| (1,1006) | 1:A:88:LEU:HD12 | 1:A:101:TRP:HH2 | 6 | 0.16 |
| (1,1006) | 1:A:88:LEU:HD13 | 1:A:101:TRP:HH2 | 6 | 0.16 |
| (1,1006) | 1:A:88:LEU:HD11 | 1:A:101:TRP:HH2 | 10 | 0.16 |
| (1,1006) | 1:A:88:LEU:HD12 | 1:A:101:TRP:HH2 | 10 | 0.16 |
| (1,1006) | 1:A:88:LEU:HD13 | 1:A:101:TRP:HH2 | 10 | 0.16 |
| (3,5) | 1:A:53:CYS:SG | 1:A:68:CYS:SG | 6 | 0.15 |
| (3,5) | 1:A:53:CYS:SG | 1:A:68:CYS:SG | 15 | 0.15 |
| (3,5) | 1:A:53:CYS:SG | 1:A:68:CYS:SG | 19 | 0.15 |
| (2,20) | 1:A:86:ARG:O | 1:A:90:THR:N | 5 | 0.15 |
| (2,20) | 1:A:86:ARG:O | 1:A:90:THR:N | 12 | 0.15 |
| (2,20) | 1:A:86:ARG:O | 1:A:90:THR:N | 13 | 0.15 |
| (1,979) | 1:A:79:PHE:HB3 | 1:A:80:HIS:HB3 | 13 | 0.15 |
| (1,976) | 1:A:74:VAL:HB | 1:A:75:CYS:HB2 | 1 | 0.15 |
| (1,973) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HB2 | 19 | 0.15 |
| (1,951) | 1:A:77:HIS:HB2 | 1:A:96:LEU:HD11 | 18 | 0.15 |
| (1,951) | 1:A:77:HIS:HB2 | 1:A:96:LEU:HD12 | 18 | 0.15 |
| (1,951) | 1:A:77:HIS:HB2 | 1:A:96:LEU:HD13 | 18 | 0.15 |
| (1,927) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HB | 7 | 0.15 |
| (1,926) | 1:A:79:PHE:H | 1:A:84:ILE:HB | 7 | 0.15 |
| (1,926) | 1:A:79:PHE:H | 1:A:84:ILE:HB | 17 | 0.15 |
| (1,880) | 1:A:43:ALA:HA | 1:A:46:ARG:HD2 | 8 | 0.15 |
| (1,880) | 1:A:43:ALA:HA | 1:A:46:ARG:HD3 | 8 | 0.15 |
| (1,86) | 1:A:108:HIS:H | 1:A:108:HIS:HE1 | 2 | 0.15 |
| (1,854) | 1:A:87:TRP:HA | 1:A:91:ARG:HG2 | 2 | 0.15 |
| (1,854) | 1:A:87:TRP:HA | 1:A:91:ARG:HG2 | 8 | 0.15 |
| (1,844) | 1:A:54:ILE:HA | 1:A:55:GLU:HG2 | 8 | 0.15 |
| (1,747) | 1:A:52:LEU:HA | 1:A:65:SER:HA | 15 | 0.15 |
| (1,747) | 1:A:52:LEU:HA | 1:A:65:SER:HA | 16 | 0.15 |
| (1,743) | 1:A:65:SER:HB2 | 1:A:66:GLU:HB2 | 8 | 0.15 |
| (1,743) | 1:A:65:SER:HB2 | 1:A:66:GLU:HB3 | 8 | 0.15 |
| (1,730) | 1:A:87:TRP:HE1 | 1:A:101:TRP:HE3 | 8 | 0.15 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|-----------------|-----------------|----------|---------------|
| (1,730) | 1:A:87:TRP:HE1 | 1:A:101:TRP:HE3 | 20 | 0.15 |
| (1,726) | 1:A:56:CYS:HA | 1:A:59:ASN:HD22 | 11 | 0.15 |
| (1,725) | 1:A:55:GLU:HB3 | 1:A:59:ASN:HD22 | 16 | 0.15 |
| (1,725) | 1:A:55:GLU:HB3 | 1:A:59:ASN:HD22 | 17 | 0.15 |
| (1,708) | 1:A:73:GLY:HA3 | 1:A:79:PHE:H | 10 | 0.15 |
| (1,708) | 1:A:73:GLY:HA3 | 1:A:79:PHE:H | 20 | 0.15 |
| (1,689) | 1:A:55:GLU:HB2 | 1:A:59:ASN:H | 11 | 0.15 |
| (1,679) | 1:A:44:ILE:H | 1:A:47:ASN:H | 9 | 0.15 |
| (1,679) | 1:A:44:ILE:H | 1:A:47:ASN:H | 13 | 0.15 |
| (1,679) | 1:A:44:ILE:H | 1:A:47:ASN:H | 15 | 0.15 |
| (1,648) | 1:A:42:CYS:HB2 | 1:A:47:ASN:H | 7 | 0.15 |
| (1,648) | 1:A:42:CYS:HB2 | 1:A:47:ASN:H | 8 | 0.15 |
| (1,628) | 1:A:42:CYS:HB2 | 1:A:43:ALA:H | 12 | 0.15 |
| (1,623) | 1:A:44:ILE:H | 1:A:83:CYS:HB2 | 6 | 0.15 |
| (1,623) | 1:A:44:ILE:H | 1:A:83:CYS:HB2 | 9 | 0.15 |
| (1,623) | 1:A:44:ILE:H | 1:A:83:CYS:HB2 | 13 | 0.15 |
| (1,623) | 1:A:44:ILE:H | 1:A:83:CYS:HB2 | 19 | 0.15 |
| (1,610) | 1:A:46:ARG:HB2 | 1:A:47:ASN:H | 7 | 0.15 |
| (1,610) | 1:A:46:ARG:HB2 | 1:A:47:ASN:H | 15 | 0.15 |
| (1,595) | 1:A:52:LEU:H | 1:A:65:SER:HB3 | 11 | 0.15 |
| (1,595) | 1:A:52:LEU:H | 1:A:65:SER:HB3 | 13 | 0.15 |
| (1,588) | 1:A:54:ILE:HD11 | 1:A:56:CYS:H | 1 | 0.15 |
| (1,588) | 1:A:54:ILE:HD12 | 1:A:56:CYS:H | 1 | 0.15 |
| (1,588) | 1:A:54:ILE:HD13 | 1:A:56:CYS:H | 1 | 0.15 |
| (1,587) | 1:A:56:CYS:H | 1:A:57:GLN:HG3 | 14 | 0.15 |
| (1,585) | 1:A:52:LEU:HA | 1:A:57:GLN:H | 1 | 0.15 |
| (1,581) | 1:A:52:LEU:HD21 | 1:A:58:ALA:H | 17 | 0.15 |
| (1,581) | 1:A:52:LEU:HD22 | 1:A:58:ALA:H | 17 | 0.15 |
| (1,581) | 1:A:52:LEU:HD23 | 1:A:58:ALA:H | 17 | 0.15 |
| (1,564) | 1:A:71:ALA:H | 1:A:81:PHE:HB3 | 3 | 0.15 |
| (1,564) | 1:A:71:ALA:H | 1:A:81:PHE:HB3 | 4 | 0.15 |
| (1,564) | 1:A:71:ALA:H | 1:A:81:PHE:HB3 | 5 | 0.15 |
| (1,556) | 1:A:72:TRP:H | 1:A:72:TRP:HE3 | 8 | 0.15 |
| (1,553) | 1:A:73:GLY:H | 1:A:104:GLN:HB2 | 8 | 0.15 |
| (1,531) | 1:A:39:VAL:HG11 | 1:A:79:PHE:H | 10 | 0.15 |
| (1,531) | 1:A:39:VAL:HG12 | 1:A:79:PHE:H | 10 | 0.15 |
| (1,531) | 1:A:39:VAL:HG13 | 1:A:79:PHE:H | 10 | 0.15 |
| (1,528) | 1:A:80:HIS:H | 1:A:82:HIS:H | 1 | 0.15 |
| (1,528) | 1:A:80:HIS:H | 1:A:82:HIS:H | 3 | 0.15 |
| (1,528) | 1:A:80:HIS:H | 1:A:82:HIS:H | 19 | 0.15 |
| (1,507) | 1:A:44:ILE:HB | 1:A:83:CYS:H | 13 | 0.15 |
| (1,500) | 1:A:84:ILE:HG12 | 1:A:85:SER:H | 7 | 0.15 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,500) | 1:A:84:ILE:HG12 | 1:A:85:SER:H | 10 | 0.15 |
| (1,500) | 1:A:84:ILE:HG12 | 1:A:85:SER:H | 12 | 0.15 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD11 | 18 | 0.15 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD12 | 18 | 0.15 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD13 | 18 | 0.15 |
| (1,482) | 1:A:88:LEU:H | 1:A:90:THR:HG21 | 20 | 0.15 |
| (1,482) | 1:A:88:LEU:H | 1:A:90:THR:HG22 | 20 | 0.15 |
| (1,482) | 1:A:88:LEU:H | 1:A:90:THR:HG23 | 20 | 0.15 |
| (1,446) | 1:A:94:CYS:H | 1:A:101:TRP:HB3 | 8 | 0.15 |
| (1,446) | 1:A:94:CYS:H | 1:A:101:TRP:HB3 | 9 | 0.15 |
| (1,395) | 1:A:91:ARG:HD3 | 1:A:93:VAL:H | 12 | 0.15 |
| (1,395) | 1:A:91:ARG:HD3 | 1:A:93:VAL:H | 16 | 0.15 |
| (1,39) | 1:A:88:LEU:HD21 | 1:A:101:TRP:H | 7 | 0.15 |
| (1,39) | 1:A:88:LEU:HD22 | 1:A:101:TRP:H | 7 | 0.15 |
| (1,39) | 1:A:88:LEU:HD23 | 1:A:101:TRP:H | 7 | 0.15 |
| (1,348) | 1:A:76:ASN:H | 1:A:77:HIS:HB2 | 6 | 0.15 |
| (1,348) | 1:A:76:ASN:H | 1:A:77:HIS:HB2 | 19 | 0.15 |
| (1,34) | 1:A:37:ILE:HA | 1:A:38:VAL:H | 15 | 0.15 |
| (1,331) | 1:A:96:LEU:H | 1:A:98:ASN:H | 9 | 0.15 |
| (1,313) | 1:A:82:HIS:HD2 | 1:A:83:CYS:H | 9 | 0.15 |
| (1,313) | 1:A:82:HIS:HD2 | 1:A:83:CYS:H | 11 | 0.15 |
| (1,310) | 1:A:80:HIS:H | 1:A:83:CYS:H | 16 | 0.15 |
| (1,29) | 1:A:75:CYS:HB3 | 1:A:102:GLU:H | 16 | 0.15 |
| (1,285) | 1:A:42:CYS:HB2 | 1:A:45:CYS:H | 4 | 0.15 |
| (1,285) | 1:A:42:CYS:HB2 | 1:A:45:CYS:H | 8 | 0.15 |
| (1,285) | 1:A:42:CYS:HB2 | 1:A:45:CYS:H | 13 | 0.15 |
| (1,285) | 1:A:42:CYS:HB2 | 1:A:45:CYS:H | 18 | 0.15 |
| (1,267) | 1:A:57:GLN:H | 1:A:57:GLN:HG2 | 16 | 0.15 |
| (1,265) | 1:A:56:CYS:HB3 | 1:A:57:GLN:H | 9 | 0.15 |
| (1,253) | 1:A:57:GLN:HB2 | 1:A:58:ALA:H | 2 | 0.15 |
| (1,250) | 1:A:55:GLU:HA | 1:A:58:ALA:H | 14 | 0.15 |
| (1,215) | 1:A:80:HIS:HB3 | 1:A:84:ILE:H | 12 | 0.15 |
| (1,174) | 1:A:49:ILE:HA | 1:A:51:ASP:H | 12 | 0.15 |
| (1,171) | 1:A:37:ILE:H | 1:A:38:VAL:H | 4 | 0.15 |
| (1,1310) | 1:A:56:CYS:SG | 1:A:82:HIS:ND1 | 10 | 0.15 |
| (1,1307) | 1:A:45:CYS:SG | 1:A:80:HIS:ND1 | 1 | 0.15 |
| (1,1288) | 1:A:82:HIS:HD2 | 1:A:86:ARG:H | 17 | 0.15 |
| (1,1259) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HD1 | 15 | 0.15 |
| (1,1259) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HD1 | 20 | 0.15 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD11 | 7 | 0.15 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD12 | 7 | 0.15 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD13 | 7 | 0.15 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1239) | 1:A:44:ILE:HD11 | 1:A:79:PHE:HD2 | 8 | 0.15 |
| (1,1239) | 1:A:44:ILE:HD12 | 1:A:79:PHE:HD2 | 8 | 0.15 |
| (1,1239) | 1:A:44:ILE:HD13 | 1:A:79:PHE:HD2 | 8 | 0.15 |
| (1,1236) | 1:A:79:PHE:HB2 | 1:A:79:PHE:HD1 | 1 | 0.15 |
| (1,1236) | 1:A:79:PHE:HB2 | 1:A:79:PHE:HD1 | 2 | 0.15 |
| (1,1236) | 1:A:79:PHE:HB2 | 1:A:79:PHE:HD1 | 6 | 0.15 |
| (1,1236) | 1:A:79:PHE:HB2 | 1:A:79:PHE:HD1 | 12 | 0.15 |
| (1,1236) | 1:A:79:PHE:HB2 | 1:A:79:PHE:HD1 | 14 | 0.15 |
| (1,1236) | 1:A:79:PHE:HB2 | 1:A:79:PHE:HD1 | 17 | 0.15 |
| (1,1236) | 1:A:79:PHE:HB2 | 1:A:79:PHE:HD1 | 18 | 0.15 |
| (1,1226) | 1:A:77:HIS:HE1 | 1:A:96:LEU:HG | 18 | 0.15 |
| (1,1224) | 1:A:77:HIS:HE1 | 1:A:97:ASP:HB3 | 2 | 0.15 |
| (1,1221) | 1:A:68:CYS:HB2 | 1:A:80:HIS:HE1 | 15 | 0.15 |
| (1,1221) | 1:A:68:CYS:HB3 | 1:A:80:HIS:HE1 | 15 | 0.15 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG21 | 7 | 0.15 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG22 | 7 | 0.15 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG23 | 7 | 0.15 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG21 | 15 | 0.15 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG22 | 15 | 0.15 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG23 | 15 | 0.15 |
| (1,1167) | 1:A:40:ASP:HB2 | 1:A:48:HIS:HE1 | 5 | 0.15 |
| (1,1167) | 1:A:40:ASP:HB3 | 1:A:48:HIS:HE1 | 5 | 0.15 |
| (1,1164) | 1:A:52:LEU:HD21 | 1:A:65:SER:HB2 | 8 | 0.15 |
| (1,1164) | 1:A:52:LEU:HD22 | 1:A:65:SER:HB2 | 8 | 0.15 |
| (1,1164) | 1:A:52:LEU:HD23 | 1:A:65:SER:HB2 | 8 | 0.15 |
| (1,1128) | 1:A:84:ILE:HG21 | 1:A:88:LEU:HB3 | 5 | 0.15 |
| (1,1128) | 1:A:84:ILE:HG22 | 1:A:88:LEU:HB3 | 5 | 0.15 |
| (1,1128) | 1:A:84:ILE:HG23 | 1:A:88:LEU:HB3 | 5 | 0.15 |
| (1,1098) | 1:A:79:PHE:HE2 | 1:A:95:PRO:HB2 | 11 | 0.15 |
| (1,1090) | 1:A:95:PRO:HD3 | 1:A:97:ASP:H | 3 | 0.15 |
| (1,1080) | 1:A:94:CYS:HB3 | 1:A:101:TRP:HA | 14 | 0.15 |
| (1,1054) | 1:A:49:ILE:HD11 | 1:A:50:MET:HA | 4 | 0.15 |
| (1,1054) | 1:A:49:ILE:HD12 | 1:A:50:MET:HA | 4 | 0.15 |
| (1,1054) | 1:A:49:ILE:HD13 | 1:A:50:MET:HA | 4 | 0.15 |
| (1,1044) | 1:A:41:ASN:H | 1:A:43:ALA:HB1 | 14 | 0.15 |
| (1,1044) | 1:A:41:ASN:H | 1:A:43:ALA:HB2 | 14 | 0.15 |
