



# Full wwPDB NMR Structure Validation Report ⓘ

Jun 5, 2023 – 12:07 PM EDT

PDB ID : 2MD5  
BMRB ID : 19474  
Title : Structure of uninhibited ETV6 ETS domain  
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Deposited on : 2013-08-29

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<https://www.wwpdb.org/validation/2017/NMRValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

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

MolProbity : 4.02b-467  
Percentile statistics : 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

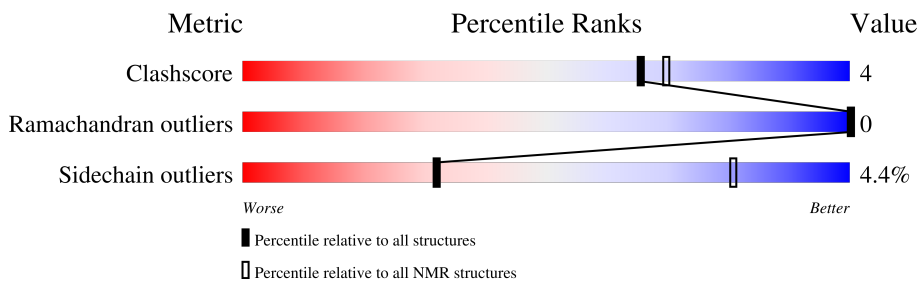
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

*SOLUTION NMR*

The overall completeness of chemical shifts assignment is 77%.

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<br>(#Entries) | NMR archive<br>(#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  $\geq 3$ , 2, 1 and 0 types of geometric quality criteria. A cyan segment indicates the fraction of residues that are not part of the well-defined cores, and a grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions  $\leq 5\%$

| Mol | Chain | Length | Quality of chain |
|-----|-------|--------|------------------|
| 1   | A     | 102    |                  |

## 2 Ensemble composition and analysis

This entry contains 10 models. Model 9 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:335-A:417 (83)      | 0.83              | 9            |

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

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

The models can be grouped into 3 clusters and 1 single-model cluster was found.

| Cluster number        | Models         |
|-----------------------|----------------|
| 1                     | 5, 7, 8, 9, 10 |
| 2                     | 3, 6           |
| 3                     | 1, 4           |
| Single-model clusters | 2              |

### 3 Entry composition

There is only 1 type of molecule in this entry. The entry contains 1754 atoms, of which 878 are hydrogens and 0 are deuteriums.

- Molecule 1 is a protein called Transcription factor ETV6.

| Mol | Chain | Residues | Atoms |     |     |     |     |   | Trace |
|-----|-------|----------|-------|-----|-----|-----|-----|---|-------|
|     |       |          | Total | C   | H   | N   | O   | S |       |
| 1   | A     | 102      | 1754  | 555 | 878 | 165 | 151 | 5 | 0     |

There are 5 discrepancies between the modelled and reference sequences:

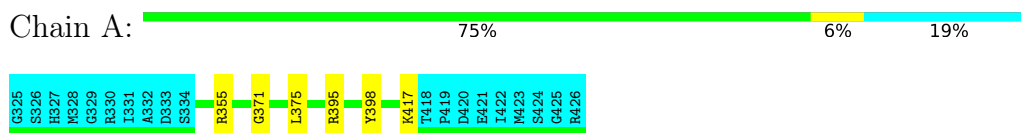
| Chain | Residue | Modelled | Actual | Comment             | Reference  |
|-------|---------|----------|--------|---------------------|------------|
| A     | 325     | GLY      | -      | expression tag      | UNP P97360 |
| A     | 326     | SER      | -      | expression tag      | UNP P97360 |
| A     | 327     | HIS      | -      | expression tag      | UNP P97360 |
| A     | 328     | MET      | -      | expression tag      | UNP P97360 |
| A     | 334     | SER      | CYS    | engineered mutation | UNP P97360 |

## 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: Transcription factor ETV6

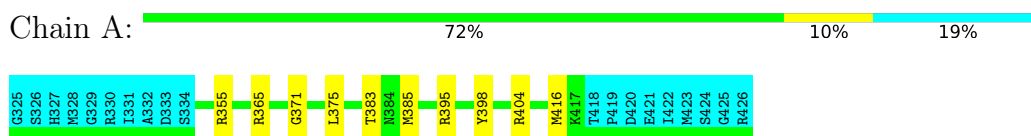


### 4.2 Scores per residue for each member of the ensemble

Colouring as in section 4.1 above.

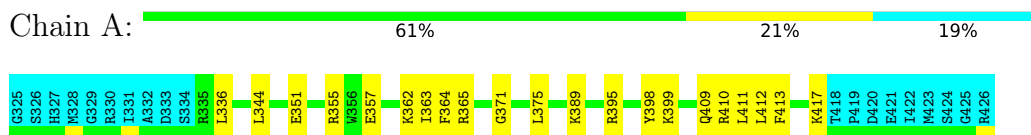
#### 4.2.1 Score per residue for model 1

- Molecule 1: Transcription factor ETV6



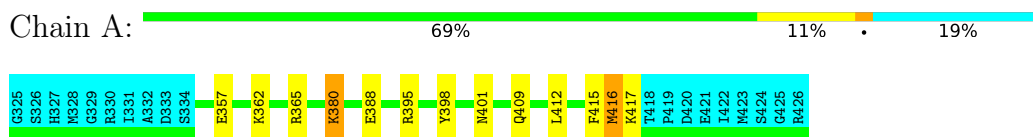
#### 4.2.2 Score per residue for model 2

- Molecule 1: Transcription factor ETV6



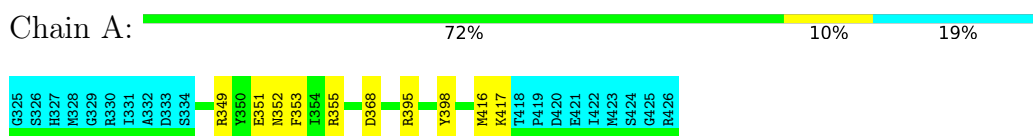
### 4.2.3 Score per residue for model 3

- Molecule 1: Transcription factor ETV6



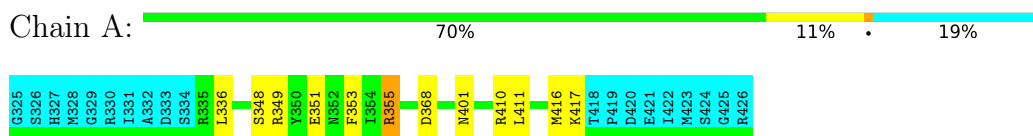
### 4.2.4 Score per residue for model 4

- Molecule 1: Transcription factor ETV6



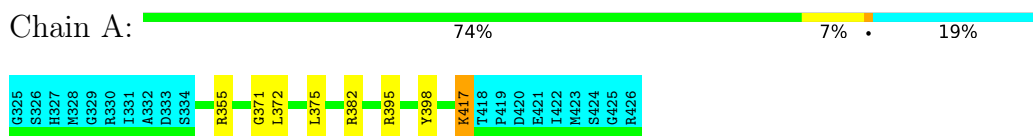
### 4.2.5 Score per residue for model 5

- Molecule 1: Transcription factor ETV6



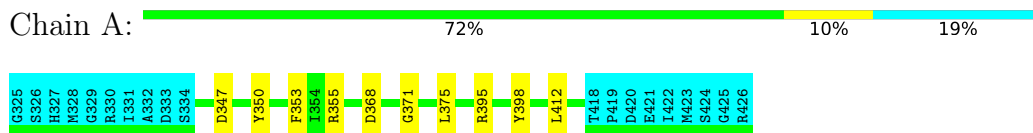
### 4.2.6 Score per residue for model 6

- Molecule 1: Transcription factor ETV6



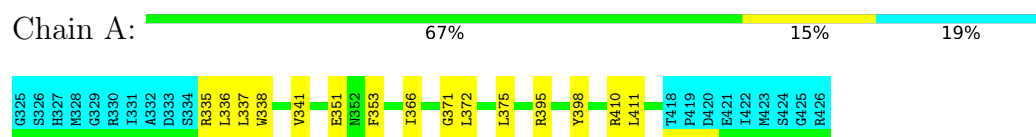
### 4.2.7 Score per residue for model 7

- Molecule 1: Transcription factor ETV6



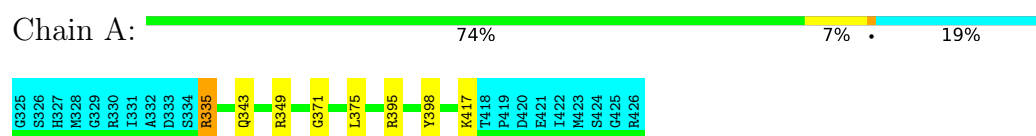
### 4.2.8 Score per residue for model 8

- Molecule 1: Transcription factor ETV6



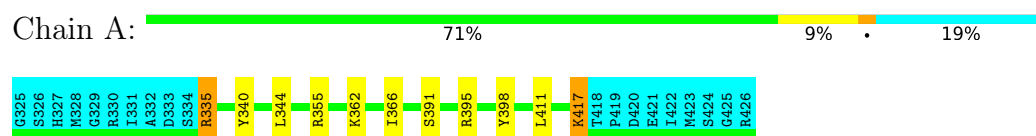
### 4.2.9 Score per residue for model 9 (medoid)

- Molecule 1: Transcription factor ETV6



### 4.2.10 Score per residue for model 10

- Molecule 1: Transcription factor ETV6



## 5 Refinement protocol and experimental data overview

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

Of the 100 calculated structures, 10 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    |         |
| CNS           | refinement            |         |
| CNS           | geometry optimization |         |

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                       | 1178           |
| Number of shifts mapped to atoms             | 1178           |
| Number of unparsed shifts                    | 0              |
| Number of shifts with mapping errors         | 0              |
| Number of shifts with mapping warnings       | 0              |
| Assignment completeness (well-defined parts) | 77%            |



## 6 Model quality i

### 6.1 Standard geometry i

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

There are no bond-length outliers.

There are no bond-angle outliers.

There are no chirality outliers.

There are no planarity outliers.

### 6.2 Too-close contacts i

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

| Mol | Chain | Non-H | H(model) | H(added) | Clashes |
|-----|-------|-------|----------|----------|---------|
| 1   | A     | 737   | 745      | 743      | 6±2     |
| All | All   | 7370  | 7450     | 7430     | 60      |

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 4.

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

| Atom-1           | Atom-2           | Clash(Å) | Distance(Å) | Models |       |
|------------------|------------------|----------|-------------|--------|-------|
|                  |                  |          |             | Worst  | Total |
| 1:A:417:LYS:HE2  | 1:A:417:LYS:HA   | 0.86     | 1.48        | 4      | 2     |
| 1:A:395:ARG:HA   | 1:A:398:TYR:HD2  | 0.67     | 1.48        | 4      | 3     |
| 1:A:335:ARG:H    | 1:A:335:ARG:HD2  | 0.65     | 1.52        | 10     | 1     |
| 1:A:366:ILE:HB   | 1:A:411:LEU:HG   | 0.64     | 1.69        | 10     | 1     |
| 1:A:357:GLU:HG2  | 1:A:365:ARG:HB2  | 0.62     | 1.72        | 2      | 1     |
| 1:A:344:LEU:HD22 | 1:A:351:GLU:HG3  | 0.61     | 1.72        | 2      | 1     |
| 1:A:395:ARG:HA   | 1:A:398:TYR:CD2  | 0.61     | 2.28        | 4      | 9     |
| 1:A:348:SER:HB2  | 1:A:355:ARG:HB3  | 0.58     | 1.76        | 5      | 1     |
| 1:A:410:ARG:HG3  | 1:A:411:LEU:HG   | 0.55     | 1.78        | 8      | 3     |
| 1:A:417:LYS:HA   | 1:A:417:LYS:HE3  | 0.54     | 1.80        | 6      | 2     |
| 1:A:362:LYS:HE3  | 1:A:415:PHE:O    | 0.53     | 2.03        | 3      | 1     |
| 1:A:335:ARG:O    | 1:A:338:TRP:HD1  | 0.52     | 1.87        | 8      | 1     |
| 1:A:366:ILE:HD12 | 1:A:372:LEU:HD22 | 0.52     | 1.80        | 8      | 1     |
| 1:A:416:MET:HA   | 1:A:416:MET:CE   | 0.51     | 2.36        | 4      | 1     |

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| Atom-1           | Atom-2           | Clash(Å) | Distance(Å) | Models |       |
|------------------|------------------|----------|-------------|--------|-------|
|                  |                  |          |             | Worst  | Total |
| 1:A:371:GLY:O    | 1:A:375:LEU:HG   | 0.49     | 2.08        | 6      | 6     |
| 1:A:353:PHE:HD1  | 1:A:368:ASP:HB3  | 0.49     | 1.68        | 4      | 3     |
| 1:A:336:LEU:O    | 1:A:336:LEU:HD13 | 0.49     | 2.07        | 5      | 2     |
| 1:A:337:LEU:O    | 1:A:341:VAL:HG23 | 0.47     | 2.09        | 8      | 1     |
| 1:A:401:ASN:O    | 1:A:416:MET:HG2  | 0.47     | 2.09        | 5      | 1     |
| 1:A:357:GLU:CG   | 1:A:365:ARG:HB2  | 0.46     | 2.40        | 2      | 1     |
| 1:A:351:GLU:HB3  | 1:A:353:PHE:CD2  | 0.46     | 2.46        | 4      | 1     |
| 1:A:335:ARG:HE   | 1:A:335:ARG:HA   | 0.46     | 1.70        | 9      | 1     |
| 1:A:389:LYS:HE2  | 1:A:389:LYS:HA   | 0.45     | 1.87        | 2      | 1     |
| 1:A:401:ASN:O    | 1:A:416:MET:HB3  | 0.45     | 2.12        | 3      | 1     |
| 1:A:404:ARG:CD   | 1:A:416:MET:HB2  | 0.44     | 2.42        | 1      | 1     |
| 1:A:347:ASP:HB3  | 1:A:350:TYR:CE1  | 0.44     | 2.46        | 7      | 1     |
| 1:A:351:GLU:HB2  | 1:A:353:PHE:CD2  | 0.43     | 2.48        | 8      | 1     |
| 1:A:391:SER:HB3  | 1:A:395:ARG:NH1  | 0.43     | 2.28        | 10     | 1     |
| 1:A:391:SER:O    | 1:A:395:ARG:HD3  | 0.42     | 2.13        | 10     | 1     |
| 1:A:357:GLU:OE1  | 1:A:365:ARG:HD3  | 0.42     | 2.13        | 3      | 1     |
| 1:A:404:ARG:HD3  | 1:A:416:MET:HB2  | 0.42     | 1.90        | 1      | 1     |
| 1:A:380:LYS:HE2  | 1:A:380:LYS:HA   | 0.42     | 1.91        | 3      | 1     |
| 1:A:353:PHE:CD1  | 1:A:368:ASP:HB3  | 0.42     | 2.50        | 4      | 1     |
| 1:A:417:LYS:HE2  | 1:A:417:LYS:CA   | 0.41     | 2.35        | 4      | 1     |
| 1:A:340:TYR:O    | 1:A:344:LEU:HG   | 0.41     | 2.15        | 10     | 1     |
| 1:A:364:PHE:CZ   | 1:A:413:PHE:HB2  | 0.40     | 2.50        | 2      | 1     |
| 1:A:409:GLN:HB3  | 1:A:412:LEU:HB3  | 0.40     | 1.93        | 3      | 1     |
| 1:A:363:ILE:HG23 | 1:A:412:LEU:HD11 | 0.40     | 1.92        | 2      | 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     | 83/102 (81%)   | 80±1 (97±2%) | 2±1 (3±2%) | 0±0 (0±0%) | 100         | 100 |
| All | All   | 830/1020 (81%) | 805 (97%)    | 25 (3%)    | 0 (0%)     | 100         | 100 |

There are no Ramachandran outliers.

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

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

| Mol | Chain | Analysed      | Rotameric    | Outliers   | Percentiles |    |
|-----|-------|---------------|--------------|------------|-------------|----|
| 1   | A     | 78/93 (84%)   | 75±1 (96±2%) | 3±1 (4±2%) | 32          | 81 |
| All | All   | 780/930 (84%) | 746 (96%)    | 34 (4%)    | 32          | 81 |

All 20 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     | 355 | ARG  | 7              |
| 1   | A     | 417 | LYS  | 5              |
| 1   | A     | 349 | ARG  | 3              |
| 1   | A     | 362 | LYS  | 2              |
| 1   | A     | 335 | ARG  | 2              |
| 1   | A     | 365 | ARG  | 1              |
| 1   | A     | 383 | THR  | 1              |
| 1   | A     | 385 | MET  | 1              |
| 1   | A     | 336 | LEU  | 1              |
| 1   | A     | 399 | LYS  | 1              |
| 1   | A     | 409 | GLN  | 1              |
| 1   | A     | 380 | LYS  | 1              |
| 1   | A     | 388 | GLU  | 1              |
| 1   | A     | 416 | MET  | 1              |
| 1   | A     | 352 | ASN  | 1              |
| 1   | A     | 351 | GLU  | 1              |
| 1   | A     | 372 | LEU  | 1              |
| 1   | A     | 382 | ARG  | 1              |
| 1   | A     | 412 | LEU  | 1              |
| 1   | A     | 343 | GLN  | 1              |

### 6.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

## 6.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

## 6.6 Ligand geometry [i](#)

There are no ligands in this entry.

## 6.7 Other polymers [i](#)

There are no such molecules in this entry.

## 6.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

## 7 Chemical shift validation [i](#)

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

### 7.1 Chemical shift list 1

File name: working\_cs.cif

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

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

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

|   |      |
|---|------|
| Total number of shifts                  | 1178 |
| Number of shifts mapped to atoms        | 1178 |
| Number of unparsed shifts               | 0    |
| Number of shifts with mapping errors    | 0    |
| Number of shifts with mapping warnings  | 0    |
| Number of shift outliers (ShiftChecker) | 5    |

#### 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         |
|------------------------|----------|---------------------------------|--------------------------|
| $^{13}\text{C}_\alpha$ | 99       | $-0.45 \pm 0.25$                | None needed (< 0.5 ppm)  |
| $^{13}\text{C}_\beta$  | 94       | $0.26 \pm 0.13$                 | None needed (< 0.5 ppm)  |
| $^{13}\text{C}'$       | 0        | —                               | None (insufficient data) |
| $^{15}\text{N}$        | 92       | $0.21 \pm 0.42$                 | 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 77%, i.e. 1009 atoms were assigned a chemical shift out of a possible 1302. 0 out of 12 assigned methyl groups (LEU and VAL) were assigned stereospecifically.

|           | Total         | $^1\text{H}$  | $^{13}\text{C}$ | $^{15}\text{N}$ |
|-----------|---------------|---------------|-----------------|-----------------|
| Backbone  | 316/414 (76%) | 159/167 (95%) | 81/166 (49%)    | 76/81 (94%)     |
| Sidechain | 583/742 (79%) | 407/475 (86%) | 170/219 (78%)   | 6/48 (12%)      |

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|          | Total           | <sup>1</sup> H | <sup>13</sup> C | <sup>15</sup> N |
|----------|-----------------|----------------|-----------------|-----------------|
| Aromatic | 110/146 (75%)   | 58/70 (83%)    | 49/69 (71%)     | 3/7 (43%)       |
| Overall  | 1009/1302 (77%) | 624/712 (88%)  | 300/454 (66%)   | 85/136 (62%)    |

The following table shows the completeness of the chemical shift assignments for the full structure. The overall completeness is 77%, i.e. 1177 atoms were assigned a chemical shift out of a possible 1534. 0 out of 12 assigned methyl groups (LEU and VAL) were assigned stereospecifically.

|           | Total           | <sup>1</sup> H | <sup>13</sup> C | <sup>15</sup> N |
|-----------|-----------------|----------------|-----------------|-----------------|
| Backbone  | 384/510 (75%)   | 193/207 (93%)  | 99/204 (49%)    | 92/99 (93%)     |
| Sidechain | 681/870 (78%)   | 475/558 (85%)  | 200/258 (78%)   | 6/54 (11%)      |
| Aromatic  | 112/154 (73%)   | 59/74 (80%)    | 50/71 (70%)     | 3/9 (33%)       |
| Overall   | 1177/1534 (77%) | 727/839 (87%)  | 349/533 (65%)   | 101/162 (62%)   |

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

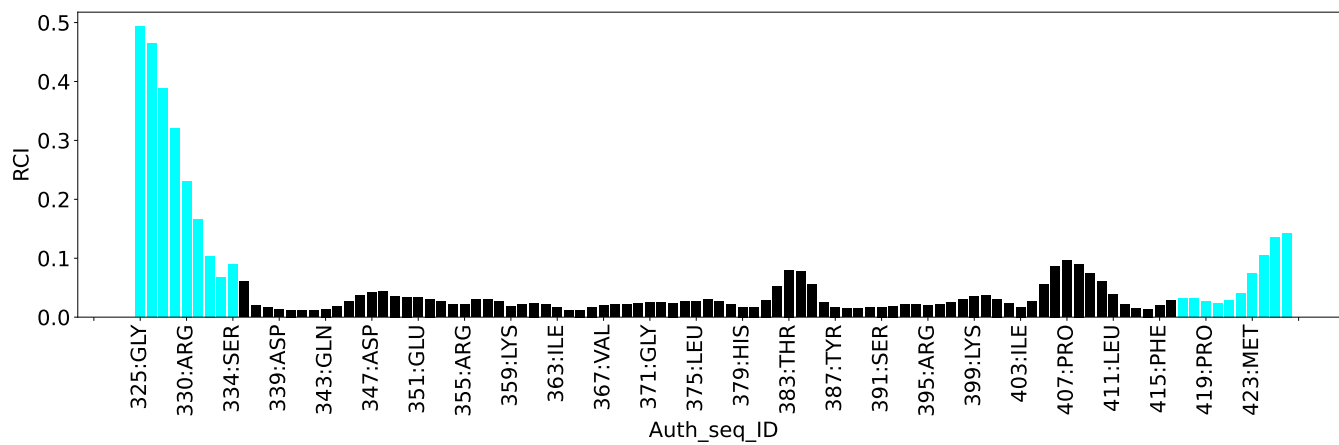
The following table lists the statistically unusual chemical shifts. These are statistical measures, and large deviations from the mean do not necessarily imply incorrect assignments. Molecules containing paramagnetic centres or hemes are expected to give rise to anomalous chemical shifts.

| List Id | Chain | Res | Type | Atom | Shift, ppm | Expected range, ppm | Z-score |
|---------|-------|-----|------|------|------------|---------------------|---------|
| 1       | A     | 413 | PHE  | HB2  | 0.77       | 1.20 – 4.80         | -6.2    |
| 1       | A     | 345 | LEU  | HD21 | -0.88      | -0.65 – 2.13        | -5.8    |
| 1       | A     | 345 | LEU  | HD22 | -0.88      | -0.65 – 2.13        | -5.8    |
| 1       | A     | 345 | LEU  | HD23 | -0.88      | -0.65 – 2.13        | -5.8    |
| 1       | A     | 359 | LYS  | HG2  | 0.11       | 0.13 – 2.61         | -5.1    |

#### 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                                | 1538  |
| Intra-residue ( $ i-j =0$ )                              | 428   |
| Sequential ( $ i-j =1$ )                                 | 371   |
| Medium range ( $ i-j >1$ and $ i-j <5$ )                 | 291   |
| Long range ( $ i-j \geq 5$ )                             | 448   |
| Inter-chain  | 0     |
| Hydrogen bond restraints                                 | 0     |
| Disulfide bond restraints                                | 0     |
| Total dihedral-angle restraints                          | 0     |
| Number of unmapped restraints                            | 0     |
| Number of restraints per residue                         | 15.1  |
| Number of long range restraints per residue <sup>1</sup> | 4.4   |

<sup>1</sup>Long range hydrogen bonds and disulfide bonds are counted as long range restraints while calculating the number of long range restraints per residue

### 8.2 Residual restraint violations

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

#### 8.2.1 Average number of distance violations per model

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

| Bins (Å)         | Average number of violations per model | Max (Å) |
|------------------|--|---------|
| 0.1-0.2 (Small)  | 37.5                                   | 0.2     |
| 0.2-0.5 (Medium) | 77.5                                   | 0.5     |
| >0.5 (Large)     | 168.1                                  | 6.56    |



### 8.2.2 Average number of dihedral-angle violations per model

Dihedral-angle violations less than  $1^\circ$  are not included in the calculation. There are no dihedral-angle violations

## 9 Distance violation analysis

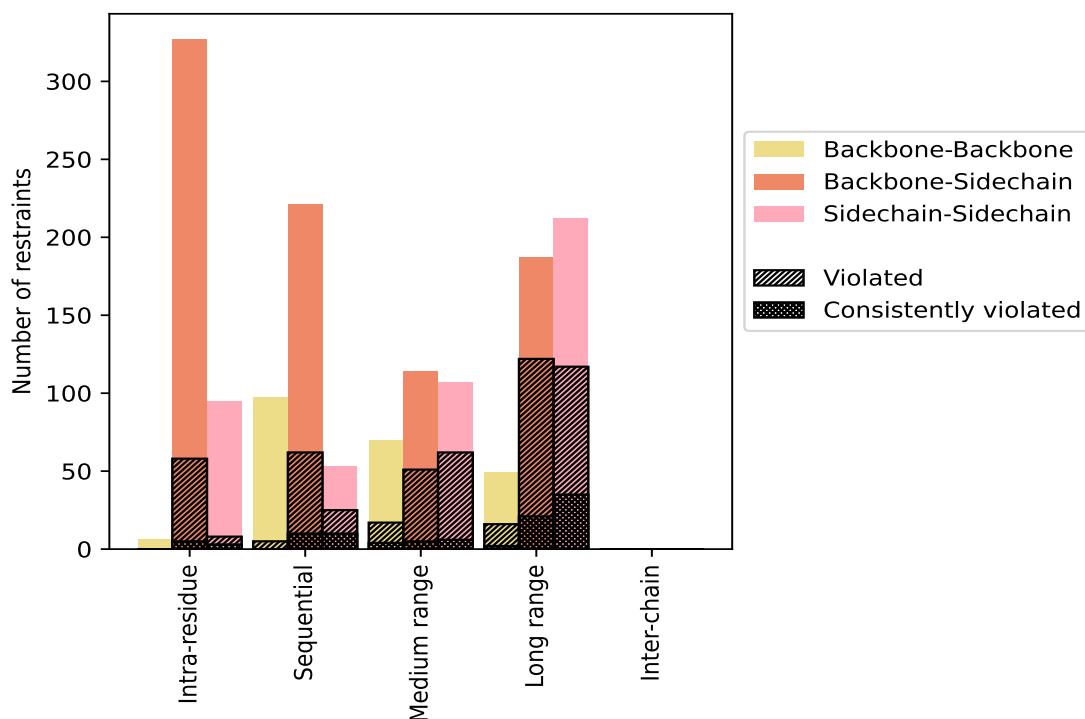
### 9.1 Summary of distance violations

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       | % <sup>1</sup> | Violated <sup>3</sup> |                |                | Consistently Violated <sup>4</sup> |                |                |
|---|-------------|----------------|-----------------------|----------------|----------------|------------------------------------|----------------|----------------|
|   |             |                | Count                 | % <sup>2</sup> | % <sup>1</sup> | Count                              | % <sup>2</sup> | % <sup>1</sup> |
| <b>Intra-residue (<math> i-j =0</math>)</b>                                 | <b>428</b>  | <b>27.8</b>    | <b>66</b>             | <b>15.4</b>    | <b>4.3</b>     | <b>8</b>                           | <b>1.9</b>     | <b>0.5</b>     |
| Backbone-Backbone   | 6           | 0.4            | 0                     | 0.0            | 0.0            | 0                                  | 0.0            | 0.0            |
| Backbone-Sidechain  | 327         | 21.3           | 58                    | 17.7           | 3.8            | 5                                  | 1.5            | 0.3            |
| Sidechain-Sidechain   | 95          | 6.2            | 8                     | 8.4            | 0.5            | 3                                  | 3.2            | 0.2            |
| <b>Sequential (<math> i-j =1</math>)</b>                                    | <b>371</b>  | <b>24.1</b>    | <b>92</b>             | <b>24.8</b>    | <b>6.0</b>     | <b>20</b>                          | <b>5.4</b>     | <b>1.3</b>     |
| Backbone-Backbone   | 97          | 6.3            | 5                     | 5.2            | 0.3            | 0                                  | 0.0            | 0.0            |
| Backbone-Sidechain  | 221         | 14.4           | 62                    | 28.1           | 4.0            | 10                                 | 4.5            | 0.7            |
| Sidechain-Sidechain   | 53          | 3.4            | 25                    | 47.2           | 1.6            | 10                                 | 18.9           | 0.7            |
| <b>Medium range (<math> i-j &gt;1</math> &amp; <math> i-j &lt;5</math>)</b> | <b>291</b>  | <b>18.9</b>    | <b>130</b>            | <b>44.7</b>    | <b>8.5</b>     | <b>15</b>                          | <b>5.2</b>     | <b>1.0</b>     |
| Backbone-Backbone   | 70          | 4.6            | 17                    | 24.3           | 1.1            | 4                                  | 5.7            | 0.3            |
| Backbone-Sidechain  | 114         | 7.4            | 51                    | 44.7           | 3.3            | 5                                  | 4.4            | 0.3            |
| Sidechain-Sidechain   | 107         | 7.0            | 62                    | 57.9           | 4.0            | 6                                  | 5.6            | 0.4            |
| <b>Long range (<math> i-j \geq 5</math>)</b>                                | <b>448</b>  | <b>29.1</b>    | <b>255</b>            | <b>56.9</b>    | <b>16.6</b>    | <b>58</b>                          | <b>12.9</b>    | <b>3.8</b>     |
| Backbone-Backbone   | 49          | 3.2            | 16                    | 32.7           | 1.0            | 2                                  | 4.1            | 0.1            |
| Backbone-Sidechain  | 187         | 12.2           | 122                   | 65.2           | 7.9            | 21                                 | 11.2           | 1.4            |
| Sidechain-Sidechain   | 212         | 13.8           | 117                   | 55.2           | 7.6            | 35                                 | 16.5           | 2.3            |
| <b>Inter-chain</b>  | <b>0</b>    | <b>0.0</b>     | <b>0</b>              | <b>0.0</b>     | <b>0.0</b>     | <b>0</b>                           | <b>0.0</b>     | <b>0.0</b>     |
| Backbone-Backbone   | 0           | 0.0            | 0                     | 0.0            | 0.0            | 0                                  | 0.0            | 0.0            |
| Backbone-Sidechain  | 0           | 0.0            | 0                     | 0.0            | 0.0            | 0                                  | 0.0            | 0.0            |
| Sidechain-Sidechain   | 0           | 0.0            | 0                     | 0.0            | 0.0            | 0                                  | 0.0            | 0.0            |
| <b>Hydrogen bond</b>  | <b>0</b>    | <b>0.0</b>     | <b>0</b>              | <b>0.0</b>     | <b>0.0</b>     | <b>0</b>                           | <b>0.0</b>     | <b>0.0</b>     |
| <b>Disulfide bond</b>   | <b>0</b>    | <b>0.0</b>     | <b>0</b>              | <b>0.0</b>     | <b>0.0</b>     | <b>0</b>                           | <b>0.0</b>     | <b>0.0</b>     |
| <b>Total</b>  | <b>1538</b> | <b>100.0</b>   | <b>543</b>            | <b>35.3</b>    | <b>35.3</b>    | <b>101</b>                         | <b>6.6</b>     | <b>6.6</b>     |
| Backbone-Backbone   | 222         | 14.4           | 38                    | 17.1           | 2.5            | 6                                  | 2.7            | 0.4            |
| Backbone-Sidechain  | 849         | 55.2           | 293                   | 34.5           | 19.1           | 41                                 | 4.8            | 2.7            |
| Sidechain-Sidechain   | 467         | 30.4           | 212                   | 45.4           | 13.8           | 54                                 | 11.6           | 3.5            |

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

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



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

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

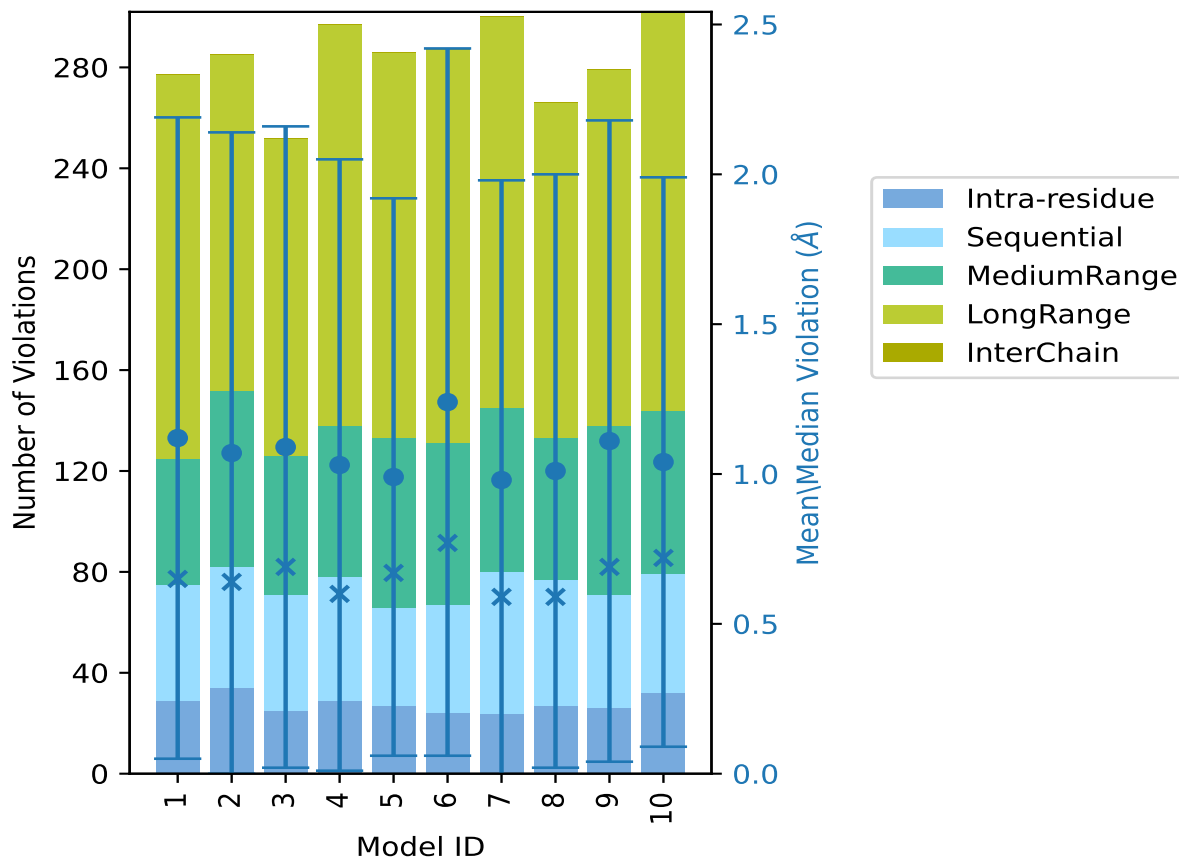
The following table provides the distance violation statistics for each model in the ensemble. Violations less than 0.1 Å are not included in the statistics.

| Model ID | Number of violations |                 |                 |                 |                 | Total | Mean (Å) | Max (Å) | SD <sup>6</sup> (Å) | Median (Å) |
|----------|----------------------|-----------------|-----------------|-----------------|-----------------|-------|----------|---------|---------------------|------------|
|          | IR <sup>1</sup>      | SQ <sup>2</sup> | MR <sup>3</sup> | LR <sup>4</sup> | IC <sup>5</sup> |       |          |         |                     |            |
| 1        | 29                   | 46              | 50              | 152             | 0               | 277   | 1.12     | 5.17    | 1.07                | 0.65       |
| 2        | 34                   | 48              | 70              | 133             | 0               | 285   | 1.07     | 5.6     | 1.07                | 0.64       |
| 3        | 25                   | 46              | 55              | 126             | 0               | 252   | 1.09     | 6.56    | 1.07                | 0.69       |
| 4        | 29                   | 49              | 60              | 159             | 0               | 297   | 1.03     | 5.95    | 1.02                | 0.6        |
| 5        | 27                   | 39              | 67              | 153             | 0               | 286   | 0.99     | 4.46    | 0.93                | 0.67       |
| 6        | 24                   | 43              | 64              | 156             | 0               | 287   | 1.24     | 5.78    | 1.18                | 0.77       |
| 7        | 24                   | 56              | 65              | 155             | 0               | 300   | 0.98     | 6.5     | 1.0                 | 0.59       |
| 8        | 27                   | 50              | 56              | 133             | 0               | 266   | 1.01     | 4.76    | 0.99                | 0.59       |
| 9        | 26                   | 45              | 67              | 141             | 0               | 279   | 1.11     | 5.92    | 1.07                | 0.69       |
| 10       | 32                   | 47              | 65              | 158             | 0               | 302   | 1.04     | 5.48    | 0.95                | 0.72       |

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

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

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



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

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

Violation analysis may find that some restraints are violated in few models and some are violated in most of models. The following table provides this information as number of violated restraints for a given fraction of the ensemble. In total, 995(IR:362, SQ:279, MR:161, LR:193, IC:0) restraints are not violated in the ensemble.

| Number of violated restraints |                 |                 |                 |                 |       | Fraction of the ensemble |      |
|-------------------------------|-----------------|-----------------|-----------------|-----------------|-------|--------------------------|------|
| IR <sup>1</sup>               | SQ <sup>2</sup> | MR <sup>3</sup> | LR <sup>4</sup> | IC <sup>5</sup> | Total | Count <sup>6</sup>       | %    |
| 19                            | 20              | 34              | 37              | 0               | 110   | 1                        | 10.0 |
| 14                            | 14              | 13              | 25              | 0               | 66    | 2                        | 20.0 |
| 3                             | 10              | 9               | 20              | 0               | 42    | 3                        | 30.0 |
| 4                             | 5               | 8               | 21              | 0               | 38    | 4                        | 40.0 |

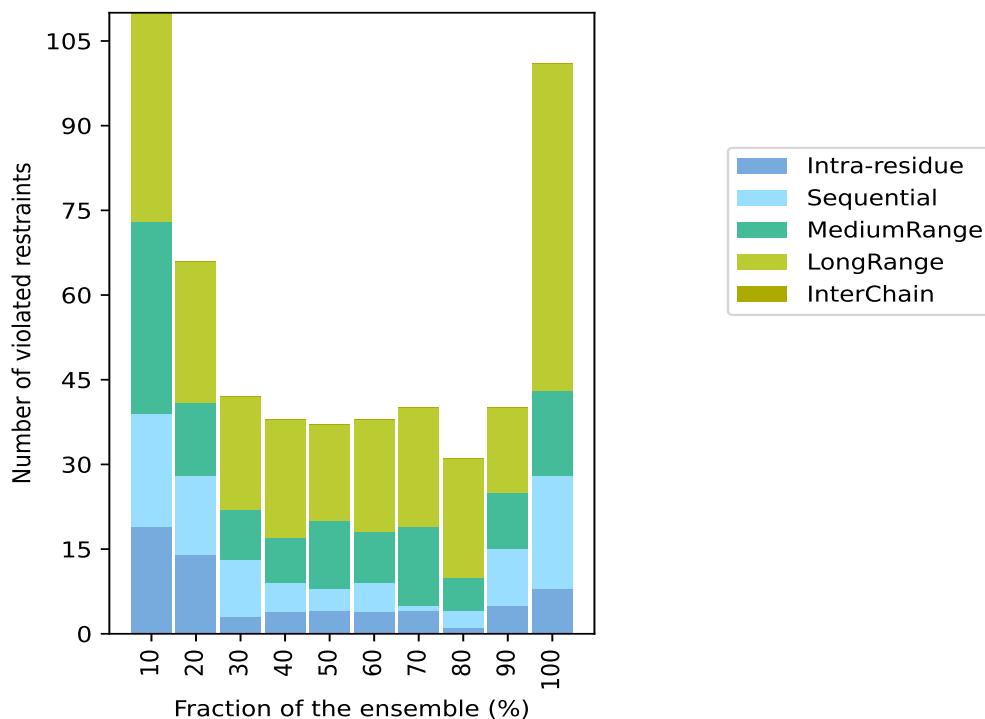
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| Number of violated restraints |                 |                 |                 |                 |       | Fraction of the ensemble |       |
|-------------------------------|-----------------|-----------------|-----------------|-----------------|-------|--------------------------|-------|
| IR <sup>1</sup>               | SQ <sup>2</sup> | MR <sup>3</sup> | LR <sup>4</sup> | IC <sup>5</sup> | Total | Count <sup>6</sup>       | %     |
| 4                             | 4               | 12              | 17              | 0               | 37    | 5                        | 50.0  |
| 4                             | 5               | 9               | 20              | 0               | 38    | 6                        | 60.0  |
| 4                             | 1               | 14              | 21              | 0               | 40    | 7                        | 70.0  |
| 1                             | 3               | 6               | 21              | 0               | 31    | 8                        | 80.0  |
| 5                             | 10              | 10              | 15              | 0               | 40    | 9                        | 90.0  |
| 8                             | 20              | 15              | 58              | 0               | 101   | 10                       | 100.0 |

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

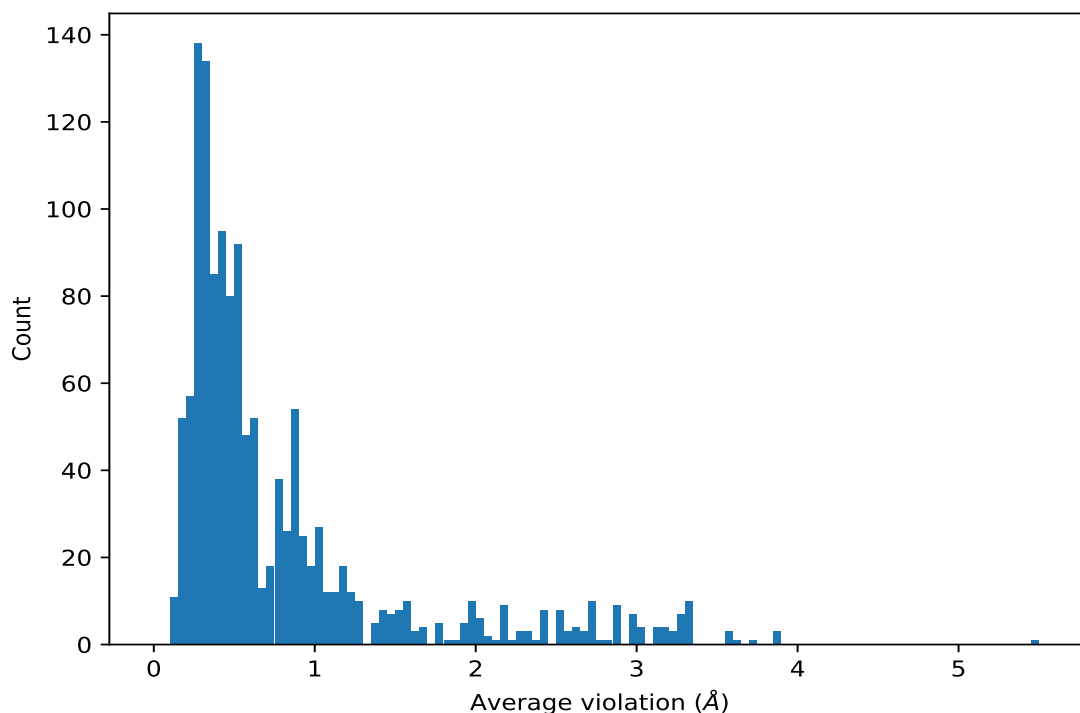
### 9.3.1 Bar graph : Distance violation statistics for the ensemble [i](#)



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

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

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



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

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

| Key      | Atom-1          | Atom-2           | Models <sup>1</sup> | Mean (Å) | SD <sup>1</sup> (Å) | Median (Å) |
|----------|-----------------|------------------|---------------------|----------|---------------------|------------|
| (1,1155) | 1:A:350:TYR:HD1 | 1:A:375:LEU:HG   | 10                  | 5.47     | 0.99                | 5.69       |
| (1,549)  | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD21 | 10                  | 3.87     | 0.82                | 4.0        |
| (1,549)  | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD22 | 10                  | 3.87     | 0.82                | 4.0        |
| (1,549)  | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD23 | 10                  | 3.87     | 0.82                | 4.0        |
| (1,1193) | 1:A:342:TYR:HE2 | 1:A:356:TRP:HH2  | 10                  | 3.74     | 0.56                | 3.58       |
| (1,1055) | 1:A:373:ALA:H   | 1:A:387:TYR:HD2  | 10                  | 3.56     | 0.61                | 3.46       |
| (1,1223) | 1:A:372:LEU:HB3 | 1:A:387:TYR:HE2  | 10                  | 3.55     | 0.72                | 3.38       |
| (1,31)   | 1:A:340:TYR:HE1 | 1:A:390:MET:HE1  | 10                  | 3.34     | 0.53                | 3.44       |
| (1,31)   | 1:A:340:TYR:HE1 | 1:A:390:MET:HE2  | 10                  | 3.34     | 0.53                | 3.44       |
| (1,31)   | 1:A:340:TYR:HE1 | 1:A:390:MET:HE3  | 10                  | 3.34     | 0.53                | 3.44       |
| (1,1353) | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD11 | 10                  | 3.32     | 0.71                | 3.43       |
| (1,1353) | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD12 | 10                  | 3.32     | 0.71                | 3.43       |
| (1,1353) | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD13 | 10                  | 3.32     | 0.71                | 3.43       |
| (1,1353) | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD21 | 10                  | 3.32     | 0.71                | 3.43       |
| (1,1353) | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD22 | 10                  | 3.32     | 0.71                | 3.43       |
| (1,1353) | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD23 | 10                  | 3.32     | 0.71                | 3.43       |

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| Key      | Atom-1           | Atom-2           | Models <sup>1</sup> | Mean (Å) | SD <sup>1</sup> (Å) | Median (Å) |
|----------|------------------|------------------|---------------------|----------|---------------------|------------|
| (1,789)  | 1:A:355:ARG:H    | 1:A:365:ARG:HG3  | 10                  | 3.31     | 0.22                | 3.36       |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD11 | 10                  | 3.28     | 0.51                | 3.4        |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD12 | 10                  | 3.28     | 0.51                | 3.4        |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD13 | 10                  | 3.28     | 0.51                | 3.4        |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD21 | 10                  | 3.28     | 0.51                | 3.4        |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD22 | 10                  | 3.28     | 0.51                | 3.4        |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD23 | 10                  | 3.28     | 0.51                | 3.4        |
| (1,29)   | 1:A:387:TYR:HD2  | 1:A:390:MET:HE1  | 10                  | 3.23     | 0.56                | 3.36       |
| (1,29)   | 1:A:387:TYR:HD2  | 1:A:390:MET:HE2  | 10                  | 3.23     | 0.56                | 3.36       |
| (1,29)   | 1:A:387:TYR:HD2  | 1:A:390:MET:HE3  | 10                  | 3.23     | 0.56                | 3.36       |
| (1,28)   | 1:A:340:TYR:HD1  | 1:A:390:MET:HE1  | 10                  | 3.18     | 0.49                | 3.4        |
| (1,28)   | 1:A:340:TYR:HD1  | 1:A:390:MET:HE2  | 10                  | 3.18     | 0.49                | 3.4        |
| (1,28)   | 1:A:340:TYR:HD1  | 1:A:390:MET:HE3  | 10                  | 3.18     | 0.49                | 3.4        |
| (1,1151) | 1:A:340:TYR:HD2  | 1:A:379:HIS:HE1  | 10                  | 3.18     | 0.74                | 3.2        |
| (1,1156) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD11 | 10                  | 3.11     | 0.79                | 3.24       |
| (1,1156) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD12 | 10                  | 3.11     | 0.79                | 3.24       |
| (1,1156) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD13 | 10                  | 3.11     | 0.79                | 3.24       |
| (1,1215) | 1:A:340:TYR:HE1  | 1:A:376:TRP:HB3  | 10                  | 3.11     | 0.67                | 3.02       |
| (1,1089) | 1:A:340:TYR:HE1  | 1:A:376:TRP:H    | 10                  | 3.03     | 0.74                | 2.97       |
| (1,30)   | 1:A:387:TYR:HE2  | 1:A:390:MET:HE1  | 10                  | 3.0      | 0.55                | 3.13       |
| (1,30)   | 1:A:387:TYR:HE2  | 1:A:390:MET:HE2  | 10                  | 3.0      | 0.55                | 3.13       |
| (1,30)   | 1:A:387:TYR:HE2  | 1:A:390:MET:HE3  | 10                  | 3.0      | 0.55                | 3.13       |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD11 | 10                  | 2.99     | 0.89                | 3.18       |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD12 | 10                  | 2.99     | 0.89                | 3.18       |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD13 | 10                  | 2.99     | 0.89                | 3.18       |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD21 | 10                  | 2.99     | 0.89                | 3.18       |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD22 | 10                  | 2.99     | 0.89                | 3.18       |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD23 | 10                  | 2.99     | 0.89                | 3.18       |
| (1,1219) | 1:A:366:ILE:HD11 | 1:A:387:TYR:HE2  | 10                  | 2.88     | 0.58                | 2.76       |
| (1,1219) | 1:A:366:ILE:HD12 | 1:A:387:TYR:HE2  | 10                  | 2.88     | 0.58                | 2.76       |
| (1,1219) | 1:A:366:ILE:HD13 | 1:A:387:TYR:HE2  | 10                  | 2.88     | 0.58                | 2.76       |
| (1,1415) | 1:A:372:LEU:HD11 | 1:A:387:TYR:HE2  | 10                  | 2.86     | 0.86                | 2.7        |
| (1,1415) | 1:A:372:LEU:HD12 | 1:A:387:TYR:HE2  | 10                  | 2.86     | 0.86                | 2.7        |
| (1,1415) | 1:A:372:LEU:HD13 | 1:A:387:TYR:HE2  | 10                  | 2.86     | 0.86                | 2.7        |
| (1,1415) | 1:A:372:LEU:HD21 | 1:A:387:TYR:HE2  | 10                  | 2.86     | 0.86                | 2.7        |
| (1,1415) | 1:A:372:LEU:HD22 | 1:A:387:TYR:HE2  | 10                  | 2.86     | 0.86                | 2.7        |
| (1,1415) | 1:A:372:LEU:HD23 | 1:A:387:TYR:HE2  | 10                  | 2.86     | 0.86                | 2.7        |
| (1,1152) | 1:A:340:TYR:HE2  | 1:A:379:HIS:HE1  | 10                  | 2.82     | 0.83                | 2.87       |
| (1,1109) | 1:A:354:ILE:H    | 1:A:355:ARG:HE   | 10                  | 2.75     | 1.03                | 3.15       |
| (1,184)  | 1:A:365:ARG:HA   | 1:A:413:PHE:HE1  | 10                  | 2.74     | 1.54                | 3.45       |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD11 | 10                  | 2.74     | 0.52                | 2.79       |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD12 | 10                  | 2.74     | 0.52                | 2.79       |

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| Key      | Atom-1           | Atom-2           | Models <sup>1</sup> | Mean (Å) | SD <sup>1</sup> (Å) | Median (Å) |
|----------|------------------|------------------|---------------------|----------|---------------------|------------|
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD13 | 10                  | 2.74     | 0.52                | 2.79       |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD21 | 10                  | 2.74     | 0.52                | 2.79       |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD22 | 10                  | 2.74     | 0.52                | 2.79       |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD23 | 10                  | 2.74     | 0.52                | 2.79       |
| (1,1087) | 1:A:340:TYR:HD1  | 1:A:376:TRP:H    | 10                  | 2.7      | 0.71                | 2.46       |
| (1,21)   | 1:A:354:ILE:HG21 | 1:A:355:ARG:HE   | 10                  | 2.66     | 0.67                | 2.96       |
| (1,21)   | 1:A:354:ILE:HG22 | 1:A:355:ARG:HE   | 10                  | 2.66     | 0.67                | 2.96       |
| (1,21)   | 1:A:354:ILE:HG23 | 1:A:355:ARG:HE   | 10                  | 2.66     | 0.67                | 2.96       |
| (1,578)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG11 | 10                  | 2.61     | 0.1                 | 2.64       |
| (1,578)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG12 | 10                  | 2.61     | 0.1                 | 2.64       |
| (1,578)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG13 | 10                  | 2.61     | 0.1                 | 2.64       |
| (1,1212) | 1:A:342:TYR:HE2  | 1:A:356:TRP:HZ2  | 10                  | 2.6      | 0.54                | 2.48       |
| (1,285)  | 1:A:398:TYR:HD2  | 1:A:403:ILE:HD11 | 10                  | 2.57     | 0.51                | 2.74       |
| (1,285)  | 1:A:398:TYR:HD2  | 1:A:403:ILE:HD12 | 10                  | 2.57     | 0.51                | 2.74       |
| (1,285)  | 1:A:398:TYR:HD2  | 1:A:403:ILE:HD13 | 10                  | 2.57     | 0.51                | 2.74       |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD21 | 10                  | 2.52     | 0.89                | 2.7        |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD22 | 10                  | 2.52     | 0.89                | 2.7        |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD23 | 10                  | 2.52     | 0.89                | 2.7        |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD11 | 10                  | 2.52     | 0.89                | 2.7        |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD12 | 10                  | 2.52     | 0.89                | 2.7        |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD13 | 10                  | 2.52     | 0.89                | 2.7        |
| (1,1184) | 1:A:405:LYS:HA   | 1:A:413:PHE:HE2  | 10                  | 2.44     | 0.89                | 2.84       |
| (1,1220) | 1:A:369:PRO:HA   | 1:A:387:TYR:HE2  | 10                  | 2.43     | 0.78                | 2.28       |
| (1,591)  | 1:A:342:TYR:HE2  | 1:A:356:TRP:HE1  | 10                  | 2.38     | 0.72                | 2.34       |
| (1,1170) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HA   | 10                  | 2.33     | 0.15                | 2.37       |
| (1,75)   | 1:A:387:TYR:HD1  | 1:A:388:GLU:HG2  | 10                  | 2.32     | 0.33                | 2.15       |
| (1,75)   | 1:A:387:TYR:HD1  | 1:A:388:GLU:HG3  | 10                  | 2.32     | 0.33                | 2.15       |
| (1,1208) | 1:A:398:TYR:HE2  | 1:A:403:ILE:HB   | 10                  | 2.19     | 0.58                | 2.38       |
| (1,1167) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HB   | 10                  | 2.19     | 0.56                | 2.37       |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG11 | 10                  | 2.17     | 0.11                | 2.2        |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG12 | 10                  | 2.17     | 0.11                | 2.2        |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG13 | 10                  | 2.17     | 0.11                | 2.2        |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG21 | 10                  | 2.17     | 0.11                | 2.2        |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG22 | 10                  | 2.17     | 0.11                | 2.2        |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG23 | 10                  | 2.17     | 0.11                | 2.2        |
| (1,1159) | 1:A:369:PRO:HA   | 1:A:387:TYR:HD2  | 10                  | 2.12     | 0.76                | 1.9        |
| (1,1254) | 1:A:337:LEU:HD11 | 1:A:340:TYR:HD1  | 10                  | 2.01     | 0.44                | 2.13       |
| (1,1254) | 1:A:337:LEU:HD12 | 1:A:340:TYR:HD1  | 10                  | 2.01     | 0.44                | 2.13       |
| (1,1254) | 1:A:337:LEU:HD13 | 1:A:340:TYR:HD1  | 10                  | 2.01     | 0.44                | 2.13       |
| (1,1254) | 1:A:337:LEU:HD21 | 1:A:340:TYR:HD1  | 10                  | 2.01     | 0.44                | 2.13       |
| (1,1254) | 1:A:337:LEU:HD22 | 1:A:340:TYR:HD1  | 10                  | 2.01     | 0.44                | 2.13       |
| (1,1254) | 1:A:337:LEU:HD23 | 1:A:340:TYR:HD1  | 10                  | 2.01     | 0.44                | 2.13       |

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| Key      | Atom-1           | Atom-2           | Models <sup>1</sup> | Mean (Å) | SD <sup>1</sup> (Å) | Median (Å) |
|----------|------------------|------------------|---------------------|----------|---------------------|------------|
| (1,474)  | 1:A:354:ILE:HG12 | 1:A:355:ARG:HE   | 10                  | 1.96     | 0.68                | 2.3        |
| (1,1330) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HE   | 10                  | 1.95     | 0.48                | 2.03       |
| (1,1330) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HE   | 10                  | 1.95     | 0.48                | 2.03       |
| (1,1330) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HE   | 10                  | 1.95     | 0.48                | 2.03       |
| (1,1330) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HE   | 10                  | 1.95     | 0.48                | 2.03       |
| (1,1330) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HE   | 10                  | 1.95     | 0.48                | 2.03       |
| (1,1330) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HE   | 10                  | 1.95     | 0.48                | 2.03       |
| (1,259)  | 1:A:387:TYR:HD1  | 1:A:388:GLU:HA   | 10                  | 1.88     | 0.15                | 1.86       |
| (1,638)  | 1:A:406:GLU:H    | 1:A:413:PHE:HD2  | 10                  | 1.84     | 0.66                | 2.06       |
| (1,363)  | 1:A:398:TYR:HE2  | 1:A:403:ILE:HG21 | 10                  | 1.79     | 0.58                | 1.98       |
| (1,363)  | 1:A:398:TYR:HE2  | 1:A:403:ILE:HG22 | 10                  | 1.79     | 0.58                | 1.98       |
| (1,363)  | 1:A:398:TYR:HE2  | 1:A:403:ILE:HG23 | 10                  | 1.79     | 0.58                | 1.98       |
| (1,231)  | 1:A:340:TYR:HE1  | 1:A:376:TRP:HA   | 10                  | 1.76     | 0.66                | 1.62       |
| (1,1168) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HG21 | 10                  | 1.66     | 0.47                | 1.81       |
| (1,1168) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HG22 | 10                  | 1.66     | 0.47                | 1.81       |
| (1,1168) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HG23 | 10                  | 1.66     | 0.47                | 1.81       |
| (1,270)  | 1:A:366:ILE:HD11 | 1:A:413:PHE:HZ   | 10                  | 1.58     | 0.18                | 1.57       |
| (1,270)  | 1:A:366:ILE:HD12 | 1:A:413:PHE:HZ   | 10                  | 1.58     | 0.18                | 1.57       |
| (1,270)  | 1:A:366:ILE:HD13 | 1:A:413:PHE:HZ   | 10                  | 1.58     | 0.18                | 1.57       |
| (1,1206) | 1:A:397:TYR:HB2  | 1:A:398:TYR:HE2  | 10                  | 1.58     | 0.57                | 1.88       |
| (1,505)  | 1:A:412:LEU:HD11 | 1:A:413:PHE:HE1  | 10                  | 1.55     | 0.59                | 1.46       |
| (1,505)  | 1:A:412:LEU:HD12 | 1:A:413:PHE:HE1  | 10                  | 1.55     | 0.59                | 1.46       |
| (1,505)  | 1:A:412:LEU:HD13 | 1:A:413:PHE:HE1  | 10                  | 1.55     | 0.59                | 1.46       |
| (1,633)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:H    | 10                  | 1.5      | 0.24                | 1.6        |
| (1,633)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:H    | 10                  | 1.5      | 0.24                | 1.6        |
| (1,372)  | 1:A:373:ALA:HB1  | 1:A:387:TYR:HD2  | 10                  | 1.5      | 0.41                | 1.43       |
| (1,372)  | 1:A:373:ALA:HB2  | 1:A:387:TYR:HD2  | 10                  | 1.5      | 0.41                | 1.43       |
| (1,372)  | 1:A:373:ALA:HB3  | 1:A:387:TYR:HD2  | 10                  | 1.5      | 0.41                | 1.43       |
| (1,396)  | 1:A:366:ILE:HG21 | 1:A:387:TYR:HD2  | 10                  | 1.49     | 0.53                | 1.42       |
| (1,396)  | 1:A:366:ILE:HG22 | 1:A:387:TYR:HD2  | 10                  | 1.49     | 0.53                | 1.42       |
| (1,396)  | 1:A:366:ILE:HG23 | 1:A:387:TYR:HD2  | 10                  | 1.49     | 0.53                | 1.42       |
| (1,397)  | 1:A:366:ILE:HG21 | 1:A:387:TYR:HE2  | 10                  | 1.43     | 0.56                | 1.33       |
| (1,397)  | 1:A:366:ILE:HG22 | 1:A:387:TYR:HE2  | 10                  | 1.43     | 0.56                | 1.33       |
| (1,397)  | 1:A:366:ILE:HG23 | 1:A:387:TYR:HE2  | 10                  | 1.43     | 0.56                | 1.33       |
| (1,1198) | 1:A:396:HIS:HD2  | 1:A:397:TYR:HA   | 10                  | 1.2      | 0.36                | 1.16       |
| (1,887)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:H    | 10                  | 1.2      | 0.05                | 1.19       |
| (1,324)  | 1:A:346:SER:H    | 1:A:354:ILE:HD11 | 10                  | 1.19     | 0.35                | 1.08       |
| (1,324)  | 1:A:346:SER:H    | 1:A:354:ILE:HD12 | 10                  | 1.19     | 0.35                | 1.08       |
| (1,324)  | 1:A:346:SER:H    | 1:A:354:ILE:HD13 | 10                  | 1.19     | 0.35                | 1.08       |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD11 | 10                  | 1.16     | 0.66                | 1.24       |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD12 | 10                  | 1.16     | 0.66                | 1.24       |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD13 | 10                  | 1.16     | 0.66                | 1.24       |

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| Key      | Atom-1           | Atom-2           | Models <sup>1</sup> | Mean (Å) | SD <sup>1</sup> (Å) | Median (Å) |
|----------|------------------|------------------|---------------------|----------|---------------------|------------|
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD21 | 10                  | 1.16     | 0.66                | 1.24       |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD22 | 10                  | 1.16     | 0.66                | 1.24       |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD23 | 10                  | 1.16     | 0.66                | 1.24       |
| (1,1163) | 1:A:398:TYR:HA   | 1:A:398:TYR:HD2  | 10                  | 1.11     | 0.18                | 1.18       |
| (1,806)  | 1:A:365:ARG:H    | 1:A:365:ARG:HG3  | 10                  | 1.1      | 0.06                | 1.08       |
| (1,572)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG11 | 10                  | 1.08     | 0.3                 | 1.08       |
| (1,572)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG12 | 10                  | 1.08     | 0.3                 | 1.08       |
| (1,572)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG13 | 10                  | 1.08     | 0.3                 | 1.08       |
| (1,1171) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG21 | 10                  | 1.08     | 0.14                | 1.1        |
| (1,1171) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG22 | 10                  | 1.08     | 0.14                | 1.1        |
| (1,1171) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG23 | 10                  | 1.08     | 0.14                | 1.1        |
| (1,1116) | 1:A:354:ILE:H    | 1:A:368:ASP:HB2  | 10                  | 1.05     | 0.03                | 1.05       |
| (1,65)   | 1:A:355:ARG:HB2  | 1:A:367:VAL:HB   | 10                  | 1.05     | 0.21                | 1.11       |
| (1,65)   | 1:A:355:ARG:HB3  | 1:A:367:VAL:HB   | 10                  | 1.05     | 0.21                | 1.11       |
| (1,922)  | 1:A:397:TYR:H    | 1:A:403:ILE:HD11 | 10                  | 1.04     | 0.22                | 0.95       |
| (1,922)  | 1:A:397:TYR:H    | 1:A:403:ILE:HD12 | 10                  | 1.04     | 0.22                | 0.95       |
| (1,922)  | 1:A:397:TYR:H    | 1:A:403:ILE:HD13 | 10                  | 1.04     | 0.22                | 0.95       |
| (1,1246) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HH2  | 10                  | 1.02     | 0.55                | 0.82       |
| (1,1246) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HH2  | 10                  | 1.02     | 0.55                | 0.82       |
| (1,1246) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HH2  | 10                  | 1.02     | 0.55                | 0.82       |
| (1,1246) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HH2  | 10                  | 1.02     | 0.55                | 0.82       |
| (1,1246) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HH2  | 10                  | 1.02     | 0.55                | 0.82       |
| (1,1246) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HH2  | 10                  | 1.02     | 0.55                | 0.82       |
| (1,401)  | 1:A:353:PHE:HB3  | 1:A:366:ILE:HG21 | 10                  | 0.98     | 0.21                | 0.97       |
| (1,401)  | 1:A:353:PHE:HB3  | 1:A:366:ILE:HG22 | 10                  | 0.98     | 0.21                | 0.97       |
| (1,401)  | 1:A:353:PHE:HB3  | 1:A:366:ILE:HG23 | 10                  | 0.98     | 0.21                | 0.97       |
| (1,361)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HG21 | 10                  | 0.97     | 0.38                | 0.93       |
| (1,361)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HG22 | 10                  | 0.97     | 0.38                | 0.93       |
| (1,361)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HG23 | 10                  | 0.97     | 0.38                | 0.93       |
| (1,1161) | 1:A:387:TYR:HD2  | 1:A:390:MET:HB2  | 10                  | 0.97     | 0.3                 | 1.08       |
| (1,1161) | 1:A:387:TYR:HD2  | 1:A:390:MET:HB3  | 10                  | 0.97     | 0.3                 | 1.08       |
| (1,1222) | 1:A:366:ILE:HG12 | 1:A:387:TYR:HE2  | 10                  | 0.96     | 0.59                | 0.85       |
| (1,1222) | 1:A:366:ILE:HG13 | 1:A:387:TYR:HE2  | 10                  | 0.96     | 0.59                | 0.85       |
| (1,1199) | 1:A:393:ALA:HA   | 1:A:396:HIS:HD2  | 10                  | 0.96     | 0.3                 | 1.02       |
| (1,995)  | 1:A:359:LYS:HD2  | 1:A:363:ILE:H    | 10                  | 0.94     | 0.27                | 0.9        |
| (1,995)  | 1:A:359:LYS:HD3  | 1:A:363:ILE:H    | 10                  | 0.94     | 0.27                | 0.9        |
| (1,780)  | 1:A:387:TYR:HD1  | 1:A:388:GLU:H    | 10                  | 0.88     | 0.09                | 0.88       |
| (1,399)  | 1:A:353:PHE:HA   | 1:A:366:ILE:HG21 | 10                  | 0.83     | 0.23                | 0.77       |
| (1,399)  | 1:A:353:PHE:HA   | 1:A:366:ILE:HG22 | 10                  | 0.83     | 0.23                | 0.77       |
| (1,399)  | 1:A:353:PHE:HA   | 1:A:366:ILE:HG23 | 10                  | 0.83     | 0.23                | 0.77       |
| (1,567)  | 1:A:386:THR:HG21 | 1:A:387:TYR:HB3  | 10                  | 0.81     | 0.32                | 0.71       |
| (1,567)  | 1:A:386:THR:HG22 | 1:A:387:TYR:HB3  | 10                  | 0.81     | 0.32                | 0.71       |

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| Key      | Atom-1           | Atom-2           | Models <sup>1</sup> | Mean (Å) | SD <sup>1</sup> (Å) | Median (Å) |
|----------|------------------|------------------|---------------------|----------|---------------------|------------|
| (1,567)  | 1:A:386:THR:HG23 | 1:A:387:TYR:HB3  | 10                  | 0.81     | 0.32                | 0.71       |
| (1,1158) | 1:A:387:TYR:HA   | 1:A:387:TYR:HD2  | 10                  | 0.81     | 0.09                | 0.8        |
| (1,84)   | 1:A:358:ASP:HA   | 1:A:360:GLU:HG2  | 10                  | 0.79     | 0.34                | 0.9        |
| (1,84)   | 1:A:358:ASP:HA   | 1:A:360:GLU:HG3  | 10                  | 0.79     | 0.34                | 0.9        |
| (1,643)  | 1:A:406:GLU:H    | 1:A:413:PHE:HB3  | 10                  | 0.76     | 0.27                | 0.86       |
| (1,904)  | 1:A:366:ILE:H    | 1:A:368:ASP:H    | 10                  | 0.75     | 0.16                | 0.77       |
| (1,214)  | 1:A:373:ALA:HB1  | 1:A:385:MET:HA   | 10                  | 0.75     | 0.21                | 0.77       |
| (1,214)  | 1:A:373:ALA:HB2  | 1:A:385:MET:HA   | 10                  | 0.75     | 0.21                | 0.77       |
| (1,214)  | 1:A:373:ALA:HB3  | 1:A:385:MET:HA   | 10                  | 0.75     | 0.21                | 0.77       |
| (1,666)  | 1:A:366:ILE:H    | 1:A:413:PHE:HZ   | 10                  | 0.74     | 0.3                 | 0.67       |
| (1,1221) | 1:A:387:TYR:HB3  | 1:A:387:TYR:HE1  | 10                  | 0.7      | 0.01                | 0.7        |
| (1,1213) | 1:A:340:TYR:HA   | 1:A:340:TYR:HE2  | 10                  | 0.7      | 0.08                | 0.72       |
| (1,313)  | 1:A:342:TYR:HA   | 1:A:342:TYR:HD2  | 10                  | 0.68     | 0.1                 | 0.72       |
| (1,1218) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HG   | 10                  | 0.63     | 0.32                | 0.64       |
| (1,1341) | 1:A:345:LEU:HD11 | 1:A:367:VAL:HG21 | 10                  | 0.62     | 0.31                | 0.58       |
| (1,1341) | 1:A:345:LEU:HD11 | 1:A:367:VAL:HG22 | 10                  | 0.62     | 0.31                | 0.58       |
| (1,1341) | 1:A:345:LEU:HD11 | 1:A:367:VAL:HG23 | 10                  | 0.62     | 0.31                | 0.58       |
| (1,1341) | 1:A:345:LEU:HD12 | 1:A:367:VAL:HG21 | 10                  | 0.62     | 0.31                | 0.58       |
| (1,1341) | 1:A:345:LEU:HD12 | 1:A:367:VAL:HG22 | 10                  | 0.62     | 0.31                | 0.58       |
| (1,1341) | 1:A:345:LEU:HD12 | 1:A:367:VAL:HG23 | 10                  | 0.62     | 0.31                | 0.58       |
| (1,1341) | 1:A:345:LEU:HD13 | 1:A:367:VAL:HG21 | 10                  | 0.62     | 0.31                | 0.58       |
| (1,1341) | 1:A:345:LEU:HD13 | 1:A:367:VAL:HG22 | 10                  | 0.62     | 0.31                | 0.58       |
| (1,1341) | 1:A:345:LEU:HD13 | 1:A:367:VAL:HG23 | 10                  | 0.62     | 0.31                | 0.58       |
| (1,1341) | 1:A:345:LEU:HD21 | 1:A:367:VAL:HG21 | 10                  | 0.62     | 0.31                | 0.58       |
| (1,1341) | 1:A:345:LEU:HD21 | 1:A:367:VAL:HG22 | 10                  | 0.62     | 0.31                | 0.58       |
| (1,1341) | 1:A:345:LEU:HD21 | 1:A:367:VAL:HG23 | 10                  | 0.62     | 0.31                | 0.58       |
| (1,1341) | 1:A:345:LEU:HD22 | 1:A:367:VAL:HG21 | 10                  | 0.62     | 0.31                | 0.58       |
| (1,1341) | 1:A:345:LEU:HD22 | 1:A:367:VAL:HG22 | 10                  | 0.62     | 0.31                | 0.58       |
| (1,1341) | 1:A:345:LEU:HD22 | 1:A:367:VAL:HG23 | 10                  | 0.62     | 0.31                | 0.58       |
| (1,1341) | 1:A:345:LEU:HD23 | 1:A:367:VAL:HG21 | 10                  | 0.62     | 0.31                | 0.58       |
| (1,1341) | 1:A:345:LEU:HD23 | 1:A:367:VAL:HG22 | 10                  | 0.62     | 0.31                | 0.58       |
| (1,1341) | 1:A:345:LEU:HD23 | 1:A:367:VAL:HG23 | 10                  | 0.62     | 0.31                | 0.58       |
| (1,569)  | 1:A:354:ILE:H    | 1:A:367:VAL:HG11 | 10                  | 0.6      | 0.3                 | 0.52       |
| (1,569)  | 1:A:354:ILE:H    | 1:A:367:VAL:HG12 | 10                  | 0.6      | 0.3                 | 0.52       |
| (1,569)  | 1:A:354:ILE:H    | 1:A:367:VAL:HG13 | 10                  | 0.6      | 0.3                 | 0.52       |
| (1,449)  | 1:A:385:MET:HB3  | 1:A:386:THR:HA   | 10                  | 0.57     | 0.14                | 0.59       |
| (1,897)  | 1:A:353:PHE:H    | 1:A:367:VAL:HB   | 10                  | 0.54     | 0.14                | 0.52       |
| (1,883)  | 1:A:401:ASN:H    | 1:A:402:ILE:HD11 | 10                  | 0.53     | 0.05                | 0.52       |
| (1,883)  | 1:A:401:ASN:H    | 1:A:402:ILE:HD12 | 10                  | 0.53     | 0.05                | 0.52       |
| (1,883)  | 1:A:401:ASN:H    | 1:A:402:ILE:HD13 | 10                  | 0.53     | 0.05                | 0.52       |
| (1,410)  | 1:A:353:PHE:HA   | 1:A:367:VAL:HA   | 10                  | 0.52     | 0.1                 | 0.54       |
| (1,726)  | 1:A:387:TYR:HD2  | 1:A:390:MET:H    | 10                  | 0.51     | 0.21                | 0.56       |

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| Key      | Atom-1           | Atom-2           | Models <sup>1</sup> | Mean (Å) | SD <sup>1</sup> (Å) | Median (Å) |
|----------|------------------|------------------|---------------------|----------|---------------------|------------|
| (1,1038) | 1:A:358:ASP:HA   | 1:A:360:GLU:H    | 10                  | 0.48     | 0.17                | 0.5        |
| (1,848)  | 1:A:361:SER:H    | 1:A:363:ILE:HB   | 10                  | 0.48     | 0.21                | 0.51       |
| (1,1104) | 1:A:354:ILE:H    | 1:A:366:ILE:HA   | 10                  | 0.47     | 0.17                | 0.45       |
| (1,842)  | 1:A:358:ASP:HA   | 1:A:361:SER:H    | 10                  | 0.46     | 0.1                 | 0.46       |
| (1,47)   | 1:A:418:THR:HG21 | 1:A:419:PRO:HB3  | 10                  | 0.43     | 0.13                | 0.41       |
| (1,47)   | 1:A:418:THR:HG22 | 1:A:419:PRO:HB3  | 10                  | 0.43     | 0.13                | 0.41       |
| (1,47)   | 1:A:418:THR:HG23 | 1:A:419:PRO:HB3  | 10                  | 0.43     | 0.13                | 0.41       |
| (1,860)  | 1:A:385:MET:HB3  | 1:A:386:THR:H    | 10                  | 0.43     | 0.15                | 0.43       |
| (1,1214) | 1:A:340:TYR:HB2  | 1:A:340:TYR:HE2  | 10                  | 0.35     | 0.03                | 0.36       |
| (1,844)  | 1:A:359:LYS:HA   | 1:A:361:SER:H    | 10                  | 0.3      | 0.12                | 0.26       |
| (1,48)   | 1:A:385:MET:HB2  | 1:A:386:THR:HA   | 10                  | 0.28     | 0.08                | 0.27       |
| (1,1160) | 1:A:387:TYR:HB2  | 1:A:387:TYR:HD2  | 10                  | 0.24     | 0.05                | 0.25       |
| (1,748)  | 1:A:347:ASP:H    | 1:A:350:TYR:HE2  | 9                   | 3.59     | 0.48                | 3.71       |
| (1,140)  | 1:A:347:ASP:HB3  | 1:A:350:TYR:HD2  | 9                   | 3.26     | 0.76                | 3.68       |
| (1,716)  | 1:A:349:ARG:H    | 1:A:350:TYR:HD2  | 9                   | 2.96     | 0.26                | 3.04       |
| (1,717)  | 1:A:349:ARG:H    | 1:A:350:TYR:HE2  | 9                   | 2.72     | 0.36                | 2.76       |
| (1,1351) | 1:A:349:ARG:HD2  | 1:A:350:TYR:HE2  | 9                   | 2.5      | 0.67                | 2.46       |
| (1,1351) | 1:A:349:ARG:HD3  | 1:A:350:TYR:HE2  | 9                   | 2.5      | 0.67                | 2.46       |
| (1,703)  | 1:A:404:ARG:H    | 1:A:413:PHE:HD2  | 9                   | 2.43     | 1.22                | 2.73       |
| (1,1352) | 1:A:349:ARG:HD2  | 1:A:350:TYR:HD2  | 9                   | 2.41     | 0.69                | 2.66       |
| (1,1352) | 1:A:349:ARG:HD3  | 1:A:350:TYR:HD2  | 9                   | 2.41     | 0.69                | 2.66       |
| (1,500)  | 1:A:336:LEU:HD21 | 1:A:338:TRP:HH2  | 9                   | 2.27     | 0.68                | 2.32       |
| (1,500)  | 1:A:336:LEU:HD22 | 1:A:338:TRP:HH2  | 9                   | 2.27     | 0.68                | 2.32       |
| (1,500)  | 1:A:336:LEU:HD23 | 1:A:338:TRP:HH2  | 9                   | 2.27     | 0.68                | 2.32       |
| (1,178)  | 1:A:412:LEU:HA   | 1:A:413:PHE:HE1  | 9                   | 2.15     | 0.84                | 2.6        |
| (1,1207) | 1:A:347:ASP:HB2  | 1:A:350:TYR:HE2  | 9                   | 2.05     | 0.79                | 2.35       |
| (1,1207) | 1:A:347:ASP:HB3  | 1:A:350:TYR:HE2  | 9                   | 2.05     | 0.79                | 2.35       |
| (1,1349) | 1:A:349:ARG:HB2  | 1:A:350:TYR:HD2  | 9                   | 1.94     | 0.17                | 2.02       |
| (1,1349) | 1:A:349:ARG:HB3  | 1:A:350:TYR:HD2  | 9                   | 1.94     | 0.17                | 2.02       |
| (1,1211) | 1:A:349:ARG:HG2  | 1:A:350:TYR:HE2  | 9                   | 1.92     | 0.38                | 2.09       |
| (1,1211) | 1:A:349:ARG:HG3  | 1:A:350:TYR:HE2  | 9                   | 1.92     | 0.38                | 2.09       |
| (1,935)  | 1:A:350:TYR:H    | 1:A:350:TYR:HD2  | 9                   | 1.46     | 0.22                | 1.41       |
| (1,1157) | 1:A:349:ARG:HG2  | 1:A:350:TYR:HD2  | 9                   | 1.39     | 0.3                 | 1.43       |
| (1,1157) | 1:A:349:ARG:HG3  | 1:A:350:TYR:HD2  | 9                   | 1.39     | 0.3                 | 1.43       |
| (1,933)  | 1:A:350:TYR:H    | 1:A:350:TYR:HE2  | 9                   | 1.26     | 0.24                | 1.18       |
| (1,605)  | 1:A:376:TRP:HE1  | 1:A:390:MET:HG2  | 9                   | 1.21     | 0.41                | 1.31       |
| (1,605)  | 1:A:376:TRP:HE1  | 1:A:390:MET:HG3  | 9                   | 1.21     | 0.41                | 1.31       |
| (1,496)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD11 | 9                   | 1.18     | 0.55                | 1.04       |
| (1,496)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD12 | 9                   | 1.18     | 0.55                | 1.04       |
| (1,496)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD13 | 9                   | 1.18     | 0.55                | 1.04       |
| (1,116)  | 1:A:353:PHE:HB2  | 1:A:372:LEU:HG   | 9                   | 1.01     | 0.35                | 1.11       |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD11 | 9                   | 1.0      | 0.27                | 1.01       |

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| Key      | Atom-1           | Atom-2           | Models <sup>1</sup> | Mean (Å) | SD <sup>1</sup> (Å) | Median (Å) |
|----------|------------------|------------------|---------------------|----------|---------------------|------------|
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD12 | 9                   | 1.0      | 0.27                | 1.01       |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD13 | 9                   | 1.0      | 0.27                | 1.01       |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD21 | 9                   | 1.0      | 0.27                | 1.01       |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD22 | 9                   | 1.0      | 0.27                | 1.01       |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD23 | 9                   | 1.0      | 0.27                | 1.01       |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD11 | 9                   | 0.85     | 0.25                | 0.93       |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD12 | 9                   | 0.85     | 0.25                | 0.93       |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD13 | 9                   | 0.85     | 0.25                | 0.93       |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD21 | 9                   | 0.85     | 0.25                | 0.93       |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD22 | 9                   | 0.85     | 0.25                | 0.93       |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD23 | 9                   | 0.85     | 0.25                | 0.93       |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD11 | 9                   | 0.85     | 0.25                | 0.93       |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD12 | 9                   | 0.85     | 0.25                | 0.93       |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD13 | 9                   | 0.85     | 0.25                | 0.93       |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD21 | 9                   | 0.85     | 0.25                | 0.93       |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD22 | 9                   | 0.85     | 0.25                | 0.93       |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD23 | 9                   | 0.85     | 0.25                | 0.93       |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD11 | 9                   | 0.85     | 0.25                | 0.93       |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD12 | 9                   | 0.85     | 0.25                | 0.93       |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD13 | 9                   | 0.85     | 0.25                | 0.93       |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD21 | 9                   | 0.85     | 0.25                | 0.93       |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD22 | 9                   | 0.85     | 0.25                | 0.93       |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD23 | 9                   | 0.85     | 0.25                | 0.93       |
| (1,88)   | 1:A:370:ASN:HA   | 1:A:387:TYR:HB3  | 9                   | 0.84     | 0.75                | 0.42       |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD11 | 9                   | 0.81     | 0.46                | 0.89       |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD12 | 9                   | 0.81     | 0.46                | 0.89       |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD13 | 9                   | 0.81     | 0.46                | 0.89       |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD21 | 9                   | 0.81     | 0.46                | 0.89       |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD22 | 9                   | 0.81     | 0.46                | 0.89       |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD23 | 9                   | 0.81     | 0.46                | 0.89       |
| (1,279)  | 1:A:363:ILE:HD11 | 1:A:412:LEU:HD11 | 9                   | 0.78     | 0.41                | 0.78       |
| (1,279)  | 1:A:363:ILE:HD11 | 1:A:412:LEU:HD12 | 9                   | 0.78     | 0.41                | 0.78       |
| (1,279)  | 1:A:363:ILE:HD11 | 1:A:412:LEU:HD13 | 9                   | 0.78     | 0.41                | 0.78       |
| (1,279)  | 1:A:363:ILE:HD12 | 1:A:412:LEU:HD11 | 9                   | 0.78     | 0.41                | 0.78       |
| (1,279)  | 1:A:363:ILE:HD12 | 1:A:412:LEU:HD12 | 9                   | 0.78     | 0.41                | 0.78       |
| (1,279)  | 1:A:363:ILE:HD12 | 1:A:412:LEU:HD13 | 9                   | 0.78     | 0.41                | 0.78       |
| (1,279)  | 1:A:363:ILE:HD13 | 1:A:412:LEU:HD11 | 9                   | 0.78     | 0.41                | 0.78       |
| (1,279)  | 1:A:363:ILE:HD13 | 1:A:412:LEU:HD12 | 9                   | 0.78     | 0.41                | 0.78       |
| (1,279)  | 1:A:363:ILE:HD13 | 1:A:412:LEU:HD13 | 9                   | 0.78     | 0.41                | 0.78       |
| (1,118)  | 1:A:353:PHE:HB3  | 1:A:372:LEU:HG   | 9                   | 0.74     | 0.33                | 0.82       |
| (1,385)  | 1:A:358:ASP:HA   | 1:A:363:ILE:HG21 | 9                   | 0.73     | 0.31                | 0.65       |
| (1,385)  | 1:A:358:ASP:HA   | 1:A:363:ILE:HG22 | 9                   | 0.73     | 0.31                | 0.65       |

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| Key      | Atom-1           | Atom-2           | Models <sup>1</sup> | Mean (Å) | SD <sup>1</sup> (Å) | Median (Å) |
|----------|------------------|------------------|---------------------|----------|---------------------|------------|
| (1,385)  | 1:A:358:ASP:HA   | 1:A:363:ILE:HG23 | 9                   | 0.73     | 0.31                | 0.65       |
| (1,565)  | 1:A:386:THR:HA   | 1:A:386:THR:HG21 | 9                   | 0.59     | 0.0                 | 0.59       |
| (1,565)  | 1:A:386:THR:HA   | 1:A:386:THR:HG22 | 9                   | 0.59     | 0.0                 | 0.59       |
| (1,565)  | 1:A:386:THR:HA   | 1:A:386:THR:HG23 | 9                   | 0.59     | 0.0                 | 0.59       |
| (1,1191) | 1:A:336:LEU:HB2  | 1:A:338:TRP:HD1  | 9                   | 0.56     | 0.29                | 0.63       |
| (1,1191) | 1:A:336:LEU:HB3  | 1:A:338:TRP:HD1  | 9                   | 0.56     | 0.29                | 0.63       |
| (1,335)  | 1:A:361:SER:HB3  | 1:A:363:ILE:HB   | 9                   | 0.54     | 0.27                | 0.57       |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD11 | 9                   | 0.54     | 0.26                | 0.49       |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD12 | 9                   | 0.54     | 0.26                | 0.49       |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD13 | 9                   | 0.54     | 0.26                | 0.49       |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD21 | 9                   | 0.54     | 0.26                | 0.49       |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD22 | 9                   | 0.54     | 0.26                | 0.49       |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD23 | 9                   | 0.54     | 0.26                | 0.49       |
| (1,1129) | 1:A:398:TYR:H    | 1:A:402:ILE:HD11 | 9                   | 0.46     | 0.26                | 0.36       |
| (1,1129) | 1:A:398:TYR:H    | 1:A:402:ILE:HD12 | 9                   | 0.46     | 0.26                | 0.36       |
| (1,1129) | 1:A:398:TYR:H    | 1:A:402:ILE:HD13 | 9                   | 0.46     | 0.26                | 0.36       |
| (1,358)  | 1:A:397:TYR:H    | 1:A:403:ILE:HG21 | 9                   | 0.44     | 0.18                | 0.37       |
| (1,358)  | 1:A:397:TYR:H    | 1:A:403:ILE:HG22 | 9                   | 0.44     | 0.18                | 0.37       |
| (1,358)  | 1:A:397:TYR:H    | 1:A:403:ILE:HG23 | 9                   | 0.44     | 0.18                | 0.37       |
| (1,19)   | 1:A:344:LEU:H    | 1:A:354:ILE:HG21 | 9                   | 0.43     | 0.17                | 0.41       |
| (1,19)   | 1:A:344:LEU:H    | 1:A:354:ILE:HG22 | 9                   | 0.43     | 0.17                | 0.41       |
| (1,19)   | 1:A:344:LEU:H    | 1:A:354:ILE:HG23 | 9                   | 0.43     | 0.17                | 0.41       |
| (1,701)  | 1:A:363:ILE:HD11 | 1:A:415:PHE:H    | 9                   | 0.4      | 0.12                | 0.39       |
| (1,701)  | 1:A:363:ILE:HD12 | 1:A:415:PHE:H    | 9                   | 0.4      | 0.12                | 0.39       |
| (1,701)  | 1:A:363:ILE:HD13 | 1:A:415:PHE:H    | 9                   | 0.4      | 0.12                | 0.39       |
| (1,673)  | 1:A:365:ARG:HD2  | 1:A:366:ILE:H    | 9                   | 0.39     | 0.14                | 0.46       |
| (1,344)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG21 | 9                   | 0.39     | 0.21                | 0.37       |
| (1,344)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG22 | 9                   | 0.39     | 0.21                | 0.37       |
| (1,344)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG23 | 9                   | 0.39     | 0.21                | 0.37       |
| (1,380)  | 1:A:363:ILE:HG21 | 1:A:364:PHE:HD1  | 9                   | 0.36     | 0.1                 | 0.37       |
| (1,380)  | 1:A:363:ILE:HG22 | 1:A:364:PHE:HD1  | 9                   | 0.36     | 0.1                 | 0.37       |
| (1,380)  | 1:A:363:ILE:HG23 | 1:A:364:PHE:HD1  | 9                   | 0.36     | 0.1                 | 0.37       |
| (1,785)  | 1:A:355:ARG:H    | 1:A:366:ILE:HA   | 9                   | 0.35     | 0.21                | 0.19       |
| (1,296)  | 1:A:340:TYR:HA   | 1:A:340:TYR:HD2  | 9                   | 0.28     | 0.06                | 0.28       |
| (1,908)  | 1:A:366:ILE:HA   | 1:A:368:ASP:H    | 9                   | 0.28     | 0.12                | 0.26       |
| (1,1130) | 1:A:340:TYR:H    | 1:A:340:TYR:HD2  | 9                   | 0.28     | 0.09                | 0.28       |
| (1,683)  | 1:A:405:LYS:H    | 1:A:413:PHE:HD2  | 8                   | 2.72     | 1.01                | 3.0        |
| (1,277)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:HD11 | 8                   | 1.46     | 0.2                 | 1.52       |
| (1,277)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:HD12 | 8                   | 1.46     | 0.2                 | 1.52       |
| (1,277)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:HD13 | 8                   | 1.46     | 0.2                 | 1.52       |
| (1,1201) | 1:A:394:LEU:HG   | 1:A:397:TYR:HE2  | 8                   | 1.44     | 0.92                | 1.29       |
| (1,146)  | 1:A:355:ARG:H    | 1:A:365:ARG:HD2  | 8                   | 1.4      | 0.44                | 1.42       |

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| Key      | Atom-1           | Atom-2           | Models <sup>1</sup> | Mean (Å) | SD <sup>1</sup> (Å) | Median (Å) |
|----------|------------------|------------------|---------------------|----------|---------------------|------------|
| (1,1174) | 1:A:394:LEU:HG   | 1:A:397:TYR:HD2  | 8                   | 1.2      | 1.17                | 0.62       |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD11 | 8                   | 1.03     | 0.65                | 0.95       |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD12 | 8                   | 1.03     | 0.65                | 0.95       |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD13 | 8                   | 1.03     | 0.65                | 0.95       |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD21 | 8                   | 1.03     | 0.65                | 0.95       |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD22 | 8                   | 1.03     | 0.65                | 0.95       |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD23 | 8                   | 1.03     | 0.65                | 0.95       |
| (1,1186) | 1:A:356:TRP:HD1  | 1:A:359:LYS:HE2  | 8                   | 0.95     | 0.52                | 1.18       |
| (1,1186) | 1:A:356:TRP:HD1  | 1:A:359:LYS:HE3  | 8                   | 0.95     | 0.52                | 1.18       |
| (1,203)  | 1:A:345:LEU:HG   | 1:A:355:ARG:HA   | 8                   | 0.94     | 0.35                | 1.01       |
| (1,1329) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HD2  | 8                   | 0.93     | 0.44                | 0.9        |
| (1,1329) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HD3  | 8                   | 0.93     | 0.44                | 0.9        |
| (1,1329) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HD2  | 8                   | 0.93     | 0.44                | 0.9        |
| (1,1329) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HD3  | 8                   | 0.93     | 0.44                | 0.9        |
| (1,1329) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HD2  | 8                   | 0.93     | 0.44                | 0.9        |
| (1,1329) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HD3  | 8                   | 0.93     | 0.44                | 0.9        |
| (1,1329) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HD2  | 8                   | 0.93     | 0.44                | 0.9        |
| (1,1329) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HD3  | 8                   | 0.93     | 0.44                | 0.9        |
| (1,1329) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HD2  | 8                   | 0.93     | 0.44                | 0.9        |
| (1,1329) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HD3  | 8                   | 0.93     | 0.44                | 0.9        |
| (1,1329) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HD2  | 8                   | 0.93     | 0.44                | 0.9        |
| (1,1329) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HD3  | 8                   | 0.93     | 0.44                | 0.9        |
| (1,191)  | 1:A:406:GLU:HA   | 1:A:412:LEU:HB3  | 8                   | 0.87     | 0.28                | 0.82       |
| (1,1180) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HA   | 8                   | 0.76     | 0.27                | 0.72       |
| (1,151)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:H    | 8                   | 0.71     | 0.19                | 0.68       |
| (1,435)  | 1:A:370:ASN:HA   | 1:A:387:TYR:HB2  | 8                   | 0.71     | 0.62                | 0.52       |
| (1,327)  | 1:A:344:LEU:H    | 1:A:354:ILE:HD11 | 8                   | 0.65     | 0.28                | 0.64       |
| (1,327)  | 1:A:344:LEU:H    | 1:A:354:ILE:HD12 | 8                   | 0.65     | 0.28                | 0.64       |
| (1,327)  | 1:A:344:LEU:H    | 1:A:354:ILE:HD13 | 8                   | 0.65     | 0.28                | 0.64       |
| (1,1110) | 1:A:327:HIS:HE1  | 1:A:328:MET:H    | 8                   | 0.62     | 0.36                | 0.54       |
| (1,824)  | 1:A:375:LEU:HB2  | 1:A:378:ASN:HD21 | 8                   | 0.61     | 0.33                | 0.58       |
| (1,824)  | 1:A:375:LEU:HB3  | 1:A:378:ASN:HD21 | 8                   | 0.61     | 0.33                | 0.58       |
| (1,1204) | 1:A:398:TYR:HE1  | 1:A:404:ARG:HA   | 8                   | 0.58     | 0.27                | 0.58       |
| (1,1245) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HZ2  | 8                   | 0.58     | 0.39                | 0.38       |
| (1,1245) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HZ2  | 8                   | 0.58     | 0.39                | 0.38       |
| (1,1245) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HZ2  | 8                   | 0.58     | 0.39                | 0.38       |
| (1,1245) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HZ2  | 8                   | 0.58     | 0.39                | 0.38       |
| (1,1245) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HZ2  | 8                   | 0.58     | 0.39                | 0.38       |
| (1,1245) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HZ2  | 8                   | 0.58     | 0.39                | 0.38       |
| (1,1114) | 1:A:354:ILE:H    | 1:A:367:VAL:HG21 | 8                   | 0.58     | 0.29                | 0.48       |
| (1,1114) | 1:A:354:ILE:H    | 1:A:367:VAL:HG22 | 8                   | 0.58     | 0.29                | 0.48       |
| (1,1114) | 1:A:354:ILE:H    | 1:A:367:VAL:HG23 | 8                   | 0.58     | 0.29                | 0.48       |

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| Key      | Atom-1           | Atom-2           | Models <sup>1</sup> | Mean (Å) | SD <sup>1</sup> (Å) | Median (Å) |
|----------|------------------|------------------|---------------------|----------|---------------------|------------|
| (1,702)  | 1:A:353:PHE:HD2  | 1:A:372:LEU:H    | 8                   | 0.55     | 0.3                 | 0.59       |
| (1,804)  | 1:A:355:ARG:HB2  | 1:A:365:ARG:H    | 8                   | 0.55     | 0.18                | 0.5        |
| (1,804)  | 1:A:355:ARG:HB3  | 1:A:365:ARG:H    | 8                   | 0.55     | 0.18                | 0.5        |
| (1,173)  | 1:A:353:PHE:HA   | 1:A:368:ASP:HA   | 8                   | 0.51     | 0.11                | 0.52       |
| (1,1328) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HG2  | 8                   | 0.49     | 0.23                | 0.52       |
| (1,1328) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HG3  | 8                   | 0.49     | 0.23                | 0.52       |
| (1,1328) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HG2  | 8                   | 0.49     | 0.23                | 0.52       |
| (1,1328) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HG3  | 8                   | 0.49     | 0.23                | 0.52       |
| (1,1328) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HG2  | 8                   | 0.49     | 0.23                | 0.52       |
| (1,1328) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HG3  | 8                   | 0.49     | 0.23                | 0.52       |
| (1,1328) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HG2  | 8                   | 0.49     | 0.23                | 0.52       |
| (1,1328) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HG3  | 8                   | 0.49     | 0.23                | 0.52       |
| (1,1328) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HG2  | 8                   | 0.49     | 0.23                | 0.52       |
| (1,1328) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HG3  | 8                   | 0.49     | 0.23                | 0.52       |
| (1,1328) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HG2  | 8                   | 0.49     | 0.23                | 0.52       |
| (1,1328) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HG3  | 8                   | 0.49     | 0.23                | 0.52       |
| (1,1337) | 1:A:345:LEU:HD11 | 1:A:357:GLU:H    | 8                   | 0.46     | 0.25                | 0.32       |
| (1,1337) | 1:A:345:LEU:HD12 | 1:A:357:GLU:H    | 8                   | 0.46     | 0.25                | 0.32       |
| (1,1337) | 1:A:345:LEU:HD13 | 1:A:357:GLU:H    | 8                   | 0.46     | 0.25                | 0.32       |
| (1,1337) | 1:A:345:LEU:HD21 | 1:A:357:GLU:H    | 8                   | 0.46     | 0.25                | 0.32       |
| (1,1337) | 1:A:345:LEU:HD22 | 1:A:357:GLU:H    | 8                   | 0.46     | 0.25                | 0.32       |
| (1,1337) | 1:A:345:LEU:HD23 | 1:A:357:GLU:H    | 8                   | 0.46     | 0.25                | 0.32       |
| (1,10)   | 1:A:376:TRP:HZ2  | 1:A:385:MET:HE1  | 8                   | 0.44     | 0.27                | 0.36       |
| (1,10)   | 1:A:376:TRP:HZ2  | 1:A:385:MET:HE2  | 8                   | 0.44     | 0.27                | 0.36       |
| (1,10)   | 1:A:376:TRP:HZ2  | 1:A:385:MET:HE3  | 8                   | 0.44     | 0.27                | 0.36       |
| (1,626)  | 1:A:355:ARG:H    | 1:A:367:VAL:H    | 8                   | 0.44     | 0.24                | 0.38       |
| (1,640)  | 1:A:406:GLU:H    | 1:A:413:PHE:HA   | 8                   | 0.42     | 0.15                | 0.42       |
| (1,215)  | 1:A:380:LYS:HA   | 1:A:380:LYS:HD2  | 8                   | 0.41     | 0.09                | 0.44       |
| (1,215)  | 1:A:380:LYS:HA   | 1:A:380:LYS:HD3  | 8                   | 0.41     | 0.09                | 0.44       |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD11 | 8                   | 0.41     | 0.12                | 0.42       |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD12 | 8                   | 0.41     | 0.12                | 0.42       |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD13 | 8                   | 0.41     | 0.12                | 0.42       |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD21 | 8                   | 0.41     | 0.12                | 0.42       |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD22 | 8                   | 0.41     | 0.12                | 0.42       |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD23 | 8                   | 0.41     | 0.12                | 0.42       |
| (1,820)  | 1:A:366:ILE:HG21 | 1:A:371:GLY:H    | 8                   | 0.41     | 0.19                | 0.44       |
| (1,820)  | 1:A:366:ILE:HG22 | 1:A:371:GLY:H    | 8                   | 0.41     | 0.19                | 0.44       |
| (1,820)  | 1:A:366:ILE:HG23 | 1:A:371:GLY:H    | 8                   | 0.41     | 0.19                | 0.44       |
| (1,330)  | 1:A:358:ASP:HA   | 1:A:361:SER:HB2  | 8                   | 0.29     | 0.14                | 0.28       |
| (1,668)  | 1:A:366:ILE:H    | 1:A:413:PHE:HE1  | 7                   | 3.61     | 0.28                | 3.51       |
| (1,665)  | 1:A:366:ILE:H    | 1:A:413:PHE:HD1  | 7                   | 2.24     | 0.2                 | 2.14       |
| (1,424)  | 1:A:405:LYS:HA   | 1:A:413:PHE:HD2  | 7                   | 1.92     | 0.32                | 1.95       |

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| Key      | Atom-1           | Atom-2           | Models <sup>1</sup> | Mean (Å) | SD <sup>1</sup> (Å) | Median (Å) |
|----------|------------------|------------------|---------------------|----------|---------------------|------------|
| (1,364)  | 1:A:403:ILE:HG21 | 1:A:413:PHE:HE2  | 7                   | 1.54     | 0.39                | 1.49       |
| (1,364)  | 1:A:403:ILE:HG22 | 1:A:413:PHE:HE2  | 7                   | 1.54     | 0.39                | 1.49       |
| (1,364)  | 1:A:403:ILE:HG23 | 1:A:413:PHE:HE2  | 7                   | 1.54     | 0.39                | 1.49       |
| (1,504)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD21 | 7                   | 1.27     | 0.77                | 1.75       |
| (1,504)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD22 | 7                   | 1.27     | 0.77                | 1.75       |
| (1,504)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD23 | 7                   | 1.27     | 0.77                | 1.75       |
| (1,1306) | 1:A:344:LEU:HD11 | 1:A:350:TYR:HE1  | 7                   | 1.26     | 0.78                | 1.34       |
| (1,1306) | 1:A:344:LEU:HD12 | 1:A:350:TYR:HE1  | 7                   | 1.26     | 0.78                | 1.34       |
| (1,1306) | 1:A:344:LEU:HD13 | 1:A:350:TYR:HE1  | 7                   | 1.26     | 0.78                | 1.34       |
| (1,1306) | 1:A:344:LEU:HD21 | 1:A:350:TYR:HE1  | 7                   | 1.26     | 0.78                | 1.34       |
| (1,1306) | 1:A:344:LEU:HD22 | 1:A:350:TYR:HE1  | 7                   | 1.26     | 0.78                | 1.34       |
| (1,1306) | 1:A:344:LEU:HD23 | 1:A:350:TYR:HE1  | 7                   | 1.26     | 0.78                | 1.34       |
| (1,287)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HD11 | 7                   | 1.21     | 0.24                | 1.2        |
| (1,287)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HD12 | 7                   | 1.21     | 0.24                | 1.2        |
| (1,287)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HD13 | 7                   | 1.21     | 0.24                | 1.2        |
| (1,360)  | 1:A:403:ILE:HG21 | 1:A:413:PHE:HD2  | 7                   | 1.21     | 0.31                | 1.18       |
| (1,360)  | 1:A:403:ILE:HG22 | 1:A:413:PHE:HD2  | 7                   | 1.21     | 0.31                | 1.18       |
| (1,360)  | 1:A:403:ILE:HG23 | 1:A:413:PHE:HD2  | 7                   | 1.21     | 0.31                | 1.18       |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD11 | 7                   | 1.16     | 0.5                 | 1.23       |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD12 | 7                   | 1.16     | 0.5                 | 1.23       |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD13 | 7                   | 1.16     | 0.5                 | 1.23       |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD21 | 7                   | 1.16     | 0.5                 | 1.23       |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD22 | 7                   | 1.16     | 0.5                 | 1.23       |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD23 | 7                   | 1.16     | 0.5                 | 1.23       |
| (1,345)  | 1:A:365:ARG:HD2  | 1:A:367:VAL:HG21 | 7                   | 1.07     | 0.24                | 1.13       |
| (1,345)  | 1:A:365:ARG:HD2  | 1:A:367:VAL:HG22 | 7                   | 1.07     | 0.24                | 1.13       |
| (1,345)  | 1:A:365:ARG:HD2  | 1:A:367:VAL:HG23 | 7                   | 1.07     | 0.24                | 1.13       |
| (1,606)  | 1:A:376:TRP:HE1  | 1:A:390:MET:HA   | 7                   | 1.03     | 0.2                 | 1.11       |
| (1,121)  | 1:A:340:TYR:HE1  | 1:A:375:LEU:HB2  | 7                   | 1.03     | 0.57                | 0.97       |
| (1,121)  | 1:A:340:TYR:HE1  | 1:A:375:LEU:HB3  | 7                   | 1.03     | 0.57                | 0.97       |
| (1,1494) | 1:A:405:LYS:HG2  | 1:A:413:PHE:HE2  | 7                   | 0.92     | 0.29                | 1.04       |
| (1,1494) | 1:A:405:LYS:HG3  | 1:A:413:PHE:HE2  | 7                   | 0.92     | 0.29                | 1.04       |
| (1,1209) | 1:A:398:TYR:HE1  | 1:A:405:LYS:HB2  | 7                   | 0.79     | 0.3                 | 0.7        |
| (1,1209) | 1:A:398:TYR:HE1  | 1:A:405:LYS:HB3  | 7                   | 0.79     | 0.3                 | 0.7        |
| (1,1243) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HD1  | 7                   | 0.77     | 0.37                | 0.65       |
| (1,1243) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HD1  | 7                   | 0.77     | 0.37                | 0.65       |
| (1,1243) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HD1  | 7                   | 0.77     | 0.37                | 0.65       |
| (1,1243) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HD1  | 7                   | 0.77     | 0.37                | 0.65       |
| (1,1243) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HD1  | 7                   | 0.77     | 0.37                | 0.65       |
| (1,1243) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HD1  | 7                   | 0.77     | 0.37                | 0.65       |
| (1,1183) | 1:A:413:PHE:HB3  | 1:A:413:PHE:HE2  | 7                   | 0.72     | 0.02                | 0.72       |
| (1,109)  | 1:A:415:PHE:HB3  | 1:A:415:PHE:HE2  | 7                   | 0.68     | 0.03                | 0.67       |

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| Key      | Atom-1           | Atom-2           | Models <sup>1</sup> | Mean (Å) | SD <sup>1</sup> (Å) | Median (Å) |
|----------|------------------|------------------|---------------------|----------|---------------------|------------|
| (1,832)  | 1:A:418:THR:H    | 1:A:422:ILE:H    | 7                   | 0.62     | 0.29                | 0.43       |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD11 | 7                   | 0.62     | 0.21                | 0.73       |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD12 | 7                   | 0.62     | 0.21                | 0.73       |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD13 | 7                   | 0.62     | 0.21                | 0.73       |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD21 | 7                   | 0.62     | 0.21                | 0.73       |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD22 | 7                   | 0.62     | 0.21                | 0.73       |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD23 | 7                   | 0.62     | 0.21                | 0.73       |
| (1,159)  | 1:A:413:PHE:HB2  | 1:A:413:PHE:HE1  | 7                   | 0.6      | 0.02                | 0.59       |
| (1,263)  | 1:A:348:SER:HA   | 1:A:351:GLU:HG2  | 7                   | 0.56     | 0.32                | 0.61       |
| (1,263)  | 1:A:348:SER:HA   | 1:A:351:GLU:HG3  | 7                   | 0.56     | 0.32                | 0.61       |
| (1,339)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:HG21 | 7                   | 0.54     | 0.09                | 0.5        |
| (1,339)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:HG22 | 7                   | 0.54     | 0.09                | 0.5        |
| (1,339)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:HG23 | 7                   | 0.54     | 0.09                | 0.5        |
| (1,339)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:HG21 | 7                   | 0.54     | 0.09                | 0.5        |
| (1,339)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:HG22 | 7                   | 0.54     | 0.09                | 0.5        |
| (1,339)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:HG23 | 7                   | 0.54     | 0.09                | 0.5        |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD21 | 7                   | 0.54     | 0.21                | 0.45       |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD22 | 7                   | 0.54     | 0.21                | 0.45       |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD23 | 7                   | 0.54     | 0.21                | 0.45       |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD11 | 7                   | 0.54     | 0.21                | 0.45       |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD12 | 7                   | 0.54     | 0.21                | 0.45       |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD13 | 7                   | 0.54     | 0.21                | 0.45       |
| (1,326)  | 1:A:341:VAL:HA   | 1:A:354:ILE:HD11 | 7                   | 0.5      | 0.25                | 0.41       |
| (1,326)  | 1:A:341:VAL:HA   | 1:A:354:ILE:HD12 | 7                   | 0.5      | 0.25                | 0.41       |
| (1,326)  | 1:A:341:VAL:HA   | 1:A:354:ILE:HD13 | 7                   | 0.5      | 0.25                | 0.41       |
| (1,172)  | 1:A:377:GLY:HA3  | 1:A:385:MET:HE1  | 7                   | 0.49     | 0.19                | 0.43       |
| (1,172)  | 1:A:377:GLY:HA3  | 1:A:385:MET:HE2  | 7                   | 0.49     | 0.19                | 0.43       |
| (1,172)  | 1:A:377:GLY:HA3  | 1:A:385:MET:HE3  | 7                   | 0.49     | 0.19                | 0.43       |
| (1,1250) | 1:A:337:LEU:HB2  | 1:A:341:VAL:HB   | 7                   | 0.48     | 0.24                | 0.52       |
| (1,1250) | 1:A:337:LEU:HB3  | 1:A:341:VAL:HB   | 7                   | 0.48     | 0.24                | 0.52       |
| (1,645)  | 1:A:406:GLU:H    | 1:A:412:LEU:HB3  | 7                   | 0.44     | 0.17                | 0.46       |
| (1,1315) | 1:A:344:LEU:HD11 | 1:A:390:MET:HE1  | 7                   | 0.39     | 0.16                | 0.35       |
| (1,1315) | 1:A:344:LEU:HD11 | 1:A:390:MET:HE2  | 7                   | 0.39     | 0.16                | 0.35       |
| (1,1315) | 1:A:344:LEU:HD11 | 1:A:390:MET:HE3  | 7                   | 0.39     | 0.16                | 0.35       |
| (1,1315) | 1:A:344:LEU:HD12 | 1:A:390:MET:HE1  | 7                   | 0.39     | 0.16                | 0.35       |
| (1,1315) | 1:A:344:LEU:HD12 | 1:A:390:MET:HE2  | 7                   | 0.39     | 0.16                | 0.35       |
| (1,1315) | 1:A:344:LEU:HD12 | 1:A:390:MET:HE3  | 7                   | 0.39     | 0.16                | 0.35       |
| (1,1315) | 1:A:344:LEU:HD13 | 1:A:390:MET:HE1  | 7                   | 0.39     | 0.16                | 0.35       |
| (1,1315) | 1:A:344:LEU:HD13 | 1:A:390:MET:HE2  | 7                   | 0.39     | 0.16                | 0.35       |
| (1,1315) | 1:A:344:LEU:HD13 | 1:A:390:MET:HE3  | 7                   | 0.39     | 0.16                | 0.35       |
| (1,1315) | 1:A:344:LEU:HD21 | 1:A:390:MET:HE1  | 7                   | 0.39     | 0.16                | 0.35       |
| (1,1315) | 1:A:344:LEU:HD21 | 1:A:390:MET:HE2  | 7                   | 0.39     | 0.16                | 0.35       |

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| Key      | Atom-1           | Atom-2           | Models <sup>1</sup> | Mean (Å) | SD <sup>1</sup> (Å) | Median (Å) |
|----------|------------------|------------------|---------------------|----------|---------------------|------------|
| (1,1315) | 1:A:344:LEU:HD21 | 1:A:390:MET:HE3  | 7                   | 0.39     | 0.16                | 0.35       |
| (1,1315) | 1:A:344:LEU:HD22 | 1:A:390:MET:HE1  | 7                   | 0.39     | 0.16                | 0.35       |
| (1,1315) | 1:A:344:LEU:HD22 | 1:A:390:MET:HE2  | 7                   | 0.39     | 0.16                | 0.35       |
| (1,1315) | 1:A:344:LEU:HD22 | 1:A:390:MET:HE3  | 7                   | 0.39     | 0.16                | 0.35       |
| (1,1315) | 1:A:344:LEU:HD23 | 1:A:390:MET:HE1  | 7                   | 0.39     | 0.16                | 0.35       |
| (1,1315) | 1:A:344:LEU:HD23 | 1:A:390:MET:HE2  | 7                   | 0.39     | 0.16                | 0.35       |
| (1,1315) | 1:A:344:LEU:HD23 | 1:A:390:MET:HE3  | 7                   | 0.39     | 0.16                | 0.35       |
| (1,846)  | 1:A:361:SER:H    | 1:A:363:ILE:HD11 | 7                   | 0.39     | 0.19                | 0.4        |
| (1,846)  | 1:A:361:SER:H    | 1:A:363:ILE:HD12 | 7                   | 0.39     | 0.19                | 0.4        |
| (1,846)  | 1:A:361:SER:H    | 1:A:363:ILE:HD13 | 7                   | 0.39     | 0.19                | 0.4        |
| (1,448)  | 1:A:374:ARG:H    | 1:A:385:MET:HB3  | 7                   | 0.37     | 0.19                | 0.3        |
| (1,1034) | 1:A:356:TRP:HB3  | 1:A:360:GLU:H    | 7                   | 0.36     | 0.13                | 0.38       |
| (1,1440) | 1:A:377:GLY:HA2  | 1:A:385:MET:HE1  | 7                   | 0.34     | 0.16                | 0.29       |
| (1,1440) | 1:A:377:GLY:HA2  | 1:A:385:MET:HE2  | 7                   | 0.34     | 0.16                | 0.29       |
| (1,1440) | 1:A:377:GLY:HA2  | 1:A:385:MET:HE3  | 7                   | 0.34     | 0.16                | 0.29       |
| (1,1440) | 1:A:377:GLY:HA3  | 1:A:385:MET:HE1  | 7                   | 0.34     | 0.16                | 0.29       |
| (1,1440) | 1:A:377:GLY:HA3  | 1:A:385:MET:HE2  | 7                   | 0.34     | 0.16                | 0.29       |
| (1,1440) | 1:A:377:GLY:HA3  | 1:A:385:MET:HE3  | 7                   | 0.34     | 0.16                | 0.29       |
| (1,1187) | 1:A:356:TRP:HD1  | 1:A:359:LYS:HD2  | 7                   | 0.33     | 0.21                | 0.21       |
| (1,1187) | 1:A:356:TRP:HD1  | 1:A:359:LYS:HD3  | 7                   | 0.33     | 0.21                | 0.21       |
| (1,1256) | 1:A:337:LEU:HD11 | 1:A:341:VAL:HA   | 7                   | 0.31     | 0.18                | 0.22       |
| (1,1256) | 1:A:337:LEU:HD12 | 1:A:341:VAL:HA   | 7                   | 0.31     | 0.18                | 0.22       |
| (1,1256) | 1:A:337:LEU:HD13 | 1:A:341:VAL:HA   | 7                   | 0.31     | 0.18                | 0.22       |
| (1,1256) | 1:A:337:LEU:HD21 | 1:A:341:VAL:HA   | 7                   | 0.31     | 0.18                | 0.22       |
| (1,1256) | 1:A:337:LEU:HD22 | 1:A:341:VAL:HA   | 7                   | 0.31     | 0.18                | 0.22       |
| (1,1256) | 1:A:337:LEU:HD23 | 1:A:341:VAL:HA   | 7                   | 0.31     | 0.18                | 0.22       |
| (1,20)   | 1:A:345:LEU:H    | 1:A:354:ILE:HG21 | 7                   | 0.29     | 0.14                | 0.29       |
| (1,20)   | 1:A:345:LEU:H    | 1:A:354:ILE:HG22 | 7                   | 0.29     | 0.14                | 0.29       |
| (1,20)   | 1:A:345:LEU:H    | 1:A:354:ILE:HG23 | 7                   | 0.29     | 0.14                | 0.29       |
| (1,896)  | 1:A:353:PHE:H    | 1:A:354:ILE:HB   | 7                   | 0.29     | 0.07                | 0.29       |
| (1,937)  | 1:A:348:SER:HA   | 1:A:350:TYR:H    | 7                   | 0.29     | 0.11                | 0.22       |
| (1,1127) | 1:A:348:SER:H    | 1:A:350:TYR:H    | 7                   | 0.28     | 0.12                | 0.24       |
| (1,426)  | 1:A:410:ARG:HA   | 1:A:410:ARG:HD2  | 7                   | 0.27     | 0.13                | 0.2        |
| (1,426)  | 1:A:410:ARG:HA   | 1:A:410:ARG:HD3  | 7                   | 0.27     | 0.13                | 0.2        |
| (1,1035) | 1:A:358:ASP:HB2  | 1:A:360:GLU:H    | 7                   | 0.25     | 0.12                | 0.17       |
| (1,1035) | 1:A:358:ASP:HB3  | 1:A:360:GLU:H    | 7                   | 0.25     | 0.12                | 0.17       |
| (1,540)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD21 | 6                   | 1.6      | 1.17                | 1.2        |
| (1,540)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD22 | 6                   | 1.6      | 1.17                | 1.2        |
| (1,540)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD23 | 6                   | 1.6      | 1.17                | 1.2        |
| (1,546)  | 1:A:336:LEU:HD11 | 1:A:338:TRP:HH2  | 6                   | 1.39     | 1.05                | 1.34       |
| (1,546)  | 1:A:336:LEU:HD12 | 1:A:338:TRP:HH2  | 6                   | 1.39     | 1.05                | 1.34       |
| (1,546)  | 1:A:336:LEU:HD13 | 1:A:338:TRP:HH2  | 6                   | 1.39     | 1.05                | 1.34       |

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| Key      | Atom-1           | Atom-2           | Models <sup>1</sup> | Mean (Å) | SD <sup>1</sup> (Å) | Median (Å) |
|----------|------------------|------------------|---------------------|----------|---------------------|------------|
| (1,663)  | 1:A:357:GLU:H    | 1:A:412:LEU:HD21 | 6                   | 1.12     | 0.53                | 1.34       |
| (1,663)  | 1:A:357:GLU:H    | 1:A:412:LEU:HD22 | 6                   | 1.12     | 0.53                | 1.34       |
| (1,663)  | 1:A:357:GLU:H    | 1:A:412:LEU:HD23 | 6                   | 1.12     | 0.53                | 1.34       |
| (1,1196) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD21 | 6                   | 0.99     | 0.39                | 0.99       |
| (1,1196) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD22 | 6                   | 0.99     | 0.39                | 0.99       |
| (1,1196) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD23 | 6                   | 0.99     | 0.39                | 0.99       |
| (1,597)  | 1:A:356:TRP:HE1  | 1:A:359:LYS:HE2  | 6                   | 0.92     | 0.41                | 1.06       |
| (1,597)  | 1:A:356:TRP:HE1  | 1:A:359:LYS:HE3  | 6                   | 0.92     | 0.41                | 1.06       |
| (1,559)  | 1:A:417:LYS:HE2  | 1:A:418:THR:HG21 | 6                   | 0.87     | 0.3                 | 0.86       |
| (1,559)  | 1:A:417:LYS:HE2  | 1:A:418:THR:HG22 | 6                   | 0.87     | 0.3                 | 0.86       |
| (1,559)  | 1:A:417:LYS:HE2  | 1:A:418:THR:HG23 | 6                   | 0.87     | 0.3                 | 0.86       |
| (1,559)  | 1:A:417:LYS:HE3  | 1:A:418:THR:HG21 | 6                   | 0.87     | 0.3                 | 0.86       |
| (1,559)  | 1:A:417:LYS:HE3  | 1:A:418:THR:HG22 | 6                   | 0.87     | 0.3                 | 0.86       |
| (1,559)  | 1:A:417:LYS:HE3  | 1:A:418:THR:HG23 | 6                   | 0.87     | 0.3                 | 0.86       |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD11 | 6                   | 0.87     | 0.64                | 0.81       |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD12 | 6                   | 0.87     | 0.64                | 0.81       |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD13 | 6                   | 0.87     | 0.64                | 0.81       |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD21 | 6                   | 0.87     | 0.64                | 0.81       |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD22 | 6                   | 0.87     | 0.64                | 0.81       |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD23 | 6                   | 0.87     | 0.64                | 0.81       |
| (1,329)  | 1:A:348:SER:HB2  | 1:A:351:GLU:HG2  | 6                   | 0.81     | 0.24                | 0.9        |
| (1,329)  | 1:A:348:SER:HB2  | 1:A:351:GLU:HG3  | 6                   | 0.81     | 0.24                | 0.9        |
| (1,329)  | 1:A:348:SER:HB3  | 1:A:351:GLU:HG2  | 6                   | 0.81     | 0.24                | 0.9        |
| (1,329)  | 1:A:348:SER:HB3  | 1:A:351:GLU:HG3  | 6                   | 0.81     | 0.24                | 0.9        |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD11 | 6                   | 0.77     | 0.24                | 0.74       |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD12 | 6                   | 0.77     | 0.24                | 0.74       |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD13 | 6                   | 0.77     | 0.24                | 0.74       |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD21 | 6                   | 0.77     | 0.24                | 0.74       |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD22 | 6                   | 0.77     | 0.24                | 0.74       |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD23 | 6                   | 0.77     | 0.24                | 0.74       |
| (1,1140) | 1:A:375:LEU:HA   | 1:A:378:ASN:HD22 | 6                   | 0.76     | 0.39                | 0.68       |
| (1,152)  | 1:A:354:ILE:H    | 1:A:355:ARG:HD2  | 6                   | 0.68     | 0.44                | 0.57       |
| (1,152)  | 1:A:354:ILE:H    | 1:A:355:ARG:HD3  | 6                   | 0.68     | 0.44                | 0.57       |
| (1,829)  | 1:A:417:LYS:HG2  | 1:A:418:THR:H    | 6                   | 0.65     | 0.18                | 0.66       |
| (1,829)  | 1:A:417:LYS:HG3  | 1:A:418:THR:H    | 6                   | 0.65     | 0.18                | 0.66       |
| (1,1331) | 1:A:345:LEU:HD11 | 1:A:356:TRP:H    | 6                   | 0.55     | 0.16                | 0.56       |
| (1,1331) | 1:A:345:LEU:HD12 | 1:A:356:TRP:H    | 6                   | 0.55     | 0.16                | 0.56       |
| (1,1331) | 1:A:345:LEU:HD13 | 1:A:356:TRP:H    | 6                   | 0.55     | 0.16                | 0.56       |
| (1,1331) | 1:A:345:LEU:HD21 | 1:A:356:TRP:H    | 6                   | 0.55     | 0.16                | 0.56       |
| (1,1331) | 1:A:345:LEU:HD22 | 1:A:356:TRP:H    | 6                   | 0.55     | 0.16                | 0.56       |
| (1,1331) | 1:A:345:LEU:HD23 | 1:A:356:TRP:H    | 6                   | 0.55     | 0.16                | 0.56       |
| (1,248)  | 1:A:376:TRP:HD1  | 1:A:390:MET:HA   | 6                   | 0.54     | 0.2                 | 0.46       |

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| Key      | Atom-1           | Atom-2           | Models <sup>1</sup> | Mean (Å) | SD <sup>1</sup> (Å) | Median (Å) |
|----------|------------------|------------------|---------------------|----------|---------------------|------------|
| (1,499)  | 1:A:369:PRO:HA   | 1:A:411:LEU:HD11 | 6                   | 0.54     | 0.22                | 0.58       |
| (1,499)  | 1:A:369:PRO:HA   | 1:A:411:LEU:HD12 | 6                   | 0.54     | 0.22                | 0.58       |
| (1,499)  | 1:A:369:PRO:HA   | 1:A:411:LEU:HD13 | 6                   | 0.54     | 0.22                | 0.58       |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD11 | 6                   | 0.53     | 0.38                | 0.38       |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD12 | 6                   | 0.53     | 0.38                | 0.38       |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD13 | 6                   | 0.53     | 0.38                | 0.38       |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD21 | 6                   | 0.53     | 0.38                | 0.38       |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD22 | 6                   | 0.53     | 0.38                | 0.38       |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD23 | 6                   | 0.53     | 0.38                | 0.38       |
| (1,712)  | 1:A:404:ARG:H    | 1:A:416:MET:HG2  | 6                   | 0.53     | 0.29                | 0.46       |
| (1,712)  | 1:A:404:ARG:H    | 1:A:416:MET:HG3  | 6                   | 0.53     | 0.29                | 0.46       |
| (1,1008) | 1:A:412:LEU:H    | 1:A:413:PHE:HD1  | 6                   | 0.53     | 0.29                | 0.64       |
| (1,1244) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HE1  | 6                   | 0.51     | 0.38                | 0.4        |
| (1,1244) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HE1  | 6                   | 0.51     | 0.38                | 0.4        |
| (1,1244) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HE1  | 6                   | 0.51     | 0.38                | 0.4        |
| (1,1244) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HE1  | 6                   | 0.51     | 0.38                | 0.4        |
| (1,1244) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HE1  | 6                   | 0.51     | 0.38                | 0.4        |
| (1,1244) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HE1  | 6                   | 0.51     | 0.38                | 0.4        |
| (1,1327) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HB2  | 6                   | 0.46     | 0.19                | 0.48       |
| (1,1327) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HB3  | 6                   | 0.46     | 0.19                | 0.48       |
| (1,1327) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HB2  | 6                   | 0.46     | 0.19                | 0.48       |
| (1,1327) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HB3  | 6                   | 0.46     | 0.19                | 0.48       |
| (1,1327) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HB2  | 6                   | 0.46     | 0.19                | 0.48       |
| (1,1327) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HB3  | 6                   | 0.46     | 0.19                | 0.48       |
| (1,1327) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HB2  | 6                   | 0.46     | 0.19                | 0.48       |
| (1,1327) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HB3  | 6                   | 0.46     | 0.19                | 0.48       |
| (1,1327) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HB2  | 6                   | 0.46     | 0.19                | 0.48       |
| (1,1327) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HB3  | 6                   | 0.46     | 0.19                | 0.48       |
| (1,1327) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HB2  | 6                   | 0.46     | 0.19                | 0.48       |
| (1,1327) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HB3  | 6                   | 0.46     | 0.19                | 0.48       |
| (1,1291) | 1:A:341:VAL:HG11 | 1:A:364:PHE:HD2  | 6                   | 0.44     | 0.24                | 0.45       |
| (1,1291) | 1:A:341:VAL:HG12 | 1:A:364:PHE:HD2  | 6                   | 0.44     | 0.24                | 0.45       |
| (1,1291) | 1:A:341:VAL:HG13 | 1:A:364:PHE:HD2  | 6                   | 0.44     | 0.24                | 0.45       |
| (1,1291) | 1:A:341:VAL:HG21 | 1:A:364:PHE:HD2  | 6                   | 0.44     | 0.24                | 0.45       |
| (1,1291) | 1:A:341:VAL:HG22 | 1:A:364:PHE:HD2  | 6                   | 0.44     | 0.24                | 0.45       |
| (1,1291) | 1:A:341:VAL:HG23 | 1:A:364:PHE:HD2  | 6                   | 0.44     | 0.24                | 0.45       |
| (1,1325) | 1:A:345:LEU:HD11 | 1:A:355:ARG:H    | 6                   | 0.43     | 0.17                | 0.5        |
| (1,1325) | 1:A:345:LEU:HD12 | 1:A:355:ARG:H    | 6                   | 0.43     | 0.17                | 0.5        |
| (1,1325) | 1:A:345:LEU:HD13 | 1:A:355:ARG:H    | 6                   | 0.43     | 0.17                | 0.5        |
| (1,1325) | 1:A:345:LEU:HD21 | 1:A:355:ARG:H    | 6                   | 0.43     | 0.17                | 0.5        |
| (1,1325) | 1:A:345:LEU:HD22 | 1:A:355:ARG:H    | 6                   | 0.43     | 0.17                | 0.5        |
| (1,1325) | 1:A:345:LEU:HD23 | 1:A:355:ARG:H    | 6                   | 0.43     | 0.17                | 0.5        |

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| Key      | Atom-1           | Atom-2           | Models <sup>1</sup> | Mean (Å) | SD <sup>1</sup> (Å) | Median (Å) |
|----------|------------------|------------------|---------------------|----------|---------------------|------------|
| (1,1216) | 1:A:340:TYR:HE2  | 1:A:379:HIS:HB2  | 6                   | 0.43     | 0.28                | 0.34       |
| (1,1216) | 1:A:340:TYR:HE2  | 1:A:379:HIS:HB3  | 6                   | 0.43     | 0.28                | 0.34       |
| (1,948)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD11 | 6                   | 0.42     | 0.19                | 0.36       |
| (1,948)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD12 | 6                   | 0.42     | 0.19                | 0.36       |
| (1,948)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD13 | 6                   | 0.42     | 0.19                | 0.36       |
| (1,587)  | 1:A:353:PHE:HB3  | 1:A:369:PRO:HA   | 6                   | 0.42     | 0.18                | 0.41       |
| (1,1202) | 1:A:397:TYR:HA   | 1:A:397:TYR:HE1  | 6                   | 0.42     | 0.29                | 0.26       |
| (1,1360) | 1:A:352:ASN:HB2  | 1:A:367:VAL:HB   | 6                   | 0.41     | 0.3                 | 0.27       |
| (1,1360) | 1:A:352:ASN:HB3  | 1:A:367:VAL:HB   | 6                   | 0.41     | 0.3                 | 0.27       |
| (1,1113) | 1:A:354:ILE:H    | 1:A:367:VAL:HB   | 6                   | 0.38     | 0.2                 | 0.41       |
| (1,204)  | 1:A:355:ARG:HA   | 1:A:367:VAL:HG21 | 6                   | 0.35     | 0.14                | 0.36       |
| (1,204)  | 1:A:355:ARG:HA   | 1:A:367:VAL:HG22 | 6                   | 0.35     | 0.14                | 0.36       |
| (1,204)  | 1:A:355:ARG:HA   | 1:A:367:VAL:HG23 | 6                   | 0.35     | 0.14                | 0.36       |
| (1,61)   | 1:A:343:GLN:H    | 1:A:343:GLN:HG2  | 6                   | 0.33     | 0.07                | 0.34       |
| (1,61)   | 1:A:343:GLN:H    | 1:A:343:GLN:HG3  | 6                   | 0.33     | 0.07                | 0.34       |
| (1,1413) | 1:A:372:LEU:HD11 | 1:A:376:TRP:H    | 6                   | 0.32     | 0.07                | 0.36       |
| (1,1413) | 1:A:372:LEU:HD12 | 1:A:376:TRP:H    | 6                   | 0.32     | 0.07                | 0.36       |
| (1,1413) | 1:A:372:LEU:HD13 | 1:A:376:TRP:H    | 6                   | 0.32     | 0.07                | 0.36       |
| (1,1413) | 1:A:372:LEU:HD21 | 1:A:376:TRP:H    | 6                   | 0.32     | 0.07                | 0.36       |
| (1,1413) | 1:A:372:LEU:HD22 | 1:A:376:TRP:H    | 6                   | 0.32     | 0.07                | 0.36       |
| (1,1413) | 1:A:372:LEU:HD23 | 1:A:376:TRP:H    | 6                   | 0.32     | 0.07                | 0.36       |
| (1,992)  | 1:A:359:LYS:HA   | 1:A:363:ILE:H    | 6                   | 0.32     | 0.09                | 0.32       |
| (1,230)  | 1:A:376:TRP:HA   | 1:A:376:TRP:HZ3  | 6                   | 0.28     | 0.07                | 0.27       |
| (1,946)  | 1:A:358:ASP:H    | 1:A:363:ILE:HG21 | 6                   | 0.28     | 0.1                 | 0.25       |
| (1,946)  | 1:A:358:ASP:H    | 1:A:363:ILE:HG22 | 6                   | 0.28     | 0.1                 | 0.25       |
| (1,946)  | 1:A:358:ASP:H    | 1:A:363:ILE:HG23 | 6                   | 0.28     | 0.1                 | 0.25       |
| (1,46)   | 1:A:385:MET:HB3  | 1:A:386:THR:HG21 | 6                   | 0.26     | 0.09                | 0.23       |
| (1,46)   | 1:A:385:MET:HB3  | 1:A:386:THR:HG22 | 6                   | 0.26     | 0.09                | 0.23       |
| (1,46)   | 1:A:385:MET:HB3  | 1:A:386:THR:HG23 | 6                   | 0.26     | 0.09                | 0.23       |
| (1,574)  | 1:A:353:PHE:HA   | 1:A:367:VAL:HG11 | 6                   | 0.25     | 0.1                 | 0.25       |
| (1,574)  | 1:A:353:PHE:HA   | 1:A:367:VAL:HG12 | 6                   | 0.25     | 0.1                 | 0.25       |
| (1,574)  | 1:A:353:PHE:HA   | 1:A:367:VAL:HG13 | 6                   | 0.25     | 0.1                 | 0.25       |
| (1,1108) | 1:A:354:ILE:H    | 1:A:367:VAL:H    | 6                   | 0.19     | 0.05                | 0.19       |
| (1,252)  | 1:A:359:LYS:HA   | 1:A:359:LYS:HG2  | 6                   | 0.15     | 0.04                | 0.13       |
| (1,542)  | 1:A:369:PRO:HA   | 1:A:411:LEU:HD21 | 5                   | 1.4      | 0.92                | 1.71       |
| (1,542)  | 1:A:369:PRO:HA   | 1:A:411:LEU:HD22 | 5                   | 1.4      | 0.92                | 1.71       |
| (1,542)  | 1:A:369:PRO:HA   | 1:A:411:LEU:HD23 | 5                   | 1.4      | 0.92                | 1.71       |
| (1,510)  | 1:A:406:GLU:H    | 1:A:412:LEU:HD11 | 5                   | 1.13     | 0.5                 | 1.35       |
| (1,510)  | 1:A:406:GLU:H    | 1:A:412:LEU:HD12 | 5                   | 1.13     | 0.5                 | 1.35       |
| (1,510)  | 1:A:406:GLU:H    | 1:A:412:LEU:HD13 | 5                   | 1.13     | 0.5                 | 1.35       |
| (1,1192) | 1:A:376:TRP:HH2  | 1:A:380:LYS:HD2  | 5                   | 1.0      | 0.38                | 0.82       |
| (1,1192) | 1:A:376:TRP:HH2  | 1:A:380:LYS:HD3  | 5                   | 1.0      | 0.38                | 0.82       |

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| Key      | Atom-1           | Atom-2           | Models <sup>1</sup> | Mean (Å) | SD <sup>1</sup> (Å) | Median (Å) |
|----------|------------------|------------------|---------------------|----------|---------------------|------------|
| (1,1435) | 1:A:376:TRP:HH2  | 1:A:380:LYS:HE2  | 5                   | 0.95     | 0.6                 | 1.19       |
| (1,1435) | 1:A:376:TRP:HH2  | 1:A:380:LYS:HE3  | 5                   | 0.95     | 0.6                 | 1.19       |
| (1,1470) | 1:A:394:LEU:HD11 | 1:A:413:PHE:HZ   | 5                   | 0.87     | 0.55                | 1.1        |
| (1,1470) | 1:A:394:LEU:HD12 | 1:A:413:PHE:HZ   | 5                   | 0.87     | 0.55                | 1.1        |
| (1,1470) | 1:A:394:LEU:HD13 | 1:A:413:PHE:HZ   | 5                   | 0.87     | 0.55                | 1.1        |
| (1,1470) | 1:A:394:LEU:HD21 | 1:A:413:PHE:HZ   | 5                   | 0.87     | 0.55                | 1.1        |
| (1,1470) | 1:A:394:LEU:HD22 | 1:A:413:PHE:HZ   | 5                   | 0.87     | 0.55                | 1.1        |
| (1,1470) | 1:A:394:LEU:HD23 | 1:A:413:PHE:HZ   | 5                   | 0.87     | 0.55                | 1.1        |
| (1,286)  | 1:A:403:ILE:HD11 | 1:A:413:PHE:HD2  | 5                   | 0.85     | 0.31                | 0.69       |
| (1,286)  | 1:A:403:ILE:HD12 | 1:A:413:PHE:HD2  | 5                   | 0.85     | 0.31                | 0.69       |
| (1,286)  | 1:A:403:ILE:HD13 | 1:A:413:PHE:HD2  | 5                   | 0.85     | 0.31                | 0.69       |
| (1,52)   | 1:A:357:GLU:HB2  | 1:A:412:LEU:HD21 | 5                   | 0.82     | 0.26                | 0.85       |
| (1,52)   | 1:A:357:GLU:HB2  | 1:A:412:LEU:HD22 | 5                   | 0.82     | 0.26                | 0.85       |
| (1,52)   | 1:A:357:GLU:HB2  | 1:A:412:LEU:HD23 | 5                   | 0.82     | 0.26                | 0.85       |
| (1,52)   | 1:A:357:GLU:HB3  | 1:A:412:LEU:HD21 | 5                   | 0.82     | 0.26                | 0.85       |
| (1,52)   | 1:A:357:GLU:HB3  | 1:A:412:LEU:HD22 | 5                   | 0.82     | 0.26                | 0.85       |
| (1,52)   | 1:A:357:GLU:HB3  | 1:A:412:LEU:HD23 | 5                   | 0.82     | 0.26                | 0.85       |
| (1,481)  | 1:A:355:ARG:H    | 1:A:365:ARG:HG2  | 5                   | 0.56     | 0.46                | 0.39       |
| (1,1172) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HG   | 5                   | 0.56     | 0.33                | 0.6        |
| (1,1070) | 1:A:417:LYS:HE2  | 1:A:421:GLU:H    | 5                   | 0.56     | 0.32                | 0.5        |
| (1,1070) | 1:A:417:LYS:HE3  | 1:A:421:GLU:H    | 5                   | 0.56     | 0.32                | 0.5        |
| (1,240)  | 1:A:415:PHE:HA   | 1:A:415:PHE:HE1  | 5                   | 0.54     | 0.31                | 0.69       |
| (1,387)  | 1:A:358:ASP:HB2  | 1:A:363:ILE:HG21 | 5                   | 0.5      | 0.21                | 0.59       |
| (1,387)  | 1:A:358:ASP:HB2  | 1:A:363:ILE:HG22 | 5                   | 0.5      | 0.21                | 0.59       |
| (1,387)  | 1:A:358:ASP:HB2  | 1:A:363:ILE:HG23 | 5                   | 0.5      | 0.21                | 0.59       |
| (1,387)  | 1:A:358:ASP:HB3  | 1:A:363:ILE:HG21 | 5                   | 0.5      | 0.21                | 0.59       |
| (1,387)  | 1:A:358:ASP:HB3  | 1:A:363:ILE:HG22 | 5                   | 0.5      | 0.21                | 0.59       |
| (1,387)  | 1:A:358:ASP:HB3  | 1:A:363:ILE:HG23 | 5                   | 0.5      | 0.21                | 0.59       |
| (1,323)  | 1:A:345:LEU:H    | 1:A:354:ILE:HD11 | 5                   | 0.46     | 0.17                | 0.4        |
| (1,323)  | 1:A:345:LEU:H    | 1:A:354:ILE:HD12 | 5                   | 0.46     | 0.17                | 0.4        |
| (1,323)  | 1:A:345:LEU:H    | 1:A:354:ILE:HD13 | 5                   | 0.46     | 0.17                | 0.4        |
| (1,14)   | 1:A:345:LEU:HA   | 1:A:354:ILE:HG21 | 5                   | 0.46     | 0.16                | 0.53       |
| (1,14)   | 1:A:345:LEU:HA   | 1:A:354:ILE:HG22 | 5                   | 0.46     | 0.16                | 0.53       |
| (1,14)   | 1:A:345:LEU:HA   | 1:A:354:ILE:HG23 | 5                   | 0.46     | 0.16                | 0.53       |
| (1,1522) | 1:A:416:MET:H    | 1:A:417:LYS:HB2  | 5                   | 0.43     | 0.24                | 0.3        |
| (1,1522) | 1:A:416:MET:H    | 1:A:417:LYS:HB3  | 5                   | 0.43     | 0.24                | 0.3        |
| (1,503)  | 1:A:406:GLU:H    | 1:A:412:LEU:HD21 | 5                   | 0.42     | 0.17                | 0.48       |
| (1,503)  | 1:A:406:GLU:H    | 1:A:412:LEU:HD22 | 5                   | 0.42     | 0.17                | 0.48       |
| (1,503)  | 1:A:406:GLU:H    | 1:A:412:LEU:HD23 | 5                   | 0.42     | 0.17                | 0.48       |
| (1,631)  | 1:A:365:ARG:HD3  | 1:A:367:VAL:H    | 5                   | 0.42     | 0.27                | 0.46       |
| (1,136)  | 1:A:356:TRP:HZ2  | 1:A:359:LYS:HE2  | 5                   | 0.42     | 0.28                | 0.34       |
| (1,136)  | 1:A:356:TRP:HZ2  | 1:A:359:LYS:HE3  | 5                   | 0.42     | 0.28                | 0.34       |

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| Key      | Atom-1           | Atom-2           | Models <sup>1</sup> | Mean (Å) | SD <sup>1</sup> (Å) | Median (Å) |
|----------|------------------|------------------|---------------------|----------|---------------------|------------|
| (1,393)  | 1:A:366:ILE:HG21 | 1:A:372:LEU:H    | 5                   | 0.4      | 0.11                | 0.46       |
| (1,393)  | 1:A:366:ILE:HG22 | 1:A:372:LEU:H    | 5                   | 0.4      | 0.11                | 0.46       |
| (1,393)  | 1:A:366:ILE:HG23 | 1:A:372:LEU:H    | 5                   | 0.4      | 0.11                | 0.46       |
| (1,377)  | 1:A:373:ALA:HB1  | 1:A:385:MET:HB3  | 5                   | 0.4      | 0.13                | 0.37       |
| (1,377)  | 1:A:373:ALA:HB2  | 1:A:385:MET:HB3  | 5                   | 0.4      | 0.13                | 0.37       |
| (1,377)  | 1:A:373:ALA:HB3  | 1:A:385:MET:HB3  | 5                   | 0.4      | 0.13                | 0.37       |
| (1,377)  | 1:A:373:ALA:HB1  | 1:A:385:MET:HB2  | 5                   | 0.4      | 0.13                | 0.37       |
| (1,377)  | 1:A:373:ALA:HB2  | 1:A:385:MET:HB2  | 5                   | 0.4      | 0.13                | 0.37       |
| (1,377)  | 1:A:373:ALA:HB3  | 1:A:385:MET:HB2  | 5                   | 0.4      | 0.13                | 0.37       |
| (1,755)  | 1:A:355:ARG:HG2  | 1:A:356:TRP:H    | 5                   | 0.37     | 0.16                | 0.42       |
| (1,755)  | 1:A:355:ARG:HG3  | 1:A:356:TRP:H    | 5                   | 0.37     | 0.16                | 0.42       |
| (1,872)  | 1:A:352:ASN:H    | 1:A:354:ILE:HG21 | 5                   | 0.35     | 0.17                | 0.32       |
| (1,872)  | 1:A:352:ASN:H    | 1:A:354:ILE:HG22 | 5                   | 0.35     | 0.17                | 0.32       |
| (1,872)  | 1:A:352:ASN:H    | 1:A:354:ILE:HG23 | 5                   | 0.35     | 0.17                | 0.32       |
| (1,99)   | 1:A:375:LEU:HB2  | 1:A:378:ASN:HB2  | 5                   | 0.32     | 0.15                | 0.23       |
| (1,99)   | 1:A:375:LEU:HB3  | 1:A:378:ASN:HB2  | 5                   | 0.32     | 0.15                | 0.23       |
| (1,762)  | 1:A:413:PHE:H    | 1:A:413:PHE:HD1  | 5                   | 0.32     | 0.04                | 0.31       |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD11 | 5                   | 0.3      | 0.13                | 0.32       |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD12 | 5                   | 0.3      | 0.13                | 0.32       |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD13 | 5                   | 0.3      | 0.13                | 0.32       |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD21 | 5                   | 0.3      | 0.13                | 0.32       |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD22 | 5                   | 0.3      | 0.13                | 0.32       |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD23 | 5                   | 0.3      | 0.13                | 0.32       |
| (1,49)   | 1:A:366:ILE:HG21 | 1:A:369:PRO:HB2  | 5                   | 0.3      | 0.15                | 0.22       |
| (1,49)   | 1:A:366:ILE:HG22 | 1:A:369:PRO:HB2  | 5                   | 0.3      | 0.15                | 0.22       |
| (1,49)   | 1:A:366:ILE:HG23 | 1:A:369:PRO:HB2  | 5                   | 0.3      | 0.15                | 0.22       |
| (1,1340) | 1:A:345:LEU:HD11 | 1:A:365:ARG:H    | 5                   | 0.3      | 0.23                | 0.21       |
| (1,1340) | 1:A:345:LEU:HD12 | 1:A:365:ARG:H    | 5                   | 0.3      | 0.23                | 0.21       |
| (1,1340) | 1:A:345:LEU:HD13 | 1:A:365:ARG:H    | 5                   | 0.3      | 0.23                | 0.21       |
| (1,1340) | 1:A:345:LEU:HD21 | 1:A:365:ARG:H    | 5                   | 0.3      | 0.23                | 0.21       |
| (1,1340) | 1:A:345:LEU:HD22 | 1:A:365:ARG:H    | 5                   | 0.3      | 0.23                | 0.21       |
| (1,1340) | 1:A:345:LEU:HD23 | 1:A:365:ARG:H    | 5                   | 0.3      | 0.23                | 0.21       |
| (1,359)  | 1:A:403:ILE:HG21 | 1:A:415:PHE:HE1  | 5                   | 0.28     | 0.12                | 0.23       |
| (1,359)  | 1:A:403:ILE:HG22 | 1:A:415:PHE:HE1  | 5                   | 0.28     | 0.12                | 0.23       |
| (1,359)  | 1:A:403:ILE:HG23 | 1:A:415:PHE:HE1  | 5                   | 0.28     | 0.12                | 0.23       |
| (1,982)  | 1:A:394:LEU:H    | 1:A:396:HIS:HB2  | 5                   | 0.28     | 0.11                | 0.3        |
| (1,982)  | 1:A:394:LEU:H    | 1:A:396:HIS:HB3  | 5                   | 0.28     | 0.11                | 0.3        |
| (1,421)  | 1:A:405:LYS:HA   | 1:A:413:PHE:HB3  | 5                   | 0.27     | 0.1                 | 0.27       |
| (1,981)  | 1:A:374:ARG:H    | 1:A:374:ARG:HD2  | 5                   | 0.26     | 0.04                | 0.24       |
| (1,981)  | 1:A:374:ARG:H    | 1:A:374:ARG:HD3  | 5                   | 0.26     | 0.04                | 0.24       |
| (1,1084) | 1:A:376:TRP:H    | 1:A:378:ASN:HB2  | 5                   | 0.21     | 0.03                | 0.22       |
| (1,911)  | 1:A:366:ILE:HG21 | 1:A:368:ASP:H    | 5                   | 0.2      | 0.06                | 0.18       |

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| Key      | Atom-1           | Atom-2           | Models <sup>1</sup> | Mean (Å) | SD <sup>1</sup> (Å) | Median (Å) |
|----------|------------------|------------------|---------------------|----------|---------------------|------------|
| (1,911)  | 1:A:366:ILE:HG22 | 1:A:368:ASP:H    | 5                   | 0.2      | 0.06                | 0.18       |
| (1,911)  | 1:A:366:ILE:HG23 | 1:A:368:ASP:H    | 5                   | 0.2      | 0.06                | 0.18       |
| (1,1307) | 1:A:344:LEU:HD11 | 1:A:353:PHE:H    | 5                   | 0.18     | 0.01                | 0.18       |
| (1,1307) | 1:A:344:LEU:HD12 | 1:A:353:PHE:H    | 5                   | 0.18     | 0.01                | 0.18       |
| (1,1307) | 1:A:344:LEU:HD13 | 1:A:353:PHE:H    | 5                   | 0.18     | 0.01                | 0.18       |
| (1,1307) | 1:A:344:LEU:HD21 | 1:A:353:PHE:H    | 5                   | 0.18     | 0.01                | 0.18       |
| (1,1307) | 1:A:344:LEU:HD22 | 1:A:353:PHE:H    | 5                   | 0.18     | 0.01                | 0.18       |
| (1,1307) | 1:A:344:LEU:HD23 | 1:A:353:PHE:H    | 5                   | 0.18     | 0.01                | 0.18       |
| (1,677)  | 1:A:366:ILE:H    | 1:A:366:ILE:HD11 | 5                   | 0.16     | 0.05                | 0.15       |
| (1,677)  | 1:A:366:ILE:H    | 1:A:366:ILE:HD12 | 5                   | 0.16     | 0.05                | 0.15       |
| (1,677)  | 1:A:366:ILE:H    | 1:A:366:ILE:HD13 | 5                   | 0.16     | 0.05                | 0.15       |
| (1,821)  | 1:A:371:GLY:H    | 1:A:372:LEU:HB2  | 5                   | 0.15     | 0.03                | 0.14       |
| (1,900)  | 1:A:353:PHE:H    | 1:A:354:ILE:HA   | 5                   | 0.13     | 0.03                | 0.12       |
| (1,506)  | 1:A:365:ARG:HD3  | 1:A:412:LEU:HD21 | 4                   | 0.91     | 0.68                | 0.6        |
| (1,506)  | 1:A:365:ARG:HD3  | 1:A:412:LEU:HD22 | 4                   | 0.91     | 0.68                | 0.6        |
| (1,506)  | 1:A:365:ARG:HD3  | 1:A:412:LEU:HD23 | 4                   | 0.91     | 0.68                | 0.6        |
| (1,869)  | 1:A:391:SER:H    | 1:A:394:LEU:HG   | 4                   | 0.85     | 0.54                | 0.67       |
| (1,1280) | 1:A:340:TYR:HE1  | 1:A:375:LEU:HD11 | 4                   | 0.76     | 0.25                | 0.77       |
| (1,1280) | 1:A:340:TYR:HE1  | 1:A:375:LEU:HD12 | 4                   | 0.76     | 0.25                | 0.77       |
| (1,1280) | 1:A:340:TYR:HE1  | 1:A:375:LEU:HD13 | 4                   | 0.76     | 0.25                | 0.77       |
| (1,1280) | 1:A:340:TYR:HE1  | 1:A:375:LEU:HD21 | 4                   | 0.76     | 0.25                | 0.77       |
| (1,1280) | 1:A:340:TYR:HE1  | 1:A:375:LEU:HD22 | 4                   | 0.76     | 0.25                | 0.77       |
| (1,1280) | 1:A:340:TYR:HE1  | 1:A:375:LEU:HD23 | 4                   | 0.76     | 0.25                | 0.77       |
| (1,1305) | 1:A:344:LEU:HD11 | 1:A:347:ASP:HB2  | 4                   | 0.74     | 0.34                | 0.58       |
| (1,1305) | 1:A:344:LEU:HD12 | 1:A:347:ASP:HB2  | 4                   | 0.74     | 0.34                | 0.58       |
| (1,1305) | 1:A:344:LEU:HD13 | 1:A:347:ASP:HB2  | 4                   | 0.74     | 0.34                | 0.58       |
| (1,1305) | 1:A:344:LEU:HD21 | 1:A:347:ASP:HB2  | 4                   | 0.74     | 0.34                | 0.58       |
| (1,1305) | 1:A:344:LEU:HD22 | 1:A:347:ASP:HB2  | 4                   | 0.74     | 0.34                | 0.58       |
| (1,1305) | 1:A:344:LEU:HD23 | 1:A:347:ASP:HB2  | 4                   | 0.74     | 0.34                | 0.58       |
| (1,943)  | 1:A:400:LEU:H    | 1:A:400:LEU:HG   | 4                   | 0.58     | 0.26                | 0.56       |
| (1,1376) | 1:A:359:LYS:HA   | 1:A:362:LYS:HG2  | 4                   | 0.55     | 0.4                 | 0.46       |
| (1,1376) | 1:A:359:LYS:HA   | 1:A:362:LYS:HG3  | 4                   | 0.55     | 0.4                 | 0.46       |
| (1,365)  | 1:A:364:PHE:HE1  | 1:A:403:ILE:HG21 | 4                   | 0.54     | 0.25                | 0.52       |
| (1,365)  | 1:A:364:PHE:HE1  | 1:A:403:ILE:HG22 | 4                   | 0.54     | 0.25                | 0.52       |
| (1,365)  | 1:A:364:PHE:HE1  | 1:A:403:ILE:HG23 | 4                   | 0.54     | 0.25                | 0.52       |
| (1,1311) | 1:A:344:LEU:HD11 | 1:A:354:ILE:HD11 | 4                   | 0.52     | 0.11                | 0.51       |
| (1,1311) | 1:A:344:LEU:HD11 | 1:A:354:ILE:HD12 | 4                   | 0.52     | 0.11                | 0.51       |
| (1,1311) | 1:A:344:LEU:HD11 | 1:A:354:ILE:HD13 | 4                   | 0.52     | 0.11                | 0.51       |
| (1,1311) | 1:A:344:LEU:HD12 | 1:A:354:ILE:HD11 | 4                   | 0.52     | 0.11                | 0.51       |
| (1,1311) | 1:A:344:LEU:HD12 | 1:A:354:ILE:HD12 | 4                   | 0.52     | 0.11                | 0.51       |
| (1,1311) | 1:A:344:LEU:HD12 | 1:A:354:ILE:HD13 | 4                   | 0.52     | 0.11                | 0.51       |
| (1,1311) | 1:A:344:LEU:HD13 | 1:A:354:ILE:HD11 | 4                   | 0.52     | 0.11                | 0.51       |

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| Key      | Atom-1           | Atom-2           | Models <sup>1</sup> | Mean (Å) | SD <sup>1</sup> (Å) | Median (Å) |
|----------|------------------|------------------|---------------------|----------|---------------------|------------|
| (1,1311) | 1:A:344:LEU:HD13 | 1:A:354:ILE:HD12 | 4                   | 0.52     | 0.11                | 0.51       |
| (1,1311) | 1:A:344:LEU:HD13 | 1:A:354:ILE:HD13 | 4                   | 0.52     | 0.11                | 0.51       |
| (1,1311) | 1:A:344:LEU:HD21 | 1:A:354:ILE:HD11 | 4                   | 0.52     | 0.11                | 0.51       |
| (1,1311) | 1:A:344:LEU:HD21 | 1:A:354:ILE:HD12 | 4                   | 0.52     | 0.11                | 0.51       |
| (1,1311) | 1:A:344:LEU:HD21 | 1:A:354:ILE:HD13 | 4                   | 0.52     | 0.11                | 0.51       |
| (1,1311) | 1:A:344:LEU:HD22 | 1:A:354:ILE:HD11 | 4                   | 0.52     | 0.11                | 0.51       |
| (1,1311) | 1:A:344:LEU:HD22 | 1:A:354:ILE:HD12 | 4                   | 0.52     | 0.11                | 0.51       |
| (1,1311) | 1:A:344:LEU:HD22 | 1:A:354:ILE:HD13 | 4                   | 0.52     | 0.11                | 0.51       |
| (1,1311) | 1:A:344:LEU:HD23 | 1:A:354:ILE:HD11 | 4                   | 0.52     | 0.11                | 0.51       |
| (1,1311) | 1:A:344:LEU:HD23 | 1:A:354:ILE:HD12 | 4                   | 0.52     | 0.11                | 0.51       |
| (1,1311) | 1:A:344:LEU:HD23 | 1:A:354:ILE:HD13 | 4                   | 0.52     | 0.11                | 0.51       |
| (1,1434) | 1:A:376:TRP:HZ2  | 1:A:380:LYS:HE2  | 4                   | 0.5      | 0.22                | 0.56       |
| (1,1434) | 1:A:376:TRP:HZ2  | 1:A:380:LYS:HE3  | 4                   | 0.5      | 0.22                | 0.56       |
| (1,1145) | 1:A:343:GLN:HA   | 1:A:343:GLN:HE22 | 4                   | 0.5      | 0.2                 | 0.48       |
| (1,1)    | 1:A:373:ALA:HB1  | 1:A:385:MET:HE1  | 4                   | 0.5      | 0.36                | 0.32       |
| (1,1)    | 1:A:373:ALA:HB1  | 1:A:385:MET:HE2  | 4                   | 0.5      | 0.36                | 0.32       |
| (1,1)    | 1:A:373:ALA:HB1  | 1:A:385:MET:HE3  | 4                   | 0.5      | 0.36                | 0.32       |
| (1,1)    | 1:A:373:ALA:HB2  | 1:A:385:MET:HE1  | 4                   | 0.5      | 0.36                | 0.32       |
| (1,1)    | 1:A:373:ALA:HB2  | 1:A:385:MET:HE2  | 4                   | 0.5      | 0.36                | 0.32       |
| (1,1)    | 1:A:373:ALA:HB2  | 1:A:385:MET:HE3  | 4                   | 0.5      | 0.36                | 0.32       |
| (1,1)    | 1:A:373:ALA:HB3  | 1:A:385:MET:HE1  | 4                   | 0.5      | 0.36                | 0.32       |
| (1,1)    | 1:A:373:ALA:HB3  | 1:A:385:MET:HE2  | 4                   | 0.5      | 0.36                | 0.32       |
| (1,1)    | 1:A:373:ALA:HB3  | 1:A:385:MET:HE3  | 4                   | 0.5      | 0.36                | 0.32       |
| (1,973)  | 1:A:394:LEU:H    | 1:A:394:LEU:HG   | 4                   | 0.43     | 0.06                | 0.45       |
| (1,1290) | 1:A:341:VAL:HG11 | 1:A:364:PHE:HE2  | 4                   | 0.42     | 0.2                 | 0.46       |
| (1,1290) | 1:A:341:VAL:HG12 | 1:A:364:PHE:HE2  | 4                   | 0.42     | 0.2                 | 0.46       |
| (1,1290) | 1:A:341:VAL:HG13 | 1:A:364:PHE:HE2  | 4                   | 0.42     | 0.2                 | 0.46       |
| (1,1290) | 1:A:341:VAL:HG21 | 1:A:364:PHE:HE2  | 4                   | 0.42     | 0.2                 | 0.46       |
| (1,1290) | 1:A:341:VAL:HG22 | 1:A:364:PHE:HE2  | 4                   | 0.42     | 0.2                 | 0.46       |
| (1,1290) | 1:A:341:VAL:HG23 | 1:A:364:PHE:HE2  | 4                   | 0.42     | 0.2                 | 0.46       |
| (1,37)   | 1:A:376:TRP:HE1  | 1:A:390:MET:HE1  | 4                   | 0.41     | 0.17                | 0.44       |
| (1,37)   | 1:A:376:TRP:HE1  | 1:A:390:MET:HE2  | 4                   | 0.41     | 0.17                | 0.44       |
| (1,37)   | 1:A:376:TRP:HE1  | 1:A:390:MET:HE3  | 4                   | 0.41     | 0.17                | 0.44       |
| (1,1267) | 1:A:337:LEU:HD11 | 1:A:393:ALA:H    | 4                   | 0.39     | 0.22                | 0.39       |
| (1,1267) | 1:A:337:LEU:HD12 | 1:A:393:ALA:H    | 4                   | 0.39     | 0.22                | 0.39       |
| (1,1267) | 1:A:337:LEU:HD13 | 1:A:393:ALA:H    | 4                   | 0.39     | 0.22                | 0.39       |
| (1,1267) | 1:A:337:LEU:HD21 | 1:A:393:ALA:H    | 4                   | 0.39     | 0.22                | 0.39       |
| (1,1267) | 1:A:337:LEU:HD22 | 1:A:393:ALA:H    | 4                   | 0.39     | 0.22                | 0.39       |
| (1,1267) | 1:A:337:LEU:HD23 | 1:A:393:ALA:H    | 4                   | 0.39     | 0.22                | 0.39       |
| (1,197)  | 1:A:363:ILE:HD11 | 1:A:414:ARG:HA   | 4                   | 0.35     | 0.09                | 0.38       |
| (1,197)  | 1:A:363:ILE:HD12 | 1:A:414:ARG:HA   | 4                   | 0.35     | 0.09                | 0.38       |
| (1,197)  | 1:A:363:ILE:HD13 | 1:A:414:ARG:HA   | 4                   | 0.35     | 0.09                | 0.38       |

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| Key      | Atom-1           | Atom-2           | Models <sup>1</sup> | Mean (Å) | SD <sup>1</sup> (Å) | Median (Å) |
|----------|------------------|------------------|---------------------|----------|---------------------|------------|
| (1,590)  | 1:A:369:PRO:HA   | 1:A:372:LEU:HB2  | 4                   | 0.33     | 0.13                | 0.3        |
| (1,517)  | 1:A:355:ARG:HG2  | 1:A:367:VAL:HG21 | 4                   | 0.33     | 0.1                 | 0.35       |
| (1,517)  | 1:A:355:ARG:HG2  | 1:A:367:VAL:HG22 | 4                   | 0.33     | 0.1                 | 0.35       |
| (1,517)  | 1:A:355:ARG:HG2  | 1:A:367:VAL:HG23 | 4                   | 0.33     | 0.1                 | 0.35       |
| (1,517)  | 1:A:355:ARG:HG3  | 1:A:367:VAL:HG21 | 4                   | 0.33     | 0.1                 | 0.35       |
| (1,517)  | 1:A:355:ARG:HG3  | 1:A:367:VAL:HG22 | 4                   | 0.33     | 0.1                 | 0.35       |
| (1,517)  | 1:A:355:ARG:HG3  | 1:A:367:VAL:HG23 | 4                   | 0.33     | 0.1                 | 0.35       |
| (1,764)  | 1:A:364:PHE:HE1  | 1:A:413:PHE:H    | 4                   | 0.32     | 0.11                | 0.32       |
| (1,316)  | 1:A:354:ILE:HD11 | 1:A:355:ARG:H    | 4                   | 0.3      | 0.07                | 0.31       |
| (1,316)  | 1:A:354:ILE:HD12 | 1:A:355:ARG:H    | 4                   | 0.3      | 0.07                | 0.31       |
| (1,316)  | 1:A:354:ILE:HD13 | 1:A:355:ARG:H    | 4                   | 0.3      | 0.07                | 0.31       |
| (1,376)  | 1:A:373:ALA:HB1  | 1:A:376:TRP:HB3  | 4                   | 0.3      | 0.08                | 0.32       |
| (1,376)  | 1:A:373:ALA:HB2  | 1:A:376:TRP:HB3  | 4                   | 0.3      | 0.08                | 0.32       |
| (1,376)  | 1:A:373:ALA:HB3  | 1:A:376:TRP:HB3  | 4                   | 0.3      | 0.08                | 0.32       |
| (1,802)  | 1:A:354:ILE:HD11 | 1:A:365:ARG:H    | 4                   | 0.3      | 0.13                | 0.26       |
| (1,802)  | 1:A:354:ILE:HD12 | 1:A:365:ARG:H    | 4                   | 0.3      | 0.13                | 0.26       |
| (1,802)  | 1:A:354:ILE:HD13 | 1:A:365:ARG:H    | 4                   | 0.3      | 0.13                | 0.26       |
| (1,1390) | 1:A:366:ILE:H    | 1:A:411:LEU:HD11 | 4                   | 0.29     | 0.13                | 0.26       |
| (1,1390) | 1:A:366:ILE:H    | 1:A:411:LEU:HD12 | 4                   | 0.29     | 0.13                | 0.26       |
| (1,1390) | 1:A:366:ILE:H    | 1:A:411:LEU:HD13 | 4                   | 0.29     | 0.13                | 0.26       |
| (1,1390) | 1:A:366:ILE:H    | 1:A:411:LEU:HD21 | 4                   | 0.29     | 0.13                | 0.26       |
| (1,1390) | 1:A:366:ILE:H    | 1:A:411:LEU:HD22 | 4                   | 0.29     | 0.13                | 0.26       |
| (1,1390) | 1:A:366:ILE:H    | 1:A:411:LEU:HD23 | 4                   | 0.29     | 0.13                | 0.26       |
| (1,1502) | 1:A:406:GLU:HG2  | 1:A:414:ARG:H    | 4                   | 0.29     | 0.1                 | 0.26       |
| (1,1502) | 1:A:406:GLU:HG3  | 1:A:414:ARG:H    | 4                   | 0.29     | 0.1                 | 0.26       |
| (1,1321) | 1:A:345:LEU:HD11 | 1:A:354:ILE:HA   | 4                   | 0.28     | 0.12                | 0.24       |
| (1,1321) | 1:A:345:LEU:HD12 | 1:A:354:ILE:HA   | 4                   | 0.28     | 0.12                | 0.24       |
| (1,1321) | 1:A:345:LEU:HD13 | 1:A:354:ILE:HA   | 4                   | 0.28     | 0.12                | 0.24       |
| (1,1321) | 1:A:345:LEU:HD21 | 1:A:354:ILE:HA   | 4                   | 0.28     | 0.12                | 0.24       |
| (1,1321) | 1:A:345:LEU:HD22 | 1:A:354:ILE:HA   | 4                   | 0.28     | 0.12                | 0.24       |
| (1,1321) | 1:A:345:LEU:HD23 | 1:A:354:ILE:HA   | 4                   | 0.28     | 0.12                | 0.24       |
| (1,1416) | 1:A:372:LEU:HD11 | 1:A:390:MET:HE1  | 4                   | 0.28     | 0.11                | 0.26       |
| (1,1416) | 1:A:372:LEU:HD11 | 1:A:390:MET:HE2  | 4                   | 0.28     | 0.11                | 0.26       |
| (1,1416) | 1:A:372:LEU:HD11 | 1:A:390:MET:HE3  | 4                   | 0.28     | 0.11                | 0.26       |
| (1,1416) | 1:A:372:LEU:HD12 | 1:A:390:MET:HE1  | 4                   | 0.28     | 0.11                | 0.26       |
| (1,1416) | 1:A:372:LEU:HD12 | 1:A:390:MET:HE2  | 4                   | 0.28     | 0.11                | 0.26       |
| (1,1416) | 1:A:372:LEU:HD12 | 1:A:390:MET:HE3  | 4                   | 0.28     | 0.11                | 0.26       |
| (1,1416) | 1:A:372:LEU:HD13 | 1:A:390:MET:HE1  | 4                   | 0.28     | 0.11                | 0.26       |
| (1,1416) | 1:A:372:LEU:HD13 | 1:A:390:MET:HE2  | 4                   | 0.28     | 0.11                | 0.26       |
| (1,1416) | 1:A:372:LEU:HD13 | 1:A:390:MET:HE3  | 4                   | 0.28     | 0.11                | 0.26       |
| (1,1416) | 1:A:372:LEU:HD21 | 1:A:390:MET:HE1  | 4                   | 0.28     | 0.11                | 0.26       |
| (1,1416) | 1:A:372:LEU:HD21 | 1:A:390:MET:HE2  | 4                   | 0.28     | 0.11                | 0.26       |

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| Key      | Atom-1           | Atom-2           | Models <sup>1</sup> | Mean (Å) | SD <sup>1</sup> (Å) | Median (Å) |
|----------|------------------|------------------|---------------------|----------|---------------------|------------|
| (1,1416) | 1:A:372:LEU:HD21 | 1:A:390:MET:HE3  | 4                   | 0.28     | 0.11                | 0.26       |
| (1,1416) | 1:A:372:LEU:HD22 | 1:A:390:MET:HE1  | 4                   | 0.28     | 0.11                | 0.26       |
| (1,1416) | 1:A:372:LEU:HD22 | 1:A:390:MET:HE2  | 4                   | 0.28     | 0.11                | 0.26       |
| (1,1416) | 1:A:372:LEU:HD22 | 1:A:390:MET:HE3  | 4                   | 0.28     | 0.11                | 0.26       |
| (1,1416) | 1:A:372:LEU:HD23 | 1:A:390:MET:HE1  | 4                   | 0.28     | 0.11                | 0.26       |
| (1,1416) | 1:A:372:LEU:HD23 | 1:A:390:MET:HE2  | 4                   | 0.28     | 0.11                | 0.26       |
| (1,1416) | 1:A:372:LEU:HD23 | 1:A:390:MET:HE3  | 4                   | 0.28     | 0.11                | 0.26       |
| (1,483)  | 1:A:363:ILE:HD11 | 1:A:414:ARG:HG2  | 4                   | 0.26     | 0.09                | 0.28       |
| (1,483)  | 1:A:363:ILE:HD11 | 1:A:414:ARG:HG3  | 4                   | 0.26     | 0.09                | 0.28       |
| (1,483)  | 1:A:363:ILE:HD12 | 1:A:414:ARG:HG2  | 4                   | 0.26     | 0.09                | 0.28       |
| (1,483)  | 1:A:363:ILE:HD12 | 1:A:414:ARG:HG3  | 4                   | 0.26     | 0.09                | 0.28       |
| (1,483)  | 1:A:363:ILE:HD13 | 1:A:414:ARG:HG2  | 4                   | 0.26     | 0.09                | 0.28       |
| (1,483)  | 1:A:363:ILE:HD13 | 1:A:414:ARG:HG3  | 4                   | 0.26     | 0.09                | 0.28       |
| (1,1009) | 1:A:412:LEU:H    | 1:A:413:PHE:HZ   | 4                   | 0.26     | 0.15                | 0.22       |
| (1,384)  | 1:A:363:ILE:HG21 | 1:A:412:LEU:HA   | 4                   | 0.25     | 0.13                | 0.22       |
| (1,384)  | 1:A:363:ILE:HG22 | 1:A:412:LEU:HA   | 4                   | 0.25     | 0.13                | 0.22       |
| (1,384)  | 1:A:363:ILE:HG23 | 1:A:412:LEU:HA   | 4                   | 0.25     | 0.13                | 0.22       |
| (1,1410) | 1:A:372:LEU:HD11 | 1:A:375:LEU:H    | 4                   | 0.24     | 0.05                | 0.24       |
| (1,1410) | 1:A:372:LEU:HD12 | 1:A:375:LEU:H    | 4                   | 0.24     | 0.05                | 0.24       |
| (1,1410) | 1:A:372:LEU:HD13 | 1:A:375:LEU:H    | 4                   | 0.24     | 0.05                | 0.24       |
| (1,1410) | 1:A:372:LEU:HD21 | 1:A:375:LEU:H    | 4                   | 0.24     | 0.05                | 0.24       |
| (1,1410) | 1:A:372:LEU:HD22 | 1:A:375:LEU:H    | 4                   | 0.24     | 0.05                | 0.24       |
| (1,1410) | 1:A:372:LEU:HD23 | 1:A:375:LEU:H    | 4                   | 0.24     | 0.05                | 0.24       |
| (1,923)  | 1:A:397:TYR:H    | 1:A:403:ILE:HB   | 4                   | 0.22     | 0.07                | 0.19       |
| (1,472)  | 1:A:354:ILE:HG12 | 1:A:367:VAL:H    | 4                   | 0.22     | 0.06                | 0.2        |
| (1,1107) | 1:A:328:MET:H    | 1:A:329:GLY:HA2  | 4                   | 0.21     | 0.04                | 0.21       |
| (1,1107) | 1:A:328:MET:H    | 1:A:329:GLY:HA3  | 4                   | 0.21     | 0.04                | 0.21       |
| (1,1057) | 1:A:373:ALA:H    | 1:A:376:TRP:HB2  | 4                   | 0.2      | 0.06                | 0.18       |
| (1,1057) | 1:A:373:ALA:H    | 1:A:376:TRP:HB3  | 4                   | 0.2      | 0.06                | 0.18       |
| (1,1235) | 1:A:328:MET:H    | 1:A:328:MET:HG2  | 4                   | 0.19     | 0.02                | 0.19       |
| (1,1235) | 1:A:328:MET:H    | 1:A:328:MET:HG3  | 4                   | 0.19     | 0.02                | 0.19       |
| (1,767)  | 1:A:412:LEU:HB3  | 1:A:413:PHE:H    | 4                   | 0.18     | 0.01                | 0.18       |
| (1,1501) | 1:A:406:GLU:HG2  | 1:A:412:LEU:HB2  | 4                   | 0.17     | 0.04                | 0.17       |
| (1,1501) | 1:A:406:GLU:HG3  | 1:A:412:LEU:HB2  | 4                   | 0.17     | 0.04                | 0.17       |
| (1,1501) | 1:A:406:GLU:HG2  | 1:A:412:LEU:HB3  | 4                   | 0.17     | 0.04                | 0.17       |
| (1,1501) | 1:A:406:GLU:HG3  | 1:A:412:LEU:HB3  | 4                   | 0.17     | 0.04                | 0.17       |
| (1,655)  | 1:A:331:ILE:HB   | 1:A:332:ALA:H    | 4                   | 0.13     | 0.01                | 0.12       |
| (1,1433) | 1:A:376:TRP:HE1  | 1:A:385:MET:HG2  | 3                   | 0.92     | 0.19                | 0.84       |
| (1,1433) | 1:A:376:TRP:HE1  | 1:A:385:MET:HG3  | 3                   | 0.92     | 0.19                | 0.84       |
| (1,866)  | 1:A:352:ASN:H    | 1:A:352:ASN:HD21 | 3                   | 0.9      | 0.42                | 1.04       |
| (1,1469) | 1:A:394:LEU:HD11 | 1:A:397:TYR:HD2  | 3                   | 0.86     | 0.34                | 0.8        |
| (1,1469) | 1:A:394:LEU:HD12 | 1:A:397:TYR:HD2  | 3                   | 0.86     | 0.34                | 0.8        |

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| Key      | Atom-1           | Atom-2           | Models <sup>1</sup> | Mean (Å) | SD <sup>1</sup> (Å) | Median (Å) |
|----------|------------------|------------------|---------------------|----------|---------------------|------------|
| (1,1469) | 1:A:394:LEU:HD13 | 1:A:397:TYR:HD2  | 3                   | 0.86     | 0.34                | 0.8        |
| (1,1469) | 1:A:394:LEU:HD21 | 1:A:397:TYR:HD2  | 3                   | 0.86     | 0.34                | 0.8        |
| (1,1469) | 1:A:394:LEU:HD22 | 1:A:397:TYR:HD2  | 3                   | 0.86     | 0.34                | 0.8        |
| (1,1469) | 1:A:394:LEU:HD23 | 1:A:397:TYR:HD2  | 3                   | 0.86     | 0.34                | 0.8        |
| (1,1468) | 1:A:394:LEU:HD11 | 1:A:397:TYR:HE2  | 3                   | 0.85     | 0.59                | 0.64       |
| (1,1468) | 1:A:394:LEU:HD12 | 1:A:397:TYR:HE2  | 3                   | 0.85     | 0.59                | 0.64       |
| (1,1468) | 1:A:394:LEU:HD13 | 1:A:397:TYR:HE2  | 3                   | 0.85     | 0.59                | 0.64       |
| (1,1468) | 1:A:394:LEU:HD21 | 1:A:397:TYR:HE2  | 3                   | 0.85     | 0.59                | 0.64       |
| (1,1468) | 1:A:394:LEU:HD22 | 1:A:397:TYR:HE2  | 3                   | 0.85     | 0.59                | 0.64       |
| (1,1468) | 1:A:394:LEU:HD23 | 1:A:397:TYR:HE2  | 3                   | 0.85     | 0.59                | 0.64       |
| (1,477)  | 1:A:425:GLY:H    | 1:A:426:ARG:HG2  | 3                   | 0.83     | 0.32                | 0.99       |
| (1,477)  | 1:A:425:GLY:H    | 1:A:426:ARG:HG3  | 3                   | 0.83     | 0.32                | 0.99       |
| (1,1058) | 1:A:373:ALA:H    | 1:A:387:TYR:HB2  | 3                   | 0.72     | 0.44                | 0.66       |
| (1,539)  | 1:A:366:ILE:H    | 1:A:411:LEU:HD21 | 3                   | 0.64     | 0.64                | 0.21       |
| (1,539)  | 1:A:366:ILE:H    | 1:A:411:LEU:HD22 | 3                   | 0.64     | 0.64                | 0.21       |
| (1,539)  | 1:A:366:ILE:H    | 1:A:411:LEU:HD23 | 3                   | 0.64     | 0.64                | 0.21       |
| (1,1397) | 1:A:369:PRO:HD2  | 1:A:411:LEU:HD11 | 3                   | 0.63     | 0.29                | 0.71       |
| (1,1397) | 1:A:369:PRO:HD2  | 1:A:411:LEU:HD12 | 3                   | 0.63     | 0.29                | 0.71       |
| (1,1397) | 1:A:369:PRO:HD2  | 1:A:411:LEU:HD13 | 3                   | 0.63     | 0.29                | 0.71       |
| (1,1397) | 1:A:369:PRO:HD2  | 1:A:411:LEU:HD21 | 3                   | 0.63     | 0.29                | 0.71       |
| (1,1397) | 1:A:369:PRO:HD2  | 1:A:411:LEU:HD22 | 3                   | 0.63     | 0.29                | 0.71       |
| (1,1397) | 1:A:369:PRO:HD2  | 1:A:411:LEU:HD23 | 3                   | 0.63     | 0.29                | 0.71       |
| (1,1397) | 1:A:369:PRO:HD3  | 1:A:411:LEU:HD11 | 3                   | 0.63     | 0.29                | 0.71       |
| (1,1397) | 1:A:369:PRO:HD3  | 1:A:411:LEU:HD12 | 3                   | 0.63     | 0.29                | 0.71       |
| (1,1397) | 1:A:369:PRO:HD3  | 1:A:411:LEU:HD13 | 3                   | 0.63     | 0.29                | 0.71       |
| (1,1397) | 1:A:369:PRO:HD3  | 1:A:411:LEU:HD21 | 3                   | 0.63     | 0.29                | 0.71       |
| (1,1397) | 1:A:369:PRO:HD3  | 1:A:411:LEU:HD22 | 3                   | 0.63     | 0.29                | 0.71       |
| (1,1397) | 1:A:369:PRO:HD3  | 1:A:411:LEU:HD23 | 3                   | 0.63     | 0.29                | 0.71       |
| (1,82)   | 1:A:352:ASN:HB2  | 1:A:367:VAL:HG11 | 3                   | 0.56     | 0.37                | 0.4        |
| (1,82)   | 1:A:352:ASN:HB2  | 1:A:367:VAL:HG12 | 3                   | 0.56     | 0.37                | 0.4        |
| (1,82)   | 1:A:352:ASN:HB2  | 1:A:367:VAL:HG13 | 3                   | 0.56     | 0.37                | 0.4        |
| (1,1377) | 1:A:361:SER:H    | 1:A:362:LYS:HG2  | 3                   | 0.52     | 0.15                | 0.57       |
| (1,1377) | 1:A:361:SER:H    | 1:A:362:LYS:HG3  | 3                   | 0.52     | 0.15                | 0.57       |
| (1,1392) | 1:A:366:ILE:HG12 | 1:A:394:LEU:HD11 | 3                   | 0.49     | 0.08                | 0.51       |
| (1,1392) | 1:A:366:ILE:HG12 | 1:A:394:LEU:HD12 | 3                   | 0.49     | 0.08                | 0.51       |
| (1,1392) | 1:A:366:ILE:HG12 | 1:A:394:LEU:HD13 | 3                   | 0.49     | 0.08                | 0.51       |
| (1,1392) | 1:A:366:ILE:HG12 | 1:A:394:LEU:HD21 | 3                   | 0.49     | 0.08                | 0.51       |
| (1,1392) | 1:A:366:ILE:HG12 | 1:A:394:LEU:HD22 | 3                   | 0.49     | 0.08                | 0.51       |
| (1,1392) | 1:A:366:ILE:HG12 | 1:A:394:LEU:HD23 | 3                   | 0.49     | 0.08                | 0.51       |
| (1,1392) | 1:A:366:ILE:HG13 | 1:A:394:LEU:HD11 | 3                   | 0.49     | 0.08                | 0.51       |
| (1,1392) | 1:A:366:ILE:HG13 | 1:A:394:LEU:HD12 | 3                   | 0.49     | 0.08                | 0.51       |
| (1,1392) | 1:A:366:ILE:HG13 | 1:A:394:LEU:HD13 | 3                   | 0.49     | 0.08                | 0.51       |

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| Key      | Atom-1           | Atom-2           | Models <sup>1</sup> | Mean (Å) | SD <sup>1</sup> (Å) | Median (Å) |
|----------|------------------|------------------|---------------------|----------|---------------------|------------|
| (1,1392) | 1:A:366:ILE:HG13 | 1:A:394:LEU:HD21 | 3                   | 0.49     | 0.08                | 0.51       |
| (1,1392) | 1:A:366:ILE:HG13 | 1:A:394:LEU:HD22 | 3                   | 0.49     | 0.08                | 0.51       |
| (1,1392) | 1:A:366:ILE:HG13 | 1:A:394:LEU:HD23 | 3                   | 0.49     | 0.08                | 0.51       |
| (1,813)  | 1:A:425:GLY:H    | 1:A:426:ARG:H    | 3                   | 0.46     | 0.09                | 0.5        |
| (1,1365) | 1:A:353:PHE:HB3  | 1:A:372:LEU:HD11 | 3                   | 0.43     | 0.23                | 0.35       |
| (1,1365) | 1:A:353:PHE:HB3  | 1:A:372:LEU:HD12 | 3                   | 0.43     | 0.23                | 0.35       |
| (1,1365) | 1:A:353:PHE:HB3  | 1:A:372:LEU:HD13 | 3                   | 0.43     | 0.23                | 0.35       |
| (1,1365) | 1:A:353:PHE:HB3  | 1:A:372:LEU:HD21 | 3                   | 0.43     | 0.23                | 0.35       |
| (1,1365) | 1:A:353:PHE:HB3  | 1:A:372:LEU:HD22 | 3                   | 0.43     | 0.23                | 0.35       |
| (1,1365) | 1:A:353:PHE:HB3  | 1:A:372:LEU:HD23 | 3                   | 0.43     | 0.23                | 0.35       |
| (1,1375) | 1:A:357:GLU:HG2  | 1:A:412:LEU:HA   | 3                   | 0.42     | 0.39                | 0.15       |
| (1,1375) | 1:A:357:GLU:HG3  | 1:A:412:LEU:HA   | 3                   | 0.42     | 0.39                | 0.15       |
| (1,1332) | 1:A:345:LEU:HD11 | 1:A:356:TRP:HB2  | 3                   | 0.42     | 0.16                | 0.37       |
| (1,1332) | 1:A:345:LEU:HD12 | 1:A:356:TRP:HB2  | 3                   | 0.42     | 0.16                | 0.37       |
| (1,1332) | 1:A:345:LEU:HD13 | 1:A:356:TRP:HB2  | 3                   | 0.42     | 0.16                | 0.37       |
| (1,1332) | 1:A:345:LEU:HD21 | 1:A:356:TRP:HB2  | 3                   | 0.42     | 0.16                | 0.37       |
| (1,1332) | 1:A:345:LEU:HD22 | 1:A:356:TRP:HB2  | 3                   | 0.42     | 0.16                | 0.37       |
| (1,1332) | 1:A:345:LEU:HD23 | 1:A:356:TRP:HB2  | 3                   | 0.42     | 0.16                | 0.37       |
| (1,921)  | 1:A:397:TYR:H    | 1:A:402:ILE:HD11 | 3                   | 0.41     | 0.18                | 0.47       |
| (1,921)  | 1:A:397:TYR:H    | 1:A:402:ILE:HD12 | 3                   | 0.41     | 0.18                | 0.47       |
| (1,921)  | 1:A:397:TYR:H    | 1:A:402:ILE:HD13 | 3                   | 0.41     | 0.18                | 0.47       |
| (1,950)  | 1:A:350:TYR:H    | 1:A:351:GLU:HG2  | 3                   | 0.36     | 0.15                | 0.36       |
| (1,950)  | 1:A:350:TYR:H    | 1:A:351:GLU:HG3  | 3                   | 0.36     | 0.15                | 0.36       |
| (1,149)  | 1:A:355:ARG:HD2  | 1:A:356:TRP:H    | 3                   | 0.35     | 0.13                | 0.32       |
| (1,149)  | 1:A:355:ARG:HD3  | 1:A:356:TRP:H    | 3                   | 0.35     | 0.13                | 0.32       |
| (1,192)  | 1:A:332:ALA:HA   | 1:A:333:ASP:HB2  | 3                   | 0.34     | 0.16                | 0.39       |
| (1,192)  | 1:A:332:ALA:HA   | 1:A:333:ASP:HB3  | 3                   | 0.34     | 0.16                | 0.39       |
| (1,534)  | 1:A:345:LEU:HD11 | 1:A:364:PHE:HD2  | 3                   | 0.31     | 0.12                | 0.27       |
| (1,534)  | 1:A:345:LEU:HD12 | 1:A:364:PHE:HD2  | 3                   | 0.31     | 0.12                | 0.27       |
| (1,534)  | 1:A:345:LEU:HD13 | 1:A:364:PHE:HD2  | 3                   | 0.31     | 0.12                | 0.27       |
| (1,1286) | 1:A:341:VAL:HG11 | 1:A:344:LEU:HD11 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,1286) | 1:A:341:VAL:HG11 | 1:A:344:LEU:HD12 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,1286) | 1:A:341:VAL:HG11 | 1:A:344:LEU:HD13 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,1286) | 1:A:341:VAL:HG11 | 1:A:344:LEU:HD21 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,1286) | 1:A:341:VAL:HG11 | 1:A:344:LEU:HD22 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,1286) | 1:A:341:VAL:HG11 | 1:A:344:LEU:HD23 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,1286) | 1:A:341:VAL:HG12 | 1:A:344:LEU:HD11 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,1286) | 1:A:341:VAL:HG12 | 1:A:344:LEU:HD12 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,1286) | 1:A:341:VAL:HG12 | 1:A:344:LEU:HD13 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,1286) | 1:A:341:VAL:HG12 | 1:A:344:LEU:HD21 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,1286) | 1:A:341:VAL:HG12 | 1:A:344:LEU:HD22 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,1286) | 1:A:341:VAL:HG12 | 1:A:344:LEU:HD23 | 3                   | 0.29     | 0.2                 | 0.17       |

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| Key      | Atom-1           | Atom-2           | Models <sup>1</sup> | Mean (Å) | SD <sup>1</sup> (Å) | Median (Å) |
|----------|------------------|------------------|---------------------|----------|---------------------|------------|
| (1,1286) | 1:A:341:VAL:HG13 | 1:A:344:LEU:HD11 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,1286) | 1:A:341:VAL:HG13 | 1:A:344:LEU:HD12 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,1286) | 1:A:341:VAL:HG13 | 1:A:344:LEU:HD13 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,1286) | 1:A:341:VAL:HG13 | 1:A:344:LEU:HD21 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,1286) | 1:A:341:VAL:HG13 | 1:A:344:LEU:HD22 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,1286) | 1:A:341:VAL:HG13 | 1:A:344:LEU:HD23 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,1286) | 1:A:341:VAL:HG21 | 1:A:344:LEU:HD11 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,1286) | 1:A:341:VAL:HG21 | 1:A:344:LEU:HD12 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,1286) | 1:A:341:VAL:HG21 | 1:A:344:LEU:HD13 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,1286) | 1:A:341:VAL:HG21 | 1:A:344:LEU:HD21 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,1286) | 1:A:341:VAL:HG21 | 1:A:344:LEU:HD22 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,1286) | 1:A:341:VAL:HG21 | 1:A:344:LEU:HD23 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,1286) | 1:A:341:VAL:HG22 | 1:A:344:LEU:HD11 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,1286) | 1:A:341:VAL:HG22 | 1:A:344:LEU:HD12 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,1286) | 1:A:341:VAL:HG22 | 1:A:344:LEU:HD13 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,1286) | 1:A:341:VAL:HG22 | 1:A:344:LEU:HD21 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,1286) | 1:A:341:VAL:HG22 | 1:A:344:LEU:HD22 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,1286) | 1:A:341:VAL:HG22 | 1:A:344:LEU:HD23 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,1286) | 1:A:341:VAL:HG23 | 1:A:344:LEU:HD11 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,1286) | 1:A:341:VAL:HG23 | 1:A:344:LEU:HD12 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,1286) | 1:A:341:VAL:HG23 | 1:A:344:LEU:HD13 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,1286) | 1:A:341:VAL:HG23 | 1:A:344:LEU:HD21 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,1286) | 1:A:341:VAL:HG23 | 1:A:344:LEU:HD22 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,1286) | 1:A:341:VAL:HG23 | 1:A:344:LEU:HD23 | 3                   | 0.29     | 0.2                 | 0.17       |
| (1,315)  | 1:A:345:LEU:HA   | 1:A:354:ILE:HD11 | 3                   | 0.29     | 0.08                | 0.35       |
| (1,315)  | 1:A:345:LEU:HA   | 1:A:354:ILE:HD12 | 3                   | 0.29     | 0.08                | 0.35       |
| (1,315)  | 1:A:345:LEU:HA   | 1:A:354:ILE:HD13 | 3                   | 0.29     | 0.08                | 0.35       |
| (1,936)  | 1:A:358:ASP:H    | 1:A:364:PHE:HA   | 3                   | 0.29     | 0.09                | 0.26       |
| (1,1106) | 1:A:352:ASN:HA   | 1:A:354:ILE:H    | 3                   | 0.29     | 0.16                | 0.19       |
| (1,760)  | 1:A:345:LEU:HB3  | 1:A:356:TRP:H    | 3                   | 0.28     | 0.17                | 0.18       |
| (1,94)   | 1:A:366:ILE:HB   | 1:A:413:PHE:HZ   | 3                   | 0.27     | 0.14                | 0.23       |
| (1,220)  | 1:A:356:TRP:HB2  | 1:A:359:LYS:HD2  | 3                   | 0.27     | 0.13                | 0.28       |
| (1,220)  | 1:A:356:TRP:HB2  | 1:A:359:LYS:HD3  | 3                   | 0.27     | 0.13                | 0.28       |
| (1,8)    | 1:A:377:GLY:H    | 1:A:385:MET:HE1  | 3                   | 0.27     | 0.1                 | 0.2        |
| (1,8)    | 1:A:377:GLY:H    | 1:A:385:MET:HE2  | 3                   | 0.27     | 0.1                 | 0.2        |
| (1,8)    | 1:A:377:GLY:H    | 1:A:385:MET:HE3  | 3                   | 0.27     | 0.1                 | 0.2        |
| (1,929)  | 1:A:358:ASP:H    | 1:A:364:PHE:H    | 3                   | 0.26     | 0.1                 | 0.2        |
| (1,1234) | 1:A:327:HIS:HB2  | 1:A:328:MET:H    | 3                   | 0.26     | 0.02                | 0.27       |
| (1,1234) | 1:A:327:HIS:HB3  | 1:A:328:MET:H    | 3                   | 0.26     | 0.02                | 0.27       |
| (1,300)  | 1:A:383:THR:HA   | 1:A:385:MET:H    | 3                   | 0.25     | 0.04                | 0.24       |
| (1,721)  | 1:A:347:ASP:HB3  | 1:A:349:ARG:H    | 3                   | 0.24     | 0.12                | 0.2        |
| (1,628)  | 1:A:353:PHE:HA   | 1:A:367:VAL:H    | 3                   | 0.23     | 0.1                 | 0.21       |

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| Key      | Atom-1           | Atom-2           | Models <sup>1</sup> | Mean (Å) | SD <sup>1</sup> (Å) | Median (Å) |
|----------|------------------|------------------|---------------------|----------|---------------------|------------|
| (1,1176) | 1:A:397:TYR:HD2  | 1:A:403:ILE:HB   | 3                   | 0.23     | 0.06                | 0.2        |
| (1,398)  | 1:A:354:ILE:HA   | 1:A:366:ILE:HG21 | 3                   | 0.22     | 0.09                | 0.22       |
| (1,398)  | 1:A:354:ILE:HA   | 1:A:366:ILE:HG22 | 3                   | 0.22     | 0.09                | 0.22       |
| (1,398)  | 1:A:354:ILE:HA   | 1:A:366:ILE:HG23 | 3                   | 0.22     | 0.09                | 0.22       |
| (1,528)  | 1:A:362:LYS:H    | 1:A:362:LYS:HG3  | 3                   | 0.22     | 0.06                | 0.18       |
| (1,895)  | 1:A:353:PHE:H    | 1:A:354:ILE:HG21 | 3                   | 0.2      | 0.06                | 0.16       |
| (1,895)  | 1:A:353:PHE:H    | 1:A:354:ILE:HG22 | 3                   | 0.2      | 0.06                | 0.16       |
| (1,895)  | 1:A:353:PHE:H    | 1:A:354:ILE:HG23 | 3                   | 0.2      | 0.06                | 0.16       |
| (1,357)  | 1:A:332:ALA:HB1  | 1:A:333:ASP:HB2  | 3                   | 0.19     | 0.04                | 0.19       |
| (1,357)  | 1:A:332:ALA:HB1  | 1:A:333:ASP:HB3  | 3                   | 0.19     | 0.04                | 0.19       |
| (1,357)  | 1:A:332:ALA:HB2  | 1:A:333:ASP:HB2  | 3                   | 0.19     | 0.04                | 0.19       |
| (1,357)  | 1:A:332:ALA:HB2  | 1:A:333:ASP:HB3  | 3                   | 0.19     | 0.04                | 0.19       |
| (1,357)  | 1:A:332:ALA:HB3  | 1:A:333:ASP:HB2  | 3                   | 0.19     | 0.04                | 0.19       |
| (1,357)  | 1:A:332:ALA:HB3  | 1:A:333:ASP:HB3  | 3                   | 0.19     | 0.04                | 0.19       |
| (1,1409) | 1:A:372:LEU:HD11 | 1:A:374:ARG:H    | 3                   | 0.16     | 0.05                | 0.14       |
| (1,1409) | 1:A:372:LEU:HD12 | 1:A:374:ARG:H    | 3                   | 0.16     | 0.05                | 0.14       |
| (1,1409) | 1:A:372:LEU:HD13 | 1:A:374:ARG:H    | 3                   | 0.16     | 0.05                | 0.14       |
| (1,1409) | 1:A:372:LEU:HD21 | 1:A:374:ARG:H    | 3                   | 0.16     | 0.05                | 0.14       |
| (1,1409) | 1:A:372:LEU:HD22 | 1:A:374:ARG:H    | 3                   | 0.16     | 0.05                | 0.14       |
| (1,1409) | 1:A:372:LEU:HD23 | 1:A:374:ARG:H    | 3                   | 0.16     | 0.05                | 0.14       |
| (1,1400) | 1:A:370:ASN:HB2  | 1:A:373:ALA:HB1  | 3                   | 0.16     | 0.03                | 0.15       |
| (1,1400) | 1:A:370:ASN:HB2  | 1:A:373:ALA:HB2  | 3                   | 0.16     | 0.03                | 0.15       |
| (1,1400) | 1:A:370:ASN:HB2  | 1:A:373:ALA:HB3  | 3                   | 0.16     | 0.03                | 0.15       |
| (1,1400) | 1:A:370:ASN:HB3  | 1:A:373:ALA:HB1  | 3                   | 0.16     | 0.03                | 0.15       |
| (1,1400) | 1:A:370:ASN:HB3  | 1:A:373:ALA:HB2  | 3                   | 0.16     | 0.03                | 0.15       |
| (1,1400) | 1:A:370:ASN:HB3  | 1:A:373:ALA:HB3  | 3                   | 0.16     | 0.03                | 0.15       |
| (1,466)  | 1:A:392:ARG:H    | 1:A:392:ARG:HG2  | 3                   | 0.15     | 0.02                | 0.15       |
| (1,675)  | 1:A:365:ARG:HB2  | 1:A:366:ILE:H    | 3                   | 0.13     | 0.01                | 0.13       |
| (1,675)  | 1:A:365:ARG:HB3  | 1:A:366:ILE:H    | 3                   | 0.13     | 0.01                | 0.13       |
| (1,1200) | 1:A:393:ALA:HB1  | 1:A:397:TYR:HE2  | 2                   | 2.42     | 0.17                | 2.42       |
| (1,1200) | 1:A:393:ALA:HB2  | 1:A:397:TYR:HE2  | 2                   | 2.42     | 0.17                | 2.42       |
| (1,1200) | 1:A:393:ALA:HB3  | 1:A:397:TYR:HE2  | 2                   | 2.42     | 0.17                | 2.42       |
| (1,1177) | 1:A:397:TYR:HD1  | 1:A:402:ILE:HD11 | 2                   | 1.98     | 0.23                | 1.98       |
| (1,1177) | 1:A:397:TYR:HD1  | 1:A:402:ILE:HD12 | 2                   | 1.98     | 0.23                | 1.98       |
| (1,1177) | 1:A:397:TYR:HD1  | 1:A:402:ILE:HD13 | 2                   | 1.98     | 0.23                | 1.98       |
| (1,1173) | 1:A:394:LEU:HA   | 1:A:397:TYR:HD2  | 2                   | 1.77     | 0.08                | 1.77       |
| (1,1203) | 1:A:394:LEU:HA   | 1:A:397:TYR:HE2  | 2                   | 1.66     | 0.29                | 1.66       |
| (1,406)  | 1:A:397:TYR:HD1  | 1:A:402:ILE:HG21 | 2                   | 1.57     | 0.25                | 1.57       |
| (1,406)  | 1:A:397:TYR:HD1  | 1:A:402:ILE:HG22 | 2                   | 1.57     | 0.25                | 1.57       |
| (1,406)  | 1:A:397:TYR:HD1  | 1:A:402:ILE:HG23 | 2                   | 1.57     | 0.25                | 1.57       |
| (1,1081) | 1:A:372:LEU:HG   | 1:A:376:TRP:H    | 2                   | 1.21     | 0.24                | 1.21       |
| (1,167)  | 1:A:425:GLY:HA2  | 1:A:426:ARG:HG2  | 2                   | 1.14     | 0.03                | 1.14       |

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| Key      | Atom-1           | Atom-2           | Models <sup>1</sup> | Mean (Å) | SD <sup>1</sup> (Å) | Median (Å) |
|----------|------------------|------------------|---------------------|----------|---------------------|------------|
| (1,167)  | 1:A:425:GLY:HA2  | 1:A:426:ARG:HG3  | 2                   | 1.14     | 0.03                | 1.14       |
| (1,167)  | 1:A:425:GLY:HA3  | 1:A:426:ARG:HG2  | 2                   | 1.14     | 0.03                | 1.14       |
| (1,167)  | 1:A:425:GLY:HA3  | 1:A:426:ARG:HG3  | 2                   | 1.14     | 0.03                | 1.14       |
| (1,1141) | 1:A:352:ASN:H    | 1:A:352:ASN:HD22 | 2                   | 0.7      | 0.48                | 0.7        |
| (1,1175) | 1:A:397:TYR:HD1  | 1:A:402:ILE:HB   | 2                   | 0.68     | 0.25                | 0.68       |
| (1,187)  | 1:A:365:ARG:HA   | 1:A:412:LEU:HD21 | 2                   | 0.68     | 0.5                 | 0.68       |
| (1,187)  | 1:A:365:ARG:HA   | 1:A:412:LEU:HD22 | 2                   | 0.68     | 0.5                 | 0.68       |
| (1,187)  | 1:A:365:ARG:HA   | 1:A:412:LEU:HD23 | 2                   | 0.68     | 0.5                 | 0.68       |
| (1,26)   | 1:A:387:TYR:HA   | 1:A:390:MET:HE1  | 2                   | 0.64     | 0.52                | 0.64       |
| (1,26)   | 1:A:387:TYR:HA   | 1:A:390:MET:HE2  | 2                   | 0.64     | 0.52                | 0.64       |
| (1,26)   | 1:A:387:TYR:HA   | 1:A:390:MET:HE3  | 2                   | 0.64     | 0.52                | 0.64       |
| (1,265)  | 1:A:391:SER:HA   | 1:A:394:LEU:HG   | 2                   | 0.6      | 0.43                | 0.6        |
| (1,462)  | 1:A:417:LYS:HD2  | 1:A:418:THR:H    | 2                   | 0.56     | 0.43                | 0.56       |
| (1,462)  | 1:A:417:LYS:HD3  | 1:A:418:THR:H    | 2                   | 0.56     | 0.43                | 0.56       |
| (1,1147) | 1:A:352:ASN:HD21 | 1:A:367:VAL:HG21 | 2                   | 0.56     | 0.01                | 0.56       |
| (1,1147) | 1:A:352:ASN:HD21 | 1:A:367:VAL:HG22 | 2                   | 0.56     | 0.01                | 0.56       |
| (1,1147) | 1:A:352:ASN:HD21 | 1:A:367:VAL:HG23 | 2                   | 0.56     | 0.01                | 0.56       |
| (1,1362) | 1:A:353:PHE:H    | 1:A:372:LEU:HD11 | 2                   | 0.55     | 0.39                | 0.55       |
| (1,1362) | 1:A:353:PHE:H    | 1:A:372:LEU:HD12 | 2                   | 0.55     | 0.39                | 0.55       |
| (1,1362) | 1:A:353:PHE:H    | 1:A:372:LEU:HD13 | 2                   | 0.55     | 0.39                | 0.55       |
| (1,1362) | 1:A:353:PHE:H    | 1:A:372:LEU:HD21 | 2                   | 0.55     | 0.39                | 0.55       |
| (1,1362) | 1:A:353:PHE:H    | 1:A:372:LEU:HD22 | 2                   | 0.55     | 0.39                | 0.55       |
| (1,1362) | 1:A:353:PHE:H    | 1:A:372:LEU:HD23 | 2                   | 0.55     | 0.39                | 0.55       |
| (1,689)  | 1:A:426:ARG:H    | 1:A:426:ARG:HD2  | 2                   | 0.53     | 0.06                | 0.53       |
| (1,689)  | 1:A:426:ARG:H    | 1:A:426:ARG:HD3  | 2                   | 0.53     | 0.06                | 0.53       |
| (1,375)  | 1:A:373:ALA:HB1  | 1:A:374:ARG:HD2  | 2                   | 0.49     | 0.25                | 0.49       |
| (1,375)  | 1:A:373:ALA:HB1  | 1:A:374:ARG:HD3  | 2                   | 0.49     | 0.25                | 0.49       |
| (1,375)  | 1:A:373:ALA:HB2  | 1:A:374:ARG:HD2  | 2                   | 0.49     | 0.25                | 0.49       |
| (1,375)  | 1:A:373:ALA:HB2  | 1:A:374:ARG:HD3  | 2                   | 0.49     | 0.25                | 0.49       |
| (1,375)  | 1:A:373:ALA:HB3  | 1:A:374:ARG:HD2  | 2                   | 0.49     | 0.25                | 0.49       |
| (1,375)  | 1:A:373:ALA:HB3  | 1:A:374:ARG:HD3  | 2                   | 0.49     | 0.25                | 0.49       |
| (1,233)  | 1:A:397:TYR:HA   | 1:A:397:TYR:HD1  | 2                   | 0.48     | 0.18                | 0.48       |
| (1,1361) | 1:A:352:ASN:HB2  | 1:A:367:VAL:HG11 | 2                   | 0.47     | 0.24                | 0.47       |
| (1,1361) | 1:A:352:ASN:HB2  | 1:A:367:VAL:HG12 | 2                   | 0.47     | 0.24                | 0.47       |
| (1,1361) | 1:A:352:ASN:HB2  | 1:A:367:VAL:HG13 | 2                   | 0.47     | 0.24                | 0.47       |
| (1,1361) | 1:A:352:ASN:HB3  | 1:A:367:VAL:HG11 | 2                   | 0.47     | 0.24                | 0.47       |
| (1,1361) | 1:A:352:ASN:HB3  | 1:A:367:VAL:HG12 | 2                   | 0.47     | 0.24                | 0.47       |
| (1,1361) | 1:A:352:ASN:HB3  | 1:A:367:VAL:HG13 | 2                   | 0.47     | 0.24                | 0.47       |
| (1,1394) | 1:A:368:ASP:HA   | 1:A:411:LEU:HD11 | 2                   | 0.46     | 0.12                | 0.46       |
| (1,1394) | 1:A:368:ASP:HA   | 1:A:411:LEU:HD12 | 2                   | 0.46     | 0.12                | 0.46       |
| (1,1394) | 1:A:368:ASP:HA   | 1:A:411:LEU:HD13 | 2                   | 0.46     | 0.12                | 0.46       |
| (1,1394) | 1:A:368:ASP:HA   | 1:A:411:LEU:HD21 | 2                   | 0.46     | 0.12                | 0.46       |

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| Key      | Atom-1           | Atom-2           | Models <sup>1</sup> | Mean (Å) | SD <sup>1</sup> (Å) | Median (Å) |
|----------|------------------|------------------|---------------------|----------|---------------------|------------|
| (1,1394) | 1:A:368:ASP:HA   | 1:A:411:LEU:HD22 | 2                   | 0.46     | 0.12                | 0.46       |
| (1,1394) | 1:A:368:ASP:HA   | 1:A:411:LEU:HD23 | 2                   | 0.46     | 0.12                | 0.46       |
| (1,520)  | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD11 | 2                   | 0.39     | 0.25                | 0.39       |
| (1,520)  | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD12 | 2                   | 0.39     | 0.25                | 0.39       |
| (1,520)  | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD13 | 2                   | 0.39     | 0.25                | 0.39       |
| (1,1268) | 1:A:337:LEU:HD11 | 1:A:393:ALA:HA   | 2                   | 0.38     | 0.04                | 0.38       |
| (1,1268) | 1:A:337:LEU:HD12 | 1:A:393:ALA:HA   | 2                   | 0.38     | 0.04                | 0.38       |
| (1,1268) | 1:A:337:LEU:HD13 | 1:A:393:ALA:HA   | 2                   | 0.38     | 0.04                | 0.38       |
| (1,1268) | 1:A:337:LEU:HD21 | 1:A:393:ALA:HA   | 2                   | 0.38     | 0.04                | 0.38       |
| (1,1268) | 1:A:337:LEU:HD22 | 1:A:393:ALA:HA   | 2                   | 0.38     | 0.04                | 0.38       |
| (1,1268) | 1:A:337:LEU:HD23 | 1:A:393:ALA:HA   | 2                   | 0.38     | 0.04                | 0.38       |
| (1,1513) | 1:A:410:ARG:HB2  | 1:A:411:LEU:HD11 | 2                   | 0.38     | 0.01                | 0.38       |
| (1,1513) | 1:A:410:ARG:HB2  | 1:A:411:LEU:HD12 | 2                   | 0.38     | 0.01                | 0.38       |
| (1,1513) | 1:A:410:ARG:HB2  | 1:A:411:LEU:HD13 | 2                   | 0.38     | 0.01                | 0.38       |
| (1,1513) | 1:A:410:ARG:HB2  | 1:A:411:LEU:HD21 | 2                   | 0.38     | 0.01                | 0.38       |
| (1,1513) | 1:A:410:ARG:HB2  | 1:A:411:LEU:HD22 | 2                   | 0.38     | 0.01                | 0.38       |
| (1,1513) | 1:A:410:ARG:HB2  | 1:A:411:LEU:HD23 | 2                   | 0.38     | 0.01                | 0.38       |
| (1,1513) | 1:A:410:ARG:HB3  | 1:A:411:LEU:HD11 | 2                   | 0.38     | 0.01                | 0.38       |
| (1,1513) | 1:A:410:ARG:HB3  | 1:A:411:LEU:HD12 | 2                   | 0.38     | 0.01                | 0.38       |
| (1,1513) | 1:A:410:ARG:HB3  | 1:A:411:LEU:HD13 | 2                   | 0.38     | 0.01                | 0.38       |
| (1,1513) | 1:A:410:ARG:HB3  | 1:A:411:LEU:HD21 | 2                   | 0.38     | 0.01                | 0.38       |
| (1,1513) | 1:A:410:ARG:HB3  | 1:A:411:LEU:HD22 | 2                   | 0.38     | 0.01                | 0.38       |
| (1,1513) | 1:A:410:ARG:HB3  | 1:A:411:LEU:HD23 | 2                   | 0.38     | 0.01                | 0.38       |
| (1,34)   | 1:A:372:LEU:H    | 1:A:390:MET:HE1  | 2                   | 0.36     | 0.12                | 0.36       |
| (1,34)   | 1:A:372:LEU:H    | 1:A:390:MET:HE2  | 2                   | 0.36     | 0.12                | 0.36       |
| (1,34)   | 1:A:372:LEU:H    | 1:A:390:MET:HE3  | 2                   | 0.36     | 0.12                | 0.36       |
| (1,763)  | 1:A:364:PHE:HD1  | 1:A:413:PHE:H    | 2                   | 0.36     | 0.04                | 0.36       |
| (1,73)   | 1:A:388:GLU:HA   | 1:A:388:GLU:HG2  | 2                   | 0.35     | 0.03                | 0.35       |
| (1,73)   | 1:A:388:GLU:HA   | 1:A:388:GLU:HG3  | 2                   | 0.35     | 0.03                | 0.35       |
| (1,182)  | 1:A:383:THR:HB   | 1:A:384:ASN:HA   | 2                   | 0.35     | 0.07                | 0.35       |
| (1,378)  | 1:A:337:LEU:HG   | 1:A:393:ALA:HB1  | 2                   | 0.35     | 0.07                | 0.35       |
| (1,378)  | 1:A:337:LEU:HG   | 1:A:393:ALA:HB2  | 2                   | 0.35     | 0.07                | 0.35       |
| (1,378)  | 1:A:337:LEU:HG   | 1:A:393:ALA:HB3  | 2                   | 0.35     | 0.07                | 0.35       |
| (1,1343) | 1:A:348:SER:HA   | 1:A:351:GLU:HB2  | 2                   | 0.34     | 0.18                | 0.34       |
| (1,1343) | 1:A:348:SER:HA   | 1:A:351:GLU:HB3  | 2                   | 0.34     | 0.18                | 0.34       |
| (1,715)  | 1:A:349:ARG:H    | 1:A:351:GLU:H    | 2                   | 0.34     | 0.07                | 0.34       |
| (1,11)   | 1:A:376:TRP:HE1  | 1:A:385:MET:HE1  | 2                   | 0.32     | 0.03                | 0.32       |
| (1,11)   | 1:A:376:TRP:HE1  | 1:A:385:MET:HE2  | 2                   | 0.32     | 0.03                | 0.32       |
| (1,11)   | 1:A:376:TRP:HE1  | 1:A:385:MET:HE3  | 2                   | 0.32     | 0.03                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD11 | 1:A:375:LEU:HD11 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD11 | 1:A:375:LEU:HD12 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD11 | 1:A:375:LEU:HD13 | 2                   | 0.32     | 0.01                | 0.32       |

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| Key      | Atom-1           | Atom-2           | Models <sup>1</sup> | Mean (Å) | SD <sup>1</sup> (Å) | Median (Å) |
|----------|------------------|------------------|---------------------|----------|---------------------|------------|
| (1,1412) | 1:A:372:LEU:HD11 | 1:A:375:LEU:HD21 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD11 | 1:A:375:LEU:HD22 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD11 | 1:A:375:LEU:HD23 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD12 | 1:A:375:LEU:HD11 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD12 | 1:A:375:LEU:HD12 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD12 | 1:A:375:LEU:HD13 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD12 | 1:A:375:LEU:HD21 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD12 | 1:A:375:LEU:HD22 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD12 | 1:A:375:LEU:HD23 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD13 | 1:A:375:LEU:HD11 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD13 | 1:A:375:LEU:HD12 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD13 | 1:A:375:LEU:HD13 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD13 | 1:A:375:LEU:HD21 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD13 | 1:A:375:LEU:HD22 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD13 | 1:A:375:LEU:HD23 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD21 | 1:A:375:LEU:HD11 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD21 | 1:A:375:LEU:HD12 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD21 | 1:A:375:LEU:HD13 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD21 | 1:A:375:LEU:HD21 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD21 | 1:A:375:LEU:HD22 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD21 | 1:A:375:LEU:HD23 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD22 | 1:A:375:LEU:HD11 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD22 | 1:A:375:LEU:HD12 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD22 | 1:A:375:LEU:HD13 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD22 | 1:A:375:LEU:HD21 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD22 | 1:A:375:LEU:HD22 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD22 | 1:A:375:LEU:HD23 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD23 | 1:A:375:LEU:HD11 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD23 | 1:A:375:LEU:HD12 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD23 | 1:A:375:LEU:HD13 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD23 | 1:A:375:LEU:HD21 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD23 | 1:A:375:LEU:HD22 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1412) | 1:A:372:LEU:HD23 | 1:A:375:LEU:HD23 | 2                   | 0.32     | 0.01                | 0.32       |
| (1,1265) | 1:A:337:LEU:HD11 | 1:A:390:MET:HA   | 2                   | 0.31     | 0.18                | 0.31       |
| (1,1265) | 1:A:337:LEU:HD12 | 1:A:390:MET:HA   | 2                   | 0.31     | 0.18                | 0.31       |
| (1,1265) | 1:A:337:LEU:HD13 | 1:A:390:MET:HA   | 2                   | 0.31     | 0.18                | 0.31       |
| (1,1265) | 1:A:337:LEU:HD21 | 1:A:390:MET:HA   | 2                   | 0.31     | 0.18                | 0.31       |
| (1,1265) | 1:A:337:LEU:HD22 | 1:A:390:MET:HA   | 2                   | 0.31     | 0.18                | 0.31       |
| (1,1265) | 1:A:337:LEU:HD23 | 1:A:390:MET:HA   | 2                   | 0.31     | 0.18                | 0.31       |
| (1,1379) | 1:A:362:LYS:H    | 1:A:362:LYS:HE2  | 2                   | 0.3      | 0.12                | 0.3        |
| (1,1379) | 1:A:362:LYS:H    | 1:A:362:LYS:HE3  | 2                   | 0.3      | 0.12                | 0.3        |
| (1,1512) | 1:A:410:ARG:HA   | 1:A:411:LEU:HD11 | 2                   | 0.3      | 0.01                | 0.3        |

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| Key      | Atom-1           | Atom-2           | Models <sup>1</sup> | Mean (Å) | SD <sup>1</sup> (Å) | Median (Å) |
|----------|------------------|------------------|---------------------|----------|---------------------|------------|
| (1,1512) | 1:A:410:ARG:HA   | 1:A:411:LEU:HD12 | 2                   | 0.3      | 0.01                | 0.3        |
| (1,1512) | 1:A:410:ARG:HA   | 1:A:411:LEU:HD13 | 2                   | 0.3      | 0.01                | 0.3        |
| (1,1512) | 1:A:410:ARG:HA   | 1:A:411:LEU:HD21 | 2                   | 0.3      | 0.01                | 0.3        |
| (1,1512) | 1:A:410:ARG:HA   | 1:A:411:LEU:HD22 | 2                   | 0.3      | 0.01                | 0.3        |
| (1,1512) | 1:A:410:ARG:HA   | 1:A:411:LEU:HD23 | 2                   | 0.3      | 0.01                | 0.3        |
| (1,1366) | 1:A:353:PHE:HB3  | 1:A:375:LEU:HD11 | 2                   | 0.3      | 0.16                | 0.3        |
| (1,1366) | 1:A:353:PHE:HB3  | 1:A:375:LEU:HD12 | 2                   | 0.3      | 0.16                | 0.3        |
| (1,1366) | 1:A:353:PHE:HB3  | 1:A:375:LEU:HD13 | 2                   | 0.3      | 0.16                | 0.3        |
| (1,1366) | 1:A:353:PHE:HB3  | 1:A:375:LEU:HD21 | 2                   | 0.3      | 0.16                | 0.3        |
| (1,1366) | 1:A:353:PHE:HB3  | 1:A:375:LEU:HD22 | 2                   | 0.3      | 0.16                | 0.3        |
| (1,1366) | 1:A:353:PHE:HB3  | 1:A:375:LEU:HD23 | 2                   | 0.3      | 0.16                | 0.3        |
| (1,161)  | 1:A:409:GLN:HG2  | 1:A:412:LEU:HB3  | 2                   | 0.3      | 0.12                | 0.3        |
| (1,161)  | 1:A:409:GLN:HG3  | 1:A:412:LEU:HB3  | 2                   | 0.3      | 0.12                | 0.3        |
| (1,1395) | 1:A:369:PRO:HB3  | 1:A:411:LEU:HD11 | 2                   | 0.3      | 0.12                | 0.3        |
| (1,1395) | 1:A:369:PRO:HB3  | 1:A:411:LEU:HD12 | 2                   | 0.3      | 0.12                | 0.3        |
| (1,1395) | 1:A:369:PRO:HB3  | 1:A:411:LEU:HD13 | 2                   | 0.3      | 0.12                | 0.3        |
| (1,1395) | 1:A:369:PRO:HB3  | 1:A:411:LEU:HD21 | 2                   | 0.3      | 0.12                | 0.3        |
| (1,1395) | 1:A:369:PRO:HB3  | 1:A:411:LEU:HD22 | 2                   | 0.3      | 0.12                | 0.3        |
| (1,1395) | 1:A:369:PRO:HB3  | 1:A:411:LEU:HD23 | 2                   | 0.3      | 0.12                | 0.3        |
| (1,1226) | 1:A:376:TRP:HZ2  | 1:A:380:LYS:HD2  | 2                   | 0.29     | 0.08                | 0.29       |
| (1,1226) | 1:A:376:TRP:HZ2  | 1:A:380:LYS:HD3  | 2                   | 0.29     | 0.08                | 0.29       |
| (1,1537) | 1:A:426:ARG:H    | 1:A:426:ARG:HB2  | 2                   | 0.29     | 0.08                | 0.29       |
| (1,1537) | 1:A:426:ARG:H    | 1:A:426:ARG:HB3  | 2                   | 0.29     | 0.08                | 0.29       |
| (1,920)  | 1:A:362:LYS:H    | 1:A:362:LYS:HG2  | 2                   | 0.26     | 0.02                | 0.26       |
| (1,1388) | 1:A:365:ARG:HA   | 1:A:411:LEU:HD11 | 2                   | 0.26     | 0.14                | 0.26       |
| (1,1388) | 1:A:365:ARG:HA   | 1:A:411:LEU:HD12 | 2                   | 0.26     | 0.14                | 0.26       |
| (1,1388) | 1:A:365:ARG:HA   | 1:A:411:LEU:HD13 | 2                   | 0.26     | 0.14                | 0.26       |
| (1,1388) | 1:A:365:ARG:HA   | 1:A:411:LEU:HD21 | 2                   | 0.26     | 0.14                | 0.26       |
| (1,1388) | 1:A:365:ARG:HA   | 1:A:411:LEU:HD22 | 2                   | 0.26     | 0.14                | 0.26       |
| (1,1388) | 1:A:365:ARG:HA   | 1:A:411:LEU:HD23 | 2                   | 0.26     | 0.14                | 0.26       |
| (1,977)  | 1:A:402:ILE:HG21 | 1:A:417:LYS:H    | 2                   | 0.24     | 0.02                | 0.24       |
| (1,977)  | 1:A:402:ILE:HG22 | 1:A:417:LYS:H    | 2                   | 0.24     | 0.02                | 0.24       |
| (1,977)  | 1:A:402:ILE:HG23 | 1:A:417:LYS:H    | 2                   | 0.24     | 0.02                | 0.24       |
| (1,1350) | 1:A:349:ARG:HD2  | 1:A:350:TYR:H    | 2                   | 0.24     | 0.14                | 0.24       |
| (1,1350) | 1:A:349:ARG:HD3  | 1:A:350:TYR:H    | 2                   | 0.24     | 0.14                | 0.24       |
| (1,1396) | 1:A:369:PRO:HG2  | 1:A:411:LEU:HD11 | 2                   | 0.24     | 0.1                 | 0.24       |
| (1,1396) | 1:A:369:PRO:HG2  | 1:A:411:LEU:HD12 | 2                   | 0.24     | 0.1                 | 0.24       |
| (1,1396) | 1:A:369:PRO:HG2  | 1:A:411:LEU:HD13 | 2                   | 0.24     | 0.1                 | 0.24       |
| (1,1396) | 1:A:369:PRO:HG2  | 1:A:411:LEU:HD21 | 2                   | 0.24     | 0.1                 | 0.24       |
| (1,1396) | 1:A:369:PRO:HG2  | 1:A:411:LEU:HD22 | 2                   | 0.24     | 0.1                 | 0.24       |
| (1,1396) | 1:A:369:PRO:HG2  | 1:A:411:LEU:HD23 | 2                   | 0.24     | 0.1                 | 0.24       |
| (1,1396) | 1:A:369:PRO:HG3  | 1:A:411:LEU:HD11 | 2                   | 0.24     | 0.1                 | 0.24       |