| (1,1044) | 1:A:41:ASN:H | 1:A:43:ALA:HB3 | 14 | 0.15 |
| (1,103) | 1:A:47:ASN:HB2 | 1:A:48:HIS:H | 11 | 0.15 |
| (1,103) | 1:A:47:ASN:HB2 | 1:A:48:HIS:H | 15 | 0.15 |
| (1,103) | 1:A:47:ASN:HB2 | 1:A:48:HIS:H | 17 | 0.15 |
| (1,103) | 1:A:47:ASN:HB2 | 1:A:48:HIS:H | 18 | 0.15 |
| (1,1012) | 1:A:96:LEU:HD11 | 1:A:97:ASP:HB2 | 2 | 0.15 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1012) | 1:A:96:LEU:HD12 | 1:A:97:ASP:HB2 | 2 | 0.15 |
| (1,1012) | 1:A:96:LEU:HD13 | 1:A:97:ASP:HB2 | 2 | 0.15 |
| (3,5) | 1:A:53:CYS:SG | 1:A:68:CYS:SG | 14 | 0.14 |
| (2,20) | 1:A:86:ARG:O | 1:A:90:THR:N | 4 | 0.14 |
| (2,19) | 1:A:86:ARG:O | 1:A:90:THR:H | 6 | 0.14 |
| (2,19) | 1:A:86:ARG:O | 1:A:90:THR:H | 7 | 0.14 |
| (1,99) | 1:A:54:ILE:HG21 | 1:A:55:GLU:H | 17 | 0.14 |
| (1,99) | 1:A:54:ILE:HG22 | 1:A:55:GLU:H | 17 | 0.14 |
| (1,99) | 1:A:54:ILE:HG23 | 1:A:55:GLU:H | 17 | 0.14 |
| (1,979) | 1:A:79:PHE:HB3 | 1:A:80:HIS:HB3 | 19 | 0.14 |
| (1,976) | 1:A:74:VAL:HB | 1:A:75:CYS:HB2 | 19 | 0.14 |
| (1,951) | 1:A:77:HIS:HB2 | 1:A:96:LEU:HD11 | 6 | 0.14 |
| (1,951) | 1:A:77:HIS:HB2 | 1:A:96:LEU:HD12 | 6 | 0.14 |
| (1,951) | 1:A:77:HIS:HB2 | 1:A:96:LEU:HD13 | 6 | 0.14 |
| (1,926) | 1:A:79:PHE:H | 1:A:84:ILE:HB | 8 | 0.14 |
| (1,920) | 1:A:94:CYS:HB2 | 1:A:98:ASN:HB2 | 10 | 0.14 |
| (1,920) | 1:A:94:CYS:HB2 | 1:A:98:ASN:HB2 | 20 | 0.14 |
| (1,86) | 1:A:108:HIS:H | 1:A:108:HIS:HE1 | 4 | 0.14 |
| (1,86) | 1:A:108:HIS:H | 1:A:108:HIS:HE1 | 14 | 0.14 |
| (1,854) | 1:A:87:TRP:HA | 1:A:91:ARG:HG2 | 1 | 0.14 |
| (1,854) | 1:A:87:TRP:HA | 1:A:91:ARG:HG2 | 11 | 0.14 |
| (1,854) | 1:A:87:TRP:HA | 1:A:91:ARG:HG2 | 13 | 0.14 |
| (1,847) | 1:A:45:CYS:HB2 | 1:A:54:ILE:HA | 11 | 0.14 |
| (1,844) | 1:A:54:ILE:HA | 1:A:55:GLU:HG2 | 7 | 0.14 |
| (1,730) | 1:A:87:TRP:HE1 | 1:A:101:TRP:HE3 | 3 | 0.14 |
| (1,730) | 1:A:87:TRP:HE1 | 1:A:101:TRP:HE3 | 18 | 0.14 |
| (1,726) | 1:A:56:CYS:HA | 1:A:59:ASN:HD22 | 8 | 0.14 |
| (1,726) | 1:A:56:CYS:HA | 1:A:59:ASN:HD22 | 10 | 0.14 |
| (1,708) | 1:A:73:GLY:HA3 | 1:A:79:PHE:H | 6 | 0.14 |
| (1,708) | 1:A:73:GLY:HA3 | 1:A:79:PHE:H | 17 | 0.14 |
| (1,689) | 1:A:55:GLU:HB2 | 1:A:59:ASN:H | 1 | 0.14 |
| (1,689) | 1:A:55:GLU:HB2 | 1:A:59:ASN:H | 15 | 0.14 |
| (1,683) | 1:A:51:ASP:H | 1:A:52:LEU:H | 20 | 0.14 |
| (1,681) | 1:A:47:ASN:H | 1:A:53:CYS:HA | 19 | 0.14 |
| (1,679) | 1:A:44:ILE:H | 1:A:47:ASN:H | 3 | 0.14 |
| (1,679) | 1:A:44:ILE:H | 1:A:47:ASN:H | 18 | 0.14 |
| (1,628) | 1:A:42:CYS:HB2 | 1:A:43:ALA:H | 5 | 0.14 |
| (1,623) | 1:A:44:ILE:H | 1:A:83:CYS:HB2 | 4 | 0.14 |
| (1,623) | 1:A:44:ILE:H | 1:A:83:CYS:HB2 | 8 | 0.14 |
| (1,623) | 1:A:44:ILE:H | 1:A:83:CYS:HB2 | 11 | 0.14 |
| (1,623) | 1:A:44:ILE:H | 1:A:83:CYS:HB2 | 14 | 0.14 |
| (1,623) | 1:A:44:ILE:H | 1:A:83:CYS:HB2 | 16 | 0.14 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|-----------------|-----------------|----------|---------------|
| (1,618) | 1:A:45:CYS:H | 1:A:46:ARG:HB2 | 9 | 0.14 |
| (1,615) | 1:A:42:CYS:HB2 | 1:A:46:ARG:H | 3 | 0.14 |
| (1,615) | 1:A:42:CYS:HB2 | 1:A:46:ARG:H | 13 | 0.14 |
| (1,615) | 1:A:42:CYS:HB2 | 1:A:46:ARG:H | 16 | 0.14 |
| (1,610) | 1:A:46:ARG:HB2 | 1:A:47:ASN:H | 4 | 0.14 |
| (1,610) | 1:A:46:ARG:HB2 | 1:A:47:ASN:H | 5 | 0.14 |
| (1,588) | 1:A:54:ILE:HD11 | 1:A:56:CYS:H | 2 | 0.14 |
| (1,588) | 1:A:54:ILE:HD12 | 1:A:56:CYS:H | 2 | 0.14 |
| (1,588) | 1:A:54:ILE:HD13 | 1:A:56:CYS:H | 2 | 0.14 |
| (1,587) | 1:A:56:CYS:H | 1:A:57:GLN:HG3 | 17 | 0.14 |
| (1,585) | 1:A:52:LEU:HA | 1:A:57:GLN:H | 7 | 0.14 |
| (1,585) | 1:A:52:LEU:HA | 1:A:57:GLN:H | 11 | 0.14 |
| (1,550) | 1:A:73:GLY:H | 1:A:76:ASN:H | 5 | 0.14 |
| (1,532) | 1:A:78:ALA:H | 1:A:96:LEU:HD11 | 18 | 0.14 |
| (1,532) | 1:A:78:ALA:H | 1:A:96:LEU:HD12 | 18 | 0.14 |
| (1,532) | 1:A:78:ALA:H | 1:A:96:LEU:HD13 | 18 | 0.14 |
| (1,530) | 1:A:70:VAL:HA | 1:A:79:PHE:H | 7 | 0.14 |
| (1,530) | 1:A:70:VAL:HA | 1:A:79:PHE:H | 17 | 0.14 |
| (1,528) | 1:A:80:HIS:H | 1:A:82:HIS:H | 6 | 0.14 |
| (1,521) | 1:A:70:VAL:HG11 | 1:A:81:PHE:H | 2 | 0.14 |
| (1,521) | 1:A:70:VAL:HG12 | 1:A:81:PHE:H | 2 | 0.14 |
| (1,521) | 1:A:70:VAL:HG13 | 1:A:81:PHE:H | 2 | 0.14 |
| (1,521) | 1:A:70:VAL:HG11 | 1:A:81:PHE:H | 11 | 0.14 |
| (1,521) | 1:A:70:VAL:HG12 | 1:A:81:PHE:H | 11 | 0.14 |
| (1,521) | 1:A:70:VAL:HG13 | 1:A:81:PHE:H | 11 | 0.14 |
| (1,521) | 1:A:70:VAL:HG11 | 1:A:81:PHE:H | 16 | 0.14 |
| (1,521) | 1:A:70:VAL:HG12 | 1:A:81:PHE:H | 16 | 0.14 |
| (1,521) | 1:A:70:VAL:HG13 | 1:A:81:PHE:H | 16 | 0.14 |
| (1,521) | 1:A:70:VAL:HG11 | 1:A:81:PHE:H | 17 | 0.14 |
| (1,521) | 1:A:70:VAL:HG12 | 1:A:81:PHE:H | 17 | 0.14 |
| (1,521) | 1:A:70:VAL:HG13 | 1:A:81:PHE:H | 17 | 0.14 |
| (1,513) | 1:A:71:ALA:HB1 | 1:A:82:HIS:H | 5 | 0.14 |
| (1,513) | 1:A:71:ALA:HB2 | 1:A:82:HIS:H | 5 | 0.14 |
| (1,513) | 1:A:71:ALA:HB3 | 1:A:82:HIS:H | 5 | 0.14 |
| (1,506) | 1:A:83:CYS:H | 1:A:86:ARG:HB2 | 10 | 0.14 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD11 | 10 | 0.14 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD12 | 10 | 0.14 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD13 | 10 | 0.14 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD11 | 12 | 0.14 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD12 | 12 | 0.14 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD13 | 12 | 0.14 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD11 | 17 | 0.14 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD12 | 17 | 0.14 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD13 | 17 | 0.14 |
| (1,482) | 1:A:88:LEU:H | 1:A:90:THR:HG21 | 15 | 0.14 |
| (1,482) | 1:A:88:LEU:H | 1:A:90:THR:HG22 | 15 | 0.14 |
| (1,482) | 1:A:88:LEU:H | 1:A:90:THR:HG23 | 15 | 0.14 |
| (1,452) | 1:A:92:GLN:HB3 | 1:A:93:VAL:H | 10 | 0.14 |
| (1,450) | 1:A:93:VAL:H | 1:A:101:TRP:HB2 | 7 | 0.14 |
| (1,446) | 1:A:94:CYS:H | 1:A:101:TRP:HB3 | 15 | 0.14 |
| (1,446) | 1:A:94:CYS:H | 1:A:101:TRP:HB3 | 18 | 0.14 |
| (1,43) | 1:A:48:HIS:HB2 | 1:A:49:ILE:H | 9 | 0.14 |
| (1,349) | 1:A:76:ASN:H | 1:A:76:ASN:HB3 | 8 | 0.14 |
| (1,349) | 1:A:76:ASN:H | 1:A:76:ASN:HB3 | 12 | 0.14 |
| (1,349) | 1:A:76:ASN:H | 1:A:76:ASN:HB3 | 19 | 0.14 |
| (1,348) | 1:A:76:ASN:H | 1:A:77:HIS:HB2 | 3 | 0.14 |
| (1,313) | 1:A:82:HIS:HD2 | 1:A:83:CYS:H | 5 | 0.14 |
| (1,310) | 1:A:80:HIS:H | 1:A:83:CYS:H | 3 | 0.14 |
| (1,310) | 1:A:80:HIS:H | 1:A:83:CYS:H | 14 | 0.14 |
| (1,29) | 1:A:75:CYS:HB3 | 1:A:102:GLU:H | 11 | 0.14 |
| (1,29) | 1:A:75:CYS:HB3 | 1:A:102:GLU:H | 20 | 0.14 |
| (1,267) | 1:A:57:GLN:H | 1:A:57:GLN:HG2 | 9 | 0.14 |
| (1,267) | 1:A:57:GLN:H | 1:A:57:GLN:HG2 | 15 | 0.14 |
| (1,251) | 1:A:57:GLN:HG2 | 1:A:58:ALA:H | 15 | 0.14 |
| (1,250) | 1:A:55:GLU:HA | 1:A:58:ALA:H | 1 | 0.14 |
| (1,215) | 1:A:80:HIS:HB3 | 1:A:84:ILE:H | 19 | 0.14 |
| (1,209) | 1:A:80:HIS:H | 1:A:84:ILE:H | 2 | 0.14 |
| (1,209) | 1:A:80:HIS:H | 1:A:84:ILE:H | 11 | 0.14 |
| (1,165) | 1:A:45:CYS:HB2 | 1:A:47:ASN:H | 17 | 0.14 |
| (1,146) | 1:A:90:THR:HB | 1:A:91:ARG:H | 19 | 0.14 |
| (1,1312) | 1:A:75:CYS:SG | 1:A:77:HIS:ND1 | 20 | 0.14 |
| (1,1307) | 1:A:45:CYS:SG | 1:A:80:HIS:ND1 | 18 | 0.14 |
| (1,1297) | 1:A:70:VAL:HG11 | 1:A:72:TRP:HD1 | 14 | 0.14 |
| (1,1297) | 1:A:70:VAL:HG12 | 1:A:72:TRP:HD1 | 14 | 0.14 |
| (1,1297) | 1:A:70:VAL:HG13 | 1:A:72:TRP:HD1 | 14 | 0.14 |
| (1,1297) | 1:A:70:VAL:HG11 | 1:A:72:TRP:HD1 | 15 | 0.14 |
| (1,1297) | 1:A:70:VAL:HG12 | 1:A:72:TRP:HD1 | 15 | 0.14 |
| (1,1297) | 1:A:70:VAL:HG13 | 1:A:72:TRP:HD1 | 15 | 0.14 |
| (1,1266) | 1:A:35:TRP:HA | 1:A:35:TRP:HE3 | 12 | 0.14 |
| (1,1259) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HD1 | 2 | 0.14 |
| (1,1259) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HD1 | 8 | 0.14 |
| (1,1259) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HD1 | 13 | 0.14 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD11 | 8 | 0.14 |
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD12 | 8 | 0.14 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1257) | 1:A:87:TRP:HD1 | 1:A:88:LEU:HD13 | 8 | 0.14 |
| (1,1236) | 1:A:79:PHE:HB2 | 1:A:79:PHE:HD1 | 4 | 0.14 |
| (1,1236) | 1:A:79:PHE:HB2 | 1:A:79:PHE:HD1 | 9 | 0.14 |
| (1,1236) | 1:A:79:PHE:HB2 | 1:A:79:PHE:HD1 | 13 | 0.14 |
| (1,1236) | 1:A:79:PHE:HB2 | 1:A:79:PHE:HD1 | 15 | 0.14 |
| (1,1236) | 1:A:79:PHE:HB2 | 1:A:79:PHE:HD1 | 16 | 0.14 |
| (1,1221) | 1:A:68:CYS:HB2 | 1:A:80:HIS:HE1 | 3 | 0.14 |
| (1,1221) | 1:A:68:CYS:HB3 | 1:A:80:HIS:HE1 | 3 | 0.14 |
| (1,1211) | 1:A:93:VAL:HG11 | 1:A:94:CYS:HA | 7 | 0.14 |
| (1,1211) | 1:A:93:VAL:HG12 | 1:A:94:CYS:HA | 7 | 0.14 |
| (1,1211) | 1:A:93:VAL:HG13 | 1:A:94:CYS:HA | 7 | 0.14 |
| (1,1211) | 1:A:93:VAL:HG11 | 1:A:94:CYS:HA | 16 | 0.14 |
| (1,1211) | 1:A:93:VAL:HG12 | 1:A:94:CYS:HA | 16 | 0.14 |
| (1,1211) | 1:A:93:VAL:HG13 | 1:A:94:CYS:HA | 16 | 0.14 |
| (1,1210) | 1:A:94:CYS:HA | 1:A:101:TRP:HB3 | 13 | 0.14 |
| (1,1197) | 1:A:64:THR:HA | 1:A:67:GLU:HG2 | 19 | 0.14 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG21 | 13 | 0.14 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG22 | 13 | 0.14 |
| (1,1190) | 1:A:92:GLN:HB3 | 1:A:93:VAL:HG23 | 13 | 0.14 |
| (1,1167) | 1:A:40:ASP:HB2 | 1:A:48:HIS:HE1 | 1 | 0.14 |
| (1,1167) | 1:A:40:ASP:HB3 | 1:A:48:HIS:HE1 | 1 | 0.14 |
| (1,1160) | 1:A:72:TRP:HB3 | 1:A:74:VAL:HA | 7 | 0.14 |
| (1,1160) | 1:A:72:TRP:HB3 | 1:A:74:VAL:HA | 12 | 0.14 |
| (1,1160) | 1:A:72:TRP:HB3 | 1:A:74:VAL:HA | 15 | 0.14 |
| (1,1128) | 1:A:84:ILE:HG21 | 1:A:88:LEU:HB3 | 3 | 0.14 |
| (1,1128) | 1:A:84:ILE:HG22 | 1:A:88:LEU:HB3 | 3 | 0.14 |
| (1,1128) | 1:A:84:ILE:HG23 | 1:A:88:LEU:HB3 | 3 | 0.14 |
| (1,1128) | 1:A:84:ILE:HG21 | 1:A:88:LEU:HB3 | 18 | 0.14 |
| (1,1128) | 1:A:84:ILE:HG22 | 1:A:88:LEU:HB3 | 18 | 0.14 |
| (1,1128) | 1:A:84:ILE:HG23 | 1:A:88:LEU:HB3 | 18 | 0.14 |
| (1,1126) | 1:A:79:PHE:HB3 | 1:A:84:ILE:HG21 | 12 | 0.14 |
| (1,1126) | 1:A:79:PHE:HB3 | 1:A:84:ILE:HG22 | 12 | 0.14 |
| (1,1126) | 1:A:79:PHE:HB3 | 1:A:84:ILE:HG23 | 12 | 0.14 |
| (1,1126) | 1:A:79:PHE:HB3 | 1:A:84:ILE:HG21 | 14 | 0.14 |
| (1,1126) | 1:A:79:PHE:HB3 | 1:A:84:ILE:HG22 | 14 | 0.14 |
| (1,1126) | 1:A:79:PHE:HB3 | 1:A:84:ILE:HG23 | 14 | 0.14 |
| (1,1090) | 1:A:95:PRO:HD3 | 1:A:97:ASP:H | 11 | 0.14 |
| (1,1090) | 1:A:95:PRO:HD3 | 1:A:97:ASP:H | 17 | 0.14 |
| (1,1054) | 1:A:49:ILE:HD11 | 1:A:50:MET:HA | 11 | 0.14 |
| (1,1054) | 1:A:49:ILE:HD12 | 1:A:50:MET:HA | 11 | 0.14 |
| (1,1054) | 1:A:49:ILE:HD13 | 1:A:50:MET:HA | 11 | 0.14 |
| (1,1050) | 1:A:37:ILE:HD11 | 1:A:38:VAL:HA | 7 | 0.14 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1050) | 1:A:37:ILE:HD12 | 1:A:38:VAL:HA | 7 | 0.14 |
| (1,1050) | 1:A:37:ILE:HD13 | 1:A:38:VAL:HA | 7 | 0.14 |
| (1,1045) | 1:A:54:ILE:HG21 | 1:A:55:GLU:HG2 | 1 | 0.14 |
| (1,1045) | 1:A:54:ILE:HG22 | 1:A:55:GLU:HG2 | 1 | 0.14 |
| (1,1045) | 1:A:54:ILE:HG23 | 1:A:55:GLU:HG2 | 1 | 0.14 |
| (1,1045) | 1:A:54:ILE:HG21 | 1:A:55:GLU:HG2 | 6 | 0.14 |
| (1,1045) | 1:A:54:ILE:HG22 | 1:A:55:GLU:HG2 | 6 | 0.14 |
| (1,1045) | 1:A:54:ILE:HG23 | 1:A:55:GLU:HG2 | 6 | 0.14 |
| (1,1045) | 1:A:54:ILE:HG21 | 1:A:55:GLU:HG2 | 20 | 0.14 |
| (1,1045) | 1:A:54:ILE:HG22 | 1:A:55:GLU:HG2 | 20 | 0.14 |
| (1,1045) | 1:A:54:ILE:HG23 | 1:A:55:GLU:HG2 | 20 | 0.14 |
| (1,1044) | 1:A:41:ASN:H | 1:A:43:ALA:HB1 | 12 | 0.14 |
| (1,1044) | 1:A:41:ASN:H | 1:A:43:ALA:HB2 | 12 | 0.14 |
| (1,1044) | 1:A:41:ASN:H | 1:A:43:ALA:HB3 | 12 | 0.14 |
| (1,1021) | 1:A:71:ALA:HB1 | 1:A:106:TYR:HB2 | 8 | 0.14 |
| (1,1021) | 1:A:71:ALA:HB2 | 1:A:106:TYR:HB2 | 8 | 0.14 |
| (1,1021) | 1:A:71:ALA:HB3 | 1:A:106:TYR:HB2 | 8 | 0.14 |
| (1,1016) | 1:A:52:LEU:HD11 | 1:A:57:GLN:HG2 | 4 | 0.14 |
| (1,1016) | 1:A:52:LEU:HD12 | 1:A:57:GLN:HG2 | 4 | 0.14 |
| (1,1016) | 1:A:52:LEU:HD13 | 1:A:57:GLN:HG2 | 4 | 0.14 |
| (1,1016) | 1:A:52:LEU:HD11 | 1:A:57:GLN:HG2 | 15 | 0.14 |
| (1,1016) | 1:A:52:LEU:HD12 | 1:A:57:GLN:HG2 | 15 | 0.14 |
| (1,1016) | 1:A:52:LEU:HD13 | 1:A:57:GLN:HG2 | 15 | 0.14 |
| (1,1012) | 1:A:96:LEU:HD11 | 1:A:97:ASP:HB2 | 4 | 0.14 |
| (1,1012) | 1:A:96:LEU:HD12 | 1:A:97:ASP:HB2 | 4 | 0.14 |
| (1,1012) | 1:A:96:LEU:HD13 | 1:A:97:ASP:HB2 | 4 | 0.14 |
| (1,1012) | 1:A:96:LEU:HD11 | 1:A:97:ASP:HB2 | 5 | 0.14 |
| (1,1012) | 1:A:96:LEU:HD12 | 1:A:97:ASP:HB2 | 5 | 0.14 |
| (1,1012) | 1:A:96:LEU:HD13 | 1:A:97:ASP:HB2 | 5 | 0.14 |
| (1,1006) | 1:A:88:LEU:HD11 | 1:A:101:TRP:HH2 | 14 | 0.14 |
| (1,1006) | 1:A:88:LEU:HD12 | 1:A:101:TRP:HH2 | 14 | 0.14 |
| (1,1006) | 1:A:88:LEU:HD13 | 1:A:101:TRP:HH2 | 14 | 0.14 |
| (1,1006) | 1:A:88:LEU:HD11 | 1:A:101:TRP:HH2 | 18 | 0.14 |
| (1,1006) | 1:A:88:LEU:HD12 | 1:A:101:TRP:HH2 | 18 | 0.14 |
| (1,1006) | 1:A:88:LEU:HD13 | 1:A:101:TRP:HH2 | 18 | 0.14 |
| (1,1006) | 1:A:88:LEU:HD11 | 1:A:101:TRP:HH2 | 19 | 0.14 |
| (1,1006) | 1:A:88:LEU:HD12 | 1:A:101:TRP:HH2 | 19 | 0.14 |
| (1,1006) | 1:A:88:LEU:HD13 | 1:A:101:TRP:HH2 | 19 | 0.14 |
| (2,5) | 1:A:73:GLY:O | 1:A:77:HIS:H | 11 | 0.13 |
| (2,20) | 1:A:86:ARG:O | 1:A:90:THR:N | 11 | 0.13 |
| (1,997) | 1:A:49:ILE:HG12 | 1:A:72:TRP:HZ2 | 3 | 0.13 |
| (1,979) | 1:A:79:PHE:HB3 | 1:A:80:HIS:HB3 | 6 | 0.13 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|-----------------|-----------------|----------|---------------|
| (1,979) | 1:A:79:PHE:HB3 | 1:A:80:HIS:HB3 | 18 | 0.13 |
| (1,976) | 1:A:74:VAL:HB | 1:A:75:CYS:HB2 | 13 | 0.13 |
| (1,973) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HB2 | 2 | 0.13 |
| (1,973) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HB2 | 7 | 0.13 |
| (1,973) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HB2 | 12 | 0.13 |
| (1,973) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HB2 | 14 | 0.13 |
| (1,969) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HB3 | 6 | 0.13 |
| (1,959) | 1:A:49:ILE:HG12 | 1:A:50:MET:HB3 | 3 | 0.13 |
| (1,959) | 1:A:49:ILE:HG12 | 1:A:50:MET:HB3 | 9 | 0.13 |
| (1,941) | 1:A:52:LEU:HD11 | 1:A:57:GLN:HG3 | 17 | 0.13 |
| (1,941) | 1:A:52:LEU:HD12 | 1:A:57:GLN:HG3 | 17 | 0.13 |
| (1,941) | 1:A:52:LEU:HD13 | 1:A:57:GLN:HG3 | 17 | 0.13 |
| (1,926) | 1:A:79:PHE:H | 1:A:84:ILE:HB | 6 | 0.13 |
| (1,926) | 1:A:79:PHE:H | 1:A:84:ILE:HB | 14 | 0.13 |
| (1,926) | 1:A:79:PHE:H | 1:A:84:ILE:HB | 19 | 0.13 |
| (1,920) | 1:A:94:CYS:HB2 | 1:A:98:ASN:HB2 | 16 | 0.13 |
| (1,917) | 1:A:93:VAL:HG11 | 1:A:98:ASN:HB2 | 3 | 0.13 |
| (1,917) | 1:A:93:VAL:HG12 | 1:A:98:ASN:HB2 | 3 | 0.13 |
| (1,917) | 1:A:93:VAL:HG13 | 1:A:98:ASN:HB2 | 3 | 0.13 |
| (1,914) | 1:A:93:VAL:HB | 1:A:98:ASN:HB3 | 10 | 0.13 |
| (1,87) | 1:A:107:GLY:HA2 | 1:A:108:HIS:H | 1 | 0.13 |
| (1,86) | 1:A:108:HIS:H | 1:A:108:HIS:HE1 | 3 | 0.13 |
| (1,86) | 1:A:108:HIS:H | 1:A:108:HIS:HE1 | 11 | 0.13 |
| (1,86) | 1:A:108:HIS:H | 1:A:108:HIS:HE1 | 17 | 0.13 |
| (1,851) | 1:A:48:HIS:HD2 | 1:A:49:ILE:HA | 14 | 0.13 |
| (1,815) | 1:A:91:ARG:HB2 | 1:A:93:VAL:HG21 | 19 | 0.13 |
| (1,815) | 1:A:91:ARG:HB2 | 1:A:93:VAL:HG22 | 19 | 0.13 |
| (1,815) | 1:A:91:ARG:HB2 | 1:A:93:VAL:HG23 | 19 | 0.13 |
| (1,812) | 1:A:55:GLU:HB2 | 1:A:58:ALA:HB1 | 14 | 0.13 |
| (1,812) | 1:A:55:GLU:HB2 | 1:A:58:ALA:HB2 | 14 | 0.13 |
| (1,812) | 1:A:55:GLU:HB2 | 1:A:58:ALA:HB3 | 14 | 0.13 |
| (1,812) | 1:A:55:GLU:HB3 | 1:A:58:ALA:HB1 | 14 | 0.13 |
| (1,812) | 1:A:55:GLU:HB3 | 1:A:58:ALA:HB2 | 14 | 0.13 |
| (1,812) | 1:A:55:GLU:HB3 | 1:A:58:ALA:HB3 | 14 | 0.13 |
| (1,800) | 1:A:74:VAL:HG11 | 1:A:104:GLN:HB3 | 1 | 0.13 |
| (1,800) | 1:A:74:VAL:HG12 | 1:A:104:GLN:HB3 | 1 | 0.13 |
| (1,800) | 1:A:74:VAL:HG13 | 1:A:104:GLN:HB3 | 1 | 0.13 |
| (1,800) | 1:A:74:VAL:HG21 | 1:A:104:GLN:HB3 | 1 | 0.13 |
| (1,800) | 1:A:74:VAL:HG22 | 1:A:104:GLN:HB3 | 1 | 0.13 |
| (1,800) | 1:A:74:VAL:HG23 | 1:A:104:GLN:HB3 | 1 | 0.13 |
| (1,800) | 1:A:74:VAL:HG11 | 1:A:104:GLN:HB3 | 5 | 0.13 |
| (1,800) | 1:A:74:VAL:HG12 | 1:A:104:GLN:HB3 | 5 | 0.13 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|-----------------|-----------------|----------|---------------|
| (1,800) | 1:A:74:VAL:HG13 | 1:A:104:GLN:HB3 | 5 | 0.13 |
| (1,800) | 1:A:74:VAL:HG21 | 1:A:104:GLN:HB3 | 5 | 0.13 |
| (1,800) | 1:A:74:VAL:HG22 | 1:A:104:GLN:HB3 | 5 | 0.13 |
| (1,800) | 1:A:74:VAL:HG23 | 1:A:104:GLN:HB3 | 5 | 0.13 |
| (1,800) | 1:A:74:VAL:HG11 | 1:A:104:GLN:HB3 | 17 | 0.13 |
| (1,800) | 1:A:74:VAL:HG12 | 1:A:104:GLN:HB3 | 17 | 0.13 |
| (1,800) | 1:A:74:VAL:HG13 | 1:A:104:GLN:HB3 | 17 | 0.13 |
| (1,800) | 1:A:74:VAL:HG21 | 1:A:104:GLN:HB3 | 17 | 0.13 |
| (1,800) | 1:A:74:VAL:HG22 | 1:A:104:GLN:HB3 | 17 | 0.13 |
| (1,800) | 1:A:74:VAL:HG23 | 1:A:104:GLN:HB3 | 17 | 0.13 |
| (1,795) | 1:A:52:LEU:HD21 | 1:A:56:CYS:HB2 | 19 | 0.13 |
| (1,795) | 1:A:52:LEU:HD22 | 1:A:56:CYS:HB2 | 19 | 0.13 |
| (1,795) | 1:A:52:LEU:HD23 | 1:A:56:CYS:HB2 | 19 | 0.13 |
| (1,783) | 1:A:79:PHE:H | 1:A:84:ILE:HG21 | 7 | 0.13 |
| (1,783) | 1:A:79:PHE:H | 1:A:84:ILE:HG22 | 7 | 0.13 |
| (1,783) | 1:A:79:PHE:H | 1:A:84:ILE:HG23 | 7 | 0.13 |
| (1,77) | 1:A:85:SER:H | 1:A:87:TRP:H | 8 | 0.13 |
| (1,747) | 1:A:52:LEU:HA | 1:A:65:SER:HA | 19 | 0.13 |
| (1,735) | 1:A:104:GLN:HG2 | 1:A:105:LYS:H | 5 | 0.13 |
| (1,735) | 1:A:104:GLN:HG3 | 1:A:105:LYS:H | 5 | 0.13 |
| (1,731) | 1:A:44:ILE:HG21 | 1:A:83:CYS:H | 5 | 0.13 |
| (1,731) | 1:A:44:ILE:HG22 | 1:A:83:CYS:H | 5 | 0.13 |
| (1,731) | 1:A:44:ILE:HG23 | 1:A:83:CYS:H | 5 | 0.13 |
| (1,730) | 1:A:87:TRP:HE1 | 1:A:101:TRP:HE3 | 4 | 0.13 |
| (1,730) | 1:A:87:TRP:HE1 | 1:A:101:TRP:HE3 | 12 | 0.13 |
| (1,726) | 1:A:56:CYS:HA | 1:A:59:ASN:HD22 | 12 | 0.13 |
| (1,725) | 1:A:55:GLU:HB3 | 1:A:59:ASN:HD22 | 15 | 0.13 |
| (1,723) | 1:A:55:GLU:HG2 | 1:A:59:ASN:HD21 | 11 | 0.13 |
| (1,723) | 1:A:55:GLU:HG3 | 1:A:59:ASN:HD21 | 11 | 0.13 |
| (1,708) | 1:A:73:GLY:HA3 | 1:A:79:PHE:H | 2 | 0.13 |
| (1,705) | 1:A:73:GLY:H | 1:A:104:GLN:HG2 | 12 | 0.13 |
| (1,705) | 1:A:73:GLY:H | 1:A:104:GLN:HG3 | 12 | 0.13 |
| (1,689) | 1:A:55:GLU:HB2 | 1:A:59:ASN:H | 16 | 0.13 |
| (1,681) | 1:A:47:ASN:H | 1:A:53:CYS:HA | 7 | 0.13 |
| (1,681) | 1:A:47:ASN:H | 1:A:53:CYS:HA | 13 | 0.13 |
| (1,681) | 1:A:47:ASN:H | 1:A:53:CYS:HA | 14 | 0.13 |
| (1,648) | 1:A:42:CYS:HB2 | 1:A:47:ASN:H | 13 | 0.13 |
| (1,639) | 1:A:38:VAL:HB | 1:A:41:ASN:H | 12 | 0.13 |
| (1,628) | 1:A:42:CYS:HB2 | 1:A:43:ALA:H | 4 | 0.13 |
| (1,623) | 1:A:44:ILE:H | 1:A:83:CYS:HB2 | 5 | 0.13 |
| (1,623) | 1:A:44:ILE:H | 1:A:83:CYS:HB2 | 15 | 0.13 |