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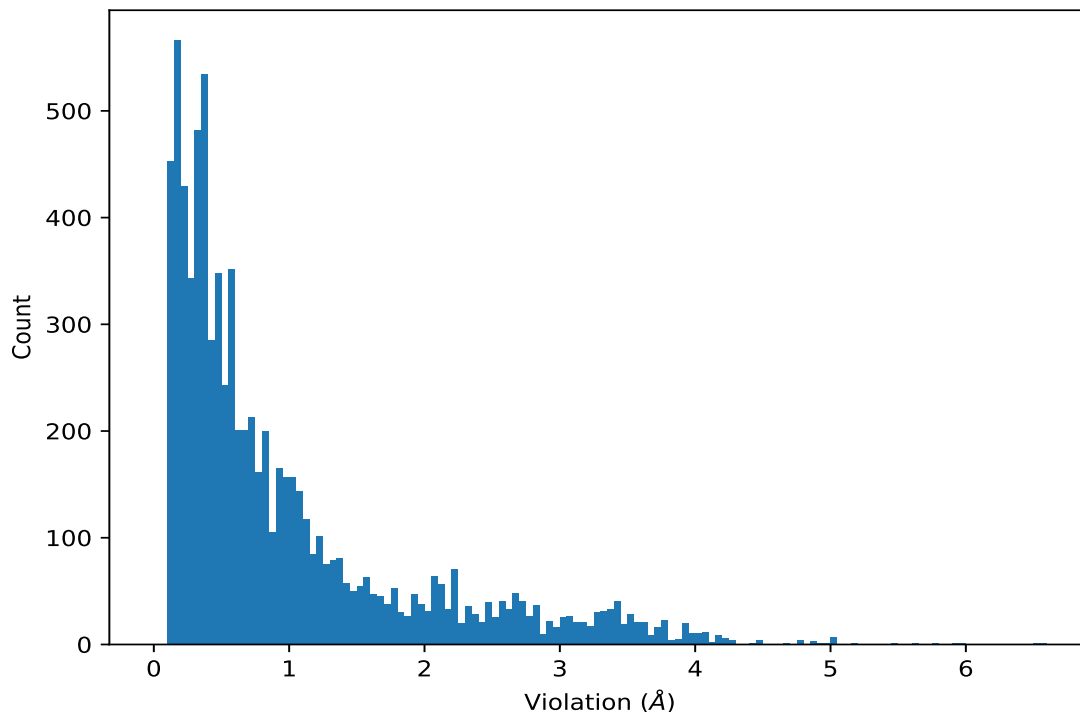
| Key      | Atom-1          | Atom-2           | Models <sup>1</sup> | Mean (Å) | SD <sup>1</sup> (Å) | Median (Å) |
|----------|-----------------|------------------|---------------------|----------|---------------------|------------|
| (1,1396) | 1:A:369:PRO:HG3 | 1:A:411:LEU:HD12 | 2                   | 0.24     | 0.1                 | 0.24       |
| (1,1396) | 1:A:369:PRO:HG3 | 1:A:411:LEU:HD13 | 2                   | 0.24     | 0.1                 | 0.24       |
| (1,1396) | 1:A:369:PRO:HG3 | 1:A:411:LEU:HD21 | 2                   | 0.24     | 0.1                 | 0.24       |
| (1,1396) | 1:A:369:PRO:HG3 | 1:A:411:LEU:HD22 | 2                   | 0.24     | 0.1                 | 0.24       |
| (1,1396) | 1:A:369:PRO:HG3 | 1:A:411:LEU:HD23 | 2                   | 0.24     | 0.1                 | 0.24       |
| (1,604)  | 1:A:376:TRP:HE1 | 1:A:393:ALA:HB1  | 2                   | 0.24     | 0.08                | 0.24       |
| (1,604)  | 1:A:376:TRP:HE1 | 1:A:393:ALA:HB2  | 2                   | 0.24     | 0.08                | 0.24       |
| (1,604)  | 1:A:376:TRP:HE1 | 1:A:393:ALA:HB3  | 2                   | 0.24     | 0.08                | 0.24       |
| (1,200)  | 1:A:355:ARG:HA  | 1:A:355:ARG:HD2  | 2                   | 0.22     | 0.04                | 0.22       |
| (1,200)  | 1:A:355:ARG:HA  | 1:A:355:ARG:HD3  | 2                   | 0.22     | 0.04                | 0.22       |
| (1,686)  | 1:A:424:SER:HA  | 1:A:426:ARG:H    | 2                   | 0.22     | 0.02                | 0.22       |
| (1,1460) | 1:A:392:ARG:H   | 1:A:392:ARG:HG2  | 2                   | 0.21     | 0.02                | 0.21       |
| (1,1460) | 1:A:392:ARG:H   | 1:A:392:ARG:HG3  | 2                   | 0.21     | 0.02                | 0.21       |
| (1,1036) | 1:A:403:ILE:HA  | 1:A:414:ARG:H    | 2                   | 0.2      | 0.09                | 0.2        |
| (1,893)  | 1:A:369:PRO:HB2 | 1:A:370:ASN:H    | 2                   | 0.2      | 0.06                | 0.2        |
| (1,594)  | 1:A:346:SER:HB2 | 1:A:356:TRP:HE1  | 2                   | 0.2      | 0.05                | 0.2        |
| (1,594)  | 1:A:346:SER:HB3 | 1:A:356:TRP:HE1  | 2                   | 0.2      | 0.05                | 0.2        |
| (1,719)  | 1:A:349:ARG:H   | 1:A:350:TYR:HB3  | 2                   | 0.2      | 0.01                | 0.2        |
| (1,250)  | 1:A:358:ASP:H   | 1:A:359:LYS:HA   | 2                   | 0.18     | 0.06                | 0.18       |
| (1,74)   | 1:A:360:GLU:HG2 | 1:A:361:SER:H    | 2                   | 0.16     | 0.01                | 0.16       |
| (1,74)   | 1:A:360:GLU:HG3 | 1:A:361:SER:H    | 2                   | 0.16     | 0.01                | 0.16       |
| (1,443)  | 1:A:332:ALA:HB1 | 1:A:333:ASP:HA   | 2                   | 0.16     | 0.04                | 0.16       |
| (1,443)  | 1:A:332:ALA:HB2 | 1:A:333:ASP:HA   | 2                   | 0.16     | 0.04                | 0.16       |
| (1,443)  | 1:A:332:ALA:HB3 | 1:A:333:ASP:HA   | 2                   | 0.16     | 0.04                | 0.16       |
| (1,826)  | 1:A:378:ASN:HB3 | 1:A:378:ASN:HD22 | 2                   | 0.16     | 0.0                 | 0.16       |
| (1,688)  | 1:A:425:GLY:HA2 | 1:A:426:ARG:H    | 2                   | 0.16     | 0.02                | 0.16       |
| (1,688)  | 1:A:425:GLY:HA3 | 1:A:426:ARG:H    | 2                   | 0.16     | 0.02                | 0.16       |
| (1,473)  | 1:A:426:ARG:H   | 1:A:426:ARG:HG2  | 2                   | 0.16     | 0.02                | 0.16       |
| (1,473)  | 1:A:426:ARG:H   | 1:A:426:ARG:HG3  | 2                   | 0.16     | 0.02                | 0.16       |
| (1,670)  | 1:A:354:ILE:HA  | 1:A:366:ILE:H    | 2                   | 0.16     | 0.05                | 0.16       |
| (1,741)  | 1:A:347:ASP:H   | 1:A:347:ASP:HB2  | 2                   | 0.16     | 0.05                | 0.16       |
| (1,1072) | 1:A:421:GLU:H   | 1:A:422:ILE:HB   | 2                   | 0.15     | 0.02                | 0.15       |
| (1,621)  | 1:A:357:GLU:HB2 | 1:A:364:PHE:H    | 2                   | 0.12     | 0.01                | 0.12       |
| (1,621)  | 1:A:357:GLU:HB3 | 1:A:364:PHE:H    | 2                   | 0.12     | 0.01                | 0.12       |
| (1,5)    | 1:A:376:TRP:HB3 | 1:A:385:MET:HE1  | 2                   | 0.12     | 0.01                | 0.12       |
| (1,5)    | 1:A:376:TRP:HB3 | 1:A:385:MET:HE2  | 2                   | 0.12     | 0.01                | 0.12       |
| (1,5)    | 1:A:376:TRP:HB3 | 1:A:385:MET:HE3  | 2                   | 0.12     | 0.01                | 0.12       |
| (1,592)  | 1:A:356:TRP:HA  | 1:A:356:TRP:HE1  | 2                   | 0.12     | 0.01                | 0.12       |
| (1,439)  | 1:A:378:ASN:HA  | 1:A:378:ASN:HD21 | 2                   | 0.12     | 0.0                 | 0.12       |

<sup>1</sup>Number of violated models, <sup>2</sup>Standard deviation

## 9.5 All violated distance restraints [i](#)

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

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



### 9.5.2 Table : All distance violations [i](#)

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

| Key      | Atom-1           | Atom-2          | Model ID | Violation (Å) |
|----------|------------------|-----------------|----------|---------------|
| (1,1155) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HG  | 3        | 6.56          |
| (1,1155) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HG  | 7        | 6.5           |
| (1,1155) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HG  | 4        | 5.95          |
| (1,1155) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HG  | 9        | 5.92          |
| (1,1155) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HG  | 6        | 5.78          |
| (1,1155) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HG  | 2        | 5.6           |
| (1,1155) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HG  | 10       | 5.48          |
| (1,1155) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HG  | 1        | 5.17          |
| (1,1223) | 1:A:372:LEU:HB3  | 1:A:387:TYR:HE2 | 6        | 5.04          |
| (1,1415) | 1:A:372:LEU:HD11 | 1:A:387:TYR:HE2 | 6        | 5.01          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1415) | 1:A:372:LEU:HD12 | 1:A:387:TYR:HE2  | 6        | 5.01          |
| (1,1415) | 1:A:372:LEU:HD13 | 1:A:387:TYR:HE2  | 6        | 5.01          |
| (1,1415) | 1:A:372:LEU:HD21 | 1:A:387:TYR:HE2  | 6        | 5.01          |
| (1,1415) | 1:A:372:LEU:HD22 | 1:A:387:TYR:HE2  | 6        | 5.01          |
| (1,1415) | 1:A:372:LEU:HD23 | 1:A:387:TYR:HE2  | 6        | 5.01          |
| (1,1055) | 1:A:373:ALA:H    | 1:A:387:TYR:HD2  | 6        | 4.99          |
| (1,1193) | 1:A:342:TYR:HE2  | 1:A:356:TRP:HH2  | 3        | 4.91          |
| (1,549)  | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD21 | 3        | 4.88          |
| (1,549)  | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD22 | 3        | 4.88          |
| (1,549)  | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD23 | 3        | 4.88          |
| (1,549)  | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD21 | 7        | 4.76          |
| (1,549)  | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD22 | 7        | 4.76          |
| (1,549)  | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD23 | 7        | 4.76          |
| (1,1155) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HG   | 8        | 4.76          |
| (1,1193) | 1:A:342:TYR:HE2  | 1:A:356:TRP:HH2  | 9        | 4.66          |
| (1,1151) | 1:A:340:TYR:HD2  | 1:A:379:HIS:HE1  | 5        | 4.46          |
| (1,549)  | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD21 | 4        | 4.45          |
| (1,549)  | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD22 | 4        | 4.45          |
| (1,549)  | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD23 | 4        | 4.45          |
| (1,1152) | 1:A:340:TYR:HE2  | 1:A:379:HIS:HE1  | 2        | 4.41          |
| (1,1220) | 1:A:369:PRO:HA   | 1:A:387:TYR:HE2  | 6        | 4.29          |
| (1,549)  | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD21 | 9        | 4.25          |
| (1,549)  | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD22 | 9        | 4.25          |
| (1,549)  | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD23 | 9        | 4.25          |
| (1,184)  | 1:A:365:ARG:HA   | 1:A:413:PHE:HE1  | 2        | 4.24          |
| (1,184)  | 1:A:365:ARG:HA   | 1:A:413:PHE:HE1  | 6        | 4.24          |
| (1,29)   | 1:A:387:TYR:HD2  | 1:A:390:MET:HE1  | 4        | 4.23          |
| (1,29)   | 1:A:387:TYR:HD2  | 1:A:390:MET:HE2  | 4        | 4.23          |
| (1,29)   | 1:A:387:TYR:HD2  | 1:A:390:MET:HE3  | 4        | 4.23          |
| (1,748)  | 1:A:347:ASP:H    | 1:A:350:TYR:HE2  | 6        | 4.22          |
| (1,31)   | 1:A:340:TYR:HE1  | 1:A:390:MET:HE1  | 6        | 4.17          |
| (1,31)   | 1:A:340:TYR:HE1  | 1:A:390:MET:HE2  | 6        | 4.17          |
| (1,31)   | 1:A:340:TYR:HE1  | 1:A:390:MET:HE3  | 6        | 4.17          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD11 | 3        | 4.15          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD12 | 3        | 4.15          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD13 | 3        | 4.15          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD21 | 3        | 4.15          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD22 | 3        | 4.15          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD23 | 3        | 4.15          |
| (1,1223) | 1:A:372:LEU:HB3  | 1:A:387:TYR:HE2  | 7        | 4.12          |
| (1,1089) | 1:A:340:TYR:HE1  | 1:A:376:TRP:H    | 9        | 4.12          |
| (1,668)  | 1:A:366:ILE:H    | 1:A:413:PHE:HE1  | 6        | 4.09          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,140)  | 1:A:347:ASP:HB3  | 1:A:350:TYR:HD2  | 8        | 4.09          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD11 | 7        | 4.09          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD12 | 7        | 4.09          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD13 | 7        | 4.09          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD21 | 7        | 4.09          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD22 | 7        | 4.09          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD23 | 7        | 4.09          |
| (1,1219) | 1:A:366:ILE:HD11 | 1:A:387:TYR:HE2  | 6        | 4.08          |
| (1,1219) | 1:A:366:ILE:HD12 | 1:A:387:TYR:HE2  | 6        | 4.08          |
| (1,1219) | 1:A:366:ILE:HD13 | 1:A:387:TYR:HE2  | 6        | 4.08          |
| (1,1223) | 1:A:372:LEU:HB3  | 1:A:387:TYR:HE2  | 1        | 4.07          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD11 | 3        | 4.04          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD12 | 3        | 4.04          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD13 | 3        | 4.04          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD21 | 3        | 4.04          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD22 | 3        | 4.04          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD23 | 3        | 4.04          |
| (1,549)  | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD21 | 2        | 4.03          |
| (1,549)  | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD22 | 2        | 4.03          |
| (1,549)  | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD23 | 2        | 4.03          |
| (1,1087) | 1:A:340:TYR:HD1  | 1:A:376:TRP:H    | 9        | 4.03          |
| (1,1055) | 1:A:373:ALA:H    | 1:A:387:TYR:HD2  | 7        | 4.03          |
| (1,748)  | 1:A:347:ASP:H    | 1:A:350:TYR:HE2  | 1        | 3.99          |
| (1,1159) | 1:A:369:PRO:HA   | 1:A:387:TYR:HD2  | 6        | 3.99          |
| (1,549)  | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD21 | 10       | 3.98          |
| (1,549)  | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD22 | 10       | 3.98          |
| (1,549)  | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD23 | 10       | 3.98          |
| (1,1215) | 1:A:340:TYR:HE1  | 1:A:376:TRP:HB3  | 9        | 3.98          |
| (1,1156) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD11 | 3        | 3.98          |
| (1,1156) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD12 | 3        | 3.98          |
| (1,1156) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD13 | 3        | 3.98          |
| (1,1055) | 1:A:373:ALA:H    | 1:A:387:TYR:HD2  | 2        | 3.98          |
| (1,1151) | 1:A:340:TYR:HD2  | 1:A:379:HIS:HE1  | 3        | 3.96          |
| (1,1223) | 1:A:372:LEU:HB3  | 1:A:387:TYR:HE2  | 2        | 3.94          |
| (1,1156) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD11 | 7        | 3.94          |
| (1,1156) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD12 | 7        | 3.94          |
| (1,1156) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD13 | 7        | 3.94          |
| (1,668)  | 1:A:366:ILE:H    | 1:A:413:PHE:HE1  | 2        | 3.93          |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD11 | 5        | 3.93          |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD12 | 5        | 3.93          |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD13 | 5        | 3.93          |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD21 | 5        | 3.93          |

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| Key      | Atom-1          | Atom-2           | Model ID | Violation (Å) |
|----------|-----------------|------------------|----------|---------------|
| (1,1279) | 1:A:340:TYR:HE1 | 1:A:372:LEU:HD22 | 5        | 3.93          |
| (1,1279) | 1:A:340:TYR:HE1 | 1:A:372:LEU:HD23 | 5        | 3.93          |
| (1,31)   | 1:A:340:TYR:HE1 | 1:A:390:MET:HE1  | 8        | 3.91          |
| (1,31)   | 1:A:340:TYR:HE1 | 1:A:390:MET:HE2  | 8        | 3.91          |
| (1,31)   | 1:A:340:TYR:HE1 | 1:A:390:MET:HE3  | 8        | 3.91          |
| (1,1354) | 1:A:350:TYR:HE1 | 1:A:375:LEU:HD11 | 7        | 3.9           |
| (1,1354) | 1:A:350:TYR:HE1 | 1:A:375:LEU:HD12 | 7        | 3.9           |
| (1,1354) | 1:A:350:TYR:HE1 | 1:A:375:LEU:HD13 | 7        | 3.9           |
| (1,1354) | 1:A:350:TYR:HE1 | 1:A:375:LEU:HD21 | 7        | 3.9           |
| (1,1354) | 1:A:350:TYR:HE1 | 1:A:375:LEU:HD22 | 7        | 3.9           |
| (1,1354) | 1:A:350:TYR:HE1 | 1:A:375:LEU:HD23 | 7        | 3.9           |
| (1,748)  | 1:A:347:ASP:H   | 1:A:350:TYR:HE2  | 8        | 3.88          |
| (1,748)  | 1:A:347:ASP:H   | 1:A:350:TYR:HE2  | 2        | 3.87          |
| (1,1089) | 1:A:340:TYR:HE1 | 1:A:376:TRP:H    | 8        | 3.87          |
| (1,184)  | 1:A:365:ARG:HA  | 1:A:413:PHE:HE1  | 10       | 3.85          |
| (1,1215) | 1:A:340:TYR:HE1 | 1:A:376:TRP:HB3  | 8        | 3.85          |
| (1,140)  | 1:A:347:ASP:HB3 | 1:A:350:TYR:HD2  | 2        | 3.83          |
| (1,1089) | 1:A:340:TYR:HE1 | 1:A:376:TRP:H    | 5        | 3.83          |
| (1,1193) | 1:A:342:TYR:HE2 | 1:A:356:TRP:HH2  | 6        | 3.8           |
| (1,1109) | 1:A:354:ILE:H   | 1:A:355:ARG:HE   | 9        | 3.8           |
| (1,140)  | 1:A:347:ASP:HB3 | 1:A:350:TYR:HD2  | 6        | 3.79          |
| (1,1353) | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD11 | 4        | 3.78          |
| (1,1353) | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD12 | 4        | 3.78          |
| (1,1353) | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD13 | 4        | 3.78          |
| (1,1353) | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD21 | 4        | 3.78          |
| (1,1353) | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD22 | 4        | 3.78          |
| (1,1353) | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD23 | 4        | 3.78          |
| (1,1279) | 1:A:340:TYR:HE1 | 1:A:372:LEU:HD11 | 8        | 3.78          |
| (1,1279) | 1:A:340:TYR:HE1 | 1:A:372:LEU:HD12 | 8        | 3.78          |
| (1,1279) | 1:A:340:TYR:HE1 | 1:A:372:LEU:HD13 | 8        | 3.78          |
| (1,1279) | 1:A:340:TYR:HE1 | 1:A:372:LEU:HD21 | 8        | 3.78          |
| (1,1279) | 1:A:340:TYR:HE1 | 1:A:372:LEU:HD22 | 8        | 3.78          |
| (1,1279) | 1:A:340:TYR:HE1 | 1:A:372:LEU:HD23 | 8        | 3.78          |
| (1,549)  | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD21 | 1        | 3.76          |
| (1,549)  | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD22 | 1        | 3.76          |
| (1,549)  | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD23 | 1        | 3.76          |
| (1,31)   | 1:A:340:TYR:HE1 | 1:A:390:MET:HE1  | 1        | 3.76          |
| (1,31)   | 1:A:340:TYR:HE1 | 1:A:390:MET:HE2  | 1        | 3.76          |
| (1,31)   | 1:A:340:TYR:HE1 | 1:A:390:MET:HE3  | 1        | 3.76          |
| (1,28)   | 1:A:340:TYR:HD1 | 1:A:390:MET:HE1  | 8        | 3.75          |
| (1,28)   | 1:A:340:TYR:HD1 | 1:A:390:MET:HE2  | 8        | 3.75          |
| (1,28)   | 1:A:340:TYR:HD1 | 1:A:390:MET:HE3  | 8        | 3.75          |

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| Key      | Atom-1          | Atom-2           | Model ID | Violation (Å) |
|----------|-----------------|------------------|----------|---------------|
| (1,1215) | 1:A:340:TYR:HE1 | 1:A:376:TRP:HB3  | 6        | 3.75          |
| (1,1215) | 1:A:340:TYR:HE1 | 1:A:376:TRP:HB3  | 5        | 3.73          |
| (1,28)   | 1:A:340:TYR:HD1 | 1:A:390:MET:HE1  | 9        | 3.72          |
| (1,28)   | 1:A:340:TYR:HD1 | 1:A:390:MET:HE2  | 9        | 3.72          |
| (1,28)   | 1:A:340:TYR:HD1 | 1:A:390:MET:HE3  | 9        | 3.72          |
| (1,1279) | 1:A:340:TYR:HE1 | 1:A:372:LEU:HD11 | 9        | 3.72          |
| (1,1279) | 1:A:340:TYR:HE1 | 1:A:372:LEU:HD12 | 9        | 3.72          |
| (1,1279) | 1:A:340:TYR:HE1 | 1:A:372:LEU:HD13 | 9        | 3.72          |
| (1,1279) | 1:A:340:TYR:HE1 | 1:A:372:LEU:HD21 | 9        | 3.72          |
| (1,1279) | 1:A:340:TYR:HE1 | 1:A:372:LEU:HD22 | 9        | 3.72          |
| (1,1279) | 1:A:340:TYR:HE1 | 1:A:372:LEU:HD23 | 9        | 3.72          |
| (1,1212) | 1:A:342:TYR:HE2 | 1:A:356:TRP:HZ2  | 3        | 3.72          |
| (1,748)  | 1:A:347:ASP:H   | 1:A:350:TYR:HE2  | 9        | 3.71          |
| (1,549)  | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD21 | 6        | 3.71          |
| (1,549)  | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD22 | 6        | 3.71          |
| (1,549)  | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD23 | 6        | 3.71          |
| (1,748)  | 1:A:347:ASP:H   | 1:A:350:TYR:HE2  | 10       | 3.7           |
| (1,140)  | 1:A:347:ASP:HB3 | 1:A:350:TYR:HD2  | 4        | 3.68          |
| (1,140)  | 1:A:347:ASP:HB3 | 1:A:350:TYR:HD2  | 10       | 3.68          |
| (1,668)  | 1:A:366:ILE:H   | 1:A:413:PHE:HE1  | 10       | 3.67          |
| (1,1193) | 1:A:342:TYR:HE2 | 1:A:356:TRP:HH2  | 2        | 3.67          |
| (1,1193) | 1:A:342:TYR:HE2 | 1:A:356:TRP:HH2  | 5        | 3.67          |
| (1,703)  | 1:A:404:ARG:H   | 1:A:413:PHE:HD2  | 4        | 3.66          |
| (1,30)   | 1:A:387:TYR:HE2 | 1:A:390:MET:HE1  | 1        | 3.66          |
| (1,30)   | 1:A:387:TYR:HE2 | 1:A:390:MET:HE2  | 1        | 3.66          |
| (1,30)   | 1:A:387:TYR:HE2 | 1:A:390:MET:HE3  | 1        | 3.66          |
| (1,1279) | 1:A:340:TYR:HE1 | 1:A:372:LEU:HD11 | 1        | 3.64          |
| (1,1279) | 1:A:340:TYR:HE1 | 1:A:372:LEU:HD12 | 1        | 3.64          |
| (1,1279) | 1:A:340:TYR:HE1 | 1:A:372:LEU:HD13 | 1        | 3.64          |
| (1,1279) | 1:A:340:TYR:HE1 | 1:A:372:LEU:HD21 | 1        | 3.64          |
| (1,1279) | 1:A:340:TYR:HE1 | 1:A:372:LEU:HD22 | 1        | 3.64          |
| (1,1279) | 1:A:340:TYR:HE1 | 1:A:372:LEU:HD23 | 1        | 3.64          |
| (1,184)  | 1:A:365:ARG:HA  | 1:A:413:PHE:HE1  | 1        | 3.63          |
| (1,31)   | 1:A:340:TYR:HE1 | 1:A:390:MET:HE1  | 9        | 3.62          |
| (1,31)   | 1:A:340:TYR:HE1 | 1:A:390:MET:HE2  | 9        | 3.62          |
| (1,31)   | 1:A:340:TYR:HE1 | 1:A:390:MET:HE3  | 9        | 3.62          |
| (1,28)   | 1:A:340:TYR:HD1 | 1:A:390:MET:HE1  | 6        | 3.61          |
| (1,28)   | 1:A:340:TYR:HD1 | 1:A:390:MET:HE2  | 6        | 3.61          |
| (1,28)   | 1:A:340:TYR:HD1 | 1:A:390:MET:HE3  | 6        | 3.61          |
| (1,1353) | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD11 | 9        | 3.61          |
| (1,1353) | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD12 | 9        | 3.61          |
| (1,1353) | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD13 | 9        | 3.61          |

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| Key      | Atom-1          | Atom-2           | Model ID | Violation (Å) |
|----------|-----------------|------------------|----------|---------------|
| (1,1353) | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD21 | 9        | 3.61          |
| (1,1353) | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD22 | 9        | 3.61          |
| (1,1353) | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD23 | 9        | 3.61          |
| (1,789)  | 1:A:355:ARG:H   | 1:A:365:ARG:HG3  | 4        | 3.6           |
| (1,1151) | 1:A:340:TYR:HD2 | 1:A:379:HIS:HE1  | 2        | 3.6           |
| (1,29)   | 1:A:387:TYR:HD2 | 1:A:390:MET:HE1  | 6        | 3.59          |
| (1,29)   | 1:A:387:TYR:HD2 | 1:A:390:MET:HE2  | 6        | 3.59          |
| (1,29)   | 1:A:387:TYR:HD2 | 1:A:390:MET:HE3  | 6        | 3.59          |
| (1,1210) | 1:A:350:TYR:HE1 | 1:A:375:LEU:HD21 | 3        | 3.57          |
| (1,1210) | 1:A:350:TYR:HE1 | 1:A:375:LEU:HD22 | 3        | 3.57          |
| (1,1210) | 1:A:350:TYR:HE1 | 1:A:375:LEU:HD23 | 3        | 3.57          |
| (1,1210) | 1:A:350:TYR:HE1 | 1:A:375:LEU:HD11 | 3        | 3.57          |
| (1,1210) | 1:A:350:TYR:HE1 | 1:A:375:LEU:HD12 | 3        | 3.57          |
| (1,1210) | 1:A:350:TYR:HE1 | 1:A:375:LEU:HD13 | 3        | 3.57          |
| (1,1156) | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD11 | 4        | 3.57          |
| (1,1156) | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD12 | 4        | 3.57          |
| (1,1156) | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD13 | 4        | 3.57          |
| (1,1354) | 1:A:350:TYR:HE1 | 1:A:375:LEU:HD11 | 4        | 3.56          |
| (1,1354) | 1:A:350:TYR:HE1 | 1:A:375:LEU:HD12 | 4        | 3.56          |
| (1,1354) | 1:A:350:TYR:HE1 | 1:A:375:LEU:HD13 | 4        | 3.56          |
| (1,1354) | 1:A:350:TYR:HE1 | 1:A:375:LEU:HD21 | 4        | 3.56          |
| (1,1354) | 1:A:350:TYR:HE1 | 1:A:375:LEU:HD22 | 4        | 3.56          |
| (1,1354) | 1:A:350:TYR:HE1 | 1:A:375:LEU:HD23 | 4        | 3.56          |
| (1,29)   | 1:A:387:TYR:HD2 | 1:A:390:MET:HE1  | 1        | 3.55          |
| (1,29)   | 1:A:387:TYR:HD2 | 1:A:390:MET:HE2  | 1        | 3.55          |
| (1,29)   | 1:A:387:TYR:HD2 | 1:A:390:MET:HE3  | 1        | 3.55          |
| (1,1156) | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD11 | 6        | 3.54          |
| (1,1156) | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD12 | 6        | 3.54          |
| (1,1156) | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD13 | 6        | 3.54          |
| (1,789)  | 1:A:355:ARG:H   | 1:A:365:ARG:HG3  | 7        | 3.53          |
| (1,1087) | 1:A:340:TYR:HD1 | 1:A:376:TRP:H    | 5        | 3.53          |
| (1,1087) | 1:A:340:TYR:HD1 | 1:A:376:TRP:H    | 8        | 3.53          |
| (1,789)  | 1:A:355:ARG:H   | 1:A:365:ARG:HG3  | 1        | 3.52          |
| (1,30)   | 1:A:387:TYR:HE2 | 1:A:390:MET:HE1  | 4        | 3.52          |
| (1,30)   | 1:A:387:TYR:HE2 | 1:A:390:MET:HE2  | 4        | 3.52          |
| (1,30)   | 1:A:387:TYR:HE2 | 1:A:390:MET:HE3  | 4        | 3.52          |
| (1,184)  | 1:A:365:ARG:HA  | 1:A:413:PHE:HE1  | 4        | 3.52          |
| (1,1152) | 1:A:340:TYR:HE2 | 1:A:379:HIS:HE1  | 3        | 3.52          |
| (1,1055) | 1:A:373:ALA:H   | 1:A:387:TYR:HD2  | 1        | 3.52          |
| (1,668)  | 1:A:366:ILE:H   | 1:A:413:PHE:HE1  | 1        | 3.51          |
| (1,140)  | 1:A:347:ASP:HB3 | 1:A:350:TYR:HD2  | 9        | 3.51          |
| (1,683)  | 1:A:405:LYS:H   | 1:A:413:PHE:HD2  | 4        | 3.5           |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,31)   | 1:A:340:TYR:HE1  | 1:A:390:MET:HE1  | 5        | 3.5           |
| (1,31)   | 1:A:340:TYR:HE1  | 1:A:390:MET:HE2  | 5        | 3.5           |
| (1,31)   | 1:A:340:TYR:HE1  | 1:A:390:MET:HE3  | 5        | 3.5           |
| (1,30)   | 1:A:387:TYR:HE2  | 1:A:390:MET:HE1  | 6        | 3.5           |
| (1,30)   | 1:A:387:TYR:HE2  | 1:A:390:MET:HE2  | 6        | 3.5           |
| (1,30)   | 1:A:387:TYR:HE2  | 1:A:390:MET:HE3  | 6        | 3.5           |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD11 | 6        | 3.5           |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD12 | 6        | 3.5           |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD13 | 6        | 3.5           |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD21 | 6        | 3.5           |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD22 | 6        | 3.5           |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD23 | 6        | 3.5           |
| (1,1193) | 1:A:342:TYR:HE2  | 1:A:356:TRP:HH2  | 1        | 3.5           |
| (1,703)  | 1:A:404:ARG:H    | 1:A:413:PHE:HD2  | 6        | 3.49          |
| (1,29)   | 1:A:387:TYR:HD2  | 1:A:390:MET:HE1  | 2        | 3.48          |
| (1,29)   | 1:A:387:TYR:HD2  | 1:A:390:MET:HE2  | 2        | 3.48          |
| (1,29)   | 1:A:387:TYR:HD2  | 1:A:390:MET:HE3  | 2        | 3.48          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD11 | 9        | 3.48          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD12 | 9        | 3.48          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD13 | 9        | 3.48          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD21 | 9        | 3.48          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD22 | 9        | 3.48          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD23 | 9        | 3.48          |
| (1,1215) | 1:A:340:TYR:HE1  | 1:A:376:TRP:HB3  | 1        | 3.48          |
| (1,1151) | 1:A:340:TYR:HD2  | 1:A:379:HIS:HE1  | 4        | 3.48          |
| (1,1055) | 1:A:373:ALA:H    | 1:A:387:TYR:HD2  | 5        | 3.47          |
| (1,28)   | 1:A:340:TYR:HD1  | 1:A:390:MET:HE1  | 7        | 3.46          |
| (1,28)   | 1:A:340:TYR:HD1  | 1:A:390:MET:HE2  | 7        | 3.46          |
| (1,28)   | 1:A:340:TYR:HD1  | 1:A:390:MET:HE3  | 7        | 3.46          |
| (1,500)  | 1:A:336:LEU:HD21 | 1:A:338:TRP:HH2  | 3        | 3.45          |
| (1,500)  | 1:A:336:LEU:HD22 | 1:A:338:TRP:HH2  | 3        | 3.45          |
| (1,500)  | 1:A:336:LEU:HD23 | 1:A:338:TRP:HH2  | 3        | 3.45          |
| (1,789)  | 1:A:355:ARG:H    | 1:A:365:ARG:HG3  | 5        | 3.44          |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD11 | 7        | 3.44          |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD12 | 7        | 3.44          |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD13 | 7        | 3.44          |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD21 | 7        | 3.44          |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD22 | 7        | 3.44          |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD23 | 7        | 3.44          |
| (1,1184) | 1:A:405:LYS:HA   | 1:A:413:PHE:HE2  | 10       | 3.44          |
| (1,1089) | 1:A:340:TYR:HE1  | 1:A:376:TRP:H    | 6        | 3.44          |
| (1,1055) | 1:A:373:ALA:H    | 1:A:387:TYR:HD2  | 4        | 3.44          |