| (1,615) | 1:A:42:CYS:HB2 | 1:A:46:ARG:H | 8 | 0.13 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|-----------------|-----------------|----------|---------------|
| (1,610) | 1:A:46:ARG:HB2 | 1:A:47:ASN:H | 1 | 0.13 |
| (1,610) | 1:A:46:ARG:HB2 | 1:A:47:ASN:H | 13 | 0.13 |
| (1,610) | 1:A:46:ARG:HB2 | 1:A:47:ASN:H | 16 | 0.13 |
| (1,597) | 1:A:51:ASP:H | 1:A:70:VAL:HG11 | 13 | 0.13 |
| (1,597) | 1:A:51:ASP:H | 1:A:70:VAL:HG12 | 13 | 0.13 |
| (1,597) | 1:A:51:ASP:H | 1:A:70:VAL:HG13 | 13 | 0.13 |
| (1,588) | 1:A:54:ILE:HD11 | 1:A:56:CYS:H | 15 | 0.13 |
| (1,588) | 1:A:54:ILE:HD12 | 1:A:56:CYS:H | 15 | 0.13 |
| (1,588) | 1:A:54:ILE:HD13 | 1:A:56:CYS:H | 15 | 0.13 |
| (1,585) | 1:A:52:LEU:HA | 1:A:57:GLN:H | 16 | 0.13 |
| (1,581) | 1:A:52:LEU:HD21 | 1:A:58:ALA:H | 10 | 0.13 |
| (1,581) | 1:A:52:LEU:HD22 | 1:A:58:ALA:H | 10 | 0.13 |
| (1,581) | 1:A:52:LEU:HD23 | 1:A:58:ALA:H | 10 | 0.13 |
| (1,564) | 1:A:71:ALA:H | 1:A:81:PHE:HB3 | 19 | 0.13 |
| (1,553) | 1:A:73:GLY:H | 1:A:104:GLN:HB2 | 19 | 0.13 |
| (1,543) | 1:A:76:ASN:H | 1:A:77:HIS:HA | 8 | 0.13 |
| (1,531) | 1:A:39:VAL:HG11 | 1:A:79:PHE:H | 5 | 0.13 |
| (1,531) | 1:A:39:VAL:HG12 | 1:A:79:PHE:H | 5 | 0.13 |
| (1,531) | 1:A:39:VAL:HG13 | 1:A:79:PHE:H | 5 | 0.13 |
| (1,531) | 1:A:39:VAL:HG11 | 1:A:79:PHE:H | 7 | 0.13 |
| (1,531) | 1:A:39:VAL:HG12 | 1:A:79:PHE:H | 7 | 0.13 |
| (1,531) | 1:A:39:VAL:HG13 | 1:A:79:PHE:H | 7 | 0.13 |
| (1,521) | 1:A:70:VAL:HG11 | 1:A:81:PHE:H | 1 | 0.13 |
| (1,521) | 1:A:70:VAL:HG12 | 1:A:81:PHE:H | 1 | 0.13 |
| (1,521) | 1:A:70:VAL:HG13 | 1:A:81:PHE:H | 1 | 0.13 |
| (1,521) | 1:A:70:VAL:HG11 | 1:A:81:PHE:H | 4 | 0.13 |
| (1,521) | 1:A:70:VAL:HG12 | 1:A:81:PHE:H | 4 | 0.13 |
| (1,521) | 1:A:70:VAL:HG13 | 1:A:81:PHE:H | 4 | 0.13 |
| (1,521) | 1:A:70:VAL:HG11 | 1:A:81:PHE:H | 10 | 0.13 |
| (1,521) | 1:A:70:VAL:HG12 | 1:A:81:PHE:H | 10 | 0.13 |
| (1,521) | 1:A:70:VAL:HG13 | 1:A:81:PHE:H | 10 | 0.13 |
| (1,521) | 1:A:70:VAL:HG11 | 1:A:81:PHE:H | 15 | 0.13 |
| (1,521) | 1:A:70:VAL:HG12 | 1:A:81:PHE:H | 15 | 0.13 |
| (1,521) | 1:A:70:VAL:HG13 | 1:A:81:PHE:H | 15 | 0.13 |
| (1,521) | 1:A:70:VAL:HG11 | 1:A:81:PHE:H | 20 | 0.13 |
| (1,521) | 1:A:70:VAL:HG12 | 1:A:81:PHE:H | 20 | 0.13 |
| (1,521) | 1:A:70:VAL:HG13 | 1:A:81:PHE:H | 20 | 0.13 |
| (1,500) | 1:A:84:ILE:HG12 | 1:A:85:SER:H | 8 | 0.13 |
| (1,500) | 1:A:84:ILE:HG12 | 1:A:85:SER:H | 9 | 0.13 |
| (1,500) | 1:A:84:ILE:HG12 | 1:A:85:SER:H | 11 | 0.13 |
| (1,500) | 1:A:84:ILE:HG12 | 1:A:85:SER:H | 14 | 0.13 |
| (1,500) | 1:A:84:ILE:HG12 | 1:A:85:SER:H | 19 | 0.13 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|-----------------|-----------------|----------|---------------|
| (1,497) | 1:A:85:SER:H | 1:A:86:ARG:HG2 | 12 | 0.13 |
| (1,497) | 1:A:85:SER:H | 1:A:86:ARG:HG3 | 12 | 0.13 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD11 | 1 | 0.13 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD12 | 1 | 0.13 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD13 | 1 | 0.13 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD11 | 3 | 0.13 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD12 | 3 | 0.13 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD13 | 3 | 0.13 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD11 | 5 | 0.13 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD12 | 5 | 0.13 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD13 | 5 | 0.13 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD11 | 6 | 0.13 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD12 | 6 | 0.13 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD13 | 6 | 0.13 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD11 | 13 | 0.13 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD12 | 13 | 0.13 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD13 | 13 | 0.13 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD11 | 19 | 0.13 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD12 | 19 | 0.13 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD13 | 19 | 0.13 |
| (1,49) | 1:A:94:CYS:H | 1:A:97:ASP:H | 18 | 0.13 |
| (1,482) | 1:A:88:LEU:H | 1:A:90:THR:HG21 | 8 | 0.13 |
| (1,482) | 1:A:88:LEU:H | 1:A:90:THR:HG22 | 8 | 0.13 |
| (1,482) | 1:A:88:LEU:H | 1:A:90:THR:HG23 | 8 | 0.13 |
| (1,482) | 1:A:88:LEU:H | 1:A:90:THR:HG21 | 13 | 0.13 |
| (1,482) | 1:A:88:LEU:H | 1:A:90:THR:HG22 | 13 | 0.13 |
| (1,482) | 1:A:88:LEU:H | 1:A:90:THR:HG23 | 13 | 0.13 |
| (1,482) | 1:A:88:LEU:H | 1:A:90:THR:HG21 | 14 | 0.13 |
| (1,482) | 1:A:88:LEU:H | 1:A:90:THR:HG22 | 14 | 0.13 |
| (1,482) | 1:A:88:LEU:H | 1:A:90:THR:HG23 | 14 | 0.13 |
| (1,452) | 1:A:92:GLN:HB3 | 1:A:93:VAL:H | 4 | 0.13 |
| (1,452) | 1:A:92:GLN:HB3 | 1:A:93:VAL:H | 9 | 0.13 |
| (1,449) | 1:A:93:VAL:H | 1:A:100:GLU:HA | 17 | 0.13 |
| (1,445) | 1:A:94:CYS:H | 1:A:97:ASP:HB2 | 8 | 0.13 |
| (1,445) | 1:A:94:CYS:H | 1:A:97:ASP:HB2 | 13 | 0.13 |
| (1,408) | 1:A:80:HIS:HA | 1:A:84:ILE:H | 19 | 0.13 |
| (1,395) | 1:A:91:ARG:HD3 | 1:A:93:VAL:H | 2 | 0.13 |
| (1,39) | 1:A:88:LEU:HD21 | 1:A:101:TRP:H | 5 | 0.13 |
| (1,39) | 1:A:88:LEU:HD22 | 1:A:101:TRP:H | 5 | 0.13 |
| (1,39) | 1:A:88:LEU:HD23 | 1:A:101:TRP:H | 5 | 0.13 |
| (1,385) | 1:A:64:THR:H | 1:A:64:THR:HB | 11 | 0.13 |
| (1,349) | 1:A:76:ASN:H | 1:A:76:ASN:HB3 | 4 | 0.13 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,349) | 1:A:76:ASN:H | 1:A:76:ASN:HB3 | 7 | 0.13 |
| (1,348) | 1:A:76:ASN:H | 1:A:77:HIS:HB2 | 1 | 0.13 |
| (1,348) | 1:A:76:ASN:H | 1:A:77:HIS:HB2 | 20 | 0.13 |
| (1,331) | 1:A:96:LEU:H | 1:A:98:ASN:H | 6 | 0.13 |
| (1,331) | 1:A:96:LEU:H | 1:A:98:ASN:H | 7 | 0.13 |
| (1,313) | 1:A:82:HIS:HD2 | 1:A:83:CYS:H | 1 | 0.13 |
| (1,310) | 1:A:80:HIS:H | 1:A:83:CYS:H | 19 | 0.13 |
| (1,283) | 1:A:73:GLY:HA2 | 1:A:77:HIS:H | 6 | 0.13 |
| (1,268) | 1:A:57:GLN:H | 1:A:57:GLN:HB3 | 15 | 0.13 |
| (1,267) | 1:A:57:GLN:H | 1:A:57:GLN:HG2 | 4 | 0.13 |
| (1,267) | 1:A:57:GLN:H | 1:A:57:GLN:HG2 | 8 | 0.13 |
| (1,265) | 1:A:56:CYS:HB3 | 1:A:57:GLN:H | 12 | 0.13 |
| (1,250) | 1:A:55:GLU:HA | 1:A:58:ALA:H | 8 | 0.13 |
| (1,238) | 1:A:81:PHE:HA | 1:A:85:SER:H | 2 | 0.13 |
| (1,238) | 1:A:81:PHE:HA | 1:A:85:SER:H | 8 | 0.13 |
| (1,215) | 1:A:80:HIS:HB3 | 1:A:84:ILE:H | 1 | 0.13 |
| (1,215) | 1:A:80:HIS:HB3 | 1:A:84:ILE:H | 8 | 0.13 |
| (1,21) | 1:A:65:SER:HA | 1:A:68:CYS:H | 7 | 0.13 |
| (1,209) | 1:A:80:HIS:H | 1:A:84:ILE:H | 4 | 0.13 |
| (1,209) | 1:A:80:HIS:H | 1:A:84:ILE:H | 10 | 0.13 |
| (1,209) | 1:A:80:HIS:H | 1:A:84:ILE:H | 18 | 0.13 |
| (1,20) | 1:A:67:GLU:H | 1:A:68:CYS:H | 6 | 0.13 |
| (1,199) | 1:A:94:CYS:HB3 | 1:A:99:ARG:H | 19 | 0.13 |
| (1,181) | 1:A:36:ASP:HB2 | 1:A:37:ILE:H | 4 | 0.13 |
| (1,181) | 1:A:36:ASP:HB3 | 1:A:37:ILE:H | 4 | 0.13 |
| (1,165) | 1:A:45:CYS:HB2 | 1:A:47:ASN:H | 16 | 0.13 |
| (1,150) | 1:A:91:ARG:H | 1:A:91:ARG:HB3 | 9 | 0.13 |
| (1,150) | 1:A:91:ARG:H | 1:A:91:ARG:HB3 | 11 | 0.13 |
| (1,150) | 1:A:91:ARG:H | 1:A:91:ARG:HB3 | 19 | 0.13 |
| (1,1312) | 1:A:75:CYS:SG | 1:A:77:HIS:ND1 | 2 | 0.13 |
| (1,1309) | 1:A:53:CYS:SG | 1:A:82:HIS:ND1 | 4 | 0.13 |
| (1,1307) | 1:A:45:CYS:SG | 1:A:80:HIS:ND1 | 11 | 0.13 |
| (1,1307) | 1:A:45:CYS:SG | 1:A:80:HIS:ND1 | 12 | 0.13 |
| (1,1282) | 1:A:70:VAL:HG11 | 1:A:80:HIS:HD2 | 13 | 0.13 |
| (1,1282) | 1:A:70:VAL:HG12 | 1:A:80:HIS:HD2 | 13 | 0.13 |
| (1,1282) | 1:A:70:VAL:HG13 | 1:A:80:HIS:HD2 | 13 | 0.13 |
| (1,1281) | 1:A:49:ILE:HA | 1:A:80:HIS:HD2 | 1 | 0.13 |
| (1,1281) | 1:A:49:ILE:HA | 1:A:80:HIS:HD2 | 6 | 0.13 |
| (1,1275) | 1:A:87:TRP:HB3 | 1:A:87:TRP:HE3 | 1 | 0.13 |
| (1,1275) | 1:A:87:TRP:HB3 | 1:A:87:TRP:HE3 | 12 | 0.13 |
| (1,1272) | 1:A:101:TRP:HB3 | 1:A:101:TRP:HE3 | 5 | 0.13 |
| (1,1268) | 1:A:71:ALA:HA | 1:A:72:TRP:HE3 | 4 | 0.13 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1259) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HD1 | 6 | 0.13 |
| (1,1245) | 1:A:79:PHE:HE1 | 1:A:95:PRO:HD2 | 14 | 0.13 |
| (1,1236) | 1:A:79:PHE:HB2 | 1:A:79:PHE:HD1 | 8 | 0.13 |
| (1,1221) | 1:A:68:CYS:HB2 | 1:A:80:HIS:HE1 | 1 | 0.13 |
| (1,1221) | 1:A:68:CYS:HB3 | 1:A:80:HIS:HE1 | 1 | 0.13 |
| (1,1221) | 1:A:68:CYS:HB2 | 1:A:80:HIS:HE1 | 17 | 0.13 |
| (1,1221) | 1:A:68:CYS:HB3 | 1:A:80:HIS:HE1 | 17 | 0.13 |
| (1,1211) | 1:A:93:VAL:HG11 | 1:A:94:CYS:HA | 14 | 0.13 |
| (1,1211) | 1:A:93:VAL:HG12 | 1:A:94:CYS:HA | 14 | 0.13 |
| (1,1211) | 1:A:93:VAL:HG13 | 1:A:94:CYS:HA | 14 | 0.13 |
| (1,1211) | 1:A:93:VAL:HG11 | 1:A:94:CYS:HA | 15 | 0.13 |
| (1,1211) | 1:A:93:VAL:HG12 | 1:A:94:CYS:HA | 15 | 0.13 |
| (1,1211) | 1:A:93:VAL:HG13 | 1:A:94:CYS:HA | 15 | 0.13 |
| (1,1197) | 1:A:64:THR:HA | 1:A:67:GLU:HG2 | 9 | 0.13 |
| (1,1192) | 1:A:40:ASP:HB2 | 1:A:49:ILE:HA | 20 | 0.13 |
| (1,1192) | 1:A:40:ASP:HB3 | 1:A:49:ILE:HA | 20 | 0.13 |
| (1,1157) | 1:A:74:VAL:HA | 1:A:104:GLN:HA | 8 | 0.13 |
| (1,1128) | 1:A:84:ILE:HG21 | 1:A:88:LEU:HB3 | 2 | 0.13 |
| (1,1128) | 1:A:84:ILE:HG22 | 1:A:88:LEU:HB3 | 2 | 0.13 |
| (1,1128) | 1:A:84:ILE:HG23 | 1:A:88:LEU:HB3 | 2 | 0.13 |
| (1,1128) | 1:A:84:ILE:HG21 | 1:A:88:LEU:HB3 | 4 | 0.13 |
| (1,1128) | 1:A:84:ILE:HG22 | 1:A:88:LEU:HB3 | 4 | 0.13 |
| (1,1128) | 1:A:84:ILE:HG23 | 1:A:88:LEU:HB3 | 4 | 0.13 |