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| Key      | Atom-1          | Atom-2           | Model ID | Violation (Å) |
|----------|-----------------|------------------|----------|---------------|
| (1,668)  | 1:A:366:ILE:H   | 1:A:413:PHE:HE1  | 4        | 3.43          |
| (1,1210) | 1:A:350:TYR:HE1 | 1:A:375:LEU:HD21 | 7        | 3.43          |
| (1,1210) | 1:A:350:TYR:HE1 | 1:A:375:LEU:HD22 | 7        | 3.43          |
| (1,1210) | 1:A:350:TYR:HE1 | 1:A:375:LEU:HD23 | 7        | 3.43          |
| (1,1210) | 1:A:350:TYR:HE1 | 1:A:375:LEU:HD11 | 7        | 3.43          |
| (1,1210) | 1:A:350:TYR:HE1 | 1:A:375:LEU:HD12 | 7        | 3.43          |
| (1,1210) | 1:A:350:TYR:HE1 | 1:A:375:LEU:HD13 | 7        | 3.43          |
| (1,1109) | 1:A:354:ILE:H   | 1:A:355:ARG:HE   | 8        | 3.43          |
| (1,591)  | 1:A:342:TYR:HE2 | 1:A:356:TRP:HE1  | 3        | 3.42          |
| (1,1277) | 1:A:340:TYR:HD1 | 1:A:372:LEU:HD11 | 9        | 3.42          |
| (1,1277) | 1:A:340:TYR:HD1 | 1:A:372:LEU:HD12 | 9        | 3.42          |
| (1,1277) | 1:A:340:TYR:HD1 | 1:A:372:LEU:HD13 | 9        | 3.42          |
| (1,1277) | 1:A:340:TYR:HD1 | 1:A:372:LEU:HD21 | 9        | 3.42          |
| (1,1277) | 1:A:340:TYR:HD1 | 1:A:372:LEU:HD22 | 9        | 3.42          |
| (1,1277) | 1:A:340:TYR:HD1 | 1:A:372:LEU:HD23 | 9        | 3.42          |
| (1,1223) | 1:A:372:LEU:HB3 | 1:A:387:TYR:HE2  | 9        | 3.42          |
| (1,1193) | 1:A:342:TYR:HE2 | 1:A:356:TRP:HH2  | 4        | 3.42          |
| (1,1089) | 1:A:340:TYR:HE1 | 1:A:376:TRP:H    | 1        | 3.42          |
| (1,591)  | 1:A:342:TYR:HE2 | 1:A:356:TRP:HE1  | 5        | 3.41          |
| (1,28)   | 1:A:340:TYR:HD1 | 1:A:390:MET:HE1  | 1        | 3.41          |
| (1,28)   | 1:A:340:TYR:HD1 | 1:A:390:MET:HE2  | 1        | 3.41          |
| (1,28)   | 1:A:340:TYR:HD1 | 1:A:390:MET:HE3  | 1        | 3.41          |
| (1,789)  | 1:A:355:ARG:H   | 1:A:365:ARG:HG3  | 2        | 3.4           |
| (1,703)  | 1:A:404:ARG:H   | 1:A:413:PHE:HD2  | 10       | 3.4           |
| (1,668)  | 1:A:366:ILE:H   | 1:A:413:PHE:HE1  | 9        | 3.4           |
| (1,29)   | 1:A:387:TYR:HD2 | 1:A:390:MET:HE1  | 7        | 3.4           |
| (1,29)   | 1:A:387:TYR:HD2 | 1:A:390:MET:HE2  | 7        | 3.4           |
| (1,29)   | 1:A:387:TYR:HD2 | 1:A:390:MET:HE3  | 7        | 3.4           |
| (1,28)   | 1:A:340:TYR:HD1 | 1:A:390:MET:HE1  | 5        | 3.4           |
| (1,28)   | 1:A:340:TYR:HD1 | 1:A:390:MET:HE2  | 5        | 3.4           |
| (1,28)   | 1:A:340:TYR:HD1 | 1:A:390:MET:HE3  | 5        | 3.4           |
| (1,683)  | 1:A:405:LYS:H   | 1:A:413:PHE:HD2  | 10       | 3.39          |
| (1,31)   | 1:A:340:TYR:HE1 | 1:A:390:MET:HE1  | 7        | 3.39          |
| (1,31)   | 1:A:340:TYR:HE1 | 1:A:390:MET:HE2  | 7        | 3.39          |
| (1,31)   | 1:A:340:TYR:HE1 | 1:A:390:MET:HE3  | 7        | 3.39          |
| (1,1156) | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD11 | 9        | 3.39          |
| (1,1156) | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD12 | 9        | 3.39          |
| (1,1156) | 1:A:350:TYR:HD1 | 1:A:375:LEU:HD13 | 9        | 3.39          |
| (1,1152) | 1:A:340:TYR:HE2 | 1:A:379:HIS:HE1  | 5        | 3.39          |
| (1,184)  | 1:A:365:ARG:HA  | 1:A:413:PHE:HE1  | 9        | 3.38          |
| (1,1277) | 1:A:340:TYR:HD1 | 1:A:372:LEU:HD11 | 5        | 3.37          |
| (1,1277) | 1:A:340:TYR:HD1 | 1:A:372:LEU:HD12 | 5        | 3.37          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD13 | 5        | 3.37          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD21 | 5        | 3.37          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD22 | 5        | 3.37          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD23 | 5        | 3.37          |
| (1,1174) | 1:A:394:LEU:HG   | 1:A:397:TYR:HD2  | 6        | 3.37          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD11 | 2        | 3.36          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD12 | 2        | 3.36          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD13 | 2        | 3.36          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD21 | 2        | 3.36          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD22 | 2        | 3.36          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD23 | 2        | 3.36          |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD11 | 6        | 3.36          |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD12 | 6        | 3.36          |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD13 | 6        | 3.36          |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD21 | 6        | 3.36          |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD22 | 6        | 3.36          |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD23 | 6        | 3.36          |
| (1,716)  | 1:A:349:ARG:H    | 1:A:350:TYR:HD2  | 2        | 3.35          |
| (1,1223) | 1:A:372:LEU:HB3  | 1:A:387:TYR:HE2  | 5        | 3.35          |
| (1,1219) | 1:A:366:ILE:HD11 | 1:A:387:TYR:HE2  | 1        | 3.35          |
| (1,1219) | 1:A:366:ILE:HD12 | 1:A:387:TYR:HE2  | 1        | 3.35          |
| (1,1219) | 1:A:366:ILE:HD13 | 1:A:387:TYR:HE2  | 1        | 3.35          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD11 | 10       | 3.34          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD12 | 10       | 3.34          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD13 | 10       | 3.34          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD21 | 10       | 3.34          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD22 | 10       | 3.34          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD23 | 10       | 3.34          |
| (1,30)   | 1:A:387:TYR:HE2  | 1:A:390:MET:HE1  | 7        | 3.33          |
| (1,30)   | 1:A:387:TYR:HE2  | 1:A:390:MET:HE2  | 7        | 3.33          |
| (1,30)   | 1:A:387:TYR:HE2  | 1:A:390:MET:HE3  | 7        | 3.33          |
| (1,1351) | 1:A:349:ARG:HD2  | 1:A:350:TYR:HE2  | 8        | 3.33          |
| (1,1351) | 1:A:349:ARG:HD3  | 1:A:350:TYR:HE2  | 8        | 3.33          |
| (1,1223) | 1:A:372:LEU:HB3  | 1:A:387:TYR:HE2  | 4        | 3.33          |
| (1,1193) | 1:A:342:TYR:HE2  | 1:A:356:TRP:HH2  | 8        | 3.33          |
| (1,1415) | 1:A:372:LEU:HD11 | 1:A:387:TYR:HE2  | 1        | 3.32          |
| (1,1415) | 1:A:372:LEU:HD12 | 1:A:387:TYR:HE2  | 1        | 3.32          |
| (1,1415) | 1:A:372:LEU:HD13 | 1:A:387:TYR:HE2  | 1        | 3.32          |
| (1,1415) | 1:A:372:LEU:HD21 | 1:A:387:TYR:HE2  | 1        | 3.32          |
| (1,1415) | 1:A:372:LEU:HD22 | 1:A:387:TYR:HE2  | 1        | 3.32          |
| (1,1415) | 1:A:372:LEU:HD23 | 1:A:387:TYR:HE2  | 1        | 3.32          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD11 | 6        | 3.32          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD12 | 6        | 3.32          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD13 | 6        | 3.32          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD21 | 6        | 3.32          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD22 | 6        | 3.32          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD23 | 6        | 3.32          |
| (1,789)  | 1:A:355:ARG:H    | 1:A:365:ARG:HG3  | 6        | 3.31          |
| (1,29)   | 1:A:387:TYR:HD2  | 1:A:390:MET:HE1  | 5        | 3.31          |
| (1,29)   | 1:A:387:TYR:HD2  | 1:A:390:MET:HE2  | 5        | 3.31          |
| (1,29)   | 1:A:387:TYR:HD2  | 1:A:390:MET:HE3  | 5        | 3.31          |
| (1,1184) | 1:A:405:LYS:HA   | 1:A:413:PHE:HE2  | 4        | 3.3           |
| (1,1109) | 1:A:354:ILE:H    | 1:A:355:ARG:HE   | 4        | 3.3           |
| (1,1415) | 1:A:372:LEU:HD11 | 1:A:387:TYR:HE2  | 2        | 3.29          |
| (1,1415) | 1:A:372:LEU:HD12 | 1:A:387:TYR:HE2  | 2        | 3.29          |
| (1,1415) | 1:A:372:LEU:HD13 | 1:A:387:TYR:HE2  | 2        | 3.29          |
| (1,1415) | 1:A:372:LEU:HD21 | 1:A:387:TYR:HE2  | 2        | 3.29          |
| (1,1415) | 1:A:372:LEU:HD22 | 1:A:387:TYR:HE2  | 2        | 3.29          |
| (1,1415) | 1:A:372:LEU:HD23 | 1:A:387:TYR:HE2  | 2        | 3.29          |
| (1,1193) | 1:A:342:TYR:HE2  | 1:A:356:TRP:HH2  | 7        | 3.29          |
| (1,1055) | 1:A:373:ALA:H    | 1:A:387:TYR:HD2  | 9        | 3.29          |
| (1,748)  | 1:A:347:ASP:H    | 1:A:350:TYR:HE2  | 4        | 3.28          |
| (1,285)  | 1:A:398:TYR:HD2  | 1:A:403:ILE:HD11 | 3        | 3.28          |
| (1,285)  | 1:A:398:TYR:HD2  | 1:A:403:ILE:HD12 | 3        | 3.28          |
| (1,285)  | 1:A:398:TYR:HD2  | 1:A:403:ILE:HD13 | 3        | 3.28          |
| (1,716)  | 1:A:349:ARG:H    | 1:A:350:TYR:HD2  | 1        | 3.27          |
| (1,668)  | 1:A:366:ILE:H    | 1:A:413:PHE:HE1  | 5        | 3.27          |
| (1,1219) | 1:A:366:ILE:HD11 | 1:A:387:TYR:HE2  | 7        | 3.27          |
| (1,1219) | 1:A:366:ILE:HD12 | 1:A:387:TYR:HE2  | 7        | 3.27          |
| (1,1219) | 1:A:366:ILE:HD13 | 1:A:387:TYR:HE2  | 7        | 3.27          |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD11 | 4        | 3.26          |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD12 | 4        | 3.26          |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD13 | 4        | 3.26          |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD21 | 4        | 3.26          |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD22 | 4        | 3.26          |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD23 | 4        | 3.26          |
| (1,540)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD21 | 4        | 3.25          |
| (1,540)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD22 | 4        | 3.25          |
| (1,540)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD23 | 4        | 3.25          |
| (1,29)   | 1:A:387:TYR:HD2  | 1:A:390:MET:HE1  | 9        | 3.25          |
| (1,29)   | 1:A:387:TYR:HD2  | 1:A:390:MET:HE2  | 9        | 3.25          |
| (1,29)   | 1:A:387:TYR:HD2  | 1:A:390:MET:HE3  | 9        | 3.25          |
| (1,1201) | 1:A:394:LEU:HG   | 1:A:397:TYR:HE2  | 6        | 3.25          |
| (1,184)  | 1:A:365:ARG:HA   | 1:A:413:PHE:HE1  | 5        | 3.24          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1219) | 1:A:366:ILE:HD11 | 1:A:387:TYR:HE2  | 2        | 3.24          |
| (1,1219) | 1:A:366:ILE:HD12 | 1:A:387:TYR:HE2  | 2        | 3.24          |
| (1,1219) | 1:A:366:ILE:HD13 | 1:A:387:TYR:HE2  | 2        | 3.24          |
| (1,717)  | 1:A:349:ARG:H    | 1:A:350:TYR:HE2  | 2        | 3.23          |
| (1,683)  | 1:A:405:LYS:H    | 1:A:413:PHE:HD2  | 6        | 3.22          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD11 | 8        | 3.22          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD12 | 8        | 3.22          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD13 | 8        | 3.22          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD21 | 8        | 3.22          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD22 | 8        | 3.22          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD23 | 8        | 3.22          |
| (1,1212) | 1:A:342:TYR:HE2  | 1:A:356:TRP:HZ2  | 9        | 3.22          |
| (1,789)  | 1:A:355:ARG:H    | 1:A:365:ARG:HG3  | 3        | 3.21          |
| (1,789)  | 1:A:355:ARG:H    | 1:A:365:ARG:HG3  | 8        | 3.2           |
| (1,1184) | 1:A:405:LYS:HA   | 1:A:413:PHE:HE2  | 6        | 3.2           |
| (1,1151) | 1:A:340:TYR:HD2  | 1:A:379:HIS:HE1  | 10       | 3.2           |
| (1,21)   | 1:A:354:ILE:HG21 | 1:A:355:ARG:HE   | 9        | 3.19          |
| (1,21)   | 1:A:354:ILE:HG22 | 1:A:355:ARG:HE   | 9        | 3.19          |
| (1,21)   | 1:A:354:ILE:HG23 | 1:A:355:ARG:HE   | 9        | 3.19          |
| (1,1151) | 1:A:340:TYR:HD2  | 1:A:379:HIS:HE1  | 1        | 3.19          |
| (1,1109) | 1:A:354:ILE:H    | 1:A:355:ARG:HE   | 1        | 3.19          |
| (1,546)  | 1:A:336:LEU:HD11 | 1:A:338:TRP:HH2  | 8        | 3.18          |
| (1,546)  | 1:A:336:LEU:HD12 | 1:A:338:TRP:HH2  | 8        | 3.18          |
| (1,546)  | 1:A:336:LEU:HD13 | 1:A:338:TRP:HH2  | 8        | 3.18          |
| (1,21)   | 1:A:354:ILE:HG21 | 1:A:355:ARG:HE   | 3        | 3.18          |
| (1,21)   | 1:A:354:ILE:HG22 | 1:A:355:ARG:HE   | 3        | 3.18          |
| (1,21)   | 1:A:354:ILE:HG23 | 1:A:355:ARG:HE   | 3        | 3.18          |
| (1,1351) | 1:A:349:ARG:HD2  | 1:A:350:TYR:HE2  | 10       | 3.18          |
| (1,1351) | 1:A:349:ARG:HD3  | 1:A:350:TYR:HE2  | 10       | 3.18          |
| (1,1151) | 1:A:340:TYR:HD2  | 1:A:379:HIS:HE1  | 8        | 3.18          |
| (1,1109) | 1:A:354:ILE:H    | 1:A:355:ARG:HE   | 5        | 3.18          |
| (1,717)  | 1:A:349:ARG:H    | 1:A:350:TYR:HE2  | 1        | 3.17          |
| (1,1351) | 1:A:349:ARG:HD2  | 1:A:350:TYR:HE2  | 1        | 3.16          |
| (1,1351) | 1:A:349:ARG:HD3  | 1:A:350:TYR:HE2  | 1        | 3.16          |
| (1,30)   | 1:A:387:TYR:HE2  | 1:A:390:MET:HE1  | 9        | 3.15          |
| (1,30)   | 1:A:387:TYR:HE2  | 1:A:390:MET:HE2  | 9        | 3.15          |
| (1,30)   | 1:A:387:TYR:HE2  | 1:A:390:MET:HE3  | 9        | 3.15          |
| (1,31)   | 1:A:340:TYR:HE1  | 1:A:390:MET:HE1  | 3        | 3.13          |
| (1,31)   | 1:A:340:TYR:HE1  | 1:A:390:MET:HE2  | 3        | 3.13          |
| (1,31)   | 1:A:340:TYR:HE1  | 1:A:390:MET:HE3  | 3        | 3.13          |
| (1,1193) | 1:A:342:TYR:HE2  | 1:A:356:TRP:HH2  | 10       | 3.13          |
| (1,716)  | 1:A:349:ARG:H    | 1:A:350:TYR:HD2  | 10       | 3.12          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,21)   | 1:A:354:ILE:HG21 | 1:A:355:ARG:HE   | 8        | 3.12          |
| (1,21)   | 1:A:354:ILE:HG22 | 1:A:355:ARG:HE   | 8        | 3.12          |
| (1,21)   | 1:A:354:ILE:HG23 | 1:A:355:ARG:HE   | 8        | 3.12          |
| (1,1109) | 1:A:354:ILE:H    | 1:A:355:ARG:HE   | 7        | 3.12          |
| (1,540)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD21 | 1        | 3.11          |
| (1,540)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD22 | 1        | 3.11          |
| (1,540)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD23 | 1        | 3.11          |
| (1,30)   | 1:A:387:TYR:HE2  | 1:A:390:MET:HE1  | 2        | 3.11          |
| (1,30)   | 1:A:387:TYR:HE2  | 1:A:390:MET:HE2  | 2        | 3.11          |
| (1,30)   | 1:A:387:TYR:HE2  | 1:A:390:MET:HE3  | 2        | 3.11          |
| (1,716)  | 1:A:349:ARG:H    | 1:A:350:TYR:HD2  | 9        | 3.1           |
| (1,21)   | 1:A:354:ILE:HG21 | 1:A:355:ARG:HE   | 2        | 3.1           |
| (1,21)   | 1:A:354:ILE:HG22 | 1:A:355:ARG:HE   | 2        | 3.1           |
| (1,21)   | 1:A:354:ILE:HG23 | 1:A:355:ARG:HE   | 2        | 3.1           |
| (1,1152) | 1:A:340:TYR:HE2  | 1:A:379:HIS:HE1  | 6        | 3.1           |
| (1,1055) | 1:A:373:ALA:H    | 1:A:387:TYR:HD2  | 3        | 3.1           |
| (1,789)  | 1:A:355:ARG:H    | 1:A:365:ARG:HG3  | 9        | 3.09          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD11 | 1        | 3.09          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD12 | 1        | 3.09          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD13 | 1        | 3.09          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD21 | 1        | 3.09          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD22 | 1        | 3.09          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD23 | 1        | 3.09          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD21 | 4        | 3.09          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD22 | 4        | 3.09          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD23 | 4        | 3.09          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD11 | 4        | 3.09          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD12 | 4        | 3.09          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD13 | 4        | 3.09          |
| (1,1156) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD11 | 2        | 3.08          |
| (1,1156) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD12 | 2        | 3.08          |
| (1,1156) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD13 | 2        | 3.08          |
| (1,1156) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD11 | 10       | 3.08          |
| (1,1156) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD12 | 10       | 3.08          |
| (1,1156) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD13 | 10       | 3.08          |
| (1,1208) | 1:A:398:TYR:HE2  | 1:A:403:ILE:HB   | 3        | 3.07          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD11 | 7        | 3.06          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD12 | 7        | 3.06          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD13 | 7        | 3.06          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD21 | 7        | 3.06          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD22 | 7        | 3.06          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD23 | 7        | 3.06          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1109) | 1:A:354:ILE:H    | 1:A:355:ARG:HE   | 3        | 3.06          |
| (1,716)  | 1:A:349:ARG:H    | 1:A:350:TYR:HD2  | 6        | 3.04          |
| (1,683)  | 1:A:405:LYS:H    | 1:A:413:PHE:HD2  | 1        | 3.04          |
| (1,1212) | 1:A:342:TYR:HE2  | 1:A:356:TRP:HZ2  | 5        | 3.04          |
| (1,21)   | 1:A:354:ILE:HG21 | 1:A:355:ARG:HE   | 7        | 3.03          |
| (1,21)   | 1:A:354:ILE:HG22 | 1:A:355:ARG:HE   | 7        | 3.03          |
| (1,21)   | 1:A:354:ILE:HG23 | 1:A:355:ARG:HE   | 7        | 3.03          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD11 | 2        | 3.03          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD12 | 2        | 3.03          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD13 | 2        | 3.03          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD21 | 2        | 3.03          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD22 | 2        | 3.03          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD23 | 2        | 3.03          |
| (1,1174) | 1:A:394:LEU:HG   | 1:A:397:TYR:HD2  | 2        | 3.02          |
| (1,748)  | 1:A:347:ASP:H    | 1:A:350:TYR:HE2  | 3        | 3.01          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD21 | 9        | 3.01          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD22 | 9        | 3.01          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD23 | 9        | 3.01          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD11 | 9        | 3.01          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD12 | 9        | 3.01          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD13 | 9        | 3.01          |
| (1,1207) | 1:A:347:ASP:HB2  | 1:A:350:TYR:HE2  | 8        | 3.01          |
| (1,1207) | 1:A:347:ASP:HB3  | 1:A:350:TYR:HE2  | 8        | 3.01          |
| (1,30)   | 1:A:387:TYR:HE2  | 1:A:390:MET:HE1  | 5        | 3.0           |
| (1,30)   | 1:A:387:TYR:HE2  | 1:A:390:MET:HE2  | 5        | 3.0           |
| (1,30)   | 1:A:387:TYR:HE2  | 1:A:390:MET:HE3  | 5        | 3.0           |
| (1,1223) | 1:A:372:LEU:HB3  | 1:A:387:TYR:HE2  | 3        | 3.0           |
| (1,1167) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HB   | 3        | 2.99          |
| (1,1152) | 1:A:340:TYR:HE2  | 1:A:379:HIS:HE1  | 4        | 2.99          |
| (1,1415) | 1:A:372:LEU:HD11 | 1:A:387:TYR:HE2  | 7        | 2.98          |
| (1,1415) | 1:A:372:LEU:HD12 | 1:A:387:TYR:HE2  | 7        | 2.98          |
| (1,1415) | 1:A:372:LEU:HD13 | 1:A:387:TYR:HE2  | 7        | 2.98          |
| (1,1415) | 1:A:372:LEU:HD21 | 1:A:387:TYR:HE2  | 7        | 2.98          |
| (1,1415) | 1:A:372:LEU:HD22 | 1:A:387:TYR:HE2  | 7        | 2.98          |
| (1,1415) | 1:A:372:LEU:HD23 | 1:A:387:TYR:HE2  | 7        | 2.98          |
| (1,500)  | 1:A:336:LEU:HD21 | 1:A:338:TRP:HH2  | 10       | 2.97          |
| (1,500)  | 1:A:336:LEU:HD22 | 1:A:338:TRP:HH2  | 10       | 2.97          |
| (1,500)  | 1:A:336:LEU:HD23 | 1:A:338:TRP:HH2  | 10       | 2.97          |
| (1,683)  | 1:A:405:LYS:H    | 1:A:413:PHE:HD2  | 9        | 2.96          |
| (1,1352) | 1:A:349:ARG:HD2  | 1:A:350:TYR:HD2  | 10       | 2.96          |
| (1,1352) | 1:A:349:ARG:HD3  | 1:A:350:TYR:HD2  | 10       | 2.96          |
| (1,1220) | 1:A:369:PRO:HA   | 1:A:387:TYR:HE2  | 7        | 2.96          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1184) | 1:A:405:LYS:HA   | 1:A:413:PHE:HE2  | 2        | 2.96          |
| (1,75)   | 1:A:387:TYR:HD1  | 1:A:388:GLU:HG2  | 2        | 2.94          |
| (1,75)   | 1:A:387:TYR:HD1  | 1:A:388:GLU:HG3  | 2        | 2.94          |
| (1,285)  | 1:A:398:TYR:HD2  | 1:A:403:ILE:HD11 | 6        | 2.94          |
| (1,285)  | 1:A:398:TYR:HD2  | 1:A:403:ILE:HD12 | 6        | 2.94          |
| (1,285)  | 1:A:398:TYR:HD2  | 1:A:403:ILE:HD13 | 6        | 2.94          |
| (1,28)   | 1:A:340:TYR:HD1  | 1:A:390:MET:HE1  | 3        | 2.94          |
| (1,28)   | 1:A:340:TYR:HD1  | 1:A:390:MET:HE2  | 3        | 2.94          |
| (1,28)   | 1:A:340:TYR:HD1  | 1:A:390:MET:HE3  | 3        | 2.94          |
| (1,1184) | 1:A:405:LYS:HA   | 1:A:413:PHE:HE2  | 9        | 2.94          |
| (1,1155) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HG   | 5        | 2.94          |
| (1,683)  | 1:A:405:LYS:H    | 1:A:413:PHE:HD2  | 2        | 2.93          |
| (1,1055) | 1:A:373:ALA:H    | 1:A:387:TYR:HD2  | 10       | 2.93          |
| (1,1352) | 1:A:349:ARG:HD2  | 1:A:350:TYR:HD2  | 1        | 2.92          |
| (1,1352) | 1:A:349:ARG:HD3  | 1:A:350:TYR:HD2  | 1        | 2.92          |
| (1,717)  | 1:A:349:ARG:H    | 1:A:350:TYR:HE2  | 9        | 2.9           |
| (1,717)  | 1:A:349:ARG:H    | 1:A:350:TYR:HE2  | 10       | 2.9           |
| (1,21)   | 1:A:354:ILE:HG21 | 1:A:355:ARG:HE   | 1        | 2.9           |
| (1,21)   | 1:A:354:ILE:HG22 | 1:A:355:ARG:HE   | 1        | 2.9           |
| (1,21)   | 1:A:354:ILE:HG23 | 1:A:355:ARG:HE   | 1        | 2.9           |
| (1,1352) | 1:A:349:ARG:HD2  | 1:A:350:TYR:HD2  | 8        | 2.9           |
| (1,1352) | 1:A:349:ARG:HD3  | 1:A:350:TYR:HD2  | 8        | 2.9           |
| (1,1109) | 1:A:354:ILE:H    | 1:A:355:ARG:HE   | 2        | 2.9           |
| (1,703)  | 1:A:404:ARG:H    | 1:A:413:PHE:HD2  | 5        | 2.85          |
| (1,285)  | 1:A:398:TYR:HD2  | 1:A:403:ILE:HD11 | 1        | 2.85          |
| (1,285)  | 1:A:398:TYR:HD2  | 1:A:403:ILE:HD12 | 1        | 2.85          |
| (1,285)  | 1:A:398:TYR:HD2  | 1:A:403:ILE:HD13 | 1        | 2.85          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD21 | 6        | 2.85          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD22 | 6        | 2.85          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD23 | 6        | 2.85          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD11 | 6        | 2.85          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD12 | 6        | 2.85          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD13 | 6        | 2.85          |
| (1,178)  | 1:A:412:LEU:HA   | 1:A:413:PHE:HE1  | 2        | 2.84          |
| (1,789)  | 1:A:355:ARG:H    | 1:A:365:ARG:HG3  | 10       | 2.83          |
| (1,1220) | 1:A:369:PRO:HA   | 1:A:387:TYR:HE2  | 2        | 2.83          |
| (1,1159) | 1:A:369:PRO:HA   | 1:A:387:TYR:HD2  | 2        | 2.83          |
| (1,1055) | 1:A:373:ALA:H    | 1:A:387:TYR:HD2  | 8        | 2.83          |
| (1,591)  | 1:A:342:TYR:HE2  | 1:A:356:TRP:HE1  | 10       | 2.81          |
| (1,549)  | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD21 | 8        | 2.81          |
| (1,549)  | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD22 | 8        | 2.81          |
| (1,549)  | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD23 | 8        | 2.81          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,29)   | 1:A:387:TYR:HD2  | 1:A:390:MET:HE1  | 10       | 2.81          |
| (1,29)   | 1:A:387:TYR:HD2  | 1:A:390:MET:HE2  | 10       | 2.81          |
| (1,29)   | 1:A:387:TYR:HD2  | 1:A:390:MET:HE3  | 10       | 2.81          |
| (1,1351) | 1:A:349:ARG:HD2  | 1:A:350:TYR:HE2  | 2        | 2.81          |
| (1,1351) | 1:A:349:ARG:HD3  | 1:A:350:TYR:HE2  | 2        | 2.81          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD11 | 1        | 2.81          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD12 | 1        | 2.81          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD13 | 1        | 2.81          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD21 | 1        | 2.81          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD22 | 1        | 2.81          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD23 | 1        | 2.81          |
| (1,1219) | 1:A:366:ILE:HD11 | 1:A:387:TYR:HE2  | 3        | 2.81          |
| (1,1219) | 1:A:366:ILE:HD12 | 1:A:387:TYR:HE2  | 3        | 2.81          |
| (1,1219) | 1:A:366:ILE:HD13 | 1:A:387:TYR:HE2  | 3        | 2.81          |
| (1,1087) | 1:A:340:TYR:HD1  | 1:A:376:TRP:H    | 1        | 2.81          |
| (1,285)  | 1:A:398:TYR:HD2  | 1:A:403:ILE:HD11 | 8        | 2.8           |
| (1,285)  | 1:A:398:TYR:HD2  | 1:A:403:ILE:HD12 | 8        | 2.8           |
| (1,285)  | 1:A:398:TYR:HD2  | 1:A:403:ILE:HD13 | 8        | 2.8           |
| (1,285)  | 1:A:398:TYR:HD2  | 1:A:403:ILE:HD11 | 10       | 2.8           |
| (1,285)  | 1:A:398:TYR:HD2  | 1:A:403:ILE:HD12 | 10       | 2.8           |
| (1,285)  | 1:A:398:TYR:HD2  | 1:A:403:ILE:HD13 | 10       | 2.8           |
| (1,178)  | 1:A:412:LEU:HA   | 1:A:413:PHE:HE1  | 1        | 2.8           |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD11 | 10       | 2.8           |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD12 | 10       | 2.8           |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD13 | 10       | 2.8           |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD21 | 10       | 2.8           |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD22 | 10       | 2.8           |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD23 | 10       | 2.8           |
| (1,75)   | 1:A:387:TYR:HD1  | 1:A:388:GLU:HG2  | 3        | 2.79          |
| (1,75)   | 1:A:387:TYR:HD1  | 1:A:388:GLU:HG3  | 3        | 2.79          |
| (1,140)  | 1:A:347:ASP:HB3  | 1:A:350:TYR:HD2  | 1        | 2.78          |
| (1,1254) | 1:A:337:LEU:HD11 | 1:A:340:TYR:HD1  | 6        | 2.78          |
| (1,1254) | 1:A:337:LEU:HD12 | 1:A:340:TYR:HD1  | 6        | 2.78          |
| (1,1254) | 1:A:337:LEU:HD13 | 1:A:340:TYR:HD1  | 6        | 2.78          |
| (1,1254) | 1:A:337:LEU:HD21 | 1:A:340:TYR:HD1  | 6        | 2.78          |
| (1,1254) | 1:A:337:LEU:HD22 | 1:A:340:TYR:HD1  | 6        | 2.78          |
| (1,1254) | 1:A:337:LEU:HD23 | 1:A:340:TYR:HD1  | 6        | 2.78          |
| (1,716)  | 1:A:349:ARG:H    | 1:A:350:TYR:HD2  | 4        | 2.77          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD11 | 4        | 2.77          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD12 | 4        | 2.77          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD13 | 4        | 2.77          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD21 | 4        | 2.77          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD22 | 4        | 2.77          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD23 | 4        | 2.77          |
| (1,1156) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD11 | 1        | 2.77          |
| (1,1156) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD12 | 1        | 2.77          |
| (1,1156) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD13 | 1        | 2.77          |
| (1,717)  | 1:A:349:ARG:H    | 1:A:350:TYR:HE2  | 6        | 2.76          |
| (1,716)  | 1:A:349:ARG:H    | 1:A:350:TYR:HD2  | 8        | 2.76          |
| (1,474)  | 1:A:354:ILE:HG12 | 1:A:355:ARG:HE   | 8        | 2.76          |
| (1,578)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG11 | 2        | 2.75          |
| (1,578)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG12 | 2        | 2.75          |
| (1,578)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG13 | 2        | 2.75          |
| (1,1184) | 1:A:405:LYS:HA   | 1:A:413:PHE:HE2  | 1        | 2.75          |
| (1,1152) | 1:A:340:TYR:HE2  | 1:A:379:HIS:HE1  | 7        | 2.75          |
| (1,716)  | 1:A:349:ARG:H    | 1:A:350:TYR:HD2  | 7        | 2.74          |
| (1,591)  | 1:A:342:TYR:HE2  | 1:A:356:TRP:HE1  | 7        | 2.74          |
| (1,703)  | 1:A:404:ARG:H    | 1:A:413:PHE:HD2  | 9        | 2.73          |
| (1,1415) | 1:A:372:LEU:HD11 | 1:A:387:TYR:HE2  | 9        | 2.73          |
| (1,1415) | 1:A:372:LEU:HD12 | 1:A:387:TYR:HE2  | 9        | 2.73          |
| (1,1415) | 1:A:372:LEU:HD13 | 1:A:387:TYR:HE2  | 9        | 2.73          |
| (1,1415) | 1:A:372:LEU:HD21 | 1:A:387:TYR:HE2  | 9        | 2.73          |
| (1,1415) | 1:A:372:LEU:HD22 | 1:A:387:TYR:HE2  | 9        | 2.73          |
| (1,1415) | 1:A:372:LEU:HD23 | 1:A:387:TYR:HE2  | 9        | 2.73          |
| (1,1152) | 1:A:340:TYR:HE2  | 1:A:379:HIS:HE1  | 1        | 2.73          |
| (1,397)  | 1:A:366:ILE:HG21 | 1:A:387:TYR:HE2  | 6        | 2.72          |
| (1,397)  | 1:A:366:ILE:HG22 | 1:A:387:TYR:HE2  | 6        | 2.72          |
| (1,397)  | 1:A:366:ILE:HG23 | 1:A:387:TYR:HE2  | 6        | 2.72          |
| (1,1219) | 1:A:366:ILE:HD11 | 1:A:387:TYR:HE2  | 10       | 2.72          |
| (1,1219) | 1:A:366:ILE:HD12 | 1:A:387:TYR:HE2  | 10       | 2.72          |
| (1,1219) | 1:A:366:ILE:HD13 | 1:A:387:TYR:HE2  | 10       | 2.72          |
| (1,178)  | 1:A:412:LEU:HA   | 1:A:413:PHE:HE1  | 10       | 2.71          |
| (1,1330) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HE   | 6        | 2.71          |
| (1,1330) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HE   | 6        | 2.71          |
| (1,1330) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HE   | 6        | 2.71          |
| (1,1330) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HE   | 6        | 2.71          |
| (1,1330) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HE   | 6        | 2.71          |
| (1,1330) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HE   | 6        | 2.71          |
| (1,1223) | 1:A:372:LEU:HB3  | 1:A:387:TYR:HE2  | 10       | 2.71          |
| (1,1151) | 1:A:340:TYR:HD2  | 1:A:379:HIS:HE1  | 9        | 2.71          |
| (1,578)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG11 | 1        | 2.7           |
| (1,578)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG12 | 1        | 2.7           |
| (1,578)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG13 | 1        | 2.7           |
| (1,231)  | 1:A:340:TYR:HE1  | 1:A:376:TRP:HA   | 9        | 2.7           |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD11 | 8        | 2.7           |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD12 | 8        | 2.7           |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD13 | 8        | 2.7           |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD21 | 8        | 2.7           |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD22 | 8        | 2.7           |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD23 | 8        | 2.7           |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD11 | 10       | 2.7           |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD12 | 10       | 2.7           |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD13 | 10       | 2.7           |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD21 | 10       | 2.7           |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD22 | 10       | 2.7           |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD23 | 10       | 2.7           |
| (1,1306) | 1:A:344:LEU:HD11 | 1:A:350:TYR:HE1  | 3        | 2.68          |
| (1,1306) | 1:A:344:LEU:HD12 | 1:A:350:TYR:HE1  | 3        | 2.68          |
| (1,1306) | 1:A:344:LEU:HD13 | 1:A:350:TYR:HE1  | 3        | 2.68          |
| (1,1306) | 1:A:344:LEU:HD21 | 1:A:350:TYR:HE1  | 3        | 2.68          |
| (1,1306) | 1:A:344:LEU:HD22 | 1:A:350:TYR:HE1  | 3        | 2.68          |
| (1,1306) | 1:A:344:LEU:HD23 | 1:A:350:TYR:HE1  | 3        | 2.68          |
| (1,1207) | 1:A:347:ASP:HB2  | 1:A:350:TYR:HE2  | 2        | 2.68          |
| (1,1207) | 1:A:347:ASP:HB3  | 1:A:350:TYR:HE2  | 2        | 2.68          |
| (1,1207) | 1:A:347:ASP:HB2  | 1:A:350:TYR:HE2  | 10       | 2.68          |
| (1,1207) | 1:A:347:ASP:HB3  | 1:A:350:TYR:HE2  | 10       | 2.68          |
| (1,638)  | 1:A:406:GLU:H    | 1:A:413:PHE:HD2  | 4        | 2.67          |
| (1,578)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG11 | 6        | 2.67          |
| (1,578)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG12 | 6        | 2.67          |
| (1,578)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG13 | 6        | 2.67          |
| (1,31)   | 1:A:340:TYR:HE1  | 1:A:390:MET:HE1  | 10       | 2.67          |
| (1,31)   | 1:A:340:TYR:HE1  | 1:A:390:MET:HE2  | 10       | 2.67          |
| (1,31)   | 1:A:340:TYR:HE1  | 1:A:390:MET:HE3  | 10       | 2.67          |
| (1,285)  | 1:A:398:TYR:HD2  | 1:A:403:ILE:HD11 | 5        | 2.67          |
| (1,285)  | 1:A:398:TYR:HD2  | 1:A:403:ILE:HD12 | 5        | 2.67          |
| (1,285)  | 1:A:398:TYR:HD2  | 1:A:403:ILE:HD13 | 5        | 2.67          |
| (1,21)   | 1:A:354:ILE:HG21 | 1:A:355:ARG:HE   | 4        | 2.67          |
| (1,21)   | 1:A:354:ILE:HG22 | 1:A:355:ARG:HE   | 4        | 2.67          |
| (1,21)   | 1:A:354:ILE:HG23 | 1:A:355:ARG:HE   | 4        | 2.67          |
| (1,1415) | 1:A:372:LEU:HD11 | 1:A:387:TYR:HE2  | 4        | 2.67          |
| (1,1415) | 1:A:372:LEU:HD12 | 1:A:387:TYR:HE2  | 4        | 2.67          |
| (1,1415) | 1:A:372:LEU:HD13 | 1:A:387:TYR:HE2  | 4        | 2.67          |
| (1,1415) | 1:A:372:LEU:HD21 | 1:A:387:TYR:HE2  | 4        | 2.67          |
| (1,1415) | 1:A:372:LEU:HD22 | 1:A:387:TYR:HE2  | 4        | 2.67          |
| (1,1415) | 1:A:372:LEU:HD23 | 1:A:387:TYR:HE2  | 4        | 2.67          |
| (1,578)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG11 | 5        | 2.66          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,578)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG12 | 5        | 2.66          |
| (1,578)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG13 | 5        | 2.66          |
| (1,178)  | 1:A:412:LEU:HA   | 1:A:413:PHE:HE1  | 5        | 2.66          |
| (1,1352) | 1:A:349:ARG:HD2  | 1:A:350:TYR:HD2  | 6        | 2.66          |
| (1,1352) | 1:A:349:ARG:HD3  | 1:A:350:TYR:HD2  | 6        | 2.66          |
| (1,1352) | 1:A:349:ARG:HD2  | 1:A:350:TYR:HD2  | 7        | 2.66          |
| (1,1352) | 1:A:349:ARG:HD3  | 1:A:350:TYR:HD2  | 7        | 2.66          |
| (1,1220) | 1:A:369:PRO:HA   | 1:A:387:TYR:HE2  | 1        | 2.66          |
| (1,1219) | 1:A:366:ILE:HD11 | 1:A:387:TYR:HE2  | 8        | 2.66          |
| (1,1219) | 1:A:366:ILE:HD12 | 1:A:387:TYR:HE2  | 8        | 2.66          |
| (1,1219) | 1:A:366:ILE:HD13 | 1:A:387:TYR:HE2  | 8        | 2.66          |
| (1,638)  | 1:A:406:GLU:H    | 1:A:413:PHE:HD2  | 10       | 2.65          |
| (1,578)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG11 | 8        | 2.65          |
| (1,578)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG12 | 8        | 2.65          |
| (1,578)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG13 | 8        | 2.65          |
| (1,1156) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD11 | 8        | 2.65          |
| (1,1156) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD12 | 8        | 2.65          |
| (1,1156) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD13 | 8        | 2.65          |
| (1,748)  | 1:A:347:ASP:H    | 1:A:350:TYR:HE2  | 7        | 2.64          |
| (1,578)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG11 | 10       | 2.64          |
| (1,578)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG12 | 10       | 2.64          |
| (1,578)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG13 | 10       | 2.64          |
| (1,396)  | 1:A:366:ILE:HG21 | 1:A:387:TYR:HD2  | 6        | 2.64          |
| (1,396)  | 1:A:366:ILE:HG22 | 1:A:387:TYR:HD2  | 6        | 2.64          |
| (1,396)  | 1:A:366:ILE:HG23 | 1:A:387:TYR:HD2  | 6        | 2.64          |
| (1,285)  | 1:A:398:TYR:HD2  | 1:A:403:ILE:HD11 | 7        | 2.64          |
| (1,285)  | 1:A:398:TYR:HD2  | 1:A:403:ILE:HD12 | 7        | 2.64          |
| (1,285)  | 1:A:398:TYR:HD2  | 1:A:403:ILE:HD13 | 7        | 2.64          |
| (1,31)   | 1:A:340:TYR:HE1  | 1:A:390:MET:HE1  | 4        | 2.63          |
| (1,31)   | 1:A:340:TYR:HE1  | 1:A:390:MET:HE2  | 4        | 2.63          |
| (1,31)   | 1:A:340:TYR:HE1  | 1:A:390:MET:HE3  | 4        | 2.63          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD11 | 6        | 2.63          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD12 | 6        | 2.63          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD13 | 6        | 2.63          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD21 | 6        | 2.63          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD22 | 6        | 2.63          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD23 | 6        | 2.63          |
| (1,703)  | 1:A:404:ARG:H    | 1:A:413:PHE:HD2  | 2        | 2.62          |
| (1,31)   | 1:A:340:TYR:HE1  | 1:A:390:MET:HE1  | 2        | 2.61          |
| (1,31)   | 1:A:340:TYR:HE1  | 1:A:390:MET:HE2  | 2        | 2.61          |
| (1,31)   | 1:A:340:TYR:HE1  | 1:A:390:MET:HE3  | 2        | 2.61          |
| (1,30)   | 1:A:387:TYR:HE2  | 1:A:390:MET:HE1  | 10       | 2.61          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,30)   | 1:A:387:TYR:HE2  | 1:A:390:MET:HE2  | 10       | 2.61          |
| (1,30)   | 1:A:387:TYR:HE2  | 1:A:390:MET:HE3  | 10       | 2.61          |
| (1,500)  | 1:A:336:LEU:HD21 | 1:A:338:TRP:HH2  | 9        | 2.6           |
| (1,500)  | 1:A:336:LEU:HD22 | 1:A:338:TRP:HH2  | 9        | 2.6           |
| (1,500)  | 1:A:336:LEU:HD23 | 1:A:338:TRP:HH2  | 9        | 2.6           |
| (1,28)   | 1:A:340:TYR:HD1  | 1:A:390:MET:HE1  | 10       | 2.6           |
| (1,28)   | 1:A:340:TYR:HD1  | 1:A:390:MET:HE2  | 10       | 2.6           |
| (1,28)   | 1:A:340:TYR:HD1  | 1:A:390:MET:HE3  | 10       | 2.6           |
| (1,178)  | 1:A:412:LEU:HA   | 1:A:413:PHE:HE1  | 6        | 2.6           |
| (1,21)   | 1:A:354:ILE:HG21 | 1:A:355:ARG:HE   | 5        | 2.59          |
| (1,21)   | 1:A:354:ILE:HG22 | 1:A:355:ARG:HE   | 5        | 2.59          |
| (1,21)   | 1:A:354:ILE:HG23 | 1:A:355:ARG:HE   | 5        | 2.59          |
| (1,703)  | 1:A:404:ARG:H    | 1:A:413:PHE:HD2  | 1        | 2.58          |
| (1,683)  | 1:A:405:LYS:H    | 1:A:413:PHE:HD2  | 5        | 2.58          |
| (1,665)  | 1:A:366:ILE:H    | 1:A:413:PHE:HD1  | 6        | 2.58          |
| (1,578)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG11 | 3        | 2.58          |
| (1,578)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG12 | 3        | 2.58          |
| (1,578)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG13 | 3        | 2.58          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD11 | 1        | 2.58          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD12 | 1        | 2.58          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD13 | 1        | 2.58          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD21 | 1        | 2.58          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD22 | 1        | 2.58          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD23 | 1        | 2.58          |
| (1,1208) | 1:A:398:TYR:HE2  | 1:A:403:ILE:HB   | 6        | 2.58          |
| (1,1200) | 1:A:393:ALA:HB1  | 1:A:397:TYR:HE2  | 2        | 2.58          |
| (1,1200) | 1:A:393:ALA:HB2  | 1:A:397:TYR:HE2  | 2        | 2.58          |
| (1,1200) | 1:A:393:ALA:HB3  | 1:A:397:TYR:HE2  | 2        | 2.58          |
| (1,88)   | 1:A:370:ASN:HA   | 1:A:387:TYR:HB3  | 6        | 2.57          |
| (1,1352) | 1:A:349:ARG:HD2  | 1:A:350:TYR:HD2  | 2        | 2.57          |
| (1,1352) | 1:A:349:ARG:HD3  | 1:A:350:TYR:HD2  | 2        | 2.57          |
| (1,1215) | 1:A:340:TYR:HE1  | 1:A:376:TRP:HB3  | 4        | 2.57          |
| (1,1167) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HB   | 6        | 2.57          |
| (1,578)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG11 | 4        | 2.56          |
| (1,578)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG12 | 4        | 2.56          |
| (1,578)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG13 | 4        | 2.56          |
| (1,500)  | 1:A:336:LEU:HD21 | 1:A:338:TRP:HH2  | 7        | 2.56          |
| (1,500)  | 1:A:336:LEU:HD22 | 1:A:338:TRP:HH2  | 7        | 2.56          |
| (1,500)  | 1:A:336:LEU:HD23 | 1:A:338:TRP:HH2  | 7        | 2.56          |
| (1,474)  | 1:A:354:ILE:HG12 | 1:A:355:ARG:HE   | 3        | 2.56          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD21 | 2        | 2.56          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD22 | 2        | 2.56          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD23 | 2        | 2.56          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD11 | 2        | 2.56          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD12 | 2        | 2.56          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD13 | 2        | 2.56          |
| (1,578)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG11 | 7        | 2.55          |
| (1,578)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG12 | 7        | 2.55          |
| (1,578)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG13 | 7        | 2.55          |
| (1,1212) | 1:A:342:TYR:HE2  | 1:A:356:TRP:HZ2  | 6        | 2.55          |
| (1,75)   | 1:A:387:TYR:HD1  | 1:A:388:GLU:HG2  | 7        | 2.54          |
| (1,75)   | 1:A:387:TYR:HD1  | 1:A:388:GLU:HG3  | 7        | 2.54          |
| (1,542)  | 1:A:369:PRO:HA   | 1:A:411:LEU:HD21 | 6        | 2.54          |
| (1,542)  | 1:A:369:PRO:HA   | 1:A:411:LEU:HD22 | 6        | 2.54          |
| (1,542)  | 1:A:369:PRO:HA   | 1:A:411:LEU:HD23 | 6        | 2.54          |
| (1,505)  | 1:A:412:LEU:HD11 | 1:A:413:PHE:HE1  | 1        | 2.53          |
| (1,505)  | 1:A:412:LEU:HD12 | 1:A:413:PHE:HE1  | 1        | 2.53          |
| (1,505)  | 1:A:412:LEU:HD13 | 1:A:413:PHE:HE1  | 1        | 2.53          |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD11 | 2        | 2.53          |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD12 | 2        | 2.53          |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD13 | 2        | 2.53          |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD21 | 2        | 2.53          |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD22 | 2        | 2.53          |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD23 | 2        | 2.53          |
| (1,1208) | 1:A:398:TYR:HE2  | 1:A:403:ILE:HB   | 1        | 2.53          |
| (1,1170) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HA   | 2        | 2.53          |
| (1,75)   | 1:A:387:TYR:HD1  | 1:A:388:GLU:HG2  | 4        | 2.52          |
| (1,75)   | 1:A:387:TYR:HD1  | 1:A:388:GLU:HG3  | 4        | 2.52          |
| (1,716)  | 1:A:349:ARG:H    | 1:A:350:TYR:HD2  | 3        | 2.52          |
| (1,231)  | 1:A:340:TYR:HE1  | 1:A:376:TRP:HA   | 8        | 2.52          |
| (1,1215) | 1:A:340:TYR:HE1  | 1:A:376:TRP:HB3  | 7        | 2.52          |
| (1,1212) | 1:A:342:TYR:HE2  | 1:A:356:TRP:HZ2  | 7        | 2.52          |
| (1,1089) | 1:A:340:TYR:HE1  | 1:A:376:TRP:H    | 4        | 2.52          |
| (1,665)  | 1:A:366:ILE:H    | 1:A:413:PHE:HD1  | 2        | 2.51          |
| (1,717)  | 1:A:349:ARG:H    | 1:A:350:TYR:HE2  | 8        | 2.5           |
| (1,1223) | 1:A:372:LEU:HB3  | 1:A:387:TYR:HE2  | 8        | 2.5           |
| (1,717)  | 1:A:349:ARG:H    | 1:A:350:TYR:HE2  | 4        | 2.49          |
| (1,474)  | 1:A:354:ILE:HG12 | 1:A:355:ARG:HE   | 2        | 2.49          |
| (1,1215) | 1:A:340:TYR:HE1  | 1:A:376:TRP:HB3  | 2        | 2.49          |
| (1,372)  | 1:A:373:ALA:HB1  | 1:A:387:TYR:HD2  | 6        | 2.48          |
| (1,372)  | 1:A:373:ALA:HB2  | 1:A:387:TYR:HD2  | 6        | 2.48          |
| (1,372)  | 1:A:373:ALA:HB3  | 1:A:387:TYR:HD2  | 6        | 2.48          |
| (1,363)  | 1:A:398:TYR:HE2  | 1:A:403:ILE:HG21 | 3        | 2.48          |
| (1,363)  | 1:A:398:TYR:HE2  | 1:A:403:ILE:HG22 | 3        | 2.48          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,363)  | 1:A:398:TYR:HE2  | 1:A:403:ILE:HG23 | 3        | 2.48          |
| (1,28)   | 1:A:340:TYR:HD1  | 1:A:390:MET:HE1  | 4        | 2.48          |
| (1,28)   | 1:A:340:TYR:HD1  | 1:A:390:MET:HE2  | 4        | 2.48          |
| (1,28)   | 1:A:340:TYR:HD1  | 1:A:390:MET:HE3  | 4        | 2.48          |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD11 | 3        | 2.48          |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD12 | 3        | 2.48          |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD13 | 3        | 2.48          |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD21 | 3        | 2.48          |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD22 | 3        | 2.48          |
| (1,1279) | 1:A:340:TYR:HE1  | 1:A:372:LEU:HD23 | 3        | 2.48          |
| (1,1211) | 1:A:349:ARG:HG2  | 1:A:350:TYR:HE2  | 9        | 2.48          |
| (1,1211) | 1:A:349:ARG:HG3  | 1:A:350:TYR:HE2  | 9        | 2.48          |
| (1,1087) | 1:A:340:TYR:HD1  | 1:A:376:TRP:H    | 4        | 2.48          |
| (1,1170) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HA   | 1        | 2.47          |
| (1,1351) | 1:A:349:ARG:HD2  | 1:A:350:TYR:HE2  | 6        | 2.46          |
| (1,1351) | 1:A:349:ARG:HD3  | 1:A:350:TYR:HE2  | 6        | 2.46          |
| (1,1167) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HB   | 1        | 2.46          |
| (1,28)   | 1:A:340:TYR:HD1  | 1:A:390:MET:HE1  | 2        | 2.45          |
| (1,28)   | 1:A:340:TYR:HD1  | 1:A:390:MET:HE2  | 2        | 2.45          |
| (1,28)   | 1:A:340:TYR:HD1  | 1:A:390:MET:HE3  | 2        | 2.45          |
| (1,1415) | 1:A:372:LEU:HD11 | 1:A:387:TYR:HE2  | 5        | 2.45          |
| (1,1415) | 1:A:372:LEU:HD12 | 1:A:387:TYR:HE2  | 5        | 2.45          |
| (1,1415) | 1:A:372:LEU:HD13 | 1:A:387:TYR:HE2  | 5        | 2.45          |
| (1,1415) | 1:A:372:LEU:HD21 | 1:A:387:TYR:HE2  | 5        | 2.45          |
| (1,1415) | 1:A:372:LEU:HD22 | 1:A:387:TYR:HE2  | 5        | 2.45          |
| (1,1415) | 1:A:372:LEU:HD23 | 1:A:387:TYR:HE2  | 5        | 2.45          |
| (1,1351) | 1:A:349:ARG:HD2  | 1:A:350:TYR:HE2  | 7        | 2.45          |
| (1,1351) | 1:A:349:ARG:HD3  | 1:A:350:TYR:HE2  | 7        | 2.45          |
| (1,1220) | 1:A:369:PRO:HA   | 1:A:387:TYR:HE2  | 5        | 2.45          |
| (1,1207) | 1:A:347:ASP:HB2  | 1:A:350:TYR:HE2  | 6        | 2.45          |
| (1,1207) | 1:A:347:ASP:HB3  | 1:A:350:TYR:HE2  | 6        | 2.45          |
| (1,1087) | 1:A:340:TYR:HD1  | 1:A:376:TRP:H    | 6        | 2.45          |
| (1,591)  | 1:A:342:TYR:HE2  | 1:A:356:TRP:HE1  | 9        | 2.44          |
| (1,1254) | 1:A:337:LEU:HD11 | 1:A:340:TYR:HD1  | 5        | 2.44          |
| (1,1254) | 1:A:337:LEU:HD12 | 1:A:340:TYR:HD1  | 5        | 2.44          |
| (1,1254) | 1:A:337:LEU:HD13 | 1:A:340:TYR:HD1  | 5        | 2.44          |
| (1,1254) | 1:A:337:LEU:HD21 | 1:A:340:TYR:HD1  | 5        | 2.44          |
| (1,1254) | 1:A:337:LEU:HD22 | 1:A:340:TYR:HD1  | 5        | 2.44          |
| (1,1254) | 1:A:337:LEU:HD23 | 1:A:340:TYR:HD1  | 5        | 2.44          |
| (1,1170) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HA   | 6        | 2.44          |
| (1,1212) | 1:A:342:TYR:HE2  | 1:A:356:TRP:HZ2  | 10       | 2.43          |
| (1,1167) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HB   | 8        | 2.43          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,717)  | 1:A:349:ARG:H    | 1:A:350:TYR:HE2  | 7        | 2.42          |
| (1,638)  | 1:A:406:GLU:H    | 1:A:413:PHE:HD2  | 1        | 2.41          |
| (1,1208) | 1:A:398:TYR:HE2  | 1:A:403:ILE:HB   | 8        | 2.41          |
| (1,1208) | 1:A:398:TYR:HE2  | 1:A:403:ILE:HB   | 10       | 2.41          |
| (1,1330) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HE   | 3        | 2.4           |
| (1,1330) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HE   | 3        | 2.4           |
| (1,1330) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HE   | 3        | 2.4           |
| (1,1330) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HE   | 3        | 2.4           |
| (1,1330) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HE   | 3        | 2.4           |
| (1,1330) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HE   | 3        | 2.4           |
| (1,1167) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HB   | 10       | 2.4           |
| (1,1219) | 1:A:366:ILE:HD11 | 1:A:387:TYR:HE2  | 4        | 2.39          |
| (1,1219) | 1:A:366:ILE:HD12 | 1:A:387:TYR:HE2  | 4        | 2.39          |
| (1,1219) | 1:A:366:ILE:HD13 | 1:A:387:TYR:HE2  | 4        | 2.39          |
| (1,1201) | 1:A:394:LEU:HG   | 1:A:397:TYR:HE2  | 2        | 2.39          |
| (1,578)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG11 | 9        | 2.38          |
| (1,578)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG12 | 9        | 2.38          |
| (1,578)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG13 | 9        | 2.38          |
| (1,474)  | 1:A:354:ILE:HG12 | 1:A:355:ARG:HE   | 7        | 2.38          |
| (1,29)   | 1:A:387:TYR:HD2  | 1:A:390:MET:HE1  | 8        | 2.38          |
| (1,29)   | 1:A:387:TYR:HD2  | 1:A:390:MET:HE2  | 8        | 2.38          |
| (1,29)   | 1:A:387:TYR:HD2  | 1:A:390:MET:HE3  | 8        | 2.38          |
| (1,1215) | 1:A:340:TYR:HE1  | 1:A:376:TRP:HB3  | 3        | 2.38          |
| (1,1170) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HA   | 8        | 2.37          |
| (1,1170) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HA   | 10       | 2.37          |
| (1,1170) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HA   | 5        | 2.36          |
| (1,1089) | 1:A:340:TYR:HE1  | 1:A:376:TRP:H    | 7        | 2.36          |
| (1,231)  | 1:A:340:TYR:HE1  | 1:A:376:TRP:HA   | 5        | 2.35          |
| (1,178)  | 1:A:412:LEU:HA   | 1:A:413:PHE:HE1  | 9        | 2.35          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD11 | 8        | 2.35          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD12 | 8        | 2.35          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD13 | 8        | 2.35          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD21 | 8        | 2.35          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD22 | 8        | 2.35          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD23 | 8        | 2.35          |
| (1,1352) | 1:A:349:ARG:HD2  | 1:A:350:TYR:HD2  | 3        | 2.35          |
| (1,1352) | 1:A:349:ARG:HD3  | 1:A:350:TYR:HD2  | 3        | 2.35          |
| (1,1207) | 1:A:347:ASP:HB2  | 1:A:350:TYR:HE2  | 9        | 2.35          |
| (1,1207) | 1:A:347:ASP:HB3  | 1:A:350:TYR:HE2  | 9        | 2.35          |
| (1,1159) | 1:A:369:PRO:HA   | 1:A:387:TYR:HD2  | 7        | 2.35          |
| (1,231)  | 1:A:340:TYR:HE1  | 1:A:376:TRP:HA   | 6        | 2.34          |
| (1,1208) | 1:A:398:TYR:HE2  | 1:A:403:ILE:HB   | 7        | 2.34          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD21 | 10       | 2.33          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD22 | 10       | 2.33          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD23 | 10       | 2.33          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD11 | 10       | 2.33          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD12 | 10       | 2.33          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD13 | 10       | 2.33          |
| (1,1170) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HA   | 3        | 2.33          |
| (1,1167) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HB   | 5        | 2.33          |
| (1,1089) | 1:A:340:TYR:HE1  | 1:A:376:TRP:H    | 10       | 2.33          |
| (1,500)  | 1:A:336:LEU:HD21 | 1:A:338:TRP:HH2  | 6        | 2.32          |
| (1,500)  | 1:A:336:LEU:HD22 | 1:A:338:TRP:HH2  | 6        | 2.32          |
| (1,500)  | 1:A:336:LEU:HD23 | 1:A:338:TRP:HH2  | 6        | 2.32          |
| (1,474)  | 1:A:354:ILE:HG12 | 1:A:355:ARG:HE   | 9        | 2.32          |
| (1,1167) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HB   | 7        | 2.32          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG11 | 1        | 2.31          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG12 | 1        | 2.31          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG13 | 1        | 2.31          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG21 | 1        | 2.31          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG22 | 1        | 2.31          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG23 | 1        | 2.31          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG11 | 6        | 2.31          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG12 | 6        | 2.31          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG13 | 6        | 2.31          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG21 | 6        | 2.31          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG22 | 6        | 2.31          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG23 | 6        | 2.31          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG11 | 8        | 2.31          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG12 | 8        | 2.31          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG13 | 8        | 2.31          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG21 | 8        | 2.31          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG22 | 8        | 2.31          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG23 | 8        | 2.31          |
| (1,1212) | 1:A:342:TYR:HE2  | 1:A:356:TRP:HZ2  | 1        | 2.31          |
| (1,1215) | 1:A:340:TYR:HE1  | 1:A:376:TRP:HB3  | 10       | 2.3           |
| (1,505)  | 1:A:412:LEU:HD11 | 1:A:413:PHE:HE1  | 5        | 2.29          |
| (1,505)  | 1:A:412:LEU:HD12 | 1:A:413:PHE:HE1  | 5        | 2.29          |
| (1,505)  | 1:A:412:LEU:HD13 | 1:A:413:PHE:HE1  | 5        | 2.29          |
| (1,474)  | 1:A:354:ILE:HG12 | 1:A:355:ARG:HE   | 6        | 2.29          |
| (1,424)  | 1:A:405:LYS:HA   | 1:A:413:PHE:HD2  | 4        | 2.28          |
| (1,364)  | 1:A:403:ILE:HG21 | 1:A:413:PHE:HE2  | 4        | 2.27          |
| (1,364)  | 1:A:403:ILE:HG22 | 1:A:413:PHE:HE2  | 4        | 2.27          |
| (1,364)  | 1:A:403:ILE:HG23 | 1:A:413:PHE:HE2  | 4        | 2.27          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,29)   | 1:A:387:TYR:HD2  | 1:A:390:MET:HE1  | 3        | 2.27          |
| (1,29)   | 1:A:387:TYR:HD2  | 1:A:390:MET:HE2  | 3        | 2.27          |
| (1,29)   | 1:A:387:TYR:HD2  | 1:A:390:MET:HE3  | 3        | 2.27          |
| (1,1208) | 1:A:398:TYR:HE2  | 1:A:403:ILE:HB   | 5        | 2.26          |
| (1,1159) | 1:A:369:PRO:HA   | 1:A:387:TYR:HD2  | 5        | 2.26          |
| (1,424)  | 1:A:405:LYS:HA   | 1:A:413:PHE:HD2  | 10       | 2.25          |
| (1,1211) | 1:A:349:ARG:HG2  | 1:A:350:TYR:HE2  | 4        | 2.25          |
| (1,1211) | 1:A:349:ARG:HG3  | 1:A:350:TYR:HE2  | 4        | 2.25          |
| (1,1200) | 1:A:393:ALA:HB1  | 1:A:397:TYR:HE2  | 6        | 2.25          |
| (1,1200) | 1:A:393:ALA:HB2  | 1:A:397:TYR:HE2  | 6        | 2.25          |
| (1,1200) | 1:A:393:ALA:HB3  | 1:A:397:TYR:HE2  | 6        | 2.25          |
| (1,1184) | 1:A:405:LYS:HA   | 1:A:413:PHE:HE2  | 5        | 2.25          |
| (1,363)  | 1:A:398:TYR:HE2  | 1:A:403:ILE:HG21 | 6        | 2.24          |
| (1,363)  | 1:A:398:TYR:HE2  | 1:A:403:ILE:HG22 | 6        | 2.24          |
| (1,363)  | 1:A:398:TYR:HE2  | 1:A:403:ILE:HG23 | 6        | 2.24          |
| (1,1415) | 1:A:372:LEU:HD11 | 1:A:387:TYR:HE2  | 10       | 2.24          |
| (1,1415) | 1:A:372:LEU:HD12 | 1:A:387:TYR:HE2  | 10       | 2.24          |
| (1,1415) | 1:A:372:LEU:HD13 | 1:A:387:TYR:HE2  | 10       | 2.24          |
| (1,1415) | 1:A:372:LEU:HD21 | 1:A:387:TYR:HE2  | 10       | 2.24          |
| (1,1415) | 1:A:372:LEU:HD22 | 1:A:387:TYR:HE2  | 10       | 2.24          |
| (1,1415) | 1:A:372:LEU:HD23 | 1:A:387:TYR:HE2  | 10       | 2.24          |
| (1,140)  | 1:A:347:ASP:HB3  | 1:A:350:TYR:HD2  | 3        | 2.24          |
| (1,591)  | 1:A:342:TYR:HE2  | 1:A:356:TRP:HE1  | 6        | 2.23          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD11 | 4        | 2.23          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD12 | 4        | 2.23          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD13 | 4        | 2.23          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD21 | 4        | 2.23          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD22 | 4        | 2.23          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD23 | 4        | 2.23          |
| (1,1219) | 1:A:366:ILE:HD11 | 1:A:387:TYR:HE2  | 9        | 2.23          |
| (1,1219) | 1:A:366:ILE:HD12 | 1:A:387:TYR:HE2  | 9        | 2.23          |
| (1,1219) | 1:A:366:ILE:HD13 | 1:A:387:TYR:HE2  | 9        | 2.23          |
| (1,1212) | 1:A:342:TYR:HE2  | 1:A:356:TRP:HZ2  | 2        | 2.23          |
| (1,1170) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HA   | 4        | 2.23          |
| (1,665)  | 1:A:366:ILE:H    | 1:A:413:PHE:HD1  | 9        | 2.22          |
| (1,638)  | 1:A:406:GLU:H    | 1:A:413:PHE:HD2  | 6        | 2.22          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG11 | 3        | 2.22          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG12 | 3        | 2.22          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG13 | 3        | 2.22          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG21 | 3        | 2.22          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG22 | 3        | 2.22          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG23 | 3        | 2.22          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1254) | 1:A:337:LEU:HD11 | 1:A:340:TYR:HD1  | 9        | 2.22          |
| (1,1254) | 1:A:337:LEU:HD12 | 1:A:340:TYR:HD1  | 9        | 2.22          |
| (1,1254) | 1:A:337:LEU:HD13 | 1:A:340:TYR:HD1  | 9        | 2.22          |
| (1,1254) | 1:A:337:LEU:HD21 | 1:A:340:TYR:HD1  | 9        | 2.22          |
| (1,1254) | 1:A:337:LEU:HD22 | 1:A:340:TYR:HD1  | 9        | 2.22          |
| (1,1254) | 1:A:337:LEU:HD23 | 1:A:340:TYR:HD1  | 9        | 2.22          |
| (1,1089) | 1:A:340:TYR:HE1  | 1:A:376:TRP:H    | 2        | 2.22          |
| (1,1087) | 1:A:340:TYR:HD1  | 1:A:376:TRP:H    | 10       | 2.22          |
| (1,396)  | 1:A:366:ILE:HG21 | 1:A:387:TYR:HD2  | 2        | 2.21          |
| (1,396)  | 1:A:366:ILE:HG22 | 1:A:387:TYR:HD2  | 2        | 2.21          |
| (1,396)  | 1:A:366:ILE:HG23 | 1:A:387:TYR:HD2  | 2        | 2.21          |
| (1,1330) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HE   | 7        | 2.21          |
| (1,1330) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HE   | 7        | 2.21          |
| (1,1330) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HE   | 7        | 2.21          |
| (1,1330) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HE   | 7        | 2.21          |
| (1,1330) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HE   | 7        | 2.21          |
| (1,1330) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HE   | 7        | 2.21          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG11 | 10       | 2.21          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG12 | 10       | 2.21          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG13 | 10       | 2.21          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG21 | 10       | 2.21          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG22 | 10       | 2.21          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG23 | 10       | 2.21          |
| (1,1254) | 1:A:337:LEU:HD11 | 1:A:340:TYR:HD1  | 7        | 2.21          |
| (1,1254) | 1:A:337:LEU:HD12 | 1:A:340:TYR:HD1  | 7        | 2.21          |
| (1,1254) | 1:A:337:LEU:HD13 | 1:A:340:TYR:HD1  | 7        | 2.21          |
| (1,1254) | 1:A:337:LEU:HD21 | 1:A:340:TYR:HD1  | 7        | 2.21          |
| (1,1254) | 1:A:337:LEU:HD22 | 1:A:340:TYR:HD1  | 7        | 2.21          |
| (1,1254) | 1:A:337:LEU:HD23 | 1:A:340:TYR:HD1  | 7        | 2.21          |
| (1,1222) | 1:A:366:ILE:HG12 | 1:A:387:TYR:HE2  | 6        | 2.21          |
| (1,1222) | 1:A:366:ILE:HG13 | 1:A:387:TYR:HE2  | 6        | 2.21          |
| (1,1177) | 1:A:397:TYR:HD1  | 1:A:402:ILE:HD11 | 6        | 2.21          |
| (1,1177) | 1:A:397:TYR:HD1  | 1:A:402:ILE:HD12 | 6        | 2.21          |
| (1,1177) | 1:A:397:TYR:HD1  | 1:A:402:ILE:HD13 | 6        | 2.21          |
| (1,505)  | 1:A:412:LEU:HD11 | 1:A:413:PHE:HE1  | 9        | 2.2           |
| (1,505)  | 1:A:412:LEU:HD12 | 1:A:413:PHE:HE1  | 9        | 2.2           |
| (1,505)  | 1:A:412:LEU:HD13 | 1:A:413:PHE:HE1  | 9        | 2.2           |
| (1,285)  | 1:A:398:TYR:HD2  | 1:A:403:ILE:HD11 | 4        | 2.2           |
| (1,285)  | 1:A:398:TYR:HD2  | 1:A:403:ILE:HD12 | 4        | 2.2           |
| (1,285)  | 1:A:398:TYR:HD2  | 1:A:403:ILE:HD13 | 4        | 2.2           |
| (1,1170) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HA   | 7        | 2.2           |
| (1,178)  | 1:A:412:LEU:HA   | 1:A:413:PHE:HE1  | 4        | 2.19          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1212) | 1:A:342:TYR:HE2  | 1:A:356:TRP:HZ2  | 8        | 2.19          |
| (1,75)   | 1:A:387:TYR:HD1  | 1:A:388:GLU:HG2  | 10       | 2.18          |
| (1,75)   | 1:A:387:TYR:HD1  | 1:A:388:GLU:HG3  | 10       | 2.18          |
| (1,1415) | 1:A:372:LEU:HD11 | 1:A:387:TYR:HE2  | 3        | 2.18          |
| (1,1415) | 1:A:372:LEU:HD12 | 1:A:387:TYR:HE2  | 3        | 2.18          |
| (1,1415) | 1:A:372:LEU:HD13 | 1:A:387:TYR:HE2  | 3        | 2.18          |
| (1,1415) | 1:A:372:LEU:HD21 | 1:A:387:TYR:HE2  | 3        | 2.18          |
| (1,1415) | 1:A:372:LEU:HD22 | 1:A:387:TYR:HE2  | 3        | 2.18          |
| (1,1415) | 1:A:372:LEU:HD23 | 1:A:387:TYR:HE2  | 3        | 2.18          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG11 | 2        | 2.18          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG12 | 2        | 2.18          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG13 | 2        | 2.18          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG21 | 2        | 2.18          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG22 | 2        | 2.18          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG23 | 2        | 2.18          |
| (1,1087) | 1:A:340:TYR:HD1  | 1:A:376:TRP:H    | 7        | 2.18          |
| (1,591)  | 1:A:342:TYR:HE2  | 1:A:356:TRP:HE1  | 1        | 2.16          |
| (1,363)  | 1:A:398:TYR:HE2  | 1:A:403:ILE:HG21 | 10       | 2.16          |
| (1,363)  | 1:A:398:TYR:HE2  | 1:A:403:ILE:HG22 | 10       | 2.16          |
| (1,363)  | 1:A:398:TYR:HE2  | 1:A:403:ILE:HG23 | 10       | 2.16          |
| (1,259)  | 1:A:387:TYR:HD1  | 1:A:388:GLU:HA   | 8        | 2.16          |
| (1,1254) | 1:A:337:LEU:HD11 | 1:A:340:TYR:HD1  | 3        | 2.16          |
| (1,1254) | 1:A:337:LEU:HD12 | 1:A:340:TYR:HD1  | 3        | 2.16          |
| (1,1254) | 1:A:337:LEU:HD13 | 1:A:340:TYR:HD1  | 3        | 2.16          |
| (1,1254) | 1:A:337:LEU:HD21 | 1:A:340:TYR:HD1  | 3        | 2.16          |
| (1,1254) | 1:A:337:LEU:HD22 | 1:A:340:TYR:HD1  | 3        | 2.16          |
| (1,1254) | 1:A:337:LEU:HD23 | 1:A:340:TYR:HD1  | 3        | 2.16          |
| (1,1089) | 1:A:340:TYR:HE1  | 1:A:376:TRP:H    | 3        | 2.16          |
| (1,638)  | 1:A:406:GLU:H    | 1:A:413:PHE:HD2  | 9        | 2.15          |
| (1,500)  | 1:A:336:LEU:HD21 | 1:A:338:TRP:HH2  | 1        | 2.15          |
| (1,500)  | 1:A:336:LEU:HD22 | 1:A:338:TRP:HH2  | 1        | 2.15          |
| (1,500)  | 1:A:336:LEU:HD23 | 1:A:338:TRP:HH2  | 1        | 2.15          |
| (1,665)  | 1:A:366:ILE:H    | 1:A:413:PHE:HD1  | 10       | 2.14          |
| (1,285)  | 1:A:398:TYR:HD2  | 1:A:403:ILE:HD11 | 9        | 2.14          |
| (1,285)  | 1:A:398:TYR:HD2  | 1:A:403:ILE:HD12 | 9        | 2.14          |
| (1,285)  | 1:A:398:TYR:HD2  | 1:A:403:ILE:HD13 | 9        | 2.14          |
| (1,435)  | 1:A:370:ASN:HA   | 1:A:387:TYR:HB2  | 6        | 2.13          |
| (1,1349) | 1:A:349:ARG:HB2  | 1:A:350:TYR:HD2  | 1        | 2.13          |
| (1,1349) | 1:A:349:ARG:HB3  | 1:A:350:TYR:HD2  | 1        | 2.13          |
| (1,1330) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HE   | 8        | 2.13          |
| (1,1330) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HE   | 8        | 2.13          |
| (1,1330) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HE   | 8        | 2.13          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1330) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HE   | 8        | 2.13          |
| (1,1330) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HE   | 8        | 2.13          |
| (1,1330) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HE   | 8        | 2.13          |
| (1,1211) | 1:A:349:ARG:HG2  | 1:A:350:TYR:HE2  | 1        | 2.13          |
| (1,1211) | 1:A:349:ARG:HG3  | 1:A:350:TYR:HE2  | 1        | 2.13          |
| (1,1151) | 1:A:340:TYR:HD2  | 1:A:379:HIS:HE1  | 7        | 2.13          |
| (1,75)   | 1:A:387:TYR:HD1  | 1:A:388:GLU:HG2  | 1        | 2.12          |
| (1,75)   | 1:A:387:TYR:HD1  | 1:A:388:GLU:HG3  | 1        | 2.12          |
| (1,665)  | 1:A:366:ILE:H    | 1:A:413:PHE:HD1  | 4        | 2.12          |
| (1,1211) | 1:A:349:ARG:HG2  | 1:A:350:TYR:HE2  | 8        | 2.12          |
| (1,1211) | 1:A:349:ARG:HG3  | 1:A:350:TYR:HE2  | 8        | 2.12          |
| (1,1168) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HG21 | 3        | 2.12          |
| (1,1168) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HG22 | 3        | 2.12          |
| (1,1168) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HG23 | 3        | 2.12          |
| (1,542)  | 1:A:369:PRO:HA   | 1:A:411:LEU:HD21 | 4        | 2.11          |
| (1,542)  | 1:A:369:PRO:HA   | 1:A:411:LEU:HD22 | 4        | 2.11          |
| (1,542)  | 1:A:369:PRO:HA   | 1:A:411:LEU:HD23 | 4        | 2.11          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD11 | 10       | 2.11          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD12 | 10       | 2.11          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD13 | 10       | 2.11          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD21 | 10       | 2.11          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD22 | 10       | 2.11          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD23 | 10       | 2.11          |
| (1,1220) | 1:A:369:PRO:HA   | 1:A:387:TYR:HE2  | 3        | 2.11          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD21 | 1        | 2.11          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD22 | 1        | 2.11          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD23 | 1        | 2.11          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD11 | 1        | 2.11          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD12 | 1        | 2.11          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD13 | 1        | 2.11          |
| (1,75)   | 1:A:387:TYR:HD1  | 1:A:388:GLU:HG2  | 5        | 2.1           |
| (1,75)   | 1:A:387:TYR:HD1  | 1:A:388:GLU:HG3  | 5        | 2.1           |
| (1,75)   | 1:A:387:TYR:HD1  | 1:A:388:GLU:HG2  | 6        | 2.1           |
| (1,75)   | 1:A:387:TYR:HD1  | 1:A:388:GLU:HG3  | 6        | 2.1           |
| (1,665)  | 1:A:366:ILE:H    | 1:A:413:PHE:HD1  | 1        | 2.1           |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG11 | 5        | 2.1           |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG12 | 5        | 2.1           |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG13 | 5        | 2.1           |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG21 | 5        | 2.1           |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG22 | 5        | 2.1           |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG23 | 5        | 2.1           |
| (1,1254) | 1:A:337:LEU:HD11 | 1:A:340:TYR:HD1  | 1        | 2.1           |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1254) | 1:A:337:LEU:HD12 | 1:A:340:TYR:HD1  | 1        | 2.1           |
| (1,1254) | 1:A:337:LEU:HD13 | 1:A:340:TYR:HD1  | 1        | 2.1           |
| (1,1254) | 1:A:337:LEU:HD21 | 1:A:340:TYR:HD1  | 1        | 2.1           |
| (1,1254) | 1:A:337:LEU:HD22 | 1:A:340:TYR:HD1  | 1        | 2.1           |
| (1,1254) | 1:A:337:LEU:HD23 | 1:A:340:TYR:HD1  | 1        | 2.1           |
| (1,504)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD21 | 5        | 2.09          |
| (1,504)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD22 | 5        | 2.09          |
| (1,504)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD23 | 5        | 2.09          |
| (1,1352) | 1:A:349:ARG:HD2  | 1:A:350:TYR:HD2  | 4        | 2.09          |
| (1,1352) | 1:A:349:ARG:HD3  | 1:A:350:TYR:HD2  | 4        | 2.09          |
| (1,1351) | 1:A:349:ARG:HD2  | 1:A:350:TYR:HE2  | 3        | 2.09          |
| (1,1351) | 1:A:349:ARG:HD3  | 1:A:350:TYR:HE2  | 3        | 2.09          |
| (1,1349) | 1:A:349:ARG:HB2  | 1:A:350:TYR:HD2  | 9        | 2.09          |
| (1,1349) | 1:A:349:ARG:HB3  | 1:A:350:TYR:HD2  | 9        | 2.09          |
| (1,1211) | 1:A:349:ARG:HG2  | 1:A:350:TYR:HE2  | 10       | 2.09          |
| (1,1211) | 1:A:349:ARG:HG3  | 1:A:350:TYR:HE2  | 10       | 2.09          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG11 | 7        | 2.08          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG12 | 7        | 2.08          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG13 | 7        | 2.08          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG21 | 7        | 2.08          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG22 | 7        | 2.08          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG23 | 7        | 2.08          |
| (1,1157) | 1:A:349:ARG:HG2  | 1:A:350:TYR:HD2  | 9        | 2.08          |
| (1,1157) | 1:A:349:ARG:HG3  | 1:A:350:TYR:HD2  | 9        | 2.08          |
| (1,717)  | 1:A:349:ARG:H    | 1:A:350:TYR:HE2  | 3        | 2.07          |
| (1,506)  | 1:A:365:ARG:HD3  | 1:A:412:LEU:HD21 | 7        | 2.07          |
| (1,506)  | 1:A:365:ARG:HD3  | 1:A:412:LEU:HD22 | 7        | 2.07          |
| (1,506)  | 1:A:365:ARG:HD3  | 1:A:412:LEU:HD23 | 7        | 2.07          |
| (1,504)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD21 | 8        | 2.07          |
| (1,504)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD22 | 8        | 2.07          |
| (1,504)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD23 | 8        | 2.07          |
| (1,1349) | 1:A:349:ARG:HB2  | 1:A:350:TYR:HD2  | 4        | 2.07          |
| (1,1349) | 1:A:349:ARG:HB3  | 1:A:350:TYR:HD2  | 4        | 2.07          |
| (1,1349) | 1:A:349:ARG:HB2  | 1:A:350:TYR:HD2  | 8        | 2.07          |
| (1,1349) | 1:A:349:ARG:HB3  | 1:A:350:TYR:HD2  | 8        | 2.07          |
| (1,1330) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HE   | 2        | 2.07          |
| (1,1330) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HE   | 2        | 2.07          |
| (1,1330) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HE   | 2        | 2.07          |
| (1,1330) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HE   | 2        | 2.07          |
| (1,1330) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HE   | 2        | 2.07          |
| (1,1330) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HE   | 2        | 2.07          |
| (1,424)  | 1:A:405:LYS:HA   | 1:A:413:PHE:HD2  | 6        | 2.06          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD11 | 6        | 2.06          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD12 | 6        | 2.06          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD13 | 6        | 2.06          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD21 | 6        | 2.06          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD22 | 6        | 2.06          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD23 | 6        | 2.06          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG11 | 4        | 2.06          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG12 | 4        | 2.06          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG13 | 4        | 2.06          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG21 | 4        | 2.06          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG22 | 4        | 2.06          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG23 | 4        | 2.06          |
| (1,549)  | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD21 | 5        | 2.05          |
| (1,549)  | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD22 | 5        | 2.05          |
| (1,549)  | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD23 | 5        | 2.05          |
| (1,496)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD11 | 8        | 2.05          |
| (1,496)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD12 | 8        | 2.05          |
| (1,496)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD13 | 8        | 2.05          |
| (1,363)  | 1:A:398:TYR:HE2  | 1:A:403:ILE:HG21 | 5        | 2.05          |
| (1,363)  | 1:A:398:TYR:HE2  | 1:A:403:ILE:HG22 | 5        | 2.05          |
| (1,363)  | 1:A:398:TYR:HE2  | 1:A:403:ILE:HG23 | 5        | 2.05          |
| (1,30)   | 1:A:387:TYR:HE2  | 1:A:390:MET:HE1  | 8        | 2.05          |
| (1,30)   | 1:A:387:TYR:HE2  | 1:A:390:MET:HE2  | 8        | 2.05          |
| (1,30)   | 1:A:387:TYR:HE2  | 1:A:390:MET:HE3  | 8        | 2.05          |
| (1,1219) | 1:A:366:ILE:HD11 | 1:A:387:TYR:HE2  | 5        | 2.05          |
| (1,1219) | 1:A:366:ILE:HD12 | 1:A:387:TYR:HE2  | 5        | 2.05          |
| (1,1219) | 1:A:366:ILE:HD13 | 1:A:387:TYR:HE2  | 5        | 2.05          |
| (1,363)  | 1:A:398:TYR:HE2  | 1:A:403:ILE:HG21 | 1        | 2.04          |
| (1,363)  | 1:A:398:TYR:HE2  | 1:A:403:ILE:HG22 | 1        | 2.04          |
| (1,363)  | 1:A:398:TYR:HE2  | 1:A:403:ILE:HG23 | 1        | 2.04          |
| (1,30)   | 1:A:387:TYR:HE2  | 1:A:390:MET:HE1  | 3        | 2.04          |
| (1,30)   | 1:A:387:TYR:HE2  | 1:A:390:MET:HE2  | 3        | 2.04          |
| (1,30)   | 1:A:387:TYR:HE2  | 1:A:390:MET:HE3  | 3        | 2.04          |
| (1,259)  | 1:A:387:TYR:HD1  | 1:A:388:GLU:HA   | 5        | 2.04          |
| (1,231)  | 1:A:340:TYR:HE1  | 1:A:376:TRP:HA   | 1        | 2.04          |
| (1,354)  | 1:A:341:VAL:HA   | 1:A:344:LEU:HG   | 3        | 2.03          |
| (1,259)  | 1:A:387:TYR:HD1  | 1:A:388:GLU:HA   | 6        | 2.03          |
| (1,1206) | 1:A:397:TYR:HB2  | 1:A:398:TYR:HE2  | 1        | 2.03          |
| (1,1168) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HG21 | 6        | 2.03          |
| (1,1168) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HG22 | 6        | 2.03          |
| (1,1168) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HG23 | 6        | 2.03          |
| (1,1349) | 1:A:349:ARG:HB2  | 1:A:350:TYR:HD2  | 10       | 2.02          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1349) | 1:A:349:ARG:HB3  | 1:A:350:TYR:HD2  | 10       | 2.02          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD11 | 3        | 2.02          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD12 | 3        | 2.02          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD13 | 3        | 2.02          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD21 | 3        | 2.02          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD22 | 3        | 2.02          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD23 | 3        | 2.02          |
| (1,1207) | 1:A:347:ASP:HB2  | 1:A:350:TYR:HE2  | 4        | 2.02          |
| (1,1207) | 1:A:347:ASP:HB3  | 1:A:350:TYR:HE2  | 4        | 2.02          |
| (1,75)   | 1:A:387:TYR:HD1  | 1:A:388:GLU:HG2  | 8        | 2.01          |
| (1,75)   | 1:A:387:TYR:HD1  | 1:A:388:GLU:HG3  | 8        | 2.01          |
| (1,397)  | 1:A:366:ILE:HG21 | 1:A:387:TYR:HE2  | 2        | 2.01          |
| (1,397)  | 1:A:366:ILE:HG22 | 1:A:387:TYR:HE2  | 2        | 2.01          |
| (1,397)  | 1:A:366:ILE:HG23 | 1:A:387:TYR:HE2  | 2        | 2.01          |
| (1,665)  | 1:A:366:ILE:H    | 1:A:413:PHE:HD1  | 5        | 2.0           |
| (1,1087) | 1:A:340:TYR:HD1  | 1:A:376:TRP:H    | 3        | 2.0           |
| (1,1330) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HE   | 9        | 1.99          |
| (1,1330) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HE   | 9        | 1.99          |
| (1,1330) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HE   | 9        | 1.99          |
| (1,1330) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HE   | 9        | 1.99          |
| (1,1330) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HE   | 9        | 1.99          |
| (1,1330) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HE   | 9        | 1.99          |
| (1,1206) | 1:A:397:TYR:HB2  | 1:A:398:TYR:HE2  | 3        | 1.99          |
| (1,1170) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HA   | 9        | 1.99          |
| (1,638)  | 1:A:406:GLU:H    | 1:A:413:PHE:HD2  | 2        | 1.98          |
| (1,259)  | 1:A:387:TYR:HD1  | 1:A:388:GLU:HA   | 10       | 1.97          |
| (1,1206) | 1:A:397:TYR:HB2  | 1:A:398:TYR:HE2  | 7        | 1.97          |
| (1,1168) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HG21 | 5        | 1.97          |
| (1,1168) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HG22 | 5        | 1.97          |
| (1,1168) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HG23 | 5        | 1.97          |
| (1,546)  | 1:A:336:LEU:HD11 | 1:A:338:TRP:HH2  | 5        | 1.96          |
| (1,546)  | 1:A:336:LEU:HD12 | 1:A:338:TRP:HH2  | 5        | 1.96          |
| (1,546)  | 1:A:336:LEU:HD13 | 1:A:338:TRP:HH2  | 5        | 1.96          |
| (1,270)  | 1:A:366:ILE:HD11 | 1:A:413:PHE:HZ   | 10       | 1.96          |
| (1,270)  | 1:A:366:ILE:HD12 | 1:A:413:PHE:HZ   | 10       | 1.96          |
| (1,270)  | 1:A:366:ILE:HD13 | 1:A:413:PHE:HZ   | 10       | 1.96          |
| (1,146)  | 1:A:355:ARG:H    | 1:A:365:ARG:HD2  | 5        | 1.96          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD11 | 2        | 1.96          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD12 | 2        | 1.96          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD13 | 2        | 1.96          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD21 | 2        | 1.96          |
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD22 | 2        | 1.96          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1277) | 1:A:340:TYR:HD1  | 1:A:372:LEU:HD23 | 2        | 1.96          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG11 | 9        | 1.96          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG12 | 9        | 1.96          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG13 | 9        | 1.96          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG21 | 9        | 1.96          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG22 | 9        | 1.96          |
| (1,1275) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG23 | 9        | 1.96          |
| (1,1220) | 1:A:369:PRO:HA   | 1:A:387:TYR:HE2  | 9        | 1.96          |
| (1,591)  | 1:A:342:TYR:HE2  | 1:A:356:TRP:HE1  | 8        | 1.95          |
| (1,424)  | 1:A:405:LYS:HA   | 1:A:413:PHE:HD2  | 9        | 1.95          |
| (1,1206) | 1:A:397:TYR:HB2  | 1:A:398:TYR:HE2  | 5        | 1.95          |
| (1,1203) | 1:A:394:LEU:HA   | 1:A:397:TYR:HE2  | 6        | 1.95          |
| (1,1246) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HH2  | 8        | 1.94          |
| (1,1246) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HH2  | 8        | 1.94          |
| (1,1246) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HH2  | 8        | 1.94          |
| (1,1246) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HH2  | 8        | 1.94          |
| (1,1246) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HH2  | 8        | 1.94          |
| (1,1246) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HH2  | 8        | 1.94          |
| (1,75)   | 1:A:387:TYR:HD1  | 1:A:388:GLU:HG2  | 9        | 1.93          |
| (1,75)   | 1:A:387:TYR:HD1  | 1:A:388:GLU:HG3  | 9        | 1.93          |
| (1,363)  | 1:A:398:TYR:HE2  | 1:A:403:ILE:HG21 | 8        | 1.93          |
| (1,363)  | 1:A:398:TYR:HE2  | 1:A:403:ILE:HG22 | 8        | 1.93          |
| (1,363)  | 1:A:398:TYR:HE2  | 1:A:403:ILE:HG23 | 8        | 1.93          |
| (1,1349) | 1:A:349:ARG:HB2  | 1:A:350:TYR:HD2  | 2        | 1.93          |
| (1,1349) | 1:A:349:ARG:HB3  | 1:A:350:TYR:HD2  | 2        | 1.93          |
| (1,1152) | 1:A:340:TYR:HE2  | 1:A:379:HIS:HE1  | 10       | 1.93          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD11 | 6        | 1.91          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD12 | 6        | 1.91          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD13 | 6        | 1.91          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD21 | 6        | 1.91          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD22 | 6        | 1.91          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD23 | 6        | 1.91          |
| (1,1330) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HE   | 10       | 1.91          |
| (1,1330) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HE   | 10       | 1.91          |
| (1,1330) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HE   | 10       | 1.91          |
| (1,1330) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HE   | 10       | 1.91          |
| (1,1330) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HE   | 10       | 1.91          |
| (1,1330) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HE   | 10       | 1.91          |
| (1,1220) | 1:A:369:PRO:HA   | 1:A:387:TYR:HE2  | 4        | 1.91          |
| (1,1211) | 1:A:349:ARG:HG2  | 1:A:350:TYR:HE2  | 2        | 1.91          |
| (1,1211) | 1:A:349:ARG:HG3  | 1:A:350:TYR:HE2  | 2        | 1.91          |
| (1,1151) | 1:A:340:TYR:HD2  | 1:A:379:HIS:HE1  | 6        | 1.91          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD11 | 1        | 1.9           |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD12 | 1        | 1.9           |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD13 | 1        | 1.9           |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD21 | 1        | 1.9           |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD22 | 1        | 1.9           |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD23 | 1        | 1.9           |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD11 | 1        | 1.9           |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD12 | 1        | 1.9           |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD13 | 1        | 1.9           |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD21 | 1        | 1.9           |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD22 | 1        | 1.9           |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD23 | 1        | 1.9           |
| (1,1206) | 1:A:397:TYR:HB2  | 1:A:398:TYR:HE2  | 10       | 1.9           |
| (1,1168) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HG21 | 10       | 1.9           |
| (1,1168) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HG22 | 10       | 1.9           |
| (1,1168) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HG23 | 10       | 1.9           |
| (1,1159) | 1:A:369:PRO:HA   | 1:A:387:TYR:HD2  | 3        | 1.9           |
| (1,364)  | 1:A:403:ILE:HG21 | 1:A:413:PHE:HE2  | 10       | 1.89          |
| (1,364)  | 1:A:403:ILE:HG22 | 1:A:413:PHE:HE2  | 10       | 1.89          |
| (1,364)  | 1:A:403:ILE:HG23 | 1:A:413:PHE:HE2  | 10       | 1.89          |
| (1,121)  | 1:A:340:TYR:HE1  | 1:A:375:LEU:HB2  | 9        | 1.89          |
| (1,121)  | 1:A:340:TYR:HE1  | 1:A:375:LEU:HB3  | 9        | 1.89          |
| (1,1159) | 1:A:369:PRO:HA   | 1:A:387:TYR:HD2  | 1        | 1.89          |
| (1,372)  | 1:A:373:ALA:HB1  | 1:A:387:TYR:HD2  | 7        | 1.88          |
| (1,372)  | 1:A:373:ALA:HB2  | 1:A:387:TYR:HD2  | 7        | 1.88          |
| (1,372)  | 1:A:373:ALA:HB3  | 1:A:387:TYR:HD2  | 7        | 1.88          |
| (1,146)  | 1:A:355:ARG:H    | 1:A:365:ARG:HD2  | 3        | 1.88          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD21 | 8        | 1.88          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD22 | 8        | 1.88          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD23 | 8        | 1.88          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD11 | 8        | 1.88          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD12 | 8        | 1.88          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD13 | 8        | 1.88          |
| (1,424)  | 1:A:405:LYS:HA   | 1:A:413:PHE:HD2  | 1        | 1.86          |
| (1,259)  | 1:A:387:TYR:HD1  | 1:A:388:GLU:HA   | 4        | 1.86          |
| (1,259)  | 1:A:387:TYR:HD1  | 1:A:388:GLU:HA   | 3        | 1.85          |
| (1,1246) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HH2  | 2        | 1.85          |
| (1,1246) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HH2  | 2        | 1.85          |
| (1,1246) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HH2  | 2        | 1.85          |
| (1,1246) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HH2  | 2        | 1.85          |
| (1,1246) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HH2  | 2        | 1.85          |
| (1,1246) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HH2  | 2        | 1.85          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1206) | 1:A:397:TYR:HB2  | 1:A:398:TYR:HE2  | 6        | 1.85          |
| (1,1173) | 1:A:394:LEU:HA   | 1:A:397:TYR:HD2  | 6        | 1.85          |
| (1,363)  | 1:A:398:TYR:HE2  | 1:A:403:ILE:HG21 | 7        | 1.84          |
| (1,363)  | 1:A:398:TYR:HE2  | 1:A:403:ILE:HG22 | 7        | 1.84          |
| (1,363)  | 1:A:398:TYR:HE2  | 1:A:403:ILE:HG23 | 7        | 1.84          |
| (1,259)  | 1:A:387:TYR:HD1  | 1:A:388:GLU:HA   | 7        | 1.84          |
| (1,546)  | 1:A:336:LEU:HD11 | 1:A:338:TRP:HH2  | 2        | 1.83          |
| (1,546)  | 1:A:336:LEU:HD12 | 1:A:338:TRP:HH2  | 2        | 1.83          |
| (1,546)  | 1:A:336:LEU:HD13 | 1:A:338:TRP:HH2  | 2        | 1.83          |
| (1,406)  | 1:A:397:TYR:HD1  | 1:A:402:ILE:HG21 | 6        | 1.82          |
| (1,406)  | 1:A:397:TYR:HD1  | 1:A:402:ILE:HG22 | 6        | 1.82          |
| (1,406)  | 1:A:397:TYR:HD1  | 1:A:402:ILE:HG23 | 6        | 1.82          |
| (1,1212) | 1:A:342:TYR:HE2  | 1:A:356:TRP:HZ2  | 4        | 1.82          |
| (1,1351) | 1:A:349:ARG:HD2  | 1:A:350:TYR:HE2  | 4        | 1.81          |
| (1,1351) | 1:A:349:ARG:HD3  | 1:A:350:TYR:HE2  | 4        | 1.81          |
| (1,1168) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HG21 | 8        | 1.81          |
| (1,1168) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HG22 | 8        | 1.81          |
| (1,1168) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HG23 | 8        | 1.81          |
| (1,1167) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HB   | 4        | 1.81          |
| (1,1087) | 1:A:340:TYR:HD1  | 1:A:376:TRP:H    | 2        | 1.81          |
| (1,21)   | 1:A:354:ILE:HG21 | 1:A:355:ARG:HE   | 6        | 1.8           |
| (1,21)   | 1:A:354:ILE:HG22 | 1:A:355:ARG:HE   | 6        | 1.8           |
| (1,21)   | 1:A:354:ILE:HG23 | 1:A:355:ARG:HE   | 6        | 1.8           |
| (1,1254) | 1:A:337:LEU:HD11 | 1:A:340:TYR:HD1  | 4        | 1.8           |
| (1,1254) | 1:A:337:LEU:HD12 | 1:A:340:TYR:HD1  | 4        | 1.8           |
| (1,1254) | 1:A:337:LEU:HD13 | 1:A:340:TYR:HD1  | 4        | 1.8           |
| (1,1254) | 1:A:337:LEU:HD21 | 1:A:340:TYR:HD1  | 4        | 1.8           |
| (1,1254) | 1:A:337:LEU:HD22 | 1:A:340:TYR:HD1  | 4        | 1.8           |
| (1,1254) | 1:A:337:LEU:HD23 | 1:A:340:TYR:HD1  | 4        | 1.8           |
| (1,1168) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HG21 | 1        | 1.8           |
| (1,1168) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HG22 | 1        | 1.8           |
| (1,1168) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HG23 | 1        | 1.8           |
| (1,496)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD11 | 5        | 1.79          |
| (1,496)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD12 | 5        | 1.79          |
| (1,496)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD13 | 5        | 1.79          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD11 | 10       | 1.78          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD12 | 10       | 1.78          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD13 | 10       | 1.78          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD21 | 10       | 1.78          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD22 | 10       | 1.78          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD23 | 10       | 1.78          |
| (1,1330) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HE   | 1        | 1.78          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1330) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HE   | 1        | 1.78          |
| (1,1330) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HE   | 1        | 1.78          |
| (1,1330) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HE   | 1        | 1.78          |
| (1,1330) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HE   | 1        | 1.78          |
| (1,1330) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HE   | 1        | 1.78          |
| (1,1198) | 1:A:396:HIS:HD2  | 1:A:397:TYR:HA   | 6        | 1.78          |
| (1,633)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:H    | 10       | 1.77          |
| (1,633)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:H    | 10       | 1.77          |
| (1,424)  | 1:A:405:LYS:HA   | 1:A:413:PHE:HD2  | 2        | 1.77          |
| (1,140)  | 1:A:347:ASP:HB3  | 1:A:350:TYR:HD2  | 7        | 1.77          |
| (1,1208) | 1:A:398:TYR:HE2  | 1:A:403:ILE:HB   | 9        | 1.77          |
| (1,1207) | 1:A:347:ASP:HB2  | 1:A:350:TYR:HE2  | 1        | 1.77          |
| (1,1207) | 1:A:347:ASP:HB3  | 1:A:350:TYR:HE2  | 1        | 1.77          |
| (1,633)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:H    | 7        | 1.76          |
| (1,633)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:H    | 7        | 1.76          |
| (1,504)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD21 | 9        | 1.76          |
| (1,504)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD22 | 9        | 1.76          |
| (1,504)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD23 | 9        | 1.76          |
| (1,500)  | 1:A:336:LEU:HD21 | 1:A:338:TRP:HH2  | 2        | 1.76          |
| (1,500)  | 1:A:336:LEU:HD22 | 1:A:338:TRP:HH2  | 2        | 1.76          |
| (1,500)  | 1:A:336:LEU:HD23 | 1:A:338:TRP:HH2  | 2        | 1.76          |
| (1,270)  | 1:A:366:ILE:HD11 | 1:A:413:PHE:HZ   | 1        | 1.76          |
| (1,270)  | 1:A:366:ILE:HD12 | 1:A:413:PHE:HZ   | 1        | 1.76          |
| (1,270)  | 1:A:366:ILE:HD13 | 1:A:413:PHE:HZ   | 1        | 1.76          |
| (1,504)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD21 | 1        | 1.75          |
| (1,504)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD22 | 1        | 1.75          |
| (1,504)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD23 | 1        | 1.75          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD11 | 8        | 1.75          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD12 | 8        | 1.75          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD13 | 8        | 1.75          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD21 | 8        | 1.75          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD22 | 8        | 1.75          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD23 | 8        | 1.75          |
| (1,1415) | 1:A:372:LEU:HD11 | 1:A:387:TYR:HE2  | 8        | 1.75          |
| (1,1415) | 1:A:372:LEU:HD12 | 1:A:387:TYR:HE2  | 8        | 1.75          |
| (1,1415) | 1:A:372:LEU:HD13 | 1:A:387:TYR:HE2  | 8        | 1.75          |
| (1,1415) | 1:A:372:LEU:HD21 | 1:A:387:TYR:HE2  | 8        | 1.75          |
| (1,1415) | 1:A:372:LEU:HD22 | 1:A:387:TYR:HE2  | 8        | 1.75          |
| (1,1415) | 1:A:372:LEU:HD23 | 1:A:387:TYR:HE2  | 8        | 1.75          |
| (1,1177) | 1:A:397:TYR:HD1  | 1:A:402:ILE:HD11 | 2        | 1.75          |
| (1,1177) | 1:A:397:TYR:HD1  | 1:A:402:ILE:HD12 | 2        | 1.75          |
| (1,1177) | 1:A:397:TYR:HD1  | 1:A:402:ILE:HD13 | 2        | 1.75          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1167) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HB   | 9        | 1.75          |
| (1,1349) | 1:A:349:ARG:HB2  | 1:A:350:TYR:HD2  | 6        | 1.74          |
| (1,1349) | 1:A:349:ARG:HB3  | 1:A:350:TYR:HD2  | 6        | 1.74          |
| (1,935)  | 1:A:350:TYR:H    | 1:A:350:TYR:HD2  | 1        | 1.73          |
| (1,935)  | 1:A:350:TYR:H    | 1:A:350:TYR:HD2  | 2        | 1.73          |
| (1,1168) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HG21 | 7        | 1.73          |
| (1,1168) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HG22 | 7        | 1.73          |
| (1,1168) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HG23 | 7        | 1.73          |
| (1,324)  | 1:A:346:SER:H    | 1:A:354:ILE:HD11 | 4        | 1.72          |
| (1,324)  | 1:A:346:SER:H    | 1:A:354:ILE:HD12 | 4        | 1.72          |
| (1,324)  | 1:A:346:SER:H    | 1:A:354:ILE:HD13 | 4        | 1.72          |
| (1,324)  | 1:A:346:SER:H    | 1:A:354:ILE:HD11 | 5        | 1.72          |
| (1,324)  | 1:A:346:SER:H    | 1:A:354:ILE:HD12 | 5        | 1.72          |
| (1,324)  | 1:A:346:SER:H    | 1:A:354:ILE:HD13 | 5        | 1.72          |
| (1,869)  | 1:A:391:SER:H    | 1:A:394:LEU:HG   | 4        | 1.71          |
| (1,542)  | 1:A:369:PRO:HA   | 1:A:411:LEU:HD21 | 1        | 1.71          |
| (1,542)  | 1:A:369:PRO:HA   | 1:A:411:LEU:HD22 | 1        | 1.71          |
| (1,542)  | 1:A:369:PRO:HA   | 1:A:411:LEU:HD23 | 1        | 1.71          |
| (1,360)  | 1:A:403:ILE:HG21 | 1:A:413:PHE:HD2  | 4        | 1.71          |
| (1,360)  | 1:A:403:ILE:HG22 | 1:A:413:PHE:HD2  | 4        | 1.71          |
| (1,360)  | 1:A:403:ILE:HG23 | 1:A:413:PHE:HD2  | 4        | 1.71          |
| (1,287)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HD11 | 3        | 1.71          |
| (1,287)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HD12 | 3        | 1.71          |
| (1,287)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HD13 | 3        | 1.71          |
| (1,277)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:HD11 | 3        | 1.71          |
| (1,277)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:HD12 | 3        | 1.71          |
| (1,277)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:HD13 | 3        | 1.71          |
| (1,259)  | 1:A:387:TYR:HD1  | 1:A:388:GLU:HA   | 9        | 1.71          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD11 | 3        | 1.71          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD12 | 3        | 1.71          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD13 | 3        | 1.71          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD21 | 3        | 1.71          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD22 | 3        | 1.71          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD23 | 3        | 1.71          |
| (1,591)  | 1:A:342:TYR:HE2  | 1:A:356:TRP:HE1  | 2        | 1.7           |
| (1,259)  | 1:A:387:TYR:HD1  | 1:A:388:GLU:HA   | 2        | 1.7           |
| (1,1349) | 1:A:349:ARG:HB2  | 1:A:350:TYR:HD2  | 3        | 1.7           |
| (1,1349) | 1:A:349:ARG:HB3  | 1:A:350:TYR:HD2  | 3        | 1.7           |
| (1,1152) | 1:A:340:TYR:HE2  | 1:A:379:HIS:HE1  | 8        | 1.7           |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD11 | 9        | 1.69          |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD12 | 9        | 1.69          |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD13 | 9        | 1.69          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD21 | 9        | 1.69          |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD22 | 9        | 1.69          |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD23 | 9        | 1.69          |
| (1,1306) | 1:A:344:LEU:HD11 | 1:A:350:TYR:HE1  | 7        | 1.69          |
| (1,1306) | 1:A:344:LEU:HD12 | 1:A:350:TYR:HE1  | 7        | 1.69          |
| (1,1306) | 1:A:344:LEU:HD13 | 1:A:350:TYR:HE1  | 7        | 1.69          |
| (1,1306) | 1:A:344:LEU:HD21 | 1:A:350:TYR:HE1  | 7        | 1.69          |
| (1,1306) | 1:A:344:LEU:HD22 | 1:A:350:TYR:HE1  | 7        | 1.69          |
| (1,1306) | 1:A:344:LEU:HD23 | 1:A:350:TYR:HE1  | 7        | 1.69          |
| (1,1208) | 1:A:398:TYR:HE2  | 1:A:403:ILE:HB   | 4        | 1.69          |
| (1,1173) | 1:A:394:LEU:HA   | 1:A:397:TYR:HD2  | 2        | 1.69          |
| (1,935)  | 1:A:350:TYR:H    | 1:A:350:TYR:HD2  | 9        | 1.68          |
| (1,270)  | 1:A:366:ILE:HD11 | 1:A:413:PHE:HZ   | 4        | 1.68          |
| (1,270)  | 1:A:366:ILE:HD12 | 1:A:413:PHE:HZ   | 4        | 1.68          |
| (1,270)  | 1:A:366:ILE:HD13 | 1:A:413:PHE:HZ   | 4        | 1.68          |
| (1,259)  | 1:A:387:TYR:HD1  | 1:A:388:GLU:HA   | 1        | 1.68          |
| (1,1206) | 1:A:397:TYR:HB2  | 1:A:398:TYR:HE2  | 8        | 1.68          |
| (1,397)  | 1:A:366:ILE:HG21 | 1:A:387:TYR:HE2  | 1        | 1.67          |
| (1,397)  | 1:A:366:ILE:HG22 | 1:A:387:TYR:HE2  | 1        | 1.67          |
| (1,397)  | 1:A:366:ILE:HG23 | 1:A:387:TYR:HE2  | 1        | 1.67          |
| (1,146)  | 1:A:355:ARG:H    | 1:A:365:ARG:HD2  | 7        | 1.67          |
| (1,1349) | 1:A:349:ARG:HB2  | 1:A:350:TYR:HD2  | 7        | 1.67          |
| (1,1349) | 1:A:349:ARG:HB3  | 1:A:350:TYR:HD2  | 7        | 1.67          |
| (1,1198) | 1:A:396:HIS:HD2  | 1:A:397:TYR:HA   | 2        | 1.67          |
| (1,270)  | 1:A:366:ILE:HD11 | 1:A:413:PHE:HZ   | 6        | 1.66          |
| (1,270)  | 1:A:366:ILE:HD12 | 1:A:413:PHE:HZ   | 6        | 1.66          |
| (1,270)  | 1:A:366:ILE:HD13 | 1:A:413:PHE:HZ   | 6        | 1.66          |
| (1,1468) | 1:A:394:LEU:HD11 | 1:A:397:TYR:HE2  | 6        | 1.66          |
| (1,1468) | 1:A:394:LEU:HD12 | 1:A:397:TYR:HE2  | 6        | 1.66          |
| (1,1468) | 1:A:394:LEU:HD13 | 1:A:397:TYR:HE2  | 6        | 1.66          |
| (1,1468) | 1:A:394:LEU:HD21 | 1:A:397:TYR:HE2  | 6        | 1.66          |
| (1,1468) | 1:A:394:LEU:HD22 | 1:A:397:TYR:HE2  | 6        | 1.66          |
| (1,1468) | 1:A:394:LEU:HD23 | 1:A:397:TYR:HE2  | 6        | 1.66          |
| (1,1186) | 1:A:356:TRP:HD1  | 1:A:359:LYS:HE2  | 10       | 1.66          |
| (1,1186) | 1:A:356:TRP:HD1  | 1:A:359:LYS:HE3  | 10       | 1.66          |
| (1,633)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:H    | 1        | 1.65          |
| (1,633)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:H    | 1        | 1.65          |
| (1,474)  | 1:A:354:ILE:HG12 | 1:A:355:ARG:HE   | 1        | 1.65          |
| (1,1435) | 1:A:376:TRP:HH2  | 1:A:380:LYS:HE2  | 5        | 1.65          |
| (1,1435) | 1:A:376:TRP:HH2  | 1:A:380:LYS:HE3  | 5        | 1.65          |
| (1,1159) | 1:A:369:PRO:HA   | 1:A:387:TYR:HD2  | 4        | 1.65          |
| (1,1152) | 1:A:340:TYR:HE2  | 1:A:379:HIS:HE1  | 9        | 1.65          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,496)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD11 | 9        | 1.62          |
| (1,496)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD12 | 9        | 1.62          |
| (1,496)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD13 | 9        | 1.62          |
| (1,372)  | 1:A:373:ALA:HB1  | 1:A:387:TYR:HD2  | 1        | 1.62          |
| (1,372)  | 1:A:373:ALA:HB2  | 1:A:387:TYR:HD2  | 1        | 1.62          |
| (1,372)  | 1:A:373:ALA:HB3  | 1:A:387:TYR:HD2  | 1        | 1.62          |
| (1,270)  | 1:A:366:ILE:HD11 | 1:A:413:PHE:HZ   | 9        | 1.62          |
| (1,270)  | 1:A:366:ILE:HD12 | 1:A:413:PHE:HZ   | 9        | 1.62          |
| (1,270)  | 1:A:366:ILE:HD13 | 1:A:413:PHE:HZ   | 9        | 1.62          |
| (1,1329) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HD2  | 8        | 1.62          |
| (1,1329) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HD3  | 8        | 1.62          |
| (1,1329) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HD2  | 8        | 1.62          |
| (1,1329) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HD3  | 8        | 1.62          |
| (1,1329) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HD2  | 8        | 1.62          |
| (1,1329) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HD3  | 8        | 1.62          |
| (1,1329) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HD2  | 8        | 1.62          |
| (1,1329) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HD3  | 8        | 1.62          |
| (1,1329) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HD2  | 8        | 1.62          |
| (1,1329) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HD3  | 8        | 1.62          |
| (1,1329) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HD2  | 8        | 1.62          |
| (1,1329) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HD3  | 8        | 1.62          |
| (1,1306) | 1:A:344:LEU:HD11 | 1:A:350:TYR:HE1  | 6        | 1.62          |
| (1,1306) | 1:A:344:LEU:HD12 | 1:A:350:TYR:HE1  | 6        | 1.62          |
| (1,1306) | 1:A:344:LEU:HD13 | 1:A:350:TYR:HE1  | 6        | 1.62          |
| (1,1306) | 1:A:344:LEU:HD21 | 1:A:350:TYR:HE1  | 6        | 1.62          |
| (1,1306) | 1:A:344:LEU:HD22 | 1:A:350:TYR:HE1  | 6        | 1.62          |
| (1,1306) | 1:A:344:LEU:HD23 | 1:A:350:TYR:HE1  | 6        | 1.62          |
| (1,1192) | 1:A:376:TRP:HH2  | 1:A:380:LYS:HD2  | 7        | 1.62          |
| (1,1192) | 1:A:376:TRP:HH2  | 1:A:380:LYS:HD3  | 7        | 1.62          |
| (1,935)  | 1:A:350:TYR:H    | 1:A:350:TYR:HD2  | 10       | 1.61          |
| (1,663)  | 1:A:357:GLU:H    | 1:A:412:LEU:HD21 | 1        | 1.61          |
| (1,663)  | 1:A:357:GLU:H    | 1:A:412:LEU:HD22 | 1        | 1.61          |
| (1,663)  | 1:A:357:GLU:H    | 1:A:412:LEU:HD23 | 1        | 1.61          |
| (1,663)  | 1:A:357:GLU:H    | 1:A:412:LEU:HD21 | 8        | 1.61          |
| (1,663)  | 1:A:357:GLU:H    | 1:A:412:LEU:HD22 | 8        | 1.61          |
| (1,663)  | 1:A:357:GLU:H    | 1:A:412:LEU:HD23 | 8        | 1.61          |
| (1,277)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:HD11 | 10       | 1.61          |
| (1,277)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:HD12 | 10       | 1.61          |
| (1,277)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:HD13 | 10       | 1.61          |
| (1,633)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:H    | 2        | 1.6           |
| (1,633)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:H    | 2        | 1.6           |
| (1,633)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:H    | 4        | 1.6           |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,633)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:H    | 4        | 1.6           |
| (1,633)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:H    | 5        | 1.6           |
| (1,633)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:H    | 5        | 1.6           |
| (1,1220) | 1:A:369:PRO:HA   | 1:A:387:TYR:HE2  | 8        | 1.6           |
| (1,1201) | 1:A:394:LEU:HG   | 1:A:397:TYR:HE2  | 1        | 1.6           |
| (1,1254) | 1:A:337:LEU:HD11 | 1:A:340:TYR:HD1  | 8        | 1.59          |
| (1,1254) | 1:A:337:LEU:HD12 | 1:A:340:TYR:HD1  | 8        | 1.59          |
| (1,1254) | 1:A:337:LEU:HD13 | 1:A:340:TYR:HD1  | 8        | 1.59          |
| (1,1254) | 1:A:337:LEU:HD21 | 1:A:340:TYR:HD1  | 8        | 1.59          |
| (1,1254) | 1:A:337:LEU:HD22 | 1:A:340:TYR:HD1  | 8        | 1.59          |
| (1,1254) | 1:A:337:LEU:HD23 | 1:A:340:TYR:HD1  | 8        | 1.59          |
| (1,933)  | 1:A:350:TYR:H    | 1:A:350:TYR:HE2  | 1        | 1.58          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD11 | 5        | 1.58          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD12 | 5        | 1.58          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD13 | 5        | 1.58          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD21 | 5        | 1.58          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD22 | 5        | 1.58          |
| (1,1353) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD23 | 5        | 1.58          |
| (1,1198) | 1:A:396:HIS:HD2  | 1:A:397:TYR:HA   | 9        | 1.58          |
| (1,1157) | 1:A:349:ARG:HG2  | 1:A:350:TYR:HD2  | 4        | 1.58          |
| (1,1157) | 1:A:349:ARG:HG3  | 1:A:350:TYR:HD2  | 4        | 1.58          |
| (1,933)  | 1:A:350:TYR:H    | 1:A:350:TYR:HE2  | 2        | 1.57          |
| (1,505)  | 1:A:412:LEU:HD11 | 1:A:413:PHE:HE1  | 2        | 1.57          |
| (1,505)  | 1:A:412:LEU:HD12 | 1:A:413:PHE:HE1  | 2        | 1.57          |
| (1,505)  | 1:A:412:LEU:HD13 | 1:A:413:PHE:HE1  | 2        | 1.57          |
| (1,279)  | 1:A:363:ILE:HD11 | 1:A:412:LEU:HD11 | 7        | 1.57          |
| (1,279)  | 1:A:363:ILE:HD11 | 1:A:412:LEU:HD12 | 7        | 1.57          |
| (1,279)  | 1:A:363:ILE:HD11 | 1:A:412:LEU:HD13 | 7        | 1.57          |
| (1,279)  | 1:A:363:ILE:HD12 | 1:A:412:LEU:HD11 | 7        | 1.57          |
| (1,279)  | 1:A:363:ILE:HD12 | 1:A:412:LEU:HD12 | 7        | 1.57          |
| (1,279)  | 1:A:363:ILE:HD12 | 1:A:412:LEU:HD13 | 7        | 1.57          |
| (1,279)  | 1:A:363:ILE:HD13 | 1:A:412:LEU:HD11 | 7        | 1.57          |
| (1,279)  | 1:A:363:ILE:HD13 | 1:A:412:LEU:HD12 | 7        | 1.57          |
| (1,279)  | 1:A:363:ILE:HD13 | 1:A:412:LEU:HD13 | 7        | 1.57          |
| (1,152)  | 1:A:354:ILE:H    | 1:A:355:ARG:HD2  | 3        | 1.57          |
| (1,152)  | 1:A:354:ILE:H    | 1:A:355:ARG:HD3  | 3        | 1.57          |
| (1,1329) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HD2  | 9        | 1.57          |
| (1,1329) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HD3  | 9        | 1.57          |
| (1,1329) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HD2  | 9        | 1.57          |
| (1,1329) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HD3  | 9        | 1.57          |
| (1,1329) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HD2  | 9        | 1.57          |
| (1,1329) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HD3  | 9        | 1.57          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1329) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HD2  | 9        | 1.57          |
| (1,1329) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HD3  | 9        | 1.57          |
| (1,1329) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HD2  | 9        | 1.57          |
| (1,1329) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HD3  | 9        | 1.57          |
| (1,1329) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HD2  | 9        | 1.57          |
| (1,1329) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HD3  | 9        | 1.57          |
| (1,1211) | 1:A:349:ARG:HG2  | 1:A:350:TYR:HE2  | 6        | 1.57          |
| (1,1211) | 1:A:349:ARG:HG3  | 1:A:350:TYR:HE2  | 6        | 1.57          |
| (1,1201) | 1:A:394:LEU:HG   | 1:A:397:TYR:HE2  | 9        | 1.57          |
| (1,605)  | 1:A:376:TRP:HE1  | 1:A:390:MET:HG2  | 4        | 1.56          |
| (1,605)  | 1:A:376:TRP:HE1  | 1:A:390:MET:HG3  | 4        | 1.56          |
| (1,1246) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HH2  | 3        | 1.56          |
| (1,1246) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HH2  | 3        | 1.56          |
| (1,1246) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HH2  | 3        | 1.56          |
| (1,1246) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HH2  | 3        | 1.56          |
| (1,1246) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HH2  | 3        | 1.56          |
| (1,1246) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HH2  | 3        | 1.56          |
| (1,505)  | 1:A:412:LEU:HD11 | 1:A:413:PHE:HE1  | 10       | 1.55          |
| (1,505)  | 1:A:412:LEU:HD12 | 1:A:413:PHE:HE1  | 10       | 1.55          |
| (1,505)  | 1:A:412:LEU:HD13 | 1:A:413:PHE:HE1  | 10       | 1.55          |
| (1,396)  | 1:A:366:ILE:HG21 | 1:A:387:TYR:HD2  | 10       | 1.55          |
| (1,396)  | 1:A:366:ILE:HG22 | 1:A:387:TYR:HD2  | 10       | 1.55          |
| (1,396)  | 1:A:366:ILE:HG23 | 1:A:387:TYR:HD2  | 10       | 1.55          |
| (1,364)  | 1:A:403:ILE:HG21 | 1:A:413:PHE:HE2  | 6        | 1.55          |
| (1,364)  | 1:A:403:ILE:HG22 | 1:A:413:PHE:HE2  | 6        | 1.55          |
| (1,364)  | 1:A:403:ILE:HG23 | 1:A:413:PHE:HE2  | 6        | 1.55          |
| (1,605)  | 1:A:376:TRP:HE1  | 1:A:390:MET:HG2  | 7        | 1.54          |
| (1,605)  | 1:A:376:TRP:HE1  | 1:A:390:MET:HG3  | 7        | 1.54          |
| (1,539)  | 1:A:366:ILE:H    | 1:A:411:LEU:HD21 | 6        | 1.54          |
| (1,539)  | 1:A:366:ILE:H    | 1:A:411:LEU:HD22 | 6        | 1.54          |
| (1,539)  | 1:A:366:ILE:H    | 1:A:411:LEU:HD23 | 6        | 1.54          |
| (1,277)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:HD11 | 7        | 1.54          |
| (1,277)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:HD12 | 7        | 1.54          |
| (1,277)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:HD13 | 7        | 1.54          |
| (1,1220) | 1:A:369:PRO:HA   | 1:A:387:TYR:HE2  | 10       | 1.54          |
| (1,372)  | 1:A:373:ALA:HB1  | 1:A:387:TYR:HD2  | 2        | 1.53          |
| (1,372)  | 1:A:373:ALA:HB2  | 1:A:387:TYR:HD2  | 2        | 1.53          |
| (1,372)  | 1:A:373:ALA:HB3  | 1:A:387:TYR:HD2  | 2        | 1.53          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD11 | 10       | 1.53          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD12 | 10       | 1.53          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD13 | 10       | 1.53          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD21 | 10       | 1.53          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD22 | 10       | 1.53          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD23 | 10       | 1.53          |
| (1,1254) | 1:A:337:LEU:HD11 | 1:A:340:TYR:HD1  | 10       | 1.53          |
| (1,1254) | 1:A:337:LEU:HD12 | 1:A:340:TYR:HD1  | 10       | 1.53          |
| (1,1254) | 1:A:337:LEU:HD13 | 1:A:340:TYR:HD1  | 10       | 1.53          |
| (1,1254) | 1:A:337:LEU:HD21 | 1:A:340:TYR:HD1  | 10       | 1.53          |
| (1,1254) | 1:A:337:LEU:HD22 | 1:A:340:TYR:HD1  | 10       | 1.53          |
| (1,1254) | 1:A:337:LEU:HD23 | 1:A:340:TYR:HD1  | 10       | 1.53          |
| (1,1222) | 1:A:366:ILE:HG12 | 1:A:387:TYR:HE2  | 2        | 1.53          |
| (1,1222) | 1:A:366:ILE:HG13 | 1:A:387:TYR:HE2  | 2        | 1.53          |
| (1,605)  | 1:A:376:TRP:HE1  | 1:A:390:MET:HG2  | 6        | 1.52          |
| (1,605)  | 1:A:376:TRP:HE1  | 1:A:390:MET:HG3  | 6        | 1.52          |
| (1,605)  | 1:A:376:TRP:HE1  | 1:A:390:MET:HG2  | 8        | 1.52          |
| (1,605)  | 1:A:376:TRP:HE1  | 1:A:390:MET:HG3  | 8        | 1.52          |
| (1,277)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:HD11 | 5        | 1.52          |
| (1,277)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:HD12 | 5        | 1.52          |
| (1,277)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:HD13 | 5        | 1.52          |
| (1,277)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:HD11 | 9        | 1.52          |
| (1,277)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:HD12 | 9        | 1.52          |
| (1,277)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:HD13 | 9        | 1.52          |
| (1,270)  | 1:A:366:ILE:HD11 | 1:A:413:PHE:HZ   | 8        | 1.52          |
| (1,270)  | 1:A:366:ILE:HD12 | 1:A:413:PHE:HZ   | 8        | 1.52          |
| (1,270)  | 1:A:366:ILE:HD13 | 1:A:413:PHE:HZ   | 8        | 1.52          |
| (1,121)  | 1:A:340:TYR:HE1  | 1:A:375:LEU:HB2  | 8        | 1.51          |
| (1,121)  | 1:A:340:TYR:HE1  | 1:A:375:LEU:HB3  | 8        | 1.51          |
| (1,597)  | 1:A:356:TRP:HE1  | 1:A:359:LYS:HE2  | 10       | 1.5           |
| (1,597)  | 1:A:356:TRP:HE1  | 1:A:359:LYS:HE3  | 10       | 1.5           |
| (1,372)  | 1:A:373:ALA:HB1  | 1:A:387:TYR:HD2  | 4        | 1.5           |
| (1,372)  | 1:A:373:ALA:HB2  | 1:A:387:TYR:HD2  | 4        | 1.5           |
| (1,372)  | 1:A:373:ALA:HB3  | 1:A:387:TYR:HD2  | 4        | 1.5           |
| (1,270)  | 1:A:366:ILE:HD11 | 1:A:413:PHE:HZ   | 3        | 1.5           |
| (1,270)  | 1:A:366:ILE:HD12 | 1:A:413:PHE:HZ   | 3        | 1.5           |
| (1,270)  | 1:A:366:ILE:HD13 | 1:A:413:PHE:HZ   | 3        | 1.5           |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD11 | 5        | 1.5           |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD12 | 5        | 1.5           |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD13 | 5        | 1.5           |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD21 | 5        | 1.5           |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD22 | 5        | 1.5           |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD23 | 5        | 1.5           |
| (1,572)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG11 | 10       | 1.49          |
| (1,572)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG12 | 10       | 1.49          |
| (1,572)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG13 | 10       | 1.49          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,397)  | 1:A:366:ILE:HG21 | 1:A:387:TYR:HE2  | 7        | 1.49          |
| (1,397)  | 1:A:366:ILE:HG22 | 1:A:387:TYR:HE2  | 7        | 1.49          |
| (1,397)  | 1:A:366:ILE:HG23 | 1:A:387:TYR:HE2  | 7        | 1.49          |
| (1,396)  | 1:A:366:ILE:HG21 | 1:A:387:TYR:HD2  | 8        | 1.49          |
| (1,396)  | 1:A:366:ILE:HG22 | 1:A:387:TYR:HD2  | 8        | 1.49          |
| (1,396)  | 1:A:366:ILE:HG23 | 1:A:387:TYR:HD2  | 8        | 1.49          |
| (1,364)  | 1:A:403:ILE:HG21 | 1:A:413:PHE:HE2  | 1        | 1.49          |
| (1,364)  | 1:A:403:ILE:HG22 | 1:A:413:PHE:HE2  | 1        | 1.49          |
| (1,364)  | 1:A:403:ILE:HG23 | 1:A:413:PHE:HE2  | 1        | 1.49          |
| (1,361)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HG21 | 6        | 1.49          |
| (1,361)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HG22 | 6        | 1.49          |
| (1,361)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HG23 | 6        | 1.49          |
| (1,1196) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD21 | 5        | 1.49          |
| (1,1196) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD22 | 5        | 1.49          |
| (1,1196) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD23 | 5        | 1.49          |
| (1,1184) | 1:A:405:LYS:HA   | 1:A:413:PHE:HE2  | 7        | 1.49          |
| (1,933)  | 1:A:350:TYR:H    | 1:A:350:TYR:HE2  | 9        | 1.48          |
| (1,360)  | 1:A:403:ILE:HG21 | 1:A:413:PHE:HD2  | 10       | 1.48          |
| (1,360)  | 1:A:403:ILE:HG22 | 1:A:413:PHE:HD2  | 10       | 1.48          |
| (1,360)  | 1:A:403:ILE:HG23 | 1:A:413:PHE:HD2  | 10       | 1.48          |
| (1,277)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:HD11 | 4        | 1.48          |
| (1,277)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:HD12 | 4        | 1.48          |
| (1,277)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:HD13 | 4        | 1.48          |
| (1,203)  | 1:A:345:LEU:HG   | 1:A:355:ARG:HA   | 10       | 1.48          |
| (1,572)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG11 | 6        | 1.47          |
| (1,572)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG12 | 6        | 1.47          |
| (1,572)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG13 | 6        | 1.47          |
| (1,510)  | 1:A:406:GLU:H    | 1:A:412:LEU:HD11 | 1        | 1.47          |
| (1,510)  | 1:A:406:GLU:H    | 1:A:412:LEU:HD12 | 1        | 1.47          |
| (1,510)  | 1:A:406:GLU:H    | 1:A:412:LEU:HD13 | 1        | 1.47          |
| (1,1211) | 1:A:349:ARG:HG2  | 1:A:350:TYR:HE2  | 7        | 1.47          |
| (1,1211) | 1:A:349:ARG:HG3  | 1:A:350:TYR:HE2  | 7        | 1.47          |
| (1,116)  | 1:A:353:PHE:HB2  | 1:A:372:LEU:HG   | 3        | 1.47          |
| (1,1159) | 1:A:369:PRO:HA   | 1:A:387:TYR:HD2  | 8        | 1.47          |
| (1,1470) | 1:A:394:LEU:HD11 | 1:A:413:PHE:HZ   | 9        | 1.46          |
| (1,1470) | 1:A:394:LEU:HD12 | 1:A:413:PHE:HZ   | 9        | 1.46          |
| (1,1470) | 1:A:394:LEU:HD13 | 1:A:413:PHE:HZ   | 9        | 1.46          |
| (1,1470) | 1:A:394:LEU:HD21 | 1:A:413:PHE:HZ   | 9        | 1.46          |
| (1,1470) | 1:A:394:LEU:HD22 | 1:A:413:PHE:HZ   | 9        | 1.46          |
| (1,1470) | 1:A:394:LEU:HD23 | 1:A:413:PHE:HZ   | 9        | 1.46          |
| (1,922)  | 1:A:397:TYR:H    | 1:A:403:ILE:HD11 | 10       | 1.45          |
| (1,922)  | 1:A:397:TYR:H    | 1:A:403:ILE:HD12 | 10       | 1.45          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,922)  | 1:A:397:TYR:H    | 1:A:403:ILE:HD13 | 10       | 1.45          |
| (1,146)  | 1:A:355:ARG:H    | 1:A:365:ARG:HD2  | 8        | 1.45          |
| (1,1157) | 1:A:349:ARG:HG2  | 1:A:350:TYR:HD2  | 1        | 1.45          |
| (1,1157) | 1:A:349:ARG:HG3  | 1:A:350:TYR:HD2  | 1        | 1.45          |
| (1,1081) | 1:A:372:LEU:HG   | 1:A:376:TRP:H    | 6        | 1.45          |
| (1,995)  | 1:A:359:LYS:HD2  | 1:A:363:ILE:H    | 3        | 1.44          |
| (1,995)  | 1:A:359:LYS:HD3  | 1:A:363:ILE:H    | 3        | 1.44          |
| (1,396)  | 1:A:366:ILE:HG21 | 1:A:387:TYR:HD2  | 7        | 1.44          |
| (1,396)  | 1:A:366:ILE:HG22 | 1:A:387:TYR:HD2  | 7        | 1.44          |
| (1,396)  | 1:A:366:ILE:HG23 | 1:A:387:TYR:HD2  | 7        | 1.44          |
| (1,1435) | 1:A:376:TRP:HH2  | 1:A:380:LYS:HE2  | 2        | 1.44          |
| (1,1435) | 1:A:376:TRP:HH2  | 1:A:380:LYS:HE3  | 2        | 1.44          |
| (1,116)  | 1:A:353:PHE:HB2  | 1:A:372:LEU:HG   | 2        | 1.44          |
| (1,1157) | 1:A:349:ARG:HG2  | 1:A:350:TYR:HD2  | 8        | 1.44          |
| (1,1157) | 1:A:349:ARG:HG3  | 1:A:350:TYR:HD2  | 8        | 1.44          |
| (1,633)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:H    | 3        | 1.43          |
| (1,633)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:H    | 3        | 1.43          |
| (1,567)  | 1:A:386:THR:HG21 | 1:A:387:TYR:HB3  | 6        | 1.43          |
| (1,567)  | 1:A:386:THR:HG22 | 1:A:387:TYR:HB3  | 6        | 1.43          |
| (1,567)  | 1:A:386:THR:HG23 | 1:A:387:TYR:HB3  | 6        | 1.43          |
| (1,474)  | 1:A:354:ILE:HG12 | 1:A:355:ARG:HE   | 5        | 1.43          |
| (1,364)  | 1:A:403:ILE:HG21 | 1:A:413:PHE:HE2  | 2        | 1.43          |
| (1,364)  | 1:A:403:ILE:HG22 | 1:A:413:PHE:HE2  | 2        | 1.43          |
| (1,364)  | 1:A:403:ILE:HG23 | 1:A:413:PHE:HE2  | 2        | 1.43          |
| (1,363)  | 1:A:398:TYR:HE2  | 1:A:403:ILE:HG21 | 9        | 1.43          |
| (1,363)  | 1:A:398:TYR:HE2  | 1:A:403:ILE:HG22 | 9        | 1.43          |
| (1,363)  | 1:A:398:TYR:HE2  | 1:A:403:ILE:HG23 | 9        | 1.43          |
| (1,324)  | 1:A:346:SER:H    | 1:A:354:ILE:HD11 | 1        | 1.43          |
| (1,324)  | 1:A:346:SER:H    | 1:A:354:ILE:HD12 | 1        | 1.43          |
| (1,324)  | 1:A:346:SER:H    | 1:A:354:ILE:HD13 | 1        | 1.43          |
| (1,1168) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HG21 | 4        | 1.43          |
| (1,1168) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HG22 | 4        | 1.43          |
| (1,1168) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HG23 | 4        | 1.43          |
| (1,1159) | 1:A:369:PRO:HA   | 1:A:387:TYR:HD2  | 10       | 1.43          |
| (1,1157) | 1:A:349:ARG:HG2  | 1:A:350:TYR:HD2  | 10       | 1.43          |
| (1,1157) | 1:A:349:ARG:HG3  | 1:A:350:TYR:HD2  | 10       | 1.43          |
| (1,933)  | 1:A:350:TYR:H    | 1:A:350:TYR:HE2  | 10       | 1.42          |
| (1,270)  | 1:A:366:ILE:HD11 | 1:A:413:PHE:HZ   | 7        | 1.42          |
| (1,270)  | 1:A:366:ILE:HD12 | 1:A:413:PHE:HZ   | 7        | 1.42          |
| (1,270)  | 1:A:366:ILE:HD13 | 1:A:413:PHE:HZ   | 7        | 1.42          |
| (1,1159) | 1:A:369:PRO:HA   | 1:A:387:TYR:HD2  | 9        | 1.42          |
| (1,1140) | 1:A:375:LEU:HA   | 1:A:378:ASN:HD22 | 5        | 1.42          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,935)  | 1:A:350:TYR:H    | 1:A:350:TYR:HD2  | 6        | 1.41          |
| (1,496)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD11 | 3        | 1.41          |
| (1,496)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD12 | 3        | 1.41          |
| (1,496)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD13 | 3        | 1.41          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD11 | 2        | 1.41          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD12 | 2        | 1.41          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD13 | 2        | 1.41          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD21 | 2        | 1.41          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD22 | 2        | 1.41          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD23 | 2        | 1.41          |
| (1,1243) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HD1  | 3        | 1.41          |
| (1,1243) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HD1  | 3        | 1.41          |
| (1,1243) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HD1  | 3        | 1.41          |
| (1,1243) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HD1  | 3        | 1.41          |
| (1,1243) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HD1  | 3        | 1.41          |
| (1,1243) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HD1  | 3        | 1.41          |
| (1,663)  | 1:A:357:GLU:H    | 1:A:412:LEU:HD21 | 9        | 1.4           |
| (1,663)  | 1:A:357:GLU:H    | 1:A:412:LEU:HD22 | 9        | 1.4           |
| (1,663)  | 1:A:357:GLU:H    | 1:A:412:LEU:HD23 | 9        | 1.4           |
| (1,121)  | 1:A:340:TYR:HE1  | 1:A:375:LEU:HB2  | 5        | 1.4           |
| (1,121)  | 1:A:340:TYR:HE1  | 1:A:375:LEU:HB3  | 5        | 1.4           |
| (1,922)  | 1:A:397:TYR:H    | 1:A:403:ILE:HD11 | 3        | 1.39          |
| (1,922)  | 1:A:397:TYR:H    | 1:A:403:ILE:HD12 | 3        | 1.39          |
| (1,922)  | 1:A:397:TYR:H    | 1:A:403:ILE:HD13 | 3        | 1.39          |
| (1,633)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:H    | 6        | 1.39          |
| (1,633)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:H    | 6        | 1.39          |
| (1,540)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD21 | 10       | 1.39          |
| (1,540)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD22 | 10       | 1.39          |
| (1,540)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD23 | 10       | 1.39          |
| (1,510)  | 1:A:406:GLU:H    | 1:A:412:LEU:HD11 | 9        | 1.39          |
| (1,510)  | 1:A:406:GLU:H    | 1:A:412:LEU:HD12 | 9        | 1.39          |
| (1,510)  | 1:A:406:GLU:H    | 1:A:412:LEU:HD13 | 9        | 1.39          |
| (1,396)  | 1:A:366:ILE:HG21 | 1:A:387:TYR:HD2  | 3        | 1.39          |
| (1,396)  | 1:A:366:ILE:HG22 | 1:A:387:TYR:HD2  | 3        | 1.39          |
| (1,396)  | 1:A:366:ILE:HG23 | 1:A:387:TYR:HD2  | 3        | 1.39          |
| (1,324)  | 1:A:346:SER:H    | 1:A:354:ILE:HD11 | 2        | 1.39          |
| (1,324)  | 1:A:346:SER:H    | 1:A:354:ILE:HD12 | 2        | 1.39          |
| (1,324)  | 1:A:346:SER:H    | 1:A:354:ILE:HD13 | 2        | 1.39          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD11 | 5        | 1.39          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD12 | 5        | 1.39          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD13 | 5        | 1.39          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD21 | 5        | 1.39          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD22 | 5        | 1.39          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD23 | 5        | 1.39          |
| (1,1186) | 1:A:356:TRP:HD1  | 1:A:359:LYS:HE2  | 8        | 1.39          |
| (1,1186) | 1:A:356:TRP:HD1  | 1:A:359:LYS:HE3  | 8        | 1.39          |
| (1,505)  | 1:A:412:LEU:HD11 | 1:A:413:PHE:HE1  | 6        | 1.38          |
| (1,505)  | 1:A:412:LEU:HD12 | 1:A:413:PHE:HE1  | 6        | 1.38          |
| (1,505)  | 1:A:412:LEU:HD13 | 1:A:413:PHE:HE1  | 6        | 1.38          |
| (1,399)  | 1:A:353:PHE:HA   | 1:A:366:ILE:HG21 | 6        | 1.38          |
| (1,399)  | 1:A:353:PHE:HA   | 1:A:366:ILE:HG22 | 6        | 1.38          |
| (1,399)  | 1:A:353:PHE:HA   | 1:A:366:ILE:HG23 | 6        | 1.38          |
| (1,363)  | 1:A:398:TYR:HE2  | 1:A:403:ILE:HG21 | 4        | 1.38          |
| (1,363)  | 1:A:398:TYR:HE2  | 1:A:403:ILE:HG22 | 4        | 1.38          |
| (1,363)  | 1:A:398:TYR:HE2  | 1:A:403:ILE:HG23 | 4        | 1.38          |
| (1,1470) | 1:A:394:LEU:HD11 | 1:A:413:PHE:HZ   | 5        | 1.38          |
| (1,1470) | 1:A:394:LEU:HD12 | 1:A:413:PHE:HZ   | 5        | 1.38          |
| (1,1470) | 1:A:394:LEU:HD13 | 1:A:413:PHE:HZ   | 5        | 1.38          |
| (1,1470) | 1:A:394:LEU:HD21 | 1:A:413:PHE:HZ   | 5        | 1.38          |
| (1,1470) | 1:A:394:LEU:HD22 | 1:A:413:PHE:HZ   | 5        | 1.38          |
| (1,1470) | 1:A:394:LEU:HD23 | 1:A:413:PHE:HZ   | 5        | 1.38          |
| (1,146)  | 1:A:355:ARG:H    | 1:A:365:ARG:HD2  | 9        | 1.38          |
| (1,361)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HG21 | 9        | 1.37          |
| (1,361)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HG22 | 9        | 1.37          |
| (1,361)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HG23 | 9        | 1.37          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD11 | 4        | 1.37          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD12 | 4        | 1.37          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD13 | 4        | 1.37          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD21 | 4        | 1.37          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD22 | 4        | 1.37          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD23 | 4        | 1.37          |
| (1,1222) | 1:A:366:ILE:HG12 | 1:A:387:TYR:HE2  | 1        | 1.37          |
| (1,1222) | 1:A:366:ILE:HG13 | 1:A:387:TYR:HE2  | 1        | 1.37          |
| (1,572)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG11 | 8        | 1.36          |
| (1,572)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG12 | 8        | 1.36          |
| (1,572)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG13 | 8        | 1.36          |
| (1,481)  | 1:A:355:ARG:H    | 1:A:365:ARG:HG2  | 2        | 1.36          |
| (1,372)  | 1:A:373:ALA:HB1  | 1:A:387:TYR:HD2  | 5        | 1.36          |
| (1,372)  | 1:A:373:ALA:HB2  | 1:A:387:TYR:HD2  | 5        | 1.36          |
| (1,372)  | 1:A:373:ALA:HB3  | 1:A:387:TYR:HD2  | 5        | 1.36          |
| (1,361)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HG21 | 10       | 1.36          |
| (1,361)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HG22 | 10       | 1.36          |
| (1,361)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HG23 | 10       | 1.36          |
| (1,285)  | 1:A:398:TYR:HD2  | 1:A:403:ILE:HD11 | 2        | 1.36          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,285)  | 1:A:398:TYR:HD2  | 1:A:403:ILE:HD12 | 2        | 1.36          |
| (1,285)  | 1:A:398:TYR:HD2  | 1:A:403:ILE:HD13 | 2        | 1.36          |
| (1,1203) | 1:A:394:LEU:HA   | 1:A:397:TYR:HE2  | 2        | 1.36          |
| (1,666)  | 1:A:366:ILE:H    | 1:A:413:PHE:HZ   | 6        | 1.35          |
| (1,510)  | 1:A:406:GLU:H    | 1:A:412:LEU:HD11 | 7        | 1.35          |
| (1,510)  | 1:A:406:GLU:H    | 1:A:412:LEU:HD12 | 7        | 1.35          |
| (1,510)  | 1:A:406:GLU:H    | 1:A:412:LEU:HD13 | 7        | 1.35          |
| (1,397)  | 1:A:366:ILE:HG21 | 1:A:387:TYR:HE2  | 8        | 1.35          |
| (1,397)  | 1:A:366:ILE:HG22 | 1:A:387:TYR:HE2  | 8        | 1.35          |
| (1,397)  | 1:A:366:ILE:HG23 | 1:A:387:TYR:HE2  | 8        | 1.35          |
| (1,270)  | 1:A:366:ILE:HD11 | 1:A:413:PHE:HZ   | 2        | 1.35          |
| (1,270)  | 1:A:366:ILE:HD12 | 1:A:413:PHE:HZ   | 2        | 1.35          |
| (1,270)  | 1:A:366:ILE:HD13 | 1:A:413:PHE:HZ   | 2        | 1.35          |
| (1,1209) | 1:A:398:TYR:HE1  | 1:A:405:LYS:HB2  | 10       | 1.35          |
| (1,1209) | 1:A:398:TYR:HE1  | 1:A:405:LYS:HB3  | 10       | 1.35          |
| (1,1168) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HG21 | 9        | 1.35          |
| (1,1168) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HG22 | 9        | 1.35          |
| (1,1168) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HG23 | 9        | 1.35          |
| (1,935)  | 1:A:350:TYR:H    | 1:A:350:TYR:HD2  | 8        | 1.34          |
| (1,500)  | 1:A:336:LEU:HD21 | 1:A:338:TRP:HH2  | 8        | 1.34          |
| (1,500)  | 1:A:336:LEU:HD22 | 1:A:338:TRP:HH2  | 8        | 1.34          |
| (1,500)  | 1:A:336:LEU:HD23 | 1:A:338:TRP:HH2  | 8        | 1.34          |
| (1,270)  | 1:A:366:ILE:HD11 | 1:A:413:PHE:HZ   | 5        | 1.34          |
| (1,270)  | 1:A:366:ILE:HD12 | 1:A:413:PHE:HZ   | 5        | 1.34          |
| (1,270)  | 1:A:366:ILE:HD13 | 1:A:413:PHE:HZ   | 5        | 1.34          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD11 | 10       | 1.34          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD12 | 10       | 1.34          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD13 | 10       | 1.34          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD21 | 10       | 1.34          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD22 | 10       | 1.34          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD23 | 10       | 1.34          |
| (1,1306) | 1:A:344:LEU:HD11 | 1:A:350:TYR:HE1  | 4        | 1.34          |
| (1,1306) | 1:A:344:LEU:HD12 | 1:A:350:TYR:HE1  | 4        | 1.34          |
| (1,1306) | 1:A:344:LEU:HD13 | 1:A:350:TYR:HE1  | 4        | 1.34          |
| (1,1306) | 1:A:344:LEU:HD21 | 1:A:350:TYR:HE1  | 4        | 1.34          |
| (1,1306) | 1:A:344:LEU:HD22 | 1:A:350:TYR:HE1  | 4        | 1.34          |
| (1,1306) | 1:A:344:LEU:HD23 | 1:A:350:TYR:HE1  | 4        | 1.34          |
| (1,1206) | 1:A:397:TYR:HB2  | 1:A:398:TYR:HE2  | 9        | 1.34          |
| (1,88)   | 1:A:370:ASN:HA   | 1:A:387:TYR:HB3  | 2        | 1.33          |
| (1,606)  | 1:A:376:TRP:HE1  | 1:A:390:MET:HA   | 8        | 1.33          |
| (1,345)  | 1:A:365:ARG:HD2  | 1:A:367:VAL:HG21 | 3        | 1.33          |
| (1,345)  | 1:A:365:ARG:HD2  | 1:A:367:VAL:HG22 | 3        | 1.33          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,345)  | 1:A:365:ARG:HD2  | 1:A:367:VAL:HG23 | 3        | 1.33          |
| (1,345)  | 1:A:365:ARG:HD2  | 1:A:367:VAL:HG21 | 7        | 1.33          |
| (1,345)  | 1:A:365:ARG:HD2  | 1:A:367:VAL:HG22 | 7        | 1.33          |
| (1,345)  | 1:A:365:ARG:HD2  | 1:A:367:VAL:HG23 | 7        | 1.33          |
| (1,935)  | 1:A:350:TYR:H    | 1:A:350:TYR:HD2  | 4        | 1.32          |
| (1,866)  | 1:A:352:ASN:H    | 1:A:352:ASN:HD21 | 10       | 1.32          |
| (1,406)  | 1:A:397:TYR:HD1  | 1:A:402:ILE:HG21 | 2        | 1.32          |
| (1,406)  | 1:A:397:TYR:HD1  | 1:A:402:ILE:HG22 | 2        | 1.32          |
| (1,406)  | 1:A:397:TYR:HD1  | 1:A:402:ILE:HG23 | 2        | 1.32          |
| (1,146)  | 1:A:355:ARG:H    | 1:A:365:ARG:HD2  | 4        | 1.32          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD11 | 10       | 1.32          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD12 | 10       | 1.32          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD13 | 10       | 1.32          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD21 | 10       | 1.32          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD22 | 10       | 1.32          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD23 | 10       | 1.32          |
| (1,638)  | 1:A:406:GLU:H    | 1:A:413:PHE:HD2  | 5        | 1.31          |
| (1,605)  | 1:A:376:TRP:HE1  | 1:A:390:MET:HG2  | 1        | 1.31          |
| (1,605)  | 1:A:376:TRP:HE1  | 1:A:390:MET:HG3  | 1        | 1.31          |
| (1,605)  | 1:A:376:TRP:HE1  | 1:A:390:MET:HG2  | 10       | 1.31          |
| (1,605)  | 1:A:376:TRP:HE1  | 1:A:390:MET:HG3  | 10       | 1.31          |
| (1,510)  | 1:A:406:GLU:H    | 1:A:412:LEU:HD11 | 8        | 1.31          |
| (1,510)  | 1:A:406:GLU:H    | 1:A:412:LEU:HD12 | 8        | 1.31          |
| (1,510)  | 1:A:406:GLU:H    | 1:A:412:LEU:HD13 | 8        | 1.31          |
| (1,500)  | 1:A:336:LEU:HD21 | 1:A:338:TRP:HH2  | 4        | 1.31          |
| (1,500)  | 1:A:336:LEU:HD22 | 1:A:338:TRP:HH2  | 4        | 1.31          |
| (1,500)  | 1:A:336:LEU:HD23 | 1:A:338:TRP:HH2  | 4        | 1.31          |
| (1,397)  | 1:A:366:ILE:HG21 | 1:A:387:TYR:HE2  | 3        | 1.31          |
| (1,397)  | 1:A:366:ILE:HG22 | 1:A:387:TYR:HE2  | 3        | 1.31          |
| (1,397)  | 1:A:366:ILE:HG23 | 1:A:387:TYR:HE2  | 3        | 1.31          |
| (1,372)  | 1:A:373:ALA:HB1  | 1:A:387:TYR:HD2  | 9        | 1.31          |
| (1,372)  | 1:A:373:ALA:HB2  | 1:A:387:TYR:HD2  | 9        | 1.31          |
| (1,372)  | 1:A:373:ALA:HB3  | 1:A:387:TYR:HD2  | 9        | 1.31          |
| (1,286)  | 1:A:403:ILE:HD11 | 1:A:413:PHE:HD2  | 4        | 1.31          |
| (1,286)  | 1:A:403:ILE:HD12 | 1:A:413:PHE:HD2  | 4        | 1.31          |
| (1,286)  | 1:A:403:ILE:HD13 | 1:A:413:PHE:HD2  | 4        | 1.31          |
| (1,1305) | 1:A:344:LEU:HD11 | 1:A:347:ASP:HB2  | 10       | 1.31          |
| (1,1305) | 1:A:344:LEU:HD12 | 1:A:347:ASP:HB2  | 10       | 1.31          |
| (1,1305) | 1:A:344:LEU:HD13 | 1:A:347:ASP:HB2  | 10       | 1.31          |
| (1,1305) | 1:A:344:LEU:HD21 | 1:A:347:ASP:HB2  | 10       | 1.31          |
| (1,1305) | 1:A:344:LEU:HD22 | 1:A:347:ASP:HB2  | 10       | 1.31          |
| (1,1305) | 1:A:344:LEU:HD23 | 1:A:347:ASP:HB2  | 10       | 1.31          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1161) | 1:A:387:TYR:HD2  | 1:A:390:MET:HB2  | 6        | 1.31          |
| (1,1161) | 1:A:387:TYR:HD2  | 1:A:390:MET:HB3  | 6        | 1.31          |
| (1,191)  | 1:A:406:GLU:HA   | 1:A:412:LEU:HB3  | 1        | 1.3           |
| (1,1469) | 1:A:394:LEU:HD11 | 1:A:397:TYR:HD2  | 6        | 1.3           |
| (1,1469) | 1:A:394:LEU:HD12 | 1:A:397:TYR:HD2  | 6        | 1.3           |
| (1,1469) | 1:A:394:LEU:HD13 | 1:A:397:TYR:HD2  | 6        | 1.3           |
| (1,1469) | 1:A:394:LEU:HD21 | 1:A:397:TYR:HD2  | 6        | 1.3           |
| (1,1469) | 1:A:394:LEU:HD22 | 1:A:397:TYR:HD2  | 6        | 1.3           |
| (1,1469) | 1:A:394:LEU:HD23 | 1:A:397:TYR:HD2  | 6        | 1.3           |
| (1,1198) | 1:A:396:HIS:HD2  | 1:A:397:TYR:HA   | 5        | 1.3           |
| (1,1196) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD21 | 7        | 1.3           |
| (1,1196) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD22 | 7        | 1.3           |
| (1,1196) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD23 | 7        | 1.3           |
| (1,505)  | 1:A:412:LEU:HD11 | 1:A:413:PHE:HE1  | 4        | 1.29          |
| (1,505)  | 1:A:412:LEU:HD12 | 1:A:413:PHE:HE1  | 4        | 1.29          |
| (1,505)  | 1:A:412:LEU:HD13 | 1:A:413:PHE:HE1  | 4        | 1.29          |
| (1,191)  | 1:A:406:GLU:HA   | 1:A:412:LEU:HB3  | 10       | 1.29          |
| (1,1184) | 1:A:405:LYS:HA   | 1:A:413:PHE:HE2  | 3        | 1.29          |
| (1,1058) | 1:A:373:ALA:H    | 1:A:387:TYR:HB2  | 6        | 1.29          |
| (1,663)  | 1:A:357:GLU:H    | 1:A:412:LEU:HD21 | 5        | 1.28          |
| (1,663)  | 1:A:357:GLU:H    | 1:A:412:LEU:HD22 | 5        | 1.28          |
| (1,663)  | 1:A:357:GLU:H    | 1:A:412:LEU:HD23 | 5        | 1.28          |
| (1,203)  | 1:A:345:LEU:HG   | 1:A:355:ARG:HA   | 6        | 1.28          |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD11 | 6        | 1.28          |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD12 | 6        | 1.28          |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD13 | 6        | 1.28          |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD21 | 6        | 1.28          |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD22 | 6        | 1.28          |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD23 | 6        | 1.28          |
| (1,1244) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HE1  | 3        | 1.28          |
| (1,1244) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HE1  | 3        | 1.28          |
| (1,1244) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HE1  | 3        | 1.28          |
| (1,1244) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HE1  | 3        | 1.28          |
| (1,1244) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HE1  | 3        | 1.28          |
| (1,1244) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HE1  | 3        | 1.28          |
| (1,1186) | 1:A:356:TRP:HD1  | 1:A:359:LYS:HE2  | 2        | 1.28          |
| (1,1186) | 1:A:356:TRP:HD1  | 1:A:359:LYS:HE3  | 2        | 1.28          |
| (1,887)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:H    | 2        | 1.27          |
| (1,887)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:H    | 4        | 1.27          |
| (1,887)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:H    | 5        | 1.27          |
| (1,424)  | 1:A:405:LYS:HA   | 1:A:413:PHE:HD2  | 5        | 1.27          |
| (1,287)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HD11 | 9        | 1.27          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,287)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HD12 | 9        | 1.27          |
| (1,287)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HD13 | 9        | 1.27          |
| (1,1211) | 1:A:349:ARG:HG2  | 1:A:350:TYR:HE2  | 3        | 1.27          |
| (1,1211) | 1:A:349:ARG:HG3  | 1:A:350:TYR:HE2  | 3        | 1.27          |
| (1,1161) | 1:A:387:TYR:HD2  | 1:A:390:MET:HB2  | 1        | 1.27          |
| (1,1161) | 1:A:387:TYR:HD2  | 1:A:390:MET:HB3  | 1        | 1.27          |
| (1,995)  | 1:A:359:LYS:HD2  | 1:A:363:ILE:H    | 4        | 1.26          |
| (1,995)  | 1:A:359:LYS:HD3  | 1:A:363:ILE:H    | 4        | 1.26          |
| (1,88)   | 1:A:370:ASN:HA   | 1:A:387:TYR:HB3  | 7        | 1.26          |
| (1,559)  | 1:A:417:LYS:HE2  | 1:A:418:THR:HG21 | 1        | 1.26          |
| (1,559)  | 1:A:417:LYS:HE2  | 1:A:418:THR:HG22 | 1        | 1.26          |
| (1,559)  | 1:A:417:LYS:HE2  | 1:A:418:THR:HG23 | 1        | 1.26          |
| (1,559)  | 1:A:417:LYS:HE3  | 1:A:418:THR:HG21 | 1        | 1.26          |
| (1,559)  | 1:A:417:LYS:HE3  | 1:A:418:THR:HG22 | 1        | 1.26          |
| (1,559)  | 1:A:417:LYS:HE3  | 1:A:418:THR:HG23 | 1        | 1.26          |
| (1,401)  | 1:A:353:PHE:HB3  | 1:A:366:ILE:HG21 | 6        | 1.26          |
| (1,401)  | 1:A:353:PHE:HB3  | 1:A:366:ILE:HG22 | 6        | 1.26          |
| (1,401)  | 1:A:353:PHE:HB3  | 1:A:366:ILE:HG23 | 6        | 1.26          |
| (1,1171) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG21 | 8        | 1.26          |
| (1,1171) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG22 | 8        | 1.26          |
| (1,1171) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG23 | 8        | 1.26          |
| (1,824)  | 1:A:375:LEU:HB2  | 1:A:378:ASN:HD21 | 5        | 1.25          |
| (1,824)  | 1:A:375:LEU:HB3  | 1:A:378:ASN:HD21 | 5        | 1.25          |
| (1,65)   | 1:A:355:ARG:HB2  | 1:A:367:VAL:HB   | 1        | 1.25          |
| (1,65)   | 1:A:355:ARG:HB3  | 1:A:367:VAL:HB   | 1        | 1.25          |
| (1,65)   | 1:A:355:ARG:HB2  | 1:A:367:VAL:HB   | 10       | 1.25          |
| (1,65)   | 1:A:355:ARG:HB3  | 1:A:367:VAL:HB   | 10       | 1.25          |
| (1,396)  | 1:A:366:ILE:HG21 | 1:A:387:TYR:HD2  | 1        | 1.25          |
| (1,396)  | 1:A:366:ILE:HG22 | 1:A:387:TYR:HD2  | 1        | 1.25          |
| (1,396)  | 1:A:366:ILE:HG23 | 1:A:387:TYR:HD2  | 1        | 1.25          |
| (1,360)  | 1:A:403:ILE:HG21 | 1:A:413:PHE:HD2  | 2        | 1.25          |
| (1,360)  | 1:A:403:ILE:HG22 | 1:A:413:PHE:HD2  | 2        | 1.25          |
| (1,360)  | 1:A:403:ILE:HG23 | 1:A:413:PHE:HD2  | 2        | 1.25          |
| (1,1254) | 1:A:337:LEU:HD11 | 1:A:340:TYR:HD1  | 2        | 1.25          |
| (1,1254) | 1:A:337:LEU:HD12 | 1:A:340:TYR:HD1  | 2        | 1.25          |
| (1,1254) | 1:A:337:LEU:HD13 | 1:A:340:TYR:HD1  | 2        | 1.25          |
| (1,1254) | 1:A:337:LEU:HD21 | 1:A:340:TYR:HD1  | 2        | 1.25          |
| (1,1254) | 1:A:337:LEU:HD22 | 1:A:340:TYR:HD1  | 2        | 1.25          |
| (1,1254) | 1:A:337:LEU:HD23 | 1:A:340:TYR:HD1  | 2        | 1.25          |
| (1,1171) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG21 | 1        | 1.25          |
| (1,1171) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG22 | 1        | 1.25          |
| (1,1171) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG23 | 1        | 1.25          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1171) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG21 | 6        | 1.25          |
| (1,1171) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG22 | 6        | 1.25          |
| (1,1171) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG23 | 6        | 1.25          |
| (1,1163) | 1:A:398:TYR:HA   | 1:A:398:TYR:HD2  | 3        | 1.25          |
| (1,806)  | 1:A:365:ARG:H    | 1:A:365:ARG:HG3  | 1        | 1.24          |
| (1,65)   | 1:A:355:ARG:HB2  | 1:A:367:VAL:HB   | 3        | 1.24          |
| (1,65)   | 1:A:355:ARG:HB3  | 1:A:367:VAL:HB   | 3        | 1.24          |
| (1,287)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HD11 | 10       | 1.24          |
| (1,287)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HD12 | 10       | 1.24          |
| (1,287)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HD13 | 10       | 1.24          |
| (1,1245) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HZ2  | 3        | 1.24          |
| (1,1245) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HZ2  | 3        | 1.24          |
| (1,1245) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HZ2  | 3        | 1.24          |
| (1,1245) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HZ2  | 3        | 1.24          |
| (1,1245) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HZ2  | 3        | 1.24          |
| (1,1245) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HZ2  | 3        | 1.24          |
| (1,1222) | 1:A:366:ILE:HG12 | 1:A:387:TYR:HE2  | 7        | 1.24          |
| (1,1222) | 1:A:366:ILE:HG13 | 1:A:387:TYR:HE2  | 7        | 1.24          |
| (1,1192) | 1:A:376:TRP:HH2  | 1:A:380:LYS:HD2  | 9        | 1.24          |
| (1,1192) | 1:A:376:TRP:HH2  | 1:A:380:LYS:HD3  | 9        | 1.24          |
| (1,118)  | 1:A:353:PHE:HB3  | 1:A:372:LEU:HG   | 3        | 1.24          |
| (1,1163) | 1:A:398:TYR:HA   | 1:A:398:TYR:HD2  | 8        | 1.24          |
| (1,1139) | 1:A:374:ARG:HD2  | 1:A:378:ASN:HD22 | 5        | 1.24          |
| (1,1139) | 1:A:374:ARG:HD3  | 1:A:378:ASN:HD22 | 5        | 1.24          |
| (1,1114) | 1:A:354:ILE:H    | 1:A:367:VAL:HG21 | 5        | 1.24          |
| (1,1114) | 1:A:354:ILE:H    | 1:A:367:VAL:HG22 | 5        | 1.24          |
| (1,1114) | 1:A:354:ILE:H    | 1:A:367:VAL:HG23 | 5        | 1.24          |
| (1,572)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG11 | 3        | 1.23          |
| (1,572)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG12 | 3        | 1.23          |
| (1,572)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG13 | 3        | 1.23          |
| (1,397)  | 1:A:366:ILE:HG21 | 1:A:387:TYR:HE2  | 10       | 1.23          |
| (1,397)  | 1:A:366:ILE:HG22 | 1:A:387:TYR:HE2  | 10       | 1.23          |
| (1,397)  | 1:A:366:ILE:HG23 | 1:A:387:TYR:HE2  | 10       | 1.23          |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD11 | 5        | 1.23          |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD12 | 5        | 1.23          |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD13 | 5        | 1.23          |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD21 | 5        | 1.23          |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD22 | 5        | 1.23          |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD23 | 5        | 1.23          |
| (1,1198) | 1:A:396:HIS:HD2  | 1:A:397:TYR:HA   | 10       | 1.23          |
| (1,633)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:H    | 9        | 1.22          |
| (1,633)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:H    | 9        | 1.22          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1494) | 1:A:405:LYS:HG2  | 1:A:413:PHE:HE2  | 6        | 1.22          |
| (1,1494) | 1:A:405:LYS:HG3  | 1:A:413:PHE:HE2  | 6        | 1.22          |
| (1,1199) | 1:A:393:ALA:HA   | 1:A:396:HIS:HD2  | 3        | 1.22          |
| (1,1199) | 1:A:393:ALA:HA   | 1:A:396:HIS:HD2  | 4        | 1.22          |
| (1,1186) | 1:A:356:TRP:HD1  | 1:A:359:LYS:HE2  | 1        | 1.22          |
| (1,1186) | 1:A:356:TRP:HD1  | 1:A:359:LYS:HE3  | 1        | 1.22          |
| (1,1163) | 1:A:398:TYR:HA   | 1:A:398:TYR:HD2  | 1        | 1.22          |
| (1,1163) | 1:A:398:TYR:HA   | 1:A:398:TYR:HD2  | 6        | 1.22          |
| (1,1163) | 1:A:398:TYR:HA   | 1:A:398:TYR:HD2  | 10       | 1.22          |
| (1,1157) | 1:A:349:ARG:HG2  | 1:A:350:TYR:HD2  | 2        | 1.22          |
| (1,1157) | 1:A:349:ARG:HG3  | 1:A:350:TYR:HD2  | 2        | 1.22          |
| (1,567)  | 1:A:386:THR:HG21 | 1:A:387:TYR:HB3  | 3        | 1.21          |
| (1,567)  | 1:A:386:THR:HG22 | 1:A:387:TYR:HB3  | 3        | 1.21          |
| (1,567)  | 1:A:386:THR:HG23 | 1:A:387:TYR:HB3  | 3        | 1.21          |
| (1,345)  | 1:A:365:ARG:HD2  | 1:A:367:VAL:HG21 | 8        | 1.21          |
| (1,345)  | 1:A:365:ARG:HD2  | 1:A:367:VAL:HG22 | 8        | 1.21          |
| (1,345)  | 1:A:365:ARG:HD2  | 1:A:367:VAL:HG23 | 8        | 1.21          |
| (1,1494) | 1:A:405:LYS:HG2  | 1:A:413:PHE:HE2  | 4        | 1.21          |
| (1,1494) | 1:A:405:LYS:HG3  | 1:A:413:PHE:HE2  | 4        | 1.21          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD11 | 7        | 1.21          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD12 | 7        | 1.21          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD13 | 7        | 1.21          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD21 | 7        | 1.21          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD22 | 7        | 1.21          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD23 | 7        | 1.21          |
| (1,1330) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HE   | 4        | 1.21          |
| (1,1330) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HE   | 4        | 1.21          |
| (1,1330) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HE   | 4        | 1.21          |
| (1,1330) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HE   | 4        | 1.21          |
| (1,1330) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HE   | 4        | 1.21          |
| (1,1330) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HE   | 4        | 1.21          |
| (1,1157) | 1:A:349:ARG:HG2  | 1:A:350:TYR:HD2  | 6        | 1.21          |
| (1,1157) | 1:A:349:ARG:HG3  | 1:A:350:TYR:HD2  | 6        | 1.21          |
| (1,922)  | 1:A:397:TYR:H    | 1:A:403:ILE:HD11 | 6        | 1.2           |
| (1,922)  | 1:A:397:TYR:H    | 1:A:403:ILE:HD12 | 6        | 1.2           |
| (1,922)  | 1:A:397:TYR:H    | 1:A:403:ILE:HD13 | 6        | 1.2           |
| (1,887)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:H    | 8        | 1.2           |
| (1,887)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:H    | 10       | 1.2           |
| (1,401)  | 1:A:353:PHE:HB3  | 1:A:366:ILE:HG21 | 2        | 1.2           |
| (1,401)  | 1:A:353:PHE:HB3  | 1:A:366:ILE:HG22 | 2        | 1.2           |
| (1,401)  | 1:A:353:PHE:HB3  | 1:A:366:ILE:HG23 | 2        | 1.2           |
| (1,287)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HD11 | 4        | 1.2           |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,287)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HD12 | 4        | 1.2           |
| (1,287)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HD13 | 4        | 1.2           |
| (1,1341) | 1:A:345:LEU:HD11 | 1:A:367:VAL:HG21 | 10       | 1.2           |
| (1,1341) | 1:A:345:LEU:HD11 | 1:A:367:VAL:HG22 | 10       | 1.2           |
| (1,1341) | 1:A:345:LEU:HD11 | 1:A:367:VAL:HG23 | 10       | 1.2           |
| (1,1341) | 1:A:345:LEU:HD12 | 1:A:367:VAL:HG21 | 10       | 1.2           |
| (1,1341) | 1:A:345:LEU:HD12 | 1:A:367:VAL:HG22 | 10       | 1.2           |
| (1,1341) | 1:A:345:LEU:HD12 | 1:A:367:VAL:HG23 | 10       | 1.2           |
| (1,1341) | 1:A:345:LEU:HD13 | 1:A:367:VAL:HG21 | 10       | 1.2           |
| (1,1341) | 1:A:345:LEU:HD13 | 1:A:367:VAL:HG22 | 10       | 1.2           |
| (1,1341) | 1:A:345:LEU:HD13 | 1:A:367:VAL:HG23 | 10       | 1.2           |
| (1,1341) | 1:A:345:LEU:HD21 | 1:A:367:VAL:HG21 | 10       | 1.2           |
| (1,1341) | 1:A:345:LEU:HD21 | 1:A:367:VAL:HG22 | 10       | 1.2           |
| (1,1341) | 1:A:345:LEU:HD21 | 1:A:367:VAL:HG23 | 10       | 1.2           |
| (1,1341) | 1:A:345:LEU:HD22 | 1:A:367:VAL:HG21 | 10       | 1.2           |
| (1,1341) | 1:A:345:LEU:HD22 | 1:A:367:VAL:HG22 | 10       | 1.2           |
| (1,1341) | 1:A:345:LEU:HD22 | 1:A:367:VAL:HG23 | 10       | 1.2           |
| (1,1341) | 1:A:345:LEU:HD23 | 1:A:367:VAL:HG21 | 10       | 1.2           |
| (1,1341) | 1:A:345:LEU:HD23 | 1:A:367:VAL:HG22 | 10       | 1.2           |
| (1,1341) | 1:A:345:LEU:HD23 | 1:A:367:VAL:HG23 | 10       | 1.2           |
| (1,1161) | 1:A:387:TYR:HD2  | 1:A:390:MET:HB2  | 2        | 1.2           |
| (1,1161) | 1:A:387:TYR:HD2  | 1:A:390:MET:HB3  | 2        | 1.2           |
| (1,935)  | 1:A:350:TYR:H    | 1:A:350:TYR:HD2  | 3        | 1.19          |
| (1,887)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:H    | 1        | 1.19          |
| (1,887)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:H    | 7        | 1.19          |
| (1,84)   | 1:A:358:ASP:HA   | 1:A:360:GLU:HG2  | 1        | 1.19          |
| (1,84)   | 1:A:358:ASP:HA   | 1:A:360:GLU:HG3  | 1        | 1.19          |
| (1,806)  | 1:A:365:ARG:H    | 1:A:365:ARG:HG3  | 2        | 1.19          |
| (1,569)  | 1:A:354:ILE:H    | 1:A:367:VAL:HG11 | 5        | 1.19          |
| (1,569)  | 1:A:354:ILE:H    | 1:A:367:VAL:HG12 | 5        | 1.19          |
| (1,569)  | 1:A:354:ILE:H    | 1:A:367:VAL:HG13 | 5        | 1.19          |
| (1,231)  | 1:A:340:TYR:HE1  | 1:A:376:TRP:HA   | 4        | 1.19          |
| (1,231)  | 1:A:340:TYR:HE1  | 1:A:376:TRP:HA   | 7        | 1.19          |
| (1,1435) | 1:A:376:TRP:HH2  | 1:A:380:LYS:HE2  | 6        | 1.19          |
| (1,1435) | 1:A:376:TRP:HH2  | 1:A:380:LYS:HE3  | 6        | 1.19          |
| (1,1433) | 1:A:376:TRP:HE1  | 1:A:385:MET:HG2  | 2        | 1.19          |
| (1,1433) | 1:A:376:TRP:HE1  | 1:A:385:MET:HG3  | 2        | 1.19          |
| (1,1199) | 1:A:393:ALA:HA   | 1:A:396:HIS:HD2  | 1        | 1.19          |
| (1,1161) | 1:A:387:TYR:HD2  | 1:A:390:MET:HB2  | 7        | 1.19          |
| (1,1161) | 1:A:387:TYR:HD2  | 1:A:390:MET:HB3  | 7        | 1.19          |
| (1,995)  | 1:A:359:LYS:HD2  | 1:A:363:ILE:H    | 9        | 1.18          |
| (1,995)  | 1:A:359:LYS:HD3  | 1:A:363:ILE:H    | 9        | 1.18          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,933)  | 1:A:350:TYR:H    | 1:A:350:TYR:HE2  | 6        | 1.18          |
| (1,401)  | 1:A:353:PHE:HB3  | 1:A:366:ILE:HG21 | 7        | 1.18          |
| (1,401)  | 1:A:353:PHE:HB3  | 1:A:366:ILE:HG22 | 7        | 1.18          |
| (1,401)  | 1:A:353:PHE:HB3  | 1:A:366:ILE:HG23 | 7        | 1.18          |
| (1,372)  | 1:A:373:ALA:HB1  | 1:A:387:TYR:HD2  | 10       | 1.18          |
| (1,372)  | 1:A:373:ALA:HB2  | 1:A:387:TYR:HD2  | 10       | 1.18          |
| (1,372)  | 1:A:373:ALA:HB3  | 1:A:387:TYR:HD2  | 10       | 1.18          |
| (1,360)  | 1:A:403:ILE:HG21 | 1:A:413:PHE:HD2  | 1        | 1.18          |
| (1,360)  | 1:A:403:ILE:HG22 | 1:A:413:PHE:HD2  | 1        | 1.18          |
| (1,360)  | 1:A:403:ILE:HG23 | 1:A:413:PHE:HD2  | 1        | 1.18          |
| (1,277)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:HD11 | 8        | 1.18          |
| (1,277)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:HD12 | 8        | 1.18          |
| (1,277)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:HD13 | 8        | 1.18          |
| (1,187)  | 1:A:365:ARG:HA   | 1:A:412:LEU:HD21 | 7        | 1.18          |
| (1,187)  | 1:A:365:ARG:HA   | 1:A:412:LEU:HD22 | 7        | 1.18          |
| (1,187)  | 1:A:365:ARG:HA   | 1:A:412:LEU:HD23 | 7        | 1.18          |
| (1,1141) | 1:A:352:ASN:H    | 1:A:352:ASN:HD22 | 10       | 1.18          |
| (1,605)  | 1:A:376:TRP:HE1  | 1:A:390:MET:HG2  | 9        | 1.17          |
| (1,605)  | 1:A:376:TRP:HE1  | 1:A:390:MET:HG3  | 9        | 1.17          |
| (1,26)   | 1:A:387:TYR:HA   | 1:A:390:MET:HE1  | 4        | 1.17          |
| (1,26)   | 1:A:387:TYR:HA   | 1:A:390:MET:HE2  | 4        | 1.17          |
| (1,26)   | 1:A:387:TYR:HA   | 1:A:390:MET:HE3  | 4        | 1.17          |
| (1,167)  | 1:A:425:GLY:HA2  | 1:A:426:ARG:HG2  | 8        | 1.17          |
| (1,167)  | 1:A:425:GLY:HA2  | 1:A:426:ARG:HG3  | 8        | 1.17          |
| (1,167)  | 1:A:425:GLY:HA3  | 1:A:426:ARG:HG2  | 8        | 1.17          |
| (1,167)  | 1:A:425:GLY:HA3  | 1:A:426:ARG:HG3  | 8        | 1.17          |
| (1,1351) | 1:A:349:ARG:HD2  | 1:A:350:TYR:HE2  | 9        | 1.17          |
| (1,1351) | 1:A:349:ARG:HD3  | 1:A:350:TYR:HE2  | 9        | 1.17          |
| (1,1161) | 1:A:387:TYR:HD2  | 1:A:390:MET:HB2  | 9        | 1.17          |
| (1,1161) | 1:A:387:TYR:HD2  | 1:A:390:MET:HB3  | 9        | 1.17          |
| (1,65)   | 1:A:355:ARG:HB2  | 1:A:367:VAL:HB   | 7        | 1.16          |
| (1,65)   | 1:A:355:ARG:HB3  | 1:A:367:VAL:HB   | 7        | 1.16          |
| (1,606)  | 1:A:376:TRP:HE1  | 1:A:390:MET:HA   | 1        | 1.16          |
| (1,364)  | 1:A:403:ILE:HG21 | 1:A:413:PHE:HE2  | 5        | 1.16          |
| (1,364)  | 1:A:403:ILE:HG22 | 1:A:413:PHE:HE2  | 5        | 1.16          |
| (1,364)  | 1:A:403:ILE:HG23 | 1:A:413:PHE:HE2  | 5        | 1.16          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD11 | 9        | 1.16          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD12 | 9        | 1.16          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD13 | 9        | 1.16          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD21 | 9        | 1.16          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD22 | 9        | 1.16          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD23 | 9        | 1.16          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,116)  | 1:A:353:PHE:HB2  | 1:A:372:LEU:HG   | 1        | 1.16          |
| (1,887)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:H    | 6        | 1.15          |
| (1,597)  | 1:A:356:TRP:HE1  | 1:A:359:LYS:HE2  | 1        | 1.15          |
| (1,597)  | 1:A:356:TRP:HE1  | 1:A:359:LYS:HE3  | 1        | 1.15          |
| (1,559)  | 1:A:417:LYS:HE2  | 1:A:418:THR:HG21 | 9        | 1.15          |
| (1,559)  | 1:A:417:LYS:HE2  | 1:A:418:THR:HG22 | 9        | 1.15          |
| (1,559)  | 1:A:417:LYS:HE2  | 1:A:418:THR:HG23 | 9        | 1.15          |
| (1,559)  | 1:A:417:LYS:HE3  | 1:A:418:THR:HG21 | 9        | 1.15          |
| (1,559)  | 1:A:417:LYS:HE3  | 1:A:418:THR:HG22 | 9        | 1.15          |
| (1,559)  | 1:A:417:LYS:HE3  | 1:A:418:THR:HG23 | 9        | 1.15          |
| (1,360)  | 1:A:403:ILE:HG21 | 1:A:413:PHE:HD2  | 6        | 1.15          |
| (1,360)  | 1:A:403:ILE:HG22 | 1:A:413:PHE:HD2  | 6        | 1.15          |
| (1,360)  | 1:A:403:ILE:HG23 | 1:A:413:PHE:HD2  | 6        | 1.15          |
| (1,324)  | 1:A:346:SER:H    | 1:A:354:ILE:HD11 | 9        | 1.15          |
| (1,324)  | 1:A:346:SER:H    | 1:A:354:ILE:HD12 | 9        | 1.15          |
| (1,324)  | 1:A:346:SER:H    | 1:A:354:ILE:HD13 | 9        | 1.15          |
| (1,1376) | 1:A:359:LYS:HA   | 1:A:362:LYS:HG2  | 10       | 1.15          |
| (1,1376) | 1:A:359:LYS:HA   | 1:A:362:LYS:HG3  | 10       | 1.15          |
| (1,1171) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG21 | 3        | 1.15          |
| (1,1171) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG22 | 3        | 1.15          |
| (1,1171) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG23 | 3        | 1.15          |
| (1,1163) | 1:A:398:TYR:HA   | 1:A:398:TYR:HD2  | 5        | 1.15          |
| (1,116)  | 1:A:353:PHE:HB2  | 1:A:372:LEU:HG   | 7        | 1.15          |
| (1,935)  | 1:A:350:TYR:H    | 1:A:350:TYR:HD2  | 7        | 1.14          |
| (1,887)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:H    | 3        | 1.14          |
| (1,887)  | 1:A:340:TYR:HD1  | 1:A:341:VAL:H    | 9        | 1.14          |
| (1,84)   | 1:A:358:ASP:HA   | 1:A:360:GLU:HG2  | 3        | 1.14          |
| (1,84)   | 1:A:358:ASP:HA   | 1:A:360:GLU:HG3  | 3        | 1.14          |
| (1,401)  | 1:A:353:PHE:HB3  | 1:A:366:ILE:HG21 | 9        | 1.14          |
| (1,401)  | 1:A:353:PHE:HB3  | 1:A:366:ILE:HG22 | 9        | 1.14          |
| (1,401)  | 1:A:353:PHE:HB3  | 1:A:366:ILE:HG23 | 9        | 1.14          |
| (1,263)  | 1:A:348:SER:HA   | 1:A:351:GLU:HG2  | 6        | 1.14          |
| (1,263)  | 1:A:348:SER:HA   | 1:A:351:GLU:HG3  | 6        | 1.14          |
| (1,214)  | 1:A:373:ALA:HB1  | 1:A:385:MET:HA   | 2        | 1.14          |
| (1,214)  | 1:A:373:ALA:HB2  | 1:A:385:MET:HA   | 2        | 1.14          |
| (1,214)  | 1:A:373:ALA:HB3  | 1:A:385:MET:HA   | 2        | 1.14          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD11 | 3        | 1.14          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD12 | 3        | 1.14          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD13 | 3        | 1.14          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD21 | 3        | 1.14          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD22 | 3        | 1.14          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD23 | 3        | 1.14          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1246) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HH2  | 10       | 1.14          |
| (1,1246) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HH2  | 10       | 1.14          |
| (1,1246) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HH2  | 10       | 1.14          |
| (1,1246) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HH2  | 10       | 1.14          |
| (1,1246) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HH2  | 10       | 1.14          |
| (1,1246) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HH2  | 10       | 1.14          |
| (1,1218) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HG   | 5        | 1.14          |
| (1,1186) | 1:A:356:TRP:HD1  | 1:A:359:LYS:HE2  | 4        | 1.14          |
| (1,1186) | 1:A:356:TRP:HD1  | 1:A:359:LYS:HE3  | 4        | 1.14          |
| (1,65)   | 1:A:355:ARG:HB2  | 1:A:367:VAL:HB   | 2        | 1.13          |
| (1,65)   | 1:A:355:ARG:HB3  | 1:A:367:VAL:HB   | 2        | 1.13          |
| (1,638)  | 1:A:406:GLU:H    | 1:A:413:PHE:HD2  | 7        | 1.13          |
| (1,606)  | 1:A:376:TRP:HE1  | 1:A:390:MET:HA   | 7        | 1.13          |
| (1,597)  | 1:A:356:TRP:HE1  | 1:A:359:LYS:HE2  | 4        | 1.13          |
| (1,597)  | 1:A:356:TRP:HE1  | 1:A:359:LYS:HE3  | 4        | 1.13          |
| (1,572)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG11 | 1        | 1.13          |
| (1,572)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG12 | 1        | 1.13          |
| (1,572)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG13 | 1        | 1.13          |
| (1,372)  | 1:A:373:ALA:HB1  | 1:A:387:TYR:HD2  | 3        | 1.13          |
| (1,372)  | 1:A:373:ALA:HB2  | 1:A:387:TYR:HD2  | 3        | 1.13          |
| (1,372)  | 1:A:373:ALA:HB3  | 1:A:387:TYR:HD2  | 3        | 1.13          |
| (1,361)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HG21 | 7        | 1.13          |
| (1,361)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HG22 | 7        | 1.13          |
| (1,361)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HG23 | 7        | 1.13          |
| (1,345)  | 1:A:365:ARG:HD2  | 1:A:367:VAL:HG21 | 10       | 1.13          |
| (1,345)  | 1:A:365:ARG:HD2  | 1:A:367:VAL:HG22 | 10       | 1.13          |
| (1,345)  | 1:A:365:ARG:HD2  | 1:A:367:VAL:HG23 | 10       | 1.13          |
| (1,287)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HD11 | 1        | 1.13          |
| (1,287)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HD12 | 1        | 1.13          |
| (1,287)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HD13 | 1        | 1.13          |
| (1,1172) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HG   | 3        | 1.13          |
| (1,1110) | 1:A:327:HIS:HE1  | 1:A:328:MET:H    | 3        | 1.13          |
| (1,933)  | 1:A:350:TYR:H    | 1:A:350:TYR:HE2  | 4        | 1.12          |
| (1,933)  | 1:A:350:TYR:H    | 1:A:350:TYR:HE2  | 8        | 1.12          |
| (1,286)  | 1:A:403:ILE:HD11 | 1:A:413:PHE:HD2  | 10       | 1.12          |
| (1,286)  | 1:A:403:ILE:HD12 | 1:A:413:PHE:HD2  | 10       | 1.12          |
| (1,286)  | 1:A:403:ILE:HD13 | 1:A:413:PHE:HD2  | 10       | 1.12          |
| (1,231)  | 1:A:340:TYR:HE1  | 1:A:376:TRP:HA   | 3        | 1.12          |
| (1,1180) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HA   | 10       | 1.12          |
| (1,1171) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG21 | 10       | 1.12          |
| (1,1171) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG22 | 10       | 1.12          |
| (1,1171) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG23 | 10       | 1.12          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1156) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD11 | 5        | 1.12          |
| (1,1156) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD12 | 5        | 1.12          |
| (1,1156) | 1:A:350:TYR:HD1  | 1:A:375:LEU:HD13 | 5        | 1.12          |
| (1,1)    | 1:A:373:ALA:HB1  | 1:A:385:MET:HE1  | 2        | 1.12          |
| (1,1)    | 1:A:373:ALA:HB1  | 1:A:385:MET:HE2  | 2        | 1.12          |
| (1,1)    | 1:A:373:ALA:HB1  | 1:A:385:MET:HE3  | 2        | 1.12          |
| (1,1)    | 1:A:373:ALA:HB2  | 1:A:385:MET:HE1  | 2        | 1.12          |
| (1,1)    | 1:A:373:ALA:HB2  | 1:A:385:MET:HE2  | 2        | 1.12          |
| (1,1)    | 1:A:373:ALA:HB2  | 1:A:385:MET:HE3  | 2        | 1.12          |
| (1,1)    | 1:A:373:ALA:HB3  | 1:A:385:MET:HE1  | 2        | 1.12          |
| (1,1)    | 1:A:373:ALA:HB3  | 1:A:385:MET:HE2  | 2        | 1.12          |
| (1,1)    | 1:A:373:ALA:HB3  | 1:A:385:MET:HE3  | 2        | 1.12          |
| (1,922)  | 1:A:397:TYR:H    | 1:A:403:ILE:HD11 | 7        | 1.11          |
| (1,922)  | 1:A:397:TYR:H    | 1:A:403:ILE:HD12 | 7        | 1.11          |
| (1,922)  | 1:A:397:TYR:H    | 1:A:403:ILE:HD13 | 7        | 1.11          |
| (1,806)  | 1:A:365:ARG:H    | 1:A:365:ARG:HG3  | 8        | 1.11          |
| (1,606)  | 1:A:376:TRP:HE1  | 1:A:390:MET:HA   | 9        | 1.11          |
| (1,52)   | 1:A:357:GLU:HB2  | 1:A:412:LEU:HD21 | 5        | 1.11          |
| (1,52)   | 1:A:357:GLU:HB2  | 1:A:412:LEU:HD22 | 5        | 1.11          |
| (1,52)   | 1:A:357:GLU:HB2  | 1:A:412:LEU:HD23 | 5        | 1.11          |
| (1,52)   | 1:A:357:GLU:HB3  | 1:A:412:LEU:HD21 | 5        | 1.11          |
| (1,52)   | 1:A:357:GLU:HB3  | 1:A:412:LEU:HD22 | 5        | 1.11          |
| (1,52)   | 1:A:357:GLU:HB3  | 1:A:412:LEU:HD23 | 5        | 1.11          |
| (1,52)   | 1:A:357:GLU:HB2  | 1:A:412:LEU:HD21 | 8        | 1.11          |
| (1,52)   | 1:A:357:GLU:HB2  | 1:A:412:LEU:HD22 | 8        | 1.11          |
| (1,52)   | 1:A:357:GLU:HB2  | 1:A:412:LEU:HD23 | 8        | 1.11          |
| (1,52)   | 1:A:357:GLU:HB3  | 1:A:412:LEU:HD21 | 8        | 1.11          |
| (1,52)   | 1:A:357:GLU:HB3  | 1:A:412:LEU:HD22 | 8        | 1.11          |
| (1,52)   | 1:A:357:GLU:HB3  | 1:A:412:LEU:HD23 | 8        | 1.11          |
| (1,477)  | 1:A:425:GLY:H    | 1:A:426:ARG:HG2  | 7        | 1.11          |
| (1,477)  | 1:A:425:GLY:H    | 1:A:426:ARG:HG3  | 7        | 1.11          |
| (1,1209) | 1:A:398:TYR:HE1  | 1:A:405:LYS:HB2  | 6        | 1.11          |
| (1,1209) | 1:A:398:TYR:HE1  | 1:A:405:LYS:HB3  | 6        | 1.11          |
| (1,1199) | 1:A:393:ALA:HA   | 1:A:396:HIS:HD2  | 10       | 1.11          |
| (1,116)  | 1:A:353:PHE:HB2  | 1:A:372:LEU:HG   | 8        | 1.11          |
| (1,1157) | 1:A:349:ARG:HG2  | 1:A:350:TYR:HD2  | 7        | 1.11          |
| (1,1157) | 1:A:349:ARG:HG3  | 1:A:350:TYR:HD2  | 7        | 1.11          |
| (1,396)  | 1:A:366:ILE:HG21 | 1:A:387:TYR:HD2  | 5        | 1.1           |
| (1,396)  | 1:A:366:ILE:HG22 | 1:A:387:TYR:HD2  | 5        | 1.1           |
| (1,396)  | 1:A:366:ILE:HG23 | 1:A:387:TYR:HD2  | 5        | 1.1           |
| (1,167)  | 1:A:425:GLY:HA2  | 1:A:426:ARG:HG2  | 7        | 1.1           |
| (1,167)  | 1:A:425:GLY:HA2  | 1:A:426:ARG:HG3  | 7        | 1.1           |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,167)  | 1:A:425:GLY:HA3  | 1:A:426:ARG:HG2  | 7        | 1.1           |
| (1,167)  | 1:A:425:GLY:HA3  | 1:A:426:ARG:HG3  | 7        | 1.1           |
| (1,1470) | 1:A:394:LEU:HD11 | 1:A:413:PHE:HZ   | 1        | 1.1           |
| (1,1470) | 1:A:394:LEU:HD12 | 1:A:413:PHE:HZ   | 1        | 1.1           |
| (1,1470) | 1:A:394:LEU:HD13 | 1:A:413:PHE:HZ   | 1        | 1.1           |
| (1,1470) | 1:A:394:LEU:HD21 | 1:A:413:PHE:HZ   | 1        | 1.1           |
| (1,1470) | 1:A:394:LEU:HD22 | 1:A:413:PHE:HZ   | 1        | 1.1           |
| (1,1470) | 1:A:394:LEU:HD23 | 1:A:413:PHE:HZ   | 1        | 1.1           |
| (1,1243) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HD1  | 6        | 1.1           |
| (1,1243) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HD1  | 6        | 1.1           |
| (1,1243) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HD1  | 6        | 1.1           |
| (1,1243) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HD1  | 6        | 1.1           |
| (1,1243) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HD1  | 6        | 1.1           |
| (1,1243) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HD1  | 6        | 1.1           |
| (1,1198) | 1:A:396:HIS:HD2  | 1:A:397:TYR:HA   | 8        | 1.1           |
| (1,832)  | 1:A:418:THR:H    | 1:A:422:ILE:H    | 9        | 1.09          |
| (1,65)   | 1:A:355:ARG:HB2  | 1:A:367:VAL:HB   | 6        | 1.09          |
| (1,65)   | 1:A:355:ARG:HB3  | 1:A:367:VAL:HB   | 6        | 1.09          |
| (1,505)  | 1:A:412:LEU:HD11 | 1:A:413:PHE:HE1  | 7        | 1.09          |
| (1,505)  | 1:A:412:LEU:HD12 | 1:A:413:PHE:HE1  | 7        | 1.09          |
| (1,505)  | 1:A:412:LEU:HD13 | 1:A:413:PHE:HE1  | 7        | 1.09          |
| (1,474)  | 1:A:354:ILE:HG12 | 1:A:355:ARG:HE   | 4        | 1.09          |
| (1,329)  | 1:A:348:SER:HB2  | 1:A:351:GLU:HG2  | 7        | 1.09          |
| (1,329)  | 1:A:348:SER:HB2  | 1:A:351:GLU:HG3  | 7        | 1.09          |
| (1,329)  | 1:A:348:SER:HB3  | 1:A:351:GLU:HG2  | 7        | 1.09          |
| (1,329)  | 1:A:348:SER:HB3  | 1:A:351:GLU:HG3  | 7        | 1.09          |
| (1,277)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:HD11 | 6        | 1.09          |
| (1,277)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:HD12 | 6        | 1.09          |
| (1,277)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:HD13 | 6        | 1.09          |
| (1,231)  | 1:A:340:TYR:HE1  | 1:A:376:TRP:HA   | 2        | 1.09          |
| (1,1280) | 1:A:340:TYR:HE1  | 1:A:375:LEU:HD11 | 9        | 1.09          |
| (1,1280) | 1:A:340:TYR:HE1  | 1:A:375:LEU:HD12 | 9        | 1.09          |
| (1,1280) | 1:A:340:TYR:HE1  | 1:A:375:LEU:HD13 | 9        | 1.09          |
| (1,1280) | 1:A:340:TYR:HE1  | 1:A:375:LEU:HD21 | 9        | 1.09          |
| (1,1280) | 1:A:340:TYR:HE1  | 1:A:375:LEU:HD22 | 9        | 1.09          |
| (1,1280) | 1:A:340:TYR:HE1  | 1:A:375:LEU:HD23 | 9        | 1.09          |
| (1,1163) | 1:A:398:TYR:HA   | 1:A:398:TYR:HD2  | 7        | 1.09          |
| (1,1116) | 1:A:354:ILE:H    | 1:A:368:ASP:HB2  | 1        | 1.09          |
| (1,1116) | 1:A:354:ILE:H    | 1:A:368:ASP:HB2  | 7        | 1.09          |
| (1,806)  | 1:A:365:ARG:H    | 1:A:365:ARG:HG3  | 4        | 1.08          |
| (1,806)  | 1:A:365:ARG:H    | 1:A:365:ARG:HG3  | 5        | 1.08          |
| (1,666)  | 1:A:366:ILE:H    | 1:A:413:PHE:HZ   | 2        | 1.08          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,643)  | 1:A:406:GLU:H    | 1:A:413:PHE:HB3  | 10       | 1.08          |
| (1,435)  | 1:A:370:ASN:HA   | 1:A:387:TYR:HB2  | 7        | 1.08          |
| (1,279)  | 1:A:363:ILE:HD11 | 1:A:412:LEU:HD11 | 9        | 1.08          |
| (1,279)  | 1:A:363:ILE:HD11 | 1:A:412:LEU:HD12 | 9        | 1.08          |
| (1,279)  | 1:A:363:ILE:HD11 | 1:A:412:LEU:HD13 | 9        | 1.08          |
| (1,279)  | 1:A:363:ILE:HD12 | 1:A:412:LEU:HD11 | 9        | 1.08          |
| (1,279)  | 1:A:363:ILE:HD12 | 1:A:412:LEU:HD12 | 9        | 1.08          |
| (1,279)  | 1:A:363:ILE:HD12 | 1:A:412:LEU:HD13 | 9        | 1.08          |
| (1,279)  | 1:A:363:ILE:HD13 | 1:A:412:LEU:HD11 | 9        | 1.08          |
| (1,279)  | 1:A:363:ILE:HD13 | 1:A:412:LEU:HD12 | 9        | 1.08          |
| (1,279)  | 1:A:363:ILE:HD13 | 1:A:412:LEU:HD13 | 9        | 1.08          |
| (1,1494) | 1:A:405:LYS:HG2  | 1:A:413:PHE:HE2  | 9        | 1.08          |
| (1,1494) | 1:A:405:LYS:HG3  | 1:A:413:PHE:HE2  | 9        | 1.08          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD11 | 3        | 1.08          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD12 | 3        | 1.08          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD13 | 3        | 1.08          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD21 | 3        | 1.08          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD22 | 3        | 1.08          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD23 | 3        | 1.08          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD11 | 3        | 1.08          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD12 | 3        | 1.08          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD13 | 3        | 1.08          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD21 | 3        | 1.08          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD22 | 3        | 1.08          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD23 | 3        | 1.08          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD11 | 3        | 1.08          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD12 | 3        | 1.08          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD13 | 3        | 1.08          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD21 | 3        | 1.08          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD22 | 3        | 1.08          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD23 | 3        | 1.08          |
| (1,1116) | 1:A:354:ILE:H    | 1:A:368:ASP:HB2  | 5        | 1.08          |
| (1,1116) | 1:A:354:ILE:H    | 1:A:368:ASP:HB2  | 6        | 1.08          |
| (1,1070) | 1:A:417:LYS:HE2  | 1:A:421:GLU:H    | 4        | 1.08          |
| (1,1070) | 1:A:417:LYS:HE3  | 1:A:421:GLU:H    | 4        | 1.08          |
| (1,82)   | 1:A:352:ASN:HB2  | 1:A:367:VAL:HG11 | 10       | 1.07          |
| (1,82)   | 1:A:352:ASN:HB2  | 1:A:367:VAL:HG12 | 10       | 1.07          |
| (1,82)   | 1:A:352:ASN:HB2  | 1:A:367:VAL:HG13 | 10       | 1.07          |
| (1,806)  | 1:A:365:ARG:H    | 1:A:365:ARG:HG3  | 7        | 1.07          |
| (1,806)  | 1:A:365:ARG:H    | 1:A:365:ARG:HG3  | 10       | 1.07          |
| (1,385)  | 1:A:358:ASP:HA   | 1:A:363:ILE:HG21 | 7        | 1.07          |
| (1,385)  | 1:A:358:ASP:HA   | 1:A:363:ILE:HG22 | 7        | 1.07          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,385)  | 1:A:358:ASP:HA   | 1:A:363:ILE:HG23 | 7        | 1.07          |
| (1,21)   | 1:A:354:ILE:HG21 | 1:A:355:ARG:HE   | 10       | 1.07          |
| (1,21)   | 1:A:354:ILE:HG22 | 1:A:355:ARG:HE   | 10       | 1.07          |
| (1,21)   | 1:A:354:ILE:HG23 | 1:A:355:ARG:HE   | 10       | 1.07          |
| (1,146)  | 1:A:355:ARG:H    | 1:A:365:ARG:HD2  | 10       | 1.07          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD11 | 8        | 1.07          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD12 | 8        | 1.07          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD13 | 8        | 1.07          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD21 | 8        | 1.07          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD22 | 8        | 1.07          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD23 | 8        | 1.07          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD11 | 8        | 1.07          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD12 | 8        | 1.07          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD13 | 8        | 1.07          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD21 | 8        | 1.07          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD22 | 8        | 1.07          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD23 | 8        | 1.07          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD11 | 8        | 1.07          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD12 | 8        | 1.07          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD13 | 8        | 1.07          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD21 | 8        | 1.07          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD22 | 8        | 1.07          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD23 | 8        | 1.07          |
| (1,1171) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG21 | 2        | 1.07          |
| (1,1171) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG22 | 2        | 1.07          |
| (1,1171) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG23 | 2        | 1.07          |
| (1,1140) | 1:A:375:LEU:HA   | 1:A:378:ASN:HD22 | 10       | 1.07          |
| (1,1116) | 1:A:354:ILE:H    | 1:A:368:ASP:HB2  | 8        | 1.07          |
| (1,88)   | 1:A:370:ASN:HA   | 1:A:387:TYR:HB3  | 5        | 1.06          |
| (1,84)   | 1:A:358:ASP:HA   | 1:A:360:GLU:HG2  | 7        | 1.06          |
| (1,84)   | 1:A:358:ASP:HA   | 1:A:360:GLU:HG3  | 7        | 1.06          |
| (1,84)   | 1:A:358:ASP:HA   | 1:A:360:GLU:HG2  | 9        | 1.06          |
| (1,84)   | 1:A:358:ASP:HA   | 1:A:360:GLU:HG3  | 9        | 1.06          |
| (1,806)  | 1:A:365:ARG:H    | 1:A:365:ARG:HG3  | 9        | 1.06          |
| (1,65)   | 1:A:355:ARG:HB2  | 1:A:367:VAL:HB   | 5        | 1.06          |
| (1,65)   | 1:A:355:ARG:HB3  | 1:A:367:VAL:HB   | 5        | 1.06          |
| (1,279)  | 1:A:363:ILE:HD11 | 1:A:412:LEU:HD11 | 8        | 1.06          |
| (1,279)  | 1:A:363:ILE:HD11 | 1:A:412:LEU:HD12 | 8        | 1.06          |
| (1,279)  | 1:A:363:ILE:HD11 | 1:A:412:LEU:HD13 | 8        | 1.06          |
| (1,279)  | 1:A:363:ILE:HD12 | 1:A:412:LEU:HD11 | 8        | 1.06          |
| (1,279)  | 1:A:363:ILE:HD12 | 1:A:412:LEU:HD12 | 8        | 1.06          |
| (1,279)  | 1:A:363:ILE:HD12 | 1:A:412:LEU:HD13 | 8        | 1.06          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,279)  | 1:A:363:ILE:HD13 | 1:A:412:LEU:HD11 | 8        | 1.06          |
| (1,279)  | 1:A:363:ILE:HD13 | 1:A:412:LEU:HD12 | 8        | 1.06          |
| (1,279)  | 1:A:363:ILE:HD13 | 1:A:412:LEU:HD13 | 8        | 1.06          |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD11 | 1        | 1.06          |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD12 | 1        | 1.06          |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD13 | 1        | 1.06          |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD21 | 1        | 1.06          |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD22 | 1        | 1.06          |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD23 | 1        | 1.06          |
| (1,1163) | 1:A:398:TYR:HA   | 1:A:398:TYR:HD2  | 9        | 1.06          |
| (1,806)  | 1:A:365:ARG:H    | 1:A:365:ARG:HG3  | 6        | 1.05          |
| (1,399)  | 1:A:353:PHE:HA   | 1:A:366:ILE:HG21 | 2        | 1.05          |
| (1,399)  | 1:A:353:PHE:HA   | 1:A:366:ILE:HG22 | 2        | 1.05          |
| (1,399)  | 1:A:353:PHE:HA   | 1:A:366:ILE:HG23 | 2        | 1.05          |
| (1,385)  | 1:A:358:ASP:HA   | 1:A:363:ILE:HG21 | 5        | 1.05          |
| (1,385)  | 1:A:358:ASP:HA   | 1:A:363:ILE:HG22 | 5        | 1.05          |
| (1,385)  | 1:A:358:ASP:HA   | 1:A:363:ILE:HG23 | 5        | 1.05          |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD11 | 9        | 1.05          |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD12 | 9        | 1.05          |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD13 | 9        | 1.05          |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD21 | 9        | 1.05          |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD22 | 9        | 1.05          |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD23 | 9        | 1.05          |
| (1,1330) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HE   | 5        | 1.05          |
| (1,1330) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HE   | 5        | 1.05          |
| (1,1330) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HE   | 5        | 1.05          |
| (1,1330) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HE   | 5        | 1.05          |
| (1,1330) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HE   | 5        | 1.05          |
| (1,1330) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HE   | 5        | 1.05          |
| (1,1218) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HG   | 4        | 1.05          |
| (1,1196) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD21 | 2        | 1.05          |
| (1,1196) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD22 | 2        | 1.05          |
| (1,1196) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD23 | 2        | 1.05          |
| (1,866)  | 1:A:352:ASN:H    | 1:A:352:ASN:HD21 | 1        | 1.04          |
| (1,806)  | 1:A:365:ARG:H    | 1:A:365:ARG:HG3  | 3        | 1.04          |
| (1,496)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD11 | 4        | 1.04          |
| (1,496)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD12 | 4        | 1.04          |
| (1,496)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD13 | 4        | 1.04          |
| (1,345)  | 1:A:365:ARG:HD2  | 1:A:367:VAL:HG21 | 9        | 1.04          |
| (1,345)  | 1:A:365:ARG:HD2  | 1:A:367:VAL:HG22 | 9        | 1.04          |
| (1,345)  | 1:A:365:ARG:HD2  | 1:A:367:VAL:HG23 | 9        | 1.04          |
| (1,327)  | 1:A:344:LEU:H    | 1:A:354:ILE:HD11 | 5        | 1.04          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,327)  | 1:A:344:LEU:H    | 1:A:354:ILE:HD12 | 5        | 1.04          |
| (1,327)  | 1:A:344:LEU:H    | 1:A:354:ILE:HD13 | 5        | 1.04          |
| (1,287)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HD11 | 7        | 1.04          |
| (1,287)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HD12 | 7        | 1.04          |
| (1,287)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HD13 | 7        | 1.04          |
| (1,1494) | 1:A:405:LYS:HG2  | 1:A:413:PHE:HE2  | 10       | 1.04          |
| (1,1494) | 1:A:405:LYS:HG3  | 1:A:413:PHE:HE2  | 10       | 1.04          |
| (1,643)  | 1:A:406:GLU:H    | 1:A:413:PHE:HB3  | 1        | 1.03          |
| (1,572)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG11 | 7        | 1.03          |
| (1,572)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG12 | 7        | 1.03          |
| (1,572)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG13 | 7        | 1.03          |
| (1,265)  | 1:A:391:SER:HA   | 1:A:394:LEU:HG   | 4        | 1.03          |
| (1,203)  | 1:A:345:LEU:HG   | 1:A:355:ARG:HA   | 9        | 1.03          |
| (1,1329) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HD2  | 6        | 1.03          |
| (1,1329) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HD3  | 6        | 1.03          |
| (1,1329) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HD2  | 6        | 1.03          |
| (1,1329) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HD3  | 6        | 1.03          |
| (1,1329) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HD2  | 6        | 1.03          |
| (1,1329) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HD3  | 6        | 1.03          |
| (1,1329) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HD2  | 6        | 1.03          |
| (1,1329) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HD3  | 6        | 1.03          |
| (1,1329) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HD2  | 6        | 1.03          |
| (1,1329) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HD3  | 6        | 1.03          |
| (1,1329) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HD2  | 6        | 1.03          |
| (1,1329) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HD3  | 6        | 1.03          |
| (1,1199) | 1:A:393:ALA:HA   | 1:A:396:HIS:HD2  | 9        | 1.03          |
| (1,1198) | 1:A:396:HIS:HD2  | 1:A:397:TYR:HA   | 1        | 1.03          |
| (1,1180) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HA   | 2        | 1.03          |
| (1,1163) | 1:A:398:TYR:HA   | 1:A:398:TYR:HD2  | 4        | 1.03          |
| (1,1116) | 1:A:354:ILE:H    | 1:A:368:ASP:HB2  | 2        | 1.03          |
| (1,1110) | 1:A:327:HIS:HE1  | 1:A:328:MET:H    | 7        | 1.03          |
| (1,540)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD21 | 6        | 1.02          |
| (1,540)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD22 | 6        | 1.02          |
| (1,540)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD23 | 6        | 1.02          |
| (1,385)  | 1:A:358:ASP:HA   | 1:A:363:ILE:HG21 | 8        | 1.02          |
| (1,385)  | 1:A:358:ASP:HA   | 1:A:363:ILE:HG22 | 8        | 1.02          |
| (1,385)  | 1:A:358:ASP:HA   | 1:A:363:ILE:HG23 | 8        | 1.02          |
| (1,364)  | 1:A:403:ILE:HG21 | 1:A:413:PHE:HE2  | 9        | 1.02          |
| (1,364)  | 1:A:403:ILE:HG22 | 1:A:413:PHE:HE2  | 9        | 1.02          |
| (1,364)  | 1:A:403:ILE:HG23 | 1:A:413:PHE:HE2  | 9        | 1.02          |
| (1,360)  | 1:A:403:ILE:HG21 | 1:A:413:PHE:HD2  | 5        | 1.02          |
| (1,360)  | 1:A:403:ILE:HG22 | 1:A:413:PHE:HD2  | 5        | 1.02          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,360)  | 1:A:403:ILE:HG23 | 1:A:413:PHE:HD2  | 5        | 1.02          |
| (1,327)  | 1:A:344:LEU:H    | 1:A:354:ILE:HD11 | 4        | 1.02          |
| (1,327)  | 1:A:344:LEU:H    | 1:A:354:ILE:HD12 | 4        | 1.02          |
| (1,327)  | 1:A:344:LEU:H    | 1:A:354:ILE:HD13 | 4        | 1.02          |
| (1,324)  | 1:A:346:SER:H    | 1:A:354:ILE:HD11 | 10       | 1.02          |
| (1,324)  | 1:A:346:SER:H    | 1:A:354:ILE:HD12 | 10       | 1.02          |
| (1,324)  | 1:A:346:SER:H    | 1:A:354:ILE:HD13 | 10       | 1.02          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD11 | 1        | 1.02          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD12 | 1        | 1.02          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD13 | 1        | 1.02          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD21 | 1        | 1.02          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD22 | 1        | 1.02          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD23 | 1        | 1.02          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD11 | 1        | 1.02          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD12 | 1        | 1.02          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD13 | 1        | 1.02          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD21 | 1        | 1.02          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD22 | 1        | 1.02          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD23 | 1        | 1.02          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD11 | 1        | 1.02          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD12 | 1        | 1.02          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD13 | 1        | 1.02          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD21 | 1        | 1.02          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD22 | 1        | 1.02          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD23 | 1        | 1.02          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD11 | 10       | 1.02          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD12 | 10       | 1.02          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD13 | 10       | 1.02          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD21 | 10       | 1.02          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD22 | 10       | 1.02          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD23 | 10       | 1.02          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD11 | 10       | 1.02          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD12 | 10       | 1.02          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD13 | 10       | 1.02          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD21 | 10       | 1.02          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD22 | 10       | 1.02          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD23 | 10       | 1.02          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD11 | 10       | 1.02          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD12 | 10       | 1.02          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD13 | 10       | 1.02          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD21 | 10       | 1.02          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD22 | 10       | 1.02          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD23 | 10       | 1.02          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD11 | 6        | 1.02          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD12 | 6        | 1.02          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD13 | 6        | 1.02          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD21 | 6        | 1.02          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD22 | 6        | 1.02          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD23 | 6        | 1.02          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD11 | 9        | 1.02          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD12 | 9        | 1.02          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD13 | 9        | 1.02          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD21 | 9        | 1.02          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD22 | 9        | 1.02          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD23 | 9        | 1.02          |
| (1,1199) | 1:A:393:ALA:HA   | 1:A:396:HIS:HD2  | 8        | 1.02          |
| (1,1191) | 1:A:336:LEU:HB2  | 1:A:338:TRP:HD1  | 3        | 1.02          |
| (1,1191) | 1:A:336:LEU:HB3  | 1:A:338:TRP:HD1  | 3        | 1.02          |
| (1,1116) | 1:A:354:ILE:H    | 1:A:368:ASP:HB2  | 3        | 1.02          |
| (1,1116) | 1:A:354:ILE:H    | 1:A:368:ASP:HB2  | 9        | 1.02          |
| (1,1109) | 1:A:354:ILE:H    | 1:A:355:ARG:HE   | 6        | 1.02          |
| (1,780)  | 1:A:387:TYR:HD1  | 1:A:388:GLU:H    | 3        | 1.01          |
| (1,712)  | 1:A:404:ARG:H    | 1:A:416:MET:HG2  | 1        | 1.01          |
| (1,712)  | 1:A:404:ARG:H    | 1:A:416:MET:HG3  | 1        | 1.01          |
| (1,572)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG11 | 5        | 1.01          |
| (1,572)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG12 | 5        | 1.01          |
| (1,572)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG13 | 5        | 1.01          |
| (1,567)  | 1:A:386:THR:HG21 | 1:A:387:TYR:HB3  | 10       | 1.01          |
| (1,567)  | 1:A:386:THR:HG22 | 1:A:387:TYR:HB3  | 10       | 1.01          |
| (1,567)  | 1:A:386:THR:HG23 | 1:A:387:TYR:HB3  | 10       | 1.01          |
| (1,401)  | 1:A:353:PHE:HB3  | 1:A:366:ILE:HG21 | 5        | 1.01          |
| (1,401)  | 1:A:353:PHE:HB3  | 1:A:366:ILE:HG22 | 5        | 1.01          |
| (1,401)  | 1:A:353:PHE:HB3  | 1:A:366:ILE:HG23 | 5        | 1.01          |
| (1,231)  | 1:A:340:TYR:HE1  | 1:A:376:TRP:HA   | 10       | 1.01          |
| (1,203)  | 1:A:345:LEU:HG   | 1:A:355:ARG:HA   | 7        | 1.01          |
| (1,203)  | 1:A:345:LEU:HG   | 1:A:355:ARG:HA   | 8        | 1.01          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD11 | 2        | 1.01          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD12 | 2        | 1.01          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD13 | 2        | 1.01          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD21 | 2        | 1.01          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD22 | 2        | 1.01          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD23 | 2        | 1.01          |
| (1,1201) | 1:A:394:LEU:HG   | 1:A:397:TYR:HE2  | 5        | 1.01          |
| (1,118)  | 1:A:353:PHE:HB3  | 1:A:372:LEU:HG   | 2        | 1.01          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1116) | 1:A:354:ILE:H    | 1:A:368:ASP:HB2  | 4        | 1.01          |
| (1,1116) | 1:A:354:ILE:H    | 1:A:368:ASP:HB2  | 10       | 1.01          |
| (1,832)  | 1:A:418:THR:H    | 1:A:422:ILE:H    | 5        | 1.0           |
| (1,385)  | 1:A:358:ASP:HA   | 1:A:363:ILE:HG21 | 6        | 1.0           |
| (1,385)  | 1:A:358:ASP:HA   | 1:A:363:ILE:HG22 | 6        | 1.0           |
| (1,385)  | 1:A:358:ASP:HA   | 1:A:363:ILE:HG23 | 6        | 1.0           |
| (1,335)  | 1:A:361:SER:HB3  | 1:A:363:ILE:HB   | 9        | 1.0           |
| (1,151)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:H    | 10       | 1.0           |
| (1,1245) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HZ2  | 8        | 1.0           |
| (1,1245) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HZ2  | 8        | 1.0           |
| (1,1245) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HZ2  | 8        | 1.0           |
| (1,1245) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HZ2  | 8        | 1.0           |
| (1,1245) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HZ2  | 8        | 1.0           |
| (1,1245) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HZ2  | 8        | 1.0           |
| (1,1243) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HD1  | 7        | 1.0           |
| (1,1243) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HD1  | 7        | 1.0           |
| (1,1243) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HD1  | 7        | 1.0           |
| (1,1243) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HD1  | 7        | 1.0           |
| (1,1243) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HD1  | 7        | 1.0           |
| (1,1243) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HD1  | 7        | 1.0           |
| (1,1157) | 1:A:349:ARG:HG2  | 1:A:350:TYR:HD2  | 3        | 1.0           |
| (1,1157) | 1:A:349:ARG:HG3  | 1:A:350:TYR:HD2  | 3        | 1.0           |
| (1,995)  | 1:A:359:LYS:HD2  | 1:A:363:ILE:H    | 7        | 0.99          |
| (1,995)  | 1:A:359:LYS:HD3  | 1:A:363:ILE:H    | 7        | 0.99          |
| (1,477)  | 1:A:425:GLY:H    | 1:A:426:ARG:HG2  | 8        | 0.99          |
| (1,477)  | 1:A:425:GLY:H    | 1:A:426:ARG:HG3  | 8        | 0.99          |
| (1,462)  | 1:A:417:LYS:HD2  | 1:A:418:THR:H    | 7        | 0.99          |
| (1,462)  | 1:A:417:LYS:HD3  | 1:A:418:THR:H    | 7        | 0.99          |
| (1,372)  | 1:A:373:ALA:HB1  | 1:A:387:TYR:HD2  | 8        | 0.99          |
| (1,372)  | 1:A:373:ALA:HB2  | 1:A:387:TYR:HD2  | 8        | 0.99          |
| (1,372)  | 1:A:373:ALA:HB3  | 1:A:387:TYR:HD2  | 8        | 0.99          |
| (1,324)  | 1:A:346:SER:H    | 1:A:354:ILE:HD11 | 3        | 0.99          |
| (1,324)  | 1:A:346:SER:H    | 1:A:354:ILE:HD12 | 3        | 0.99          |
| (1,324)  | 1:A:346:SER:H    | 1:A:354:ILE:HD13 | 3        | 0.99          |
| (1,1180) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HA   | 3        | 0.99          |
| (1,1161) | 1:A:387:TYR:HD2  | 1:A:390:MET:HB2  | 5        | 0.99          |
| (1,1161) | 1:A:387:TYR:HD2  | 1:A:390:MET:HB3  | 5        | 0.99          |
| (1,904)  | 1:A:366:ILE:H    | 1:A:368:ASP:H    | 7        | 0.98          |
| (1,780)  | 1:A:387:TYR:HD1  | 1:A:388:GLU:H    | 8        | 0.98          |
| (1,65)   | 1:A:355:ARG:HB2  | 1:A:367:VAL:HB   | 4        | 0.98          |
| (1,65)   | 1:A:355:ARG:HB3  | 1:A:367:VAL:HB   | 4        | 0.98          |
| (1,633)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:H    | 8        | 0.98          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,633)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:H    | 8        | 0.98          |
| (1,597)  | 1:A:356:TRP:HE1  | 1:A:359:LYS:HE2  | 2        | 0.98          |
| (1,597)  | 1:A:356:TRP:HE1  | 1:A:359:LYS:HE3  | 2        | 0.98          |
| (1,1375) | 1:A:357:GLU:HG2  | 1:A:412:LEU:HA   | 3        | 0.98          |
| (1,1375) | 1:A:357:GLU:HG3  | 1:A:412:LEU:HA   | 3        | 0.98          |
| (1,1337) | 1:A:345:LEU:HD11 | 1:A:357:GLU:H    | 5        | 0.98          |
| (1,1337) | 1:A:345:LEU:HD12 | 1:A:357:GLU:H    | 5        | 0.98          |
| (1,1337) | 1:A:345:LEU:HD13 | 1:A:357:GLU:H    | 5        | 0.98          |
| (1,1337) | 1:A:345:LEU:HD21 | 1:A:357:GLU:H    | 5        | 0.98          |
| (1,1337) | 1:A:345:LEU:HD22 | 1:A:357:GLU:H    | 5        | 0.98          |
| (1,1337) | 1:A:345:LEU:HD23 | 1:A:357:GLU:H    | 5        | 0.98          |
| (1,1171) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG21 | 5        | 0.98          |
| (1,1171) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG22 | 5        | 0.98          |
| (1,1171) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG23 | 5        | 0.98          |
| (1,1158) | 1:A:387:TYR:HA   | 1:A:387:TYR:HD2  | 1        | 0.98          |
| (1,1110) | 1:A:327:HIS:HE1  | 1:A:328:MET:H    | 4        | 0.98          |
| (1,1081) | 1:A:372:LEU:HG   | 1:A:376:TRP:H    | 10       | 0.98          |
| (1,995)  | 1:A:359:LYS:HD2  | 1:A:363:ILE:H    | 5        | 0.97          |
| (1,995)  | 1:A:359:LYS:HD3  | 1:A:363:ILE:H    | 5        | 0.97          |
| (1,943)  | 1:A:400:LEU:H    | 1:A:400:LEU:HG   | 10       | 0.97          |
| (1,329)  | 1:A:348:SER:HB2  | 1:A:351:GLU:HG2  | 6        | 0.97          |
| (1,329)  | 1:A:348:SER:HB2  | 1:A:351:GLU:HG3  | 6        | 0.97          |
| (1,329)  | 1:A:348:SER:HB3  | 1:A:351:GLU:HG2  | 6        | 0.97          |
| (1,329)  | 1:A:348:SER:HB3  | 1:A:351:GLU:HG3  | 6        | 0.97          |
| (1,324)  | 1:A:346:SER:H    | 1:A:354:ILE:HD11 | 7        | 0.97          |
| (1,324)  | 1:A:346:SER:H    | 1:A:354:ILE:HD12 | 7        | 0.97          |
| (1,324)  | 1:A:346:SER:H    | 1:A:354:ILE:HD13 | 7        | 0.97          |
| (1,1341) | 1:A:345:LEU:HD11 | 1:A:367:VAL:HG21 | 5        | 0.97          |
| (1,1341) | 1:A:345:LEU:HD11 | 1:A:367:VAL:HG22 | 5        | 0.97          |
| (1,1341) | 1:A:345:LEU:HD11 | 1:A:367:VAL:HG23 | 5        | 0.97          |
| (1,1341) | 1:A:345:LEU:HD12 | 1:A:367:VAL:HG21 | 5        | 0.97          |
| (1,1341) | 1:A:345:LEU:HD12 | 1:A:367:VAL:HG22 | 5        | 0.97          |
| (1,1341) | 1:A:345:LEU:HD12 | 1:A:367:VAL:HG23 | 5        | 0.97          |
| (1,1341) | 1:A:345:LEU:HD13 | 1:A:367:VAL:HG21 | 5        | 0.97          |
| (1,1341) | 1:A:345:LEU:HD13 | 1:A:367:VAL:HG22 | 5        | 0.97          |
| (1,1341) | 1:A:345:LEU:HD13 | 1:A:367:VAL:HG23 | 5        | 0.97          |
| (1,1341) | 1:A:345:LEU:HD21 | 1:A:367:VAL:HG21 | 5        | 0.97          |
| (1,1341) | 1:A:345:LEU:HD21 | 1:A:367:VAL:HG22 | 5        | 0.97          |
| (1,1341) | 1:A:345:LEU:HD21 | 1:A:367:VAL:HG23 | 5        | 0.97          |
| (1,1341) | 1:A:345:LEU:HD22 | 1:A:367:VAL:HG21 | 5        | 0.97          |
| (1,1341) | 1:A:345:LEU:HD22 | 1:A:367:VAL:HG22 | 5        | 0.97          |
| (1,1341) | 1:A:345:LEU:HD22 | 1:A:367:VAL:HG23 | 5        | 0.97          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1341) | 1:A:345:LEU:HD23 | 1:A:367:VAL:HG21 | 5        | 0.97          |
| (1,1341) | 1:A:345:LEU:HD23 | 1:A:367:VAL:HG22 | 5        | 0.97          |
| (1,1341) | 1:A:345:LEU:HD23 | 1:A:367:VAL:HG23 | 5        | 0.97          |
| (1,1329) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HD2  | 10       | 0.97          |
| (1,1329) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HD3  | 10       | 0.97          |
| (1,1329) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HD2  | 10       | 0.97          |
| (1,1329) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HD3  | 10       | 0.97          |
| (1,1329) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HD2  | 10       | 0.97          |
| (1,1329) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HD3  | 10       | 0.97          |
| (1,1329) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HD2  | 10       | 0.97          |
| (1,1329) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HD3  | 10       | 0.97          |
| (1,1329) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HD2  | 10       | 0.97          |
| (1,1329) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HD3  | 10       | 0.97          |
| (1,1329) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HD2  | 10       | 0.97          |
| (1,1329) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HD3  | 10       | 0.97          |
| (1,1245) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HZ2  | 2        | 0.97          |
| (1,1245) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HZ2  | 2        | 0.97          |
| (1,1245) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HZ2  | 2        | 0.97          |
| (1,1245) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HZ2  | 2        | 0.97          |
| (1,1245) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HZ2  | 2        | 0.97          |
| (1,1245) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HZ2  | 2        | 0.97          |
| (1,121)  | 1:A:340:TYR:HE1  | 1:A:375:LEU:HB2  | 1        | 0.97          |
| (1,121)  | 1:A:340:TYR:HE1  | 1:A:375:LEU:HB3  | 1        | 0.97          |
| (1,1204) | 1:A:398:TYR:HE1  | 1:A:404:ARG:HA   | 3        | 0.97          |
| (1,1199) | 1:A:393:ALA:HA   | 1:A:396:HIS:HD2  | 7        | 0.97          |
| (1,118)  | 1:A:353:PHE:HB3  | 1:A:372:LEU:HG   | 8        | 0.97          |
| (1,1171) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG21 | 7        | 0.97          |
| (1,1171) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG22 | 7        | 0.97          |
| (1,1171) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG23 | 7        | 0.97          |
| (1,116)  | 1:A:353:PHE:HB2  | 1:A:372:LEU:HG   | 4        | 0.97          |
| (1,922)  | 1:A:397:TYR:H    | 1:A:403:ILE:HD11 | 8        | 0.96          |
| (1,922)  | 1:A:397:TYR:H    | 1:A:403:ILE:HD12 | 8        | 0.96          |
| (1,922)  | 1:A:397:TYR:H    | 1:A:403:ILE:HD13 | 8        | 0.96          |
| (1,861)  | 1:A:386:THR:H    | 1:A:389:LYS:HD2  | 1        | 0.96          |
| (1,861)  | 1:A:386:THR:H    | 1:A:389:LYS:HD3  | 1        | 0.96          |
| (1,496)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD11 | 7        | 0.96          |
| (1,496)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD12 | 7        | 0.96          |
| (1,496)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD13 | 7        | 0.96          |
| (1,214)  | 1:A:373:ALA:HB1  | 1:A:385:MET:HA   | 3        | 0.96          |
| (1,214)  | 1:A:373:ALA:HB2  | 1:A:385:MET:HA   | 3        | 0.96          |
| (1,214)  | 1:A:373:ALA:HB3  | 1:A:385:MET:HA   | 3        | 0.96          |
| (1,151)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:H    | 3        | 0.96          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1199) | 1:A:393:ALA:HA   | 1:A:396:HIS:HD2  | 6        | 0.96          |
| (1,1129) | 1:A:398:TYR:H    | 1:A:402:ILE:HD11 | 4        | 0.96          |
| (1,1129) | 1:A:398:TYR:H    | 1:A:402:ILE:HD12 | 4        | 0.96          |
| (1,1129) | 1:A:398:TYR:H    | 1:A:402:ILE:HD13 | 4        | 0.96          |
| (1,933)  | 1:A:350:TYR:H    | 1:A:350:TYR:HE2  | 7        | 0.95          |
| (1,904)  | 1:A:366:ILE:H    | 1:A:368:ASP:H    | 9        | 0.95          |
| (1,780)  | 1:A:387:TYR:HD1  | 1:A:388:GLU:H    | 10       | 0.95          |
| (1,591)  | 1:A:342:TYR:HE2  | 1:A:356:TRP:HE1  | 4        | 0.95          |
| (1,505)  | 1:A:412:LEU:HD11 | 1:A:413:PHE:HE1  | 3        | 0.95          |
| (1,505)  | 1:A:412:LEU:HD12 | 1:A:413:PHE:HE1  | 3        | 0.95          |
| (1,505)  | 1:A:412:LEU:HD13 | 1:A:413:PHE:HE1  | 3        | 0.95          |
| (1,396)  | 1:A:366:ILE:HG21 | 1:A:387:TYR:HD2  | 4        | 0.95          |
| (1,396)  | 1:A:366:ILE:HG22 | 1:A:387:TYR:HD2  | 4        | 0.95          |
| (1,396)  | 1:A:366:ILE:HG23 | 1:A:387:TYR:HD2  | 4        | 0.95          |
| (1,329)  | 1:A:348:SER:HB2  | 1:A:351:GLU:HG2  | 3        | 0.95          |
| (1,329)  | 1:A:348:SER:HB2  | 1:A:351:GLU:HG3  | 3        | 0.95          |
| (1,329)  | 1:A:348:SER:HB3  | 1:A:351:GLU:HG2  | 3        | 0.95          |
| (1,329)  | 1:A:348:SER:HB3  | 1:A:351:GLU:HG3  | 3        | 0.95          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD11 | 3        | 0.95          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD12 | 3        | 0.95          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD13 | 3        | 0.95          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD21 | 3        | 0.95          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD22 | 3        | 0.95          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD23 | 3        | 0.95          |
| (1,1397) | 1:A:369:PRO:HD2  | 1:A:411:LEU:HD11 | 4        | 0.95          |
| (1,1397) | 1:A:369:PRO:HD2  | 1:A:411:LEU:HD12 | 4        | 0.95          |
| (1,1397) | 1:A:369:PRO:HD2  | 1:A:411:LEU:HD13 | 4        | 0.95          |
| (1,1397) | 1:A:369:PRO:HD2  | 1:A:411:LEU:HD21 | 4        | 0.95          |
| (1,1397) | 1:A:369:PRO:HD2  | 1:A:411:LEU:HD22 | 4        | 0.95          |
| (1,1397) | 1:A:369:PRO:HD2  | 1:A:411:LEU:HD23 | 4        | 0.95          |
| (1,1397) | 1:A:369:PRO:HD3  | 1:A:411:LEU:HD11 | 4        | 0.95          |
| (1,1397) | 1:A:369:PRO:HD3  | 1:A:411:LEU:HD12 | 4        | 0.95          |
| (1,1397) | 1:A:369:PRO:HD3  | 1:A:411:LEU:HD13 | 4        | 0.95          |
| (1,1397) | 1:A:369:PRO:HD3  | 1:A:411:LEU:HD21 | 4        | 0.95          |
| (1,1397) | 1:A:369:PRO:HD3  | 1:A:411:LEU:HD22 | 4        | 0.95          |
| (1,1397) | 1:A:369:PRO:HD3  | 1:A:411:LEU:HD23 | 4        | 0.95          |
| (1,1362) | 1:A:353:PHE:H    | 1:A:372:LEU:HD11 | 10       | 0.95          |
| (1,1362) | 1:A:353:PHE:H    | 1:A:372:LEU:HD12 | 10       | 0.95          |
| (1,1362) | 1:A:353:PHE:H    | 1:A:372:LEU:HD13 | 10       | 0.95          |
| (1,1362) | 1:A:353:PHE:H    | 1:A:372:LEU:HD21 | 10       | 0.95          |
| (1,1362) | 1:A:353:PHE:H    | 1:A:372:LEU:HD22 | 10       | 0.95          |
| (1,1362) | 1:A:353:PHE:H    | 1:A:372:LEU:HD23 | 10       | 0.95          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,136)  | 1:A:356:TRP:HZ2  | 1:A:359:LYS:HE2  | 9        | 0.95          |
| (1,136)  | 1:A:356:TRP:HZ2  | 1:A:359:LYS:HE3  | 9        | 0.95          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD11 | 5        | 0.95          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD12 | 5        | 0.95          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD13 | 5        | 0.95          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD21 | 5        | 0.95          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD22 | 5        | 0.95          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD23 | 5        | 0.95          |
| (1,10)   | 1:A:376:TRP:HZ2  | 1:A:385:MET:HE1  | 4        | 0.95          |
| (1,10)   | 1:A:376:TRP:HZ2  | 1:A:385:MET:HE2  | 4        | 0.95          |
| (1,10)   | 1:A:376:TRP:HZ2  | 1:A:385:MET:HE3  | 4        | 0.95          |
| (1,922)  | 1:A:397:TYR:H    | 1:A:403:ILE:HD11 | 1        | 0.94          |
| (1,922)  | 1:A:397:TYR:H    | 1:A:403:ILE:HD12 | 1        | 0.94          |
| (1,922)  | 1:A:397:TYR:H    | 1:A:403:ILE:HD13 | 1        | 0.94          |
| (1,84)   | 1:A:358:ASP:HA   | 1:A:360:GLU:HG2  | 6        | 0.94          |
| (1,84)   | 1:A:358:ASP:HA   | 1:A:360:GLU:HG3  | 6        | 0.94          |
| (1,702)  | 1:A:353:PHE:HD2  | 1:A:372:LEU:H    | 2        | 0.94          |
| (1,702)  | 1:A:353:PHE:HD2  | 1:A:372:LEU:H    | 10       | 0.94          |
| (1,666)  | 1:A:366:ILE:H    | 1:A:413:PHE:HZ   | 3        | 0.94          |
| (1,638)  | 1:A:406:GLU:H    | 1:A:413:PHE:HD2  | 8        | 0.94          |
| (1,399)  | 1:A:353:PHE:HA   | 1:A:366:ILE:HG21 | 7        | 0.94          |
| (1,399)  | 1:A:353:PHE:HA   | 1:A:366:ILE:HG22 | 7        | 0.94          |
| (1,399)  | 1:A:353:PHE:HA   | 1:A:366:ILE:HG23 | 7        | 0.94          |
| (1,397)  | 1:A:366:ILE:HG21 | 1:A:387:TYR:HE2  | 5        | 0.94          |
| (1,397)  | 1:A:366:ILE:HG22 | 1:A:387:TYR:HE2  | 5        | 0.94          |
| (1,397)  | 1:A:366:ILE:HG23 | 1:A:387:TYR:HE2  | 5        | 0.94          |
| (1,172)  | 1:A:377:GLY:HA3  | 1:A:385:MET:HE1  | 6        | 0.94          |
| (1,172)  | 1:A:377:GLY:HA3  | 1:A:385:MET:HE2  | 6        | 0.94          |
| (1,172)  | 1:A:377:GLY:HA3  | 1:A:385:MET:HE3  | 6        | 0.94          |
| (1,1175) | 1:A:397:TYR:HD1  | 1:A:402:ILE:HB   | 6        | 0.94          |
| (1,1171) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG21 | 4        | 0.94          |
| (1,1171) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG22 | 4        | 0.94          |
| (1,1171) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG23 | 4        | 0.94          |
| (1,643)  | 1:A:406:GLU:H    | 1:A:413:PHE:HB3  | 4        | 0.93          |
| (1,401)  | 1:A:353:PHE:HB3  | 1:A:366:ILE:HG21 | 4        | 0.93          |
| (1,401)  | 1:A:353:PHE:HB3  | 1:A:366:ILE:HG22 | 4        | 0.93          |
| (1,401)  | 1:A:353:PHE:HB3  | 1:A:366:ILE:HG23 | 4        | 0.93          |
| (1,361)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HG21 | 2        | 0.93          |
| (1,361)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HG22 | 2        | 0.93          |
| (1,361)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HG23 | 2        | 0.93          |
| (1,361)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HG21 | 3        | 0.93          |
| (1,361)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HG22 | 3        | 0.93          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,361)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HG23 | 3        | 0.93          |
| (1,324)  | 1:A:346:SER:H    | 1:A:354:ILE:HD11 | 6        | 0.93          |
| (1,324)  | 1:A:346:SER:H    | 1:A:354:ILE:HD12 | 6        | 0.93          |
| (1,324)  | 1:A:346:SER:H    | 1:A:354:ILE:HD13 | 6        | 0.93          |
| (1,191)  | 1:A:406:GLU:HA   | 1:A:412:LEU:HB3  | 7        | 0.93          |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD11 | 2        | 0.93          |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD12 | 2        | 0.93          |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD13 | 2        | 0.93          |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD21 | 2        | 0.93          |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD22 | 2        | 0.93          |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD23 | 2        | 0.93          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD11 | 5        | 0.93          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD12 | 5        | 0.93          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD13 | 5        | 0.93          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD21 | 5        | 0.93          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD22 | 5        | 0.93          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD23 | 5        | 0.93          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD11 | 5        | 0.93          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD12 | 5        | 0.93          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD13 | 5        | 0.93          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD21 | 5        | 0.93          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD22 | 5        | 0.93          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD23 | 5        | 0.93          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD11 | 5        | 0.93          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD12 | 5        | 0.93          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD13 | 5        | 0.93          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD21 | 5        | 0.93          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD22 | 5        | 0.93          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD23 | 5        | 0.93          |
| (1,1341) | 1:A:345:LEU:HD11 | 1:A:367:VAL:HG21 | 3        | 0.93          |
| (1,1341) | 1:A:345:LEU:HD11 | 1:A:367:VAL:HG22 | 3        | 0.93          |
| (1,1341) | 1:A:345:LEU:HD11 | 1:A:367:VAL:HG23 | 3        | 0.93          |
| (1,1341) | 1:A:345:LEU:HD12 | 1:A:367:VAL:HG21 | 3        | 0.93          |
| (1,1341) | 1:A:345:LEU:HD12 | 1:A:367:VAL:HG22 | 3        | 0.93          |
| (1,1341) | 1:A:345:LEU:HD12 | 1:A:367:VAL:HG23 | 3        | 0.93          |
| (1,1341) | 1:A:345:LEU:HD13 | 1:A:367:VAL:HG21 | 3        | 0.93          |
| (1,1341) | 1:A:345:LEU:HD13 | 1:A:367:VAL:HG22 | 3        | 0.93          |
| (1,1341) | 1:A:345:LEU:HD13 | 1:A:367:VAL:HG23 | 3        | 0.93          |
| (1,1341) | 1:A:345:LEU:HD21 | 1:A:367:VAL:HG21 | 3        | 0.93          |
| (1,1341) | 1:A:345:LEU:HD21 | 1:A:367:VAL:HG22 | 3        | 0.93          |
| (1,1341) | 1:A:345:LEU:HD21 | 1:A:367:VAL:HG23 | 3        | 0.93          |
| (1,1341) | 1:A:345:LEU:HD22 | 1:A:367:VAL:HG21 | 3        | 0.93          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1341) | 1:A:345:LEU:HD22 | 1:A:367:VAL:HG22 | 3        | 0.93          |
| (1,1341) | 1:A:345:LEU:HD22 | 1:A:367:VAL:HG23 | 3        | 0.93          |
| (1,1341) | 1:A:345:LEU:HD23 | 1:A:367:VAL:HG21 | 3        | 0.93          |
| (1,1341) | 1:A:345:LEU:HD23 | 1:A:367:VAL:HG22 | 3        | 0.93          |
| (1,1341) | 1:A:345:LEU:HD23 | 1:A:367:VAL:HG23 | 3        | 0.93          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD11 | 7        | 0.93          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD12 | 7        | 0.93          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD13 | 7        | 0.93          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD21 | 7        | 0.93          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD22 | 7        | 0.93          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD23 | 7        | 0.93          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD21 | 5        | 0.93          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD22 | 5        | 0.93          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD23 | 5        | 0.93          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD11 | 5        | 0.93          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD12 | 5        | 0.93          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD13 | 5        | 0.93          |
| (1,1202) | 1:A:397:TYR:HA   | 1:A:397:TYR:HE1  | 6        | 0.93          |
| (1,1196) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD21 | 6        | 0.93          |
| (1,1196) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD22 | 6        | 0.93          |
| (1,1196) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD23 | 6        | 0.93          |
| (1,118)  | 1:A:353:PHE:HB3  | 1:A:372:LEU:HG   | 1        | 0.93          |
| (1,933)  | 1:A:350:TYR:H    | 1:A:350:TYR:HE2  | 3        | 0.92          |
| (1,780)  | 1:A:387:TYR:HD1  | 1:A:388:GLU:H    | 6        | 0.92          |
| (1,401)  | 1:A:353:PHE:HB3  | 1:A:366:ILE:HG21 | 1        | 0.92          |
| (1,401)  | 1:A:353:PHE:HB3  | 1:A:366:ILE:HG22 | 1        | 0.92          |
| (1,401)  | 1:A:353:PHE:HB3  | 1:A:366:ILE:HG23 | 1        | 0.92          |
| (1,365)  | 1:A:364:PHE:HE1  | 1:A:403:ILE:HG21 | 2        | 0.92          |
| (1,365)  | 1:A:364:PHE:HE1  | 1:A:403:ILE:HG22 | 2        | 0.92          |
| (1,365)  | 1:A:364:PHE:HE1  | 1:A:403:ILE:HG23 | 2        | 0.92          |
| (1,361)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HG21 | 1        | 0.92          |
| (1,361)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HG22 | 1        | 0.92          |
| (1,361)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HG23 | 1        | 0.92          |
| (1,240)  | 1:A:415:PHE:HA   | 1:A:415:PHE:HE1  | 4        | 0.92          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD11 | 8        | 0.92          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD12 | 8        | 0.92          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD13 | 8        | 0.92          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD21 | 8        | 0.92          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD22 | 8        | 0.92          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD23 | 8        | 0.92          |
| (1,1150) | 1:A:378:ASN:H    | 1:A:378:ASN:HD22 | 5        | 0.92          |
| (1,869)  | 1:A:391:SER:H    | 1:A:394:LEU:HG   | 5        | 0.91          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,666)  | 1:A:366:ILE:H    | 1:A:413:PHE:HZ   | 10       | 0.91          |
| (1,643)  | 1:A:406:GLU:H    | 1:A:413:PHE:HB3  | 7        | 0.91          |
| (1,626)  | 1:A:355:ARG:H    | 1:A:367:VAL:H    | 10       | 0.91          |
| (1,606)  | 1:A:376:TRP:HE1  | 1:A:390:MET:HA   | 6        | 0.91          |
| (1,559)  | 1:A:417:LYS:HE2  | 1:A:418:THR:HG21 | 8        | 0.91          |
| (1,559)  | 1:A:417:LYS:HE2  | 1:A:418:THR:HG22 | 8        | 0.91          |
| (1,559)  | 1:A:417:LYS:HE2  | 1:A:418:THR:HG23 | 8        | 0.91          |
| (1,559)  | 1:A:417:LYS:HE3  | 1:A:418:THR:HG21 | 8        | 0.91          |
| (1,559)  | 1:A:417:LYS:HE3  | 1:A:418:THR:HG22 | 8        | 0.91          |
| (1,559)  | 1:A:417:LYS:HE3  | 1:A:418:THR:HG23 | 8        | 0.91          |
| (1,361)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HG21 | 4        | 0.91          |
| (1,361)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HG22 | 4        | 0.91          |
| (1,361)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HG23 | 4        | 0.91          |
| (1,344)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG21 | 6        | 0.91          |
| (1,344)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG22 | 6        | 0.91          |
| (1,344)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG23 | 6        | 0.91          |
| (1,248)  | 1:A:376:TRP:HD1  | 1:A:390:MET:HA   | 8        | 0.91          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD11 | 7        | 0.91          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD12 | 7        | 0.91          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD13 | 7        | 0.91          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD21 | 7        | 0.91          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD22 | 7        | 0.91          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD23 | 7        | 0.91          |
| (1,1222) | 1:A:366:ILE:HG12 | 1:A:387:TYR:HE2  | 10       | 0.91          |
| (1,1222) | 1:A:366:ILE:HG13 | 1:A:387:TYR:HE2  | 10       | 0.91          |
| (1,922)  | 1:A:397:TYR:H    | 1:A:403:ILE:HD11 | 5        | 0.9           |
| (1,922)  | 1:A:397:TYR:H    | 1:A:403:ILE:HD12 | 5        | 0.9           |
| (1,922)  | 1:A:397:TYR:H    | 1:A:403:ILE:HD13 | 5        | 0.9           |
| (1,904)  | 1:A:366:ILE:H    | 1:A:368:ASP:H    | 10       | 0.9           |
| (1,780)  | 1:A:387:TYR:HD1  | 1:A:388:GLU:H    | 2        | 0.9           |
| (1,638)  | 1:A:406:GLU:H    | 1:A:413:PHE:HD2  | 3        | 0.9           |
| (1,191)  | 1:A:406:GLU:HA   | 1:A:412:LEU:HB3  | 8        | 0.9           |
| (1,1494) | 1:A:405:LYS:HG2  | 1:A:413:PHE:HE2  | 2        | 0.9           |
| (1,1494) | 1:A:405:LYS:HG3  | 1:A:413:PHE:HE2  | 2        | 0.9           |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD11 | 1        | 0.9           |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD12 | 1        | 0.9           |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD13 | 1        | 0.9           |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD21 | 1        | 0.9           |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD22 | 1        | 0.9           |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD23 | 1        | 0.9           |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD11 | 4        | 0.9           |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD12 | 4        | 0.9           |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD13 | 4        | 0.9           |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD21 | 4        | 0.9           |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD22 | 4        | 0.9           |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD23 | 4        | 0.9           |
| (1,1196) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD21 | 9        | 0.9           |
| (1,1196) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD22 | 9        | 0.9           |
| (1,1196) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD23 | 9        | 0.9           |
| (1,1158) | 1:A:387:TYR:HA   | 1:A:387:TYR:HD2  | 4        | 0.9           |
| (1,829)  | 1:A:417:LYS:HG2  | 1:A:418:THR:H    | 10       | 0.89          |
| (1,829)  | 1:A:417:LYS:HG3  | 1:A:418:THR:H    | 10       | 0.89          |
| (1,567)  | 1:A:386:THR:HG21 | 1:A:387:TYR:HB3  | 8        | 0.89          |
| (1,567)  | 1:A:386:THR:HG22 | 1:A:387:TYR:HB3  | 8        | 0.89          |
| (1,567)  | 1:A:386:THR:HG23 | 1:A:387:TYR:HB3  | 8        | 0.89          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD11 | 2        | 0.89          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD12 | 2        | 0.89          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD13 | 2        | 0.89          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD21 | 2        | 0.89          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD22 | 2        | 0.89          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD23 | 2        | 0.89          |
| (1,726)  | 1:A:387:TYR:HD2  | 1:A:390:MET:H    | 1        | 0.88          |
| (1,643)  | 1:A:406:GLU:H    | 1:A:413:PHE:HB3  | 2        | 0.88          |
| (1,606)  | 1:A:376:TRP:HE1  | 1:A:390:MET:HA   | 10       | 0.88          |
| (1,569)  | 1:A:354:ILE:H    | 1:A:367:VAL:HG11 | 3        | 0.88          |
| (1,569)  | 1:A:354:ILE:H    | 1:A:367:VAL:HG12 | 3        | 0.88          |
| (1,569)  | 1:A:354:ILE:H    | 1:A:367:VAL:HG13 | 3        | 0.88          |
| (1,496)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD11 | 2        | 0.88          |
| (1,496)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD12 | 2        | 0.88          |
| (1,496)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD13 | 2        | 0.88          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD11 | 9        | 0.88          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD12 | 9        | 0.88          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD13 | 9        | 0.88          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD21 | 9        | 0.88          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD22 | 9        | 0.88          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD23 | 9        | 0.88          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD11 | 9        | 0.88          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD12 | 9        | 0.88          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD13 | 9        | 0.88          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD21 | 9        | 0.88          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD22 | 9        | 0.88          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD23 | 9        | 0.88          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD11 | 9        | 0.88          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD12 | 9        | 0.88          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD13 | 9        | 0.88          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD21 | 9        | 0.88          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD22 | 9        | 0.88          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD23 | 9        | 0.88          |
| (1,1360) | 1:A:352:ASN:HB2  | 1:A:367:VAL:HB   | 10       | 0.88          |
| (1,1360) | 1:A:352:ASN:HB3  | 1:A:367:VAL:HB   | 10       | 0.88          |
| (1,1198) | 1:A:396:HIS:HD2  | 1:A:397:TYR:HA   | 4        | 0.88          |
| (1,631)  | 1:A:365:ARG:HD3  | 1:A:367:VAL:H    | 10       | 0.87          |
| (1,572)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG11 | 4        | 0.87          |
| (1,572)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG12 | 4        | 0.87          |
| (1,572)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG13 | 4        | 0.87          |
| (1,335)  | 1:A:361:SER:HB3  | 1:A:363:ILE:HB   | 10       | 0.87          |
| (1,1208) | 1:A:398:TYR:HE2  | 1:A:403:ILE:HB   | 2        | 0.87          |
| (1,1207) | 1:A:347:ASP:HB2  | 1:A:350:TYR:HE2  | 3        | 0.87          |
| (1,1207) | 1:A:347:ASP:HB3  | 1:A:350:TYR:HE2  | 3        | 0.87          |
| (1,1158) | 1:A:387:TYR:HA   | 1:A:387:TYR:HD2  | 9        | 0.87          |
| (1,84)   | 1:A:358:ASP:HA   | 1:A:360:GLU:HG2  | 4        | 0.86          |
| (1,84)   | 1:A:358:ASP:HA   | 1:A:360:GLU:HG3  | 4        | 0.86          |
| (1,780)  | 1:A:387:TYR:HD1  | 1:A:388:GLU:H    | 5        | 0.86          |
| (1,329)  | 1:A:348:SER:HB2  | 1:A:351:GLU:HG2  | 4        | 0.86          |
| (1,329)  | 1:A:348:SER:HB2  | 1:A:351:GLU:HG3  | 4        | 0.86          |
| (1,329)  | 1:A:348:SER:HB3  | 1:A:351:GLU:HG2  | 4        | 0.86          |
| (1,329)  | 1:A:348:SER:HB3  | 1:A:351:GLU:HG3  | 4        | 0.86          |
| (1,287)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HD11 | 8        | 0.86          |
| (1,287)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HD12 | 8        | 0.86          |
| (1,287)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HD13 | 8        | 0.86          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD11 | 9        | 0.86          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD12 | 9        | 0.86          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD13 | 9        | 0.86          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD21 | 9        | 0.86          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD22 | 9        | 0.86          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD23 | 9        | 0.86          |
| (1,1213) | 1:A:340:TYR:HA   | 1:A:340:TYR:HE2  | 9        | 0.86          |
| (1,1174) | 1:A:394:LEU:HG   | 1:A:397:TYR:HD2  | 9        | 0.86          |
| (1,1104) | 1:A:354:ILE:H    | 1:A:366:ILE:HA   | 6        | 0.86          |
| (1,922)  | 1:A:397:TYR:H    | 1:A:403:ILE:HD11 | 9        | 0.85          |
| (1,922)  | 1:A:397:TYR:H    | 1:A:403:ILE:HD12 | 9        | 0.85          |
| (1,922)  | 1:A:397:TYR:H    | 1:A:403:ILE:HD13 | 9        | 0.85          |
| (1,643)  | 1:A:406:GLU:H    | 1:A:413:PHE:HB3  | 8        | 0.85          |
| (1,546)  | 1:A:336:LEU:HD11 | 1:A:338:TRP:HH2  | 3        | 0.85          |
| (1,546)  | 1:A:336:LEU:HD12 | 1:A:338:TRP:HH2  | 3        | 0.85          |
| (1,546)  | 1:A:336:LEU:HD13 | 1:A:338:TRP:HH2  | 3        | 0.85          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,52)   | 1:A:357:GLU:HB2  | 1:A:412:LEU:HD21 | 9        | 0.85          |
| (1,52)   | 1:A:357:GLU:HB2  | 1:A:412:LEU:HD22 | 9        | 0.85          |
| (1,52)   | 1:A:357:GLU:HB2  | 1:A:412:LEU:HD23 | 9        | 0.85          |
| (1,52)   | 1:A:357:GLU:HB3  | 1:A:412:LEU:HD21 | 9        | 0.85          |
| (1,52)   | 1:A:357:GLU:HB3  | 1:A:412:LEU:HD22 | 9        | 0.85          |
| (1,52)   | 1:A:357:GLU:HB3  | 1:A:412:LEU:HD23 | 9        | 0.85          |
| (1,396)  | 1:A:366:ILE:HG21 | 1:A:387:TYR:HD2  | 9        | 0.85          |
| (1,396)  | 1:A:366:ILE:HG22 | 1:A:387:TYR:HD2  | 9        | 0.85          |
| (1,396)  | 1:A:366:ILE:HG23 | 1:A:387:TYR:HD2  | 9        | 0.85          |
| (1,326)  | 1:A:341:VAL:HA   | 1:A:354:ILE:HD11 | 5        | 0.85          |
| (1,326)  | 1:A:341:VAL:HA   | 1:A:354:ILE:HD12 | 5        | 0.85          |
| (1,326)  | 1:A:341:VAL:HA   | 1:A:354:ILE:HD13 | 5        | 0.85          |
| (1,214)  | 1:A:373:ALA:HB1  | 1:A:385:MET:HA   | 5        | 0.85          |
| (1,214)  | 1:A:373:ALA:HB2  | 1:A:385:MET:HA   | 5        | 0.85          |
| (1,214)  | 1:A:373:ALA:HB3  | 1:A:385:MET:HA   | 5        | 0.85          |
| (1,1246) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HH2  | 9        | 0.85          |
| (1,1246) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HH2  | 9        | 0.85          |
| (1,1246) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HH2  | 9        | 0.85          |
| (1,1246) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HH2  | 9        | 0.85          |
| (1,1246) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HH2  | 9        | 0.85          |
| (1,1246) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HH2  | 9        | 0.85          |
| (1,121)  | 1:A:340:TYR:HE1  | 1:A:375:LEU:HB2  | 6        | 0.85          |
| (1,121)  | 1:A:340:TYR:HE1  | 1:A:375:LEU:HB3  | 6        | 0.85          |
| (1,1206) | 1:A:397:TYR:HB2  | 1:A:398:TYR:HE2  | 4        | 0.85          |
| (1,1171) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG21 | 9        | 0.85          |
| (1,1171) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG22 | 9        | 0.85          |
| (1,1171) | 1:A:340:TYR:HD1  | 1:A:341:VAL:HG23 | 9        | 0.85          |
| (1,1167) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HB   | 2        | 0.85          |
| (1,1008) | 1:A:412:LEU:H    | 1:A:413:PHE:HD1  | 1        | 0.85          |
| (1,922)  | 1:A:397:TYR:H    | 1:A:403:ILE:HD11 | 4        | 0.84          |
| (1,922)  | 1:A:397:TYR:H    | 1:A:403:ILE:HD12 | 4        | 0.84          |
| (1,922)  | 1:A:397:TYR:H    | 1:A:403:ILE:HD13 | 4        | 0.84          |
| (1,543)  | 1:A:410:ARG:HD2  | 1:A:411:LEU:HD21 | 4        | 0.84          |
| (1,543)  | 1:A:410:ARG:HD2  | 1:A:411:LEU:HD22 | 4        | 0.84          |
| (1,543)  | 1:A:410:ARG:HD2  | 1:A:411:LEU:HD23 | 4        | 0.84          |
| (1,543)  | 1:A:410:ARG:HD3  | 1:A:411:LEU:HD21 | 4        | 0.84          |
| (1,543)  | 1:A:410:ARG:HD3  | 1:A:411:LEU:HD22 | 4        | 0.84          |
| (1,543)  | 1:A:410:ARG:HD3  | 1:A:411:LEU:HD23 | 4        | 0.84          |
| (1,401)  | 1:A:353:PHE:HB3  | 1:A:366:ILE:HG21 | 3        | 0.84          |
| (1,401)  | 1:A:353:PHE:HB3  | 1:A:366:ILE:HG22 | 3        | 0.84          |
| (1,401)  | 1:A:353:PHE:HB3  | 1:A:366:ILE:HG23 | 3        | 0.84          |
| (1,399)  | 1:A:353:PHE:HA   | 1:A:366:ILE:HG21 | 1        | 0.84          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,399)  | 1:A:353:PHE:HA   | 1:A:366:ILE:HG22 | 1        | 0.84          |
| (1,399)  | 1:A:353:PHE:HA   | 1:A:366:ILE:HG23 | 1        | 0.84          |
| (1,397)  | 1:A:366:ILE:HG21 | 1:A:387:TYR:HE2  | 9        | 0.84          |
| (1,397)  | 1:A:366:ILE:HG22 | 1:A:387:TYR:HE2  | 9        | 0.84          |
| (1,397)  | 1:A:366:ILE:HG23 | 1:A:387:TYR:HE2  | 9        | 0.84          |
| (1,327)  | 1:A:344:LEU:H    | 1:A:354:ILE:HD11 | 9        | 0.84          |
| (1,327)  | 1:A:344:LEU:H    | 1:A:354:ILE:HD12 | 9        | 0.84          |
| (1,327)  | 1:A:344:LEU:H    | 1:A:354:ILE:HD13 | 9        | 0.84          |
| (1,1433) | 1:A:376:TRP:HE1  | 1:A:385:MET:HG2  | 4        | 0.84          |
| (1,1433) | 1:A:376:TRP:HE1  | 1:A:385:MET:HG3  | 4        | 0.84          |
| (1,1291) | 1:A:341:VAL:HG11 | 1:A:364:PHE:HD2  | 5        | 0.84          |
| (1,1291) | 1:A:341:VAL:HG12 | 1:A:364:PHE:HD2  | 5        | 0.84          |
| (1,1291) | 1:A:341:VAL:HG13 | 1:A:364:PHE:HD2  | 5        | 0.84          |
| (1,1291) | 1:A:341:VAL:HG21 | 1:A:364:PHE:HD2  | 5        | 0.84          |
| (1,1291) | 1:A:341:VAL:HG22 | 1:A:364:PHE:HD2  | 5        | 0.84          |
| (1,1291) | 1:A:341:VAL:HG23 | 1:A:364:PHE:HD2  | 5        | 0.84          |
| (1,1204) | 1:A:398:TYR:HE1  | 1:A:404:ARG:HA   | 10       | 0.84          |
| (1,1191) | 1:A:336:LEU:HB2  | 1:A:338:TRP:HD1  | 6        | 0.84          |
| (1,1191) | 1:A:336:LEU:HB3  | 1:A:338:TRP:HD1  | 6        | 0.84          |
| (1,1158) | 1:A:387:TYR:HA   | 1:A:387:TYR:HD2  | 7        | 0.84          |
| (1,804)  | 1:A:355:ARG:HB2  | 1:A:365:ARG:H    | 1        | 0.83          |
| (1,804)  | 1:A:355:ARG:HB3  | 1:A:365:ARG:H    | 1        | 0.83          |
| (1,780)  | 1:A:387:TYR:HD1  | 1:A:388:GLU:H    | 9        | 0.83          |
| (1,569)  | 1:A:354:ILE:H    | 1:A:367:VAL:HG11 | 4        | 0.83          |
| (1,569)  | 1:A:354:ILE:H    | 1:A:367:VAL:HG12 | 4        | 0.83          |
| (1,569)  | 1:A:354:ILE:H    | 1:A:367:VAL:HG13 | 4        | 0.83          |
| (1,569)  | 1:A:354:ILE:H    | 1:A:367:VAL:HG11 | 10       | 0.83          |
| (1,569)  | 1:A:354:ILE:H    | 1:A:367:VAL:HG12 | 10       | 0.83          |
| (1,569)  | 1:A:354:ILE:H    | 1:A:367:VAL:HG13 | 10       | 0.83          |
| (1,499)  | 1:A:369:PRO:HA   | 1:A:411:LEU:HD11 | 7        | 0.83          |
| (1,499)  | 1:A:369:PRO:HA   | 1:A:411:LEU:HD12 | 7        | 0.83          |
| (1,499)  | 1:A:369:PRO:HA   | 1:A:411:LEU:HD13 | 7        | 0.83          |
| (1,1522) | 1:A:416:MET:H    | 1:A:417:LYS:HB2  | 9        | 0.83          |
| (1,1522) | 1:A:416:MET:H    | 1:A:417:LYS:HB3  | 9        | 0.83          |
| (1,1329) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HD2  | 7        | 0.83          |
| (1,1329) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HD3  | 7        | 0.83          |
| (1,1329) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HD2  | 7        | 0.83          |
| (1,1329) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HD3  | 7        | 0.83          |
| (1,1329) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HD2  | 7        | 0.83          |
| (1,1329) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HD3  | 7        | 0.83          |
| (1,1329) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HD2  | 7        | 0.83          |
| (1,1329) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HD3  | 7        | 0.83          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1329) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HD2  | 7        | 0.83          |
| (1,1329) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HD3  | 7        | 0.83          |
| (1,1329) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HD2  | 7        | 0.83          |
| (1,1329) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HD3  | 7        | 0.83          |
| (1,1218) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HG   | 2        | 0.83          |
| (1,1216) | 1:A:340:TYR:HE2  | 1:A:379:HIS:HB2  | 2        | 0.83          |
| (1,1216) | 1:A:340:TYR:HE2  | 1:A:379:HIS:HB3  | 2        | 0.83          |
| (1,1191) | 1:A:336:LEU:HB2  | 1:A:338:TRP:HD1  | 7        | 0.83          |
| (1,1191) | 1:A:336:LEU:HB3  | 1:A:338:TRP:HD1  | 7        | 0.83          |
| (1,995)  | 1:A:359:LYS:HD2  | 1:A:363:ILE:H    | 6        | 0.82          |
| (1,995)  | 1:A:359:LYS:HD3  | 1:A:363:ILE:H    | 6        | 0.82          |
| (1,643)  | 1:A:406:GLU:H    | 1:A:413:PHE:HB3  | 3        | 0.82          |
| (1,559)  | 1:A:417:LYS:HE2  | 1:A:418:THR:HG21 | 5        | 0.82          |
| (1,559)  | 1:A:417:LYS:HE2  | 1:A:418:THR:HG22 | 5        | 0.82          |
| (1,559)  | 1:A:417:LYS:HE2  | 1:A:418:THR:HG23 | 5        | 0.82          |
| (1,559)  | 1:A:417:LYS:HE3  | 1:A:418:THR:HG21 | 5        | 0.82          |
| (1,559)  | 1:A:417:LYS:HE3  | 1:A:418:THR:HG22 | 5        | 0.82          |
| (1,559)  | 1:A:417:LYS:HE3  | 1:A:418:THR:HG23 | 5        | 0.82          |
| (1,399)  | 1:A:353:PHE:HA   | 1:A:366:ILE:HG21 | 9        | 0.82          |
| (1,399)  | 1:A:353:PHE:HA   | 1:A:366:ILE:HG22 | 9        | 0.82          |
| (1,399)  | 1:A:353:PHE:HA   | 1:A:366:ILE:HG23 | 9        | 0.82          |
| (1,358)  | 1:A:397:TYR:H    | 1:A:403:ILE:HG21 | 10       | 0.82          |
| (1,358)  | 1:A:397:TYR:H    | 1:A:403:ILE:HG22 | 10       | 0.82          |
| (1,358)  | 1:A:397:TYR:H    | 1:A:403:ILE:HG23 | 10       | 0.82          |
| (1,326)  | 1:A:341:VAL:HA   | 1:A:354:ILE:HD11 | 9        | 0.82          |
| (1,326)  | 1:A:341:VAL:HA   | 1:A:354:ILE:HD12 | 9        | 0.82          |
| (1,326)  | 1:A:341:VAL:HA   | 1:A:354:ILE:HD13 | 9        | 0.82          |
| (1,279)  | 1:A:363:ILE:HD11 | 1:A:412:LEU:HD11 | 3        | 0.82          |
| (1,279)  | 1:A:363:ILE:HD11 | 1:A:412:LEU:HD12 | 3        | 0.82          |
| (1,279)  | 1:A:363:ILE:HD11 | 1:A:412:LEU:HD13 | 3        | 0.82          |
| (1,279)  | 1:A:363:ILE:HD12 | 1:A:412:LEU:HD11 | 3        | 0.82          |
| (1,279)  | 1:A:363:ILE:HD12 | 1:A:412:LEU:HD12 | 3        | 0.82          |
| (1,279)  | 1:A:363:ILE:HD12 | 1:A:412:LEU:HD13 | 3        | 0.82          |
| (1,279)  | 1:A:363:ILE:HD13 | 1:A:412:LEU:HD11 | 3        | 0.82          |
| (1,279)  | 1:A:363:ILE:HD13 | 1:A:412:LEU:HD12 | 3        | 0.82          |
| (1,279)  | 1:A:363:ILE:HD13 | 1:A:412:LEU:HD13 | 3        | 0.82          |
| (1,214)  | 1:A:373:ALA:HB1  | 1:A:385:MET:HA   | 4        | 0.82          |
| (1,214)  | 1:A:373:ALA:HB2  | 1:A:385:MET:HA   | 4        | 0.82          |
| (1,214)  | 1:A:373:ALA:HB3  | 1:A:385:MET:HA   | 4        | 0.82          |
| (1,203)  | 1:A:345:LEU:HG   | 1:A:355:ARG:HA   | 5        | 0.82          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD11 | 9        | 0.82          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD12 | 9        | 0.82          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD13 | 9        | 0.82          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD21 | 9        | 0.82          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD22 | 9        | 0.82          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD23 | 9        | 0.82          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD11 | 5        | 0.82          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD12 | 5        | 0.82          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD13 | 5        | 0.82          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD21 | 5        | 0.82          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD22 | 5        | 0.82          |
| (1,1354) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD23 | 5        | 0.82          |
| (1,1306) | 1:A:344:LEU:HD11 | 1:A:350:TYR:HE1  | 10       | 0.82          |
| (1,1306) | 1:A:344:LEU:HD12 | 1:A:350:TYR:HE1  | 10       | 0.82          |
| (1,1306) | 1:A:344:LEU:HD13 | 1:A:350:TYR:HE1  | 10       | 0.82          |
| (1,1306) | 1:A:344:LEU:HD21 | 1:A:350:TYR:HE1  | 10       | 0.82          |
| (1,1306) | 1:A:344:LEU:HD22 | 1:A:350:TYR:HE1  | 10       | 0.82          |
| (1,1306) | 1:A:344:LEU:HD23 | 1:A:350:TYR:HE1  | 10       | 0.82          |
| (1,1192) | 1:A:376:TRP:HH2  | 1:A:380:LYS:HD2  | 5        | 0.82          |
| (1,1192) | 1:A:376:TRP:HH2  | 1:A:380:LYS:HD3  | 5        | 0.82          |
| (1,118)  | 1:A:353:PHE:HB3  | 1:A:372:LEU:HG   | 7        | 0.82          |
| (1,922)  | 1:A:397:TYR:H    | 1:A:403:ILE:HD11 | 2        | 0.81          |
| (1,922)  | 1:A:397:TYR:H    | 1:A:403:ILE:HD12 | 2        | 0.81          |
| (1,922)  | 1:A:397:TYR:H    | 1:A:403:ILE:HD13 | 2        | 0.81          |
| (1,824)  | 1:A:375:LEU:HB2  | 1:A:378:ASN:HD21 | 10       | 0.81          |
| (1,824)  | 1:A:375:LEU:HB3  | 1:A:378:ASN:HD21 | 10       | 0.81          |
| (1,401)  | 1:A:353:PHE:HB3  | 1:A:366:ILE:HG21 | 10       | 0.81          |
| (1,401)  | 1:A:353:PHE:HB3  | 1:A:366:ILE:HG22 | 10       | 0.81          |
| (1,401)  | 1:A:353:PHE:HB3  | 1:A:366:ILE:HG23 | 10       | 0.81          |
| (1,313)  | 1:A:342:TYR:HA   | 1:A:342:TYR:HD2  | 9        | 0.81          |
| (1,1514) | 1:A:410:ARG:HD2  | 1:A:411:LEU:HD11 | 4        | 0.81          |
| (1,1514) | 1:A:410:ARG:HD2  | 1:A:411:LEU:HD12 | 4        | 0.81          |
| (1,1514) | 1:A:410:ARG:HD2  | 1:A:411:LEU:HD13 | 4        | 0.81          |
| (1,1514) | 1:A:410:ARG:HD2  | 1:A:411:LEU:HD21 | 4        | 0.81          |
| (1,1514) | 1:A:410:ARG:HD2  | 1:A:411:LEU:HD22 | 4        | 0.81          |
| (1,1514) | 1:A:410:ARG:HD2  | 1:A:411:LEU:HD23 | 4        | 0.81          |
| (1,1514) | 1:A:410:ARG:HD3  | 1:A:411:LEU:HD11 | 4        | 0.81          |
| (1,1514) | 1:A:410:ARG:HD3  | 1:A:411:LEU:HD12 | 4        | 0.81          |
| (1,1514) | 1:A:410:ARG:HD3  | 1:A:411:LEU:HD13 | 4        | 0.81          |
| (1,1514) | 1:A:410:ARG:HD3  | 1:A:411:LEU:HD21 | 4        | 0.81          |
| (1,1514) | 1:A:410:ARG:HD3  | 1:A:411:LEU:HD22 | 4        | 0.81          |
| (1,1514) | 1:A:410:ARG:HD3  | 1:A:411:LEU:HD23 | 4        | 0.81          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD11 | 10       | 0.81          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD12 | 10       | 0.81          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD13 | 10       | 0.81          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD21 | 10       | 0.81          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD22 | 10       | 0.81          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD23 | 10       | 0.81          |
| (1,1204) | 1:A:398:TYR:HE1  | 1:A:404:ARG:HA   | 6        | 0.81          |
| (1,1184) | 1:A:405:LYS:HA   | 1:A:413:PHE:HE2  | 8        | 0.81          |
| (1,116)  | 1:A:353:PHE:HB2  | 1:A:372:LEU:HG   | 5        | 0.81          |
| (1,1158) | 1:A:387:TYR:HA   | 1:A:387:TYR:HD2  | 5        | 0.81          |
| (1,995)  | 1:A:359:LYS:HD2  | 1:A:363:ILE:H    | 1        | 0.8           |
| (1,995)  | 1:A:359:LYS:HD3  | 1:A:363:ILE:H    | 1        | 0.8           |
| (1,846)  | 1:A:361:SER:H    | 1:A:363:ILE:HD11 | 7        | 0.8           |
| (1,846)  | 1:A:361:SER:H    | 1:A:363:ILE:HD12 | 7        | 0.8           |
| (1,846)  | 1:A:361:SER:H    | 1:A:363:ILE:HD13 | 7        | 0.8           |
| (1,804)  | 1:A:355:ARG:HB2  | 1:A:365:ARG:H    | 2        | 0.8           |
| (1,804)  | 1:A:355:ARG:HB3  | 1:A:365:ARG:H    | 2        | 0.8           |
| (1,1469) | 1:A:394:LEU:HD11 | 1:A:397:TYR:HD2  | 2        | 0.8           |
| (1,1469) | 1:A:394:LEU:HD12 | 1:A:397:TYR:HD2  | 2        | 0.8           |
| (1,1469) | 1:A:394:LEU:HD13 | 1:A:397:TYR:HD2  | 2        | 0.8           |
| (1,1469) | 1:A:394:LEU:HD21 | 1:A:397:TYR:HD2  | 2        | 0.8           |
| (1,1469) | 1:A:394:LEU:HD22 | 1:A:397:TYR:HD2  | 2        | 0.8           |
| (1,1469) | 1:A:394:LEU:HD23 | 1:A:397:TYR:HD2  | 2        | 0.8           |
| (1,1328) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HG2  | 7        | 0.8           |
| (1,1328) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HG3  | 7        | 0.8           |
| (1,1328) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HG2  | 7        | 0.8           |
| (1,1328) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HG3  | 7        | 0.8           |
| (1,1328) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HG2  | 7        | 0.8           |
| (1,1328) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HG3  | 7        | 0.8           |
| (1,1328) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HG2  | 7        | 0.8           |
| (1,1328) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HG3  | 7        | 0.8           |
| (1,1328) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HG2  | 7        | 0.8           |
| (1,1328) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HG3  | 7        | 0.8           |
| (1,1328) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HG2  | 7        | 0.8           |
| (1,1328) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HG3  | 7        | 0.8           |
| (1,1328) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HG2  | 10       | 0.8           |
| (1,1328) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HG3  | 10       | 0.8           |
| (1,1328) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HG2  | 10       | 0.8           |
| (1,1328) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HG3  | 10       | 0.8           |
| (1,1328) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HG2  | 10       | 0.8           |
| (1,1328) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HG3  | 10       | 0.8           |
| (1,1328) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HG2  | 10       | 0.8           |
| (1,1328) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HG3  | 10       | 0.8           |
| (1,1328) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HG2  | 10       | 0.8           |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1328) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HG3  | 10       | 0.8           |
| (1,1328) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HG2  | 10       | 0.8           |
| (1,1328) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HG3  | 10       | 0.8           |
| (1,1280) | 1:A:340:TYR:HE1  | 1:A:375:LEU:HD11 | 8        | 0.8           |
| (1,1280) | 1:A:340:TYR:HE1  | 1:A:375:LEU:HD12 | 8        | 0.8           |
| (1,1280) | 1:A:340:TYR:HE1  | 1:A:375:LEU:HD13 | 8        | 0.8           |
| (1,1280) | 1:A:340:TYR:HE1  | 1:A:375:LEU:HD21 | 8        | 0.8           |
| (1,1280) | 1:A:340:TYR:HE1  | 1:A:375:LEU:HD22 | 8        | 0.8           |
| (1,1280) | 1:A:340:TYR:HE1  | 1:A:375:LEU:HD23 | 8        | 0.8           |
| (1,1250) | 1:A:337:LEU:HB2  | 1:A:341:VAL:HB   | 3        | 0.8           |
| (1,1250) | 1:A:337:LEU:HB3  | 1:A:341:VAL:HB   | 3        | 0.8           |
| (1,1218) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HG   | 10       | 0.8           |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD21 | 4        | 0.8           |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD22 | 4        | 0.8           |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD23 | 4        | 0.8           |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD11 | 4        | 0.8           |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD12 | 4        | 0.8           |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD13 | 4        | 0.8           |
| (1,1145) | 1:A:343:GLN:HA   | 1:A:343:GLN:HE22 | 8        | 0.8           |
| (1,829)  | 1:A:417:LYS:HG2  | 1:A:418:THR:H    | 5        | 0.79          |
| (1,829)  | 1:A:417:LYS:HG3  | 1:A:418:THR:H    | 5        | 0.79          |
| (1,824)  | 1:A:375:LEU:HB2  | 1:A:378:ASN:HD21 | 7        | 0.79          |
| (1,824)  | 1:A:375:LEU:HB3  | 1:A:378:ASN:HD21 | 7        | 0.79          |
| (1,780)  | 1:A:387:TYR:HD1  | 1:A:388:GLU:H    | 4        | 0.79          |
| (1,559)  | 1:A:417:LYS:HE2  | 1:A:418:THR:HG21 | 7        | 0.79          |
| (1,559)  | 1:A:417:LYS:HE2  | 1:A:418:THR:HG22 | 7        | 0.79          |
| (1,559)  | 1:A:417:LYS:HE2  | 1:A:418:THR:HG23 | 7        | 0.79          |
| (1,559)  | 1:A:417:LYS:HE3  | 1:A:418:THR:HG21 | 7        | 0.79          |
| (1,559)  | 1:A:417:LYS:HE3  | 1:A:418:THR:HG22 | 7        | 0.79          |
| (1,559)  | 1:A:417:LYS:HE3  | 1:A:418:THR:HG23 | 7        | 0.79          |
| (1,449)  | 1:A:385:MET:HB3  | 1:A:386:THR:HA   | 2        | 0.79          |
| (1,435)  | 1:A:370:ASN:HA   | 1:A:387:TYR:HB2  | 2        | 0.79          |
| (1,214)  | 1:A:373:ALA:HB1  | 1:A:385:MET:HA   | 6        | 0.79          |
| (1,214)  | 1:A:373:ALA:HB2  | 1:A:385:MET:HA   | 6        | 0.79          |
| (1,214)  | 1:A:373:ALA:HB3  | 1:A:385:MET:HA   | 6        | 0.79          |
| (1,151)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:H    | 9        | 0.79          |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD11 | 6        | 0.79          |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD12 | 6        | 0.79          |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD13 | 6        | 0.79          |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD21 | 6        | 0.79          |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD22 | 6        | 0.79          |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD23 | 6        | 0.79          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD11 | 6        | 0.79          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD12 | 6        | 0.79          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD13 | 6        | 0.79          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD21 | 6        | 0.79          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD22 | 6        | 0.79          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD23 | 6        | 0.79          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD11 | 6        | 0.79          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD12 | 6        | 0.79          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD13 | 6        | 0.79          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD21 | 6        | 0.79          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD22 | 6        | 0.79          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD23 | 6        | 0.79          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD11 | 6        | 0.79          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD12 | 6        | 0.79          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD13 | 6        | 0.79          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD21 | 6        | 0.79          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD22 | 6        | 0.79          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD23 | 6        | 0.79          |
| (1,1222) | 1:A:366:ILE:HG12 | 1:A:387:TYR:HE2  | 3        | 0.79          |
| (1,1222) | 1:A:366:ILE:HG13 | 1:A:387:TYR:HE2  | 3        | 0.79          |
| (1,1201) | 1:A:394:LEU:HG   | 1:A:397:TYR:HE2  | 10       | 0.79          |
| (1,904)  | 1:A:366:ILE:H    | 1:A:368:ASP:H    | 4        | 0.78          |
| (1,904)  | 1:A:366:ILE:H    | 1:A:368:ASP:H    | 6        | 0.78          |
| (1,897)  | 1:A:353:PHE:H    | 1:A:367:VAL:HB   | 10       | 0.78          |
| (1,829)  | 1:A:417:LYS:HG2  | 1:A:418:THR:H    | 4        | 0.78          |
| (1,829)  | 1:A:417:LYS:HG3  | 1:A:418:THR:H    | 4        | 0.78          |
| (1,780)  | 1:A:387:TYR:HD1  | 1:A:388:GLU:H    | 7        | 0.78          |
| (1,564)  | 1:A:386:THR:HG21 | 1:A:390:MET:H    | 6        | 0.78          |
| (1,564)  | 1:A:386:THR:HG22 | 1:A:390:MET:H    | 6        | 0.78          |
| (1,564)  | 1:A:386:THR:HG23 | 1:A:390:MET:H    | 6        | 0.78          |
| (1,387)  | 1:A:358:ASP:HB2  | 1:A:363:ILE:HG21 | 7        | 0.78          |
| (1,387)  | 1:A:358:ASP:HB2  | 1:A:363:ILE:HG22 | 7        | 0.78          |
| (1,387)  | 1:A:358:ASP:HB2  | 1:A:363:ILE:HG23 | 7        | 0.78          |
| (1,387)  | 1:A:358:ASP:HB3  | 1:A:363:ILE:HG21 | 7        | 0.78          |
| (1,387)  | 1:A:358:ASP:HB3  | 1:A:363:ILE:HG22 | 7        | 0.78          |
| (1,387)  | 1:A:358:ASP:HB3  | 1:A:363:ILE:HG23 | 7        | 0.78          |
| (1,313)  | 1:A:342:TYR:HA   | 1:A:342:TYR:HD2  | 8        | 0.78          |
| (1,279)  | 1:A:363:ILE:HD11 | 1:A:412:LEU:HD11 | 5        | 0.78          |
| (1,279)  | 1:A:363:ILE:HD11 | 1:A:412:LEU:HD12 | 5        | 0.78          |
| (1,279)  | 1:A:363:ILE:HD11 | 1:A:412:LEU:HD13 | 5        | 0.78          |
| (1,279)  | 1:A:363:ILE:HD12 | 1:A:412:LEU:HD11 | 5        | 0.78          |
| (1,279)  | 1:A:363:ILE:HD12 | 1:A:412:LEU:HD12 | 5        | 0.78          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,279)  | 1:A:363:ILE:HD12 | 1:A:412:LEU:HD13 | 5        | 0.78          |
| (1,279)  | 1:A:363:ILE:HD13 | 1:A:412:LEU:HD11 | 5        | 0.78          |
| (1,279)  | 1:A:363:ILE:HD13 | 1:A:412:LEU:HD12 | 5        | 0.78          |
| (1,279)  | 1:A:363:ILE:HD13 | 1:A:412:LEU:HD13 | 5        | 0.78          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD11 | 9        | 0.78          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD12 | 9        | 0.78          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD13 | 9        | 0.78          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD21 | 9        | 0.78          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD22 | 9        | 0.78          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD23 | 9        | 0.78          |
| (1,1246) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HH2  | 5        | 0.78          |
| (1,1246) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HH2  | 5        | 0.78          |
| (1,1246) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HH2  | 5        | 0.78          |
| (1,1246) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HH2  | 5        | 0.78          |
| (1,1246) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HH2  | 5        | 0.78          |
| (1,1246) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HH2  | 5        | 0.78          |
| (1,1216) | 1:A:340:TYR:HE2  | 1:A:379:HIS:HB2  | 5        | 0.78          |
| (1,1216) | 1:A:340:TYR:HE2  | 1:A:379:HIS:HB3  | 5        | 0.78          |
| (1,1158) | 1:A:387:TYR:HA   | 1:A:387:TYR:HD2  | 6        | 0.78          |
| (1,1158) | 1:A:387:TYR:HA   | 1:A:387:TYR:HD2  | 10       | 0.78          |
| (1,481)  | 1:A:355:ARG:H    | 1:A:365:ARG:HG2  | 1        | 0.77          |
| (1,345)  | 1:A:365:ARG:HD2  | 1:A:367:VAL:HG21 | 4        | 0.77          |
| (1,345)  | 1:A:365:ARG:HD2  | 1:A:367:VAL:HG22 | 4        | 0.77          |
| (1,345)  | 1:A:365:ARG:HD2  | 1:A:367:VAL:HG23 | 4        | 0.77          |
| (1,327)  | 1:A:344:LEU:H    | 1:A:354:ILE:HD11 | 1        | 0.77          |
| (1,327)  | 1:A:344:LEU:H    | 1:A:354:ILE:HD12 | 1        | 0.77          |
| (1,327)  | 1:A:344:LEU:H    | 1:A:354:ILE:HD13 | 1        | 0.77          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD11 | 5        | 0.77          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD12 | 5        | 0.77          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD13 | 5        | 0.77          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD21 | 5        | 0.77          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD22 | 5        | 0.77          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD23 | 5        | 0.77          |
| (1,1360) | 1:A:352:ASN:HB2  | 1:A:367:VAL:HB   | 6        | 0.77          |
| (1,1360) | 1:A:352:ASN:HB3  | 1:A:367:VAL:HB   | 6        | 0.77          |
| (1,1218) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HG   | 3        | 0.77          |
| (1,1198) | 1:A:396:HIS:HD2  | 1:A:397:TYR:HA   | 7        | 0.77          |
| (1,1180) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HA   | 7        | 0.77          |
| (1,1174) | 1:A:394:LEU:HG   | 1:A:397:TYR:HD2  | 1        | 0.77          |
| (1,1161) | 1:A:387:TYR:HD2  | 1:A:390:MET:HB2  | 4        | 0.77          |
| (1,1161) | 1:A:387:TYR:HD2  | 1:A:390:MET:HB3  | 4        | 0.77          |
| (1,10)   | 1:A:376:TRP:HZ2  | 1:A:385:MET:HE1  | 5        | 0.77          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,10)   | 1:A:376:TRP:HZ2  | 1:A:385:MET:HE2  | 5        | 0.77          |
| (1,10)   | 1:A:376:TRP:HZ2  | 1:A:385:MET:HE3  | 5        | 0.77          |
| (1,904)  | 1:A:366:ILE:H    | 1:A:368:ASP:H    | 1        | 0.76          |
| (1,603)  | 1:A:376:TRP:HE1  | 1:A:380:LYS:HD2  | 6        | 0.76          |
| (1,603)  | 1:A:376:TRP:HE1  | 1:A:380:LYS:HD3  | 6        | 0.76          |
| (1,313)  | 1:A:342:TYR:HA   | 1:A:342:TYR:HD2  | 5        | 0.76          |
| (1,263)  | 1:A:348:SER:HA   | 1:A:351:GLU:HG2  | 7        | 0.76          |
| (1,263)  | 1:A:348:SER:HA   | 1:A:351:GLU:HG3  | 7        | 0.76          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD11 | 1        | 0.76          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD12 | 1        | 0.76          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD13 | 1        | 0.76          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD21 | 1        | 0.76          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD22 | 1        | 0.76          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD23 | 1        | 0.76          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD11 | 1        | 0.76          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD12 | 1        | 0.76          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD13 | 1        | 0.76          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD21 | 1        | 0.76          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD22 | 1        | 0.76          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD23 | 1        | 0.76          |
| (1,1250) | 1:A:337:LEU:HB2  | 1:A:341:VAL:HB   | 10       | 0.76          |
| (1,1250) | 1:A:337:LEU:HB3  | 1:A:341:VAL:HB   | 10       | 0.76          |
| (1,1246) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HH2  | 7        | 0.76          |
| (1,1246) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HH2  | 7        | 0.76          |
| (1,1246) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HH2  | 7        | 0.76          |
| (1,1246) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HH2  | 7        | 0.76          |
| (1,1246) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HH2  | 7        | 0.76          |
| (1,1246) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HH2  | 7        | 0.76          |
| (1,1209) | 1:A:398:TYR:HE1  | 1:A:405:LYS:HB2  | 3        | 0.76          |
| (1,1209) | 1:A:398:TYR:HE1  | 1:A:405:LYS:HB3  | 3        | 0.76          |
| (1,116)  | 1:A:353:PHE:HB2  | 1:A:372:LEU:HG   | 9        | 0.76          |
| (1,848)  | 1:A:361:SER:H    | 1:A:363:ILE:HB   | 9        | 0.75          |
| (1,820)  | 1:A:366:ILE:HG21 | 1:A:371:GLY:H    | 7        | 0.75          |
| (1,820)  | 1:A:366:ILE:HG22 | 1:A:371:GLY:H    | 7        | 0.75          |
| (1,820)  | 1:A:366:ILE:HG23 | 1:A:371:GLY:H    | 7        | 0.75          |
| (1,712)  | 1:A:404:ARG:H    | 1:A:416:MET:HG2  | 2        | 0.75          |
| (1,712)  | 1:A:404:ARG:H    | 1:A:416:MET:HG3  | 2        | 0.75          |
| (1,448)  | 1:A:374:ARG:H    | 1:A:385:MET:HB3  | 5        | 0.75          |
| (1,335)  | 1:A:361:SER:HB3  | 1:A:363:ILE:HB   | 2        | 0.75          |
| (1,214)  | 1:A:373:ALA:HB1  | 1:A:385:MET:HA   | 8        | 0.75          |
| (1,214)  | 1:A:373:ALA:HB2  | 1:A:385:MET:HA   | 8        | 0.75          |
| (1,214)  | 1:A:373:ALA:HB3  | 1:A:385:MET:HA   | 8        | 0.75          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,152)  | 1:A:354:ILE:H    | 1:A:355:ARG:HD2  | 8        | 0.75          |
| (1,152)  | 1:A:354:ILE:H    | 1:A:355:ARG:HD3  | 8        | 0.75          |
| (1,1434) | 1:A:376:TRP:HZ2  | 1:A:380:LYS:HE2  | 6        | 0.75          |
| (1,1434) | 1:A:376:TRP:HZ2  | 1:A:380:LYS:HE3  | 6        | 0.75          |
| (1,1340) | 1:A:345:LEU:HD11 | 1:A:365:ARG:H    | 5        | 0.75          |
| (1,1340) | 1:A:345:LEU:HD12 | 1:A:365:ARG:H    | 5        | 0.75          |
| (1,1340) | 1:A:345:LEU:HD13 | 1:A:365:ARG:H    | 5        | 0.75          |
| (1,1340) | 1:A:345:LEU:HD21 | 1:A:365:ARG:H    | 5        | 0.75          |
| (1,1340) | 1:A:345:LEU:HD22 | 1:A:365:ARG:H    | 5        | 0.75          |
| (1,1340) | 1:A:345:LEU:HD23 | 1:A:365:ARG:H    | 5        | 0.75          |
| (1,1213) | 1:A:340:TYR:HA   | 1:A:340:TYR:HE2  | 4        | 0.75          |
| (1,1158) | 1:A:387:TYR:HA   | 1:A:387:TYR:HD2  | 3        | 0.75          |
| (1,1008) | 1:A:412:LEU:H    | 1:A:413:PHE:HD1  | 10       | 0.75          |
| (1,995)  | 1:A:359:LYS:HD2  | 1:A:363:ILE:H    | 2        | 0.74          |
| (1,995)  | 1:A:359:LYS:HD3  | 1:A:363:ILE:H    | 2        | 0.74          |
| (1,780)  | 1:A:387:TYR:HD1  | 1:A:388:GLU:H    | 1        | 0.74          |
| (1,397)  | 1:A:366:ILE:HG21 | 1:A:387:TYR:HE2  | 4        | 0.74          |
| (1,397)  | 1:A:366:ILE:HG22 | 1:A:387:TYR:HE2  | 4        | 0.74          |
| (1,397)  | 1:A:366:ILE:HG23 | 1:A:387:TYR:HE2  | 4        | 0.74          |
| (1,375)  | 1:A:373:ALA:HB1  | 1:A:374:ARG:HD2  | 5        | 0.74          |
| (1,375)  | 1:A:373:ALA:HB1  | 1:A:374:ARG:HD3  | 5        | 0.74          |
| (1,375)  | 1:A:373:ALA:HB2  | 1:A:374:ARG:HD2  | 5        | 0.74          |
| (1,375)  | 1:A:373:ALA:HB2  | 1:A:374:ARG:HD3  | 5        | 0.74          |
| (1,375)  | 1:A:373:ALA:HB3  | 1:A:374:ARG:HD2  | 5        | 0.74          |
| (1,375)  | 1:A:373:ALA:HB3  | 1:A:374:ARG:HD3  | 5        | 0.74          |
| (1,279)  | 1:A:363:ILE:HD11 | 1:A:412:LEU:HD11 | 1        | 0.74          |
| (1,279)  | 1:A:363:ILE:HD11 | 1:A:412:LEU:HD12 | 1        | 0.74          |
| (1,279)  | 1:A:363:ILE:HD11 | 1:A:412:LEU:HD13 | 1        | 0.74          |
| (1,279)  | 1:A:363:ILE:HD12 | 1:A:412:LEU:HD11 | 1        | 0.74          |
| (1,279)  | 1:A:363:ILE:HD12 | 1:A:412:LEU:HD12 | 1        | 0.74          |
| (1,279)  | 1:A:363:ILE:HD12 | 1:A:412:LEU:HD13 | 1        | 0.74          |
| (1,279)  | 1:A:363:ILE:HD13 | 1:A:412:LEU:HD11 | 1        | 0.74          |
| (1,279)  | 1:A:363:ILE:HD13 | 1:A:412:LEU:HD12 | 1        | 0.74          |
| (1,279)  | 1:A:363:ILE:HD13 | 1:A:412:LEU:HD13 | 1        | 0.74          |
| (1,240)  | 1:A:415:PHE:HA   | 1:A:415:PHE:HE1  | 6        | 0.74          |
| (1,191)  | 1:A:406:GLU:HA   | 1:A:412:LEU:HB3  | 9        | 0.74          |
| (1,1433) | 1:A:376:TRP:HE1  | 1:A:385:MET:HG2  | 5        | 0.74          |
| (1,1433) | 1:A:376:TRP:HE1  | 1:A:385:MET:HG3  | 5        | 0.74          |
| (1,1365) | 1:A:353:PHE:HB3  | 1:A:372:LEU:HD11 | 10       | 0.74          |
| (1,1365) | 1:A:353:PHE:HB3  | 1:A:372:LEU:HD12 | 10       | 0.74          |
| (1,1365) | 1:A:353:PHE:HB3  | 1:A:372:LEU:HD13 | 10       | 0.74          |
| (1,1365) | 1:A:353:PHE:HB3  | 1:A:372:LEU:HD21 | 10       | 0.74          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1365) | 1:A:353:PHE:HB3  | 1:A:372:LEU:HD22 | 10       | 0.74          |
| (1,1365) | 1:A:353:PHE:HB3  | 1:A:372:LEU:HD23 | 10       | 0.74          |
| (1,1337) | 1:A:345:LEU:HD11 | 1:A:357:GLU:H    | 7        | 0.74          |
| (1,1337) | 1:A:345:LEU:HD12 | 1:A:357:GLU:H    | 7        | 0.74          |
| (1,1337) | 1:A:345:LEU:HD13 | 1:A:357:GLU:H    | 7        | 0.74          |
| (1,1337) | 1:A:345:LEU:HD21 | 1:A:357:GLU:H    | 7        | 0.74          |
| (1,1337) | 1:A:345:LEU:HD22 | 1:A:357:GLU:H    | 7        | 0.74          |
| (1,1337) | 1:A:345:LEU:HD23 | 1:A:357:GLU:H    | 7        | 0.74          |
| (1,1327) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HB2  | 10       | 0.74          |
| (1,1327) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HB3  | 10       | 0.74          |
| (1,1327) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HB2  | 10       | 0.74          |
| (1,1327) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HB3  | 10       | 0.74          |
| (1,1327) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HB2  | 10       | 0.74          |
| (1,1327) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HB3  | 10       | 0.74          |
| (1,1327) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HB2  | 10       | 0.74          |
| (1,1327) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HB3  | 10       | 0.74          |
| (1,1327) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HB2  | 10       | 0.74          |
| (1,1327) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HB3  | 10       | 0.74          |
| (1,1327) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HB2  | 10       | 0.74          |
| (1,1327) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HB3  | 10       | 0.74          |
| (1,1280) | 1:A:340:TYR:HE1  | 1:A:375:LEU:HD11 | 5        | 0.74          |
| (1,1280) | 1:A:340:TYR:HE1  | 1:A:375:LEU:HD12 | 5        | 0.74          |
| (1,1280) | 1:A:340:TYR:HE1  | 1:A:375:LEU:HD13 | 5        | 0.74          |
| (1,1280) | 1:A:340:TYR:HE1  | 1:A:375:LEU:HD21 | 5        | 0.74          |
| (1,1280) | 1:A:340:TYR:HE1  | 1:A:375:LEU:HD22 | 5        | 0.74          |
| (1,1280) | 1:A:340:TYR:HE1  | 1:A:375:LEU:HD23 | 5        | 0.74          |
| (1,1213) | 1:A:340:TYR:HA   | 1:A:340:TYR:HE2  | 7        | 0.74          |
| (1,1183) | 1:A:413:PHE:HB3  | 1:A:413:PHE:HE2  | 1        | 0.74          |
| (1,1183) | 1:A:413:PHE:HB3  | 1:A:413:PHE:HE2  | 2        | 0.74          |
| (1,1183) | 1:A:413:PHE:HB3  | 1:A:413:PHE:HE2  | 10       | 0.74          |
| (1,1129) | 1:A:398:TYR:H    | 1:A:402:ILE:HD11 | 7        | 0.74          |
| (1,1129) | 1:A:398:TYR:H    | 1:A:402:ILE:HD12 | 7        | 0.74          |
| (1,1129) | 1:A:398:TYR:H    | 1:A:402:ILE:HD13 | 7        | 0.74          |
| (1,109)  | 1:A:415:PHE:HB3  | 1:A:415:PHE:HE2  | 10       | 0.74          |
| (1,1038) | 1:A:358:ASP:HA   | 1:A:360:GLU:H    | 7        | 0.74          |
| (1,626)  | 1:A:355:ARG:H    | 1:A:367:VAL:H    | 4        | 0.73          |
| (1,313)  | 1:A:342:TYR:HA   | 1:A:342:TYR:HD2  | 7        | 0.73          |
| (1,19)   | 1:A:344:LEU:H    | 1:A:354:ILE:HG21 | 5        | 0.73          |
| (1,19)   | 1:A:344:LEU:H    | 1:A:354:ILE:HG22 | 5        | 0.73          |
| (1,19)   | 1:A:344:LEU:H    | 1:A:354:ILE:HG23 | 5        | 0.73          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD11 | 2        | 0.73          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD12 | 2        | 0.73          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD13 | 2        | 0.73          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD21 | 2        | 0.73          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD22 | 2        | 0.73          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD23 | 2        | 0.73          |
| (1,1213) | 1:A:340:TYR:HA   | 1:A:340:TYR:HE2  | 3        | 0.73          |
| (1,1158) | 1:A:387:TYR:HA   | 1:A:387:TYR:HD2  | 2        | 0.73          |
| (1,1113) | 1:A:354:ILE:H    | 1:A:367:VAL:HB   | 5        | 0.73          |
| (1,1008) | 1:A:412:LEU:H    | 1:A:413:PHE:HD1  | 2        | 0.73          |
| (1,702)  | 1:A:353:PHE:HD2  | 1:A:372:LEU:H    | 9        | 0.72          |
| (1,572)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG11 | 2        | 0.72          |
| (1,572)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG12 | 2        | 0.72          |
| (1,572)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG13 | 2        | 0.72          |
| (1,399)  | 1:A:353:PHE:HA   | 1:A:366:ILE:HG21 | 3        | 0.72          |
| (1,399)  | 1:A:353:PHE:HA   | 1:A:366:ILE:HG22 | 3        | 0.72          |
| (1,399)  | 1:A:353:PHE:HA   | 1:A:366:ILE:HG23 | 3        | 0.72          |
| (1,399)  | 1:A:353:PHE:HA   | 1:A:366:ILE:HG21 | 10       | 0.72          |
| (1,399)  | 1:A:353:PHE:HA   | 1:A:366:ILE:HG22 | 10       | 0.72          |
| (1,399)  | 1:A:353:PHE:HA   | 1:A:366:ILE:HG23 | 10       | 0.72          |
| (1,339)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:HG21 | 5        | 0.72          |
| (1,339)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:HG22 | 5        | 0.72          |
| (1,339)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:HG23 | 5        | 0.72          |
| (1,339)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:HG21 | 5        | 0.72          |
| (1,339)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:HG22 | 5        | 0.72          |
| (1,339)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:HG23 | 5        | 0.72          |
| (1,313)  | 1:A:342:TYR:HA   | 1:A:342:TYR:HD2  | 3        | 0.72          |
| (1,173)  | 1:A:353:PHE:HA   | 1:A:368:ASP:HA   | 8        | 0.72          |
| (1,1341) | 1:A:345:LEU:HD11 | 1:A:367:VAL:HG21 | 7        | 0.72          |
| (1,1341) | 1:A:345:LEU:HD11 | 1:A:367:VAL:HG22 | 7        | 0.72          |
| (1,1341) | 1:A:345:LEU:HD11 | 1:A:367:VAL:HG23 | 7        | 0.72          |
| (1,1341) | 1:A:345:LEU:HD12 | 1:A:367:VAL:HG21 | 7        | 0.72          |
| (1,1341) | 1:A:345:LEU:HD12 | 1:A:367:VAL:HG22 | 7        | 0.72          |
| (1,1341) | 1:A:345:LEU:HD12 | 1:A:367:VAL:HG23 | 7        | 0.72          |
| (1,1341) | 1:A:345:LEU:HD13 | 1:A:367:VAL:HG21 | 7        | 0.72          |
| (1,1341) | 1:A:345:LEU:HD13 | 1:A:367:VAL:HG22 | 7        | 0.72          |
| (1,1341) | 1:A:345:LEU:HD13 | 1:A:367:VAL:HG23 | 7        | 0.72          |
| (1,1341) | 1:A:345:LEU:HD21 | 1:A:367:VAL:HG21 | 7        | 0.72          |
| (1,1341) | 1:A:345:LEU:HD21 | 1:A:367:VAL:HG22 | 7        | 0.72          |
| (1,1341) | 1:A:345:LEU:HD21 | 1:A:367:VAL:HG23 | 7        | 0.72          |
| (1,1341) | 1:A:345:LEU:HD22 | 1:A:367:VAL:HG21 | 7        | 0.72          |
| (1,1341) | 1:A:345:LEU:HD22 | 1:A:367:VAL:HG22 | 7        | 0.72          |
| (1,1341) | 1:A:345:LEU:HD22 | 1:A:367:VAL:HG23 | 7        | 0.72          |
| (1,1341) | 1:A:345:LEU:HD23 | 1:A:367:VAL:HG21 | 7        | 0.72          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1341) | 1:A:345:LEU:HD23 | 1:A:367:VAL:HG22 | 7        | 0.72          |
| (1,1341) | 1:A:345:LEU:HD23 | 1:A:367:VAL:HG23 | 7        | 0.72          |
| (1,1331) | 1:A:345:LEU:HD11 | 1:A:356:TRP:H    | 10       | 0.72          |
| (1,1331) | 1:A:345:LEU:HD12 | 1:A:356:TRP:H    | 10       | 0.72          |
| (1,1331) | 1:A:345:LEU:HD13 | 1:A:356:TRP:H    | 10       | 0.72          |
| (1,1331) | 1:A:345:LEU:HD21 | 1:A:356:TRP:H    | 10       | 0.72          |
| (1,1331) | 1:A:345:LEU:HD22 | 1:A:356:TRP:H    | 10       | 0.72          |
| (1,1331) | 1:A:345:LEU:HD23 | 1:A:356:TRP:H    | 10       | 0.72          |
| (1,1221) | 1:A:387:TYR:HB3  | 1:A:387:TYR:HE1  | 1        | 0.72          |
| (1,1221) | 1:A:387:TYR:HB3  | 1:A:387:TYR:HE1  | 4        | 0.72          |
| (1,1213) | 1:A:340:TYR:HA   | 1:A:340:TYR:HE2  | 8        | 0.72          |
| (1,1183) | 1:A:413:PHE:HB3  | 1:A:413:PHE:HE2  | 5        | 0.72          |
| (1,1161) | 1:A:387:TYR:HD2  | 1:A:390:MET:HB2  | 10       | 0.72          |
| (1,1161) | 1:A:387:TYR:HD2  | 1:A:390:MET:HB3  | 10       | 0.72          |
| (1,1114) | 1:A:354:ILE:H    | 1:A:367:VAL:HG21 | 4        | 0.72          |
| (1,1114) | 1:A:354:ILE:H    | 1:A:367:VAL:HG22 | 4        | 0.72          |
| (1,1114) | 1:A:354:ILE:H    | 1:A:367:VAL:HG23 | 4        | 0.72          |
| (1,109)  | 1:A:415:PHE:HB3  | 1:A:415:PHE:HE2  | 9        | 0.72          |
| (1,1070) | 1:A:417:LYS:HE2  | 1:A:421:GLU:H    | 10       | 0.72          |
| (1,1070) | 1:A:417:LYS:HE3  | 1:A:421:GLU:H    | 10       | 0.72          |
| (1,904)  | 1:A:366:ILE:H    | 1:A:368:ASP:H    | 5        | 0.71          |
| (1,897)  | 1:A:353:PHE:H    | 1:A:367:VAL:HB   | 6        | 0.71          |
| (1,567)  | 1:A:386:THR:HG21 | 1:A:387:TYR:HB3  | 1        | 0.71          |
| (1,567)  | 1:A:386:THR:HG22 | 1:A:387:TYR:HB3  | 1        | 0.71          |
| (1,567)  | 1:A:386:THR:HG23 | 1:A:387:TYR:HB3  | 1        | 0.71          |
| (1,567)  | 1:A:386:THR:HG21 | 1:A:387:TYR:HB3  | 4        | 0.71          |
| (1,567)  | 1:A:386:THR:HG22 | 1:A:387:TYR:HB3  | 4        | 0.71          |
| (1,567)  | 1:A:386:THR:HG23 | 1:A:387:TYR:HB3  | 4        | 0.71          |
| (1,499)  | 1:A:369:PRO:HA   | 1:A:411:LEU:HD11 | 4        | 0.71          |
| (1,499)  | 1:A:369:PRO:HA   | 1:A:411:LEU:HD12 | 4        | 0.71          |
| (1,499)  | 1:A:369:PRO:HA   | 1:A:411:LEU:HD13 | 4        | 0.71          |
| (1,313)  | 1:A:342:TYR:HA   | 1:A:342:TYR:HD2  | 6        | 0.71          |
| (1,1440) | 1:A:377:GLY:HA2  | 1:A:385:MET:HE1  | 6        | 0.71          |
| (1,1440) | 1:A:377:GLY:HA2  | 1:A:385:MET:HE2  | 6        | 0.71          |
| (1,1440) | 1:A:377:GLY:HA2  | 1:A:385:MET:HE3  | 6        | 0.71          |
| (1,1440) | 1:A:377:GLY:HA3  | 1:A:385:MET:HE1  | 6        | 0.71          |
| (1,1440) | 1:A:377:GLY:HA3  | 1:A:385:MET:HE2  | 6        | 0.71          |
| (1,1440) | 1:A:377:GLY:HA3  | 1:A:385:MET:HE3  | 6        | 0.71          |
| (1,1397) | 1:A:369:PRO:HD2  | 1:A:411:LEU:HD11 | 6        | 0.71          |
| (1,1397) | 1:A:369:PRO:HD2  | 1:A:411:LEU:HD12 | 6        | 0.71          |
| (1,1397) | 1:A:369:PRO:HD2  | 1:A:411:LEU:HD13 | 6        | 0.71          |
| (1,1397) | 1:A:369:PRO:HD2  | 1:A:411:LEU:HD21 | 6        | 0.71          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1397) | 1:A:369:PRO:HD2  | 1:A:411:LEU:HD22 | 6        | 0.71          |
| (1,1397) | 1:A:369:PRO:HD2  | 1:A:411:LEU:HD23 | 6        | 0.71          |
| (1,1397) | 1:A:369:PRO:HD3  | 1:A:411:LEU:HD11 | 6        | 0.71          |
| (1,1397) | 1:A:369:PRO:HD3  | 1:A:411:LEU:HD12 | 6        | 0.71          |
| (1,1397) | 1:A:369:PRO:HD3  | 1:A:411:LEU:HD13 | 6        | 0.71          |
| (1,1397) | 1:A:369:PRO:HD3  | 1:A:411:LEU:HD21 | 6        | 0.71          |
| (1,1397) | 1:A:369:PRO:HD3  | 1:A:411:LEU:HD22 | 6        | 0.71          |
| (1,1397) | 1:A:369:PRO:HD3  | 1:A:411:LEU:HD23 | 6        | 0.71          |
| (1,1361) | 1:A:352:ASN:HB2  | 1:A:367:VAL:HG11 | 10       | 0.71          |
| (1,1361) | 1:A:352:ASN:HB2  | 1:A:367:VAL:HG12 | 10       | 0.71          |
| (1,1361) | 1:A:352:ASN:HB2  | 1:A:367:VAL:HG13 | 10       | 0.71          |
| (1,1361) | 1:A:352:ASN:HB3  | 1:A:367:VAL:HG11 | 10       | 0.71          |
| (1,1361) | 1:A:352:ASN:HB3  | 1:A:367:VAL:HG12 | 10       | 0.71          |
| (1,1361) | 1:A:352:ASN:HB3  | 1:A:367:VAL:HG13 | 10       | 0.71          |
| (1,1221) | 1:A:387:TYR:HB3  | 1:A:387:TYR:HE1  | 5        | 0.71          |
| (1,1221) | 1:A:387:TYR:HB3  | 1:A:387:TYR:HE1  | 7        | 0.71          |
| (1,1221) | 1:A:387:TYR:HB3  | 1:A:387:TYR:HE1  | 9        | 0.71          |
| (1,1213) | 1:A:340:TYR:HA   | 1:A:340:TYR:HE2  | 10       | 0.71          |
| (1,1202) | 1:A:397:TYR:HA   | 1:A:397:TYR:HE1  | 2        | 0.71          |
| (1,1183) | 1:A:413:PHE:HB3  | 1:A:413:PHE:HE2  | 6        | 0.71          |
| (1,832)  | 1:A:418:THR:H    | 1:A:422:ILE:H    | 1        | 0.7           |
| (1,785)  | 1:A:355:ARG:H    | 1:A:366:ILE:HA   | 2        | 0.7           |
| (1,702)  | 1:A:353:PHE:HD2  | 1:A:372:LEU:H    | 3        | 0.7           |
| (1,567)  | 1:A:386:THR:HG21 | 1:A:387:TYR:HB3  | 5        | 0.7           |
| (1,567)  | 1:A:386:THR:HG22 | 1:A:387:TYR:HB3  | 5        | 0.7           |
| (1,567)  | 1:A:386:THR:HG23 | 1:A:387:TYR:HB3  | 5        | 0.7           |
| (1,232)  | 1:A:397:TYR:HA   | 1:A:402:ILE:H    | 7        | 0.7           |
| (1,165)  | 1:A:329:GLY:HA2  | 1:A:330:ARG:HG2  | 3        | 0.7           |
| (1,165)  | 1:A:329:GLY:HA2  | 1:A:330:ARG:HG3  | 3        | 0.7           |
| (1,165)  | 1:A:329:GLY:HA3  | 1:A:330:ARG:HG2  | 3        | 0.7           |
| (1,165)  | 1:A:329:GLY:HA3  | 1:A:330:ARG:HG3  | 3        | 0.7           |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD11 | 2        | 0.7           |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD12 | 2        | 0.7           |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD13 | 2        | 0.7           |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD21 | 2        | 0.7           |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD22 | 2        | 0.7           |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD23 | 2        | 0.7           |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD11 | 5        | 0.7           |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD12 | 5        | 0.7           |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD13 | 5        | 0.7           |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD21 | 5        | 0.7           |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD22 | 5        | 0.7           |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD23 | 5        | 0.7           |
| (1,1331) | 1:A:345:LEU:HD11 | 1:A:356:TRP:H    | 7        | 0.7           |
| (1,1331) | 1:A:345:LEU:HD12 | 1:A:356:TRP:H    | 7        | 0.7           |
| (1,1331) | 1:A:345:LEU:HD13 | 1:A:356:TRP:H    | 7        | 0.7           |
| (1,1331) | 1:A:345:LEU:HD21 | 1:A:356:TRP:H    | 7        | 0.7           |
| (1,1331) | 1:A:345:LEU:HD22 | 1:A:356:TRP:H    | 7        | 0.7           |
| (1,1331) | 1:A:345:LEU:HD23 | 1:A:356:TRP:H    | 7        | 0.7           |
| (1,1221) | 1:A:387:TYR:HB3  | 1:A:387:TYR:HE1  | 2        | 0.7           |
| (1,1221) | 1:A:387:TYR:HB3  | 1:A:387:TYR:HE1  | 6        | 0.7           |
| (1,1221) | 1:A:387:TYR:HB3  | 1:A:387:TYR:HE1  | 10       | 0.7           |
| (1,1213) | 1:A:340:TYR:HA   | 1:A:340:TYR:HE2  | 1        | 0.7           |
| (1,1209) | 1:A:398:TYR:HE1  | 1:A:405:LYS:HB2  | 5        | 0.7           |
| (1,1209) | 1:A:398:TYR:HE1  | 1:A:405:LYS:HB3  | 5        | 0.7           |
| (1,1183) | 1:A:413:PHE:HB3  | 1:A:413:PHE:HE2  | 4        | 0.7           |
| (1,1140) | 1:A:375:LEU:HA   | 1:A:378:ASN:HD22 | 3        | 0.7           |
| (1,1110) | 1:A:327:HIS:HE1  | 1:A:328:MET:H    | 5        | 0.7           |
| (1,84)   | 1:A:358:ASP:HA   | 1:A:360:GLU:HG2  | 5        | 0.69          |
| (1,84)   | 1:A:358:ASP:HA   | 1:A:360:GLU:HG3  | 5        | 0.69          |
| (1,666)  | 1:A:366:ILE:H    | 1:A:413:PHE:HZ   | 7        | 0.69          |
| (1,65)   | 1:A:355:ARG:HB2  | 1:A:367:VAL:HB   | 9        | 0.69          |
| (1,65)   | 1:A:355:ARG:HB3  | 1:A:367:VAL:HB   | 9        | 0.69          |
| (1,449)  | 1:A:385:MET:HB3  | 1:A:386:THR:HA   | 9        | 0.69          |
| (1,435)  | 1:A:370:ASN:HA   | 1:A:387:TYR:HB2  | 5        | 0.69          |
| (1,345)  | 1:A:365:ARG:HD2  | 1:A:367:VAL:HG21 | 5        | 0.69          |
| (1,345)  | 1:A:365:ARG:HD2  | 1:A:367:VAL:HG22 | 5        | 0.69          |
| (1,345)  | 1:A:365:ARG:HD2  | 1:A:367:VAL:HG23 | 5        | 0.69          |
| (1,286)  | 1:A:403:ILE:HD11 | 1:A:413:PHE:HD2  | 6        | 0.69          |
| (1,286)  | 1:A:403:ILE:HD12 | 1:A:413:PHE:HD2  | 6        | 0.69          |
| (1,286)  | 1:A:403:ILE:HD13 | 1:A:413:PHE:HD2  | 6        | 0.69          |
| (1,240)  | 1:A:415:PHE:HA   | 1:A:415:PHE:HE1  | 3        | 0.69          |
| (1,184)  | 1:A:365:ARG:HA   | 1:A:413:PHE:HE1  | 3        | 0.69          |
| (1,151)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:H    | 5        | 0.69          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD11 | 5        | 0.69          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD12 | 5        | 0.69          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD13 | 5        | 0.69          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD21 | 5        | 0.69          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD22 | 5        | 0.69          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD23 | 5        | 0.69          |
| (1,1331) | 1:A:345:LEU:HD11 | 1:A:356:TRP:H    | 5        | 0.69          |
| (1,1331) | 1:A:345:LEU:HD12 | 1:A:356:TRP:H    | 5        | 0.69          |
| (1,1331) | 1:A:345:LEU:HD13 | 1:A:356:TRP:H    | 5        | 0.69          |
| (1,1331) | 1:A:345:LEU:HD21 | 1:A:356:TRP:H    | 5        | 0.69          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1331) | 1:A:345:LEU:HD22 | 1:A:356:TRP:H    | 5        | 0.69          |
| (1,1331) | 1:A:345:LEU:HD23 | 1:A:356:TRP:H    | 5        | 0.69          |
| (1,1221) | 1:A:387:TYR:HB3  | 1:A:387:TYR:HE1  | 3        | 0.69          |
| (1,1183) | 1:A:413:PHE:HB3  | 1:A:413:PHE:HE2  | 9        | 0.69          |
| (1,1114) | 1:A:354:ILE:H    | 1:A:367:VAL:HG21 | 3        | 0.69          |
| (1,1114) | 1:A:354:ILE:H    | 1:A:367:VAL:HG22 | 3        | 0.69          |
| (1,1114) | 1:A:354:ILE:H    | 1:A:367:VAL:HG23 | 3        | 0.69          |
| (1,948)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD11 | 4        | 0.68          |
| (1,948)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD12 | 4        | 0.68          |
| (1,948)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD13 | 4        | 0.68          |
| (1,948)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD11 | 6        | 0.68          |
| (1,948)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD12 | 6        | 0.68          |
| (1,948)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD13 | 6        | 0.68          |
| (1,848)  | 1:A:361:SER:H    | 1:A:363:ILE:HB   | 6        | 0.68          |
| (1,606)  | 1:A:376:TRP:HE1  | 1:A:390:MET:HA   | 4        | 0.68          |
| (1,587)  | 1:A:353:PHE:HB3  | 1:A:369:PRO:HA   | 2        | 0.68          |
| (1,234)  | 1:A:396:HIS:HA   | 1:A:399:LYS:HB2  | 7        | 0.68          |
| (1,234)  | 1:A:396:HIS:HA   | 1:A:399:LYS:HB3  | 7        | 0.68          |
| (1,214)  | 1:A:373:ALA:HB1  | 1:A:385:MET:HA   | 10       | 0.68          |
| (1,214)  | 1:A:373:ALA:HB2  | 1:A:385:MET:HA   | 10       | 0.68          |
| (1,214)  | 1:A:373:ALA:HB3  | 1:A:385:MET:HA   | 10       | 0.68          |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD11 | 4        | 0.68          |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD12 | 4        | 0.68          |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD13 | 4        | 0.68          |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD21 | 4        | 0.68          |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD22 | 4        | 0.68          |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD23 | 4        | 0.68          |
| (1,1311) | 1:A:344:LEU:HD11 | 1:A:354:ILE:HD11 | 9        | 0.68          |
| (1,1311) | 1:A:344:LEU:HD11 | 1:A:354:ILE:HD12 | 9        | 0.68          |
| (1,1311) | 1:A:344:LEU:HD11 | 1:A:354:ILE:HD13 | 9        | 0.68          |
| (1,1311) | 1:A:344:LEU:HD12 | 1:A:354:ILE:HD11 | 9        | 0.68          |
| (1,1311) | 1:A:344:LEU:HD12 | 1:A:354:ILE:HD12 | 9        | 0.68          |
| (1,1311) | 1:A:344:LEU:HD12 | 1:A:354:ILE:HD13 | 9        | 0.68          |
| (1,1311) | 1:A:344:LEU:HD13 | 1:A:354:ILE:HD11 | 9        | 0.68          |
| (1,1311) | 1:A:344:LEU:HD13 | 1:A:354:ILE:HD12 | 9        | 0.68          |
| (1,1311) | 1:A:344:LEU:HD13 | 1:A:354:ILE:HD13 | 9        | 0.68          |
| (1,1311) | 1:A:344:LEU:HD21 | 1:A:354:ILE:HD11 | 9        | 0.68          |
| (1,1311) | 1:A:344:LEU:HD21 | 1:A:354:ILE:HD12 | 9        | 0.68          |
| (1,1311) | 1:A:344:LEU:HD21 | 1:A:354:ILE:HD13 | 9        | 0.68          |
| (1,1311) | 1:A:344:LEU:HD22 | 1:A:354:ILE:HD11 | 9        | 0.68          |
| (1,1311) | 1:A:344:LEU:HD22 | 1:A:354:ILE:HD12 | 9        | 0.68          |
| (1,1311) | 1:A:344:LEU:HD22 | 1:A:354:ILE:HD13 | 9        | 0.68          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1311) | 1:A:344:LEU:HD23 | 1:A:354:ILE:HD11 | 9        | 0.68          |
| (1,1311) | 1:A:344:LEU:HD23 | 1:A:354:ILE:HD12 | 9        | 0.68          |
| (1,1311) | 1:A:344:LEU:HD23 | 1:A:354:ILE:HD13 | 9        | 0.68          |
| (1,1256) | 1:A:337:LEU:HD11 | 1:A:341:VAL:HA   | 3        | 0.68          |
| (1,1256) | 1:A:337:LEU:HD12 | 1:A:341:VAL:HA   | 3        | 0.68          |
| (1,1256) | 1:A:337:LEU:HD13 | 1:A:341:VAL:HA   | 3        | 0.68          |
| (1,1256) | 1:A:337:LEU:HD21 | 1:A:341:VAL:HA   | 3        | 0.68          |
| (1,1256) | 1:A:337:LEU:HD22 | 1:A:341:VAL:HA   | 3        | 0.68          |
| (1,1256) | 1:A:337:LEU:HD23 | 1:A:341:VAL:HA   | 3        | 0.68          |
| (1,1221) | 1:A:387:TYR:HB3  | 1:A:387:TYR:HE1  | 8        | 0.68          |
| (1,1199) | 1:A:393:ALA:HA   | 1:A:396:HIS:HD2  | 2        | 0.68          |
| (1,1198) | 1:A:396:HIS:HD2  | 1:A:397:TYR:HA   | 3        | 0.68          |
| (1,1192) | 1:A:376:TRP:HH2  | 1:A:380:LYS:HD2  | 6        | 0.68          |
| (1,1192) | 1:A:376:TRP:HH2  | 1:A:380:LYS:HD3  | 6        | 0.68          |
| (1,109)  | 1:A:415:PHE:HB3  | 1:A:415:PHE:HE2  | 7        | 0.68          |
| (1,848)  | 1:A:361:SER:H    | 1:A:363:ILE:HB   | 7        | 0.67          |
| (1,804)  | 1:A:355:ARG:HB2  | 1:A:365:ARG:H    | 4        | 0.67          |
| (1,804)  | 1:A:355:ARG:HB3  | 1:A:365:ARG:H    | 4        | 0.67          |
| (1,726)  | 1:A:387:TYR:HD2  | 1:A:390:MET:H    | 7        | 0.67          |
| (1,504)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD21 | 7        | 0.67          |
| (1,504)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD22 | 7        | 0.67          |
| (1,504)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD23 | 7        | 0.67          |
| (1,499)  | 1:A:369:PRO:HA   | 1:A:411:LEU:HD11 | 5        | 0.67          |
| (1,499)  | 1:A:369:PRO:HA   | 1:A:411:LEU:HD12 | 5        | 0.67          |
| (1,499)  | 1:A:369:PRO:HA   | 1:A:411:LEU:HD13 | 5        | 0.67          |
| (1,496)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD11 | 1        | 0.67          |
| (1,496)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD12 | 1        | 0.67          |
| (1,496)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD13 | 1        | 0.67          |
| (1,449)  | 1:A:385:MET:HB3  | 1:A:386:THR:HA   | 6        | 0.67          |
| (1,449)  | 1:A:385:MET:HB3  | 1:A:386:THR:HA   | 10       | 0.67          |
| (1,399)  | 1:A:353:PHE:HA   | 1:A:366:ILE:HG21 | 5        | 0.67          |
| (1,399)  | 1:A:353:PHE:HA   | 1:A:366:ILE:HG22 | 5        | 0.67          |
| (1,399)  | 1:A:353:PHE:HA   | 1:A:366:ILE:HG23 | 5        | 0.67          |
| (1,214)  | 1:A:373:ALA:HB1  | 1:A:385:MET:HA   | 9        | 0.67          |
| (1,214)  | 1:A:373:ALA:HB2  | 1:A:385:MET:HA   | 9        | 0.67          |
| (1,214)  | 1:A:373:ALA:HB3  | 1:A:385:MET:HA   | 9        | 0.67          |
| (1,151)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:H    | 7        | 0.67          |
| (1,1484) | 1:A:402:ILE:HA   | 1:A:416:MET:HB2  | 5        | 0.67          |
| (1,1484) | 1:A:402:ILE:HA   | 1:A:416:MET:HB3  | 5        | 0.67          |
| (1,1377) | 1:A:361:SER:H    | 1:A:362:LYS:HG2  | 2        | 0.67          |
| (1,1377) | 1:A:361:SER:H    | 1:A:362:LYS:HG3  | 2        | 0.67          |
| (1,1329) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HD2  | 5        | 0.67          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1329) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HD3  | 5        | 0.67          |
| (1,1329) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HD2  | 5        | 0.67          |
| (1,1329) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HD3  | 5        | 0.67          |
| (1,1329) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HD2  | 5        | 0.67          |
| (1,1329) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HD3  | 5        | 0.67          |
| (1,1329) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HD2  | 5        | 0.67          |
| (1,1329) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HD3  | 5        | 0.67          |
| (1,1329) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HD2  | 5        | 0.67          |
| (1,1329) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HD3  | 5        | 0.67          |
| (1,1329) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HD2  | 5        | 0.67          |
| (1,1329) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HD3  | 5        | 0.67          |
| (1,1180) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HA   | 1        | 0.67          |
| (1,118)  | 1:A:353:PHE:HB3  | 1:A:372:LEU:HG   | 5        | 0.67          |
| (1,109)  | 1:A:415:PHE:HB3  | 1:A:415:PHE:HE2  | 8        | 0.67          |
| (1,567)  | 1:A:386:THR:HG21 | 1:A:387:TYR:HB3  | 2        | 0.66          |
| (1,567)  | 1:A:386:THR:HG22 | 1:A:387:TYR:HB3  | 2        | 0.66          |
| (1,567)  | 1:A:386:THR:HG23 | 1:A:387:TYR:HB3  | 2        | 0.66          |
| (1,360)  | 1:A:403:ILE:HG21 | 1:A:413:PHE:HD2  | 9        | 0.66          |
| (1,360)  | 1:A:403:ILE:HG22 | 1:A:413:PHE:HD2  | 9        | 0.66          |
| (1,360)  | 1:A:403:ILE:HG23 | 1:A:413:PHE:HD2  | 9        | 0.66          |
| (1,323)  | 1:A:345:LEU:H    | 1:A:354:ILE:HD11 | 5        | 0.66          |
| (1,323)  | 1:A:345:LEU:H    | 1:A:354:ILE:HD12 | 5        | 0.66          |
| (1,323)  | 1:A:345:LEU:H    | 1:A:354:ILE:HD13 | 5        | 0.66          |
| (1,248)  | 1:A:376:TRP:HD1  | 1:A:390:MET:HA   | 9        | 0.66          |
| (1,233)  | 1:A:397:TYR:HA   | 1:A:397:TYR:HD1  | 6        | 0.66          |
| (1,178)  | 1:A:412:LEU:HA   | 1:A:413:PHE:HE1  | 8        | 0.66          |
| (1,1213) | 1:A:340:TYR:HA   | 1:A:340:TYR:HE2  | 5        | 0.66          |
| (1,1201) | 1:A:394:LEU:HG   | 1:A:397:TYR:HE2  | 7        | 0.66          |
| (1,1187) | 1:A:356:TRP:HD1  | 1:A:359:LYS:HD2  | 8        | 0.66          |
| (1,1187) | 1:A:356:TRP:HD1  | 1:A:359:LYS:HD3  | 8        | 0.66          |
| (1,109)  | 1:A:415:PHE:HB3  | 1:A:415:PHE:HE2  | 2        | 0.66          |
| (1,109)  | 1:A:415:PHE:HB3  | 1:A:415:PHE:HE2  | 5        | 0.66          |
| (1,1058) | 1:A:373:ALA:H    | 1:A:387:TYR:HB2  | 2        | 0.66          |
| (1,666)  | 1:A:366:ILE:H    | 1:A:413:PHE:HZ   | 1        | 0.65          |
| (1,640)  | 1:A:406:GLU:H    | 1:A:413:PHE:HA   | 10       | 0.65          |
| (1,47)   | 1:A:418:THR:HG21 | 1:A:419:PRO:HB3  | 6        | 0.65          |
| (1,47)   | 1:A:418:THR:HG22 | 1:A:419:PRO:HB3  | 6        | 0.65          |
| (1,47)   | 1:A:418:THR:HG23 | 1:A:419:PRO:HB3  | 6        | 0.65          |
| (1,385)  | 1:A:358:ASP:HA   | 1:A:363:ILE:HG21 | 9        | 0.65          |
| (1,385)  | 1:A:358:ASP:HA   | 1:A:363:ILE:HG22 | 9        | 0.65          |
| (1,385)  | 1:A:358:ASP:HA   | 1:A:363:ILE:HG23 | 9        | 0.65          |
| (1,339)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:HG21 | 3        | 0.65          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,339)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:HG22 | 3        | 0.65          |
| (1,339)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:HG23 | 3        | 0.65          |
| (1,339)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:HG21 | 3        | 0.65          |
| (1,339)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:HG22 | 3        | 0.65          |
| (1,339)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:HG23 | 3        | 0.65          |
| (1,326)  | 1:A:341:VAL:HA   | 1:A:354:ILE:HD11 | 4        | 0.65          |
| (1,326)  | 1:A:341:VAL:HA   | 1:A:354:ILE:HD12 | 4        | 0.65          |
| (1,326)  | 1:A:341:VAL:HA   | 1:A:354:ILE:HD13 | 4        | 0.65          |
| (1,323)  | 1:A:345:LEU:H    | 1:A:354:ILE:HD11 | 4        | 0.65          |
| (1,323)  | 1:A:345:LEU:H    | 1:A:354:ILE:HD12 | 4        | 0.65          |
| (1,323)  | 1:A:345:LEU:H    | 1:A:354:ILE:HD13 | 4        | 0.65          |
| (1,14)   | 1:A:345:LEU:HA   | 1:A:354:ILE:HG21 | 3        | 0.65          |
| (1,14)   | 1:A:345:LEU:HA   | 1:A:354:ILE:HG22 | 3        | 0.65          |
| (1,14)   | 1:A:345:LEU:HA   | 1:A:354:ILE:HG23 | 3        | 0.65          |
| (1,1305) | 1:A:344:LEU:HD11 | 1:A:347:ASP:HB2  | 8        | 0.65          |
| (1,1305) | 1:A:344:LEU:HD12 | 1:A:347:ASP:HB2  | 8        | 0.65          |
| (1,1305) | 1:A:344:LEU:HD13 | 1:A:347:ASP:HB2  | 8        | 0.65          |
| (1,1305) | 1:A:344:LEU:HD21 | 1:A:347:ASP:HB2  | 8        | 0.65          |
| (1,1305) | 1:A:344:LEU:HD22 | 1:A:347:ASP:HB2  | 8        | 0.65          |
| (1,1305) | 1:A:344:LEU:HD23 | 1:A:347:ASP:HB2  | 8        | 0.65          |
| (1,1290) | 1:A:341:VAL:HG11 | 1:A:364:PHE:HE2  | 5        | 0.65          |
| (1,1290) | 1:A:341:VAL:HG12 | 1:A:364:PHE:HE2  | 5        | 0.65          |
| (1,1290) | 1:A:341:VAL:HG13 | 1:A:364:PHE:HE2  | 5        | 0.65          |
| (1,1290) | 1:A:341:VAL:HG21 | 1:A:364:PHE:HE2  | 5        | 0.65          |
| (1,1290) | 1:A:341:VAL:HG22 | 1:A:364:PHE:HE2  | 5        | 0.65          |
| (1,1290) | 1:A:341:VAL:HG23 | 1:A:364:PHE:HE2  | 5        | 0.65          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD11 | 10       | 0.65          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD12 | 10       | 0.65          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD13 | 10       | 0.65          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD21 | 10       | 0.65          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD22 | 10       | 0.65          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD23 | 10       | 0.65          |
| (1,1267) | 1:A:337:LEU:HD11 | 1:A:393:ALA:H    | 8        | 0.65          |
| (1,1267) | 1:A:337:LEU:HD12 | 1:A:393:ALA:H    | 8        | 0.65          |
| (1,1267) | 1:A:337:LEU:HD13 | 1:A:393:ALA:H    | 8        | 0.65          |
| (1,1267) | 1:A:337:LEU:HD21 | 1:A:393:ALA:H    | 8        | 0.65          |
| (1,1267) | 1:A:337:LEU:HD22 | 1:A:393:ALA:H    | 8        | 0.65          |
| (1,1267) | 1:A:337:LEU:HD23 | 1:A:393:ALA:H    | 8        | 0.65          |
| (1,1243) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HD1  | 9        | 0.65          |
| (1,1243) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HD1  | 9        | 0.65          |
| (1,1243) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HD1  | 9        | 0.65          |
| (1,1243) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HD1  | 9        | 0.65          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1243) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HD1  | 9        | 0.65          |
| (1,1243) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HD1  | 9        | 0.65          |
| (1,1161) | 1:A:387:TYR:HD2  | 1:A:390:MET:HB2  | 3        | 0.65          |
| (1,1161) | 1:A:387:TYR:HD2  | 1:A:390:MET:HB3  | 3        | 0.65          |
| (1,1158) | 1:A:387:TYR:HA   | 1:A:387:TYR:HD2  | 8        | 0.65          |
| (1,1140) | 1:A:375:LEU:HA   | 1:A:378:ASN:HD22 | 7        | 0.65          |
| (1,109)  | 1:A:415:PHE:HB3  | 1:A:415:PHE:HE2  | 1        | 0.65          |
| (1,785)  | 1:A:355:ARG:H    | 1:A:366:ILE:HA   | 6        | 0.64          |
| (1,645)  | 1:A:406:GLU:H    | 1:A:412:LEU:HB3  | 1        | 0.64          |
| (1,605)  | 1:A:376:TRP:HE1  | 1:A:390:MET:HG2  | 5        | 0.64          |
| (1,605)  | 1:A:376:TRP:HE1  | 1:A:390:MET:HG3  | 5        | 0.64          |
| (1,520)  | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD11 | 10       | 0.64          |
| (1,520)  | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD12 | 10       | 0.64          |
| (1,520)  | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD13 | 10       | 0.64          |
| (1,505)  | 1:A:412:LEU:HD11 | 1:A:413:PHE:HE1  | 8        | 0.64          |
| (1,505)  | 1:A:412:LEU:HD12 | 1:A:413:PHE:HE1  | 8        | 0.64          |
| (1,505)  | 1:A:412:LEU:HD13 | 1:A:413:PHE:HE1  | 8        | 0.64          |
| (1,410)  | 1:A:353:PHE:HA   | 1:A:367:VAL:HA   | 10       | 0.64          |
| (1,377)  | 1:A:373:ALA:HB1  | 1:A:385:MET:HB3  | 5        | 0.64          |
| (1,377)  | 1:A:373:ALA:HB2  | 1:A:385:MET:HB3  | 5        | 0.64          |
| (1,377)  | 1:A:373:ALA:HB3  | 1:A:385:MET:HB3  | 5        | 0.64          |
| (1,377)  | 1:A:373:ALA:HB1  | 1:A:385:MET:HB2  | 5        | 0.64          |
| (1,377)  | 1:A:373:ALA:HB2  | 1:A:385:MET:HB2  | 5        | 0.64          |
| (1,377)  | 1:A:373:ALA:HB3  | 1:A:385:MET:HB2  | 5        | 0.64          |
| (1,191)  | 1:A:406:GLU:HA   | 1:A:412:LEU:HB3  | 3        | 0.64          |
| (1,1468) | 1:A:394:LEU:HD11 | 1:A:397:TYR:HE2  | 2        | 0.64          |
| (1,1468) | 1:A:394:LEU:HD12 | 1:A:397:TYR:HE2  | 2        | 0.64          |
| (1,1468) | 1:A:394:LEU:HD13 | 1:A:397:TYR:HE2  | 2        | 0.64          |
| (1,1468) | 1:A:394:LEU:HD21 | 1:A:397:TYR:HE2  | 2        | 0.64          |
| (1,1468) | 1:A:394:LEU:HD22 | 1:A:397:TYR:HE2  | 2        | 0.64          |
| (1,1468) | 1:A:394:LEU:HD23 | 1:A:397:TYR:HE2  | 2        | 0.64          |
| (1,1376) | 1:A:359:LYS:HA   | 1:A:362:LYS:HG2  | 3        | 0.64          |
| (1,1376) | 1:A:359:LYS:HA   | 1:A:362:LYS:HG3  | 3        | 0.64          |
| (1,1332) | 1:A:345:LEU:HD11 | 1:A:356:TRP:HB2  | 5        | 0.64          |
| (1,1332) | 1:A:345:LEU:HD12 | 1:A:356:TRP:HB2  | 5        | 0.64          |
| (1,1332) | 1:A:345:LEU:HD13 | 1:A:356:TRP:HB2  | 5        | 0.64          |
| (1,1332) | 1:A:345:LEU:HD21 | 1:A:356:TRP:HB2  | 5        | 0.64          |
| (1,1332) | 1:A:345:LEU:HD22 | 1:A:356:TRP:HB2  | 5        | 0.64          |
| (1,1332) | 1:A:345:LEU:HD23 | 1:A:356:TRP:HB2  | 5        | 0.64          |
| (1,1315) | 1:A:344:LEU:HD11 | 1:A:390:MET:HE1  | 3        | 0.64          |
| (1,1315) | 1:A:344:LEU:HD11 | 1:A:390:MET:HE2  | 3        | 0.64          |
| (1,1315) | 1:A:344:LEU:HD11 | 1:A:390:MET:HE3  | 3        | 0.64          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1315) | 1:A:344:LEU:HD12 | 1:A:390:MET:HE1  | 3        | 0.64          |
| (1,1315) | 1:A:344:LEU:HD12 | 1:A:390:MET:HE2  | 3        | 0.64          |
| (1,1315) | 1:A:344:LEU:HD12 | 1:A:390:MET:HE3  | 3        | 0.64          |
| (1,1315) | 1:A:344:LEU:HD13 | 1:A:390:MET:HE1  | 3        | 0.64          |
| (1,1315) | 1:A:344:LEU:HD13 | 1:A:390:MET:HE2  | 3        | 0.64          |
| (1,1315) | 1:A:344:LEU:HD13 | 1:A:390:MET:HE3  | 3        | 0.64          |
| (1,1315) | 1:A:344:LEU:HD21 | 1:A:390:MET:HE1  | 3        | 0.64          |
| (1,1315) | 1:A:344:LEU:HD21 | 1:A:390:MET:HE2  | 3        | 0.64          |
| (1,1315) | 1:A:344:LEU:HD21 | 1:A:390:MET:HE3  | 3        | 0.64          |
| (1,1315) | 1:A:344:LEU:HD22 | 1:A:390:MET:HE1  | 3        | 0.64          |
| (1,1315) | 1:A:344:LEU:HD22 | 1:A:390:MET:HE2  | 3        | 0.64          |
| (1,1315) | 1:A:344:LEU:HD22 | 1:A:390:MET:HE3  | 3        | 0.64          |
| (1,1315) | 1:A:344:LEU:HD23 | 1:A:390:MET:HE1  | 3        | 0.64          |
| (1,1315) | 1:A:344:LEU:HD23 | 1:A:390:MET:HE2  | 3        | 0.64          |
| (1,1315) | 1:A:344:LEU:HD23 | 1:A:390:MET:HE3  | 3        | 0.64          |
| (1,1204) | 1:A:398:TYR:HE1  | 1:A:404:ARG:HA   | 8        | 0.64          |
| (1,1104) | 1:A:354:ILE:H    | 1:A:366:ILE:HA   | 2        | 0.64          |
| (1,1038) | 1:A:358:ASP:HA   | 1:A:360:GLU:H    | 1        | 0.64          |
| (1,995)  | 1:A:359:LYS:HD2  | 1:A:363:ILE:H    | 10       | 0.63          |
| (1,995)  | 1:A:359:LYS:HD3  | 1:A:363:ILE:H    | 10       | 0.63          |
| (1,943)  | 1:A:400:LEU:H    | 1:A:400:LEU:HG   | 1        | 0.63          |
| (1,842)  | 1:A:358:ASP:HA   | 1:A:361:SER:H    | 5        | 0.63          |
| (1,65)   | 1:A:355:ARG:HB2  | 1:A:367:VAL:HB   | 8        | 0.63          |
| (1,65)   | 1:A:355:ARG:HB3  | 1:A:367:VAL:HB   | 8        | 0.63          |
| (1,540)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD21 | 8        | 0.63          |
| (1,540)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD22 | 8        | 0.63          |
| (1,540)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD23 | 8        | 0.63          |
| (1,503)  | 1:A:406:GLU:H    | 1:A:412:LEU:HD21 | 9        | 0.63          |
| (1,503)  | 1:A:406:GLU:H    | 1:A:412:LEU:HD22 | 9        | 0.63          |
| (1,503)  | 1:A:406:GLU:H    | 1:A:412:LEU:HD23 | 9        | 0.63          |
| (1,410)  | 1:A:353:PHE:HA   | 1:A:367:VAL:HA   | 6        | 0.63          |
| (1,263)  | 1:A:348:SER:HA   | 1:A:351:GLU:HG2  | 3        | 0.63          |
| (1,263)  | 1:A:348:SER:HA   | 1:A:351:GLU:HG3  | 3        | 0.63          |
| (1,1325) | 1:A:345:LEU:HD11 | 1:A:355:ARG:H    | 10       | 0.63          |
| (1,1325) | 1:A:345:LEU:HD12 | 1:A:355:ARG:H    | 10       | 0.63          |
| (1,1325) | 1:A:345:LEU:HD13 | 1:A:355:ARG:H    | 10       | 0.63          |
| (1,1325) | 1:A:345:LEU:HD21 | 1:A:355:ARG:H    | 10       | 0.63          |
| (1,1325) | 1:A:345:LEU:HD22 | 1:A:355:ARG:H    | 10       | 0.63          |
| (1,1325) | 1:A:345:LEU:HD23 | 1:A:355:ARG:H    | 10       | 0.63          |
| (1,1250) | 1:A:337:LEU:HB2  | 1:A:341:VAL:HB   | 4        | 0.63          |
| (1,1250) | 1:A:337:LEU:HB3  | 1:A:341:VAL:HB   | 4        | 0.63          |
| (1,1192) | 1:A:376:TRP:HH2  | 1:A:380:LYS:HD2  | 4        | 0.63          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1192) | 1:A:376:TRP:HH2  | 1:A:380:LYS:HD3  | 4        | 0.63          |
| (1,1191) | 1:A:336:LEU:HB2  | 1:A:338:TRP:HD1  | 5        | 0.63          |
| (1,1191) | 1:A:336:LEU:HB3  | 1:A:338:TRP:HD1  | 5        | 0.63          |
| (1,1191) | 1:A:336:LEU:HB2  | 1:A:338:TRP:HD1  | 9        | 0.63          |
| (1,1191) | 1:A:336:LEU:HB3  | 1:A:338:TRP:HD1  | 9        | 0.63          |
| (1,1129) | 1:A:398:TYR:H    | 1:A:402:ILE:HD11 | 8        | 0.63          |
| (1,1129) | 1:A:398:TYR:H    | 1:A:402:ILE:HD12 | 8        | 0.63          |
| (1,1129) | 1:A:398:TYR:H    | 1:A:402:ILE:HD13 | 8        | 0.63          |
| (1,904)  | 1:A:366:ILE:H    | 1:A:368:ASP:H    | 2        | 0.62          |
| (1,883)  | 1:A:401:ASN:H    | 1:A:402:ILE:HD11 | 10       | 0.62          |
| (1,883)  | 1:A:401:ASN:H    | 1:A:402:ILE:HD12 | 10       | 0.62          |
| (1,883)  | 1:A:401:ASN:H    | 1:A:402:ILE:HD13 | 10       | 0.62          |
| (1,663)  | 1:A:357:GLU:H    | 1:A:412:LEU:HD21 | 7        | 0.62          |
| (1,663)  | 1:A:357:GLU:H    | 1:A:412:LEU:HD22 | 7        | 0.62          |
| (1,663)  | 1:A:357:GLU:H    | 1:A:412:LEU:HD23 | 7        | 0.62          |
| (1,645)  | 1:A:406:GLU:H    | 1:A:412:LEU:HB3  | 9        | 0.62          |
| (1,474)  | 1:A:354:ILE:HG12 | 1:A:355:ARG:HE   | 10       | 0.62          |
| (1,385)  | 1:A:358:ASP:HA   | 1:A:363:ILE:HG21 | 10       | 0.62          |
| (1,385)  | 1:A:358:ASP:HA   | 1:A:363:ILE:HG22 | 10       | 0.62          |
| (1,385)  | 1:A:358:ASP:HA   | 1:A:363:ILE:HG23 | 10       | 0.62          |
| (1,37)   | 1:A:376:TRP:HE1  | 1:A:390:MET:HE1  | 7        | 0.62          |
| (1,37)   | 1:A:376:TRP:HE1  | 1:A:390:MET:HE2  | 7        | 0.62          |
| (1,37)   | 1:A:376:TRP:HE1  | 1:A:390:MET:HE3  | 7        | 0.62          |
| (1,159)  | 1:A:413:PHE:HB2  | 1:A:413:PHE:HE1  | 9        | 0.62          |
| (1,1434) | 1:A:376:TRP:HZ2  | 1:A:380:LYS:HE2  | 3        | 0.62          |
| (1,1434) | 1:A:376:TRP:HZ2  | 1:A:380:LYS:HE3  | 3        | 0.62          |
| (1,1352) | 1:A:349:ARG:HD2  | 1:A:350:TYR:HD2  | 9        | 0.62          |
| (1,1352) | 1:A:349:ARG:HD3  | 1:A:350:TYR:HD2  | 9        | 0.62          |
| (1,1328) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HG2  | 3        | 0.62          |
| (1,1328) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HG3  | 3        | 0.62          |
| (1,1328) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HG2  | 3        | 0.62          |
| (1,1328) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HG3  | 3        | 0.62          |
| (1,1328) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HG2  | 3        | 0.62          |
| (1,1328) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HG3  | 3        | 0.62          |
| (1,1328) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HG2  | 3        | 0.62          |
| (1,1328) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HG3  | 3        | 0.62          |
| (1,1328) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HG2  | 3        | 0.62          |
| (1,1328) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HG3  | 3        | 0.62          |
| (1,1328) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HG2  | 3        | 0.62          |
| (1,1328) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HG3  | 3        | 0.62          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD11 | 8        | 0.62          |
| (1,1278) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD12 | 8        | 0.62          |

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| Key      | Atom-1          | Atom-2           | Model ID | Violation (Å) |
|----------|-----------------|------------------|----------|---------------|
| (1,1278) | 1:A:340:TYR:HE1 | 1:A:344:LEU:HD13 | 8        | 0.62          |
| (1,1278) | 1:A:340:TYR:HE1 | 1:A:344:LEU:HD21 | 8        | 0.62          |
| (1,1278) | 1:A:340:TYR:HE1 | 1:A:344:LEU:HD22 | 8        | 0.62          |
| (1,1278) | 1:A:340:TYR:HE1 | 1:A:344:LEU:HD23 | 8        | 0.62          |
| (1,1209) | 1:A:398:TYR:HE1 | 1:A:405:LYS:HB2  | 8        | 0.62          |
| (1,1209) | 1:A:398:TYR:HE1 | 1:A:405:LYS:HB3  | 8        | 0.62          |
| (1,1187) | 1:A:356:TRP:HD1 | 1:A:359:LYS:HD2  | 10       | 0.62          |
| (1,1187) | 1:A:356:TRP:HD1 | 1:A:359:LYS:HD3  | 10       | 0.62          |
| (1,712)  | 1:A:404:ARG:H   | 1:A:416:MET:HG2  | 8        | 0.61          |
| (1,712)  | 1:A:404:ARG:H   | 1:A:416:MET:HG3  | 8        | 0.61          |
| (1,506)  | 1:A:365:ARG:HD3 | 1:A:412:LEU:HD21 | 1        | 0.61          |
| (1,506)  | 1:A:365:ARG:HD3 | 1:A:412:LEU:HD22 | 1        | 0.61          |
| (1,506)  | 1:A:365:ARG:HD3 | 1:A:412:LEU:HD23 | 1        | 0.61          |
| (1,358)  | 1:A:397:TYR:H   | 1:A:403:ILE:HG21 | 5        | 0.61          |
| (1,358)  | 1:A:397:TYR:H   | 1:A:403:ILE:HG22 | 5        | 0.61          |
| (1,358)  | 1:A:397:TYR:H   | 1:A:403:ILE:HG23 | 5        | 0.61          |
| (1,263)  | 1:A:348:SER:HA  | 1:A:351:GLU:HG2  | 4        | 0.61          |
| (1,263)  | 1:A:348:SER:HA  | 1:A:351:GLU:HG3  | 4        | 0.61          |
| (1,203)  | 1:A:345:LEU:HG  | 1:A:355:ARG:HA   | 3        | 0.61          |
| (1,19)   | 1:A:344:LEU:H   | 1:A:354:ILE:HG21 | 10       | 0.61          |
| (1,19)   | 1:A:344:LEU:H   | 1:A:354:ILE:HG22 | 10       | 0.61          |
| (1,19)   | 1:A:344:LEU:H   | 1:A:354:ILE:HG23 | 10       | 0.61          |
| (1,159)  | 1:A:413:PHE:HB2 | 1:A:413:PHE:HE1  | 4        | 0.61          |
| (1,159)  | 1:A:413:PHE:HB2 | 1:A:413:PHE:HE1  | 6        | 0.61          |
| (1,1180) | 1:A:353:PHE:HD2 | 1:A:372:LEU:HA   | 6        | 0.61          |
| (1,1163) | 1:A:398:TYR:HA  | 1:A:398:TYR:HD2  | 2        | 0.61          |
| (1,883)  | 1:A:401:ASN:H   | 1:A:402:ILE:HD11 | 3        | 0.6           |
| (1,883)  | 1:A:401:ASN:H   | 1:A:402:ILE:HD12 | 3        | 0.6           |
| (1,883)  | 1:A:401:ASN:H   | 1:A:402:ILE:HD13 | 3        | 0.6           |
| (1,881)  | 1:A:400:LEU:HB2 | 1:A:401:ASN:H    | 10       | 0.6           |
| (1,860)  | 1:A:385:MET:HB3 | 1:A:386:THR:H    | 6        | 0.6           |
| (1,860)  | 1:A:385:MET:HB3 | 1:A:386:THR:H    | 9        | 0.6           |
| (1,755)  | 1:A:355:ARG:HG2 | 1:A:356:TRP:H    | 7        | 0.6           |
| (1,755)  | 1:A:355:ARG:HG3 | 1:A:356:TRP:H    | 7        | 0.6           |
| (1,726)  | 1:A:387:TYR:HD2 | 1:A:390:MET:H    | 6        | 0.6           |
| (1,689)  | 1:A:426:ARG:H   | 1:A:426:ARG:HD2  | 8        | 0.6           |
| (1,689)  | 1:A:426:ARG:H   | 1:A:426:ARG:HD3  | 8        | 0.6           |
| (1,565)  | 1:A:386:THR:HA  | 1:A:386:THR:HG21 | 2        | 0.6           |
| (1,565)  | 1:A:386:THR:HA  | 1:A:386:THR:HG22 | 2        | 0.6           |
| (1,565)  | 1:A:386:THR:HA  | 1:A:386:THR:HG23 | 2        | 0.6           |
| (1,565)  | 1:A:386:THR:HA  | 1:A:386:THR:HG21 | 4        | 0.6           |
| (1,565)  | 1:A:386:THR:HA  | 1:A:386:THR:HG22 | 4        | 0.6           |