| (1,1128) | 1:A:84:ILE:HG21 | 1:A:88:LEU:HB3 | 6 | 0.13 |
| (1,1128) | 1:A:84:ILE:HG22 | 1:A:88:LEU:HB3 | 6 | 0.13 |
| (1,1128) | 1:A:84:ILE:HG23 | 1:A:88:LEU:HB3 | 6 | 0.13 |
| (1,1128) | 1:A:84:ILE:HG21 | 1:A:88:LEU:HB3 | 9 | 0.13 |
| (1,1128) | 1:A:84:ILE:HG22 | 1:A:88:LEU:HB3 | 9 | 0.13 |
| (1,1128) | 1:A:84:ILE:HG23 | 1:A:88:LEU:HB3 | 9 | 0.13 |
| (1,1126) | 1:A:79:PHE:HB3 | 1:A:84:ILE:HG21 | 10 | 0.13 |
| (1,1126) | 1:A:79:PHE:HB3 | 1:A:84:ILE:HG22 | 10 | 0.13 |
| (1,1126) | 1:A:79:PHE:HB3 | 1:A:84:ILE:HG23 | 10 | 0.13 |
| (1,1108) | 1:A:94:CYS:HB3 | 1:A:99:ARG:HB2 | 3 | 0.13 |
| (1,1103) | 1:A:50:MET:HB3 | 1:A:72:TRP:HH2 | 2 | 0.13 |
| (1,1103) | 1:A:50:MET:HB3 | 1:A:72:TRP:HH2 | 14 | 0.13 |
| (1,1090) | 1:A:95:PRO:HD3 | 1:A:97:ASP:H | 9 | 0.13 |
| (1,1090) | 1:A:95:PRO:HD3 | 1:A:97:ASP:H | 15 | 0.13 |
| (1,1080) | 1:A:94:CYS:HB3 | 1:A:101:TRP:HA | 10 | 0.13 |
| (1,1080) | 1:A:94:CYS:HB3 | 1:A:101:TRP:HA | 15 | 0.13 |
| (1,1012) | 1:A:96:LEU:HD11 | 1:A:97:ASP:HB2 | 3 | 0.13 |
| (1,1012) | 1:A:96:LEU:HD12 | 1:A:97:ASP:HB2 | 3 | 0.13 |
| (1,1012) | 1:A:96:LEU:HD13 | 1:A:97:ASP:HB2 | 3 | 0.13 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1006) | 1:A:88:LEU:HD11 | 1:A:101:TRP:HH2 | 12 | 0.13 |
| (1,1006) | 1:A:88:LEU:HD12 | 1:A:101:TRP:HH2 | 12 | 0.13 |
| (1,1006) | 1:A:88:LEU:HD13 | 1:A:101:TRP:HH2 | 12 | 0.13 |
| (3,5) | 1:A:53:CYS:SG | 1:A:68:CYS:SG | 8 | 0.12 |
| (3,5) | 1:A:53:CYS:SG | 1:A:68:CYS:SG | 13 | 0.12 |
| (1,976) | 1:A:74:VAL:HB | 1:A:75:CYS:HB2 | 8 | 0.12 |
| (1,976) | 1:A:74:VAL:HB | 1:A:75:CYS:HB2 | 9 | 0.12 |
| (1,973) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HB2 | 1 | 0.12 |
| (1,969) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HB3 | 3 | 0.12 |
| (1,968) | 1:A:99:ARG:HB3 | 1:A:99:ARG:HD3 | 17 | 0.12 |
| (1,951) | 1:A:77:HIS:HB2 | 1:A:96:LEU:HD11 | 1 | 0.12 |
| (1,951) | 1:A:77:HIS:HB2 | 1:A:96:LEU:HD12 | 1 | 0.12 |
| (1,951) | 1:A:77:HIS:HB2 | 1:A:96:LEU:HD13 | 1 | 0.12 |
| (1,951) | 1:A:77:HIS:HB2 | 1:A:96:LEU:HD11 | 4 | 0.12 |
| (1,951) | 1:A:77:HIS:HB2 | 1:A:96:LEU:HD12 | 4 | 0.12 |
| (1,951) | 1:A:77:HIS:HB2 | 1:A:96:LEU:HD13 | 4 | 0.12 |
| (1,927) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HB | 2 | 0.12 |
| (1,926) | 1:A:79:PHE:H | 1:A:84:ILE:HB | 1 | 0.12 |
| (1,926) | 1:A:79:PHE:H | 1:A:84:ILE:HB | 9 | 0.12 |
| (1,926) | 1:A:79:PHE:H | 1:A:84:ILE:HB | 16 | 0.12 |
| (1,926) | 1:A:79:PHE:H | 1:A:84:ILE:HB | 20 | 0.12 |
| (1,920) | 1:A:94:CYS:HB2 | 1:A:98:ASN:HB2 | 17 | 0.12 |
| (1,880) | 1:A:43:ALA:HA | 1:A:46:ARG:HD2 | 7 | 0.12 |
| (1,880) | 1:A:43:ALA:HA | 1:A:46:ARG:HD3 | 7 | 0.12 |
| (1,854) | 1:A:87:TRP:HA | 1:A:91:ARG:HG2 | 6 | 0.12 |
| (1,854) | 1:A:87:TRP:HA | 1:A:91:ARG:HG2 | 19 | 0.12 |
| (1,851) | 1:A:48:HIS:HD2 | 1:A:49:ILE:HA | 1 | 0.12 |
| (1,851) | 1:A:48:HIS:HD2 | 1:A:49:ILE:HA | 6 | 0.12 |
| (1,844) | 1:A:54:ILE:HA | 1:A:55:GLU:HG2 | 20 | 0.12 |
| (1,815) | 1:A:91:ARG:HB2 | 1:A:93:VAL:HG21 | 3 | 0.12 |
| (1,815) | 1:A:91:ARG:HB2 | 1:A:93:VAL:HG22 | 3 | 0.12 |
| (1,815) | 1:A:91:ARG:HB2 | 1:A:93:VAL:HG23 | 3 | 0.12 |
| (1,814) | 1:A:54:ILE:HG21 | 1:A:54:ILE:HG13 | 1 | 0.12 |
| (1,814) | 1:A:54:ILE:HG22 | 1:A:54:ILE:HG13 | 1 | 0.12 |
| (1,814) | 1:A:54:ILE:HG23 | 1:A:54:ILE:HG13 | 1 | 0.12 |
| (1,812) | 1:A:55:GLU:HB2 | 1:A:58:ALA:HB1 | 20 | 0.12 |
| (1,812) | 1:A:55:GLU:HB2 | 1:A:58:ALA:HB2 | 20 | 0.12 |
| (1,812) | 1:A:55:GLU:HB2 | 1:A:58:ALA:HB3 | 20 | 0.12 |
| (1,812) | 1:A:55:GLU:HB3 | 1:A:58:ALA:HB1 | 20 | 0.12 |
| (1,812) | 1:A:55:GLU:HB3 | 1:A:58:ALA:HB2 | 20 | 0.12 |
| (1,812) | 1:A:55:GLU:HB3 | 1:A:58:ALA:HB3 | 20 | 0.12 |
| (1,800) | 1:A:74:VAL:HG11 | 1:A:104:GLN:HB3 | 16 | 0.12 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|-----------------|-----------------|----------|---------------|
| (1,800) | 1:A:74:VAL:HG12 | 1:A:104:GLN:HB3 | 16 | 0.12 |
| (1,800) | 1:A:74:VAL:HG13 | 1:A:104:GLN:HB3 | 16 | 0.12 |
| (1,800) | 1:A:74:VAL:HG21 | 1:A:104:GLN:HB3 | 16 | 0.12 |
| (1,800) | 1:A:74:VAL:HG22 | 1:A:104:GLN:HB3 | 16 | 0.12 |
| (1,800) | 1:A:74:VAL:HG23 | 1:A:104:GLN:HB3 | 16 | 0.12 |
| (1,800) | 1:A:74:VAL:HG11 | 1:A:104:GLN:HB3 | 20 | 0.12 |
| (1,800) | 1:A:74:VAL:HG12 | 1:A:104:GLN:HB3 | 20 | 0.12 |
| (1,800) | 1:A:74:VAL:HG13 | 1:A:104:GLN:HB3 | 20 | 0.12 |
| (1,800) | 1:A:74:VAL:HG21 | 1:A:104:GLN:HB3 | 20 | 0.12 |
| (1,800) | 1:A:74:VAL:HG22 | 1:A:104:GLN:HB3 | 20 | 0.12 |
| (1,800) | 1:A:74:VAL:HG23 | 1:A:104:GLN:HB3 | 20 | 0.12 |
| (1,756) | 1:A:47:ASN:HB2 | 1:A:53:CYS:HA | 14 | 0.12 |
| (1,747) | 1:A:52:LEU:HA | 1:A:65:SER:HA | 5 | 0.12 |
| (1,747) | 1:A:52:LEU:HA | 1:A:65:SER:HA | 17 | 0.12 |
| (1,743) | 1:A:65:SER:HB2 | 1:A:66:GLU:HB2 | 10 | 0.12 |
| (1,743) | 1:A:65:SER:HB2 | 1:A:66:GLU:HB3 | 10 | 0.12 |
| (1,743) | 1:A:65:SER:HB2 | 1:A:66:GLU:HB2 | 11 | 0.12 |
| (1,743) | 1:A:65:SER:HB2 | 1:A:66:GLU:HB3 | 11 | 0.12 |
| (1,743) | 1:A:65:SER:HB2 | 1:A:66:GLU:HB2 | 18 | 0.12 |
| (1,743) | 1:A:65:SER:HB2 | 1:A:66:GLU:HB3 | 18 | 0.12 |
| (1,742) | 1:A:84:ILE:HG12 | 1:A:88:LEU:H | 18 | 0.12 |
| (1,735) | 1:A:104:GLN:HG2 | 1:A:105:LYS:H | 3 | 0.12 |
| (1,735) | 1:A:104:GLN:HG3 | 1:A:105:LYS:H | 3 | 0.12 |
| (1,731) | 1:A:44:ILE:HG21 | 1:A:83:CYS:H | 13 | 0.12 |
| (1,731) | 1:A:44:ILE:HG22 | 1:A:83:CYS:H | 13 | 0.12 |
| (1,731) | 1:A:44:ILE:HG23 | 1:A:83:CYS:H | 13 | 0.12 |
| (1,731) | 1:A:44:ILE:HG21 | 1:A:83:CYS:H | 16 | 0.12 |
| (1,731) | 1:A:44:ILE:HG22 | 1:A:83:CYS:H | 16 | 0.12 |
| (1,731) | 1:A:44:ILE:HG23 | 1:A:83:CYS:H | 16 | 0.12 |
| (1,730) | 1:A:87:TRP:HE1 | 1:A:101:TRP:HE3 | 2 | 0.12 |
| (1,730) | 1:A:87:TRP:HE1 | 1:A:101:TRP:HE3 | 11 | 0.12 |
| (1,715) | 1:A:94:CYS:H | 1:A:99:ARG:HG2 | 12 | 0.12 |
| (1,715) | 1:A:94:CYS:H | 1:A:99:ARG:HG3 | 12 | 0.12 |
| (1,705) | 1:A:73:GLY:H | 1:A:104:GLN:HG2 | 6 | 0.12 |
| (1,705) | 1:A:73:GLY:H | 1:A:104:GLN:HG3 | 6 | 0.12 |
| (1,705) | 1:A:73:GLY:H | 1:A:104:GLN:HG2 | 20 | 0.12 |
| (1,705) | 1:A:73:GLY:H | 1:A:104:GLN:HG3 | 20 | 0.12 |
| (1,695) | 1:A:68:CYS:H | 1:A:80:HIS:HE1 | 7 | 0.12 |
| (1,689) | 1:A:55:GLU:HB2 | 1:A:59:ASN:H | 7 | 0.12 |
| (1,689) | 1:A:55:GLU:HB2 | 1:A:59:ASN:H | 10 | 0.12 |
| (1,681) | 1:A:47:ASN:H | 1:A:53:CYS:HA | 6 | 0.12 |
| (1,681) | 1:A:47:ASN:H | 1:A:53:CYS:HA | 17 | 0.12 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|-----------------|-----------------|----------|---------------|
| (1,679) | 1:A:44:ILE:H | 1:A:47:ASN:H | 4 | 0.12 |
| (1,679) | 1:A:44:ILE:H | 1:A:47:ASN:H | 8 | 0.12 |
| (1,675) | 1:A:42:CYS:H | 1:A:48:HIS:HD2 | 12 | 0.12 |
| (1,67) | 1:A:42:CYS:H | 1:A:49:ILE:H | 16 | 0.12 |
| (1,630) | 1:A:43:ALA:H | 1:A:44:ILE:HG12 | 17 | 0.12 |
| (1,623) | 1:A:44:ILE:H | 1:A:83:CYS:HB2 | 3 | 0.12 |
| (1,618) | 1:A:45:CYS:H | 1:A:46:ARG:HB2 | 20 | 0.12 |
| (1,610) | 1:A:46:ARG:HB2 | 1:A:47:ASN:H | 8 | 0.12 |
| (1,588) | 1:A:54:ILE:HD11 | 1:A:56:CYS:H | 12 | 0.12 |
| (1,588) | 1:A:54:ILE:HD12 | 1:A:56:CYS:H | 12 | 0.12 |
| (1,588) | 1:A:54:ILE:HD13 | 1:A:56:CYS:H | 12 | 0.12 |
| (1,585) | 1:A:52:LEU:HA | 1:A:57:GLN:H | 4 | 0.12 |
| (1,585) | 1:A:52:LEU:HA | 1:A:57:GLN:H | 20 | 0.12 |
| (1,581) | 1:A:52:LEU:HD21 | 1:A:58:ALA:H | 12 | 0.12 |
| (1,581) | 1:A:52:LEU:HD22 | 1:A:58:ALA:H | 12 | 0.12 |
| (1,581) | 1:A:52:LEU:HD23 | 1:A:58:ALA:H | 12 | 0.12 |
| (1,564) | 1:A:71:ALA:H | 1:A:81:PHE:HB3 | 18 | 0.12 |
| (1,556) | 1:A:72:TRP:H | 1:A:72:TRP:HE3 | 20 | 0.12 |
| (1,550) | 1:A:73:GLY:H | 1:A:76:ASN:H | 3 | 0.12 |
| (1,550) | 1:A:73:GLY:H | 1:A:76:ASN:H | 16 | 0.12 |
| (1,550) | 1:A:73:GLY:H | 1:A:76:ASN:H | 17 | 0.12 |
| (1,545) | 1:A:73:GLY:H | 1:A:75:CYS:H | 13 | 0.12 |
| (1,530) | 1:A:70:VAL:HA | 1:A:79:PHE:H | 18 | 0.12 |
| (1,521) | 1:A:70:VAL:HG11 | 1:A:81:PHE:H | 13 | 0.12 |
| (1,521) | 1:A:70:VAL:HG12 | 1:A:81:PHE:H | 13 | 0.12 |
| (1,521) | 1:A:70:VAL:HG13 | 1:A:81:PHE:H | 13 | 0.12 |
| (1,500) | 1:A:84:ILE:HG12 | 1:A:85:SER:H | 2 | 0.12 |
| (1,495) | 1:A:83:CYS:HB3 | 1:A:85:SER:H | 13 | 0.12 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD11 | 8 | 0.12 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD12 | 8 | 0.12 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD13 | 8 | 0.12 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD11 | 9 | 0.12 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD12 | 9 | 0.12 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD13 | 9 | 0.12 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD11 | 15 | 0.12 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD12 | 15 | 0.12 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD13 | 15 | 0.12 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD11 | 16 | 0.12 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD12 | 16 | 0.12 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD13 | 16 | 0.12 |
| (1,486) | 1:A:87:TRP:H | 1:A:87:TRP:HD1 | 18 | 0.12 |
| (1,482) | 1:A:88:LEU:H | 1:A:90:THR:HG21 | 16 | 0.12 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|-----------------|-----------------|----------|---------------|
| (1,482) | 1:A:88:LEU:H | 1:A:90:THR:HG22 | 16 | 0.12 |