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| Key      | Atom-1          | Atom-2           | Model ID | Violation (Å) |
|----------|-----------------|------------------|----------|---------------|
| (1,565)  | 1:A:386:THR:HA  | 1:A:386:THR:HG23 | 4        | 0.6           |
| (1,565)  | 1:A:386:THR:HA  | 1:A:386:THR:HG21 | 7        | 0.6           |
| (1,565)  | 1:A:386:THR:HA  | 1:A:386:THR:HG22 | 7        | 0.6           |
| (1,565)  | 1:A:386:THR:HA  | 1:A:386:THR:HG23 | 7        | 0.6           |
| (1,565)  | 1:A:386:THR:HA  | 1:A:386:THR:HG21 | 8        | 0.6           |
| (1,565)  | 1:A:386:THR:HA  | 1:A:386:THR:HG22 | 8        | 0.6           |
| (1,565)  | 1:A:386:THR:HA  | 1:A:386:THR:HG23 | 8        | 0.6           |
| (1,506)  | 1:A:365:ARG:HD3 | 1:A:412:LEU:HD21 | 4        | 0.6           |
| (1,506)  | 1:A:365:ARG:HD3 | 1:A:412:LEU:HD22 | 4        | 0.6           |
| (1,506)  | 1:A:365:ARG:HD3 | 1:A:412:LEU:HD23 | 4        | 0.6           |
| (1,399)  | 1:A:353:PHE:HA  | 1:A:366:ILE:HG21 | 8        | 0.6           |
| (1,399)  | 1:A:353:PHE:HA  | 1:A:366:ILE:HG22 | 8        | 0.6           |
| (1,399)  | 1:A:353:PHE:HA  | 1:A:366:ILE:HG23 | 8        | 0.6           |
| (1,387)  | 1:A:358:ASP:HB2 | 1:A:363:ILE:HG21 | 6        | 0.6           |
| (1,387)  | 1:A:358:ASP:HB2 | 1:A:363:ILE:HG22 | 6        | 0.6           |
| (1,387)  | 1:A:358:ASP:HB2 | 1:A:363:ILE:HG23 | 6        | 0.6           |
| (1,387)  | 1:A:358:ASP:HB3 | 1:A:363:ILE:HG21 | 6        | 0.6           |
| (1,387)  | 1:A:358:ASP:HB3 | 1:A:363:ILE:HG22 | 6        | 0.6           |
| (1,387)  | 1:A:358:ASP:HB3 | 1:A:363:ILE:HG23 | 6        | 0.6           |
| (1,329)  | 1:A:348:SER:HB2 | 1:A:351:GLU:HG2  | 10       | 0.6           |
| (1,329)  | 1:A:348:SER:HB2 | 1:A:351:GLU:HG3  | 10       | 0.6           |
| (1,329)  | 1:A:348:SER:HB3 | 1:A:351:GLU:HG2  | 10       | 0.6           |
| (1,329)  | 1:A:348:SER:HB3 | 1:A:351:GLU:HG3  | 10       | 0.6           |
| (1,324)  | 1:A:346:SER:H   | 1:A:354:ILE:HD11 | 8        | 0.6           |
| (1,324)  | 1:A:346:SER:H   | 1:A:354:ILE:HD12 | 8        | 0.6           |
| (1,324)  | 1:A:346:SER:H   | 1:A:354:ILE:HD13 | 8        | 0.6           |
| (1,19)   | 1:A:344:LEU:H   | 1:A:354:ILE:HG21 | 1        | 0.6           |
| (1,19)   | 1:A:344:LEU:H   | 1:A:354:ILE:HG22 | 1        | 0.6           |
| (1,19)   | 1:A:344:LEU:H   | 1:A:354:ILE:HG23 | 1        | 0.6           |
| (1,1389) | 1:A:365:ARG:HD3 | 1:A:411:LEU:HD11 | 9        | 0.6           |
| (1,1389) | 1:A:365:ARG:HD3 | 1:A:411:LEU:HD12 | 9        | 0.6           |
| (1,1389) | 1:A:365:ARG:HD3 | 1:A:411:LEU:HD13 | 9        | 0.6           |
| (1,1389) | 1:A:365:ARG:HD3 | 1:A:411:LEU:HD21 | 9        | 0.6           |
| (1,1389) | 1:A:365:ARG:HD3 | 1:A:411:LEU:HD22 | 9        | 0.6           |
| (1,1389) | 1:A:365:ARG:HD3 | 1:A:411:LEU:HD23 | 9        | 0.6           |
| (1,1213) | 1:A:340:TYR:HA  | 1:A:340:TYR:HE2  | 6        | 0.6           |
| (1,1209) | 1:A:398:TYR:HE1 | 1:A:405:LYS:HB2  | 1        | 0.6           |
| (1,1209) | 1:A:398:TYR:HE1 | 1:A:405:LYS:HB3  | 1        | 0.6           |
| (1,1172) | 1:A:340:TYR:HD1 | 1:A:344:LEU:HG   | 4        | 0.6           |
| (1,1172) | 1:A:340:TYR:HD1 | 1:A:344:LEU:HG   | 5        | 0.6           |
| (1,99)   | 1:A:375:LEU:HB2 | 1:A:378:ASN:HB2  | 5        | 0.59          |
| (1,99)   | 1:A:375:LEU:HB3 | 1:A:378:ASN:HB2  | 5        | 0.59          |