| (1,482) | 1:A:88:LEU:H | 1:A:90:THR:HG23 | 16 | 0.12 |
| (1,452) | 1:A:92:GLN:HB3 | 1:A:93:VAL:H | 6 | 0.12 |
| (1,452) | 1:A:92:GLN:HB3 | 1:A:93:VAL:H | 11 | 0.12 |
| (1,452) | 1:A:92:GLN:HB3 | 1:A:93:VAL:H | 17 | 0.12 |
| (1,452) | 1:A:92:GLN:HB3 | 1:A:93:VAL:H | 19 | 0.12 |
| (1,445) | 1:A:94:CYS:H | 1:A:97:ASP:HB2 | 19 | 0.12 |
| (1,43) | 1:A:48:HIS:HB2 | 1:A:49:ILE:H | 7 | 0.12 |
| (1,349) | 1:A:76:ASN:H | 1:A:76:ASN:HB3 | 14 | 0.12 |
| (1,349) | 1:A:76:ASN:H | 1:A:76:ASN:HB3 | 17 | 0.12 |
| (1,348) | 1:A:76:ASN:H | 1:A:77:HIS:HB2 | 9 | 0.12 |
| (1,34) | 1:A:37:ILE:HA | 1:A:38:VAL:H | 7 | 0.12 |
| (1,331) | 1:A:96:LEU:H | 1:A:98:ASN:H | 18 | 0.12 |
| (1,313) | 1:A:82:HIS:HD2 | 1:A:83:CYS:H | 10 | 0.12 |
| (1,313) | 1:A:82:HIS:HD2 | 1:A:83:CYS:H | 17 | 0.12 |
| (1,310) | 1:A:80:HIS:H | 1:A:83:CYS:H | 2 | 0.12 |
| (1,310) | 1:A:80:HIS:H | 1:A:83:CYS:H | 8 | 0.12 |
| (1,310) | 1:A:80:HIS:H | 1:A:83:CYS:H | 13 | 0.12 |
| (1,283) | 1:A:73:GLY:HA2 | 1:A:77:HIS:H | 15 | 0.12 |
| (1,276) | 1:A:52:LEU:HD21 | 1:A:57:GLN:H | 12 | 0.12 |
| (1,276) | 1:A:52:LEU:HD22 | 1:A:57:GLN:H | 12 | 0.12 |
| (1,276) | 1:A:52:LEU:HD23 | 1:A:57:GLN:H | 12 | 0.12 |
| (1,276) | 1:A:52:LEU:HD21 | 1:A:57:GLN:H | 16 | 0.12 |
| (1,276) | 1:A:52:LEU:HD22 | 1:A:57:GLN:H | 16 | 0.12 |
| (1,276) | 1:A:52:LEU:HD23 | 1:A:57:GLN:H | 16 | 0.12 |
| (1,267) | 1:A:57:GLN:H | 1:A:57:GLN:HG2 | 6 | 0.12 |
| (1,265) | 1:A:56:CYS:HB3 | 1:A:57:GLN:H | 3 | 0.12 |
| (1,265) | 1:A:56:CYS:HB3 | 1:A:57:GLN:H | 4 | 0.12 |
| (1,265) | 1:A:56:CYS:HB3 | 1:A:57:GLN:H | 17 | 0.12 |
| (1,265) | 1:A:56:CYS:HB3 | 1:A:57:GLN:H | 20 | 0.12 |
| (1,253) | 1:A:57:GLN:HB2 | 1:A:58:ALA:H | 4 | 0.12 |
| (1,253) | 1:A:57:GLN:HB2 | 1:A:58:ALA:H | 12 | 0.12 |
| (1,253) | 1:A:57:GLN:HB2 | 1:A:58:ALA:H | 13 | 0.12 |
| (1,253) | 1:A:57:GLN:HB2 | 1:A:58:ALA:H | 14 | 0.12 |
| (1,250) | 1:A:55:GLU:HA | 1:A:58:ALA:H | 9 | 0.12 |
| (1,238) | 1:A:81:PHE:HA | 1:A:85:SER:H | 14 | 0.12 |
| (1,21) | 1:A:65:SER:HA | 1:A:68:CYS:H | 5 | 0.12 |
| (1,21) | 1:A:65:SER:HA | 1:A:68:CYS:H | 10 | 0.12 |
| (1,209) | 1:A:80:HIS:H | 1:A:84:ILE:H | 3 | 0.12 |
| (1,209) | 1:A:80:HIS:H | 1:A:84:ILE:H | 5 | 0.12 |
| (1,209) | 1:A:80:HIS:H | 1:A:84:ILE:H | 12 | 0.12 |
| (1,209) | 1:A:80:HIS:H | 1:A:84:ILE:H | 16 | 0.12 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,209) | 1:A:80:HIS:H | 1:A:84:ILE:H | 19 | 0.12 |
| (1,199) | 1:A:94:CYS:HB3 | 1:A:99:ARG:H | 1 | 0.12 |
| (1,199) | 1:A:94:CYS:HB3 | 1:A:99:ARG:H | 7 | 0.12 |
| (1,181) | 1:A:36:ASP:HB2 | 1:A:37:ILE:H | 3 | 0.12 |
| (1,181) | 1:A:36:ASP:HB3 | 1:A:37:ILE:H | 3 | 0.12 |
| (1,165) | 1:A:45:CYS:HB2 | 1:A:47:ASN:H | 8 | 0.12 |
| (1,152) | 1:A:80:HIS:HB2 | 1:A:82:HIS:H | 2 | 0.12 |
| (1,150) | 1:A:91:ARG:H | 1:A:91:ARG:HB3 | 10 | 0.12 |
| (1,146) | 1:A:90:THR:HB | 1:A:91:ARG:H | 10 | 0.12 |
| (1,146) | 1:A:90:THR:HB | 1:A:91:ARG:H | 11 | 0.12 |
| (1,144) | 1:A:89:LYS:H | 1:A:91:ARG:H | 9 | 0.12 |
| (1,1313) | 1:A:77:HIS:ND1 | 1:A:94:CYS:SG | 8 | 0.12 |
| (1,1312) | 1:A:75:CYS:SG | 1:A:77:HIS:ND1 | 11 | 0.12 |
| (1,1310) | 1:A:56:CYS:SG | 1:A:82:HIS:ND1 | 4 | 0.12 |
| (1,1310) | 1:A:56:CYS:SG | 1:A:82:HIS:ND1 | 12 | 0.12 |
| (1,1307) | 1:A:45:CYS:SG | 1:A:80:HIS:ND1 | 3 | 0.12 |
| (1,1307) | 1:A:45:CYS:SG | 1:A:80:HIS:ND1 | 9 | 0.12 |
| (1,1297) | 1:A:70:VAL:HG11 | 1:A:72:TRP:HD1 | 2 | 0.12 |
| (1,1297) | 1:A:70:VAL:HG12 | 1:A:72:TRP:HD1 | 2 | 0.12 |
| (1,1297) | 1:A:70:VAL:HG13 | 1:A:72:TRP:HD1 | 2 | 0.12 |
| (1,1288) | 1:A:82:HIS:HD2 | 1:A:86:ARG:H | 1 | 0.12 |
| (1,1288) | 1:A:82:HIS:HD2 | 1:A:86:ARG:H | 11 | 0.12 |
| (1,1286) | 1:A:82:HIS:HA | 1:A:82:HIS:HD2 | 7 | 0.12 |
| (1,1281) | 1:A:49:ILE:HA | 1:A:80:HIS:HD2 | 15 | 0.12 |
| (1,1275) | 1:A:87:TRP:HB3 | 1:A:87:TRP:HE3 | 8 | 0.12 |
| (1,1275) | 1:A:87:TRP:HB3 | 1:A:87:TRP:HE3 | 13 | 0.12 |
| (1,1275) | 1:A:87:TRP:HB3 | 1:A:87:TRP:HE3 | 19 | 0.12 |
| (1,1272) | 1:A:101:TRP:HB3 | 1:A:101:TRP:HE3 | 1 | 0.12 |
| (1,1272) | 1:A:101:TRP:HB3 | 1:A:101:TRP:HE3 | 4 | 0.12 |
| (1,1272) | 1:A:101:TRP:HB3 | 1:A:101:TRP:HE3 | 6 | 0.12 |
| (1,1272) | 1:A:101:TRP:HB3 | 1:A:101:TRP:HE3 | 14 | 0.12 |
| (1,1272) | 1:A:101:TRP:HB3 | 1:A:101:TRP:HE3 | 20 | 0.12 |
| (1,1268) | 1:A:71:ALA:HA | 1:A:72:TRP:HE3 | 3 | 0.12 |
| (1,1263) | 1:A:70:VAL:HB | 1:A:72:TRP:HZ3 | 20 | 0.12 |
| (1,1259) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HD1 | 7 | 0.12 |
| (1,1259) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HD1 | 10 | 0.12 |
| (1,1259) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HD1 | 11 | 0.12 |
| (1,1253) | 1:A:87:TRP:HB2 | 1:A:87:TRP:HD1 | 5 | 0.12 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD11 | 17 | 0.12 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD12 | 17 | 0.12 |
| (1,1240) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HD13 | 17 | 0.12 |
| (1,1236) | 1:A:79:PHE:HB2 | 1:A:79:PHE:HD1 | 19 | 0.12 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1226) | 1:A:77:HIS:HE1 | 1:A:96:LEU:HG | 10 | 0.12 |
| (1,1221) | 1:A:68:CYS:HB2 | 1:A:80:HIS:HE1 | 6 | 0.12 |
| (1,1221) | 1:A:68:CYS:HB3 | 1:A:80:HIS:HE1 | 6 | 0.12 |
| (1,1221) | 1:A:68:CYS:HB2 | 1:A:80:HIS:HE1 | 11 | 0.12 |
| (1,1221) | 1:A:68:CYS:HB3 | 1:A:80:HIS:HE1 | 11 | 0.12 |
| (1,1221) | 1:A:68:CYS:HB2 | 1:A:80:HIS:HE1 | 13 | 0.12 |
| (1,1221) | 1:A:68:CYS:HB3 | 1:A:80:HIS:HE1 | 13 | 0.12 |
| (1,1211) | 1:A:93:VAL:HG11 | 1:A:94:CYS:HA | 2 | 0.12 |
| (1,1211) | 1:A:93:VAL:HG12 | 1:A:94:CYS:HA | 2 | 0.12 |
| (1,1211) | 1:A:93:VAL:HG13 | 1:A:94:CYS:HA | 2 | 0.12 |
| (1,1211) | 1:A:93:VAL:HG11 | 1:A:94:CYS:HA | 4 | 0.12 |
| (1,1211) | 1:A:93:VAL:HG12 | 1:A:94:CYS:HA | 4 | 0.12 |
| (1,1211) | 1:A:93:VAL:HG13 | 1:A:94:CYS:HA | 4 | 0.12 |
| (1,1211) | 1:A:93:VAL:HG11 | 1:A:94:CYS:HA | 5 | 0.12 |
| (1,1211) | 1:A:93:VAL:HG12 | 1:A:94:CYS:HA | 5 | 0.12 |
| (1,1211) | 1:A:93:VAL:HG13 | 1:A:94:CYS:HA | 5 | 0.12 |
| (1,1211) | 1:A:93:VAL:HG11 | 1:A:94:CYS:HA | 6 | 0.12 |
| (1,1211) | 1:A:93:VAL:HG12 | 1:A:94:CYS:HA | 6 | 0.12 |
| (1,1211) | 1:A:93:VAL:HG13 | 1:A:94:CYS:HA | 6 | 0.12 |
| (1,1211) | 1:A:93:VAL:HG11 | 1:A:94:CYS:HA | 12 | 0.12 |
| (1,1211) | 1:A:93:VAL:HG12 | 1:A:94:CYS:HA | 12 | 0.12 |
| (1,1211) | 1:A:93:VAL:HG13 | 1:A:94:CYS:HA | 12 | 0.12 |
| (1,1199) | 1:A:64:THR:HA | 1:A:66:GLU:HB2 | 9 | 0.12 |
| (1,1164) | 1:A:52:LEU:HD21 | 1:A:65:SER:HB2 | 15 | 0.12 |
| (1,1164) | 1:A:52:LEU:HD22 | 1:A:65:SER:HB2 | 15 | 0.12 |
| (1,1164) | 1:A:52:LEU:HD23 | 1:A:65:SER:HB2 | 15 | 0.12 |
| (1,1160) | 1:A:72:TRP:HB3 | 1:A:74:VAL:HA | 16 | 0.12 |
| (1,1151) | 1:A:43:ALA:HB1 | 1:A:46:ARG:HA | 5 | 0.12 |
| (1,1151) | 1:A:43:ALA:HB2 | 1:A:46:ARG:HA | 5 | 0.12 |
| (1,1151) | 1:A:43:ALA:HB3 | 1:A:46:ARG:HA | 5 | 0.12 |
| (1,1126) | 1:A:79:PHE:HB3 | 1:A:84:ILE:HG21 | 3 | 0.12 |
| (1,1126) | 1:A:79:PHE:HB3 | 1:A:84:ILE:HG22 | 3 | 0.12 |
| (1,1126) | 1:A:79:PHE:HB3 | 1:A:84:ILE:HG23 | 3 | 0.12 |
| (1,1126) | 1:A:79:PHE:HB3 | 1:A:84:ILE:HG21 | 6 | 0.12 |
| (1,1126) | 1:A:79:PHE:HB3 | 1:A:84:ILE:HG22 | 6 | 0.12 |
| (1,1126) | 1:A:79:PHE:HB3 | 1:A:84:ILE:HG23 | 6 | 0.12 |
| (1,1126) | 1:A:79:PHE:HB3 | 1:A:84:ILE:HG21 | 11 | 0.12 |
| (1,1126) | 1:A:79:PHE:HB3 | 1:A:84:ILE:HG22 | 11 | 0.12 |
| (1,1126) | 1:A:79:PHE:HB3 | 1:A:84:ILE:HG23 | 11 | 0.12 |
| (1,1126) | 1:A:79:PHE:HB3 | 1:A:84:ILE:HG21 | 17 | 0.12 |
| (1,1126) | 1:A:79:PHE:HB3 | 1:A:84:ILE:HG22 | 17 | 0.12 |
| (1,1126) | 1:A:79:PHE:HB3 | 1:A:84:ILE:HG23 | 17 | 0.12 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1126) | 1:A:79:PHE:HB3 | 1:A:84:ILE:HG21 | 20 | 0.12 |
| (1,1126) | 1:A:79:PHE:HB3 | 1:A:84:ILE:HG22 | 20 | 0.12 |
| (1,1126) | 1:A:79:PHE:HB3 | 1:A:84:ILE:HG23 | 20 | 0.12 |
| (1,1090) | 1:A:95:PRO:HD3 | 1:A:97:ASP:H | 7 | 0.12 |
| (1,1090) | 1:A:95:PRO:HD3 | 1:A:97:ASP:H | 18 | 0.12 |
| (1,1074) | 1:A:64:THR:HB | 1:A:67:GLU:HB3 | 18 | 0.12 |
| (1,1073) | 1:A:64:THR:HB | 1:A:66:GLU:HB2 | 19 | 0.12 |
| (1,1054) | 1:A:49:ILE:HD11 | 1:A:50:MET:HA | 8 | 0.12 |
| (1,1054) | 1:A:49:ILE:HD12 | 1:A:50:MET:HA | 8 | 0.12 |
| (1,1054) | 1:A:49:ILE:HD13 | 1:A:50:MET:HA | 8 | 0.12 |
| (1,1054) | 1:A:49:ILE:HD11 | 1:A:50:MET:HA | 10 | 0.12 |
| (1,1054) | 1:A:49:ILE:HD12 | 1:A:50:MET:HA | 10 | 0.12 |
| (1,1054) | 1:A:49:ILE:HD13 | 1:A:50:MET:HA | 10 | 0.12 |
| (1,1054) | 1:A:49:ILE:HD11 | 1:A:50:MET:HA | 17 | 0.12 |
| (1,1054) | 1:A:49:ILE:HD12 | 1:A:50:MET:HA | 17 | 0.12 |
| (1,1054) | 1:A:49:ILE:HD13 | 1:A:50:MET:HA | 17 | 0.12 |
| (1,1054) | 1:A:49:ILE:HD11 | 1:A:50:MET:HA | 19 | 0.12 |
| (1,1054) | 1:A:49:ILE:HD12 | 1:A:50:MET:HA | 19 | 0.12 |
| (1,1054) | 1:A:49:ILE:HD13 | 1:A:50:MET:HA | 19 | 0.12 |
| (1,1045) | 1:A:54:ILE:HG21 | 1:A:55:GLU:HG2 | 10 | 0.12 |
| (1,1045) | 1:A:54:ILE:HG22 | 1:A:55:GLU:HG2 | 10 | 0.12 |
| (1,1045) | 1:A:54:ILE:HG23 | 1:A:55:GLU:HG2 | 10 | 0.12 |
| (1,103) | 1:A:47:ASN:HB2 | 1:A:48:HIS:H | 8 | 0.12 |
| (1,103) | 1:A:47:ASN:HB2 | 1:A:48:HIS:H | 16 | 0.12 |
| (1,1024) | 1:A:77:HIS:HD2 | 1:A:96:LEU:HD21 | 7 | 0.12 |
| (1,1024) | 1:A:77:HIS:HD2 | 1:A:96:LEU:HD22 | 7 | 0.12 |
| (1,1024) | 1:A:77:HIS:HD2 | 1:A:96:LEU:HD23 | 7 | 0.12 |
| (1,1012) | 1:A:96:LEU:HD11 | 1:A:97:ASP:HB2 | 7 | 0.12 |
| (1,1012) | 1:A:96:LEU:HD12 | 1:A:97:ASP:HB2 | 7 | 0.12 |
| (1,1012) | 1:A:96:LEU:HD13 | 1:A:97:ASP:HB2 | 7 | 0.12 |
| (1,1005) | 1:A:77:HIS:HD2 | 1:A:96:LEU:HG | 20 | 0.12 |
| (3,5) | 1:A:53:CYS:SG | 1:A:68:CYS:SG | 3 | 0.11 |
| (3,5) | 1:A:53:CYS:SG | 1:A:68:CYS:SG | 9 | 0.11 |
| (3,5) | 1:A:53:CYS:SG | 1:A:68:CYS:SG | 10 | 0.11 |
| (3,5) | 1:A:53:CYS:SG | 1:A:68:CYS:SG | 17 | 0.11 |
| (2,5) | 1:A:73:GLY:O | 1:A:77:HIS:H | 7 | 0.11 |
| (2,5) | 1:A:73:GLY:O | 1:A:77:HIS:H | 18 | 0.11 |
| (2,5) | 1:A:73:GLY:O | 1:A:77:HIS:H | 20 | 0.11 |
| (2,20) | 1:A:86:ARG:O | 1:A:90:THR:N | 16 | 0.11 |
| (1,997) | 1:A:49:ILE:HG12 | 1:A:72:TRP:HZ2 | 5 | 0.11 |
| (1,997) | 1:A:49:ILE:HG12 | 1:A:72:TRP:HZ2 | 7 | 0.11 |
| (1,997) | 1:A:49:ILE:HG12 | 1:A:72:TRP:HZ2 | 8 | 0.11 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|-----------------|-----------------|----------|---------------|
| (1,997) | 1:A:49:ILE:HG12 | 1:A:72:TRP:HZ2 | 20 | 0.11 |
| (1,99) | 1:A:54:ILE:HG21 | 1:A:55:GLU:H | 4 | 0.11 |
| (1,99) | 1:A:54:ILE:HG22 | 1:A:55:GLU:H | 4 | 0.11 |
| (1,99) | 1:A:54:ILE:HG23 | 1:A:55:GLU:H | 4 | 0.11 |
| (1,99) | 1:A:54:ILE:HG21 | 1:A:55:GLU:H | 20 | 0.11 |
| (1,99) | 1:A:54:ILE:HG22 | 1:A:55:GLU:H | 20 | 0.11 |
| (1,99) | 1:A:54:ILE:HG23 | 1:A:55:GLU:H | 20 | 0.11 |
| (1,973) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HB2 | 17 | 0.11 |
| (1,973) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HB2 | 20 | 0.11 |
| (1,969) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HB3 | 18 | 0.11 |
| (1,959) | 1:A:49:ILE:HG12 | 1:A:50:MET:HB3 | 4 | 0.11 |
| (1,959) | 1:A:49:ILE:HG12 | 1:A:50:MET:HB3 | 5 | 0.11 |
| (1,927) | 1:A:79:PHE:HD1 | 1:A:84:ILE:HB | 18 | 0.11 |
| (1,926) | 1:A:79:PHE:H | 1:A:84:ILE:HB | 2 | 0.11 |
| (1,926) | 1:A:79:PHE:H | 1:A:84:ILE:HB | 4 | 0.11 |
| (1,926) | 1:A:79:PHE:H | 1:A:84:ILE:HB | 10 | 0.11 |
| (1,905) | 1:A:86:ARG:HA | 1:A:89:LYS:HE3 | 1 | 0.11 |
| (1,87) | 1:A:107:GLY:HA2 | 1:A:108:HIS:H | 3 | 0.11 |
| (1,86) | 1:A:108:HIS:H | 1:A:108:HIS:HE1 | 1 | 0.11 |
| (1,854) | 1:A:87:TRP:HA | 1:A:91:ARG:HG2 | 9 | 0.11 |
| (1,851) | 1:A:48:HIS:HD2 | 1:A:49:ILE:HA | 7 | 0.11 |
| (1,844) | 1:A:54:ILE:HA | 1:A:55:GLU:HG2 | 10 | 0.11 |
| (1,844) | 1:A:54:ILE:HA | 1:A:55:GLU:HG2 | 15 | 0.11 |
| (1,83) | 1:A:86:ARG:HG3 | 1:A:87:TRP:H | 19 | 0.11 |
| (1,815) | 1:A:91:ARG:HB2 | 1:A:93:VAL:HG21 | 1 | 0.11 |
| (1,815) | 1:A:91:ARG:HB2 | 1:A:93:VAL:HG22 | 1 | 0.11 |
| (1,815) | 1:A:91:ARG:HB2 | 1:A:93:VAL:HG23 | 1 | 0.11 |
| (1,815) | 1:A:91:ARG:HB2 | 1:A:93:VAL:HG21 | 9 | 0.11 |
| (1,815) | 1:A:91:ARG:HB2 | 1:A:93:VAL:HG22 | 9 | 0.11 |
| (1,815) | 1:A:91:ARG:HB2 | 1:A:93:VAL:HG23 | 9 | 0.11 |
| (1,815) | 1:A:91:ARG:HB2 | 1:A:93:VAL:HG21 | 10 | 0.11 |
| (1,815) | 1:A:91:ARG:HB2 | 1:A:93:VAL:HG22 | 10 | 0.11 |
| (1,815) | 1:A:91:ARG:HB2 | 1:A:93:VAL:HG23 | 10 | 0.11 |
| (1,815) | 1:A:91:ARG:HB2 | 1:A:93:VAL:HG21 | 13 | 0.11 |
| (1,815) | 1:A:91:ARG:HB2 | 1:A:93:VAL:HG22 | 13 | 0.11 |
| (1,815) | 1:A:91:ARG:HB2 | 1:A:93:VAL:HG23 | 13 | 0.11 |
| (1,814) | 1:A:54:ILE:HG21 | 1:A:54:ILE:HG13 | 4 | 0.11 |
| (1,814) | 1:A:54:ILE:HG22 | 1:A:54:ILE:HG13 | 4 | 0.11 |
| (1,814) | 1:A:54:ILE:HG23 | 1:A:54:ILE:HG13 | 4 | 0.11 |
| (1,814) | 1:A:54:ILE:HG21 | 1:A:54:ILE:HG13 | 5 | 0.11 |
| (1,814) | 1:A:54:ILE:HG22 | 1:A:54:ILE:HG13 | 5 | 0.11 |
| (1,814) | 1:A:54:ILE:HG23 | 1:A:54:ILE:HG13 | 5 | 0.11 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|-----------------|-----------------|----------|---------------|
| (1,814) | 1:A:54:ILE:HG21 | 1:A:54:ILE:HG13 | 6 | 0.11 |
| (1,814) | 1:A:54:ILE:HG22 | 1:A:54:ILE:HG13 | 6 | 0.11 |
| (1,814) | 1:A:54:ILE:HG23 | 1:A:54:ILE:HG13 | 6 | 0.11 |
| (1,814) | 1:A:54:ILE:HG21 | 1:A:54:ILE:HG13 | 8 | 0.11 |
| (1,814) | 1:A:54:ILE:HG22 | 1:A:54:ILE:HG13 | 8 | 0.11 |
| (1,814) | 1:A:54:ILE:HG23 | 1:A:54:ILE:HG13 | 8 | 0.11 |
| (1,814) | 1:A:54:ILE:HG21 | 1:A:54:ILE:HG13 | 12 | 0.11 |
| (1,814) | 1:A:54:ILE:HG22 | 1:A:54:ILE:HG13 | 12 | 0.11 |
| (1,814) | 1:A:54:ILE:HG23 | 1:A:54:ILE:HG13 | 12 | 0.11 |
| (1,814) | 1:A:54:ILE:HG21 | 1:A:54:ILE:HG13 | 18 | 0.11 |
| (1,814) | 1:A:54:ILE:HG22 | 1:A:54:ILE:HG13 | 18 | 0.11 |
| (1,814) | 1:A:54:ILE:HG23 | 1:A:54:ILE:HG13 | 18 | 0.11 |
| (1,812) | 1:A:55:GLU:HB2 | 1:A:58:ALA:HB1 | 4 | 0.11 |
| (1,812) | 1:A:55:GLU:HB2 | 1:A:58:ALA:HB2 | 4 | 0.11 |
| (1,812) | 1:A:55:GLU:HB2 | 1:A:58:ALA:HB3 | 4 | 0.11 |
| (1,812) | 1:A:55:GLU:HB3 | 1:A:58:ALA:HB1 | 4 | 0.11 |
| (1,812) | 1:A:55:GLU:HB3 | 1:A:58:ALA:HB2 | 4 | 0.11 |
| (1,812) | 1:A:55:GLU:HB3 | 1:A:58:ALA:HB3 | 4 | 0.11 |
| (1,800) | 1:A:74:VAL:HG11 | 1:A:104:GLN:HB3 | 2 | 0.11 |
| (1,800) | 1:A:74:VAL:HG12 | 1:A:104:GLN:HB3 | 2 | 0.11 |
| (1,800) | 1:A:74:VAL:HG13 | 1:A:104:GLN:HB3 | 2 | 0.11 |
| (1,800) | 1:A:74:VAL:HG21 | 1:A:104:GLN:HB3 | 2 | 0.11 |
| (1,800) | 1:A:74:VAL:HG22 | 1:A:104:GLN:HB3 | 2 | 0.11 |
| (1,800) | 1:A:74:VAL:HG23 | 1:A:104:GLN:HB3 | 2 | 0.11 |
| (1,800) | 1:A:74:VAL:HG11 | 1:A:104:GLN:HB3 | 12 | 0.11 |
| (1,800) | 1:A:74:VAL:HG12 | 1:A:104:GLN:HB3 | 12 | 0.11 |
| (1,800) | 1:A:74:VAL:HG13 | 1:A:104:GLN:HB3 | 12 | 0.11 |
| (1,800) | 1:A:74:VAL:HG21 | 1:A:104:GLN:HB3 | 12 | 0.11 |
| (1,800) | 1:A:74:VAL:HG22 | 1:A:104:GLN:HB3 | 12 | 0.11 |
| (1,800) | 1:A:74:VAL:HG23 | 1:A:104:GLN:HB3 | 12 | 0.11 |
| (1,800) | 1:A:74:VAL:HG11 | 1:A:104:GLN:HB3 | 14 | 0.11 |
| (1,800) | 1:A:74:VAL:HG12 | 1:A:104:GLN:HB3 | 14 | 0.11 |
| (1,800) | 1:A:74:VAL:HG13 | 1:A:104:GLN:HB3 | 14 | 0.11 |
| (1,800) | 1:A:74:VAL:HG21 | 1:A:104:GLN:HB3 | 14 | 0.11 |
| (1,800) | 1:A:74:VAL:HG22 | 1:A:104:GLN:HB3 | 14 | 0.11 |
| (1,800) | 1:A:74:VAL:HG23 | 1:A:104:GLN:HB3 | 14 | 0.11 |
| (1,800) | 1:A:74:VAL:HG11 | 1:A:104:GLN:HB3 | 15 | 0.11 |
| (1,800) | 1:A:74:VAL:HG12 | 1:A:104:GLN:HB3 | 15 | 0.11 |
| (1,800) | 1:A:74:VAL:HG13 | 1:A:104:GLN:HB3 | 15 | 0.11 |
| (1,800) | 1:A:74:VAL:HG21 | 1:A:104:GLN:HB3 | 15 | 0.11 |
| (1,800) | 1:A:74:VAL:HG22 | 1:A:104:GLN:HB3 | 15 | 0.11 |
| (1,800) | 1:A:74:VAL:HG23 | 1:A:104:GLN:HB3 | 15 | 0.11 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|-----------------|-----------------|----------|---------------|
| (1,795) | 1:A:52:LEU:HD21 | 1:A:56:CYS:HB2 | 13 | 0.11 |
| (1,795) | 1:A:52:LEU:HD22 | 1:A:56:CYS:HB2 | 13 | 0.11 |
| (1,795) | 1:A:52:LEU:HD23 | 1:A:56:CYS:HB2 | 13 | 0.11 |
| (1,783) | 1:A:79:PHE:H | 1:A:84:ILE:HG21 | 1 | 0.11 |
| (1,783) | 1:A:79:PHE:H | 1:A:84:ILE:HG22 | 1 | 0.11 |
| (1,783) | 1:A:79:PHE:H | 1:A:84:ILE:HG23 | 1 | 0.11 |
| (1,783) | 1:A:79:PHE:H | 1:A:84:ILE:HG21 | 17 | 0.11 |
| (1,783) | 1:A:79:PHE:H | 1:A:84:ILE:HG22 | 17 | 0.11 |
| (1,783) | 1:A:79:PHE:H | 1:A:84:ILE:HG23 | 17 | 0.11 |
| (1,747) | 1:A:52:LEU:HA | 1:A:65:SER:HA | 2 | 0.11 |
| (1,743) | 1:A:65:SER:HB2 | 1:A:66:GLU:HB2 | 9 | 0.11 |
| (1,743) | 1:A:65:SER:HB2 | 1:A:66:GLU:HB3 | 9 | 0.11 |
| (1,730) | 1:A:87:TRP:HE1 | 1:A:101:TRP:HE3 | 14 | 0.11 |
| (1,725) | 1:A:55:GLU:HB3 | 1:A:59:ASN:HD22 | 6 | 0.11 |
| (1,725) | 1:A:55:GLU:HB3 | 1:A:59:ASN:HD22 | 14 | 0.11 |
| (1,721) | 1:A:58:ALA:HB1 | 1:A:59:ASN:HD21 | 4 | 0.11 |
| (1,721) | 1:A:58:ALA:HB2 | 1:A:59:ASN:HD21 | 4 | 0.11 |
| (1,721) | 1:A:58:ALA:HB3 | 1:A:59:ASN:HD21 | 4 | 0.11 |
| (1,718) | 1:A:101:TRP:HZ2 | 1:A:103:PHE:H | 13 | 0.11 |
| (1,716) | 1:A:94:CYS:H | 1:A:95:PRO:HD3 | 19 | 0.11 |
| (1,708) | 1:A:73:GLY:HA3 | 1:A:79:PHE:H | 3 | 0.11 |
| (1,708) | 1:A:73:GLY:HA3 | 1:A:79:PHE:H | 9 | 0.11 |
| (1,708) | 1:A:73:GLY:HA3 | 1:A:79:PHE:H | 12 | 0.11 |
| (1,708) | 1:A:73:GLY:HA3 | 1:A:79:PHE:H | 14 | 0.11 |
| (1,696) | 1:A:67:GLU:HB2 | 1:A:69:THR:H | 4 | 0.11 |
| (1,696) | 1:A:67:GLU:HB3 | 1:A:69:THR:H | 4 | 0.11 |
| (1,695) | 1:A:68:CYS:H | 1:A:80:HIS:HE1 | 2 | 0.11 |
| (1,681) | 1:A:47:ASN:H | 1:A:53:CYS:HA | 10 | 0.11 |
| (1,679) | 1:A:44:ILE:H | 1:A:47:ASN:H | 2 | 0.11 |
| (1,648) | 1:A:42:CYS:HB2 | 1:A:47:ASN:H | 5 | 0.11 |
| (1,648) | 1:A:42:CYS:HB2 | 1:A:47:ASN:H | 16 | 0.11 |
| (1,643) | 1:A:37:ILE:HG12 | 1:A:38:VAL:H | 1 | 0.11 |
| (1,629) | 1:A:43:ALA:H | 1:A:44:ILE:HG21 | 5 | 0.11 |
| (1,629) | 1:A:43:ALA:H | 1:A:44:ILE:HG22 | 5 | 0.11 |
| (1,629) | 1:A:43:ALA:H | 1:A:44:ILE:HG23 | 5 | 0.11 |
| (1,629) | 1:A:43:ALA:H | 1:A:44:ILE:HG21 | 7 | 0.11 |
| (1,629) | 1:A:43:ALA:H | 1:A:44:ILE:HG22 | 7 | 0.11 |
| (1,629) | 1:A:43:ALA:H | 1:A:44:ILE:HG23 | 7 | 0.11 |
| (1,628) | 1:A:42:CYS:HB2 | 1:A:43:ALA:H | 16 | 0.11 |
| (1,623) | 1:A:44:ILE:H | 1:A:83:CYS:HB2 | 17 | 0.11 |
| (1,618) | 1:A:45:CYS:H | 1:A:46:ARG:HB2 | 11 | 0.11 |
| (1,610) | 1:A:46:ARG:HB2 | 1:A:47:ASN:H | 12 | 0.11 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|---------|-----------------|-----------------|----------|---------------|
| (1,610) | 1:A:46:ARG:HB2 | 1:A:47:ASN:H | 14 | 0.11 |
| (1,610) | 1:A:46:ARG:HB2 | 1:A:47:ASN:H | 17 | 0.11 |
| (1,599) | 1:A:41:ASN:HB2 | 1:A:49:ILE:H | 4 | 0.11 |
| (1,599) | 1:A:41:ASN:HB2 | 1:A:49:ILE:H | 9 | 0.11 |
| (1,597) | 1:A:51:ASP:H | 1:A:70:VAL:HG11 | 1 | 0.11 |
| (1,597) | 1:A:51:ASP:H | 1:A:70:VAL:HG12 | 1 | 0.11 |
| (1,597) | 1:A:51:ASP:H | 1:A:70:VAL:HG13 | 1 | 0.11 |