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| Key     | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|---------|------------------|------------------|----------|---------------|
| (1,921) | 1:A:397:TYR:H    | 1:A:402:ILE:HD11 | 4        | 0.59          |
| (1,921) | 1:A:397:TYR:H    | 1:A:402:ILE:HD12 | 4        | 0.59          |
| (1,921) | 1:A:397:TYR:H    | 1:A:402:ILE:HD13 | 4        | 0.59          |
| (1,904) | 1:A:366:ILE:H    | 1:A:368:ASP:H    | 8        | 0.59          |
| (1,897) | 1:A:353:PHE:H    | 1:A:367:VAL:HB   | 1        | 0.59          |
| (1,872) | 1:A:352:ASN:H    | 1:A:354:ILE:HG21 | 4        | 0.59          |
| (1,872) | 1:A:352:ASN:H    | 1:A:354:ILE:HG22 | 4        | 0.59          |
| (1,872) | 1:A:352:ASN:H    | 1:A:354:ILE:HG23 | 4        | 0.59          |
| (1,847) | 1:A:361:SER:H    | 1:A:363:ILE:HG12 | 3        | 0.59          |
| (1,847) | 1:A:361:SER:H    | 1:A:363:ILE:HG13 | 3        | 0.59          |
| (1,701) | 1:A:363:ILE:HD11 | 1:A:415:PHE:H    | 4        | 0.59          |
| (1,701) | 1:A:363:ILE:HD12 | 1:A:415:PHE:H    | 4        | 0.59          |
| (1,701) | 1:A:363:ILE:HD13 | 1:A:415:PHE:H    | 4        | 0.59          |
| (1,676) | 1:A:365:ARG:HG3  | 1:A:366:ILE:H    | 2        | 0.59          |
| (1,599) | 1:A:356:TRP:HE1  | 1:A:359:LYS:HD2  | 9        | 0.59          |
| (1,599) | 1:A:356:TRP:HE1  | 1:A:359:LYS:HD3  | 9        | 0.59          |
| (1,589) | 1:A:369:PRO:HA   | 1:A:387:TYR:HB2  | 6        | 0.59          |
| (1,587) | 1:A:353:PHE:HB3  | 1:A:369:PRO:HA   | 10       | 0.59          |
| (1,565) | 1:A:386:THR:HA   | 1:A:386:THR:HG21 | 1        | 0.59          |
| (1,565) | 1:A:386:THR:HA   | 1:A:386:THR:HG22 | 1        | 0.59          |
| (1,565) | 1:A:386:THR:HA   | 1:A:386:THR:HG23 | 1        | 0.59          |
| (1,565) | 1:A:386:THR:HA   | 1:A:386:THR:HG21 | 3        | 0.59          |
| (1,565) | 1:A:386:THR:HA   | 1:A:386:THR:HG22 | 3        | 0.59          |
| (1,565) | 1:A:386:THR:HA   | 1:A:386:THR:HG23 | 3        | 0.59          |
| (1,565) | 1:A:386:THR:HA   | 1:A:386:THR:HG21 | 5        | 0.59          |
| (1,565) | 1:A:386:THR:HA   | 1:A:386:THR:HG22 | 5        | 0.59          |
| (1,565) | 1:A:386:THR:HA   | 1:A:386:THR:HG23 | 5        | 0.59          |
| (1,565) | 1:A:386:THR:HA   | 1:A:386:THR:HG21 | 9        | 0.59          |
| (1,565) | 1:A:386:THR:HA   | 1:A:386:THR:HG22 | 9        | 0.59          |
| (1,565) | 1:A:386:THR:HA   | 1:A:386:THR:HG23 | 9        | 0.59          |
| (1,565) | 1:A:386:THR:HA   | 1:A:386:THR:HG21 | 10       | 0.59          |
| (1,565) | 1:A:386:THR:HA   | 1:A:386:THR:HG22 | 10       | 0.59          |
| (1,565) | 1:A:386:THR:HA   | 1:A:386:THR:HG23 | 10       | 0.59          |
| (1,449) | 1:A:385:MET:HB3  | 1:A:386:THR:HA   | 5        | 0.59          |
| (1,449) | 1:A:385:MET:HB3  | 1:A:386:THR:HA   | 8        | 0.59          |
| (1,410) | 1:A:353:PHE:HA   | 1:A:367:VAL:HA   | 1        | 0.59          |
| (1,410) | 1:A:353:PHE:HA   | 1:A:367:VAL:HA   | 2        | 0.59          |
| (1,387) | 1:A:358:ASP:HB2  | 1:A:363:ILE:HG21 | 5        | 0.59          |
| (1,387) | 1:A:358:ASP:HB2  | 1:A:363:ILE:HG22 | 5        | 0.59          |
| (1,387) | 1:A:358:ASP:HB2  | 1:A:363:ILE:HG23 | 5        | 0.59          |
| (1,387) | 1:A:358:ASP:HB3  | 1:A:363:ILE:HG21 | 5        | 0.59          |
| (1,387) | 1:A:358:ASP:HB3  | 1:A:363:ILE:HG22 | 5        | 0.59          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,387)  | 1:A:358:ASP:HB3  | 1:A:363:ILE:HG23 | 5        | 0.59          |
| (1,358)  | 1:A:397:TYR:H    | 1:A:403:ILE:HG21 | 6        | 0.59          |
| (1,358)  | 1:A:397:TYR:H    | 1:A:403:ILE:HG22 | 6        | 0.59          |
| (1,358)  | 1:A:397:TYR:H    | 1:A:403:ILE:HG23 | 6        | 0.59          |
| (1,313)  | 1:A:342:TYR:HA   | 1:A:342:TYR:HD2  | 10       | 0.59          |
| (1,191)  | 1:A:406:GLU:HA   | 1:A:412:LEU:HB3  | 4        | 0.59          |
| (1,159)  | 1:A:413:PHE:HB2  | 1:A:413:PHE:HE1  | 1        | 0.59          |
| (1,159)  | 1:A:413:PHE:HB2  | 1:A:413:PHE:HE1  | 5        | 0.59          |
| (1,159)  | 1:A:413:PHE:HB2  | 1:A:413:PHE:HE1  | 10       | 0.59          |
| (1,1394) | 1:A:368:ASP:HA   | 1:A:411:LEU:HD11 | 6        | 0.59          |
| (1,1394) | 1:A:368:ASP:HA   | 1:A:411:LEU:HD12 | 6        | 0.59          |
| (1,1394) | 1:A:368:ASP:HA   | 1:A:411:LEU:HD13 | 6        | 0.59          |
| (1,1394) | 1:A:368:ASP:HA   | 1:A:411:LEU:HD21 | 6        | 0.59          |
| (1,1394) | 1:A:368:ASP:HA   | 1:A:411:LEU:HD22 | 6        | 0.59          |
| (1,1394) | 1:A:368:ASP:HA   | 1:A:411:LEU:HD23 | 6        | 0.59          |
| (1,1341) | 1:A:345:LEU:HD11 | 1:A:367:VAL:HG21 | 6        | 0.59          |
| (1,1341) | 1:A:345:LEU:HD11 | 1:A:367:VAL:HG22 | 6        | 0.59          |
| (1,1341) | 1:A:345:LEU:HD11 | 1:A:367:VAL:HG23 | 6        | 0.59          |
| (1,1341) | 1:A:345:LEU:HD12 | 1:A:367:VAL:HG21 | 6        | 0.59          |
| (1,1341) | 1:A:345:LEU:HD12 | 1:A:367:VAL:HG22 | 6        | 0.59          |
| (1,1341) | 1:A:345:LEU:HD12 | 1:A:367:VAL:HG23 | 6        | 0.59          |
| (1,1341) | 1:A:345:LEU:HD13 | 1:A:367:VAL:HG21 | 6        | 0.59          |
| (1,1341) | 1:A:345:LEU:HD13 | 1:A:367:VAL:HG22 | 6        | 0.59          |
| (1,1341) | 1:A:345:LEU:HD13 | 1:A:367:VAL:HG23 | 6        | 0.59          |
| (1,1341) | 1:A:345:LEU:HD21 | 1:A:367:VAL:HG21 | 6        | 0.59          |
| (1,1341) | 1:A:345:LEU:HD21 | 1:A:367:VAL:HG22 | 6        | 0.59          |
| (1,1341) | 1:A:345:LEU:HD21 | 1:A:367:VAL:HG23 | 6        | 0.59          |
| (1,1341) | 1:A:345:LEU:HD22 | 1:A:367:VAL:HG21 | 6        | 0.59          |
| (1,1341) | 1:A:345:LEU:HD22 | 1:A:367:VAL:HG22 | 6        | 0.59          |
| (1,1341) | 1:A:345:LEU:HD22 | 1:A:367:VAL:HG23 | 6        | 0.59          |
| (1,1341) | 1:A:345:LEU:HD23 | 1:A:367:VAL:HG21 | 6        | 0.59          |
| (1,1341) | 1:A:345:LEU:HD23 | 1:A:367:VAL:HG22 | 6        | 0.59          |
| (1,1341) | 1:A:345:LEU:HD23 | 1:A:367:VAL:HG23 | 6        | 0.59          |
| (1,1327) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HB2  | 6        | 0.59          |
| (1,1327) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HB3  | 6        | 0.59          |
| (1,1327) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HB2  | 6        | 0.59          |
| (1,1327) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HB3  | 6        | 0.59          |
| (1,1327) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HB2  | 6        | 0.59          |
| (1,1327) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HB3  | 6        | 0.59          |
| (1,1327) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HB2  | 6        | 0.59          |
| (1,1327) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HB3  | 6        | 0.59          |
| (1,1327) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HB2  | 6        | 0.59          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1327) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HB3  | 6        | 0.59          |
| (1,1327) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HB2  | 6        | 0.59          |
| (1,1327) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HB3  | 6        | 0.59          |
| (1,1260) | 1:A:337:LEU:HD11 | 1:A:376:TRP:HE1  | 8        | 0.59          |
| (1,1260) | 1:A:337:LEU:HD12 | 1:A:376:TRP:HE1  | 8        | 0.59          |
| (1,1260) | 1:A:337:LEU:HD13 | 1:A:376:TRP:HE1  | 8        | 0.59          |
| (1,1260) | 1:A:337:LEU:HD21 | 1:A:376:TRP:HE1  | 8        | 0.59          |
| (1,1260) | 1:A:337:LEU:HD22 | 1:A:376:TRP:HE1  | 8        | 0.59          |
| (1,1260) | 1:A:337:LEU:HD23 | 1:A:376:TRP:HE1  | 8        | 0.59          |
| (1,1180) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HA   | 9        | 0.59          |
| (1,1038) | 1:A:358:ASP:HA   | 1:A:360:GLU:H    | 3        | 0.59          |
| (1,995)  | 1:A:359:LYS:HD2  | 1:A:363:ILE:H    | 8        | 0.58          |
| (1,995)  | 1:A:359:LYS:HD3  | 1:A:363:ILE:H    | 8        | 0.58          |
| (1,897)  | 1:A:353:PHE:H    | 1:A:367:VAL:HB   | 3        | 0.58          |
| (1,883)  | 1:A:401:ASN:H    | 1:A:402:ILE:HD11 | 7        | 0.58          |
| (1,883)  | 1:A:401:ASN:H    | 1:A:402:ILE:HD12 | 7        | 0.58          |
| (1,883)  | 1:A:401:ASN:H    | 1:A:402:ILE:HD13 | 7        | 0.58          |
| (1,844)  | 1:A:359:LYS:HA   | 1:A:361:SER:H    | 9        | 0.58          |
| (1,824)  | 1:A:375:LEU:HB2  | 1:A:378:ASN:HD21 | 8        | 0.58          |
| (1,824)  | 1:A:375:LEU:HB3  | 1:A:378:ASN:HD21 | 8        | 0.58          |
| (1,824)  | 1:A:375:LEU:HB2  | 1:A:378:ASN:HD21 | 9        | 0.58          |
| (1,824)  | 1:A:375:LEU:HB3  | 1:A:378:ASN:HD21 | 9        | 0.58          |
| (1,47)   | 1:A:418:THR:HG21 | 1:A:419:PRO:HB3  | 4        | 0.58          |
| (1,47)   | 1:A:418:THR:HG22 | 1:A:419:PRO:HB3  | 4        | 0.58          |
| (1,47)   | 1:A:418:THR:HG23 | 1:A:419:PRO:HB3  | 4        | 0.58          |
| (1,399)  | 1:A:353:PHE:HA   | 1:A:366:ILE:HG21 | 4        | 0.58          |
| (1,399)  | 1:A:353:PHE:HA   | 1:A:366:ILE:HG22 | 4        | 0.58          |
| (1,399)  | 1:A:353:PHE:HA   | 1:A:366:ILE:HG23 | 4        | 0.58          |
| (1,385)  | 1:A:358:ASP:HA   | 1:A:363:ILE:HG21 | 1        | 0.58          |
| (1,385)  | 1:A:358:ASP:HA   | 1:A:363:ILE:HG22 | 1        | 0.58          |
| (1,385)  | 1:A:358:ASP:HA   | 1:A:363:ILE:HG23 | 1        | 0.58          |
| (1,335)  | 1:A:361:SER:HB3  | 1:A:363:ILE:HB   | 1        | 0.58          |
| (1,313)  | 1:A:342:TYR:HA   | 1:A:342:TYR:HD2  | 1        | 0.58          |
| (1,178)  | 1:A:412:LEU:HA   | 1:A:413:PHE:HE1  | 3        | 0.58          |
| (1,1522) | 1:A:416:MET:H    | 1:A:417:LYS:HB2  | 5        | 0.58          |
| (1,1522) | 1:A:416:MET:H    | 1:A:417:LYS:HB3  | 5        | 0.58          |
| (1,152)  | 1:A:354:ILE:H    | 1:A:355:ARG:HD2  | 9        | 0.58          |
| (1,152)  | 1:A:354:ILE:H    | 1:A:355:ARG:HD3  | 9        | 0.58          |
| (1,151)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:H    | 4        | 0.58          |
| (1,1341) | 1:A:345:LEU:HD11 | 1:A:367:VAL:HG21 | 4        | 0.58          |
| (1,1341) | 1:A:345:LEU:HD11 | 1:A:367:VAL:HG22 | 4        | 0.58          |
| (1,1341) | 1:A:345:LEU:HD11 | 1:A:367:VAL:HG23 | 4        | 0.58          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1341) | 1:A:345:LEU:HD12 | 1:A:367:VAL:HG21 | 4        | 0.58          |
| (1,1341) | 1:A:345:LEU:HD12 | 1:A:367:VAL:HG22 | 4        | 0.58          |
| (1,1341) | 1:A:345:LEU:HD12 | 1:A:367:VAL:HG23 | 4        | 0.58          |
| (1,1341) | 1:A:345:LEU:HD13 | 1:A:367:VAL:HG21 | 4        | 0.58          |
| (1,1341) | 1:A:345:LEU:HD13 | 1:A:367:VAL:HG22 | 4        | 0.58          |
| (1,1341) | 1:A:345:LEU:HD13 | 1:A:367:VAL:HG23 | 4        | 0.58          |
| (1,1341) | 1:A:345:LEU:HD21 | 1:A:367:VAL:HG21 | 4        | 0.58          |
| (1,1341) | 1:A:345:LEU:HD21 | 1:A:367:VAL:HG22 | 4        | 0.58          |
| (1,1341) | 1:A:345:LEU:HD21 | 1:A:367:VAL:HG23 | 4        | 0.58          |
| (1,1341) | 1:A:345:LEU:HD22 | 1:A:367:VAL:HG21 | 4        | 0.58          |
| (1,1341) | 1:A:345:LEU:HD22 | 1:A:367:VAL:HG22 | 4        | 0.58          |
| (1,1341) | 1:A:345:LEU:HD22 | 1:A:367:VAL:HG23 | 4        | 0.58          |
| (1,1341) | 1:A:345:LEU:HD23 | 1:A:367:VAL:HG21 | 4        | 0.58          |
| (1,1341) | 1:A:345:LEU:HD23 | 1:A:367:VAL:HG22 | 4        | 0.58          |
| (1,1341) | 1:A:345:LEU:HD23 | 1:A:367:VAL:HG23 | 4        | 0.58          |
| (1,1244) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HE1  | 6        | 0.58          |
| (1,1244) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HE1  | 6        | 0.58          |
| (1,1244) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HE1  | 6        | 0.58          |
| (1,1244) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HE1  | 6        | 0.58          |
| (1,1244) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HE1  | 6        | 0.58          |
| (1,1244) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HE1  | 6        | 0.58          |
| (1,1207) | 1:A:347:ASP:HB2  | 1:A:350:TYR:HE2  | 7        | 0.58          |
| (1,1207) | 1:A:347:ASP:HB3  | 1:A:350:TYR:HE2  | 7        | 0.58          |
| (1,118)  | 1:A:353:PHE:HB3  | 1:A:372:LEU:HG   | 4        | 0.58          |
| (1,860)  | 1:A:385:MET:HB3  | 1:A:386:THR:H    | 10       | 0.57          |
| (1,726)  | 1:A:387:TYR:HD2  | 1:A:390:MET:H    | 5        | 0.57          |
| (1,726)  | 1:A:387:TYR:HD2  | 1:A:390:MET:H    | 9        | 0.57          |
| (1,643)  | 1:A:406:GLU:H    | 1:A:413:PHE:HB3  | 6        | 0.57          |
| (1,569)  | 1:A:354:ILE:H    | 1:A:367:VAL:HG11 | 1        | 0.57          |
| (1,569)  | 1:A:354:ILE:H    | 1:A:367:VAL:HG12 | 1        | 0.57          |
| (1,569)  | 1:A:354:ILE:H    | 1:A:367:VAL:HG13 | 1        | 0.57          |
| (1,335)  | 1:A:361:SER:HB3  | 1:A:363:ILE:HB   | 4        | 0.57          |
| (1,33)   | 1:A:390:MET:H    | 1:A:390:MET:HE1  | 4        | 0.57          |
| (1,33)   | 1:A:390:MET:H    | 1:A:390:MET:HE2  | 4        | 0.57          |
| (1,33)   | 1:A:390:MET:H    | 1:A:390:MET:HE3  | 4        | 0.57          |
| (1,286)  | 1:A:403:ILE:HD11 | 1:A:413:PHE:HD2  | 1        | 0.57          |
| (1,286)  | 1:A:403:ILE:HD12 | 1:A:413:PHE:HD2  | 1        | 0.57          |
| (1,286)  | 1:A:403:ILE:HD13 | 1:A:413:PHE:HD2  | 1        | 0.57          |
| (1,286)  | 1:A:403:ILE:HD11 | 1:A:413:PHE:HD2  | 5        | 0.57          |
| (1,286)  | 1:A:403:ILE:HD12 | 1:A:413:PHE:HD2  | 5        | 0.57          |
| (1,286)  | 1:A:403:ILE:HD13 | 1:A:413:PHE:HD2  | 5        | 0.57          |
| (1,173)  | 1:A:353:PHE:HA   | 1:A:368:ASP:HA   | 10       | 0.57          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,159)  | 1:A:413:PHE:HB2  | 1:A:413:PHE:HE1  | 2        | 0.57          |
| (1,151)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:H    | 8        | 0.57          |
| (1,1392) | 1:A:366:ILE:HG12 | 1:A:394:LEU:HD11 | 5        | 0.57          |
| (1,1392) | 1:A:366:ILE:HG12 | 1:A:394:LEU:HD12 | 5        | 0.57          |
| (1,1392) | 1:A:366:ILE:HG12 | 1:A:394:LEU:HD13 | 5        | 0.57          |
| (1,1392) | 1:A:366:ILE:HG12 | 1:A:394:LEU:HD21 | 5        | 0.57          |
| (1,1392) | 1:A:366:ILE:HG12 | 1:A:394:LEU:HD22 | 5        | 0.57          |
| (1,1392) | 1:A:366:ILE:HG12 | 1:A:394:LEU:HD23 | 5        | 0.57          |
| (1,1392) | 1:A:366:ILE:HG13 | 1:A:394:LEU:HD11 | 5        | 0.57          |
| (1,1392) | 1:A:366:ILE:HG13 | 1:A:394:LEU:HD12 | 5        | 0.57          |
| (1,1392) | 1:A:366:ILE:HG13 | 1:A:394:LEU:HD13 | 5        | 0.57          |
| (1,1392) | 1:A:366:ILE:HG13 | 1:A:394:LEU:HD21 | 5        | 0.57          |
| (1,1392) | 1:A:366:ILE:HG13 | 1:A:394:LEU:HD22 | 5        | 0.57          |
| (1,1392) | 1:A:366:ILE:HG13 | 1:A:394:LEU:HD23 | 5        | 0.57          |
| (1,1377) | 1:A:361:SER:H    | 1:A:362:LYS:HG2  | 4        | 0.57          |
| (1,1377) | 1:A:361:SER:H    | 1:A:362:LYS:HG3  | 4        | 0.57          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD11 | 3        | 0.57          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD12 | 3        | 0.57          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD13 | 3        | 0.57          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD21 | 3        | 0.57          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD22 | 3        | 0.57          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD23 | 3        | 0.57          |
| (1,1291) | 1:A:341:VAL:HG11 | 1:A:364:PHE:HD2  | 9        | 0.57          |
| (1,1291) | 1:A:341:VAL:HG12 | 1:A:364:PHE:HD2  | 9        | 0.57          |
| (1,1291) | 1:A:341:VAL:HG13 | 1:A:364:PHE:HD2  | 9        | 0.57          |
| (1,1291) | 1:A:341:VAL:HG21 | 1:A:364:PHE:HD2  | 9        | 0.57          |
| (1,1291) | 1:A:341:VAL:HG22 | 1:A:364:PHE:HD2  | 9        | 0.57          |
| (1,1291) | 1:A:341:VAL:HG23 | 1:A:364:PHE:HD2  | 9        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG11 | 1:A:344:LEU:HD11 | 3        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG11 | 1:A:344:LEU:HD12 | 3        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG11 | 1:A:344:LEU:HD13 | 3        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG11 | 1:A:344:LEU:HD21 | 3        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG11 | 1:A:344:LEU:HD22 | 3        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG11 | 1:A:344:LEU:HD23 | 3        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG12 | 1:A:344:LEU:HD11 | 3        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG12 | 1:A:344:LEU:HD12 | 3        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG12 | 1:A:344:LEU:HD13 | 3        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG12 | 1:A:344:LEU:HD21 | 3        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG12 | 1:A:344:LEU:HD22 | 3        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG12 | 1:A:344:LEU:HD23 | 3        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG13 | 1:A:344:LEU:HD11 | 3        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG13 | 1:A:344:LEU:HD12 | 3        | 0.57          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1286) | 1:A:341:VAL:HG13 | 1:A:344:LEU:HD13 | 3        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG13 | 1:A:344:LEU:HD21 | 3        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG13 | 1:A:344:LEU:HD22 | 3        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG13 | 1:A:344:LEU:HD23 | 3        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG21 | 1:A:344:LEU:HD11 | 3        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG21 | 1:A:344:LEU:HD12 | 3        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG21 | 1:A:344:LEU:HD13 | 3        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG21 | 1:A:344:LEU:HD21 | 3        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG21 | 1:A:344:LEU:HD22 | 3        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG21 | 1:A:344:LEU:HD23 | 3        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG22 | 1:A:344:LEU:HD11 | 3        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG22 | 1:A:344:LEU:HD12 | 3        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG22 | 1:A:344:LEU:HD13 | 3        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG22 | 1:A:344:LEU:HD21 | 3        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG22 | 1:A:344:LEU:HD22 | 3        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG22 | 1:A:344:LEU:HD23 | 3        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG23 | 1:A:344:LEU:HD11 | 3        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG23 | 1:A:344:LEU:HD12 | 3        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG23 | 1:A:344:LEU:HD13 | 3        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG23 | 1:A:344:LEU:HD21 | 3        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG23 | 1:A:344:LEU:HD22 | 3        | 0.57          |
| (1,1286) | 1:A:341:VAL:HG23 | 1:A:344:LEU:HD23 | 3        | 0.57          |
| (1,1267) | 1:A:337:LEU:HD11 | 1:A:393:ALA:H    | 2        | 0.57          |
| (1,1267) | 1:A:337:LEU:HD12 | 1:A:393:ALA:H    | 2        | 0.57          |
| (1,1267) | 1:A:337:LEU:HD13 | 1:A:393:ALA:H    | 2        | 0.57          |
| (1,1267) | 1:A:337:LEU:HD21 | 1:A:393:ALA:H    | 2        | 0.57          |
| (1,1267) | 1:A:337:LEU:HD22 | 1:A:393:ALA:H    | 2        | 0.57          |
| (1,1267) | 1:A:337:LEU:HD23 | 1:A:393:ALA:H    | 2        | 0.57          |
| (1,824)  | 1:A:375:LEU:HB2  | 1:A:378:ASN:HD21 | 3        | 0.56          |
| (1,824)  | 1:A:375:LEU:HB3  | 1:A:378:ASN:HD21 | 3        | 0.56          |
| (1,49)   | 1:A:366:ILE:HG21 | 1:A:369:PRO:HB2  | 10       | 0.56          |
| (1,49)   | 1:A:366:ILE:HG22 | 1:A:369:PRO:HB2  | 10       | 0.56          |
| (1,49)   | 1:A:366:ILE:HG23 | 1:A:369:PRO:HB2  | 10       | 0.56          |
| (1,410)  | 1:A:353:PHE:HA   | 1:A:367:VAL:HA   | 5        | 0.56          |
| (1,365)  | 1:A:364:PHE:HE1  | 1:A:403:ILE:HG21 | 8        | 0.56          |
| (1,365)  | 1:A:364:PHE:HE1  | 1:A:403:ILE:HG22 | 8        | 0.56          |
| (1,365)  | 1:A:364:PHE:HE1  | 1:A:403:ILE:HG23 | 8        | 0.56          |
| (1,313)  | 1:A:342:TYR:HA   | 1:A:342:TYR:HD2  | 2        | 0.56          |
| (1,191)  | 1:A:406:GLU:HA   | 1:A:412:LEU:HB3  | 6        | 0.56          |
| (1,173)  | 1:A:353:PHE:HA   | 1:A:368:ASP:HA   | 6        | 0.56          |
| (1,152)  | 1:A:354:ILE:H    | 1:A:355:ARG:HD2  | 7        | 0.56          |
| (1,152)  | 1:A:354:ILE:H    | 1:A:355:ARG:HD3  | 7        | 0.56          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1494) | 1:A:405:LYS:HG2  | 1:A:413:PHE:HE2  | 1        | 0.56          |
| (1,1494) | 1:A:405:LYS:HG3  | 1:A:413:PHE:HE2  | 1        | 0.56          |
| (1,14)   | 1:A:345:LEU:HA   | 1:A:354:ILE:HG21 | 5        | 0.56          |
| (1,14)   | 1:A:345:LEU:HA   | 1:A:354:ILE:HG22 | 5        | 0.56          |
| (1,14)   | 1:A:345:LEU:HA   | 1:A:354:ILE:HG23 | 5        | 0.56          |
| (1,1311) | 1:A:344:LEU:HD11 | 1:A:354:ILE:HD11 | 1        | 0.56          |
| (1,1311) | 1:A:344:LEU:HD11 | 1:A:354:ILE:HD12 | 1        | 0.56          |
| (1,1311) | 1:A:344:LEU:HD11 | 1:A:354:ILE:HD13 | 1        | 0.56          |
| (1,1311) | 1:A:344:LEU:HD12 | 1:A:354:ILE:HD11 | 1        | 0.56          |
| (1,1311) | 1:A:344:LEU:HD12 | 1:A:354:ILE:HD12 | 1        | 0.56          |
| (1,1311) | 1:A:344:LEU:HD12 | 1:A:354:ILE:HD13 | 1        | 0.56          |
| (1,1311) | 1:A:344:LEU:HD13 | 1:A:354:ILE:HD11 | 1        | 0.56          |
| (1,1311) | 1:A:344:LEU:HD13 | 1:A:354:ILE:HD12 | 1        | 0.56          |
| (1,1311) | 1:A:344:LEU:HD13 | 1:A:354:ILE:HD13 | 1        | 0.56          |
| (1,1311) | 1:A:344:LEU:HD21 | 1:A:354:ILE:HD11 | 1        | 0.56          |
| (1,1311) | 1:A:344:LEU:HD21 | 1:A:354:ILE:HD12 | 1        | 0.56          |
| (1,1311) | 1:A:344:LEU:HD21 | 1:A:354:ILE:HD13 | 1        | 0.56          |
| (1,1311) | 1:A:344:LEU:HD22 | 1:A:354:ILE:HD11 | 1        | 0.56          |
| (1,1311) | 1:A:344:LEU:HD22 | 1:A:354:ILE:HD12 | 1        | 0.56          |
| (1,1311) | 1:A:344:LEU:HD22 | 1:A:354:ILE:HD13 | 1        | 0.56          |
| (1,1311) | 1:A:344:LEU:HD23 | 1:A:354:ILE:HD11 | 1        | 0.56          |
| (1,1311) | 1:A:344:LEU:HD23 | 1:A:354:ILE:HD12 | 1        | 0.56          |
| (1,1311) | 1:A:344:LEU:HD23 | 1:A:354:ILE:HD13 | 1        | 0.56          |
| (1,1246) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HH2  | 1        | 0.56          |
| (1,1246) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HH2  | 1        | 0.56          |
| (1,1246) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HH2  | 1        | 0.56          |
| (1,1246) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HH2  | 1        | 0.56          |
| (1,1246) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HH2  | 1        | 0.56          |
| (1,1246) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HH2  | 1        | 0.56          |
| (1,1244) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HE1  | 7        | 0.56          |
| (1,1244) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HE1  | 7        | 0.56          |
| (1,1244) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HE1  | 7        | 0.56          |
| (1,1244) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HE1  | 7        | 0.56          |
| (1,1244) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HE1  | 7        | 0.56          |
| (1,1244) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HE1  | 7        | 0.56          |
| (1,1147) | 1:A:352:ASN:HD21 | 1:A:367:VAL:HG21 | 6        | 0.56          |
| (1,1147) | 1:A:352:ASN:HD21 | 1:A:367:VAL:HG22 | 6        | 0.56          |
| (1,1147) | 1:A:352:ASN:HD21 | 1:A:367:VAL:HG23 | 6        | 0.56          |
| (1,1034) | 1:A:356:TRP:HB3  | 1:A:360:GLU:H    | 9        | 0.56          |
| (1,950)  | 1:A:350:TYR:H    | 1:A:351:GLU:HG2  | 6        | 0.55          |
| (1,950)  | 1:A:350:TYR:H    | 1:A:351:GLU:HG3  | 6        | 0.55          |
| (1,897)  | 1:A:353:PHE:H    | 1:A:367:VAL:HB   | 5        | 0.55          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,848)  | 1:A:361:SER:H    | 1:A:363:ILE:HB   | 5        | 0.55          |
| (1,842)  | 1:A:358:ASP:HA   | 1:A:361:SER:H    | 9        | 0.55          |
| (1,828)  | 1:A:374:ARG:HG3  | 1:A:378:ASN:HD22 | 5        | 0.55          |
| (1,813)  | 1:A:425:GLY:H    | 1:A:426:ARG:H    | 4        | 0.55          |
| (1,726)  | 1:A:387:TYR:HD2  | 1:A:390:MET:H    | 4        | 0.55          |
| (1,726)  | 1:A:387:TYR:HD2  | 1:A:390:MET:H    | 10       | 0.55          |
| (1,640)  | 1:A:406:GLU:H    | 1:A:413:PHE:HA   | 1        | 0.55          |
| (1,503)  | 1:A:406:GLU:H    | 1:A:412:LEU:HD21 | 1        | 0.55          |
| (1,503)  | 1:A:406:GLU:H    | 1:A:412:LEU:HD22 | 1        | 0.55          |
| (1,503)  | 1:A:406:GLU:H    | 1:A:412:LEU:HD23 | 1        | 0.55          |
| (1,279)  | 1:A:363:ILE:HD11 | 1:A:412:LEU:HD11 | 10       | 0.55          |
| (1,279)  | 1:A:363:ILE:HD11 | 1:A:412:LEU:HD12 | 10       | 0.55          |
| (1,279)  | 1:A:363:ILE:HD11 | 1:A:412:LEU:HD13 | 10       | 0.55          |
| (1,279)  | 1:A:363:ILE:HD12 | 1:A:412:LEU:HD11 | 10       | 0.55          |
| (1,279)  | 1:A:363:ILE:HD12 | 1:A:412:LEU:HD12 | 10       | 0.55          |
| (1,279)  | 1:A:363:ILE:HD12 | 1:A:412:LEU:HD13 | 10       | 0.55          |
| (1,279)  | 1:A:363:ILE:HD13 | 1:A:412:LEU:HD11 | 10       | 0.55          |
| (1,279)  | 1:A:363:ILE:HD13 | 1:A:412:LEU:HD12 | 10       | 0.55          |
| (1,279)  | 1:A:363:ILE:HD13 | 1:A:412:LEU:HD13 | 10       | 0.55          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD11 | 5        | 0.55          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD12 | 5        | 0.55          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD13 | 5        | 0.55          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD21 | 5        | 0.55          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD22 | 5        | 0.55          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD23 | 5        | 0.55          |
| (1,1328) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HG2  | 5        | 0.55          |
| (1,1328) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HG3  | 5        | 0.55          |
| (1,1328) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HG2  | 5        | 0.55          |
| (1,1328) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HG3  | 5        | 0.55          |
| (1,1328) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HG2  | 5        | 0.55          |
| (1,1328) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HG3  | 5        | 0.55          |
| (1,1328) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HG2  | 5        | 0.55          |
| (1,1328) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HG3  | 5        | 0.55          |
| (1,1328) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HG2  | 5        | 0.55          |
| (1,1328) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HG3  | 5        | 0.55          |
| (1,1328) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HG2  | 5        | 0.55          |
| (1,1328) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HG3  | 5        | 0.55          |
| (1,1325) | 1:A:345:LEU:HD11 | 1:A:355:ARG:H    | 7        | 0.55          |
| (1,1325) | 1:A:345:LEU:HD12 | 1:A:355:ARG:H    | 7        | 0.55          |
| (1,1325) | 1:A:345:LEU:HD13 | 1:A:355:ARG:H    | 7        | 0.55          |
| (1,1325) | 1:A:345:LEU:HD21 | 1:A:355:ARG:H    | 7        | 0.55          |
| (1,1325) | 1:A:345:LEU:HD22 | 1:A:355:ARG:H    | 7        | 0.55          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1325) | 1:A:345:LEU:HD23 | 1:A:355:ARG:H    | 7        | 0.55          |
| (1,1291) | 1:A:341:VAL:HG11 | 1:A:364:PHE:HD2  | 7        | 0.55          |
| (1,1291) | 1:A:341:VAL:HG12 | 1:A:364:PHE:HD2  | 7        | 0.55          |
| (1,1291) | 1:A:341:VAL:HG13 | 1:A:364:PHE:HD2  | 7        | 0.55          |
| (1,1291) | 1:A:341:VAL:HG21 | 1:A:364:PHE:HD2  | 7        | 0.55          |
| (1,1291) | 1:A:341:VAL:HG22 | 1:A:364:PHE:HD2  | 7        | 0.55          |
| (1,1291) | 1:A:341:VAL:HG23 | 1:A:364:PHE:HD2  | 7        | 0.55          |
| (1,1222) | 1:A:366:ILE:HG12 | 1:A:387:TYR:HE2  | 8        | 0.55          |
| (1,1222) | 1:A:366:ILE:HG13 | 1:A:387:TYR:HE2  | 8        | 0.55          |
| (1,1213) | 1:A:340:TYR:HA   | 1:A:340:TYR:HE2  | 2        | 0.55          |
| (1,1147) | 1:A:352:ASN:HD21 | 1:A:367:VAL:HG21 | 4        | 0.55          |
| (1,1147) | 1:A:352:ASN:HD21 | 1:A:367:VAL:HG22 | 4        | 0.55          |
| (1,1147) | 1:A:352:ASN:HD21 | 1:A:367:VAL:HG23 | 4        | 0.55          |
| (1,1127) | 1:A:348:SER:H    | 1:A:350:TYR:H    | 6        | 0.55          |
| (1,860)  | 1:A:385:MET:HB3  | 1:A:386:THR:H    | 8        | 0.54          |
| (1,785)  | 1:A:355:ARG:H    | 1:A:366:ILE:HA   | 4        | 0.54          |
| (1,673)  | 1:A:365:ARG:HD2  | 1:A:366:ILE:H    | 6        | 0.54          |
| (1,47)   | 1:A:418:THR:HG21 | 1:A:419:PRO:HB3  | 7        | 0.54          |
| (1,47)   | 1:A:418:THR:HG22 | 1:A:419:PRO:HB3  | 7        | 0.54          |
| (1,47)   | 1:A:418:THR:HG23 | 1:A:419:PRO:HB3  | 7        | 0.54          |
| (1,313)  | 1:A:342:TYR:HA   | 1:A:342:TYR:HD2  | 4        | 0.54          |
| (1,173)  | 1:A:353:PHE:HA   | 1:A:368:ASP:HA   | 2        | 0.54          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD11 | 6        | 0.54          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD12 | 6        | 0.54          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD13 | 6        | 0.54          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD21 | 6        | 0.54          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD22 | 6        | 0.54          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD23 | 6        | 0.54          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD11 | 2        | 0.54          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD12 | 2        | 0.54          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD13 | 2        | 0.54          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD21 | 2        | 0.54          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD22 | 2        | 0.54          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD23 | 2        | 0.54          |
| (1,1145) | 1:A:343:GLN:HA   | 1:A:343:GLN:HE22 | 1        | 0.54          |
| (1,1129) | 1:A:398:TYR:H    | 1:A:402:ILE:HD11 | 3        | 0.54          |
| (1,1129) | 1:A:398:TYR:H    | 1:A:402:ILE:HD12 | 3        | 0.54          |
| (1,1129) | 1:A:398:TYR:H    | 1:A:402:ILE:HD13 | 3        | 0.54          |
| (1,1008) | 1:A:412:LEU:H    | 1:A:413:PHE:HD1  | 5        | 0.54          |
| (1,970)  | 1:A:402:ILE:HA   | 1:A:417:LYS:H    | 5        | 0.53          |
| (1,829)  | 1:A:417:LYS:HG2  | 1:A:418:THR:H    | 2        | 0.53          |
| (1,829)  | 1:A:417:LYS:HG3  | 1:A:418:THR:H    | 2        | 0.53          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,804)  | 1:A:355:ARG:HB2  | 1:A:365:ARG:H    | 3        | 0.53          |
| (1,804)  | 1:A:355:ARG:HB3  | 1:A:365:ARG:H    | 3        | 0.53          |
| (1,701)  | 1:A:363:ILE:HD11 | 1:A:415:PHE:H    | 9        | 0.53          |
| (1,701)  | 1:A:363:ILE:HD12 | 1:A:415:PHE:H    | 9        | 0.53          |
| (1,701)  | 1:A:363:ILE:HD13 | 1:A:415:PHE:H    | 9        | 0.53          |
| (1,673)  | 1:A:365:ARG:HD2  | 1:A:366:ILE:H    | 4        | 0.53          |
| (1,673)  | 1:A:365:ARG:HD2  | 1:A:366:ILE:H    | 10       | 0.53          |
| (1,572)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG11 | 9        | 0.53          |
| (1,572)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG12 | 9        | 0.53          |
| (1,572)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG13 | 9        | 0.53          |
| (1,52)   | 1:A:357:GLU:HB2  | 1:A:412:LEU:HD21 | 1        | 0.53          |
| (1,52)   | 1:A:357:GLU:HB2  | 1:A:412:LEU:HD22 | 1        | 0.53          |
| (1,52)   | 1:A:357:GLU:HB2  | 1:A:412:LEU:HD23 | 1        | 0.53          |
| (1,52)   | 1:A:357:GLU:HB3  | 1:A:412:LEU:HD21 | 1        | 0.53          |
| (1,52)   | 1:A:357:GLU:HB3  | 1:A:412:LEU:HD22 | 1        | 0.53          |
| (1,52)   | 1:A:357:GLU:HB3  | 1:A:412:LEU:HD23 | 1        | 0.53          |
| (1,204)  | 1:A:355:ARG:HA   | 1:A:367:VAL:HG21 | 4        | 0.53          |
| (1,204)  | 1:A:355:ARG:HA   | 1:A:367:VAL:HG22 | 4        | 0.53          |
| (1,204)  | 1:A:355:ARG:HA   | 1:A:367:VAL:HG23 | 4        | 0.53          |
| (1,149)  | 1:A:355:ARG:HD2  | 1:A:356:TRP:H    | 9        | 0.53          |
| (1,149)  | 1:A:355:ARG:HD3  | 1:A:356:TRP:H    | 9        | 0.53          |
| (1,14)   | 1:A:345:LEU:HA   | 1:A:354:ILE:HG21 | 2        | 0.53          |
| (1,14)   | 1:A:345:LEU:HA   | 1:A:354:ILE:HG22 | 2        | 0.53          |
| (1,14)   | 1:A:345:LEU:HA   | 1:A:354:ILE:HG23 | 2        | 0.53          |
| (1,1204) | 1:A:398:TYR:HE1  | 1:A:404:ARG:HA   | 5        | 0.53          |
| (1,883)  | 1:A:401:ASN:H    | 1:A:402:ILE:HD11 | 5        | 0.52          |
| (1,883)  | 1:A:401:ASN:H    | 1:A:402:ILE:HD12 | 5        | 0.52          |
| (1,883)  | 1:A:401:ASN:H    | 1:A:402:ILE:HD13 | 5        | 0.52          |
| (1,883)  | 1:A:401:ASN:H    | 1:A:402:ILE:HD11 | 9        | 0.52          |
| (1,883)  | 1:A:401:ASN:H    | 1:A:402:ILE:HD12 | 9        | 0.52          |
| (1,883)  | 1:A:401:ASN:H    | 1:A:402:ILE:HD13 | 9        | 0.52          |
| (1,760)  | 1:A:345:LEU:HB3  | 1:A:356:TRP:H    | 10       | 0.52          |
| (1,666)  | 1:A:366:ILE:H    | 1:A:413:PHE:HZ   | 8        | 0.52          |
| (1,645)  | 1:A:406:GLU:H    | 1:A:412:LEU:HB3  | 10       | 0.52          |
| (1,401)  | 1:A:353:PHE:HB3  | 1:A:366:ILE:HG21 | 8        | 0.52          |
| (1,401)  | 1:A:353:PHE:HB3  | 1:A:366:ILE:HG22 | 8        | 0.52          |
| (1,401)  | 1:A:353:PHE:HB3  | 1:A:366:ILE:HG23 | 8        | 0.52          |
| (1,393)  | 1:A:366:ILE:HG21 | 1:A:372:LEU:H    | 7        | 0.52          |
| (1,393)  | 1:A:366:ILE:HG22 | 1:A:372:LEU:H    | 7        | 0.52          |
| (1,393)  | 1:A:366:ILE:HG23 | 1:A:372:LEU:H    | 7        | 0.52          |
| (1,263)  | 1:A:348:SER:HA   | 1:A:351:GLU:HG2  | 10       | 0.52          |
| (1,263)  | 1:A:348:SER:HA   | 1:A:351:GLU:HG3  | 10       | 0.52          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,215)  | 1:A:380:LYS:HA   | 1:A:380:LYS:HD2  | 7        | 0.52          |
| (1,215)  | 1:A:380:LYS:HA   | 1:A:380:LYS:HD3  | 7        | 0.52          |
| (1,172)  | 1:A:377:GLY:HA3  | 1:A:385:MET:HE1  | 10       | 0.52          |
| (1,172)  | 1:A:377:GLY:HA3  | 1:A:385:MET:HE2  | 10       | 0.52          |
| (1,172)  | 1:A:377:GLY:HA3  | 1:A:385:MET:HE3  | 10       | 0.52          |
| (1,1343) | 1:A:348:SER:HA   | 1:A:351:GLU:HB2  | 8        | 0.52          |
| (1,1343) | 1:A:348:SER:HA   | 1:A:351:GLU:HB3  | 8        | 0.52          |
| (1,1305) | 1:A:344:LEU:HD11 | 1:A:347:ASP:HB2  | 2        | 0.52          |
| (1,1305) | 1:A:344:LEU:HD12 | 1:A:347:ASP:HB2  | 2        | 0.52          |
| (1,1305) | 1:A:344:LEU:HD13 | 1:A:347:ASP:HB2  | 2        | 0.52          |
| (1,1305) | 1:A:344:LEU:HD21 | 1:A:347:ASP:HB2  | 2        | 0.52          |
| (1,1305) | 1:A:344:LEU:HD22 | 1:A:347:ASP:HB2  | 2        | 0.52          |
| (1,1305) | 1:A:344:LEU:HD23 | 1:A:347:ASP:HB2  | 2        | 0.52          |
| (1,1290) | 1:A:341:VAL:HG11 | 1:A:364:PHE:HE2  | 9        | 0.52          |
| (1,1290) | 1:A:341:VAL:HG12 | 1:A:364:PHE:HE2  | 9        | 0.52          |
| (1,1290) | 1:A:341:VAL:HG13 | 1:A:364:PHE:HE2  | 9        | 0.52          |
| (1,1290) | 1:A:341:VAL:HG21 | 1:A:364:PHE:HE2  | 9        | 0.52          |
| (1,1290) | 1:A:341:VAL:HG22 | 1:A:364:PHE:HE2  | 9        | 0.52          |
| (1,1290) | 1:A:341:VAL:HG23 | 1:A:364:PHE:HE2  | 9        | 0.52          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD11 | 7        | 0.52          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD12 | 7        | 0.52          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD13 | 7        | 0.52          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD21 | 7        | 0.52          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD22 | 7        | 0.52          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD23 | 7        | 0.52          |
| (1,1250) | 1:A:337:LEU:HB2  | 1:A:341:VAL:HB   | 8        | 0.52          |
| (1,1250) | 1:A:337:LEU:HB3  | 1:A:341:VAL:HB   | 8        | 0.52          |
| (1,1222) | 1:A:366:ILE:HG12 | 1:A:387:TYR:HE2  | 4        | 0.52          |
| (1,1222) | 1:A:366:ILE:HG13 | 1:A:387:TYR:HE2  | 4        | 0.52          |
| (1,1114) | 1:A:354:ILE:H    | 1:A:367:VAL:HG21 | 10       | 0.52          |
| (1,1114) | 1:A:354:ILE:H    | 1:A:367:VAL:HG22 | 10       | 0.52          |
| (1,1114) | 1:A:354:ILE:H    | 1:A:367:VAL:HG23 | 10       | 0.52          |
| (1,883)  | 1:A:401:ASN:H    | 1:A:402:ILE:HD11 | 4        | 0.51          |
| (1,883)  | 1:A:401:ASN:H    | 1:A:402:ILE:HD12 | 4        | 0.51          |
| (1,883)  | 1:A:401:ASN:H    | 1:A:402:ILE:HD13 | 4        | 0.51          |
| (1,848)  | 1:A:361:SER:H    | 1:A:363:ILE:HB   | 8        | 0.51          |
| (1,848)  | 1:A:361:SER:H    | 1:A:363:ILE:HB   | 10       | 0.51          |
| (1,820)  | 1:A:366:ILE:HG21 | 1:A:371:GLY:H    | 4        | 0.51          |
| (1,820)  | 1:A:366:ILE:HG22 | 1:A:371:GLY:H    | 4        | 0.51          |
| (1,820)  | 1:A:366:ILE:HG23 | 1:A:371:GLY:H    | 4        | 0.51          |
| (1,802)  | 1:A:354:ILE:HD11 | 1:A:365:ARG:H    | 5        | 0.51          |
| (1,802)  | 1:A:354:ILE:HD12 | 1:A:365:ARG:H    | 5        | 0.51          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,802)  | 1:A:354:ILE:HD13 | 1:A:365:ARG:H    | 5        | 0.51          |
| (1,701)  | 1:A:363:ILE:HD11 | 1:A:415:PHE:H    | 2        | 0.51          |
| (1,701)  | 1:A:363:ILE:HD12 | 1:A:415:PHE:H    | 2        | 0.51          |
| (1,701)  | 1:A:363:ILE:HD13 | 1:A:415:PHE:H    | 2        | 0.51          |
| (1,666)  | 1:A:366:ILE:H    | 1:A:413:PHE:HZ   | 4        | 0.51          |
| (1,640)  | 1:A:406:GLU:H    | 1:A:413:PHE:HA   | 4        | 0.51          |
| (1,590)  | 1:A:369:PRO:HA   | 1:A:372:LEU:HB2  | 2        | 0.51          |
| (1,52)   | 1:A:357:GLU:HB2  | 1:A:412:LEU:HD21 | 7        | 0.51          |
| (1,52)   | 1:A:357:GLU:HB2  | 1:A:412:LEU:HD22 | 7        | 0.51          |
| (1,52)   | 1:A:357:GLU:HB2  | 1:A:412:LEU:HD23 | 7        | 0.51          |
| (1,52)   | 1:A:357:GLU:HB3  | 1:A:412:LEU:HD21 | 7        | 0.51          |
| (1,52)   | 1:A:357:GLU:HB3  | 1:A:412:LEU:HD22 | 7        | 0.51          |
| (1,52)   | 1:A:357:GLU:HB3  | 1:A:412:LEU:HD23 | 7        | 0.51          |
| (1,448)  | 1:A:374:ARG:H    | 1:A:385:MET:HB3  | 8        | 0.51          |
| (1,410)  | 1:A:353:PHE:HA   | 1:A:367:VAL:HA   | 7        | 0.51          |
| (1,327)  | 1:A:344:LEU:H    | 1:A:354:ILE:HD11 | 10       | 0.51          |
| (1,327)  | 1:A:344:LEU:H    | 1:A:354:ILE:HD12 | 10       | 0.51          |
| (1,327)  | 1:A:344:LEU:H    | 1:A:354:ILE:HD13 | 10       | 0.51          |
| (1,1392) | 1:A:366:ILE:HG12 | 1:A:394:LEU:HD11 | 9        | 0.51          |
| (1,1392) | 1:A:366:ILE:HG12 | 1:A:394:LEU:HD12 | 9        | 0.51          |
| (1,1392) | 1:A:366:ILE:HG12 | 1:A:394:LEU:HD13 | 9        | 0.51          |
| (1,1392) | 1:A:366:ILE:HG12 | 1:A:394:LEU:HD21 | 9        | 0.51          |
| (1,1392) | 1:A:366:ILE:HG12 | 1:A:394:LEU:HD22 | 9        | 0.51          |
| (1,1392) | 1:A:366:ILE:HG12 | 1:A:394:LEU:HD23 | 9        | 0.51          |
| (1,1392) | 1:A:366:ILE:HG13 | 1:A:394:LEU:HD11 | 9        | 0.51          |
| (1,1392) | 1:A:366:ILE:HG13 | 1:A:394:LEU:HD12 | 9        | 0.51          |
| (1,1392) | 1:A:366:ILE:HG13 | 1:A:394:LEU:HD13 | 9        | 0.51          |
| (1,1392) | 1:A:366:ILE:HG13 | 1:A:394:LEU:HD21 | 9        | 0.51          |
| (1,1392) | 1:A:366:ILE:HG13 | 1:A:394:LEU:HD22 | 9        | 0.51          |
| (1,1392) | 1:A:366:ILE:HG13 | 1:A:394:LEU:HD23 | 9        | 0.51          |
| (1,1337) | 1:A:345:LEU:HD11 | 1:A:357:GLU:H    | 10       | 0.51          |
| (1,1337) | 1:A:345:LEU:HD12 | 1:A:357:GLU:H    | 10       | 0.51          |
| (1,1337) | 1:A:345:LEU:HD13 | 1:A:357:GLU:H    | 10       | 0.51          |
| (1,1337) | 1:A:345:LEU:HD21 | 1:A:357:GLU:H    | 10       | 0.51          |
| (1,1337) | 1:A:345:LEU:HD22 | 1:A:357:GLU:H    | 10       | 0.51          |
| (1,1337) | 1:A:345:LEU:HD23 | 1:A:357:GLU:H    | 10       | 0.51          |
| (1,1325) | 1:A:345:LEU:HD11 | 1:A:355:ARG:H    | 5        | 0.51          |
| (1,1325) | 1:A:345:LEU:HD12 | 1:A:355:ARG:H    | 5        | 0.51          |
| (1,1325) | 1:A:345:LEU:HD13 | 1:A:355:ARG:H    | 5        | 0.51          |
| (1,1325) | 1:A:345:LEU:HD21 | 1:A:355:ARG:H    | 5        | 0.51          |
| (1,1325) | 1:A:345:LEU:HD22 | 1:A:355:ARG:H    | 5        | 0.51          |
| (1,1325) | 1:A:345:LEU:HD23 | 1:A:355:ARG:H    | 5        | 0.51          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1315) | 1:A:344:LEU:HD11 | 1:A:390:MET:HE1  | 9        | 0.51          |
| (1,1315) | 1:A:344:LEU:HD11 | 1:A:390:MET:HE2  | 9        | 0.51          |
| (1,1315) | 1:A:344:LEU:HD11 | 1:A:390:MET:HE3  | 9        | 0.51          |
| (1,1315) | 1:A:344:LEU:HD12 | 1:A:390:MET:HE1  | 9        | 0.51          |
| (1,1315) | 1:A:344:LEU:HD12 | 1:A:390:MET:HE2  | 9        | 0.51          |
| (1,1315) | 1:A:344:LEU:HD12 | 1:A:390:MET:HE3  | 9        | 0.51          |
| (1,1315) | 1:A:344:LEU:HD13 | 1:A:390:MET:HE1  | 9        | 0.51          |
| (1,1315) | 1:A:344:LEU:HD13 | 1:A:390:MET:HE2  | 9        | 0.51          |
| (1,1315) | 1:A:344:LEU:HD13 | 1:A:390:MET:HE3  | 9        | 0.51          |
| (1,1315) | 1:A:344:LEU:HD21 | 1:A:390:MET:HE1  | 9        | 0.51          |
| (1,1315) | 1:A:344:LEU:HD21 | 1:A:390:MET:HE2  | 9        | 0.51          |
| (1,1315) | 1:A:344:LEU:HD21 | 1:A:390:MET:HE3  | 9        | 0.51          |
| (1,1315) | 1:A:344:LEU:HD22 | 1:A:390:MET:HE1  | 9        | 0.51          |
| (1,1315) | 1:A:344:LEU:HD22 | 1:A:390:MET:HE2  | 9        | 0.51          |
| (1,1315) | 1:A:344:LEU:HD22 | 1:A:390:MET:HE3  | 9        | 0.51          |
| (1,1315) | 1:A:344:LEU:HD23 | 1:A:390:MET:HE1  | 9        | 0.51          |
| (1,1315) | 1:A:344:LEU:HD23 | 1:A:390:MET:HE2  | 9        | 0.51          |
| (1,1315) | 1:A:344:LEU:HD23 | 1:A:390:MET:HE3  | 9        | 0.51          |
| (1,1306) | 1:A:344:LEU:HD11 | 1:A:350:TYR:HE1  | 1        | 0.51          |
| (1,1306) | 1:A:344:LEU:HD12 | 1:A:350:TYR:HE1  | 1        | 0.51          |
| (1,1306) | 1:A:344:LEU:HD13 | 1:A:350:TYR:HE1  | 1        | 0.51          |
| (1,1306) | 1:A:344:LEU:HD21 | 1:A:350:TYR:HE1  | 1        | 0.51          |
| (1,1306) | 1:A:344:LEU:HD22 | 1:A:350:TYR:HE1  | 1        | 0.51          |
| (1,1306) | 1:A:344:LEU:HD23 | 1:A:350:TYR:HE1  | 1        | 0.51          |
| (1,1106) | 1:A:352:ASN:HA   | 1:A:354:ILE:H    | 5        | 0.51          |
| (1,1104) | 1:A:354:ILE:H    | 1:A:366:ILE:HA   | 1        | 0.51          |
| (1,1104) | 1:A:354:ILE:H    | 1:A:366:ILE:HA   | 7        | 0.51          |
| (1,1038) | 1:A:358:ASP:HA   | 1:A:360:GLU:H    | 5        | 0.51          |
| (1,1038) | 1:A:358:ASP:HA   | 1:A:360:GLU:H    | 6        | 0.51          |
| (1,10)   | 1:A:376:TRP:HZ2  | 1:A:385:MET:HE1  | 2        | 0.51          |
| (1,10)   | 1:A:376:TRP:HZ2  | 1:A:385:MET:HE2  | 2        | 0.51          |
| (1,10)   | 1:A:376:TRP:HZ2  | 1:A:385:MET:HE3  | 2        | 0.51          |
| (1,897)  | 1:A:353:PHE:H    | 1:A:367:VAL:HB   | 7        | 0.5           |
| (1,883)  | 1:A:401:ASN:H    | 1:A:402:ILE:HD11 | 1        | 0.5           |
| (1,883)  | 1:A:401:ASN:H    | 1:A:402:ILE:HD12 | 1        | 0.5           |
| (1,883)  | 1:A:401:ASN:H    | 1:A:402:ILE:HD13 | 1        | 0.5           |
| (1,883)  | 1:A:401:ASN:H    | 1:A:402:ILE:HD11 | 2        | 0.5           |
| (1,883)  | 1:A:401:ASN:H    | 1:A:402:ILE:HD12 | 2        | 0.5           |
| (1,883)  | 1:A:401:ASN:H    | 1:A:402:ILE:HD13 | 2        | 0.5           |
| (1,872)  | 1:A:352:ASN:H    | 1:A:354:ILE:HG21 | 2        | 0.5           |
| (1,872)  | 1:A:352:ASN:H    | 1:A:354:ILE:HG22 | 2        | 0.5           |
| (1,872)  | 1:A:352:ASN:H    | 1:A:354:ILE:HG23 | 2        | 0.5           |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,848)  | 1:A:361:SER:H    | 1:A:363:ILE:HB   | 1        | 0.5           |
| (1,820)  | 1:A:366:ILE:HG21 | 1:A:371:GLY:H    | 6        | 0.5           |
| (1,820)  | 1:A:366:ILE:HG22 | 1:A:371:GLY:H    | 6        | 0.5           |
| (1,820)  | 1:A:366:ILE:HG23 | 1:A:371:GLY:H    | 6        | 0.5           |
| (1,813)  | 1:A:425:GLY:H    | 1:A:426:ARG:H    | 10       | 0.5           |
| (1,631)  | 1:A:365:ARG:HD3  | 1:A:367:VAL:H    | 7        | 0.5           |
| (1,499)  | 1:A:369:PRO:HA   | 1:A:411:LEU:HD11 | 9        | 0.5           |
| (1,499)  | 1:A:369:PRO:HA   | 1:A:411:LEU:HD12 | 9        | 0.5           |
| (1,499)  | 1:A:369:PRO:HA   | 1:A:411:LEU:HD13 | 9        | 0.5           |
| (1,359)  | 1:A:403:ILE:HG21 | 1:A:415:PHE:HE1  | 4        | 0.5           |
| (1,359)  | 1:A:403:ILE:HG22 | 1:A:415:PHE:HE1  | 4        | 0.5           |
| (1,359)  | 1:A:403:ILE:HG23 | 1:A:415:PHE:HE1  | 4        | 0.5           |
| (1,339)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:HG21 | 1        | 0.5           |
| (1,339)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:HG22 | 1        | 0.5           |
| (1,339)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:HG23 | 1        | 0.5           |
| (1,339)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:HG21 | 1        | 0.5           |
| (1,339)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:HG22 | 1        | 0.5           |
| (1,339)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:HG23 | 1        | 0.5           |
| (1,339)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:HG21 | 4        | 0.5           |
| (1,339)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:HG22 | 4        | 0.5           |
| (1,339)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:HG23 | 4        | 0.5           |
| (1,339)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:HG21 | 4        | 0.5           |
| (1,339)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:HG22 | 4        | 0.5           |
| (1,339)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:HG23 | 4        | 0.5           |
| (1,339)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:HG21 | 7        | 0.5           |
| (1,339)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:HG22 | 7        | 0.5           |
| (1,339)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:HG23 | 7        | 0.5           |
| (1,339)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:HG21 | 7        | 0.5           |
| (1,339)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:HG22 | 7        | 0.5           |
| (1,339)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:HG23 | 7        | 0.5           |
| (1,192)  | 1:A:332:ALA:HA   | 1:A:333:ASP:HB2  | 2        | 0.5           |
| (1,192)  | 1:A:332:ALA:HA   | 1:A:333:ASP:HB3  | 2        | 0.5           |
| (1,173)  | 1:A:353:PHE:HA   | 1:A:368:ASP:HA   | 3        | 0.5           |
| (1,146)  | 1:A:355:ARG:H    | 1:A:365:ARG:HD2  | 6        | 0.5           |
| (1,1434) | 1:A:376:TRP:HZ2  | 1:A:380:LYS:HE2  | 5        | 0.5           |
| (1,1434) | 1:A:376:TRP:HZ2  | 1:A:380:LYS:HE3  | 5        | 0.5           |
| (1,1325) | 1:A:345:LEU:HD11 | 1:A:355:ARG:H    | 3        | 0.5           |
| (1,1325) | 1:A:345:LEU:HD12 | 1:A:355:ARG:H    | 3        | 0.5           |
| (1,1325) | 1:A:345:LEU:HD13 | 1:A:355:ARG:H    | 3        | 0.5           |
| (1,1325) | 1:A:345:LEU:HD21 | 1:A:355:ARG:H    | 3        | 0.5           |
| (1,1325) | 1:A:345:LEU:HD22 | 1:A:355:ARG:H    | 3        | 0.5           |
| (1,1325) | 1:A:345:LEU:HD23 | 1:A:355:ARG:H    | 3        | 0.5           |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1218) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HG   | 7        | 0.5           |
| (1,1117) | 1:A:330:ARG:H    | 1:A:330:ARG:HG2  | 3        | 0.5           |
| (1,1117) | 1:A:330:ARG:H    | 1:A:330:ARG:HG3  | 3        | 0.5           |
| (1,1070) | 1:A:417:LYS:HE2  | 1:A:421:GLU:H    | 7        | 0.5           |
| (1,1070) | 1:A:417:LYS:HE3  | 1:A:421:GLU:H    | 7        | 0.5           |
| (1,973)  | 1:A:394:LEU:H    | 1:A:394:LEU:HG   | 1        | 0.49          |
| (1,943)  | 1:A:400:LEU:H    | 1:A:400:LEU:HG   | 6        | 0.49          |
| (1,937)  | 1:A:348:SER:HA   | 1:A:350:TYR:H    | 3        | 0.49          |
| (1,842)  | 1:A:358:ASP:HA   | 1:A:361:SER:H    | 7        | 0.49          |
| (1,829)  | 1:A:417:LYS:HG2  | 1:A:418:THR:H    | 7        | 0.49          |
| (1,829)  | 1:A:417:LYS:HG3  | 1:A:418:THR:H    | 7        | 0.49          |
| (1,47)   | 1:A:418:THR:HG21 | 1:A:419:PRO:HB3  | 2        | 0.49          |
| (1,47)   | 1:A:418:THR:HG22 | 1:A:419:PRO:HB3  | 2        | 0.49          |
| (1,47)   | 1:A:418:THR:HG23 | 1:A:419:PRO:HB3  | 2        | 0.49          |
| (1,449)  | 1:A:385:MET:HB3  | 1:A:386:THR:HA   | 7        | 0.49          |
| (1,426)  | 1:A:410:ARG:HA   | 1:A:410:ARG:HD2  | 1        | 0.49          |
| (1,426)  | 1:A:410:ARG:HA   | 1:A:410:ARG:HD3  | 1        | 0.49          |
| (1,214)  | 1:A:373:ALA:HB1  | 1:A:385:MET:HA   | 1        | 0.49          |
| (1,214)  | 1:A:373:ALA:HB2  | 1:A:385:MET:HA   | 1        | 0.49          |
| (1,214)  | 1:A:373:ALA:HB3  | 1:A:385:MET:HA   | 1        | 0.49          |
| (1,20)   | 1:A:345:LEU:H    | 1:A:354:ILE:HG21 | 3        | 0.49          |
| (1,20)   | 1:A:345:LEU:H    | 1:A:354:ILE:HG22 | 3        | 0.49          |
| (1,20)   | 1:A:345:LEU:H    | 1:A:354:ILE:HG23 | 3        | 0.49          |
| (1,20)   | 1:A:345:LEU:H    | 1:A:354:ILE:HG21 | 5        | 0.49          |
| (1,20)   | 1:A:345:LEU:H    | 1:A:354:ILE:HG22 | 5        | 0.49          |
| (1,20)   | 1:A:345:LEU:H    | 1:A:354:ILE:HG23 | 5        | 0.49          |
| (1,1508) | 1:A:409:GLN:HB2  | 1:A:412:LEU:HG   | 7        | 0.49          |
| (1,1508) | 1:A:409:GLN:HB3  | 1:A:412:LEU:HG   | 7        | 0.49          |
| (1,1390) | 1:A:366:ILE:H    | 1:A:411:LEU:HD11 | 6        | 0.49          |
| (1,1390) | 1:A:366:ILE:H    | 1:A:411:LEU:HD12 | 6        | 0.49          |
| (1,1390) | 1:A:366:ILE:H    | 1:A:411:LEU:HD13 | 6        | 0.49          |
| (1,1390) | 1:A:366:ILE:H    | 1:A:411:LEU:HD21 | 6        | 0.49          |
| (1,1390) | 1:A:366:ILE:H    | 1:A:411:LEU:HD22 | 6        | 0.49          |
| (1,1390) | 1:A:366:ILE:H    | 1:A:411:LEU:HD23 | 6        | 0.49          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD11 | 9        | 0.49          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD12 | 9        | 0.49          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD13 | 9        | 0.49          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD21 | 9        | 0.49          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD22 | 9        | 0.49          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD23 | 9        | 0.49          |
| (1,1315) | 1:A:344:LEU:HD11 | 1:A:390:MET:HE1  | 2        | 0.49          |
| (1,1315) | 1:A:344:LEU:HD11 | 1:A:390:MET:HE2  | 2        | 0.49          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1315) | 1:A:344:LEU:HD11 | 1:A:390:MET:HE3  | 2        | 0.49          |
| (1,1315) | 1:A:344:LEU:HD12 | 1:A:390:MET:HE1  | 2        | 0.49          |
| (1,1315) | 1:A:344:LEU:HD12 | 1:A:390:MET:HE2  | 2        | 0.49          |
| (1,1315) | 1:A:344:LEU:HD12 | 1:A:390:MET:HE3  | 2        | 0.49          |
| (1,1315) | 1:A:344:LEU:HD13 | 1:A:390:MET:HE1  | 2        | 0.49          |
| (1,1315) | 1:A:344:LEU:HD13 | 1:A:390:MET:HE2  | 2        | 0.49          |
| (1,1315) | 1:A:344:LEU:HD13 | 1:A:390:MET:HE3  | 2        | 0.49          |
| (1,1315) | 1:A:344:LEU:HD21 | 1:A:390:MET:HE1  | 2        | 0.49          |
| (1,1315) | 1:A:344:LEU:HD21 | 1:A:390:MET:HE2  | 2        | 0.49          |
| (1,1315) | 1:A:344:LEU:HD21 | 1:A:390:MET:HE3  | 2        | 0.49          |
| (1,1315) | 1:A:344:LEU:HD22 | 1:A:390:MET:HE1  | 2        | 0.49          |
| (1,1315) | 1:A:344:LEU:HD22 | 1:A:390:MET:HE2  | 2        | 0.49          |
| (1,1315) | 1:A:344:LEU:HD22 | 1:A:390:MET:HE3  | 2        | 0.49          |
| (1,1315) | 1:A:344:LEU:HD23 | 1:A:390:MET:HE1  | 2        | 0.49          |
| (1,1315) | 1:A:344:LEU:HD23 | 1:A:390:MET:HE2  | 2        | 0.49          |
| (1,1315) | 1:A:344:LEU:HD23 | 1:A:390:MET:HE3  | 2        | 0.49          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD11 | 2        | 0.49          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD12 | 2        | 0.49          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD13 | 2        | 0.49          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD21 | 2        | 0.49          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD22 | 2        | 0.49          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD23 | 2        | 0.49          |
| (1,1265) | 1:A:337:LEU:HD11 | 1:A:390:MET:HA   | 4        | 0.49          |
| (1,1265) | 1:A:337:LEU:HD12 | 1:A:390:MET:HA   | 4        | 0.49          |
| (1,1265) | 1:A:337:LEU:HD13 | 1:A:390:MET:HA   | 4        | 0.49          |
| (1,1265) | 1:A:337:LEU:HD21 | 1:A:390:MET:HA   | 4        | 0.49          |
| (1,1265) | 1:A:337:LEU:HD22 | 1:A:390:MET:HA   | 4        | 0.49          |
| (1,1265) | 1:A:337:LEU:HD23 | 1:A:390:MET:HA   | 4        | 0.49          |
| (1,1246) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HH2  | 6        | 0.49          |
| (1,1246) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HH2  | 6        | 0.49          |
| (1,1246) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HH2  | 6        | 0.49          |
| (1,1246) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HH2  | 6        | 0.49          |
| (1,1246) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HH2  | 6        | 0.49          |
| (1,1246) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HH2  | 6        | 0.49          |
| (1,973)  | 1:A:394:LEU:H    | 1:A:394:LEU:HG   | 9        | 0.48          |
| (1,897)  | 1:A:353:PHE:H    | 1:A:367:VAL:HB   | 4        | 0.48          |
| (1,883)  | 1:A:401:ASN:H    | 1:A:402:ILE:HD11 | 8        | 0.48          |
| (1,883)  | 1:A:401:ASN:H    | 1:A:402:ILE:HD12 | 8        | 0.48          |
| (1,883)  | 1:A:401:ASN:H    | 1:A:402:ILE:HD13 | 8        | 0.48          |
| (1,842)  | 1:A:358:ASP:HA   | 1:A:361:SER:H    | 6        | 0.48          |
| (1,702)  | 1:A:353:PHE:HD2  | 1:A:372:LEU:H    | 1        | 0.48          |
| (1,666)  | 1:A:366:ILE:H    | 1:A:413:PHE:HZ   | 9        | 0.48          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,569)  | 1:A:354:ILE:H    | 1:A:367:VAL:HG11 | 2        | 0.48          |
| (1,569)  | 1:A:354:ILE:H    | 1:A:367:VAL:HG12 | 2        | 0.48          |
| (1,569)  | 1:A:354:ILE:H    | 1:A:367:VAL:HG13 | 2        | 0.48          |
| (1,503)  | 1:A:406:GLU:H    | 1:A:412:LEU:HD21 | 10       | 0.48          |
| (1,503)  | 1:A:406:GLU:H    | 1:A:412:LEU:HD22 | 10       | 0.48          |
| (1,503)  | 1:A:406:GLU:H    | 1:A:412:LEU:HD23 | 10       | 0.48          |
| (1,449)  | 1:A:385:MET:HB3  | 1:A:386:THR:HA   | 4        | 0.48          |
| (1,410)  | 1:A:353:PHE:HA   | 1:A:367:VAL:HA   | 3        | 0.48          |
| (1,380)  | 1:A:363:ILE:HG21 | 1:A:364:PHE:HD1  | 9        | 0.48          |
| (1,380)  | 1:A:363:ILE:HG22 | 1:A:364:PHE:HD1  | 9        | 0.48          |
| (1,380)  | 1:A:363:ILE:HG23 | 1:A:364:PHE:HD1  | 9        | 0.48          |
| (1,37)   | 1:A:376:TRP:HE1  | 1:A:390:MET:HE1  | 8        | 0.48          |
| (1,37)   | 1:A:376:TRP:HE1  | 1:A:390:MET:HE2  | 8        | 0.48          |
| (1,37)   | 1:A:376:TRP:HE1  | 1:A:390:MET:HE3  | 8        | 0.48          |
| (1,34)   | 1:A:372:LEU:H    | 1:A:390:MET:HE1  | 4        | 0.48          |
| (1,34)   | 1:A:372:LEU:H    | 1:A:390:MET:HE2  | 4        | 0.48          |
| (1,34)   | 1:A:372:LEU:H    | 1:A:390:MET:HE3  | 4        | 0.48          |
| (1,339)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:HG21 | 2        | 0.48          |
| (1,339)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:HG22 | 2        | 0.48          |
| (1,339)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:HG23 | 2        | 0.48          |
| (1,339)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:HG21 | 2        | 0.48          |
| (1,339)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:HG22 | 2        | 0.48          |
| (1,339)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:HG23 | 2        | 0.48          |
| (1,204)  | 1:A:355:ARG:HA   | 1:A:367:VAL:HG21 | 10       | 0.48          |
| (1,204)  | 1:A:355:ARG:HA   | 1:A:367:VAL:HG22 | 10       | 0.48          |
| (1,204)  | 1:A:355:ARG:HA   | 1:A:367:VAL:HG23 | 10       | 0.48          |
| (1,1328) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HG2  | 6        | 0.48          |
| (1,1328) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HG3  | 6        | 0.48          |
| (1,1328) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HG2  | 6        | 0.48          |
| (1,1328) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HG3  | 6        | 0.48          |
| (1,1328) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HG2  | 6        | 0.48          |
| (1,1328) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HG3  | 6        | 0.48          |
| (1,1328) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HG2  | 6        | 0.48          |
| (1,1328) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HG3  | 6        | 0.48          |
| (1,1328) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HG2  | 6        | 0.48          |
| (1,1328) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HG3  | 6        | 0.48          |
| (1,1328) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HG2  | 6        | 0.48          |
| (1,1328) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HG3  | 6        | 0.48          |
| (1,1327) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HB2  | 7        | 0.48          |
| (1,1327) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HB3  | 7        | 0.48          |
| (1,1327) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HB2  | 7        | 0.48          |
| (1,1327) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HB3  | 7        | 0.48          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1327) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HB2  | 7        | 0.48          |
| (1,1327) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HB3  | 7        | 0.48          |
| (1,1327) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HB2  | 7        | 0.48          |
| (1,1327) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HB3  | 7        | 0.48          |
| (1,1327) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HB2  | 7        | 0.48          |
| (1,1327) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HB3  | 7        | 0.48          |
| (1,1327) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HB2  | 7        | 0.48          |
| (1,1327) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HB3  | 7        | 0.48          |
| (1,1321) | 1:A:345:LEU:HD11 | 1:A:354:ILE:HA   | 10       | 0.48          |
| (1,1321) | 1:A:345:LEU:HD12 | 1:A:354:ILE:HA   | 10       | 0.48          |
| (1,1321) | 1:A:345:LEU:HD13 | 1:A:354:ILE:HA   | 10       | 0.48          |
| (1,1321) | 1:A:345:LEU:HD21 | 1:A:354:ILE:HA   | 10       | 0.48          |
| (1,1321) | 1:A:345:LEU:HD22 | 1:A:354:ILE:HA   | 10       | 0.48          |
| (1,1321) | 1:A:345:LEU:HD23 | 1:A:354:ILE:HA   | 10       | 0.48          |
| (1,1305) | 1:A:344:LEU:HD11 | 1:A:347:ASP:HB2  | 9        | 0.48          |
| (1,1305) | 1:A:344:LEU:HD12 | 1:A:347:ASP:HB2  | 9        | 0.48          |
| (1,1305) | 1:A:344:LEU:HD13 | 1:A:347:ASP:HB2  | 9        | 0.48          |
| (1,1305) | 1:A:344:LEU:HD21 | 1:A:347:ASP:HB2  | 9        | 0.48          |
| (1,1305) | 1:A:344:LEU:HD22 | 1:A:347:ASP:HB2  | 9        | 0.48          |
| (1,1305) | 1:A:344:LEU:HD23 | 1:A:347:ASP:HB2  | 9        | 0.48          |
| (1,1186) | 1:A:356:TRP:HD1  | 1:A:359:LYS:HE2  | 7        | 0.48          |
| (1,1186) | 1:A:356:TRP:HD1  | 1:A:359:LYS:HE3  | 7        | 0.48          |
| (1,1109) | 1:A:354:ILE:H    | 1:A:355:ARG:HE   | 10       | 0.48          |
| (1,1104) | 1:A:354:ILE:H    | 1:A:366:ILE:HA   | 9        | 0.48          |
| (1,1038) | 1:A:358:ASP:HA   | 1:A:360:GLU:H    | 4        | 0.48          |
| (1,921)  | 1:A:397:TYR:H    | 1:A:402:ILE:HD11 | 7        | 0.47          |
| (1,921)  | 1:A:397:TYR:H    | 1:A:402:ILE:HD12 | 7        | 0.47          |
| (1,921)  | 1:A:397:TYR:H    | 1:A:402:ILE:HD13 | 7        | 0.47          |
| (1,897)  | 1:A:353:PHE:H    | 1:A:367:VAL:HB   | 8        | 0.47          |
| (1,804)  | 1:A:355:ARG:HB2  | 1:A:365:ARG:H    | 7        | 0.47          |
| (1,804)  | 1:A:355:ARG:HB3  | 1:A:365:ARG:H    | 7        | 0.47          |
| (1,689)  | 1:A:426:ARG:H    | 1:A:426:ARG:HD2  | 7        | 0.47          |
| (1,689)  | 1:A:426:ARG:H    | 1:A:426:ARG:HD3  | 7        | 0.47          |
| (1,640)  | 1:A:406:GLU:H    | 1:A:413:PHE:HA   | 7        | 0.47          |
| (1,587)  | 1:A:353:PHE:HB3  | 1:A:369:PRO:HA   | 8        | 0.47          |
| (1,534)  | 1:A:345:LEU:HD11 | 1:A:364:PHE:HD2  | 4        | 0.47          |
| (1,534)  | 1:A:345:LEU:HD12 | 1:A:364:PHE:HD2  | 4        | 0.47          |
| (1,534)  | 1:A:345:LEU:HD13 | 1:A:364:PHE:HD2  | 4        | 0.47          |
| (1,410)  | 1:A:353:PHE:HA   | 1:A:367:VAL:HA   | 4        | 0.47          |
| (1,393)  | 1:A:366:ILE:HG21 | 1:A:372:LEU:H    | 5        | 0.47          |
| (1,393)  | 1:A:366:ILE:HG22 | 1:A:372:LEU:H    | 5        | 0.47          |
| (1,393)  | 1:A:366:ILE:HG23 | 1:A:372:LEU:H    | 5        | 0.47          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,365)  | 1:A:364:PHE:HE1  | 1:A:403:ILE:HG21 | 7        | 0.47          |
| (1,365)  | 1:A:364:PHE:HE1  | 1:A:403:ILE:HG22 | 7        | 0.47          |
| (1,365)  | 1:A:364:PHE:HE1  | 1:A:403:ILE:HG23 | 7        | 0.47          |
| (1,344)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG21 | 5        | 0.47          |
| (1,344)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG22 | 5        | 0.47          |
| (1,344)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG23 | 5        | 0.47          |
| (1,330)  | 1:A:358:ASP:HA   | 1:A:361:SER:HB2  | 8        | 0.47          |
| (1,248)  | 1:A:376:TRP:HD1  | 1:A:390:MET:HA   | 1        | 0.47          |
| (1,215)  | 1:A:380:LYS:HA   | 1:A:380:LYS:HD2  | 4        | 0.47          |
| (1,215)  | 1:A:380:LYS:HA   | 1:A:380:LYS:HD3  | 4        | 0.47          |
| (1,172)  | 1:A:377:GLY:HA3  | 1:A:385:MET:HE1  | 3        | 0.47          |
| (1,172)  | 1:A:377:GLY:HA3  | 1:A:385:MET:HE2  | 3        | 0.47          |
| (1,172)  | 1:A:377:GLY:HA3  | 1:A:385:MET:HE3  | 3        | 0.47          |
| (1,1469) | 1:A:394:LEU:HD11 | 1:A:397:TYR:HD2  | 4        | 0.47          |
| (1,1469) | 1:A:394:LEU:HD12 | 1:A:397:TYR:HD2  | 4        | 0.47          |
| (1,1469) | 1:A:394:LEU:HD13 | 1:A:397:TYR:HD2  | 4        | 0.47          |
| (1,1469) | 1:A:394:LEU:HD21 | 1:A:397:TYR:HD2  | 4        | 0.47          |
| (1,1469) | 1:A:394:LEU:HD22 | 1:A:397:TYR:HD2  | 4        | 0.47          |
| (1,1469) | 1:A:394:LEU:HD23 | 1:A:397:TYR:HD2  | 4        | 0.47          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD11 | 2        | 0.47          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD12 | 2        | 0.47          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD13 | 2        | 0.47          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD21 | 2        | 0.47          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD22 | 2        | 0.47          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD23 | 2        | 0.47          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD11 | 2        | 0.47          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD12 | 2        | 0.47          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD13 | 2        | 0.47          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD21 | 2        | 0.47          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD22 | 2        | 0.47          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD23 | 2        | 0.47          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD11 | 2        | 0.47          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD12 | 2        | 0.47          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD13 | 2        | 0.47          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD21 | 2        | 0.47          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD22 | 2        | 0.47          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD23 | 2        | 0.47          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD11 | 7        | 0.47          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD12 | 7        | 0.47          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD13 | 7        | 0.47          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD21 | 7        | 0.47          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD22 | 7        | 0.47          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD23 | 7        | 0.47          |
| (1,1329) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HD2  | 3        | 0.47          |
| (1,1329) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HD3  | 3        | 0.47          |
| (1,1329) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HD2  | 3        | 0.47          |
| (1,1329) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HD3  | 3        | 0.47          |
| (1,1329) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HD2  | 3        | 0.47          |
| (1,1329) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HD3  | 3        | 0.47          |
| (1,1329) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HD2  | 3        | 0.47          |
| (1,1329) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HD3  | 3        | 0.47          |
| (1,1329) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HD2  | 3        | 0.47          |
| (1,1329) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HD3  | 3        | 0.47          |
| (1,1329) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HD2  | 3        | 0.47          |
| (1,1329) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HD3  | 3        | 0.47          |
| (1,1327) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HB2  | 9        | 0.47          |
| (1,1327) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HB3  | 9        | 0.47          |
| (1,1327) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HB2  | 9        | 0.47          |
| (1,1327) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HB3  | 9        | 0.47          |
| (1,1327) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HB2  | 9        | 0.47          |
| (1,1327) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HB3  | 9        | 0.47          |
| (1,1327) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HB2  | 9        | 0.47          |
| (1,1327) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HB3  | 9        | 0.47          |
| (1,1327) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HB2  | 9        | 0.47          |
| (1,1327) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HB3  | 9        | 0.47          |
| (1,1327) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HB2  | 9        | 0.47          |
| (1,1327) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HB3  | 9        | 0.47          |
| (1,1038) | 1:A:358:ASP:HA   | 1:A:360:GLU:H    | 10       | 0.47          |
| (1,1009) | 1:A:412:LEU:H    | 1:A:413:PHE:HZ   | 8        | 0.47          |
| (1,94)   | 1:A:366:ILE:HB   | 1:A:413:PHE:HZ   | 6        | 0.46          |
| (1,908)  | 1:A:366:ILE:HA   | 1:A:368:ASP:H    | 9        | 0.46          |
| (1,904)  | 1:A:366:ILE:H    | 1:A:368:ASP:H    | 3        | 0.46          |
| (1,883)  | 1:A:401:ASN:H    | 1:A:402:ILE:HD11 | 6        | 0.46          |
| (1,883)  | 1:A:401:ASN:H    | 1:A:402:ILE:HD12 | 6        | 0.46          |
| (1,883)  | 1:A:401:ASN:H    | 1:A:402:ILE:HD13 | 6        | 0.46          |
| (1,846)  | 1:A:361:SER:H    | 1:A:363:ILE:HD11 | 6        | 0.46          |
| (1,846)  | 1:A:361:SER:H    | 1:A:363:ILE:HD12 | 6        | 0.46          |
| (1,846)  | 1:A:361:SER:H    | 1:A:363:ILE:HD13 | 6        | 0.46          |
| (1,842)  | 1:A:358:ASP:HA   | 1:A:361:SER:H    | 8        | 0.46          |
| (1,755)  | 1:A:355:ARG:HG2  | 1:A:356:TRP:H    | 5        | 0.46          |
| (1,755)  | 1:A:355:ARG:HG3  | 1:A:356:TRP:H    | 5        | 0.46          |
| (1,673)  | 1:A:365:ARG:HD2  | 1:A:366:ILE:H    | 7        | 0.46          |
| (1,673)  | 1:A:365:ARG:HD2  | 1:A:366:ILE:H    | 9        | 0.46          |
| (1,645)  | 1:A:406:GLU:H    | 1:A:412:LEU:HB3  | 8        | 0.46          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,631)  | 1:A:365:ARG:HD3  | 1:A:367:VAL:H    | 3        | 0.46          |
| (1,569)  | 1:A:354:ILE:H    | 1:A:367:VAL:HG11 | 7        | 0.46          |
| (1,569)  | 1:A:354:ILE:H    | 1:A:367:VAL:HG12 | 7        | 0.46          |
| (1,569)  | 1:A:354:ILE:H    | 1:A:367:VAL:HG13 | 7        | 0.46          |
| (1,425)  | 1:A:339:ASP:HA   | 1:A:342:TYR:HB2  | 8        | 0.46          |
| (1,393)  | 1:A:366:ILE:HG21 | 1:A:372:LEU:H    | 4        | 0.46          |
| (1,393)  | 1:A:366:ILE:HG22 | 1:A:372:LEU:H    | 4        | 0.46          |
| (1,393)  | 1:A:366:ILE:HG23 | 1:A:372:LEU:H    | 4        | 0.46          |
| (1,380)  | 1:A:363:ILE:HG21 | 1:A:364:PHE:HD1  | 2        | 0.46          |
| (1,380)  | 1:A:363:ILE:HG22 | 1:A:364:PHE:HD1  | 2        | 0.46          |
| (1,380)  | 1:A:363:ILE:HG23 | 1:A:364:PHE:HD1  | 2        | 0.46          |
| (1,248)  | 1:A:376:TRP:HD1  | 1:A:390:MET:HA   | 6        | 0.46          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD11 | 7        | 0.46          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD12 | 7        | 0.46          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD13 | 7        | 0.46          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD21 | 7        | 0.46          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD22 | 7        | 0.46          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD23 | 7        | 0.46          |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD11 | 5        | 0.46          |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD12 | 5        | 0.46          |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD13 | 5        | 0.46          |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD21 | 5        | 0.46          |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD22 | 5        | 0.46          |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD23 | 5        | 0.46          |
| (1,1366) | 1:A:353:PHE:HB3  | 1:A:375:LEU:HD11 | 5        | 0.46          |
| (1,1366) | 1:A:353:PHE:HB3  | 1:A:375:LEU:HD12 | 5        | 0.46          |
| (1,1366) | 1:A:353:PHE:HB3  | 1:A:375:LEU:HD13 | 5        | 0.46          |
| (1,1366) | 1:A:353:PHE:HB3  | 1:A:375:LEU:HD21 | 5        | 0.46          |
| (1,1366) | 1:A:353:PHE:HB3  | 1:A:375:LEU:HD22 | 5        | 0.46          |
| (1,1366) | 1:A:353:PHE:HB3  | 1:A:375:LEU:HD23 | 5        | 0.46          |
| (1,1311) | 1:A:344:LEU:HD11 | 1:A:354:ILE:HD11 | 4        | 0.46          |
| (1,1311) | 1:A:344:LEU:HD11 | 1:A:354:ILE:HD12 | 4        | 0.46          |
| (1,1311) | 1:A:344:LEU:HD11 | 1:A:354:ILE:HD13 | 4        | 0.46          |
| (1,1311) | 1:A:344:LEU:HD12 | 1:A:354:ILE:HD11 | 4        | 0.46          |
| (1,1311) | 1:A:344:LEU:HD12 | 1:A:354:ILE:HD12 | 4        | 0.46          |
| (1,1311) | 1:A:344:LEU:HD12 | 1:A:354:ILE:HD13 | 4        | 0.46          |
| (1,1311) | 1:A:344:LEU:HD13 | 1:A:354:ILE:HD11 | 4        | 0.46          |
| (1,1311) | 1:A:344:LEU:HD13 | 1:A:354:ILE:HD12 | 4        | 0.46          |
| (1,1311) | 1:A:344:LEU:HD13 | 1:A:354:ILE:HD13 | 4        | 0.46          |
| (1,1311) | 1:A:344:LEU:HD21 | 1:A:354:ILE:HD11 | 4        | 0.46          |
| (1,1311) | 1:A:344:LEU:HD21 | 1:A:354:ILE:HD12 | 4        | 0.46          |
| (1,1311) | 1:A:344:LEU:HD21 | 1:A:354:ILE:HD13 | 4        | 0.46          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1311) | 1:A:344:LEU:HD22 | 1:A:354:ILE:HD11 | 4        | 0.46          |
| (1,1311) | 1:A:344:LEU:HD22 | 1:A:354:ILE:HD12 | 4        | 0.46          |
| (1,1311) | 1:A:344:LEU:HD22 | 1:A:354:ILE:HD13 | 4        | 0.46          |
| (1,1311) | 1:A:344:LEU:HD23 | 1:A:354:ILE:HD11 | 4        | 0.46          |
| (1,1311) | 1:A:344:LEU:HD23 | 1:A:354:ILE:HD12 | 4        | 0.46          |
| (1,1311) | 1:A:344:LEU:HD23 | 1:A:354:ILE:HD13 | 4        | 0.46          |
| (1,1174) | 1:A:394:LEU:HG   | 1:A:397:TYR:HD2  | 10       | 0.46          |
| (1,1098) | 1:A:395:ARG:H    | 1:A:395:ARG:HD2  | 8        | 0.46          |
| (1,1098) | 1:A:395:ARG:H    | 1:A:395:ARG:HD3  | 8        | 0.46          |
| (1,946)  | 1:A:358:ASP:H    | 1:A:363:ILE:HG21 | 8        | 0.45          |
| (1,946)  | 1:A:358:ASP:H    | 1:A:363:ILE:HG22 | 8        | 0.45          |
| (1,946)  | 1:A:358:ASP:H    | 1:A:363:ILE:HG23 | 8        | 0.45          |
| (1,842)  | 1:A:358:ASP:HA   | 1:A:361:SER:H    | 10       | 0.45          |
| (1,820)  | 1:A:366:ILE:HG21 | 1:A:371:GLY:H    | 5        | 0.45          |
| (1,820)  | 1:A:366:ILE:HG22 | 1:A:371:GLY:H    | 5        | 0.45          |
| (1,820)  | 1:A:366:ILE:HG23 | 1:A:371:GLY:H    | 5        | 0.45          |
| (1,46)   | 1:A:385:MET:HB3  | 1:A:386:THR:HG21 | 9        | 0.45          |
| (1,46)   | 1:A:385:MET:HB3  | 1:A:386:THR:HG22 | 9        | 0.45          |
| (1,46)   | 1:A:385:MET:HB3  | 1:A:386:THR:HG23 | 9        | 0.45          |
| (1,380)  | 1:A:363:ILE:HG21 | 1:A:364:PHE:HD1  | 8        | 0.45          |
| (1,380)  | 1:A:363:ILE:HG22 | 1:A:364:PHE:HD1  | 8        | 0.45          |
| (1,380)  | 1:A:363:ILE:HG23 | 1:A:364:PHE:HD1  | 8        | 0.45          |
| (1,339)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:HG21 | 10       | 0.45          |
| (1,339)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:HG22 | 10       | 0.45          |
| (1,339)  | 1:A:355:ARG:HB2  | 1:A:367:VAL:HG23 | 10       | 0.45          |
| (1,339)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:HG21 | 10       | 0.45          |
| (1,339)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:HG22 | 10       | 0.45          |
| (1,339)  | 1:A:355:ARG:HB3  | 1:A:367:VAL:HG23 | 10       | 0.45          |
| (1,330)  | 1:A:358:ASP:HA   | 1:A:361:SER:HB2  | 5        | 0.45          |
| (1,215)  | 1:A:380:LYS:HA   | 1:A:380:LYS:HD2  | 2        | 0.45          |
| (1,215)  | 1:A:380:LYS:HA   | 1:A:380:LYS:HD3  | 2        | 0.45          |
| (1,173)  | 1:A:353:PHE:HA   | 1:A:368:ASP:HA   | 1        | 0.45          |
| (1,152)  | 1:A:354:ILE:H    | 1:A:355:ARG:HD2  | 5        | 0.45          |
| (1,152)  | 1:A:354:ILE:H    | 1:A:355:ARG:HD3  | 5        | 0.45          |
| (1,1502) | 1:A:406:GLU:HG2  | 1:A:414:ARG:H    | 10       | 0.45          |
| (1,1502) | 1:A:406:GLU:HG3  | 1:A:414:ARG:H    | 10       | 0.45          |
| (1,1243) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HD1  | 5        | 0.45          |
| (1,1243) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HD1  | 5        | 0.45          |
| (1,1243) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HD1  | 5        | 0.45          |
| (1,1243) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HD1  | 5        | 0.45          |
| (1,1243) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HD1  | 5        | 0.45          |
| (1,1243) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HD1  | 5        | 0.45          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD21 | 6        | 0.45          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD22 | 6        | 0.45          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD23 | 6        | 0.45          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD11 | 6        | 0.45          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD12 | 6        | 0.45          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD13 | 6        | 0.45          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD21 | 9        | 0.45          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD22 | 9        | 0.45          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD23 | 9        | 0.45          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD11 | 9        | 0.45          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD12 | 9        | 0.45          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD13 | 9        | 0.45          |
| (1,1174) | 1:A:394:LEU:HG   | 1:A:397:TYR:HD2  | 7        | 0.45          |
| (1,1113) | 1:A:354:ILE:H    | 1:A:367:VAL:HB   | 3        | 0.45          |
| (1,1035) | 1:A:358:ASP:HB2  | 1:A:360:GLU:H    | 1        | 0.45          |
| (1,1035) | 1:A:358:ASP:HB3  | 1:A:360:GLU:H    | 1        | 0.45          |
| (1,1034) | 1:A:356:TRP:HB3  | 1:A:360:GLU:H    | 4        | 0.45          |
| (1,908)  | 1:A:366:ILE:HA   | 1:A:368:ASP:H    | 7        | 0.44          |
| (1,860)  | 1:A:385:MET:HB3  | 1:A:386:THR:H    | 7        | 0.44          |
| (1,844)  | 1:A:359:LYS:HA   | 1:A:361:SER:H    | 8        | 0.44          |
| (1,842)  | 1:A:358:ASP:HA   | 1:A:361:SER:H    | 1        | 0.44          |
| (1,820)  | 1:A:366:ILE:HG21 | 1:A:371:GLY:H    | 9        | 0.44          |
| (1,820)  | 1:A:366:ILE:HG22 | 1:A:371:GLY:H    | 9        | 0.44          |
| (1,820)  | 1:A:366:ILE:HG23 | 1:A:371:GLY:H    | 9        | 0.44          |
| (1,701)  | 1:A:363:ILE:HD11 | 1:A:415:PHE:H    | 6        | 0.44          |
| (1,701)  | 1:A:363:ILE:HD12 | 1:A:415:PHE:H    | 6        | 0.44          |
| (1,701)  | 1:A:363:ILE:HD13 | 1:A:415:PHE:H    | 6        | 0.44          |
| (1,567)  | 1:A:386:THR:HG21 | 1:A:387:TYR:HB3  | 9        | 0.44          |
| (1,567)  | 1:A:386:THR:HG22 | 1:A:387:TYR:HB3  | 9        | 0.44          |
| (1,567)  | 1:A:386:THR:HG23 | 1:A:387:TYR:HB3  | 9        | 0.44          |
| (1,563)  | 1:A:386:THR:HG21 | 1:A:389:LYS:H    | 6        | 0.44          |
| (1,563)  | 1:A:386:THR:HG22 | 1:A:389:LYS:H    | 6        | 0.44          |
| (1,563)  | 1:A:386:THR:HG23 | 1:A:389:LYS:H    | 6        | 0.44          |
| (1,385)  | 1:A:358:ASP:HA   | 1:A:363:ILE:HG21 | 4        | 0.44          |
| (1,385)  | 1:A:358:ASP:HA   | 1:A:363:ILE:HG22 | 4        | 0.44          |
| (1,385)  | 1:A:358:ASP:HA   | 1:A:363:ILE:HG23 | 4        | 0.44          |
| (1,248)  | 1:A:376:TRP:HD1  | 1:A:390:MET:HA   | 10       | 0.44          |
| (1,215)  | 1:A:380:LYS:HA   | 1:A:380:LYS:HD2  | 10       | 0.44          |
| (1,215)  | 1:A:380:LYS:HA   | 1:A:380:LYS:HD3  | 10       | 0.44          |
| (1,197)  | 1:A:363:ILE:HD11 | 1:A:414:ARG:HA   | 4        | 0.44          |
| (1,197)  | 1:A:363:ILE:HD12 | 1:A:414:ARG:HA   | 4        | 0.44          |
| (1,197)  | 1:A:363:ILE:HD13 | 1:A:414:ARG:HA   | 4        | 0.44          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,197)  | 1:A:363:ILE:HD11 | 1:A:414:ARG:HA   | 10       | 0.44          |
| (1,197)  | 1:A:363:ILE:HD12 | 1:A:414:ARG:HA   | 10       | 0.44          |
| (1,197)  | 1:A:363:ILE:HD13 | 1:A:414:ARG:HA   | 10       | 0.44          |
| (1,1218) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HG   | 9        | 0.44          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD21 | 2        | 0.44          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD22 | 2        | 0.44          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD23 | 2        | 0.44          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD11 | 2        | 0.44          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD12 | 2        | 0.44          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD13 | 2        | 0.44          |
| (1,1114) | 1:A:354:ILE:H    | 1:A:367:VAL:HG21 | 7        | 0.44          |
| (1,1114) | 1:A:354:ILE:H    | 1:A:367:VAL:HG22 | 7        | 0.44          |
| (1,1114) | 1:A:354:ILE:H    | 1:A:367:VAL:HG23 | 7        | 0.44          |
| (1,1113) | 1:A:354:ILE:H    | 1:A:367:VAL:HB   | 10       | 0.44          |
| (1,1038) | 1:A:358:ASP:HA   | 1:A:360:GLU:H    | 9        | 0.44          |
| (1,897)  | 1:A:353:PHE:H    | 1:A:367:VAL:HB   | 2        | 0.43          |
| (1,869)  | 1:A:391:SER:H    | 1:A:394:LEU:HG   | 1        | 0.43          |
| (1,842)  | 1:A:358:ASP:HA   | 1:A:361:SER:H    | 4        | 0.43          |
| (1,832)  | 1:A:418:THR:H    | 1:A:422:ILE:H    | 8        | 0.43          |
| (1,764)  | 1:A:364:PHE:HE1  | 1:A:413:PHE:H    | 4        | 0.43          |
| (1,645)  | 1:A:406:GLU:H    | 1:A:412:LEU:HB3  | 7        | 0.43          |
| (1,518)  | 1:A:402:ILE:HG21 | 1:A:417:LYS:HG2  | 8        | 0.43          |
| (1,518)  | 1:A:402:ILE:HG21 | 1:A:417:LYS:HG3  | 8        | 0.43          |
| (1,518)  | 1:A:402:ILE:HG22 | 1:A:417:LYS:HG2  | 8        | 0.43          |
| (1,518)  | 1:A:402:ILE:HG22 | 1:A:417:LYS:HG3  | 8        | 0.43          |
| (1,518)  | 1:A:402:ILE:HG23 | 1:A:417:LYS:HG2  | 8        | 0.43          |
| (1,518)  | 1:A:402:ILE:HG23 | 1:A:417:LYS:HG3  | 8        | 0.43          |
| (1,517)  | 1:A:355:ARG:HG2  | 1:A:367:VAL:HG21 | 2        | 0.43          |
| (1,517)  | 1:A:355:ARG:HG2  | 1:A:367:VAL:HG22 | 2        | 0.43          |
| (1,517)  | 1:A:355:ARG:HG2  | 1:A:367:VAL:HG23 | 2        | 0.43          |
| (1,517)  | 1:A:355:ARG:HG3  | 1:A:367:VAL:HG21 | 2        | 0.43          |
| (1,517)  | 1:A:355:ARG:HG3  | 1:A:367:VAL:HG22 | 2        | 0.43          |
| (1,517)  | 1:A:355:ARG:HG3  | 1:A:367:VAL:HG23 | 2        | 0.43          |
| (1,344)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG21 | 10       | 0.43          |
| (1,344)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG22 | 10       | 0.43          |
| (1,344)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG23 | 10       | 0.43          |
| (1,327)  | 1:A:344:LEU:H    | 1:A:354:ILE:HD11 | 2        | 0.43          |
| (1,327)  | 1:A:344:LEU:H    | 1:A:354:ILE:HD12 | 2        | 0.43          |
| (1,327)  | 1:A:344:LEU:H    | 1:A:354:ILE:HD13 | 2        | 0.43          |
| (1,220)  | 1:A:356:TRP:HB2  | 1:A:359:LYS:HD2  | 8        | 0.43          |
| (1,220)  | 1:A:356:TRP:HB2  | 1:A:359:LYS:HD3  | 8        | 0.43          |
| (1,215)  | 1:A:380:LYS:HA   | 1:A:380:LYS:HD2  | 1        | 0.43          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,215)  | 1:A:380:LYS:HA   | 1:A:380:LYS:HD3  | 1        | 0.43          |
| (1,215)  | 1:A:380:LYS:HA   | 1:A:380:LYS:HD2  | 8        | 0.43          |
| (1,215)  | 1:A:380:LYS:HA   | 1:A:380:LYS:HD3  | 8        | 0.43          |
| (1,172)  | 1:A:377:GLY:HA3  | 1:A:385:MET:HE1  | 9        | 0.43          |
| (1,172)  | 1:A:377:GLY:HA3  | 1:A:385:MET:HE2  | 9        | 0.43          |
| (1,172)  | 1:A:377:GLY:HA3  | 1:A:385:MET:HE3  | 9        | 0.43          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD11 | 7        | 0.43          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD12 | 7        | 0.43          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD13 | 7        | 0.43          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD21 | 7        | 0.43          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD22 | 7        | 0.43          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD23 | 7        | 0.43          |
| (1,1331) | 1:A:345:LEU:HD11 | 1:A:356:TRP:H    | 8        | 0.43          |
| (1,1331) | 1:A:345:LEU:HD12 | 1:A:356:TRP:H    | 8        | 0.43          |
| (1,1331) | 1:A:345:LEU:HD13 | 1:A:356:TRP:H    | 8        | 0.43          |
| (1,1331) | 1:A:345:LEU:HD21 | 1:A:356:TRP:H    | 8        | 0.43          |
| (1,1331) | 1:A:345:LEU:HD22 | 1:A:356:TRP:H    | 8        | 0.43          |
| (1,1331) | 1:A:345:LEU:HD23 | 1:A:356:TRP:H    | 8        | 0.43          |
| (1,1256) | 1:A:337:LEU:HD11 | 1:A:341:VAL:HA   | 6        | 0.43          |
| (1,1256) | 1:A:337:LEU:HD12 | 1:A:341:VAL:HA   | 6        | 0.43          |
| (1,1256) | 1:A:337:LEU:HD13 | 1:A:341:VAL:HA   | 6        | 0.43          |
| (1,1256) | 1:A:337:LEU:HD21 | 1:A:341:VAL:HA   | 6        | 0.43          |
| (1,1256) | 1:A:337:LEU:HD22 | 1:A:341:VAL:HA   | 6        | 0.43          |
| (1,1256) | 1:A:337:LEU:HD23 | 1:A:341:VAL:HA   | 6        | 0.43          |
| (1,1175) | 1:A:397:TYR:HD1  | 1:A:402:ILE:HB   | 2        | 0.43          |
| (1,1168) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HG21 | 2        | 0.43          |
| (1,1168) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HG22 | 2        | 0.43          |
| (1,1168) | 1:A:398:TYR:HD2  | 1:A:403:ILE:HG23 | 2        | 0.43          |
| (1,1104) | 1:A:354:ILE:H    | 1:A:366:ILE:HA   | 4        | 0.43          |
| (1,992)  | 1:A:359:LYS:HA   | 1:A:363:ILE:H    | 9        | 0.42          |
| (1,973)  | 1:A:394:LEU:H    | 1:A:394:LEU:HG   | 5        | 0.42          |
| (1,88)   | 1:A:370:ASN:HA   | 1:A:387:TYR:HB3  | 4        | 0.42          |
| (1,860)  | 1:A:385:MET:HB3  | 1:A:386:THR:H    | 5        | 0.42          |
| (1,84)   | 1:A:358:ASP:HA   | 1:A:360:GLU:HG2  | 2        | 0.42          |
| (1,84)   | 1:A:358:ASP:HA   | 1:A:360:GLU:HG3  | 2        | 0.42          |
| (1,829)  | 1:A:417:LYS:HG2  | 1:A:418:THR:H    | 9        | 0.42          |
| (1,829)  | 1:A:417:LYS:HG3  | 1:A:418:THR:H    | 9        | 0.42          |
| (1,764)  | 1:A:364:PHE:HE1  | 1:A:413:PHE:H    | 10       | 0.42          |
| (1,755)  | 1:A:355:ARG:HG2  | 1:A:356:TRP:H    | 3        | 0.42          |
| (1,755)  | 1:A:355:ARG:HG3  | 1:A:356:TRP:H    | 3        | 0.42          |
| (1,626)  | 1:A:355:ARG:H    | 1:A:367:VAL:H    | 9        | 0.42          |
| (1,597)  | 1:A:356:TRP:HE1  | 1:A:359:LYS:HE2  | 9        | 0.42          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,597)  | 1:A:356:TRP:HE1  | 1:A:359:LYS:HE3  | 9        | 0.42          |
| (1,542)  | 1:A:369:PRO:HA   | 1:A:411:LEU:HD21 | 7        | 0.42          |
| (1,542)  | 1:A:369:PRO:HA   | 1:A:411:LEU:HD22 | 7        | 0.42          |
| (1,542)  | 1:A:369:PRO:HA   | 1:A:411:LEU:HD23 | 7        | 0.42          |
| (1,53)   | 1:A:386:THR:HG21 | 1:A:389:LYS:HB2  | 6        | 0.42          |
| (1,53)   | 1:A:386:THR:HG21 | 1:A:389:LYS:HB3  | 6        | 0.42          |
| (1,53)   | 1:A:386:THR:HG22 | 1:A:389:LYS:HB2  | 6        | 0.42          |
| (1,53)   | 1:A:386:THR:HG22 | 1:A:389:LYS:HB3  | 6        | 0.42          |
| (1,53)   | 1:A:386:THR:HG23 | 1:A:389:LYS:HB2  | 6        | 0.42          |
| (1,53)   | 1:A:386:THR:HG23 | 1:A:389:LYS:HB3  | 6        | 0.42          |
| (1,47)   | 1:A:418:THR:HG21 | 1:A:419:PRO:HB3  | 9        | 0.42          |
| (1,47)   | 1:A:418:THR:HG22 | 1:A:419:PRO:HB3  | 9        | 0.42          |
| (1,47)   | 1:A:418:THR:HG23 | 1:A:419:PRO:HB3  | 9        | 0.42          |
| (1,449)  | 1:A:385:MET:HB3  | 1:A:386:THR:HA   | 3        | 0.42          |
| (1,426)  | 1:A:410:ARG:HA   | 1:A:410:ARG:HD2  | 5        | 0.42          |
| (1,426)  | 1:A:410:ARG:HA   | 1:A:410:ARG:HD3  | 5        | 0.42          |
| (1,421)  | 1:A:405:LYS:HA   | 1:A:413:PHE:HB3  | 1        | 0.42          |
| (1,384)  | 1:A:363:ILE:HG21 | 1:A:412:LEU:HA   | 10       | 0.42          |
| (1,384)  | 1:A:363:ILE:HG22 | 1:A:412:LEU:HA   | 10       | 0.42          |
| (1,384)  | 1:A:363:ILE:HG23 | 1:A:412:LEU:HA   | 10       | 0.42          |
| (1,380)  | 1:A:363:ILE:HG21 | 1:A:364:PHE:HD1  | 3        | 0.42          |
| (1,380)  | 1:A:363:ILE:HG22 | 1:A:364:PHE:HD1  | 3        | 0.42          |
| (1,380)  | 1:A:363:ILE:HG23 | 1:A:364:PHE:HD1  | 3        | 0.42          |
| (1,378)  | 1:A:337:LEU:HG   | 1:A:393:ALA:HB1  | 2        | 0.42          |
| (1,378)  | 1:A:337:LEU:HG   | 1:A:393:ALA:HB2  | 2        | 0.42          |
| (1,378)  | 1:A:337:LEU:HG   | 1:A:393:ALA:HB3  | 2        | 0.42          |
| (1,330)  | 1:A:358:ASP:HA   | 1:A:361:SER:HB2  | 9        | 0.42          |
| (1,19)   | 1:A:344:LEU:H    | 1:A:354:ILE:HG21 | 4        | 0.42          |
| (1,19)   | 1:A:344:LEU:H    | 1:A:354:ILE:HG22 | 4        | 0.42          |
| (1,19)   | 1:A:344:LEU:H    | 1:A:354:ILE:HG23 | 4        | 0.42          |
| (1,182)  | 1:A:383:THR:HB   | 1:A:384:ASN:HA   | 3        | 0.42          |
| (1,161)  | 1:A:409:GLN:HG2  | 1:A:412:LEU:HB3  | 5        | 0.42          |
| (1,161)  | 1:A:409:GLN:HG3  | 1:A:412:LEU:HB3  | 5        | 0.42          |
| (1,151)  | 1:A:365:ARG:HD3  | 1:A:366:ILE:H    | 6        | 0.42          |
| (1,1416) | 1:A:372:LEU:HD11 | 1:A:390:MET:HE1  | 1        | 0.42          |
| (1,1416) | 1:A:372:LEU:HD11 | 1:A:390:MET:HE2  | 1        | 0.42          |
| (1,1416) | 1:A:372:LEU:HD11 | 1:A:390:MET:HE3  | 1        | 0.42          |
| (1,1416) | 1:A:372:LEU:HD12 | 1:A:390:MET:HE1  | 1        | 0.42          |
| (1,1416) | 1:A:372:LEU:HD12 | 1:A:390:MET:HE2  | 1        | 0.42          |
| (1,1416) | 1:A:372:LEU:HD12 | 1:A:390:MET:HE3  | 1        | 0.42          |
| (1,1416) | 1:A:372:LEU:HD13 | 1:A:390:MET:HE1  | 1        | 0.42          |
| (1,1416) | 1:A:372:LEU:HD13 | 1:A:390:MET:HE2  | 1        | 0.42          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1416) | 1:A:372:LEU:HD13 | 1:A:390:MET:HE3  | 1        | 0.42          |
| (1,1416) | 1:A:372:LEU:HD21 | 1:A:390:MET:HE1  | 1        | 0.42          |
| (1,1416) | 1:A:372:LEU:HD21 | 1:A:390:MET:HE2  | 1        | 0.42          |
| (1,1416) | 1:A:372:LEU:HD21 | 1:A:390:MET:HE3  | 1        | 0.42          |
| (1,1416) | 1:A:372:LEU:HD22 | 1:A:390:MET:HE1  | 1        | 0.42          |
| (1,1416) | 1:A:372:LEU:HD22 | 1:A:390:MET:HE2  | 1        | 0.42          |
| (1,1416) | 1:A:372:LEU:HD22 | 1:A:390:MET:HE3  | 1        | 0.42          |
| (1,1416) | 1:A:372:LEU:HD23 | 1:A:390:MET:HE1  | 1        | 0.42          |
| (1,1416) | 1:A:372:LEU:HD23 | 1:A:390:MET:HE2  | 1        | 0.42          |
| (1,1416) | 1:A:372:LEU:HD23 | 1:A:390:MET:HE3  | 1        | 0.42          |
| (1,1379) | 1:A:362:LYS:H    | 1:A:362:LYS:HE2  | 3        | 0.42          |
| (1,1379) | 1:A:362:LYS:H    | 1:A:362:LYS:HE3  | 3        | 0.42          |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD11 | 4        | 0.42          |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD12 | 4        | 0.42          |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD13 | 4        | 0.42          |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD21 | 4        | 0.42          |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD22 | 4        | 0.42          |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD23 | 4        | 0.42          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD11 | 6        | 0.42          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD12 | 6        | 0.42          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD13 | 6        | 0.42          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD21 | 6        | 0.42          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD22 | 6        | 0.42          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD23 | 6        | 0.42          |
| (1,1268) | 1:A:337:LEU:HD11 | 1:A:393:ALA:HA   | 2        | 0.42          |
| (1,1268) | 1:A:337:LEU:HD12 | 1:A:393:ALA:HA   | 2        | 0.42          |
| (1,1268) | 1:A:337:LEU:HD13 | 1:A:393:ALA:HA   | 2        | 0.42          |
| (1,1268) | 1:A:337:LEU:HD21 | 1:A:393:ALA:HA   | 2        | 0.42          |
| (1,1268) | 1:A:337:LEU:HD22 | 1:A:393:ALA:HA   | 2        | 0.42          |
| (1,1268) | 1:A:337:LEU:HD23 | 1:A:393:ALA:HA   | 2        | 0.42          |
| (1,1245) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HZ2  | 10       | 0.42          |
| (1,1245) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HZ2  | 10       | 0.42          |
| (1,1245) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HZ2  | 10       | 0.42          |
| (1,1245) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HZ2  | 10       | 0.42          |
| (1,1245) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HZ2  | 10       | 0.42          |
| (1,1245) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HZ2  | 10       | 0.42          |
| (1,1204) | 1:A:398:TYR:HE1  | 1:A:404:ARG:HA   | 1        | 0.42          |
| (1,1130) | 1:A:340:TYR:H    | 1:A:340:TYR:HD2  | 6        | 0.42          |
| (1,948)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD11 | 2        | 0.41          |
| (1,948)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD12 | 2        | 0.41          |
| (1,948)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD13 | 2        | 0.41          |
| (1,936)  | 1:A:358:ASP:H    | 1:A:364:PHE:HA   | 7        | 0.41          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,846)  | 1:A:361:SER:H    | 1:A:363:ILE:HD11 | 5        | 0.41          |
| (1,846)  | 1:A:361:SER:H    | 1:A:363:ILE:HD12 | 5        | 0.41          |
| (1,846)  | 1:A:361:SER:H    | 1:A:363:ILE:HD13 | 5        | 0.41          |
| (1,842)  | 1:A:358:ASP:HA   | 1:A:361:SER:H    | 3        | 0.41          |
| (1,8)    | 1:A:377:GLY:H    | 1:A:385:MET:HE1  | 3        | 0.41          |
| (1,8)    | 1:A:377:GLY:H    | 1:A:385:MET:HE2  | 3        | 0.41          |
| (1,8)    | 1:A:377:GLY:H    | 1:A:385:MET:HE3  | 3        | 0.41          |
| (1,721)  | 1:A:347:ASP:HB3  | 1:A:349:ARG:H    | 2        | 0.41          |
| (1,715)  | 1:A:349:ARG:H    | 1:A:351:GLU:H    | 8        | 0.41          |
| (1,61)   | 1:A:343:GLN:H    | 1:A:343:GLN:HG2  | 6        | 0.41          |
| (1,61)   | 1:A:343:GLN:H    | 1:A:343:GLN:HG3  | 6        | 0.41          |
| (1,546)  | 1:A:336:LEU:HD11 | 1:A:338:TRP:HH2  | 10       | 0.41          |
| (1,546)  | 1:A:336:LEU:HD12 | 1:A:338:TRP:HH2  | 10       | 0.41          |
| (1,546)  | 1:A:336:LEU:HD13 | 1:A:338:TRP:HH2  | 10       | 0.41          |
| (1,517)  | 1:A:355:ARG:HG2  | 1:A:367:VAL:HG21 | 10       | 0.41          |
| (1,517)  | 1:A:355:ARG:HG2  | 1:A:367:VAL:HG22 | 10       | 0.41          |
| (1,517)  | 1:A:355:ARG:HG2  | 1:A:367:VAL:HG23 | 10       | 0.41          |
| (1,517)  | 1:A:355:ARG:HG3  | 1:A:367:VAL:HG21 | 10       | 0.41          |
| (1,517)  | 1:A:355:ARG:HG3  | 1:A:367:VAL:HG22 | 10       | 0.41          |
| (1,517)  | 1:A:355:ARG:HG3  | 1:A:367:VAL:HG23 | 10       | 0.41          |
| (1,48)   | 1:A:385:MET:HB2  | 1:A:386:THR:HA   | 10       | 0.41          |
| (1,344)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG21 | 8        | 0.41          |
| (1,344)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG22 | 8        | 0.41          |
| (1,344)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG23 | 8        | 0.41          |
| (1,326)  | 1:A:341:VAL:HA   | 1:A:354:ILE:HD11 | 10       | 0.41          |
| (1,326)  | 1:A:341:VAL:HA   | 1:A:354:ILE:HD12 | 10       | 0.41          |
| (1,326)  | 1:A:341:VAL:HA   | 1:A:354:ILE:HD13 | 10       | 0.41          |
| (1,19)   | 1:A:344:LEU:H    | 1:A:354:ILE:HG21 | 9        | 0.41          |
| (1,19)   | 1:A:344:LEU:H    | 1:A:354:ILE:HG22 | 9        | 0.41          |
| (1,19)   | 1:A:344:LEU:H    | 1:A:354:ILE:HG23 | 9        | 0.41          |
| (1,173)  | 1:A:353:PHE:HA   | 1:A:368:ASP:HA   | 9        | 0.41          |
| (1,157)  | 1:A:363:ILE:HD11 | 1:A:414:ARG:HD2  | 5        | 0.41          |
| (1,157)  | 1:A:363:ILE:HD12 | 1:A:414:ARG:HD2  | 5        | 0.41          |
| (1,157)  | 1:A:363:ILE:HD13 | 1:A:414:ARG:HD2  | 5        | 0.41          |
| (1,1494) | 1:A:405:LYS:HG2  | 1:A:413:PHE:HE2  | 5        | 0.41          |
| (1,1494) | 1:A:405:LYS:HG3  | 1:A:413:PHE:HE2  | 5        | 0.41          |
| (1,1395) | 1:A:369:PRO:HB3  | 1:A:411:LEU:HD11 | 4        | 0.41          |
| (1,1395) | 1:A:369:PRO:HB3  | 1:A:411:LEU:HD12 | 4        | 0.41          |
| (1,1395) | 1:A:369:PRO:HB3  | 1:A:411:LEU:HD13 | 4        | 0.41          |
| (1,1395) | 1:A:369:PRO:HB3  | 1:A:411:LEU:HD21 | 4        | 0.41          |
| (1,1395) | 1:A:369:PRO:HB3  | 1:A:411:LEU:HD22 | 4        | 0.41          |
| (1,1395) | 1:A:369:PRO:HB3  | 1:A:411:LEU:HD23 | 4        | 0.41          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1243) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HD1  | 2        | 0.41          |
| (1,1243) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HD1  | 2        | 0.41          |
| (1,1243) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HD1  | 2        | 0.41          |
| (1,1243) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HD1  | 2        | 0.41          |
| (1,1243) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HD1  | 2        | 0.41          |
| (1,1243) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HD1  | 2        | 0.41          |
| (1,1209) | 1:A:398:TYR:HE1  | 1:A:405:LYS:HB2  | 7        | 0.41          |
| (1,1209) | 1:A:398:TYR:HE1  | 1:A:405:LYS:HB3  | 7        | 0.41          |
| (1,1145) | 1:A:343:GLN:HA   | 1:A:343:GLN:HE22 | 3        | 0.41          |
| (1,992)  | 1:A:359:LYS:HA   | 1:A:363:ILE:H    | 3        | 0.4           |
| (1,982)  | 1:A:394:LEU:H    | 1:A:396:HIS:HB2  | 6        | 0.4           |
| (1,982)  | 1:A:394:LEU:H    | 1:A:396:HIS:HB3  | 6        | 0.4           |
| (1,929)  | 1:A:358:ASP:H    | 1:A:364:PHE:H    | 7        | 0.4           |
| (1,860)  | 1:A:385:MET:HB3  | 1:A:386:THR:H    | 2        | 0.4           |
| (1,846)  | 1:A:361:SER:H    | 1:A:363:ILE:HD11 | 8        | 0.4           |
| (1,846)  | 1:A:361:SER:H    | 1:A:363:ILE:HD12 | 8        | 0.4           |
| (1,846)  | 1:A:361:SER:H    | 1:A:363:ILE:HD13 | 8        | 0.4           |
| (1,832)  | 1:A:418:THR:H    | 1:A:422:ILE:H    | 10       | 0.4           |
| (1,82)   | 1:A:352:ASN:HB2  | 1:A:367:VAL:HG11 | 6        | 0.4           |
| (1,82)   | 1:A:352:ASN:HB2  | 1:A:367:VAL:HG12 | 6        | 0.4           |
| (1,82)   | 1:A:352:ASN:HB2  | 1:A:367:VAL:HG13 | 6        | 0.4           |
| (1,804)  | 1:A:355:ARG:HB2  | 1:A:365:ARG:H    | 5        | 0.4           |
| (1,804)  | 1:A:355:ARG:HB3  | 1:A:365:ARG:H    | 5        | 0.4           |
| (1,804)  | 1:A:355:ARG:HB2  | 1:A:365:ARG:H    | 10       | 0.4           |
| (1,804)  | 1:A:355:ARG:HB3  | 1:A:365:ARG:H    | 10       | 0.4           |
| (1,61)   | 1:A:343:GLN:H    | 1:A:343:GLN:HG2  | 7        | 0.4           |
| (1,61)   | 1:A:343:GLN:H    | 1:A:343:GLN:HG3  | 7        | 0.4           |
| (1,47)   | 1:A:418:THR:HG21 | 1:A:419:PRO:HB3  | 5        | 0.4           |
| (1,47)   | 1:A:418:THR:HG22 | 1:A:419:PRO:HB3  | 5        | 0.4           |
| (1,47)   | 1:A:418:THR:HG23 | 1:A:419:PRO:HB3  | 5        | 0.4           |
| (1,410)  | 1:A:353:PHE:HA   | 1:A:367:VAL:HA   | 9        | 0.4           |
| (1,358)  | 1:A:397:TYR:H    | 1:A:403:ILE:HG21 | 9        | 0.4           |
| (1,358)  | 1:A:397:TYR:H    | 1:A:403:ILE:HG22 | 9        | 0.4           |
| (1,358)  | 1:A:397:TYR:H    | 1:A:403:ILE:HG23 | 9        | 0.4           |
| (1,323)  | 1:A:345:LEU:H    | 1:A:354:ILE:HD11 | 1        | 0.4           |
| (1,323)  | 1:A:345:LEU:H    | 1:A:354:ILE:HD12 | 1        | 0.4           |
| (1,323)  | 1:A:345:LEU:H    | 1:A:354:ILE:HD13 | 1        | 0.4           |
| (1,184)  | 1:A:365:ARG:HA   | 1:A:413:PHE:HE1  | 7        | 0.4           |
| (1,172)  | 1:A:377:GLY:HA3  | 1:A:385:MET:HE1  | 8        | 0.4           |
| (1,172)  | 1:A:377:GLY:HA3  | 1:A:385:MET:HE2  | 8        | 0.4           |
| (1,172)  | 1:A:377:GLY:HA3  | 1:A:385:MET:HE3  | 8        | 0.4           |
| (1,1280) | 1:A:340:TYR:HE1  | 1:A:375:LEU:HD11 | 1        | 0.4           |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1280) | 1:A:340:TYR:HE1  | 1:A:375:LEU:HD12 | 1        | 0.4           |
| (1,1280) | 1:A:340:TYR:HE1  | 1:A:375:LEU:HD13 | 1        | 0.4           |
| (1,1280) | 1:A:340:TYR:HE1  | 1:A:375:LEU:HD21 | 1        | 0.4           |
| (1,1280) | 1:A:340:TYR:HE1  | 1:A:375:LEU:HD22 | 1        | 0.4           |
| (1,1280) | 1:A:340:TYR:HE1  | 1:A:375:LEU:HD23 | 1        | 0.4           |
| (1,1214) | 1:A:340:TYR:HB2  | 1:A:340:TYR:HE2  | 2        | 0.4           |
| (1,1191) | 1:A:336:LEU:HB2  | 1:A:338:TRP:HD1  | 2        | 0.4           |
| (1,1191) | 1:A:336:LEU:HB3  | 1:A:338:TRP:HD1  | 2        | 0.4           |
| (1,982)  | 1:A:394:LEU:H    | 1:A:396:HIS:HB2  | 2        | 0.39          |
| (1,982)  | 1:A:394:LEU:H    | 1:A:396:HIS:HB3  | 2        | 0.39          |
| (1,937)  | 1:A:348:SER:HA   | 1:A:350:TYR:H    | 7        | 0.39          |
| (1,908)  | 1:A:366:ILE:HA   | 1:A:368:ASP:H    | 10       | 0.39          |
| (1,785)  | 1:A:355:ARG:H    | 1:A:366:ILE:HA   | 1        | 0.39          |
| (1,763)  | 1:A:364:PHE:HD1  | 1:A:413:PHE:H    | 4        | 0.39          |
| (1,701)  | 1:A:363:ILE:HD11 | 1:A:415:PHE:H    | 1        | 0.39          |
| (1,701)  | 1:A:363:ILE:HD12 | 1:A:415:PHE:H    | 1        | 0.39          |
| (1,701)  | 1:A:363:ILE:HD13 | 1:A:415:PHE:H    | 1        | 0.39          |
| (1,626)  | 1:A:355:ARG:H    | 1:A:367:VAL:H    | 1        | 0.39          |
| (1,61)   | 1:A:343:GLN:H    | 1:A:343:GLN:HG2  | 5        | 0.39          |
| (1,61)   | 1:A:343:GLN:H    | 1:A:343:GLN:HG3  | 5        | 0.39          |
| (1,481)  | 1:A:355:ARG:H    | 1:A:365:ARG:HG2  | 4        | 0.39          |
| (1,48)   | 1:A:385:MET:HB2  | 1:A:386:THR:HA   | 6        | 0.39          |
| (1,376)  | 1:A:373:ALA:HB1  | 1:A:376:TRP:HB3  | 6        | 0.39          |
| (1,376)  | 1:A:373:ALA:HB2  | 1:A:376:TRP:HB3  | 6        | 0.39          |
| (1,376)  | 1:A:373:ALA:HB3  | 1:A:376:TRP:HB3  | 6        | 0.39          |
| (1,37)   | 1:A:376:TRP:HE1  | 1:A:390:MET:HE1  | 6        | 0.39          |
| (1,37)   | 1:A:376:TRP:HE1  | 1:A:390:MET:HE2  | 6        | 0.39          |
| (1,37)   | 1:A:376:TRP:HE1  | 1:A:390:MET:HE3  | 6        | 0.39          |
| (1,316)  | 1:A:354:ILE:HD11 | 1:A:355:ARG:H    | 5        | 0.39          |
| (1,316)  | 1:A:354:ILE:HD12 | 1:A:355:ARG:H    | 5        | 0.39          |
| (1,316)  | 1:A:354:ILE:HD13 | 1:A:355:ARG:H    | 5        | 0.39          |
| (1,192)  | 1:A:332:ALA:HA   | 1:A:333:ASP:HB2  | 7        | 0.39          |
| (1,192)  | 1:A:332:ALA:HA   | 1:A:333:ASP:HB3  | 7        | 0.39          |
| (1,1513) | 1:A:410:ARG:HB2  | 1:A:411:LEU:HD11 | 4        | 0.39          |
| (1,1513) | 1:A:410:ARG:HB2  | 1:A:411:LEU:HD12 | 4        | 0.39          |
| (1,1513) | 1:A:410:ARG:HB2  | 1:A:411:LEU:HD13 | 4        | 0.39          |
| (1,1513) | 1:A:410:ARG:HB2  | 1:A:411:LEU:HD21 | 4        | 0.39          |
| (1,1513) | 1:A:410:ARG:HB2  | 1:A:411:LEU:HD22 | 4        | 0.39          |
| (1,1513) | 1:A:410:ARG:HB2  | 1:A:411:LEU:HD23 | 4        | 0.39          |
| (1,1513) | 1:A:410:ARG:HB3  | 1:A:411:LEU:HD11 | 4        | 0.39          |
| (1,1513) | 1:A:410:ARG:HB3  | 1:A:411:LEU:HD12 | 4        | 0.39          |
| (1,1513) | 1:A:410:ARG:HB3  | 1:A:411:LEU:HD13 | 4        | 0.39          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1513) | 1:A:410:ARG:HB3  | 1:A:411:LEU:HD21 | 4        | 0.39          |
| (1,1513) | 1:A:410:ARG:HB3  | 1:A:411:LEU:HD22 | 4        | 0.39          |
| (1,1513) | 1:A:410:ARG:HB3  | 1:A:411:LEU:HD23 | 4        | 0.39          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD11 | 2        | 0.39          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD12 | 2        | 0.39          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD13 | 2        | 0.39          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD21 | 2        | 0.39          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD22 | 2        | 0.39          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD23 | 2        | 0.39          |
| (1,1413) | 1:A:372:LEU:HD11 | 1:A:376:TRP:H    | 1        | 0.39          |
| (1,1413) | 1:A:372:LEU:HD12 | 1:A:376:TRP:H    | 1        | 0.39          |
| (1,1413) | 1:A:372:LEU:HD13 | 1:A:376:TRP:H    | 1        | 0.39          |
| (1,1413) | 1:A:372:LEU:HD21 | 1:A:376:TRP:H    | 1        | 0.39          |
| (1,1413) | 1:A:372:LEU:HD22 | 1:A:376:TRP:H    | 1        | 0.39          |
| (1,1413) | 1:A:372:LEU:HD23 | 1:A:376:TRP:H    | 1        | 0.39          |
| (1,1388) | 1:A:365:ARG:HA   | 1:A:411:LEU:HD11 | 6        | 0.39          |
| (1,1388) | 1:A:365:ARG:HA   | 1:A:411:LEU:HD12 | 6        | 0.39          |
| (1,1388) | 1:A:365:ARG:HA   | 1:A:411:LEU:HD13 | 6        | 0.39          |
| (1,1388) | 1:A:365:ARG:HA   | 1:A:411:LEU:HD21 | 6        | 0.39          |
| (1,1388) | 1:A:365:ARG:HA   | 1:A:411:LEU:HD22 | 6        | 0.39          |
| (1,1388) | 1:A:365:ARG:HA   | 1:A:411:LEU:HD23 | 6        | 0.39          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD11 | 9        | 0.39          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD12 | 9        | 0.39          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD13 | 9        | 0.39          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD21 | 9        | 0.39          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD22 | 9        | 0.39          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD23 | 9        | 0.39          |
| (1,1338) | 1:A:345:LEU:HD11 | 1:A:364:PHE:HA   | 5        | 0.39          |
| (1,1338) | 1:A:345:LEU:HD12 | 1:A:364:PHE:HA   | 5        | 0.39          |
| (1,1338) | 1:A:345:LEU:HD13 | 1:A:364:PHE:HA   | 5        | 0.39          |
| (1,1338) | 1:A:345:LEU:HD21 | 1:A:364:PHE:HA   | 5        | 0.39          |
| (1,1338) | 1:A:345:LEU:HD22 | 1:A:364:PHE:HA   | 5        | 0.39          |
| (1,1338) | 1:A:345:LEU:HD23 | 1:A:364:PHE:HA   | 5        | 0.39          |
| (1,1331) | 1:A:345:LEU:HD11 | 1:A:356:TRP:H    | 9        | 0.39          |
| (1,1331) | 1:A:345:LEU:HD12 | 1:A:356:TRP:H    | 9        | 0.39          |
| (1,1331) | 1:A:345:LEU:HD13 | 1:A:356:TRP:H    | 9        | 0.39          |
| (1,1331) | 1:A:345:LEU:HD21 | 1:A:356:TRP:H    | 9        | 0.39          |
| (1,1331) | 1:A:345:LEU:HD22 | 1:A:356:TRP:H    | 9        | 0.39          |
| (1,1331) | 1:A:345:LEU:HD23 | 1:A:356:TRP:H    | 9        | 0.39          |
| (1,1327) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HB2  | 8        | 0.39          |
| (1,1327) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HB3  | 8        | 0.39          |
| (1,1327) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HB2  | 8        | 0.39          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1327) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HB3  | 8        | 0.39          |
| (1,1327) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HB2  | 8        | 0.39          |
| (1,1327) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HB3  | 8        | 0.39          |
| (1,1327) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HB2  | 8        | 0.39          |
| (1,1327) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HB3  | 8        | 0.39          |
| (1,1327) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HB2  | 8        | 0.39          |
| (1,1327) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HB3  | 8        | 0.39          |
| (1,1327) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HB2  | 8        | 0.39          |
| (1,1327) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HB3  | 8        | 0.39          |
| (1,1290) | 1:A:341:VAL:HG11 | 1:A:364:PHE:HE2  | 4        | 0.39          |
| (1,1290) | 1:A:341:VAL:HG12 | 1:A:364:PHE:HE2  | 4        | 0.39          |
| (1,1290) | 1:A:341:VAL:HG13 | 1:A:364:PHE:HE2  | 4        | 0.39          |
| (1,1290) | 1:A:341:VAL:HG21 | 1:A:364:PHE:HE2  | 4        | 0.39          |
| (1,1290) | 1:A:341:VAL:HG22 | 1:A:364:PHE:HE2  | 4        | 0.39          |
| (1,1290) | 1:A:341:VAL:HG23 | 1:A:364:PHE:HE2  | 4        | 0.39          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD11 | 1        | 0.39          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD12 | 1        | 0.39          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD13 | 1        | 0.39          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD21 | 1        | 0.39          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD22 | 1        | 0.39          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD23 | 1        | 0.39          |
| (1,1214) | 1:A:340:TYR:HB2  | 1:A:340:TYR:HE2  | 5        | 0.39          |
| (1,1161) | 1:A:387:TYR:HD2  | 1:A:390:MET:HB2  | 8        | 0.39          |
| (1,1161) | 1:A:387:TYR:HD2  | 1:A:390:MET:HB3  | 8        | 0.39          |
| (1,992)  | 1:A:359:LYS:HA   | 1:A:363:ILE:H    | 7        | 0.38          |
| (1,88)   | 1:A:370:ASN:HA   | 1:A:387:TYR:HB3  | 3        | 0.38          |
| (1,84)   | 1:A:358:ASP:HA   | 1:A:360:GLU:HG2  | 10       | 0.38          |
| (1,84)   | 1:A:358:ASP:HA   | 1:A:360:GLU:HG3  | 10       | 0.38          |
| (1,73)   | 1:A:388:GLU:HA   | 1:A:388:GLU:HG2  | 2        | 0.38          |
| (1,73)   | 1:A:388:GLU:HA   | 1:A:388:GLU:HG3  | 2        | 0.38          |
| (1,590)  | 1:A:369:PRO:HA   | 1:A:372:LEU:HB2  | 9        | 0.38          |
| (1,512)  | 1:A:365:ARG:HA   | 1:A:412:LEU:HD11 | 4        | 0.38          |
| (1,512)  | 1:A:365:ARG:HA   | 1:A:412:LEU:HD12 | 4        | 0.38          |
| (1,512)  | 1:A:365:ARG:HA   | 1:A:412:LEU:HD13 | 4        | 0.38          |
| (1,477)  | 1:A:425:GLY:H    | 1:A:426:ARG:HG2  | 4        | 0.38          |
| (1,477)  | 1:A:425:GLY:H    | 1:A:426:ARG:HG3  | 4        | 0.38          |
| (1,448)  | 1:A:374:ARG:H    | 1:A:385:MET:HB3  | 2        | 0.38          |
| (1,377)  | 1:A:373:ALA:HB1  | 1:A:385:MET:HB3  | 4        | 0.38          |
| (1,377)  | 1:A:373:ALA:HB2  | 1:A:385:MET:HB3  | 4        | 0.38          |
| (1,377)  | 1:A:373:ALA:HB3  | 1:A:385:MET:HB3  | 4        | 0.38          |
| (1,377)  | 1:A:373:ALA:HB1  | 1:A:385:MET:HB2  | 4        | 0.38          |
| (1,377)  | 1:A:373:ALA:HB2  | 1:A:385:MET:HB2  | 4        | 0.38          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,377)  | 1:A:373:ALA:HB3  | 1:A:385:MET:HB2  | 4        | 0.38          |
| (1,361)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HG21 | 8        | 0.38          |
| (1,361)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HG22 | 8        | 0.38          |
| (1,361)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HG23 | 8        | 0.38          |
| (1,329)  | 1:A:348:SER:HB2  | 1:A:351:GLU:HG2  | 2        | 0.38          |
| (1,329)  | 1:A:348:SER:HB2  | 1:A:351:GLU:HG3  | 2        | 0.38          |
| (1,329)  | 1:A:348:SER:HB3  | 1:A:351:GLU:HG2  | 2        | 0.38          |
| (1,329)  | 1:A:348:SER:HB3  | 1:A:351:GLU:HG3  | 2        | 0.38          |
| (1,296)  | 1:A:340:TYR:HA   | 1:A:340:TYR:HD2  | 9        | 0.38          |
| (1,230)  | 1:A:376:TRP:HA   | 1:A:376:TRP:HZ3  | 9        | 0.38          |
| (1,204)  | 1:A:355:ARG:HA   | 1:A:367:VAL:HG21 | 5        | 0.38          |
| (1,204)  | 1:A:355:ARG:HA   | 1:A:367:VAL:HG22 | 5        | 0.38          |
| (1,204)  | 1:A:355:ARG:HA   | 1:A:367:VAL:HG23 | 5        | 0.38          |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD11 | 7        | 0.38          |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD12 | 7        | 0.38          |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD13 | 7        | 0.38          |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD21 | 7        | 0.38          |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD22 | 7        | 0.38          |
| (1,1450) | 1:A:387:TYR:HE2  | 1:A:394:LEU:HD23 | 7        | 0.38          |
| (1,1440) | 1:A:377:GLY:HA2  | 1:A:385:MET:HE1  | 8        | 0.38          |
| (1,1440) | 1:A:377:GLY:HA2  | 1:A:385:MET:HE2  | 8        | 0.38          |
| (1,1440) | 1:A:377:GLY:HA2  | 1:A:385:MET:HE3  | 8        | 0.38          |
| (1,1440) | 1:A:377:GLY:HA3  | 1:A:385:MET:HE1  | 8        | 0.38          |
| (1,1440) | 1:A:377:GLY:HA3  | 1:A:385:MET:HE2  | 8        | 0.38          |
| (1,1440) | 1:A:377:GLY:HA3  | 1:A:385:MET:HE3  | 8        | 0.38          |
| (1,1392) | 1:A:366:ILE:HG12 | 1:A:394:LEU:HD11 | 1        | 0.38          |
| (1,1392) | 1:A:366:ILE:HG12 | 1:A:394:LEU:HD12 | 1        | 0.38          |
| (1,1392) | 1:A:366:ILE:HG12 | 1:A:394:LEU:HD13 | 1        | 0.38          |
| (1,1392) | 1:A:366:ILE:HG12 | 1:A:394:LEU:HD21 | 1        | 0.38          |
| (1,1392) | 1:A:366:ILE:HG12 | 1:A:394:LEU:HD22 | 1        | 0.38          |
| (1,1392) | 1:A:366:ILE:HG12 | 1:A:394:LEU:HD23 | 1        | 0.38          |
| (1,1392) | 1:A:366:ILE:HG13 | 1:A:394:LEU:HD11 | 1        | 0.38          |
| (1,1392) | 1:A:366:ILE:HG13 | 1:A:394:LEU:HD12 | 1        | 0.38          |
| (1,1392) | 1:A:366:ILE:HG13 | 1:A:394:LEU:HD13 | 1        | 0.38          |
| (1,1392) | 1:A:366:ILE:HG13 | 1:A:394:LEU:HD21 | 1        | 0.38          |
| (1,1392) | 1:A:366:ILE:HG13 | 1:A:394:LEU:HD22 | 1        | 0.38          |
| (1,1392) | 1:A:366:ILE:HG13 | 1:A:394:LEU:HD23 | 1        | 0.38          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD11 | 2        | 0.38          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD12 | 2        | 0.38          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD13 | 2        | 0.38          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD21 | 2        | 0.38          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD22 | 2        | 0.38          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD23 | 2        | 0.38          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD11 | 8        | 0.38          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD12 | 8        | 0.38          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD13 | 8        | 0.38          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD21 | 8        | 0.38          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD22 | 8        | 0.38          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD23 | 8        | 0.38          |
| (1,136)  | 1:A:356:TRP:HZ2  | 1:A:359:LYS:HE2  | 4        | 0.38          |
| (1,136)  | 1:A:356:TRP:HZ2  | 1:A:359:LYS:HE3  | 4        | 0.38          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD11 | 10       | 0.38          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD12 | 10       | 0.38          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD13 | 10       | 0.38          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD21 | 10       | 0.38          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD22 | 10       | 0.38          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD23 | 10       | 0.38          |
| (1,1350) | 1:A:349:ARG:HD2  | 1:A:350:TYR:H    | 8        | 0.38          |
| (1,1350) | 1:A:349:ARG:HD3  | 1:A:350:TYR:H    | 8        | 0.38          |
| (1,1341) | 1:A:345:LEU:HD11 | 1:A:367:VAL:HG21 | 1        | 0.38          |
| (1,1341) | 1:A:345:LEU:HD11 | 1:A:367:VAL:HG22 | 1        | 0.38          |
| (1,1341) | 1:A:345:LEU:HD11 | 1:A:367:VAL:HG23 | 1        | 0.38          |
| (1,1341) | 1:A:345:LEU:HD12 | 1:A:367:VAL:HG21 | 1        | 0.38          |
| (1,1341) | 1:A:345:LEU:HD12 | 1:A:367:VAL:HG22 | 1        | 0.38          |
| (1,1341) | 1:A:345:LEU:HD12 | 1:A:367:VAL:HG23 | 1        | 0.38          |
| (1,1341) | 1:A:345:LEU:HD13 | 1:A:367:VAL:HG21 | 1        | 0.38          |
| (1,1341) | 1:A:345:LEU:HD13 | 1:A:367:VAL:HG22 | 1        | 0.38          |
| (1,1341) | 1:A:345:LEU:HD13 | 1:A:367:VAL:HG23 | 1        | 0.38          |
| (1,1341) | 1:A:345:LEU:HD21 | 1:A:367:VAL:HG21 | 1        | 0.38          |
| (1,1341) | 1:A:345:LEU:HD21 | 1:A:367:VAL:HG22 | 1        | 0.38          |
| (1,1341) | 1:A:345:LEU:HD21 | 1:A:367:VAL:HG23 | 1        | 0.38          |
| (1,1341) | 1:A:345:LEU:HD22 | 1:A:367:VAL:HG21 | 1        | 0.38          |
| (1,1341) | 1:A:345:LEU:HD22 | 1:A:367:VAL:HG22 | 1        | 0.38          |
| (1,1341) | 1:A:345:LEU:HD22 | 1:A:367:VAL:HG23 | 1        | 0.38          |
| (1,1341) | 1:A:345:LEU:HD23 | 1:A:367:VAL:HG21 | 1        | 0.38          |
| (1,1341) | 1:A:345:LEU:HD23 | 1:A:367:VAL:HG22 | 1        | 0.38          |
| (1,1341) | 1:A:345:LEU:HD23 | 1:A:367:VAL:HG23 | 1        | 0.38          |
| (1,1311) | 1:A:344:LEU:HD11 | 1:A:354:ILE:HD11 | 5        | 0.38          |
| (1,1311) | 1:A:344:LEU:HD11 | 1:A:354:ILE:HD12 | 5        | 0.38          |
| (1,1311) | 1:A:344:LEU:HD11 | 1:A:354:ILE:HD13 | 5        | 0.38          |
| (1,1311) | 1:A:344:LEU:HD12 | 1:A:354:ILE:HD11 | 5        | 0.38          |
| (1,1311) | 1:A:344:LEU:HD12 | 1:A:354:ILE:HD12 | 5        | 0.38          |
| (1,1311) | 1:A:344:LEU:HD12 | 1:A:354:ILE:HD13 | 5        | 0.38          |
| (1,1311) | 1:A:344:LEU:HD13 | 1:A:354:ILE:HD11 | 5        | 0.38          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1311) | 1:A:344:LEU:HD13 | 1:A:354:ILE:HD12 | 5        | 0.38          |
| (1,1311) | 1:A:344:LEU:HD13 | 1:A:354:ILE:HD13 | 5        | 0.38          |
| (1,1311) | 1:A:344:LEU:HD21 | 1:A:354:ILE:HD11 | 5        | 0.38          |
| (1,1311) | 1:A:344:LEU:HD21 | 1:A:354:ILE:HD12 | 5        | 0.38          |
| (1,1311) | 1:A:344:LEU:HD21 | 1:A:354:ILE:HD13 | 5        | 0.38          |
| (1,1311) | 1:A:344:LEU:HD22 | 1:A:354:ILE:HD11 | 5        | 0.38          |
| (1,1311) | 1:A:344:LEU:HD22 | 1:A:354:ILE:HD12 | 5        | 0.38          |
| (1,1311) | 1:A:344:LEU:HD22 | 1:A:354:ILE:HD13 | 5        | 0.38          |
| (1,1311) | 1:A:344:LEU:HD23 | 1:A:354:ILE:HD11 | 5        | 0.38          |
| (1,1311) | 1:A:344:LEU:HD23 | 1:A:354:ILE:HD12 | 5        | 0.38          |
| (1,1311) | 1:A:344:LEU:HD23 | 1:A:354:ILE:HD13 | 5        | 0.38          |
| (1,1295) | 1:A:343:GLN:HA   | 1:A:343:GLN:HE21 | 8        | 0.38          |
| (1,1295) | 1:A:343:GLN:HA   | 1:A:343:GLN:HE22 | 8        | 0.38          |
| (1,1247) | 1:A:336:LEU:HD11 | 1:A:339:ASP:HA   | 2        | 0.38          |
| (1,1247) | 1:A:336:LEU:HD12 | 1:A:339:ASP:HA   | 2        | 0.38          |
| (1,1247) | 1:A:336:LEU:HD13 | 1:A:339:ASP:HA   | 2        | 0.38          |
| (1,1247) | 1:A:336:LEU:HD21 | 1:A:339:ASP:HA   | 2        | 0.38          |
| (1,1247) | 1:A:336:LEU:HD22 | 1:A:339:ASP:HA   | 2        | 0.38          |
| (1,1247) | 1:A:336:LEU:HD23 | 1:A:339:ASP:HA   | 2        | 0.38          |
| (1,1216) | 1:A:340:TYR:HE2  | 1:A:379:HIS:HB2  | 10       | 0.38          |
| (1,1216) | 1:A:340:TYR:HE2  | 1:A:379:HIS:HB3  | 10       | 0.38          |
| (1,1214) | 1:A:340:TYR:HB2  | 1:A:340:TYR:HE2  | 4        | 0.38          |
| (1,1113) | 1:A:354:ILE:H    | 1:A:367:VAL:HB   | 4        | 0.38          |
| (1,1110) | 1:A:327:HIS:HE1  | 1:A:328:MET:H    | 10       | 0.38          |
| (1,1035) | 1:A:358:ASP:HB2  | 1:A:360:GLU:H    | 3        | 0.38          |
| (1,1035) | 1:A:358:ASP:HB3  | 1:A:360:GLU:H    | 3        | 0.38          |
| (1,1034) | 1:A:356:TRP:HB3  | 1:A:360:GLU:H    | 7        | 0.38          |
| (1,1034) | 1:A:356:TRP:HB3  | 1:A:360:GLU:H    | 8        | 0.38          |
| (1,10)   | 1:A:376:TRP:HZ2  | 1:A:385:MET:HE1  | 1        | 0.38          |
| (1,10)   | 1:A:376:TRP:HZ2  | 1:A:385:MET:HE2  | 1        | 0.38          |
| (1,10)   | 1:A:376:TRP:HZ2  | 1:A:385:MET:HE3  | 1        | 0.38          |
| (1,896)  | 1:A:353:PHE:H    | 1:A:354:ILE:HB   | 4        | 0.37          |
| (1,832)  | 1:A:418:THR:H    | 1:A:422:ILE:H    | 2        | 0.37          |
| (1,701)  | 1:A:363:ILE:HD11 | 1:A:415:PHE:H    | 10       | 0.37          |
| (1,701)  | 1:A:363:ILE:HD12 | 1:A:415:PHE:H    | 10       | 0.37          |
| (1,701)  | 1:A:363:ILE:HD13 | 1:A:415:PHE:H    | 10       | 0.37          |
| (1,628)  | 1:A:353:PHE:HA   | 1:A:367:VAL:H    | 6        | 0.37          |
| (1,626)  | 1:A:355:ARG:H    | 1:A:367:VAL:H    | 6        | 0.37          |
| (1,597)  | 1:A:356:TRP:HE1  | 1:A:359:LYS:HE2  | 8        | 0.37          |
| (1,597)  | 1:A:356:TRP:HE1  | 1:A:359:LYS:HE3  | 8        | 0.37          |
| (1,49)   | 1:A:366:ILE:HG21 | 1:A:369:PRO:HB2  | 8        | 0.37          |
| (1,49)   | 1:A:366:ILE:HG22 | 1:A:369:PRO:HB2  | 8        | 0.37          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,49)   | 1:A:366:ILE:HG23 | 1:A:369:PRO:HB2  | 8        | 0.37          |
| (1,48)   | 1:A:385:MET:HB2  | 1:A:386:THR:HA   | 9        | 0.37          |
| (1,4)    | 1:A:377:GLY:HA2  | 1:A:385:MET:HE1  | 6        | 0.37          |
| (1,4)    | 1:A:377:GLY:HA2  | 1:A:385:MET:HE2  | 6        | 0.37          |
| (1,4)    | 1:A:377:GLY:HA2  | 1:A:385:MET:HE3  | 6        | 0.37          |
| (1,387)  | 1:A:358:ASP:HB2  | 1:A:363:ILE:HG21 | 8        | 0.37          |
| (1,387)  | 1:A:358:ASP:HB2  | 1:A:363:ILE:HG22 | 8        | 0.37          |
| (1,387)  | 1:A:358:ASP:HB2  | 1:A:363:ILE:HG23 | 8        | 0.37          |
| (1,387)  | 1:A:358:ASP:HB3  | 1:A:363:ILE:HG21 | 8        | 0.37          |
| (1,387)  | 1:A:358:ASP:HB3  | 1:A:363:ILE:HG22 | 8        | 0.37          |
| (1,387)  | 1:A:358:ASP:HB3  | 1:A:363:ILE:HG23 | 8        | 0.37          |
| (1,380)  | 1:A:363:ILE:HG21 | 1:A:364:PHE:HD1  | 1        | 0.37          |
| (1,380)  | 1:A:363:ILE:HG22 | 1:A:364:PHE:HD1  | 1        | 0.37          |
| (1,380)  | 1:A:363:ILE:HG23 | 1:A:364:PHE:HD1  | 1        | 0.37          |
| (1,380)  | 1:A:363:ILE:HG21 | 1:A:364:PHE:HD1  | 7        | 0.37          |
| (1,380)  | 1:A:363:ILE:HG22 | 1:A:364:PHE:HD1  | 7        | 0.37          |
| (1,380)  | 1:A:363:ILE:HG23 | 1:A:364:PHE:HD1  | 7        | 0.37          |
| (1,377)  | 1:A:373:ALA:HB1  | 1:A:385:MET:HB3  | 8        | 0.37          |
| (1,377)  | 1:A:373:ALA:HB2  | 1:A:385:MET:HB3  | 8        | 0.37          |
| (1,377)  | 1:A:373:ALA:HB3  | 1:A:385:MET:HB3  | 8        | 0.37          |
| (1,377)  | 1:A:373:ALA:HB1  | 1:A:385:MET:HB2  | 8        | 0.37          |
| (1,377)  | 1:A:373:ALA:HB2  | 1:A:385:MET:HB2  | 8        | 0.37          |
| (1,377)  | 1:A:373:ALA:HB3  | 1:A:385:MET:HB2  | 8        | 0.37          |
| (1,358)  | 1:A:397:TYR:H    | 1:A:403:ILE:HG21 | 3        | 0.37          |
| (1,358)  | 1:A:397:TYR:H    | 1:A:403:ILE:HG22 | 3        | 0.37          |
| (1,358)  | 1:A:397:TYR:H    | 1:A:403:ILE:HG23 | 3        | 0.37          |
| (1,344)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG21 | 4        | 0.37          |
| (1,344)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG22 | 4        | 0.37          |
| (1,344)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG23 | 4        | 0.37          |
| (1,246)  | 1:A:392:ARG:HA   | 1:A:392:ARG:HD2  | 4        | 0.37          |
| (1,246)  | 1:A:392:ARG:HA   | 1:A:392:ARG:HD3  | 4        | 0.37          |
| (1,230)  | 1:A:376:TRP:HA   | 1:A:376:TRP:HZ3  | 8        | 0.37          |
| (1,1537) | 1:A:426:ARG:H    | 1:A:426:ARG:HB2  | 2        | 0.37          |
| (1,1537) | 1:A:426:ARG:H    | 1:A:426:ARG:HB3  | 2        | 0.37          |
| (1,1513) | 1:A:410:ARG:HB2  | 1:A:411:LEU:HD11 | 1        | 0.37          |
| (1,1513) | 1:A:410:ARG:HB2  | 1:A:411:LEU:HD12 | 1        | 0.37          |
| (1,1513) | 1:A:410:ARG:HB2  | 1:A:411:LEU:HD13 | 1        | 0.37          |
| (1,1513) | 1:A:410:ARG:HB2  | 1:A:411:LEU:HD21 | 1        | 0.37          |
| (1,1513) | 1:A:410:ARG:HB2  | 1:A:411:LEU:HD22 | 1        | 0.37          |
| (1,1513) | 1:A:410:ARG:HB2  | 1:A:411:LEU:HD23 | 1        | 0.37          |
| (1,1513) | 1:A:410:ARG:HB3  | 1:A:411:LEU:HD11 | 1        | 0.37          |
| (1,1513) | 1:A:410:ARG:HB3  | 1:A:411:LEU:HD12 | 1        | 0.37          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1513) | 1:A:410:ARG:HB3  | 1:A:411:LEU:HD13 | 1        | 0.37          |
| (1,1513) | 1:A:410:ARG:HB3  | 1:A:411:LEU:HD21 | 1        | 0.37          |
| (1,1513) | 1:A:410:ARG:HB3  | 1:A:411:LEU:HD22 | 1        | 0.37          |
| (1,1513) | 1:A:410:ARG:HB3  | 1:A:411:LEU:HD23 | 1        | 0.37          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD11 | 1        | 0.37          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD12 | 1        | 0.37          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD13 | 1        | 0.37          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD21 | 1        | 0.37          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD22 | 1        | 0.37          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD23 | 1        | 0.37          |
| (1,1332) | 1:A:345:LEU:HD11 | 1:A:356:TRP:HB2  | 7        | 0.37          |
| (1,1332) | 1:A:345:LEU:HD12 | 1:A:356:TRP:HB2  | 7        | 0.37          |
| (1,1332) | 1:A:345:LEU:HD13 | 1:A:356:TRP:HB2  | 7        | 0.37          |
| (1,1332) | 1:A:345:LEU:HD21 | 1:A:356:TRP:HB2  | 7        | 0.37          |
| (1,1332) | 1:A:345:LEU:HD22 | 1:A:356:TRP:HB2  | 7        | 0.37          |
| (1,1332) | 1:A:345:LEU:HD23 | 1:A:356:TRP:HB2  | 7        | 0.37          |
| (1,1243) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HD1  | 10       | 0.37          |
| (1,1243) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HD1  | 10       | 0.37          |
| (1,1243) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HD1  | 10       | 0.37          |
| (1,1243) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HD1  | 10       | 0.37          |
| (1,1243) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HD1  | 10       | 0.37          |
| (1,1243) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HD1  | 10       | 0.37          |
| (1,1226) | 1:A:376:TRP:HZ2  | 1:A:380:LYS:HD2  | 6        | 0.37          |
| (1,1226) | 1:A:376:TRP:HZ2  | 1:A:380:LYS:HD3  | 6        | 0.37          |
| (1,1187) | 1:A:356:TRP:HD1  | 1:A:359:LYS:HD2  | 1        | 0.37          |
| (1,1187) | 1:A:356:TRP:HD1  | 1:A:359:LYS:HD3  | 1        | 0.37          |
| (1,1130) | 1:A:340:TYR:H    | 1:A:340:TYR:HD2  | 3        | 0.37          |
| (1,950)  | 1:A:350:TYR:H    | 1:A:351:GLU:HG2  | 8        | 0.36          |
| (1,950)  | 1:A:350:TYR:H    | 1:A:351:GLU:HG3  | 8        | 0.36          |
| (1,896)  | 1:A:353:PHE:H    | 1:A:354:ILE:HB   | 3        | 0.36          |
| (1,869)  | 1:A:391:SER:H    | 1:A:394:LEU:HG   | 9        | 0.36          |
| (1,860)  | 1:A:385:MET:HB3  | 1:A:386:THR:H    | 4        | 0.36          |
| (1,848)  | 1:A:361:SER:H    | 1:A:363:ILE:HB   | 4        | 0.36          |
| (1,832)  | 1:A:418:THR:H    | 1:A:422:ILE:H    | 4        | 0.36          |
| (1,762)  | 1:A:413:PHE:H    | 1:A:413:PHE:HD1  | 10       | 0.36          |
| (1,726)  | 1:A:387:TYR:HD2  | 1:A:390:MET:H    | 2        | 0.36          |
| (1,701)  | 1:A:363:ILE:HD11 | 1:A:415:PHE:H    | 8        | 0.36          |
| (1,701)  | 1:A:363:ILE:HD12 | 1:A:415:PHE:H    | 8        | 0.36          |
| (1,701)  | 1:A:363:ILE:HD13 | 1:A:415:PHE:H    | 8        | 0.36          |
| (1,640)  | 1:A:406:GLU:H    | 1:A:413:PHE:HA   | 2        | 0.36          |
| (1,605)  | 1:A:376:TRP:HE1  | 1:A:390:MET:HG2  | 2        | 0.36          |
| (1,605)  | 1:A:376:TRP:HE1  | 1:A:390:MET:HG3  | 2        | 0.36          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,574)  | 1:A:353:PHE:HA   | 1:A:367:VAL:HG11 | 4        | 0.36          |
| (1,574)  | 1:A:353:PHE:HA   | 1:A:367:VAL:HG12 | 4        | 0.36          |
| (1,574)  | 1:A:353:PHE:HA   | 1:A:367:VAL:HG13 | 4        | 0.36          |
| (1,574)  | 1:A:353:PHE:HA   | 1:A:367:VAL:HG11 | 5        | 0.36          |
| (1,574)  | 1:A:353:PHE:HA   | 1:A:367:VAL:HG12 | 5        | 0.36          |
| (1,574)  | 1:A:353:PHE:HA   | 1:A:367:VAL:HG13 | 5        | 0.36          |
| (1,506)  | 1:A:365:ARG:HD3  | 1:A:412:LEU:HD21 | 6        | 0.36          |
| (1,506)  | 1:A:365:ARG:HD3  | 1:A:412:LEU:HD22 | 6        | 0.36          |
| (1,506)  | 1:A:365:ARG:HD3  | 1:A:412:LEU:HD23 | 6        | 0.36          |
| (1,358)  | 1:A:397:TYR:H    | 1:A:403:ILE:HG21 | 7        | 0.36          |
| (1,358)  | 1:A:397:TYR:H    | 1:A:403:ILE:HG22 | 7        | 0.36          |
| (1,358)  | 1:A:397:TYR:H    | 1:A:403:ILE:HG23 | 7        | 0.36          |
| (1,335)  | 1:A:361:SER:HB3  | 1:A:363:ILE:HB   | 8        | 0.36          |
| (1,172)  | 1:A:377:GLY:HA3  | 1:A:385:MET:HE1  | 7        | 0.36          |
| (1,172)  | 1:A:377:GLY:HA3  | 1:A:385:MET:HE2  | 7        | 0.36          |
| (1,172)  | 1:A:377:GLY:HA3  | 1:A:385:MET:HE3  | 7        | 0.36          |
| (1,1448) | 1:A:386:THR:HA   | 1:A:389:LYS:HG2  | 1        | 0.36          |
| (1,1448) | 1:A:386:THR:HA   | 1:A:389:LYS:HG3  | 1        | 0.36          |
| (1,1413) | 1:A:372:LEU:HD11 | 1:A:376:TRP:H    | 5        | 0.36          |
| (1,1413) | 1:A:372:LEU:HD12 | 1:A:376:TRP:H    | 5        | 0.36          |
| (1,1413) | 1:A:372:LEU:HD13 | 1:A:376:TRP:H    | 5        | 0.36          |
| (1,1413) | 1:A:372:LEU:HD21 | 1:A:376:TRP:H    | 5        | 0.36          |
| (1,1413) | 1:A:372:LEU:HD22 | 1:A:376:TRP:H    | 5        | 0.36          |
| (1,1413) | 1:A:372:LEU:HD23 | 1:A:376:TRP:H    | 5        | 0.36          |
| (1,1413) | 1:A:372:LEU:HD11 | 1:A:376:TRP:H    | 7        | 0.36          |
| (1,1413) | 1:A:372:LEU:HD12 | 1:A:376:TRP:H    | 7        | 0.36          |
| (1,1413) | 1:A:372:LEU:HD13 | 1:A:376:TRP:H    | 7        | 0.36          |
| (1,1413) | 1:A:372:LEU:HD21 | 1:A:376:TRP:H    | 7        | 0.36          |
| (1,1413) | 1:A:372:LEU:HD22 | 1:A:376:TRP:H    | 7        | 0.36          |
| (1,1413) | 1:A:372:LEU:HD23 | 1:A:376:TRP:H    | 7        | 0.36          |
| (1,1331) | 1:A:345:LEU:HD11 | 1:A:356:TRP:H    | 6        | 0.36          |
| (1,1331) | 1:A:345:LEU:HD12 | 1:A:356:TRP:H    | 6        | 0.36          |
| (1,1331) | 1:A:345:LEU:HD13 | 1:A:356:TRP:H    | 6        | 0.36          |
| (1,1331) | 1:A:345:LEU:HD21 | 1:A:356:TRP:H    | 6        | 0.36          |
| (1,1331) | 1:A:345:LEU:HD22 | 1:A:356:TRP:H    | 6        | 0.36          |
| (1,1331) | 1:A:345:LEU:HD23 | 1:A:356:TRP:H    | 6        | 0.36          |
| (1,1264) | 1:A:337:LEU:HD11 | 1:A:385:MET:HE1  | 2        | 0.36          |
| (1,1264) | 1:A:337:LEU:HD11 | 1:A:385:MET:HE2  | 2        | 0.36          |
| (1,1264) | 1:A:337:LEU:HD11 | 1:A:385:MET:HE3  | 2        | 0.36          |
| (1,1264) | 1:A:337:LEU:HD12 | 1:A:385:MET:HE1  | 2        | 0.36          |
| (1,1264) | 1:A:337:LEU:HD12 | 1:A:385:MET:HE2  | 2        | 0.36          |
| (1,1264) | 1:A:337:LEU:HD12 | 1:A:385:MET:HE3  | 2        | 0.36          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1264) | 1:A:337:LEU:HD13 | 1:A:385:MET:HE1  | 2        | 0.36          |
| (1,1264) | 1:A:337:LEU:HD13 | 1:A:385:MET:HE2  | 2        | 0.36          |
| (1,1264) | 1:A:337:LEU:HD13 | 1:A:385:MET:HE3  | 2        | 0.36          |
| (1,1264) | 1:A:337:LEU:HD21 | 1:A:385:MET:HE1  | 2        | 0.36          |
| (1,1264) | 1:A:337:LEU:HD21 | 1:A:385:MET:HE2  | 2        | 0.36          |
| (1,1264) | 1:A:337:LEU:HD21 | 1:A:385:MET:HE3  | 2        | 0.36          |
| (1,1264) | 1:A:337:LEU:HD22 | 1:A:385:MET:HE1  | 2        | 0.36          |
| (1,1264) | 1:A:337:LEU:HD22 | 1:A:385:MET:HE2  | 2        | 0.36          |
| (1,1264) | 1:A:337:LEU:HD22 | 1:A:385:MET:HE3  | 2        | 0.36          |
| (1,1264) | 1:A:337:LEU:HD23 | 1:A:385:MET:HE1  | 2        | 0.36          |
| (1,1264) | 1:A:337:LEU:HD23 | 1:A:385:MET:HE2  | 2        | 0.36          |
| (1,1264) | 1:A:337:LEU:HD23 | 1:A:385:MET:HE3  | 2        | 0.36          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD21 | 7        | 0.36          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD22 | 7        | 0.36          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD23 | 7        | 0.36          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD11 | 7        | 0.36          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD12 | 7        | 0.36          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD13 | 7        | 0.36          |
| (1,1214) | 1:A:340:TYR:HB2  | 1:A:340:TYR:HE2  | 7        | 0.36          |
| (1,1214) | 1:A:340:TYR:HB2  | 1:A:340:TYR:HE2  | 9        | 0.36          |
| (1,1214) | 1:A:340:TYR:HB2  | 1:A:340:TYR:HE2  | 10       | 0.36          |
| (1,1174) | 1:A:394:LEU:HG   | 1:A:397:TYR:HD2  | 3        | 0.36          |
| (1,1140) | 1:A:375:LEU:HA   | 1:A:378:ASN:HD22 | 8        | 0.36          |
| (1,1130) | 1:A:340:TYR:H    | 1:A:340:TYR:HD2  | 1        | 0.36          |
| (1,1129) | 1:A:398:TYR:H    | 1:A:402:ILE:HD11 | 10       | 0.36          |
| (1,1129) | 1:A:398:TYR:H    | 1:A:402:ILE:HD12 | 10       | 0.36          |
| (1,1129) | 1:A:398:TYR:H    | 1:A:402:ILE:HD13 | 10       | 0.36          |
| (1,1114) | 1:A:354:ILE:H    | 1:A:367:VAL:HG21 | 2        | 0.36          |
| (1,1114) | 1:A:354:ILE:H    | 1:A:367:VAL:HG22 | 2        | 0.36          |
| (1,1114) | 1:A:354:ILE:H    | 1:A:367:VAL:HG23 | 2        | 0.36          |
| (1,1104) | 1:A:354:ILE:H    | 1:A:366:ILE:HA   | 5        | 0.36          |
| (1,1)    | 1:A:373:ALA:HB1  | 1:A:385:MET:HE1  | 3        | 0.36          |
| (1,1)    | 1:A:373:ALA:HB1  | 1:A:385:MET:HE2  | 3        | 0.36          |
| (1,1)    | 1:A:373:ALA:HB1  | 1:A:385:MET:HE3  | 3        | 0.36          |
| (1,1)    | 1:A:373:ALA:HB2  | 1:A:385:MET:HE1  | 3        | 0.36          |
| (1,1)    | 1:A:373:ALA:HB2  | 1:A:385:MET:HE2  | 3        | 0.36          |
| (1,1)    | 1:A:373:ALA:HB2  | 1:A:385:MET:HE3  | 3        | 0.36          |
| (1,1)    | 1:A:373:ALA:HB3  | 1:A:385:MET:HE1  | 3        | 0.36          |
| (1,1)    | 1:A:373:ALA:HB3  | 1:A:385:MET:HE2  | 3        | 0.36          |
| (1,1)    | 1:A:373:ALA:HB3  | 1:A:385:MET:HE3  | 3        | 0.36          |
| (1,762)  | 1:A:413:PHE:H    | 1:A:413:PHE:HD1  | 2        | 0.35          |
| (1,587)  | 1:A:353:PHE:HB3  | 1:A:369:PRO:HA   | 9        | 0.35          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,47)   | 1:A:418:THR:HG21 | 1:A:419:PRO:HB3  | 3        | 0.35          |
| (1,47)   | 1:A:418:THR:HG22 | 1:A:419:PRO:HB3  | 3        | 0.35          |
| (1,47)   | 1:A:418:THR:HG23 | 1:A:419:PRO:HB3  | 3        | 0.35          |
| (1,376)  | 1:A:373:ALA:HB1  | 1:A:376:TRP:HB3  | 7        | 0.35          |
| (1,376)  | 1:A:373:ALA:HB2  | 1:A:376:TRP:HB3  | 7        | 0.35          |
| (1,376)  | 1:A:373:ALA:HB3  | 1:A:376:TRP:HB3  | 7        | 0.35          |
| (1,315)  | 1:A:345:LEU:HA   | 1:A:354:ILE:HD11 | 4        | 0.35          |
| (1,315)  | 1:A:345:LEU:HA   | 1:A:354:ILE:HD12 | 4        | 0.35          |
| (1,315)  | 1:A:345:LEU:HA   | 1:A:354:ILE:HD13 | 4        | 0.35          |
| (1,315)  | 1:A:345:LEU:HA   | 1:A:354:ILE:HD11 | 5        | 0.35          |
| (1,315)  | 1:A:345:LEU:HA   | 1:A:354:ILE:HD12 | 5        | 0.35          |
| (1,315)  | 1:A:345:LEU:HA   | 1:A:354:ILE:HD13 | 5        | 0.35          |
| (1,296)  | 1:A:340:TYR:HA   | 1:A:340:TYR:HD2  | 3        | 0.35          |
| (1,215)  | 1:A:380:LYS:HA   | 1:A:380:LYS:HD2  | 5        | 0.35          |
| (1,215)  | 1:A:380:LYS:HA   | 1:A:380:LYS:HD3  | 5        | 0.35          |
| (1,214)  | 1:A:373:ALA:HB1  | 1:A:385:MET:HA   | 7        | 0.35          |
| (1,214)  | 1:A:373:ALA:HB2  | 1:A:385:MET:HA   | 7        | 0.35          |
| (1,214)  | 1:A:373:ALA:HB3  | 1:A:385:MET:HA   | 7        | 0.35          |
| (1,1413) | 1:A:372:LEU:HD11 | 1:A:376:TRP:H    | 8        | 0.35          |
| (1,1413) | 1:A:372:LEU:HD12 | 1:A:376:TRP:H    | 8        | 0.35          |
| (1,1413) | 1:A:372:LEU:HD13 | 1:A:376:TRP:H    | 8        | 0.35          |
| (1,1413) | 1:A:372:LEU:HD21 | 1:A:376:TRP:H    | 8        | 0.35          |
| (1,1413) | 1:A:372:LEU:HD22 | 1:A:376:TRP:H    | 8        | 0.35          |
| (1,1413) | 1:A:372:LEU:HD23 | 1:A:376:TRP:H    | 8        | 0.35          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD11 | 7        | 0.35          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD12 | 7        | 0.35          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD13 | 7        | 0.35          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD21 | 7        | 0.35          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD22 | 7        | 0.35          |
| (1,1393) | 1:A:366:ILE:HD11 | 1:A:394:LEU:HD23 | 7        | 0.35          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD11 | 7        | 0.35          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD12 | 7        | 0.35          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD13 | 7        | 0.35          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD21 | 7        | 0.35          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD22 | 7        | 0.35          |
| (1,1393) | 1:A:366:ILE:HD12 | 1:A:394:LEU:HD23 | 7        | 0.35          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD11 | 7        | 0.35          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD12 | 7        | 0.35          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD13 | 7        | 0.35          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD21 | 7        | 0.35          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD22 | 7        | 0.35          |
| (1,1393) | 1:A:366:ILE:HD13 | 1:A:394:LEU:HD23 | 7        | 0.35          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1365) | 1:A:353:PHE:HB3  | 1:A:372:LEU:HD11 | 3        | 0.35          |
| (1,1365) | 1:A:353:PHE:HB3  | 1:A:372:LEU:HD12 | 3        | 0.35          |
| (1,1365) | 1:A:353:PHE:HB3  | 1:A:372:LEU:HD13 | 3        | 0.35          |
| (1,1365) | 1:A:353:PHE:HB3  | 1:A:372:LEU:HD21 | 3        | 0.35          |
| (1,1365) | 1:A:353:PHE:HB3  | 1:A:372:LEU:HD22 | 3        | 0.35          |
| (1,1365) | 1:A:353:PHE:HB3  | 1:A:372:LEU:HD23 | 3        | 0.35          |
| (1,1341) | 1:A:345:LEU:HD11 | 1:A:367:VAL:HG21 | 9        | 0.35          |
| (1,1341) | 1:A:345:LEU:HD11 | 1:A:367:VAL:HG22 | 9        | 0.35          |
| (1,1341) | 1:A:345:LEU:HD11 | 1:A:367:VAL:HG23 | 9        | 0.35          |
| (1,1341) | 1:A:345:LEU:HD12 | 1:A:367:VAL:HG21 | 9        | 0.35          |
| (1,1341) | 1:A:345:LEU:HD12 | 1:A:367:VAL:HG22 | 9        | 0.35          |
| (1,1341) | 1:A:345:LEU:HD12 | 1:A:367:VAL:HG23 | 9        | 0.35          |
| (1,1341) | 1:A:345:LEU:HD13 | 1:A:367:VAL:HG21 | 9        | 0.35          |
| (1,1341) | 1:A:345:LEU:HD13 | 1:A:367:VAL:HG22 | 9        | 0.35          |
| (1,1341) | 1:A:345:LEU:HD13 | 1:A:367:VAL:HG23 | 9        | 0.35          |
| (1,1341) | 1:A:345:LEU:HD21 | 1:A:367:VAL:HG21 | 9        | 0.35          |
| (1,1341) | 1:A:345:LEU:HD21 | 1:A:367:VAL:HG22 | 9        | 0.35          |
| (1,1341) | 1:A:345:LEU:HD21 | 1:A:367:VAL:HG23 | 9        | 0.35          |
| (1,1341) | 1:A:345:LEU:HD22 | 1:A:367:VAL:HG21 | 9        | 0.35          |
| (1,1341) | 1:A:345:LEU:HD22 | 1:A:367:VAL:HG22 | 9        | 0.35          |
| (1,1341) | 1:A:345:LEU:HD22 | 1:A:367:VAL:HG23 | 9        | 0.35          |
| (1,1341) | 1:A:345:LEU:HD23 | 1:A:367:VAL:HG21 | 9        | 0.35          |
| (1,1341) | 1:A:345:LEU:HD23 | 1:A:367:VAL:HG22 | 9        | 0.35          |
| (1,1341) | 1:A:345:LEU:HD23 | 1:A:367:VAL:HG23 | 9        | 0.35          |
| (1,1315) | 1:A:344:LEU:HD11 | 1:A:390:MET:HE1  | 8        | 0.35          |
| (1,1315) | 1:A:344:LEU:HD11 | 1:A:390:MET:HE2  | 8        | 0.35          |
| (1,1315) | 1:A:344:LEU:HD11 | 1:A:390:MET:HE3  | 8        | 0.35          |
| (1,1315) | 1:A:344:LEU:HD12 | 1:A:390:MET:HE1  | 8        | 0.35          |
| (1,1315) | 1:A:344:LEU:HD12 | 1:A:390:MET:HE2  | 8        | 0.35          |
| (1,1315) | 1:A:344:LEU:HD12 | 1:A:390:MET:HE3  | 8        | 0.35          |
| (1,1315) | 1:A:344:LEU:HD13 | 1:A:390:MET:HE1  | 8        | 0.35          |
| (1,1315) | 1:A:344:LEU:HD13 | 1:A:390:MET:HE2  | 8        | 0.35          |
| (1,1315) | 1:A:344:LEU:HD13 | 1:A:390:MET:HE3  | 8        | 0.35          |
| (1,1315) | 1:A:344:LEU:HD21 | 1:A:390:MET:HE1  | 8        | 0.35          |
| (1,1315) | 1:A:344:LEU:HD21 | 1:A:390:MET:HE2  | 8        | 0.35          |
| (1,1315) | 1:A:344:LEU:HD21 | 1:A:390:MET:HE3  | 8        | 0.35          |
| (1,1315) | 1:A:344:LEU:HD22 | 1:A:390:MET:HE1  | 8        | 0.35          |
| (1,1315) | 1:A:344:LEU:HD22 | 1:A:390:MET:HE2  | 8        | 0.35          |
| (1,1315) | 1:A:344:LEU:HD22 | 1:A:390:MET:HE3  | 8        | 0.35          |
| (1,1315) | 1:A:344:LEU:HD23 | 1:A:390:MET:HE1  | 8        | 0.35          |
| (1,1315) | 1:A:344:LEU:HD23 | 1:A:390:MET:HE2  | 8        | 0.35          |
| (1,1315) | 1:A:344:LEU:HD23 | 1:A:390:MET:HE3  | 8        | 0.35          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1291) | 1:A:341:VAL:HG11 | 1:A:364:PHE:HD2  | 8        | 0.35          |
| (1,1291) | 1:A:341:VAL:HG12 | 1:A:364:PHE:HD2  | 8        | 0.35          |
| (1,1291) | 1:A:341:VAL:HG13 | 1:A:364:PHE:HD2  | 8        | 0.35          |
| (1,1291) | 1:A:341:VAL:HG21 | 1:A:364:PHE:HD2  | 8        | 0.35          |
| (1,1291) | 1:A:341:VAL:HG22 | 1:A:364:PHE:HD2  | 8        | 0.35          |
| (1,1291) | 1:A:341:VAL:HG23 | 1:A:364:PHE:HD2  | 8        | 0.35          |
| (1,1268) | 1:A:337:LEU:HD11 | 1:A:393:ALA:HA   | 8        | 0.35          |
| (1,1268) | 1:A:337:LEU:HD12 | 1:A:393:ALA:HA   | 8        | 0.35          |
| (1,1268) | 1:A:337:LEU:HD13 | 1:A:393:ALA:HA   | 8        | 0.35          |
| (1,1268) | 1:A:337:LEU:HD21 | 1:A:393:ALA:HA   | 8        | 0.35          |
| (1,1268) | 1:A:337:LEU:HD22 | 1:A:393:ALA:HA   | 8        | 0.35          |
| (1,1268) | 1:A:337:LEU:HD23 | 1:A:393:ALA:HA   | 8        | 0.35          |
| (1,1245) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HZ2  | 7        | 0.35          |
| (1,1245) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HZ2  | 7        | 0.35          |
| (1,1245) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HZ2  | 7        | 0.35          |
| (1,1245) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HZ2  | 7        | 0.35          |
| (1,1245) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HZ2  | 7        | 0.35          |
| (1,1245) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HZ2  | 7        | 0.35          |
| (1,1239) | 1:A:330:ARG:HG2  | 1:A:331:ILE:HG12 | 1        | 0.35          |
| (1,1239) | 1:A:330:ARG:HG2  | 1:A:331:ILE:HG13 | 1        | 0.35          |
| (1,1239) | 1:A:330:ARG:HG3  | 1:A:331:ILE:HG12 | 1        | 0.35          |
| (1,1239) | 1:A:330:ARG:HG3  | 1:A:331:ILE:HG13 | 1        | 0.35          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD21 | 5        | 0.35          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD22 | 5        | 0.35          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD23 | 5        | 0.35          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD11 | 5        | 0.35          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD12 | 5        | 0.35          |
| (1,1210) | 1:A:350:TYR:HE1  | 1:A:375:LEU:HD13 | 5        | 0.35          |
| (1,1205) | 1:A:395:ARG:HD2  | 1:A:398:TYR:HE2  | 8        | 0.35          |
| (1,1205) | 1:A:395:ARG:HD3  | 1:A:398:TYR:HE2  | 8        | 0.35          |
| (1,1129) | 1:A:398:TYR:H    | 1:A:402:ILE:HD11 | 6        | 0.35          |
| (1,1129) | 1:A:398:TYR:H    | 1:A:402:ILE:HD12 | 6        | 0.35          |
| (1,1129) | 1:A:398:TYR:H    | 1:A:402:ILE:HD13 | 6        | 0.35          |
| (1,1114) | 1:A:354:ILE:H    | 1:A:367:VAL:HG21 | 6        | 0.35          |
| (1,1114) | 1:A:354:ILE:H    | 1:A:367:VAL:HG22 | 6        | 0.35          |
| (1,1114) | 1:A:354:ILE:H    | 1:A:367:VAL:HG23 | 6        | 0.35          |
| (1,1034) | 1:A:356:TRP:HB3  | 1:A:360:GLU:H    | 1        | 0.35          |
| (1,1013) | 1:A:409:GLN:HG2  | 1:A:412:LEU:H    | 5        | 0.35          |
| (1,1013) | 1:A:409:GLN:HG3  | 1:A:412:LEU:H    | 5        | 0.35          |
| (1,99)   | 1:A:375:LEU:HB2  | 1:A:378:ASN:HB2  | 10       | 0.34          |
| (1,99)   | 1:A:375:LEU:HB3  | 1:A:378:ASN:HB2  | 10       | 0.34          |
| (1,981)  | 1:A:374:ARG:H    | 1:A:374:ARG:HD2  | 7        | 0.34          |