| (1,595) | 1:A:52:LEU:H | 1:A:65:SER:HB3 | 4 | 0.11 |
| (1,564) | 1:A:71:ALA:H | 1:A:81:PHE:HB3 | 8 | 0.11 |
| (1,564) | 1:A:71:ALA:H | 1:A:81:PHE:HB3 | 13 | 0.11 |
| (1,564) | 1:A:71:ALA:H | 1:A:81:PHE:HB3 | 16 | 0.11 |
| (1,556) | 1:A:72:TRP:H | 1:A:72:TRP:HE3 | 5 | 0.11 |
| (1,556) | 1:A:72:TRP:H | 1:A:72:TRP:HE3 | 10 | 0.11 |
| (1,556) | 1:A:72:TRP:H | 1:A:72:TRP:HE3 | 11 | 0.11 |
| (1,553) | 1:A:73:GLY:H | 1:A:104:GLN:HB2 | 9 | 0.11 |
| (1,553) | 1:A:73:GLY:H | 1:A:104:GLN:HB2 | 10 | 0.11 |
| (1,543) | 1:A:76:ASN:H | 1:A:77:HIS:HA | 1 | 0.11 |
| (1,530) | 1:A:70:VAL:HA | 1:A:79:PHE:H | 6 | 0.11 |
| (1,521) | 1:A:70:VAL:HG11 | 1:A:81:PHE:H | 3 | 0.11 |
| (1,521) | 1:A:70:VAL:HG12 | 1:A:81:PHE:H | 3 | 0.11 |
| (1,521) | 1:A:70:VAL:HG13 | 1:A:81:PHE:H | 3 | 0.11 |
| (1,521) | 1:A:70:VAL:HG11 | 1:A:81:PHE:H | 18 | 0.11 |
| (1,521) | 1:A:70:VAL:HG12 | 1:A:81:PHE:H | 18 | 0.11 |
| (1,521) | 1:A:70:VAL:HG13 | 1:A:81:PHE:H | 18 | 0.11 |
| (1,507) | 1:A:44:ILE:HB | 1:A:83:CYS:H | 9 | 0.11 |
| (1,507) | 1:A:44:ILE:HB | 1:A:83:CYS:H | 16 | 0.11 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD11 | 14 | 0.11 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD12 | 14 | 0.11 |
| (1,491) | 1:A:87:TRP:H | 1:A:88:LEU:HD13 | 14 | 0.11 |
| (1,486) | 1:A:87:TRP:H | 1:A:87:TRP:HD1 | 7 | 0.11 |
| (1,450) | 1:A:93:VAL:H | 1:A:101:TRP:HB2 | 2 | 0.11 |
| (1,446) | 1:A:94:CYS:H | 1:A:101:TRP:HB3 | 5 | 0.11 |
| (1,43) | 1:A:48:HIS:HB2 | 1:A:49:ILE:H | 4 | 0.11 |
| (1,43) | 1:A:48:HIS:HB2 | 1:A:49:ILE:H | 11 | 0.11 |
| (1,43) | 1:A:48:HIS:HB2 | 1:A:49:ILE:H | 15 | 0.11 |
| (1,416) | 1:A:101:TRP:HH2 | 1:A:104:GLN:H | 18 | 0.11 |
| (1,408) | 1:A:80:HIS:HA | 1:A:84:ILE:H | 15 | 0.11 |
| (1,39) | 1:A:88:LEU:HD21 | 1:A:101:TRP:H | 2 | 0.11 |
| (1,39) | 1:A:88:LEU:HD22 | 1:A:101:TRP:H | 2 | 0.11 |
| (1,39) | 1:A:88:LEU:HD23 | 1:A:101:TRP:H | 2 | 0.11 |
| (1,368) | 1:A:96:LEU:HG | 1:A:97:ASP:H | 13 | 0.11 |
| (1,349) | 1:A:76:ASN:H | 1:A:76:ASN:HB3 | 1 | 0.11 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|----------------|----------|---------------|
| (1,349) | 1:A:76:ASN:H | 1:A:76:ASN:HB3 | 5 | 0.11 |
| (1,349) | 1:A:76:ASN:H | 1:A:76:ASN:HB3 | 13 | 0.11 |
| (1,349) | 1:A:76:ASN:H | 1:A:76:ASN:HB3 | 18 | 0.11 |
| (1,348) | 1:A:76:ASN:H | 1:A:77:HIS:HB2 | 5 | 0.11 |
| (1,348) | 1:A:76:ASN:H | 1:A:77:HIS:HB2 | 8 | 0.11 |
| (1,348) | 1:A:76:ASN:H | 1:A:77:HIS:HB2 | 10 | 0.11 |
| (1,348) | 1:A:76:ASN:H | 1:A:77:HIS:HB2 | 14 | 0.11 |
| (1,336) | 1:A:97:ASP:HB3 | 1:A:98:ASN:H | 8 | 0.11 |
| (1,313) | 1:A:82:HIS:HD2 | 1:A:83:CYS:H | 14 | 0.11 |
| (1,310) | 1:A:80:HIS:H | 1:A:83:CYS:H | 6 | 0.11 |
| (1,310) | 1:A:80:HIS:H | 1:A:83:CYS:H | 9 | 0.11 |
| (1,310) | 1:A:80:HIS:H | 1:A:83:CYS:H | 15 | 0.11 |
| (1,310) | 1:A:80:HIS:H | 1:A:83:CYS:H | 17 | 0.11 |
| (1,292) | 1:A:44:ILE:HG12 | 1:A:45:CYS:H | 6 | 0.11 |
| (1,292) | 1:A:44:ILE:HG12 | 1:A:45:CYS:H | 7 | 0.11 |
| (1,285) | 1:A:42:CYS:HB2 | 1:A:45:CYS:H | 3 | 0.11 |
| (1,285) | 1:A:42:CYS:HB2 | 1:A:45:CYS:H | 20 | 0.11 |
| (1,283) | 1:A:73:GLY:HA2 | 1:A:77:HIS:H | 12 | 0.11 |
| (1,265) | 1:A:56:CYS:HB3 | 1:A:57:GLN:H | 1 | 0.11 |
| (1,265) | 1:A:56:CYS:HB3 | 1:A:57:GLN:H | 6 | 0.11 |
| (1,250) | 1:A:55:GLU:HA | 1:A:58:ALA:H | 20 | 0.11 |
| (1,25) | 1:A:67:GLU:HB3 | 1:A:68:CYS:H | 14 | 0.11 |
| (1,238) | 1:A:81:PHE:HA | 1:A:85:SER:H | 3 | 0.11 |
| (1,21) | 1:A:65:SER:HA | 1:A:68:CYS:H | 17 | 0.11 |
| (1,209) | 1:A:80:HIS:H | 1:A:84:ILE:H | 7 | 0.11 |
| (1,209) | 1:A:80:HIS:H | 1:A:84:ILE:H | 8 | 0.11 |
| (1,209) | 1:A:80:HIS:H | 1:A:84:ILE:H | 9 | 0.11 |
| (1,209) | 1:A:80:HIS:H | 1:A:84:ILE:H | 13 | 0.11 |
| (1,209) | 1:A:80:HIS:H | 1:A:84:ILE:H | 20 | 0.11 |
| (1,205) | 1:A:93:VAL:HG11 | 1:A:99:ARG:H | 13 | 0.11 |
| (1,205) | 1:A:93:VAL:HG12 | 1:A:99:ARG:H | 13 | 0.11 |
| (1,205) | 1:A:93:VAL:HG13 | 1:A:99:ARG:H | 13 | 0.11 |
| (1,199) | 1:A:94:CYS:HB3 | 1:A:99:ARG:H | 9 | 0.11 |
| (1,199) | 1:A:94:CYS:HB3 | 1:A:99:ARG:H | 11 | 0.11 |
| (1,152) | 1:A:80:HIS:HB2 | 1:A:82:HIS:H | 14 | 0.11 |
| (1,150) | 1:A:91:ARG:H | 1:A:91:ARG:HB3 | 12 | 0.11 |
| (1,146) | 1:A:90:THR:HB | 1:A:91:ARG:H | 9 | 0.11 |
| (1,144) | 1:A:89:LYS:H | 1:A:91:ARG:H | 16 | 0.11 |
| (1,1312) | 1:A:75:CYS:SG | 1:A:77:HIS:ND1 | 7 | 0.11 |
| (1,1307) | 1:A:45:CYS:SG | 1:A:80:HIS:ND1 | 14 | 0.11 |
| (1,1288) | 1:A:82:HIS:HD2 | 1:A:86:ARG:H | 5 | 0.11 |
| (1,1288) | 1:A:82:HIS:HD2 | 1:A:86:ARG:H | 16 | 0.11 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1281) | 1:A:49:ILE:HA | 1:A:80:HIS:HD2 | 7 | 0.11 |
| (1,1275) | 1:A:87:TRP:HB3 | 1:A:87:TRP:HE3 | 2 | 0.11 |
| (1,1275) | 1:A:87:TRP:HB3 | 1:A:87:TRP:HE3 | 4 | 0.11 |
| (1,1275) | 1:A:87:TRP:HB3 | 1:A:87:TRP:HE3 | 6 | 0.11 |
| (1,1275) | 1:A:87:TRP:HB3 | 1:A:87:TRP:HE3 | 9 | 0.11 |
| (1,1275) | 1:A:87:TRP:HB3 | 1:A:87:TRP:HE3 | 10 | 0.11 |
| (1,1275) | 1:A:87:TRP:HB3 | 1:A:87:TRP:HE3 | 14 | 0.11 |
| (1,1275) | 1:A:87:TRP:HB3 | 1:A:87:TRP:HE3 | 15 | 0.11 |
| (1,1275) | 1:A:87:TRP:HB3 | 1:A:87:TRP:HE3 | 16 | 0.11 |
| (1,1275) | 1:A:87:TRP:HB3 | 1:A:87:TRP:HE3 | 17 | 0.11 |
| (1,1275) | 1:A:87:TRP:HB3 | 1:A:87:TRP:HE3 | 18 | 0.11 |
| (1,1275) | 1:A:87:TRP:HB3 | 1:A:87:TRP:HE3 | 20 | 0.11 |
| (1,1272) | 1:A:101:TRP:HB3 | 1:A:101:TRP:HE3 | 2 | 0.11 |
| (1,1272) | 1:A:101:TRP:HB3 | 1:A:101:TRP:HE3 | 3 | 0.11 |
| (1,1272) | 1:A:101:TRP:HB3 | 1:A:101:TRP:HE3 | 7 | 0.11 |
| (1,1272) | 1:A:101:TRP:HB3 | 1:A:101:TRP:HE3 | 9 | 0.11 |
| (1,1272) | 1:A:101:TRP:HB3 | 1:A:101:TRP:HE3 | 10 | 0.11 |
| (1,1272) | 1:A:101:TRP:HB3 | 1:A:101:TRP:HE3 | 11 | 0.11 |
| (1,1272) | 1:A:101:TRP:HB3 | 1:A:101:TRP:HE3 | 12 | 0.11 |
| (1,1268) | 1:A:71:ALA:HA | 1:A:72:TRP:HE3 | 9 | 0.11 |
| (1,1268) | 1:A:71:ALA:HA | 1:A:72:TRP:HE3 | 10 | 0.11 |
| (1,1268) | 1:A:71:ALA:HA | 1:A:72:TRP:HE3 | 18 | 0.11 |
| (1,1263) | 1:A:70:VAL:HB | 1:A:72:TRP:HZ3 | 9 | 0.11 |
| (1,1263) | 1:A:70:VAL:HB | 1:A:72:TRP:HZ3 | 12 | 0.11 |
| (1,126) | 1:A:39:VAL:HA | 1:A:40:ASP:H | 8 | 0.11 |
| (1,1259) | 1:A:87:TRP:HD1 | 1:A:101:TRP:HD1 | 4 | 0.11 |
| (1,1224) | 1:A:77:HIS:HE1 | 1:A:97:ASP:HB3 | 7 | 0.11 |
| (1,1224) | 1:A:77:HIS:HE1 | 1:A:97:ASP:HB3 | 18 | 0.11 |
| (1,1222) | 1:A:77:HIS:HE1 | 1:A:97:ASP:HA | 13 | 0.11 |
| (1,1221) | 1:A:68:CYS:HB2 | 1:A:80:HIS:HE1 | 19 | 0.11 |
| (1,1221) | 1:A:68:CYS:HB3 | 1:A:80:HIS:HE1 | 19 | 0.11 |
| (1,1211) | 1:A:93:VAL:HG11 | 1:A:94:CYS:HA | 3 | 0.11 |
| (1,1211) | 1:A:93:VAL:HG12 | 1:A:94:CYS:HA | 3 | 0.11 |
| (1,1211) | 1:A:93:VAL:HG13 | 1:A:94:CYS:HA | 3 | 0.11 |
| (1,1211) | 1:A:93:VAL:HG11 | 1:A:94:CYS:HA | 10 | 0.11 |
| (1,1211) | 1:A:93:VAL:HG12 | 1:A:94:CYS:HA | 10 | 0.11 |
| (1,1211) | 1:A:93:VAL:HG13 | 1:A:94:CYS:HA | 10 | 0.11 |
| (1,1211) | 1:A:93:VAL:HG11 | 1:A:94:CYS:HA | 17 | 0.11 |
| (1,1211) | 1:A:93:VAL:HG12 | 1:A:94:CYS:HA | 17 | 0.11 |
| (1,1211) | 1:A:93:VAL:HG13 | 1:A:94:CYS:HA | 17 | 0.11 |
| (1,1211) | 1:A:93:VAL:HG11 | 1:A:94:CYS:HA | 18 | 0.11 |
| (1,1211) | 1:A:93:VAL:HG12 | 1:A:94:CYS:HA | 18 | 0.11 |

Continued on next page...

Continued from previous page...

| Key | Atom-1 | Atom-2 | Model ID | Violation (Å) |
|----------|-----------------|-----------------|----------|---------------|
| (1,1211) | 1:A:93:VAL:HG13 | 1:A:94:CYS:HA | 18 | 0.11 |
| (1,1197) | 1:A:64:THR:HA | 1:A:67:GLU:HG2 | 7 | 0.11 |
| (1,1197) | 1:A:64:THR:HA | 1:A:67:GLU:HG2 | 13 | 0.11 |
| (1,1164) | 1:A:52:LEU:HD21 | 1:A:65:SER:HB2 | 3 | 0.11 |
| (1,1164) | 1:A:52:LEU:HD22 | 1:A:65:SER:HB2 | 3 | 0.11 |
| (1,1164) | 1:A:52:LEU:HD23 | 1:A:65:SER:HB2 | 3 | 0.11 |
| (1,1160) | 1:A:72:TRP:HB3 | 1:A:74:VAL:HA | 1 | 0.11 |
| (1,1151) | 1:A:43:ALA:HB1 | 1:A:46:ARG:HA | 20 | 0.11 |
| (1,1151) | 1:A:43:ALA:HB2 | 1:A:46:ARG:HA | 20 | 0.11 |
| (1,1151) | 1:A:43:ALA:HB3 | 1:A:46:ARG:HA | 20 | 0.11 |
| (1,1140) | 1:A:106:TYR:HD2 | 1:A:107:GLY:HA2 | 3 | 0.11 |
| (1,1106) | 1:A:72:TRP:HB3 | 1:A:104:GLN:HB2 | 2 | 0.11 |
| (1,1091) | 1:A:79:PHE:HE1 | 1:A:95:PRO:HD3 | 1 | 0.11 |
| (1,1090) | 1:A:95:PRO:HD3 | 1:A:97:ASP:H | 20 | 0.11 |
| (1,1080) | 1:A:94:CYS:HB3 | 1:A:101:TRP:HA | 8 | 0.11 |
| (1,1073) | 1:A:64:THR:HB | 1:A:66:GLU:HB2 | 10 | 0.11 |
| (1,1054) | 1:A:49:ILE:HD11 | 1:A:50:MET:HA | 9 | 0.11 |
| (1,1054) | 1:A:49:ILE:HD12 | 1:A:50:MET:HA | 9 | 0.11 |
| (1,1054) | 1:A:49:ILE:HD13 | 1:A:50:MET:HA | 9 | 0.11 |
| (1,1050) | 1:A:37:ILE:HD11 | 1:A:38:VAL:HA | 13 | 0.11 |
| (1,1050) | 1:A:37:ILE:HD12 | 1:A:38:VAL:HA | 13 | 0.11 |
| (1,1050) | 1:A:37:ILE:HD13 | 1:A:38:VAL:HA | 13 | 0.11 |
| (1,1017) | 1:A:71:ALA:HB1 | 1:A:101:TRP:HH2 | 5 | 0.11 |
| (1,1017) | 1:A:71:ALA:HB2 | 1:A:101:TRP:HH2 | 5 | 0.11 |
| (1,1017) | 1:A:71:ALA:HB3 | 1:A:101:TRP:HH2 | 5 | 0.11 |
| (1,1012) | 1:A:96:LEU:HD11 | 1:A:97:ASP:HB2 | 1 | 0.11 |
| (1,1012) | 1:A:96:LEU:HD12 | 1:A:97:ASP:HB2 | 1 | 0.11 |
| (1,1012) | 1:A:96:LEU:HD13 | 1:A:97:ASP:HB2 | 1 | 0.11 |
| (1,1012) | 1:A:96:LEU:HD11 | 1:A:97:ASP:HB2 | 9 | 0.11 |
| (1,1012) | 1:A:96:LEU:HD12 | 1:A:97:ASP:HB2 | 9 | 0.11 |
| (1,1012) | 1:A:96:LEU:HD13 | 1:A:97:ASP:HB2 | 9 | 0.11 |

10 Dihedral-angle violation analysis

No dihedral-angle restraints found