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| Key     | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|---------|------------------|------------------|----------|---------------|
| (1,981) | 1:A:374:ARG:H    | 1:A:374:ARG:HD3  | 7        | 0.34          |
| (1,946) | 1:A:358:ASP:H    | 1:A:363:ILE:HG21 | 5        | 0.34          |
| (1,946) | 1:A:358:ASP:H    | 1:A:363:ILE:HG22 | 5        | 0.34          |
| (1,946) | 1:A:358:ASP:H    | 1:A:363:ILE:HG23 | 5        | 0.34          |
| (1,937) | 1:A:348:SER:HA   | 1:A:350:TYR:H    | 6        | 0.34          |
| (1,923) | 1:A:397:TYR:H    | 1:A:403:ILE:HB   | 10       | 0.34          |
| (1,813) | 1:A:425:GLY:H    | 1:A:426:ARG:H    | 3        | 0.34          |
| (1,640) | 1:A:406:GLU:H    | 1:A:413:PHE:HA   | 3        | 0.34          |
| (1,483) | 1:A:363:ILE:HD11 | 1:A:414:ARG:HG2  | 9        | 0.34          |
| (1,483) | 1:A:363:ILE:HD11 | 1:A:414:ARG:HG3  | 9        | 0.34          |
| (1,483) | 1:A:363:ILE:HD12 | 1:A:414:ARG:HG2  | 9        | 0.34          |
| (1,483) | 1:A:363:ILE:HD12 | 1:A:414:ARG:HG3  | 9        | 0.34          |
| (1,483) | 1:A:363:ILE:HD13 | 1:A:414:ARG:HG2  | 9        | 0.34          |
| (1,483) | 1:A:363:ILE:HD13 | 1:A:414:ARG:HG3  | 9        | 0.34          |
| (1,47)  | 1:A:418:THR:HG21 | 1:A:419:PRO:HB3  | 8        | 0.34          |
| (1,47)  | 1:A:418:THR:HG22 | 1:A:419:PRO:HB3  | 8        | 0.34          |
| (1,47)  | 1:A:418:THR:HG23 | 1:A:419:PRO:HB3  | 8        | 0.34          |
| (1,435) | 1:A:370:ASN:HA   | 1:A:387:TYR:HB2  | 3        | 0.34          |
| (1,426) | 1:A:410:ARG:HA   | 1:A:410:ARG:HD2  | 8        | 0.34          |
| (1,426) | 1:A:410:ARG:HA   | 1:A:410:ARG:HD3  | 8        | 0.34          |
| (1,389) | 1:A:363:ILE:HG21 | 1:A:412:LEU:HG   | 5        | 0.34          |
| (1,389) | 1:A:363:ILE:HG22 | 1:A:412:LEU:HG   | 5        | 0.34          |
| (1,389) | 1:A:363:ILE:HG23 | 1:A:412:LEU:HG   | 5        | 0.34          |
| (1,363) | 1:A:398:TYR:HE2  | 1:A:403:ILE:HG21 | 2        | 0.34          |
| (1,363) | 1:A:398:TYR:HE2  | 1:A:403:ILE:HG22 | 2        | 0.34          |
| (1,363) | 1:A:398:TYR:HE2  | 1:A:403:ILE:HG23 | 2        | 0.34          |
| (1,358) | 1:A:397:TYR:H    | 1:A:403:ILE:HG21 | 8        | 0.34          |
| (1,358) | 1:A:397:TYR:H    | 1:A:403:ILE:HG22 | 8        | 0.34          |
| (1,358) | 1:A:397:TYR:H    | 1:A:403:ILE:HG23 | 8        | 0.34          |
| (1,326) | 1:A:341:VAL:HA   | 1:A:354:ILE:HD11 | 7        | 0.34          |
| (1,326) | 1:A:341:VAL:HA   | 1:A:354:ILE:HD12 | 7        | 0.34          |
| (1,326) | 1:A:341:VAL:HA   | 1:A:354:ILE:HD13 | 7        | 0.34          |
| (1,276) | 1:A:358:ASP:HB2  | 1:A:363:ILE:HD11 | 7        | 0.34          |
| (1,276) | 1:A:358:ASP:HB2  | 1:A:363:ILE:HD12 | 7        | 0.34          |
| (1,276) | 1:A:358:ASP:HB2  | 1:A:363:ILE:HD13 | 7        | 0.34          |
| (1,276) | 1:A:358:ASP:HB3  | 1:A:363:ILE:HD11 | 7        | 0.34          |
| (1,276) | 1:A:358:ASP:HB3  | 1:A:363:ILE:HD12 | 7        | 0.34          |
| (1,276) | 1:A:358:ASP:HB3  | 1:A:363:ILE:HD13 | 7        | 0.34          |
| (1,204) | 1:A:355:ARG:HA   | 1:A:367:VAL:HG21 | 3        | 0.34          |
| (1,204) | 1:A:355:ARG:HA   | 1:A:367:VAL:HG22 | 3        | 0.34          |
| (1,204) | 1:A:355:ARG:HA   | 1:A:367:VAL:HG23 | 3        | 0.34          |
| (1,172) | 1:A:377:GLY:HA3  | 1:A:385:MET:HE1  | 1        | 0.34          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,172)  | 1:A:377:GLY:HA3  | 1:A:385:MET:HE2  | 1        | 0.34          |
| (1,172)  | 1:A:377:GLY:HA3  | 1:A:385:MET:HE3  | 1        | 0.34          |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD11 | 4        | 0.34          |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD12 | 4        | 0.34          |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD13 | 4        | 0.34          |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD21 | 4        | 0.34          |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD22 | 4        | 0.34          |
| (1,1451) | 1:A:387:TYR:HD2  | 1:A:394:LEU:HD23 | 4        | 0.34          |
| (1,1394) | 1:A:368:ASP:HA   | 1:A:411:LEU:HD11 | 4        | 0.34          |
| (1,1394) | 1:A:368:ASP:HA   | 1:A:411:LEU:HD12 | 4        | 0.34          |
| (1,1394) | 1:A:368:ASP:HA   | 1:A:411:LEU:HD13 | 4        | 0.34          |
| (1,1394) | 1:A:368:ASP:HA   | 1:A:411:LEU:HD21 | 4        | 0.34          |
| (1,1394) | 1:A:368:ASP:HA   | 1:A:411:LEU:HD22 | 4        | 0.34          |
| (1,1394) | 1:A:368:ASP:HA   | 1:A:411:LEU:HD23 | 4        | 0.34          |
| (1,136)  | 1:A:356:TRP:HZ2  | 1:A:359:LYS:HE2  | 10       | 0.34          |
| (1,136)  | 1:A:356:TRP:HZ2  | 1:A:359:LYS:HE3  | 10       | 0.34          |
| (1,1337) | 1:A:345:LEU:HD11 | 1:A:357:GLU:H    | 4        | 0.34          |
| (1,1337) | 1:A:345:LEU:HD12 | 1:A:357:GLU:H    | 4        | 0.34          |
| (1,1337) | 1:A:345:LEU:HD13 | 1:A:357:GLU:H    | 4        | 0.34          |
| (1,1337) | 1:A:345:LEU:HD21 | 1:A:357:GLU:H    | 4        | 0.34          |
| (1,1337) | 1:A:345:LEU:HD22 | 1:A:357:GLU:H    | 4        | 0.34          |
| (1,1337) | 1:A:345:LEU:HD23 | 1:A:357:GLU:H    | 4        | 0.34          |
| (1,1272) | 1:A:339:ASP:HA   | 1:A:342:TYR:HB2  | 8        | 0.34          |
| (1,1272) | 1:A:339:ASP:HA   | 1:A:342:TYR:HB3  | 8        | 0.34          |
| (1,1127) | 1:A:348:SER:H    | 1:A:350:TYR:H    | 3        | 0.34          |
| (1,1110) | 1:A:327:HIS:HE1  | 1:A:328:MET:H    | 1        | 0.34          |
| (1,11)   | 1:A:376:TRP:HE1  | 1:A:385:MET:HE1  | 5        | 0.34          |
| (1,11)   | 1:A:376:TRP:HE1  | 1:A:385:MET:HE2  | 5        | 0.34          |
| (1,11)   | 1:A:376:TRP:HE1  | 1:A:385:MET:HE3  | 5        | 0.34          |
| (1,973)  | 1:A:394:LEU:H    | 1:A:394:LEU:HG   | 4        | 0.33          |
| (1,866)  | 1:A:352:ASN:H    | 1:A:352:ASN:HD21 | 2        | 0.33          |
| (1,804)  | 1:A:355:ARG:HB2  | 1:A:365:ARG:H    | 8        | 0.33          |
| (1,804)  | 1:A:355:ARG:HB3  | 1:A:365:ARG:H    | 8        | 0.33          |
| (1,640)  | 1:A:406:GLU:H    | 1:A:413:PHE:HA   | 8        | 0.33          |
| (1,567)  | 1:A:386:THR:HG21 | 1:A:387:TYR:HB3  | 7        | 0.33          |
| (1,567)  | 1:A:386:THR:HG22 | 1:A:387:TYR:HB3  | 7        | 0.33          |
| (1,567)  | 1:A:386:THR:HG23 | 1:A:387:TYR:HB3  | 7        | 0.33          |
| (1,435)  | 1:A:370:ASN:HA   | 1:A:387:TYR:HB2  | 1        | 0.33          |
| (1,421)  | 1:A:405:LYS:HA   | 1:A:413:PHE:HB3  | 8        | 0.33          |
| (1,398)  | 1:A:354:ILE:HA   | 1:A:366:ILE:HG21 | 6        | 0.33          |
| (1,398)  | 1:A:354:ILE:HA   | 1:A:366:ILE:HG22 | 6        | 0.33          |
| (1,398)  | 1:A:354:ILE:HA   | 1:A:366:ILE:HG23 | 6        | 0.33          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,323)  | 1:A:345:LEU:H    | 1:A:354:ILE:HD11 | 2        | 0.33          |
| (1,323)  | 1:A:345:LEU:H    | 1:A:354:ILE:HD12 | 2        | 0.33          |
| (1,323)  | 1:A:345:LEU:H    | 1:A:354:ILE:HD13 | 2        | 0.33          |
| (1,316)  | 1:A:354:ILE:HD11 | 1:A:355:ARG:H    | 3        | 0.33          |
| (1,316)  | 1:A:354:ILE:HD12 | 1:A:355:ARG:H    | 3        | 0.33          |
| (1,316)  | 1:A:354:ILE:HD13 | 1:A:355:ARG:H    | 3        | 0.33          |
| (1,1416) | 1:A:372:LEU:HD11 | 1:A:390:MET:HE1  | 9        | 0.33          |
| (1,1416) | 1:A:372:LEU:HD11 | 1:A:390:MET:HE2  | 9        | 0.33          |
| (1,1416) | 1:A:372:LEU:HD11 | 1:A:390:MET:HE3  | 9        | 0.33          |
| (1,1416) | 1:A:372:LEU:HD12 | 1:A:390:MET:HE1  | 9        | 0.33          |
| (1,1416) | 1:A:372:LEU:HD12 | 1:A:390:MET:HE2  | 9        | 0.33          |
| (1,1416) | 1:A:372:LEU:HD12 | 1:A:390:MET:HE3  | 9        | 0.33          |
| (1,1416) | 1:A:372:LEU:HD13 | 1:A:390:MET:HE1  | 9        | 0.33          |
| (1,1416) | 1:A:372:LEU:HD13 | 1:A:390:MET:HE2  | 9        | 0.33          |
| (1,1416) | 1:A:372:LEU:HD13 | 1:A:390:MET:HE3  | 9        | 0.33          |
| (1,1416) | 1:A:372:LEU:HD21 | 1:A:390:MET:HE1  | 9        | 0.33          |
| (1,1416) | 1:A:372:LEU:HD21 | 1:A:390:MET:HE2  | 9        | 0.33          |
| (1,1416) | 1:A:372:LEU:HD21 | 1:A:390:MET:HE3  | 9        | 0.33          |
| (1,1416) | 1:A:372:LEU:HD22 | 1:A:390:MET:HE1  | 9        | 0.33          |
| (1,1416) | 1:A:372:LEU:HD22 | 1:A:390:MET:HE2  | 9        | 0.33          |
| (1,1416) | 1:A:372:LEU:HD22 | 1:A:390:MET:HE3  | 9        | 0.33          |
| (1,1416) | 1:A:372:LEU:HD23 | 1:A:390:MET:HE1  | 9        | 0.33          |
| (1,1416) | 1:A:372:LEU:HD23 | 1:A:390:MET:HE2  | 9        | 0.33          |
| (1,1416) | 1:A:372:LEU:HD23 | 1:A:390:MET:HE3  | 9        | 0.33          |
| (1,1396) | 1:A:369:PRO:HG2  | 1:A:411:LEU:HD11 | 7        | 0.33          |
| (1,1396) | 1:A:369:PRO:HG2  | 1:A:411:LEU:HD12 | 7        | 0.33          |
| (1,1396) | 1:A:369:PRO:HG2  | 1:A:411:LEU:HD13 | 7        | 0.33          |
| (1,1396) | 1:A:369:PRO:HG2  | 1:A:411:LEU:HD21 | 7        | 0.33          |
| (1,1396) | 1:A:369:PRO:HG2  | 1:A:411:LEU:HD22 | 7        | 0.33          |
| (1,1396) | 1:A:369:PRO:HG2  | 1:A:411:LEU:HD23 | 7        | 0.33          |
| (1,1396) | 1:A:369:PRO:HG3  | 1:A:411:LEU:HD11 | 7        | 0.33          |
| (1,1396) | 1:A:369:PRO:HG3  | 1:A:411:LEU:HD12 | 7        | 0.33          |
| (1,1396) | 1:A:369:PRO:HG3  | 1:A:411:LEU:HD13 | 7        | 0.33          |
| (1,1396) | 1:A:369:PRO:HG3  | 1:A:411:LEU:HD21 | 7        | 0.33          |
| (1,1396) | 1:A:369:PRO:HG3  | 1:A:411:LEU:HD22 | 7        | 0.33          |
| (1,1396) | 1:A:369:PRO:HG3  | 1:A:411:LEU:HD23 | 7        | 0.33          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD21 | 1        | 0.33          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD22 | 1        | 0.33          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD23 | 1        | 0.33          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD11 | 1        | 0.33          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD12 | 1        | 0.33          |
| (1,1217) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HD13 | 1        | 0.33          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1214) | 1:A:340:TYR:HB2  | 1:A:340:TYR:HE2  | 1        | 0.33          |
| (1,1140) | 1:A:375:LEU:HA   | 1:A:378:ASN:HD22 | 9        | 0.33          |
| (1,10)   | 1:A:376:TRP:HZ2  | 1:A:385:MET:HE1  | 8        | 0.33          |
| (1,10)   | 1:A:376:TRP:HZ2  | 1:A:385:MET:HE2  | 8        | 0.33          |
| (1,10)   | 1:A:376:TRP:HZ2  | 1:A:385:MET:HE3  | 8        | 0.33          |
| (1,872)  | 1:A:352:ASN:H    | 1:A:354:ILE:HG21 | 5        | 0.32          |
| (1,872)  | 1:A:352:ASN:H    | 1:A:354:ILE:HG22 | 5        | 0.32          |
| (1,872)  | 1:A:352:ASN:H    | 1:A:354:ILE:HG23 | 5        | 0.32          |
| (1,844)  | 1:A:359:LYS:HA   | 1:A:361:SER:H    | 3        | 0.32          |
| (1,763)  | 1:A:364:PHE:HD1  | 1:A:413:PHE:H    | 10       | 0.32          |
| (1,73)   | 1:A:388:GLU:HA   | 1:A:388:GLU:HG2  | 3        | 0.32          |
| (1,73)   | 1:A:388:GLU:HA   | 1:A:388:GLU:HG3  | 3        | 0.32          |
| (1,712)  | 1:A:404:ARG:H    | 1:A:416:MET:HG2  | 7        | 0.32          |
| (1,712)  | 1:A:404:ARG:H    | 1:A:416:MET:HG3  | 7        | 0.32          |
| (1,703)  | 1:A:404:ARG:H    | 1:A:413:PHE:HD2  | 3        | 0.32          |
| (1,673)  | 1:A:365:ARG:HD2  | 1:A:366:ILE:H    | 3        | 0.32          |
| (1,666)  | 1:A:366:ILE:H    | 1:A:413:PHE:HZ   | 5        | 0.32          |
| (1,483)  | 1:A:363:ILE:HD11 | 1:A:414:ARG:HG2  | 4        | 0.32          |
| (1,483)  | 1:A:363:ILE:HD11 | 1:A:414:ARG:HG3  | 4        | 0.32          |
| (1,483)  | 1:A:363:ILE:HD12 | 1:A:414:ARG:HG2  | 4        | 0.32          |
| (1,483)  | 1:A:363:ILE:HD12 | 1:A:414:ARG:HG3  | 4        | 0.32          |
| (1,483)  | 1:A:363:ILE:HD13 | 1:A:414:ARG:HG2  | 4        | 0.32          |
| (1,483)  | 1:A:363:ILE:HD13 | 1:A:414:ARG:HG3  | 4        | 0.32          |
| (1,47)   | 1:A:418:THR:HG21 | 1:A:419:PRO:HB3  | 10       | 0.32          |
| (1,47)   | 1:A:418:THR:HG22 | 1:A:419:PRO:HB3  | 10       | 0.32          |
| (1,47)   | 1:A:418:THR:HG23 | 1:A:419:PRO:HB3  | 10       | 0.32          |
| (1,411)  | 1:A:365:ARG:HD3  | 1:A:367:VAL:HA   | 10       | 0.32          |
| (1,411)  | 1:A:365:ARG:HD2  | 1:A:367:VAL:HA   | 10       | 0.32          |
| (1,384)  | 1:A:363:ILE:HG21 | 1:A:412:LEU:HA   | 7        | 0.32          |
| (1,384)  | 1:A:363:ILE:HG22 | 1:A:412:LEU:HA   | 7        | 0.32          |
| (1,384)  | 1:A:363:ILE:HG23 | 1:A:412:LEU:HA   | 7        | 0.32          |
| (1,377)  | 1:A:373:ALA:HB1  | 1:A:385:MET:HB3  | 2        | 0.32          |
| (1,377)  | 1:A:373:ALA:HB2  | 1:A:385:MET:HB3  | 2        | 0.32          |
| (1,377)  | 1:A:373:ALA:HB3  | 1:A:385:MET:HB3  | 2        | 0.32          |
| (1,377)  | 1:A:373:ALA:HB1  | 1:A:385:MET:HB2  | 2        | 0.32          |
| (1,377)  | 1:A:373:ALA:HB2  | 1:A:385:MET:HB2  | 2        | 0.32          |
| (1,377)  | 1:A:373:ALA:HB3  | 1:A:385:MET:HB2  | 2        | 0.32          |
| (1,330)  | 1:A:358:ASP:HA   | 1:A:361:SER:HB2  | 10       | 0.32          |
| (1,327)  | 1:A:344:LEU:H    | 1:A:354:ILE:HD11 | 6        | 0.32          |
| (1,327)  | 1:A:344:LEU:H    | 1:A:354:ILE:HD12 | 6        | 0.32          |
| (1,327)  | 1:A:344:LEU:H    | 1:A:354:ILE:HD13 | 6        | 0.32          |
| (1,296)  | 1:A:340:TYR:HA   | 1:A:340:TYR:HD2  | 8        | 0.32          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,173)  | 1:A:353:PHE:HA   | 1:A:368:ASP:HA   | 7        | 0.32          |
| (1,149)  | 1:A:355:ARG:HD2  | 1:A:356:TRP:H    | 6        | 0.32          |
| (1,149)  | 1:A:355:ARG:HD3  | 1:A:356:TRP:H    | 6        | 0.32          |
| (1,1440) | 1:A:377:GLY:HA2  | 1:A:385:MET:HE1  | 10       | 0.32          |
| (1,1440) | 1:A:377:GLY:HA2  | 1:A:385:MET:HE2  | 10       | 0.32          |
| (1,1440) | 1:A:377:GLY:HA2  | 1:A:385:MET:HE3  | 10       | 0.32          |
| (1,1440) | 1:A:377:GLY:HA3  | 1:A:385:MET:HE1  | 10       | 0.32          |
| (1,1440) | 1:A:377:GLY:HA3  | 1:A:385:MET:HE2  | 10       | 0.32          |
| (1,1440) | 1:A:377:GLY:HA3  | 1:A:385:MET:HE3  | 10       | 0.32          |
| (1,1413) | 1:A:372:LEU:HD11 | 1:A:376:TRP:H    | 4        | 0.32          |
| (1,1413) | 1:A:372:LEU:HD12 | 1:A:376:TRP:H    | 4        | 0.32          |
| (1,1413) | 1:A:372:LEU:HD13 | 1:A:376:TRP:H    | 4        | 0.32          |
| (1,1413) | 1:A:372:LEU:HD21 | 1:A:376:TRP:H    | 4        | 0.32          |
| (1,1413) | 1:A:372:LEU:HD22 | 1:A:376:TRP:H    | 4        | 0.32          |
| (1,1413) | 1:A:372:LEU:HD23 | 1:A:376:TRP:H    | 4        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD11 | 1:A:375:LEU:HD11 | 5        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD11 | 1:A:375:LEU:HD12 | 5        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD11 | 1:A:375:LEU:HD13 | 5        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD11 | 1:A:375:LEU:HD21 | 5        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD11 | 1:A:375:LEU:HD22 | 5        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD11 | 1:A:375:LEU:HD23 | 5        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD12 | 1:A:375:LEU:HD11 | 5        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD12 | 1:A:375:LEU:HD12 | 5        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD12 | 1:A:375:LEU:HD13 | 5        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD12 | 1:A:375:LEU:HD21 | 5        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD12 | 1:A:375:LEU:HD22 | 5        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD12 | 1:A:375:LEU:HD23 | 5        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD13 | 1:A:375:LEU:HD11 | 5        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD13 | 1:A:375:LEU:HD12 | 5        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD13 | 1:A:375:LEU:HD13 | 5        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD13 | 1:A:375:LEU:HD21 | 5        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD13 | 1:A:375:LEU:HD22 | 5        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD13 | 1:A:375:LEU:HD23 | 5        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD21 | 1:A:375:LEU:HD11 | 5        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD21 | 1:A:375:LEU:HD12 | 5        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD21 | 1:A:375:LEU:HD13 | 5        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD21 | 1:A:375:LEU:HD21 | 5        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD21 | 1:A:375:LEU:HD22 | 5        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD21 | 1:A:375:LEU:HD23 | 5        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD22 | 1:A:375:LEU:HD11 | 5        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD22 | 1:A:375:LEU:HD12 | 5        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD22 | 1:A:375:LEU:HD13 | 5        | 0.32          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1412) | 1:A:372:LEU:HD22 | 1:A:375:LEU:HD21 | 5        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD22 | 1:A:375:LEU:HD22 | 5        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD22 | 1:A:375:LEU:HD23 | 5        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD23 | 1:A:375:LEU:HD11 | 5        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD23 | 1:A:375:LEU:HD12 | 5        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD23 | 1:A:375:LEU:HD13 | 5        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD23 | 1:A:375:LEU:HD21 | 5        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD23 | 1:A:375:LEU:HD22 | 5        | 0.32          |
| (1,1412) | 1:A:372:LEU:HD23 | 1:A:375:LEU:HD23 | 5        | 0.32          |
| (1,1377) | 1:A:361:SER:H    | 1:A:362:LYS:HG2  | 10       | 0.32          |
| (1,1377) | 1:A:361:SER:H    | 1:A:362:LYS:HG3  | 10       | 0.32          |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD11 | 10       | 0.32          |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD12 | 10       | 0.32          |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD13 | 10       | 0.32          |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD21 | 10       | 0.32          |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD22 | 10       | 0.32          |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD23 | 10       | 0.32          |
| (1,1341) | 1:A:345:LEU:HD11 | 1:A:367:VAL:HG21 | 8        | 0.32          |
| (1,1341) | 1:A:345:LEU:HD11 | 1:A:367:VAL:HG22 | 8        | 0.32          |
| (1,1341) | 1:A:345:LEU:HD11 | 1:A:367:VAL:HG23 | 8        | 0.32          |
| (1,1341) | 1:A:345:LEU:HD12 | 1:A:367:VAL:HG21 | 8        | 0.32          |
| (1,1341) | 1:A:345:LEU:HD12 | 1:A:367:VAL:HG22 | 8        | 0.32          |
| (1,1341) | 1:A:345:LEU:HD12 | 1:A:367:VAL:HG23 | 8        | 0.32          |
| (1,1341) | 1:A:345:LEU:HD13 | 1:A:367:VAL:HG21 | 8        | 0.32          |
| (1,1341) | 1:A:345:LEU:HD13 | 1:A:367:VAL:HG22 | 8        | 0.32          |
| (1,1341) | 1:A:345:LEU:HD13 | 1:A:367:VAL:HG23 | 8        | 0.32          |
| (1,1341) | 1:A:345:LEU:HD21 | 1:A:367:VAL:HG21 | 8        | 0.32          |
| (1,1341) | 1:A:345:LEU:HD21 | 1:A:367:VAL:HG22 | 8        | 0.32          |
| (1,1341) | 1:A:345:LEU:HD21 | 1:A:367:VAL:HG23 | 8        | 0.32          |
| (1,1341) | 1:A:345:LEU:HD22 | 1:A:367:VAL:HG21 | 8        | 0.32          |
| (1,1341) | 1:A:345:LEU:HD22 | 1:A:367:VAL:HG22 | 8        | 0.32          |
| (1,1341) | 1:A:345:LEU:HD22 | 1:A:367:VAL:HG23 | 8        | 0.32          |
| (1,1341) | 1:A:345:LEU:HD23 | 1:A:367:VAL:HG21 | 8        | 0.32          |
| (1,1341) | 1:A:345:LEU:HD23 | 1:A:367:VAL:HG22 | 8        | 0.32          |
| (1,1341) | 1:A:345:LEU:HD23 | 1:A:367:VAL:HG23 | 8        | 0.32          |
| (1,1315) | 1:A:344:LEU:HD11 | 1:A:390:MET:HE1  | 1        | 0.32          |
| (1,1315) | 1:A:344:LEU:HD11 | 1:A:390:MET:HE2  | 1        | 0.32          |
| (1,1315) | 1:A:344:LEU:HD11 | 1:A:390:MET:HE3  | 1        | 0.32          |
| (1,1315) | 1:A:344:LEU:HD12 | 1:A:390:MET:HE1  | 1        | 0.32          |
| (1,1315) | 1:A:344:LEU:HD12 | 1:A:390:MET:HE2  | 1        | 0.32          |
| (1,1315) | 1:A:344:LEU:HD12 | 1:A:390:MET:HE3  | 1        | 0.32          |
| (1,1315) | 1:A:344:LEU:HD13 | 1:A:390:MET:HE1  | 1        | 0.32          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1315) | 1:A:344:LEU:HD13 | 1:A:390:MET:HE2  | 1        | 0.32          |
| (1,1315) | 1:A:344:LEU:HD13 | 1:A:390:MET:HE3  | 1        | 0.32          |
| (1,1315) | 1:A:344:LEU:HD21 | 1:A:390:MET:HE1  | 1        | 0.32          |
| (1,1315) | 1:A:344:LEU:HD21 | 1:A:390:MET:HE2  | 1        | 0.32          |
| (1,1315) | 1:A:344:LEU:HD21 | 1:A:390:MET:HE3  | 1        | 0.32          |
| (1,1315) | 1:A:344:LEU:HD22 | 1:A:390:MET:HE1  | 1        | 0.32          |
| (1,1315) | 1:A:344:LEU:HD22 | 1:A:390:MET:HE2  | 1        | 0.32          |
| (1,1315) | 1:A:344:LEU:HD22 | 1:A:390:MET:HE3  | 1        | 0.32          |
| (1,1315) | 1:A:344:LEU:HD23 | 1:A:390:MET:HE1  | 1        | 0.32          |
| (1,1315) | 1:A:344:LEU:HD23 | 1:A:390:MET:HE2  | 1        | 0.32          |
| (1,1315) | 1:A:344:LEU:HD23 | 1:A:390:MET:HE3  | 1        | 0.32          |
| (1,1218) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HG   | 6        | 0.32          |
| (1,1214) | 1:A:340:TYR:HB2  | 1:A:340:TYR:HE2  | 6        | 0.32          |
| (1,1214) | 1:A:340:TYR:HB2  | 1:A:340:TYR:HE2  | 8        | 0.32          |
| (1,1191) | 1:A:336:LEU:HB2  | 1:A:338:TRP:HD1  | 10       | 0.32          |
| (1,1191) | 1:A:336:LEU:HB3  | 1:A:338:TRP:HD1  | 10       | 0.32          |
| (1,118)  | 1:A:353:PHE:HB3  | 1:A:372:LEU:HG   | 9        | 0.32          |
| (1,1114) | 1:A:354:ILE:H    | 1:A:367:VAL:HG21 | 1        | 0.32          |
| (1,1114) | 1:A:354:ILE:H    | 1:A:367:VAL:HG22 | 1        | 0.32          |
| (1,1114) | 1:A:354:ILE:H    | 1:A:367:VAL:HG23 | 1        | 0.32          |
| (1,1104) | 1:A:354:ILE:H    | 1:A:366:ILE:HA   | 8        | 0.32          |
| (1,1009) | 1:A:412:LEU:H    | 1:A:413:PHE:HZ   | 1        | 0.32          |
| (1,948)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD11 | 10       | 0.31          |
| (1,948)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD12 | 10       | 0.31          |
| (1,948)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD13 | 10       | 0.31          |
| (1,911)  | 1:A:366:ILE:HG21 | 1:A:368:ASP:H    | 6        | 0.31          |
| (1,911)  | 1:A:366:ILE:HG22 | 1:A:368:ASP:H    | 6        | 0.31          |
| (1,911)  | 1:A:366:ILE:HG23 | 1:A:368:ASP:H    | 6        | 0.31          |
| (1,896)  | 1:A:353:PHE:H    | 1:A:354:ILE:HB   | 2        | 0.31          |
| (1,762)  | 1:A:413:PHE:H    | 1:A:413:PHE:HD1  | 1        | 0.31          |
| (1,762)  | 1:A:413:PHE:H    | 1:A:413:PHE:HD1  | 5        | 0.31          |
| (1,604)  | 1:A:376:TRP:HE1  | 1:A:393:ALA:HB1  | 8        | 0.31          |
| (1,604)  | 1:A:376:TRP:HE1  | 1:A:393:ALA:HB2  | 8        | 0.31          |
| (1,604)  | 1:A:376:TRP:HE1  | 1:A:393:ALA:HB3  | 8        | 0.31          |
| (1,569)  | 1:A:354:ILE:H    | 1:A:367:VAL:HG11 | 9        | 0.31          |
| (1,569)  | 1:A:354:ILE:H    | 1:A:367:VAL:HG12 | 9        | 0.31          |
| (1,569)  | 1:A:354:ILE:H    | 1:A:367:VAL:HG13 | 9        | 0.31          |
| (1,559)  | 1:A:417:LYS:HE2  | 1:A:418:THR:HG21 | 3        | 0.31          |
| (1,559)  | 1:A:417:LYS:HE2  | 1:A:418:THR:HG22 | 3        | 0.31          |
| (1,559)  | 1:A:417:LYS:HE2  | 1:A:418:THR:HG23 | 3        | 0.31          |
| (1,559)  | 1:A:417:LYS:HE3  | 1:A:418:THR:HG21 | 3        | 0.31          |
| (1,559)  | 1:A:417:LYS:HE3  | 1:A:418:THR:HG22 | 3        | 0.31          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,559)  | 1:A:417:LYS:HE3  | 1:A:418:THR:HG23 | 3        | 0.31          |
| (1,472)  | 1:A:354:ILE:HG12 | 1:A:367:VAL:H    | 5        | 0.31          |
| (1,36)   | 1:A:376:TRP:H    | 1:A:390:MET:HE1  | 3        | 0.31          |
| (1,36)   | 1:A:376:TRP:H    | 1:A:390:MET:HE2  | 3        | 0.31          |
| (1,36)   | 1:A:376:TRP:H    | 1:A:390:MET:HE3  | 3        | 0.31          |
| (1,32)   | 1:A:373:ALA:H    | 1:A:390:MET:HE1  | 4        | 0.31          |
| (1,32)   | 1:A:373:ALA:H    | 1:A:390:MET:HE2  | 4        | 0.31          |
| (1,32)   | 1:A:373:ALA:H    | 1:A:390:MET:HE3  | 4        | 0.31          |
| (1,197)  | 1:A:363:ILE:HD11 | 1:A:414:ARG:HA   | 6        | 0.31          |
| (1,197)  | 1:A:363:ILE:HD12 | 1:A:414:ARG:HA   | 6        | 0.31          |
| (1,197)  | 1:A:363:ILE:HD13 | 1:A:414:ARG:HA   | 6        | 0.31          |
| (1,19)   | 1:A:344:LEU:H    | 1:A:354:ILE:HG21 | 3        | 0.31          |
| (1,19)   | 1:A:344:LEU:H    | 1:A:354:ILE:HG22 | 3        | 0.31          |
| (1,19)   | 1:A:344:LEU:H    | 1:A:354:ILE:HG23 | 3        | 0.31          |
| (1,19)   | 1:A:344:LEU:H    | 1:A:354:ILE:HG21 | 8        | 0.31          |
| (1,19)   | 1:A:344:LEU:H    | 1:A:354:ILE:HG22 | 8        | 0.31          |
| (1,19)   | 1:A:344:LEU:H    | 1:A:354:ILE:HG23 | 8        | 0.31          |
| (1,1512) | 1:A:410:ARG:HA   | 1:A:411:LEU:HD11 | 1        | 0.31          |
| (1,1512) | 1:A:410:ARG:HA   | 1:A:411:LEU:HD12 | 1        | 0.31          |
| (1,1512) | 1:A:410:ARG:HA   | 1:A:411:LEU:HD13 | 1        | 0.31          |
| (1,1512) | 1:A:410:ARG:HA   | 1:A:411:LEU:HD21 | 1        | 0.31          |
| (1,1512) | 1:A:410:ARG:HA   | 1:A:411:LEU:HD22 | 1        | 0.31          |
| (1,1512) | 1:A:410:ARG:HA   | 1:A:411:LEU:HD23 | 1        | 0.31          |
| (1,1412) | 1:A:372:LEU:HD11 | 1:A:375:LEU:HD11 | 10       | 0.31          |
| (1,1412) | 1:A:372:LEU:HD11 | 1:A:375:LEU:HD12 | 10       | 0.31          |
| (1,1412) | 1:A:372:LEU:HD11 | 1:A:375:LEU:HD13 | 10       | 0.31          |
| (1,1412) | 1:A:372:LEU:HD11 | 1:A:375:LEU:HD21 | 10       | 0.31          |
| (1,1412) | 1:A:372:LEU:HD11 | 1:A:375:LEU:HD22 | 10       | 0.31          |
| (1,1412) | 1:A:372:LEU:HD11 | 1:A:375:LEU:HD23 | 10       | 0.31          |
| (1,1412) | 1:A:372:LEU:HD12 | 1:A:375:LEU:HD11 | 10       | 0.31          |
| (1,1412) | 1:A:372:LEU:HD12 | 1:A:375:LEU:HD12 | 10       | 0.31          |
| (1,1412) | 1:A:372:LEU:HD12 | 1:A:375:LEU:HD13 | 10       | 0.31          |
| (1,1412) | 1:A:372:LEU:HD12 | 1:A:375:LEU:HD21 | 10       | 0.31          |
| (1,1412) | 1:A:372:LEU:HD12 | 1:A:375:LEU:HD22 | 10       | 0.31          |
| (1,1412) | 1:A:372:LEU:HD12 | 1:A:375:LEU:HD23 | 10       | 0.31          |
| (1,1412) | 1:A:372:LEU:HD13 | 1:A:375:LEU:HD11 | 10       | 0.31          |
| (1,1412) | 1:A:372:LEU:HD13 | 1:A:375:LEU:HD12 | 10       | 0.31          |
| (1,1412) | 1:A:372:LEU:HD13 | 1:A:375:LEU:HD13 | 10       | 0.31          |
| (1,1412) | 1:A:372:LEU:HD13 | 1:A:375:LEU:HD21 | 10       | 0.31          |
| (1,1412) | 1:A:372:LEU:HD13 | 1:A:375:LEU:HD22 | 10       | 0.31          |
| (1,1412) | 1:A:372:LEU:HD13 | 1:A:375:LEU:HD23 | 10       | 0.31          |
| (1,1412) | 1:A:372:LEU:HD21 | 1:A:375:LEU:HD11 | 10       | 0.31          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1412) | 1:A:372:LEU:HD21 | 1:A:375:LEU:HD12 | 10       | 0.31          |
| (1,1412) | 1:A:372:LEU:HD21 | 1:A:375:LEU:HD13 | 10       | 0.31          |
| (1,1412) | 1:A:372:LEU:HD21 | 1:A:375:LEU:HD21 | 10       | 0.31          |
| (1,1412) | 1:A:372:LEU:HD21 | 1:A:375:LEU:HD22 | 10       | 0.31          |
| (1,1412) | 1:A:372:LEU:HD21 | 1:A:375:LEU:HD23 | 10       | 0.31          |
| (1,1412) | 1:A:372:LEU:HD22 | 1:A:375:LEU:HD11 | 10       | 0.31          |
| (1,1412) | 1:A:372:LEU:HD22 | 1:A:375:LEU:HD12 | 10       | 0.31          |
| (1,1412) | 1:A:372:LEU:HD22 | 1:A:375:LEU:HD13 | 10       | 0.31          |
| (1,1412) | 1:A:372:LEU:HD22 | 1:A:375:LEU:HD21 | 10       | 0.31          |
| (1,1412) | 1:A:372:LEU:HD22 | 1:A:375:LEU:HD22 | 10       | 0.31          |
| (1,1412) | 1:A:372:LEU:HD22 | 1:A:375:LEU:HD23 | 10       | 0.31          |
| (1,1412) | 1:A:372:LEU:HD23 | 1:A:375:LEU:HD11 | 10       | 0.31          |
| (1,1412) | 1:A:372:LEU:HD23 | 1:A:375:LEU:HD12 | 10       | 0.31          |
| (1,1412) | 1:A:372:LEU:HD23 | 1:A:375:LEU:HD13 | 10       | 0.31          |
| (1,1412) | 1:A:372:LEU:HD23 | 1:A:375:LEU:HD21 | 10       | 0.31          |
| (1,1412) | 1:A:372:LEU:HD23 | 1:A:375:LEU:HD22 | 10       | 0.31          |
| (1,1412) | 1:A:372:LEU:HD23 | 1:A:375:LEU:HD23 | 10       | 0.31          |
| (1,1410) | 1:A:372:LEU:HD11 | 1:A:375:LEU:H    | 7        | 0.31          |
| (1,1410) | 1:A:372:LEU:HD12 | 1:A:375:LEU:H    | 7        | 0.31          |
| (1,1410) | 1:A:372:LEU:HD13 | 1:A:375:LEU:H    | 7        | 0.31          |
| (1,1410) | 1:A:372:LEU:HD21 | 1:A:375:LEU:H    | 7        | 0.31          |
| (1,1410) | 1:A:372:LEU:HD22 | 1:A:375:LEU:H    | 7        | 0.31          |
| (1,1410) | 1:A:372:LEU:HD23 | 1:A:375:LEU:H    | 7        | 0.31          |
| (1,1390) | 1:A:366:ILE:H    | 1:A:411:LEU:HD11 | 7        | 0.31          |
| (1,1390) | 1:A:366:ILE:H    | 1:A:411:LEU:HD12 | 7        | 0.31          |
| (1,1390) | 1:A:366:ILE:H    | 1:A:411:LEU:HD13 | 7        | 0.31          |
| (1,1390) | 1:A:366:ILE:H    | 1:A:411:LEU:HD21 | 7        | 0.31          |
| (1,1390) | 1:A:366:ILE:H    | 1:A:411:LEU:HD22 | 7        | 0.31          |
| (1,1390) | 1:A:366:ILE:H    | 1:A:411:LEU:HD23 | 7        | 0.31          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD11 | 4        | 0.31          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD12 | 4        | 0.31          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD13 | 4        | 0.31          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD21 | 4        | 0.31          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD22 | 4        | 0.31          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD23 | 4        | 0.31          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD11 | 5        | 0.31          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD12 | 5        | 0.31          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD13 | 5        | 0.31          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD21 | 5        | 0.31          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD22 | 5        | 0.31          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD23 | 5        | 0.31          |
| (1,1337) | 1:A:345:LEU:HD11 | 1:A:357:GLU:H    | 9        | 0.31          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1337) | 1:A:345:LEU:HD12 | 1:A:357:GLU:H    | 9        | 0.31          |
| (1,1337) | 1:A:345:LEU:HD13 | 1:A:357:GLU:H    | 9        | 0.31          |
| (1,1337) | 1:A:345:LEU:HD21 | 1:A:357:GLU:H    | 9        | 0.31          |
| (1,1337) | 1:A:345:LEU:HD22 | 1:A:357:GLU:H    | 9        | 0.31          |
| (1,1337) | 1:A:345:LEU:HD23 | 1:A:357:GLU:H    | 9        | 0.31          |
| (1,1329) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HD2  | 1        | 0.31          |
| (1,1329) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HD3  | 1        | 0.31          |
| (1,1329) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HD2  | 1        | 0.31          |
| (1,1329) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HD3  | 1        | 0.31          |
| (1,1329) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HD2  | 1        | 0.31          |
| (1,1329) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HD3  | 1        | 0.31          |
| (1,1329) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HD2  | 1        | 0.31          |
| (1,1329) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HD3  | 1        | 0.31          |
| (1,1329) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HD2  | 1        | 0.31          |
| (1,1329) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HD3  | 1        | 0.31          |
| (1,1329) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HD2  | 1        | 0.31          |
| (1,1329) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HD3  | 1        | 0.31          |
| (1,1256) | 1:A:337:LEU:HD11 | 1:A:341:VAL:HA   | 9        | 0.31          |
| (1,1256) | 1:A:337:LEU:HD12 | 1:A:341:VAL:HA   | 9        | 0.31          |
| (1,1256) | 1:A:337:LEU:HD13 | 1:A:341:VAL:HA   | 9        | 0.31          |
| (1,1256) | 1:A:337:LEU:HD21 | 1:A:341:VAL:HA   | 9        | 0.31          |
| (1,1256) | 1:A:337:LEU:HD22 | 1:A:341:VAL:HA   | 9        | 0.31          |
| (1,1256) | 1:A:337:LEU:HD23 | 1:A:341:VAL:HA   | 9        | 0.31          |
| (1,1186) | 1:A:356:TRP:HD1  | 1:A:359:LYS:HE2  | 5        | 0.31          |
| (1,1186) | 1:A:356:TRP:HD1  | 1:A:359:LYS:HE3  | 5        | 0.31          |
| (1,1176) | 1:A:397:TYR:HD2  | 1:A:403:ILE:HB   | 7        | 0.31          |
| (1,10)   | 1:A:376:TRP:HZ2  | 1:A:385:MET:HE1  | 7        | 0.31          |
| (1,10)   | 1:A:376:TRP:HZ2  | 1:A:385:MET:HE2  | 7        | 0.31          |
| (1,10)   | 1:A:376:TRP:HZ2  | 1:A:385:MET:HE3  | 7        | 0.31          |
| (1,982)  | 1:A:394:LEU:H    | 1:A:396:HIS:HB2  | 9        | 0.3           |
| (1,982)  | 1:A:394:LEU:H    | 1:A:396:HIS:HB3  | 9        | 0.3           |
| (1,844)  | 1:A:359:LYS:HA   | 1:A:361:SER:H    | 6        | 0.3           |
| (1,722)  | 1:A:349:ARG:H    | 1:A:349:ARG:HG2  | 4        | 0.3           |
| (1,722)  | 1:A:349:ARG:H    | 1:A:349:ARG:HG3  | 4        | 0.3           |
| (1,673)  | 1:A:365:ARG:HD2  | 1:A:366:ILE:H    | 8        | 0.3           |
| (1,574)  | 1:A:353:PHE:HA   | 1:A:367:VAL:HG11 | 10       | 0.3           |
| (1,574)  | 1:A:353:PHE:HA   | 1:A:367:VAL:HG12 | 10       | 0.3           |
| (1,574)  | 1:A:353:PHE:HA   | 1:A:367:VAL:HG13 | 10       | 0.3           |
| (1,528)  | 1:A:362:LYS:H    | 1:A:362:LYS:HG3  | 10       | 0.3           |
| (1,504)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD21 | 6        | 0.3           |
| (1,504)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD22 | 6        | 0.3           |
| (1,504)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD23 | 6        | 0.3           |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,46)   | 1:A:385:MET:HB3  | 1:A:386:THR:HG21 | 7        | 0.3           |
| (1,46)   | 1:A:385:MET:HB3  | 1:A:386:THR:HG22 | 7        | 0.3           |
| (1,46)   | 1:A:385:MET:HB3  | 1:A:386:THR:HG23 | 7        | 0.3           |
| (1,449)  | 1:A:385:MET:HB3  | 1:A:386:THR:HA   | 1        | 0.3           |
| (1,448)  | 1:A:374:ARG:H    | 1:A:385:MET:HB3  | 10       | 0.3           |
| (1,361)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HG21 | 5        | 0.3           |
| (1,361)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HG22 | 5        | 0.3           |
| (1,361)  | 1:A:397:TYR:HD2  | 1:A:403:ILE:HG23 | 5        | 0.3           |
| (1,327)  | 1:A:344:LEU:H    | 1:A:354:ILE:HD11 | 7        | 0.3           |
| (1,327)  | 1:A:344:LEU:H    | 1:A:354:ILE:HD12 | 7        | 0.3           |
| (1,327)  | 1:A:344:LEU:H    | 1:A:354:ILE:HD13 | 7        | 0.3           |
| (1,300)  | 1:A:383:THR:HA   | 1:A:385:MET:H    | 7        | 0.3           |
| (1,233)  | 1:A:397:TYR:HA   | 1:A:397:TYR:HD1  | 2        | 0.3           |
| (1,20)   | 1:A:345:LEU:H    | 1:A:354:ILE:HG21 | 1        | 0.3           |
| (1,20)   | 1:A:345:LEU:H    | 1:A:354:ILE:HG22 | 1        | 0.3           |
| (1,20)   | 1:A:345:LEU:H    | 1:A:354:ILE:HG23 | 1        | 0.3           |
| (1,1522) | 1:A:416:MET:H    | 1:A:417:LYS:HB2  | 2        | 0.3           |
| (1,1522) | 1:A:416:MET:H    | 1:A:417:LYS:HB3  | 2        | 0.3           |
| (1,14)   | 1:A:345:LEU:HA   | 1:A:354:ILE:HG21 | 10       | 0.3           |
| (1,14)   | 1:A:345:LEU:HA   | 1:A:354:ILE:HG22 | 10       | 0.3           |
| (1,14)   | 1:A:345:LEU:HA   | 1:A:354:ILE:HG23 | 10       | 0.3           |
| (1,1337) | 1:A:345:LEU:HD11 | 1:A:357:GLU:H    | 3        | 0.3           |
| (1,1337) | 1:A:345:LEU:HD12 | 1:A:357:GLU:H    | 3        | 0.3           |
| (1,1337) | 1:A:345:LEU:HD13 | 1:A:357:GLU:H    | 3        | 0.3           |
| (1,1337) | 1:A:345:LEU:HD21 | 1:A:357:GLU:H    | 3        | 0.3           |
| (1,1337) | 1:A:345:LEU:HD22 | 1:A:357:GLU:H    | 3        | 0.3           |
| (1,1337) | 1:A:345:LEU:HD23 | 1:A:357:GLU:H    | 3        | 0.3           |
| (1,1315) | 1:A:344:LEU:HD11 | 1:A:390:MET:HE1  | 4        | 0.3           |
| (1,1315) | 1:A:344:LEU:HD11 | 1:A:390:MET:HE2  | 4        | 0.3           |
| (1,1315) | 1:A:344:LEU:HD11 | 1:A:390:MET:HE3  | 4        | 0.3           |
| (1,1315) | 1:A:344:LEU:HD12 | 1:A:390:MET:HE1  | 4        | 0.3           |
| (1,1315) | 1:A:344:LEU:HD12 | 1:A:390:MET:HE2  | 4        | 0.3           |
| (1,1315) | 1:A:344:LEU:HD12 | 1:A:390:MET:HE3  | 4        | 0.3           |
| (1,1315) | 1:A:344:LEU:HD13 | 1:A:390:MET:HE1  | 4        | 0.3           |
| (1,1315) | 1:A:344:LEU:HD13 | 1:A:390:MET:HE2  | 4        | 0.3           |
| (1,1315) | 1:A:344:LEU:HD13 | 1:A:390:MET:HE3  | 4        | 0.3           |
| (1,1315) | 1:A:344:LEU:HD21 | 1:A:390:MET:HE1  | 4        | 0.3           |
| (1,1315) | 1:A:344:LEU:HD21 | 1:A:390:MET:HE2  | 4        | 0.3           |
| (1,1315) | 1:A:344:LEU:HD21 | 1:A:390:MET:HE3  | 4        | 0.3           |
| (1,1315) | 1:A:344:LEU:HD22 | 1:A:390:MET:HE1  | 4        | 0.3           |
| (1,1315) | 1:A:344:LEU:HD22 | 1:A:390:MET:HE2  | 4        | 0.3           |
| (1,1315) | 1:A:344:LEU:HD22 | 1:A:390:MET:HE3  | 4        | 0.3           |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1315) | 1:A:344:LEU:HD23 | 1:A:390:MET:HE1  | 4        | 0.3           |
| (1,1315) | 1:A:344:LEU:HD23 | 1:A:390:MET:HE2  | 4        | 0.3           |
| (1,1315) | 1:A:344:LEU:HD23 | 1:A:390:MET:HE3  | 4        | 0.3           |
| (1,1250) | 1:A:337:LEU:HB2  | 1:A:341:VAL:HB   | 1        | 0.3           |
| (1,1250) | 1:A:337:LEU:HB3  | 1:A:341:VAL:HB   | 1        | 0.3           |
| (1,1216) | 1:A:340:TYR:HE2  | 1:A:379:HIS:HB2  | 4        | 0.3           |
| (1,1216) | 1:A:340:TYR:HE2  | 1:A:379:HIS:HB3  | 4        | 0.3           |
| (1,1214) | 1:A:340:TYR:HB2  | 1:A:340:TYR:HE2  | 3        | 0.3           |
| (1,1174) | 1:A:394:LEU:HG   | 1:A:397:TYR:HD2  | 5        | 0.3           |
| (1,1160) | 1:A:387:TYR:HB2  | 1:A:387:TYR:HD2  | 8        | 0.3           |
| (1,1130) | 1:A:340:TYR:H    | 1:A:340:TYR:HD2  | 8        | 0.3           |
| (1,1110) | 1:A:327:HIS:HE1  | 1:A:328:MET:H    | 8        | 0.3           |
| (1,1104) | 1:A:354:ILE:H    | 1:A:366:ILE:HA   | 3        | 0.3           |
| (1,1057) | 1:A:373:ALA:H    | 1:A:376:TRP:HB2  | 7        | 0.3           |
| (1,1057) | 1:A:373:ALA:H    | 1:A:376:TRP:HB3  | 7        | 0.3           |
| (1,1038) | 1:A:358:ASP:HA   | 1:A:360:GLU:H    | 2        | 0.3           |
| (1,1036) | 1:A:403:ILE:HA   | 1:A:414:ARG:H    | 10       | 0.3           |
| (1,896)  | 1:A:353:PHE:H    | 1:A:354:ILE:HB   | 5        | 0.29          |
| (1,844)  | 1:A:359:LYS:HA   | 1:A:361:SER:H    | 5        | 0.29          |
| (1,684)  | 1:A:398:TYR:HE1  | 1:A:405:LYS:H    | 10       | 0.29          |
| (1,643)  | 1:A:406:GLU:H    | 1:A:413:PHE:HB3  | 9        | 0.29          |
| (1,61)   | 1:A:343:GLN:H    | 1:A:343:GLN:HG2  | 3        | 0.29          |
| (1,61)   | 1:A:343:GLN:H    | 1:A:343:GLN:HG3  | 3        | 0.29          |
| (1,517)  | 1:A:355:ARG:HG2  | 1:A:367:VAL:HG21 | 4        | 0.29          |
| (1,517)  | 1:A:355:ARG:HG2  | 1:A:367:VAL:HG22 | 4        | 0.29          |
| (1,517)  | 1:A:355:ARG:HG2  | 1:A:367:VAL:HG23 | 4        | 0.29          |
| (1,517)  | 1:A:355:ARG:HG3  | 1:A:367:VAL:HG21 | 4        | 0.29          |
| (1,517)  | 1:A:355:ARG:HG3  | 1:A:367:VAL:HG22 | 4        | 0.29          |
| (1,517)  | 1:A:355:ARG:HG3  | 1:A:367:VAL:HG23 | 4        | 0.29          |
| (1,48)   | 1:A:385:MET:HB2  | 1:A:386:THR:HA   | 8        | 0.29          |
| (1,448)  | 1:A:374:ARG:H    | 1:A:385:MET:HB3  | 9        | 0.29          |
| (1,410)  | 1:A:353:PHE:HA   | 1:A:367:VAL:HA   | 8        | 0.29          |
| (1,335)  | 1:A:361:SER:HB3  | 1:A:363:ILE:HB   | 3        | 0.29          |
| (1,316)  | 1:A:354:ILE:HD11 | 1:A:355:ARG:H    | 7        | 0.29          |
| (1,316)  | 1:A:354:ILE:HD12 | 1:A:355:ARG:H    | 7        | 0.29          |
| (1,316)  | 1:A:354:ILE:HD13 | 1:A:355:ARG:H    | 7        | 0.29          |
| (1,296)  | 1:A:340:TYR:HA   | 1:A:340:TYR:HD2  | 1        | 0.29          |
| (1,248)  | 1:A:376:TRP:HD1  | 1:A:390:MET:HA   | 7        | 0.29          |
| (1,230)  | 1:A:376:TRP:HA   | 1:A:376:TRP:HZ3  | 7        | 0.29          |
| (1,203)  | 1:A:345:LEU:HG   | 1:A:355:ARG:HA   | 1        | 0.29          |
| (1,20)   | 1:A:345:LEU:H    | 1:A:354:ILE:HG21 | 10       | 0.29          |
| (1,20)   | 1:A:345:LEU:H    | 1:A:354:ILE:HG22 | 10       | 0.29          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,20)   | 1:A:345:LEU:H    | 1:A:354:ILE:HG23 | 10       | 0.29          |
| (1,1512) | 1:A:410:ARG:HA   | 1:A:411:LEU:HD11 | 4        | 0.29          |
| (1,1512) | 1:A:410:ARG:HA   | 1:A:411:LEU:HD12 | 4        | 0.29          |
| (1,1512) | 1:A:410:ARG:HA   | 1:A:411:LEU:HD13 | 4        | 0.29          |
| (1,1512) | 1:A:410:ARG:HA   | 1:A:411:LEU:HD21 | 4        | 0.29          |
| (1,1512) | 1:A:410:ARG:HA   | 1:A:411:LEU:HD22 | 4        | 0.29          |
| (1,1512) | 1:A:410:ARG:HA   | 1:A:411:LEU:HD23 | 4        | 0.29          |
| (1,1440) | 1:A:377:GLY:HA2  | 1:A:385:MET:HE1  | 1        | 0.29          |
| (1,1440) | 1:A:377:GLY:HA2  | 1:A:385:MET:HE2  | 1        | 0.29          |
| (1,1440) | 1:A:377:GLY:HA2  | 1:A:385:MET:HE3  | 1        | 0.29          |
| (1,1440) | 1:A:377:GLY:HA3  | 1:A:385:MET:HE1  | 1        | 0.29          |
| (1,1440) | 1:A:377:GLY:HA3  | 1:A:385:MET:HE2  | 1        | 0.29          |
| (1,1440) | 1:A:377:GLY:HA3  | 1:A:385:MET:HE3  | 1        | 0.29          |
| (1,1374) | 1:A:357:GLU:HG2  | 1:A:363:ILE:HG21 | 9        | 0.29          |
| (1,1374) | 1:A:357:GLU:HG2  | 1:A:363:ILE:HG22 | 9        | 0.29          |
| (1,1374) | 1:A:357:GLU:HG2  | 1:A:363:ILE:HG23 | 9        | 0.29          |
| (1,1374) | 1:A:357:GLU:HG3  | 1:A:363:ILE:HG21 | 9        | 0.29          |
| (1,1374) | 1:A:357:GLU:HG3  | 1:A:363:ILE:HG22 | 9        | 0.29          |
| (1,1374) | 1:A:357:GLU:HG3  | 1:A:363:ILE:HG23 | 9        | 0.29          |
| (1,1360) | 1:A:352:ASN:HB2  | 1:A:367:VAL:HB   | 8        | 0.29          |
| (1,1360) | 1:A:352:ASN:HB3  | 1:A:367:VAL:HB   | 8        | 0.29          |
| (1,1325) | 1:A:345:LEU:HD11 | 1:A:355:ARG:H    | 6        | 0.29          |
| (1,1325) | 1:A:345:LEU:HD12 | 1:A:355:ARG:H    | 6        | 0.29          |
| (1,1325) | 1:A:345:LEU:HD13 | 1:A:355:ARG:H    | 6        | 0.29          |
| (1,1325) | 1:A:345:LEU:HD21 | 1:A:355:ARG:H    | 6        | 0.29          |
| (1,1325) | 1:A:345:LEU:HD22 | 1:A:355:ARG:H    | 6        | 0.29          |
| (1,1325) | 1:A:345:LEU:HD23 | 1:A:355:ARG:H    | 6        | 0.29          |
| (1,1222) | 1:A:366:ILE:HG12 | 1:A:387:TYR:HE2  | 9        | 0.29          |
| (1,1222) | 1:A:366:ILE:HG13 | 1:A:387:TYR:HE2  | 9        | 0.29          |
| (1,121)  | 1:A:340:TYR:HE1  | 1:A:375:LEU:HB2  | 4        | 0.29          |
| (1,121)  | 1:A:340:TYR:HE1  | 1:A:375:LEU:HB3  | 4        | 0.29          |
| (1,1160) | 1:A:387:TYR:HB2  | 1:A:387:TYR:HD2  | 2        | 0.29          |
| (1,1160) | 1:A:387:TYR:HB2  | 1:A:387:TYR:HD2  | 3        | 0.29          |
| (1,1127) | 1:A:348:SER:H    | 1:A:350:TYR:H    | 4        | 0.29          |
| (1,11)   | 1:A:376:TRP:HE1  | 1:A:385:MET:HE1  | 4        | 0.29          |
| (1,11)   | 1:A:376:TRP:HE1  | 1:A:385:MET:HE2  | 4        | 0.29          |
| (1,11)   | 1:A:376:TRP:HE1  | 1:A:385:MET:HE3  | 4        | 0.29          |
| (1,1011) | 1:A:388:GLU:HG2  | 1:A:389:LYS:H    | 7        | 0.29          |
| (1,1011) | 1:A:388:GLU:HG3  | 1:A:389:LYS:H    | 7        | 0.29          |
| (1,896)  | 1:A:353:PHE:H    | 1:A:354:ILE:HB   | 1        | 0.28          |
| (1,895)  | 1:A:353:PHE:H    | 1:A:354:ILE:HG21 | 4        | 0.28          |
| (1,895)  | 1:A:353:PHE:H    | 1:A:354:ILE:HG22 | 4        | 0.28          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,895)  | 1:A:353:PHE:H    | 1:A:354:ILE:HG23 | 4        | 0.28          |
| (1,702)  | 1:A:353:PHE:HD2  | 1:A:372:LEU:H    | 7        | 0.28          |
| (1,701)  | 1:A:363:ILE:HD11 | 1:A:415:PHE:H    | 5        | 0.28          |
| (1,701)  | 1:A:363:ILE:HD12 | 1:A:415:PHE:H    | 5        | 0.28          |
| (1,701)  | 1:A:363:ILE:HD13 | 1:A:415:PHE:H    | 5        | 0.28          |
| (1,61)   | 1:A:343:GLN:H    | 1:A:343:GLN:HG2  | 1        | 0.28          |
| (1,61)   | 1:A:343:GLN:H    | 1:A:343:GLN:HG3  | 1        | 0.28          |
| (1,503)  | 1:A:406:GLU:H    | 1:A:412:LEU:HD21 | 8        | 0.28          |
| (1,503)  | 1:A:406:GLU:H    | 1:A:412:LEU:HD22 | 8        | 0.28          |
| (1,503)  | 1:A:406:GLU:H    | 1:A:412:LEU:HD23 | 8        | 0.28          |
| (1,495)  | 1:A:366:ILE:H    | 1:A:411:LEU:HD11 | 7        | 0.28          |
| (1,495)  | 1:A:366:ILE:H    | 1:A:411:LEU:HD12 | 7        | 0.28          |
| (1,495)  | 1:A:366:ILE:H    | 1:A:411:LEU:HD13 | 7        | 0.28          |
| (1,48)   | 1:A:385:MET:HB2  | 1:A:386:THR:HA   | 1        | 0.28          |
| (1,378)  | 1:A:337:LEU:HG   | 1:A:393:ALA:HB1  | 8        | 0.28          |
| (1,378)  | 1:A:337:LEU:HG   | 1:A:393:ALA:HB2  | 8        | 0.28          |
| (1,378)  | 1:A:337:LEU:HG   | 1:A:393:ALA:HB3  | 8        | 0.28          |
| (1,376)  | 1:A:373:ALA:HB1  | 1:A:376:TRP:HB3  | 2        | 0.28          |
| (1,376)  | 1:A:373:ALA:HB2  | 1:A:376:TRP:HB3  | 2        | 0.28          |
| (1,376)  | 1:A:373:ALA:HB3  | 1:A:376:TRP:HB3  | 2        | 0.28          |
| (1,359)  | 1:A:403:ILE:HG21 | 1:A:415:PHE:HE1  | 6        | 0.28          |
| (1,359)  | 1:A:403:ILE:HG22 | 1:A:415:PHE:HE1  | 6        | 0.28          |
| (1,359)  | 1:A:403:ILE:HG23 | 1:A:415:PHE:HE1  | 6        | 0.28          |
| (1,296)  | 1:A:340:TYR:HA   | 1:A:340:TYR:HD2  | 7        | 0.28          |
| (1,220)  | 1:A:356:TRP:HB2  | 1:A:359:LYS:HD2  | 2        | 0.28          |
| (1,220)  | 1:A:356:TRP:HB2  | 1:A:359:LYS:HD3  | 2        | 0.28          |
| (1,199)  | 1:A:345:LEU:HA   | 1:A:355:ARG:HA   | 10       | 0.28          |
| (1,182)  | 1:A:383:THR:HB   | 1:A:384:ASN:HA   | 7        | 0.28          |
| (1,1376) | 1:A:359:LYS:HA   | 1:A:362:LYS:HG2  | 9        | 0.28          |
| (1,1376) | 1:A:359:LYS:HA   | 1:A:362:LYS:HG3  | 9        | 0.28          |
| (1,1340) | 1:A:345:LEU:HD11 | 1:A:365:ARG:H    | 1        | 0.28          |
| (1,1340) | 1:A:345:LEU:HD12 | 1:A:365:ARG:H    | 1        | 0.28          |
| (1,1340) | 1:A:345:LEU:HD13 | 1:A:365:ARG:H    | 1        | 0.28          |
| (1,1340) | 1:A:345:LEU:HD21 | 1:A:365:ARG:H    | 1        | 0.28          |
| (1,1340) | 1:A:345:LEU:HD22 | 1:A:365:ARG:H    | 1        | 0.28          |
| (1,1340) | 1:A:345:LEU:HD23 | 1:A:365:ARG:H    | 1        | 0.28          |
| (1,1337) | 1:A:345:LEU:HD11 | 1:A:357:GLU:H    | 1        | 0.28          |
| (1,1337) | 1:A:345:LEU:HD12 | 1:A:357:GLU:H    | 1        | 0.28          |
| (1,1337) | 1:A:345:LEU:HD13 | 1:A:357:GLU:H    | 1        | 0.28          |
| (1,1337) | 1:A:345:LEU:HD21 | 1:A:357:GLU:H    | 1        | 0.28          |
| (1,1337) | 1:A:345:LEU:HD22 | 1:A:357:GLU:H    | 1        | 0.28          |
| (1,1337) | 1:A:345:LEU:HD23 | 1:A:357:GLU:H    | 1        | 0.28          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1328) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HG2  | 8        | 0.28          |
| (1,1328) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HG3  | 8        | 0.28          |
| (1,1328) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HG2  | 8        | 0.28          |
| (1,1328) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HG3  | 8        | 0.28          |
| (1,1328) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HG2  | 8        | 0.28          |
| (1,1328) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HG3  | 8        | 0.28          |
| (1,1328) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HG2  | 8        | 0.28          |
| (1,1328) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HG3  | 8        | 0.28          |
| (1,1328) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HG2  | 8        | 0.28          |
| (1,1328) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HG3  | 8        | 0.28          |
| (1,1328) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HG2  | 8        | 0.28          |
| (1,1328) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HG3  | 8        | 0.28          |
| (1,1234) | 1:A:327:HIS:HB2  | 1:A:328:MET:H    | 7        | 0.28          |
| (1,1234) | 1:A:327:HIS:HB3  | 1:A:328:MET:H    | 7        | 0.28          |
| (1,1204) | 1:A:398:TYR:HE1  | 1:A:404:ARG:HA   | 9        | 0.28          |
| (1,1160) | 1:A:387:TYR:HB2  | 1:A:387:TYR:HD2  | 6        | 0.28          |
| (1,1130) | 1:A:340:TYR:H    | 1:A:340:TYR:HD2  | 2        | 0.28          |
| (1,1130) | 1:A:340:TYR:H    | 1:A:340:TYR:HD2  | 10       | 0.28          |
| (1,1104) | 1:A:354:ILE:H    | 1:A:366:ILE:HA   | 10       | 0.28          |
| (1,1070) | 1:A:417:LYS:HE2  | 1:A:421:GLU:H    | 1        | 0.28          |
| (1,1070) | 1:A:417:LYS:HE3  | 1:A:421:GLU:H    | 1        | 0.28          |
| (1,920)  | 1:A:362:LYS:H    | 1:A:362:LYS:HG2  | 2        | 0.27          |
| (1,908)  | 1:A:366:ILE:HA   | 1:A:368:ASP:H    | 6        | 0.27          |
| (1,846)  | 1:A:361:SER:H    | 1:A:363:ILE:HD11 | 1        | 0.27          |
| (1,846)  | 1:A:361:SER:H    | 1:A:363:ILE:HD12 | 1        | 0.27          |
| (1,846)  | 1:A:361:SER:H    | 1:A:363:ILE:HD13 | 1        | 0.27          |
| (1,802)  | 1:A:354:ILE:HD11 | 1:A:365:ARG:H    | 3        | 0.27          |
| (1,802)  | 1:A:354:ILE:HD12 | 1:A:365:ARG:H    | 3        | 0.27          |
| (1,802)  | 1:A:354:ILE:HD13 | 1:A:365:ARG:H    | 3        | 0.27          |
| (1,643)  | 1:A:406:GLU:H    | 1:A:413:PHE:HB3  | 5        | 0.27          |
| (1,609)  | 1:A:398:TYR:H    | 1:A:403:ILE:H    | 7        | 0.27          |
| (1,534)  | 1:A:345:LEU:HD11 | 1:A:364:PHE:HD2  | 5        | 0.27          |
| (1,534)  | 1:A:345:LEU:HD12 | 1:A:364:PHE:HD2  | 5        | 0.27          |
| (1,534)  | 1:A:345:LEU:HD13 | 1:A:364:PHE:HD2  | 5        | 0.27          |
| (1,499)  | 1:A:369:PRO:HA   | 1:A:411:LEU:HD11 | 1        | 0.27          |
| (1,499)  | 1:A:369:PRO:HA   | 1:A:411:LEU:HD12 | 1        | 0.27          |
| (1,499)  | 1:A:369:PRO:HA   | 1:A:411:LEU:HD13 | 1        | 0.27          |
| (1,421)  | 1:A:405:LYS:HA   | 1:A:413:PHE:HB3  | 4        | 0.27          |
| (1,393)  | 1:A:366:ILE:HG21 | 1:A:372:LEU:H    | 6        | 0.27          |
| (1,393)  | 1:A:366:ILE:HG22 | 1:A:372:LEU:H    | 6        | 0.27          |
| (1,393)  | 1:A:366:ILE:HG23 | 1:A:372:LEU:H    | 6        | 0.27          |
| (1,393)  | 1:A:366:ILE:HG21 | 1:A:372:LEU:H    | 9        | 0.27          |

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| Key      | Atom-1           | Atom-2          | Model ID | Violation (Å) |
|----------|------------------|-----------------|----------|---------------|
| (1,393)  | 1:A:366:ILE:HG22 | 1:A:372:LEU:H   | 9        | 0.27          |
| (1,393)  | 1:A:366:ILE:HG23 | 1:A:372:LEU:H   | 9        | 0.27          |
| (1,380)  | 1:A:363:ILE:HG21 | 1:A:364:PHE:HD1 | 4        | 0.27          |
| (1,380)  | 1:A:363:ILE:HG22 | 1:A:364:PHE:HD1 | 4        | 0.27          |
| (1,380)  | 1:A:363:ILE:HG23 | 1:A:364:PHE:HD1 | 4        | 0.27          |
| (1,377)  | 1:A:373:ALA:HB1  | 1:A:385:MET:HB3 | 9        | 0.27          |
| (1,377)  | 1:A:373:ALA:HB2  | 1:A:385:MET:HB3 | 9        | 0.27          |
| (1,377)  | 1:A:373:ALA:HB3  | 1:A:385:MET:HB3 | 9        | 0.27          |
| (1,377)  | 1:A:373:ALA:HB1  | 1:A:385:MET:HB2 | 9        | 0.27          |
| (1,377)  | 1:A:373:ALA:HB2  | 1:A:385:MET:HB2 | 9        | 0.27          |
| (1,377)  | 1:A:373:ALA:HB3  | 1:A:385:MET:HB2 | 9        | 0.27          |
| (1,1532) | 1:A:420:ASP:HB2  | 1:A:421:GLU:H   | 4        | 0.27          |
| (1,1532) | 1:A:420:ASP:HB3  | 1:A:421:GLU:H   | 4        | 0.27          |
| (1,1522) | 1:A:416:MET:H    | 1:A:417:LYS:HB2 | 8        | 0.27          |
| (1,1522) | 1:A:416:MET:H    | 1:A:417:LYS:HB3 | 8        | 0.27          |
| (1,1440) | 1:A:377:GLY:HA2  | 1:A:385:MET:HE1 | 9        | 0.27          |
| (1,1440) | 1:A:377:GLY:HA2  | 1:A:385:MET:HE2 | 9        | 0.27          |
| (1,1440) | 1:A:377:GLY:HA2  | 1:A:385:MET:HE3 | 9        | 0.27          |
| (1,1440) | 1:A:377:GLY:HA3  | 1:A:385:MET:HE1 | 9        | 0.27          |
| (1,1440) | 1:A:377:GLY:HA3  | 1:A:385:MET:HE2 | 9        | 0.27          |
| (1,1440) | 1:A:377:GLY:HA3  | 1:A:385:MET:HE3 | 9        | 0.27          |
| (1,1234) | 1:A:327:HIS:HB2  | 1:A:328:MET:H   | 4        | 0.27          |
| (1,1234) | 1:A:327:HIS:HB3  | 1:A:328:MET:H   | 4        | 0.27          |
| (1,121)  | 1:A:340:TYR:HE1  | 1:A:375:LEU:HB2 | 10       | 0.27          |
| (1,121)  | 1:A:340:TYR:HE1  | 1:A:375:LEU:HB3 | 10       | 0.27          |
| (1,1202) | 1:A:397:TYR:HA   | 1:A:397:TYR:HE1 | 9        | 0.27          |
| (1,1201) | 1:A:394:LEU:HG   | 1:A:397:TYR:HE2 | 3        | 0.27          |
| (1,1172) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HG  | 9        | 0.27          |
| (1,1035) | 1:A:358:ASP:HB2  | 1:A:360:GLU:H   | 2        | 0.27          |
| (1,1035) | 1:A:358:ASP:HB3  | 1:A:360:GLU:H   | 2        | 0.27          |
| (1,1)    | 1:A:373:ALA:HB1  | 1:A:385:MET:HE1 | 6        | 0.27          |
| (1,1)    | 1:A:373:ALA:HB1  | 1:A:385:MET:HE2 | 6        | 0.27          |
| (1,1)    | 1:A:373:ALA:HB1  | 1:A:385:MET:HE3 | 6        | 0.27          |
| (1,1)    | 1:A:373:ALA:HB2  | 1:A:385:MET:HE1 | 6        | 0.27          |
| (1,1)    | 1:A:373:ALA:HB2  | 1:A:385:MET:HE2 | 6        | 0.27          |
| (1,1)    | 1:A:373:ALA:HB2  | 1:A:385:MET:HE3 | 6        | 0.27          |
| (1,1)    | 1:A:373:ALA:HB3  | 1:A:385:MET:HE1 | 6        | 0.27          |
| (1,1)    | 1:A:373:ALA:HB3  | 1:A:385:MET:HE2 | 6        | 0.27          |
| (1,1)    | 1:A:373:ALA:HB3  | 1:A:385:MET:HE3 | 6        | 0.27          |
| (1,977)  | 1:A:402:ILE:HG21 | 1:A:417:LYS:H   | 5        | 0.26          |
| (1,977)  | 1:A:402:ILE:HG22 | 1:A:417:LYS:H   | 5        | 0.26          |
| (1,977)  | 1:A:402:ILE:HG23 | 1:A:417:LYS:H   | 5        | 0.26          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,946)  | 1:A:358:ASP:H    | 1:A:363:ILE:HG21 | 9        | 0.26          |
| (1,946)  | 1:A:358:ASP:H    | 1:A:363:ILE:HG22 | 9        | 0.26          |
| (1,946)  | 1:A:358:ASP:H    | 1:A:363:ILE:HG23 | 9        | 0.26          |
| (1,936)  | 1:A:358:ASP:H    | 1:A:364:PHE:HA   | 6        | 0.26          |
| (1,908)  | 1:A:366:ILE:HA   | 1:A:368:ASP:H    | 1        | 0.26          |
| (1,897)  | 1:A:353:PHE:H    | 1:A:367:VAL:HB   | 9        | 0.26          |
| (1,896)  | 1:A:353:PHE:H    | 1:A:354:ILE:HB   | 7        | 0.26          |
| (1,893)  | 1:A:369:PRO:HB2  | 1:A:370:ASN:H    | 7        | 0.26          |
| (1,820)  | 1:A:366:ILE:HG21 | 1:A:371:GLY:H    | 1        | 0.26          |
| (1,820)  | 1:A:366:ILE:HG22 | 1:A:371:GLY:H    | 1        | 0.26          |
| (1,820)  | 1:A:366:ILE:HG23 | 1:A:371:GLY:H    | 1        | 0.26          |
| (1,715)  | 1:A:349:ARG:H    | 1:A:351:GLU:H    | 6        | 0.26          |
| (1,673)  | 1:A:365:ARG:HD2  | 1:A:366:ILE:H    | 5        | 0.26          |
| (1,626)  | 1:A:355:ARG:H    | 1:A:367:VAL:H    | 2        | 0.26          |
| (1,48)   | 1:A:385:MET:HB2  | 1:A:386:THR:HA   | 7        | 0.26          |
| (1,326)  | 1:A:341:VAL:HA   | 1:A:354:ILE:HD11 | 6        | 0.26          |
| (1,326)  | 1:A:341:VAL:HA   | 1:A:354:ILE:HD12 | 6        | 0.26          |
| (1,326)  | 1:A:341:VAL:HA   | 1:A:354:ILE:HD13 | 6        | 0.26          |
| (1,296)  | 1:A:340:TYR:HA   | 1:A:340:TYR:HD2  | 4        | 0.26          |
| (1,296)  | 1:A:340:TYR:HA   | 1:A:340:TYR:HD2  | 10       | 0.26          |
| (1,200)  | 1:A:355:ARG:HA   | 1:A:355:ARG:HD2  | 8        | 0.26          |
| (1,200)  | 1:A:355:ARG:HA   | 1:A:355:ARG:HD3  | 8        | 0.26          |
| (1,1502) | 1:A:406:GLU:HG2  | 1:A:414:ARG:H    | 4        | 0.26          |
| (1,1502) | 1:A:406:GLU:HG3  | 1:A:414:ARG:H    | 4        | 0.26          |
| (1,1410) | 1:A:372:LEU:HD11 | 1:A:375:LEU:H    | 4        | 0.26          |
| (1,1410) | 1:A:372:LEU:HD12 | 1:A:375:LEU:H    | 4        | 0.26          |
| (1,1410) | 1:A:372:LEU:HD13 | 1:A:375:LEU:H    | 4        | 0.26          |
| (1,1410) | 1:A:372:LEU:HD21 | 1:A:375:LEU:H    | 4        | 0.26          |
| (1,1410) | 1:A:372:LEU:HD22 | 1:A:375:LEU:H    | 4        | 0.26          |
| (1,1410) | 1:A:372:LEU:HD23 | 1:A:375:LEU:H    | 4        | 0.26          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD11 | 1        | 0.26          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD12 | 1        | 0.26          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD13 | 1        | 0.26          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD21 | 1        | 0.26          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD22 | 1        | 0.26          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD23 | 1        | 0.26          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD11 | 7        | 0.26          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD12 | 7        | 0.26          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD13 | 7        | 0.26          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD21 | 7        | 0.26          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD22 | 7        | 0.26          |
| (1,1363) | 1:A:353:PHE:HB2  | 1:A:372:LEU:HD23 | 7        | 0.26          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD11 | 3        | 0.26          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD12 | 3        | 0.26          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD13 | 3        | 0.26          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD21 | 3        | 0.26          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD22 | 3        | 0.26          |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD23 | 3        | 0.26          |
| (1,1321) | 1:A:345:LEU:HD11 | 1:A:354:ILE:HA   | 3        | 0.26          |
| (1,1321) | 1:A:345:LEU:HD12 | 1:A:354:ILE:HA   | 3        | 0.26          |
| (1,1321) | 1:A:345:LEU:HD13 | 1:A:354:ILE:HA   | 3        | 0.26          |
| (1,1321) | 1:A:345:LEU:HD21 | 1:A:354:ILE:HA   | 3        | 0.26          |
| (1,1321) | 1:A:345:LEU:HD22 | 1:A:354:ILE:HA   | 3        | 0.26          |
| (1,1321) | 1:A:345:LEU:HD23 | 1:A:354:ILE:HA   | 3        | 0.26          |
| (1,1246) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HH2  | 4        | 0.26          |
| (1,1246) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HH2  | 4        | 0.26          |
| (1,1246) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HH2  | 4        | 0.26          |
| (1,1246) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HH2  | 4        | 0.26          |
| (1,1246) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HH2  | 4        | 0.26          |
| (1,1246) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HH2  | 4        | 0.26          |
| (1,1180) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HA   | 8        | 0.26          |
| (1,1160) | 1:A:387:TYR:HB2  | 1:A:387:TYR:HD2  | 10       | 0.26          |
| (1,1145) | 1:A:343:GLN:HA   | 1:A:343:GLN:HE22 | 6        | 0.26          |
| (1,1108) | 1:A:354:ILE:H    | 1:A:367:VAL:H    | 5        | 0.26          |
| (1,1107) | 1:A:328:MET:H    | 1:A:329:GLY:HA2  | 1        | 0.26          |
| (1,1107) | 1:A:328:MET:H    | 1:A:329:GLY:HA3  | 1        | 0.26          |
| (1,1084) | 1:A:376:TRP:H    | 1:A:378:ASN:HB2  | 3        | 0.26          |
| (1,992)  | 1:A:359:LYS:HA   | 1:A:363:ILE:H    | 4        | 0.25          |
| (1,943)  | 1:A:400:LEU:H    | 1:A:400:LEU:HG   | 7        | 0.25          |
| (1,908)  | 1:A:366:ILE:HA   | 1:A:368:ASP:H    | 8        | 0.25          |
| (1,762)  | 1:A:413:PHE:H    | 1:A:413:PHE:HD1  | 6        | 0.25          |
| (1,712)  | 1:A:404:ARG:H    | 1:A:416:MET:HG2  | 9        | 0.25          |
| (1,712)  | 1:A:404:ARG:H    | 1:A:416:MET:HG3  | 9        | 0.25          |
| (1,702)  | 1:A:353:PHE:HD2  | 1:A:372:LEU:H    | 6        | 0.25          |
| (1,677)  | 1:A:366:ILE:H    | 1:A:366:ILE:HD11 | 4        | 0.25          |
| (1,677)  | 1:A:366:ILE:H    | 1:A:366:ILE:HD12 | 4        | 0.25          |
| (1,677)  | 1:A:366:ILE:H    | 1:A:366:ILE:HD13 | 4        | 0.25          |
| (1,594)  | 1:A:346:SER:HB2  | 1:A:356:TRP:HE1  | 10       | 0.25          |
| (1,594)  | 1:A:346:SER:HB3  | 1:A:356:TRP:HE1  | 10       | 0.25          |
| (1,569)  | 1:A:354:ILE:H    | 1:A:367:VAL:HG11 | 6        | 0.25          |
| (1,569)  | 1:A:354:ILE:H    | 1:A:367:VAL:HG12 | 6        | 0.25          |
| (1,569)  | 1:A:354:ILE:H    | 1:A:367:VAL:HG13 | 6        | 0.25          |
| (1,504)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD21 | 4        | 0.25          |
| (1,504)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD22 | 4        | 0.25          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,504)  | 1:A:358:ASP:H    | 1:A:412:LEU:HD23 | 4        | 0.25          |
| (1,472)  | 1:A:354:ILE:HG12 | 1:A:367:VAL:H    | 10       | 0.25          |
| (1,358)  | 1:A:397:TYR:H    | 1:A:403:ILE:HG21 | 1        | 0.25          |
| (1,358)  | 1:A:397:TYR:H    | 1:A:403:ILE:HG22 | 1        | 0.25          |
| (1,358)  | 1:A:397:TYR:H    | 1:A:403:ILE:HG23 | 1        | 0.25          |
| (1,357)  | 1:A:332:ALA:HB1  | 1:A:333:ASP:HB2  | 7        | 0.25          |
| (1,357)  | 1:A:332:ALA:HB1  | 1:A:333:ASP:HB3  | 7        | 0.25          |
| (1,357)  | 1:A:332:ALA:HB2  | 1:A:333:ASP:HB2  | 7        | 0.25          |
| (1,357)  | 1:A:332:ALA:HB2  | 1:A:333:ASP:HB3  | 7        | 0.25          |
| (1,357)  | 1:A:332:ALA:HB3  | 1:A:333:ASP:HB2  | 7        | 0.25          |
| (1,357)  | 1:A:332:ALA:HB3  | 1:A:333:ASP:HB3  | 7        | 0.25          |
| (1,344)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG21 | 3        | 0.25          |
| (1,344)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG22 | 3        | 0.25          |
| (1,344)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG23 | 3        | 0.25          |
| (1,323)  | 1:A:345:LEU:H    | 1:A:354:ILE:HD11 | 9        | 0.25          |
| (1,323)  | 1:A:345:LEU:H    | 1:A:354:ILE:HD12 | 9        | 0.25          |
| (1,323)  | 1:A:345:LEU:H    | 1:A:354:ILE:HD13 | 9        | 0.25          |
| (1,296)  | 1:A:340:TYR:HA   | 1:A:340:TYR:HD2  | 6        | 0.25          |
| (1,250)  | 1:A:358:ASP:H    | 1:A:359:LYS:HA   | 7        | 0.25          |
| (1,230)  | 1:A:376:TRP:HA   | 1:A:376:TRP:HZ3  | 10       | 0.25          |
| (1,226)  | 1:A:349:ARG:HA   | 1:A:351:GLU:H    | 6        | 0.25          |
| (1,19)   | 1:A:344:LEU:H    | 1:A:354:ILE:HG21 | 6        | 0.25          |
| (1,19)   | 1:A:344:LEU:H    | 1:A:354:ILE:HG22 | 6        | 0.25          |
| (1,19)   | 1:A:344:LEU:H    | 1:A:354:ILE:HG23 | 6        | 0.25          |
| (1,19)   | 1:A:344:LEU:H    | 1:A:354:ILE:HG21 | 7        | 0.25          |
| (1,19)   | 1:A:344:LEU:H    | 1:A:354:ILE:HG22 | 7        | 0.25          |
| (1,19)   | 1:A:344:LEU:H    | 1:A:354:ILE:HG23 | 7        | 0.25          |
| (1,1502) | 1:A:406:GLU:HG2  | 1:A:414:ARG:H    | 6        | 0.25          |
| (1,1502) | 1:A:406:GLU:HG3  | 1:A:414:ARG:H    | 6        | 0.25          |
| (1,1468) | 1:A:394:LEU:HD11 | 1:A:397:TYR:HE2  | 4        | 0.25          |
| (1,1468) | 1:A:394:LEU:HD12 | 1:A:397:TYR:HE2  | 4        | 0.25          |
| (1,1468) | 1:A:394:LEU:HD13 | 1:A:397:TYR:HE2  | 4        | 0.25          |
| (1,1468) | 1:A:394:LEU:HD21 | 1:A:397:TYR:HE2  | 4        | 0.25          |
| (1,1468) | 1:A:394:LEU:HD22 | 1:A:397:TYR:HE2  | 4        | 0.25          |
| (1,1468) | 1:A:394:LEU:HD23 | 1:A:397:TYR:HE2  | 4        | 0.25          |
| (1,1435) | 1:A:376:TRP:HH2  | 1:A:380:LYS:HE2  | 4        | 0.25          |
| (1,1435) | 1:A:376:TRP:HH2  | 1:A:380:LYS:HE3  | 4        | 0.25          |
| (1,1360) | 1:A:352:ASN:HB2  | 1:A:367:VAL:HB   | 2        | 0.25          |
| (1,1360) | 1:A:352:ASN:HB3  | 1:A:367:VAL:HB   | 2        | 0.25          |
| (1,1332) | 1:A:345:LEU:HD11 | 1:A:356:TRP:HB2  | 10       | 0.25          |
| (1,1332) | 1:A:345:LEU:HD12 | 1:A:356:TRP:HB2  | 10       | 0.25          |
| (1,1332) | 1:A:345:LEU:HD13 | 1:A:356:TRP:HB2  | 10       | 0.25          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1332) | 1:A:345:LEU:HD21 | 1:A:356:TRP:HB2  | 10       | 0.25          |
| (1,1332) | 1:A:345:LEU:HD22 | 1:A:356:TRP:HB2  | 10       | 0.25          |
| (1,1332) | 1:A:345:LEU:HD23 | 1:A:356:TRP:HB2  | 10       | 0.25          |
| (1,1250) | 1:A:337:LEU:HB2  | 1:A:341:VAL:HB   | 9        | 0.25          |
| (1,1250) | 1:A:337:LEU:HB3  | 1:A:341:VAL:HB   | 9        | 0.25          |
| (1,1245) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HZ2  | 5        | 0.25          |
| (1,1245) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HZ2  | 5        | 0.25          |
| (1,1245) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HZ2  | 5        | 0.25          |
| (1,1245) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HZ2  | 5        | 0.25          |
| (1,1245) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HZ2  | 5        | 0.25          |
| (1,1245) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HZ2  | 5        | 0.25          |
| (1,1244) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HE1  | 2        | 0.25          |
| (1,1244) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HE1  | 2        | 0.25          |
| (1,1244) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HE1  | 2        | 0.25          |
| (1,1244) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HE1  | 2        | 0.25          |
| (1,1244) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HE1  | 2        | 0.25          |
| (1,1244) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HE1  | 2        | 0.25          |
| (1,1196) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD21 | 10       | 0.25          |
| (1,1196) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD22 | 10       | 0.25          |
| (1,1196) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD23 | 10       | 0.25          |
| (1,116)  | 1:A:353:PHE:HB2  | 1:A:372:LEU:HG   | 6        | 0.25          |
| (1,1129) | 1:A:398:TYR:H    | 1:A:402:ILE:HD11 | 2        | 0.25          |
| (1,1129) | 1:A:398:TYR:H    | 1:A:402:ILE:HD12 | 2        | 0.25          |
| (1,1129) | 1:A:398:TYR:H    | 1:A:402:ILE:HD13 | 2        | 0.25          |
| (1,999)  | 1:A:331:ILE:HG21 | 1:A:333:ASP:H    | 2        | 0.24          |
| (1,999)  | 1:A:331:ILE:HG22 | 1:A:333:ASP:H    | 2        | 0.24          |
| (1,999)  | 1:A:331:ILE:HG23 | 1:A:333:ASP:H    | 2        | 0.24          |
| (1,992)  | 1:A:359:LYS:HA   | 1:A:363:ILE:H    | 5        | 0.24          |
| (1,981)  | 1:A:374:ARG:H    | 1:A:374:ARG:HD2  | 2        | 0.24          |
| (1,981)  | 1:A:374:ARG:H    | 1:A:374:ARG:HD3  | 2        | 0.24          |
| (1,981)  | 1:A:374:ARG:H    | 1:A:374:ARG:HD2  | 4        | 0.24          |
| (1,981)  | 1:A:374:ARG:H    | 1:A:374:ARG:HD3  | 4        | 0.24          |
| (1,946)  | 1:A:358:ASP:H    | 1:A:363:ILE:HG21 | 6        | 0.24          |
| (1,946)  | 1:A:358:ASP:H    | 1:A:363:ILE:HG22 | 6        | 0.24          |
| (1,946)  | 1:A:358:ASP:H    | 1:A:363:ILE:HG23 | 6        | 0.24          |
| (1,920)  | 1:A:362:LYS:H    | 1:A:362:LYS:HG2  | 4        | 0.24          |
| (1,911)  | 1:A:366:ILE:HG21 | 1:A:368:ASP:H    | 7        | 0.24          |
| (1,911)  | 1:A:366:ILE:HG22 | 1:A:368:ASP:H    | 7        | 0.24          |
| (1,911)  | 1:A:366:ILE:HG23 | 1:A:368:ASP:H    | 7        | 0.24          |
| (1,844)  | 1:A:359:LYS:HA   | 1:A:361:SER:H    | 1        | 0.24          |
| (1,844)  | 1:A:359:LYS:HA   | 1:A:361:SER:H    | 2        | 0.24          |
| (1,842)  | 1:A:358:ASP:HA   | 1:A:361:SER:H    | 2        | 0.24          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,802)  | 1:A:354:ILE:HD11 | 1:A:365:ARG:H    | 8        | 0.24          |
| (1,802)  | 1:A:354:ILE:HD12 | 1:A:365:ARG:H    | 8        | 0.24          |
| (1,802)  | 1:A:354:ILE:HD13 | 1:A:365:ARG:H    | 8        | 0.24          |
| (1,483)  | 1:A:363:ILE:HD11 | 1:A:414:ARG:HG2  | 10       | 0.24          |
| (1,483)  | 1:A:363:ILE:HD11 | 1:A:414:ARG:HG3  | 10       | 0.24          |
| (1,483)  | 1:A:363:ILE:HD12 | 1:A:414:ARG:HG2  | 10       | 0.24          |
| (1,483)  | 1:A:363:ILE:HD12 | 1:A:414:ARG:HG3  | 10       | 0.24          |
| (1,483)  | 1:A:363:ILE:HD13 | 1:A:414:ARG:HG2  | 10       | 0.24          |
| (1,483)  | 1:A:363:ILE:HD13 | 1:A:414:ARG:HG3  | 10       | 0.24          |
| (1,46)   | 1:A:385:MET:HB3  | 1:A:386:THR:HG21 | 8        | 0.24          |
| (1,46)   | 1:A:385:MET:HB3  | 1:A:386:THR:HG22 | 8        | 0.24          |
| (1,46)   | 1:A:385:MET:HB3  | 1:A:386:THR:HG23 | 8        | 0.24          |
| (1,454)  | 1:A:396:HIS:HB2  | 1:A:399:LYS:HB2  | 7        | 0.24          |
| (1,454)  | 1:A:396:HIS:HB2  | 1:A:399:LYS:HB3  | 7        | 0.24          |
| (1,454)  | 1:A:396:HIS:HB3  | 1:A:399:LYS:HB2  | 7        | 0.24          |
| (1,454)  | 1:A:396:HIS:HB3  | 1:A:399:LYS:HB3  | 7        | 0.24          |
| (1,375)  | 1:A:373:ALA:HB1  | 1:A:374:ARG:HD2  | 7        | 0.24          |
| (1,375)  | 1:A:373:ALA:HB1  | 1:A:374:ARG:HD3  | 7        | 0.24          |
| (1,375)  | 1:A:373:ALA:HB2  | 1:A:374:ARG:HD2  | 7        | 0.24          |
| (1,375)  | 1:A:373:ALA:HB2  | 1:A:374:ARG:HD3  | 7        | 0.24          |
| (1,375)  | 1:A:373:ALA:HB3  | 1:A:374:ARG:HD2  | 7        | 0.24          |
| (1,375)  | 1:A:373:ALA:HB3  | 1:A:374:ARG:HD3  | 7        | 0.24          |
| (1,344)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG21 | 1        | 0.24          |
| (1,344)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG22 | 1        | 0.24          |
| (1,344)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG23 | 1        | 0.24          |
| (1,330)  | 1:A:358:ASP:HA   | 1:A:361:SER:HB2  | 4        | 0.24          |
| (1,300)  | 1:A:383:THR:HA   | 1:A:385:MET:H    | 10       | 0.24          |
| (1,1440) | 1:A:377:GLY:HA2  | 1:A:385:MET:HE1  | 7        | 0.24          |
| (1,1440) | 1:A:377:GLY:HA2  | 1:A:385:MET:HE2  | 7        | 0.24          |
| (1,1440) | 1:A:377:GLY:HA2  | 1:A:385:MET:HE3  | 7        | 0.24          |
| (1,1440) | 1:A:377:GLY:HA3  | 1:A:385:MET:HE1  | 7        | 0.24          |
| (1,1440) | 1:A:377:GLY:HA3  | 1:A:385:MET:HE2  | 7        | 0.24          |
| (1,1440) | 1:A:377:GLY:HA3  | 1:A:385:MET:HE3  | 7        | 0.24          |
| (1,1435) | 1:A:376:TRP:HH2  | 1:A:380:LYS:HE2  | 3        | 0.24          |
| (1,1435) | 1:A:376:TRP:HH2  | 1:A:380:LYS:HE3  | 3        | 0.24          |
| (1,14)   | 1:A:345:LEU:HA   | 1:A:354:ILE:HG21 | 4        | 0.24          |
| (1,14)   | 1:A:345:LEU:HA   | 1:A:354:ILE:HG22 | 4        | 0.24          |
| (1,14)   | 1:A:345:LEU:HA   | 1:A:354:ILE:HG23 | 4        | 0.24          |
| (1,1397) | 1:A:369:PRO:HD2  | 1:A:411:LEU:HD11 | 1        | 0.24          |
| (1,1397) | 1:A:369:PRO:HD2  | 1:A:411:LEU:HD12 | 1        | 0.24          |
| (1,1397) | 1:A:369:PRO:HD2  | 1:A:411:LEU:HD13 | 1        | 0.24          |
| (1,1397) | 1:A:369:PRO:HD2  | 1:A:411:LEU:HD21 | 1        | 0.24          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1397) | 1:A:369:PRO:HD2  | 1:A:411:LEU:HD22 | 1        | 0.24          |
| (1,1397) | 1:A:369:PRO:HD2  | 1:A:411:LEU:HD23 | 1        | 0.24          |
| (1,1397) | 1:A:369:PRO:HD3  | 1:A:411:LEU:HD11 | 1        | 0.24          |
| (1,1397) | 1:A:369:PRO:HD3  | 1:A:411:LEU:HD12 | 1        | 0.24          |
| (1,1397) | 1:A:369:PRO:HD3  | 1:A:411:LEU:HD13 | 1        | 0.24          |
| (1,1397) | 1:A:369:PRO:HD3  | 1:A:411:LEU:HD21 | 1        | 0.24          |
| (1,1397) | 1:A:369:PRO:HD3  | 1:A:411:LEU:HD22 | 1        | 0.24          |
| (1,1397) | 1:A:369:PRO:HD3  | 1:A:411:LEU:HD23 | 1        | 0.24          |
| (1,136)  | 1:A:356:TRP:HZ2  | 1:A:359:LYS:HE2  | 1        | 0.24          |
| (1,136)  | 1:A:356:TRP:HZ2  | 1:A:359:LYS:HE3  | 1        | 0.24          |
| (1,1328) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HG2  | 9        | 0.24          |
| (1,1328) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HG3  | 9        | 0.24          |
| (1,1328) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HG2  | 9        | 0.24          |
| (1,1328) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HG3  | 9        | 0.24          |
| (1,1328) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HG2  | 9        | 0.24          |
| (1,1328) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HG3  | 9        | 0.24          |
| (1,1328) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HG2  | 9        | 0.24          |
| (1,1328) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HG3  | 9        | 0.24          |
| (1,1328) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HG2  | 9        | 0.24          |
| (1,1328) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HG3  | 9        | 0.24          |
| (1,1328) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HG2  | 9        | 0.24          |
| (1,1328) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HG3  | 9        | 0.24          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD11 | 8        | 0.24          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD12 | 8        | 0.24          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD13 | 8        | 0.24          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD21 | 8        | 0.24          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD22 | 8        | 0.24          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD23 | 8        | 0.24          |
| (1,1245) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HZ2  | 9        | 0.24          |
| (1,1245) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HZ2  | 9        | 0.24          |
| (1,1245) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HZ2  | 9        | 0.24          |
| (1,1245) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HZ2  | 9        | 0.24          |
| (1,1245) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HZ2  | 9        | 0.24          |
| (1,1245) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HZ2  | 9        | 0.24          |
| (1,1206) | 1:A:397:TYR:HB2  | 1:A:398:TYR:HE2  | 2        | 0.24          |
| (1,1202) | 1:A:397:TYR:HA   | 1:A:397:TYR:HE1  | 4        | 0.24          |
| (1,1160) | 1:A:387:TYR:HB2  | 1:A:387:TYR:HD2  | 9        | 0.24          |
| (1,1127) | 1:A:348:SER:H    | 1:A:350:TYR:H    | 5        | 0.24          |
| (1,1108) | 1:A:354:ILE:H    | 1:A:367:VAL:H    | 6        | 0.24          |
| (1,1)    | 1:A:373:ALA:HB1  | 1:A:385:MET:HE1  | 10       | 0.24          |
| (1,1)    | 1:A:373:ALA:HB1  | 1:A:385:MET:HE2  | 10       | 0.24          |
| (1,1)    | 1:A:373:ALA:HB1  | 1:A:385:MET:HE3  | 10       | 0.24          |

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| Key     | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|---------|------------------|------------------|----------|---------------|
| (1,1)   | 1:A:373:ALA:HB2  | 1:A:385:MET:HE1  | 10       | 0.24          |
| (1,1)   | 1:A:373:ALA:HB2  | 1:A:385:MET:HE2  | 10       | 0.24          |
| (1,1)   | 1:A:373:ALA:HB2  | 1:A:385:MET:HE3  | 10       | 0.24          |
| (1,1)   | 1:A:373:ALA:HB3  | 1:A:385:MET:HE1  | 10       | 0.24          |
| (1,1)   | 1:A:373:ALA:HB3  | 1:A:385:MET:HE2  | 10       | 0.24          |
| (1,1)   | 1:A:373:ALA:HB3  | 1:A:385:MET:HE3  | 10       | 0.24          |
| (1,99)  | 1:A:375:LEU:HB2  | 1:A:378:ASN:HB2  | 3        | 0.23          |
| (1,99)  | 1:A:375:LEU:HB3  | 1:A:378:ASN:HB2  | 3        | 0.23          |
| (1,99)  | 1:A:375:LEU:HB2  | 1:A:378:ASN:HB2  | 7        | 0.23          |
| (1,99)  | 1:A:375:LEU:HB3  | 1:A:378:ASN:HB2  | 7        | 0.23          |
| (1,981) | 1:A:374:ARG:H    | 1:A:374:ARG:HD2  | 3        | 0.23          |
| (1,981) | 1:A:374:ARG:H    | 1:A:374:ARG:HD3  | 3        | 0.23          |
| (1,981) | 1:A:374:ARG:H    | 1:A:374:ARG:HD2  | 5        | 0.23          |
| (1,981) | 1:A:374:ARG:H    | 1:A:374:ARG:HD3  | 5        | 0.23          |
| (1,977) | 1:A:402:ILE:HG21 | 1:A:417:LYS:H    | 9        | 0.23          |
| (1,977) | 1:A:402:ILE:HG22 | 1:A:417:LYS:H    | 9        | 0.23          |
| (1,977) | 1:A:402:ILE:HG23 | 1:A:417:LYS:H    | 9        | 0.23          |
| (1,948) | 1:A:358:ASP:H    | 1:A:412:LEU:HD11 | 3        | 0.23          |
| (1,948) | 1:A:358:ASP:H    | 1:A:412:LEU:HD12 | 3        | 0.23          |
| (1,948) | 1:A:358:ASP:H    | 1:A:412:LEU:HD13 | 3        | 0.23          |
| (1,948) | 1:A:358:ASP:H    | 1:A:412:LEU:HD11 | 7        | 0.23          |
| (1,948) | 1:A:358:ASP:H    | 1:A:412:LEU:HD12 | 7        | 0.23          |
| (1,948) | 1:A:358:ASP:H    | 1:A:412:LEU:HD13 | 7        | 0.23          |
| (1,946) | 1:A:358:ASP:H    | 1:A:363:ILE:HG21 | 1        | 0.23          |
| (1,946) | 1:A:358:ASP:H    | 1:A:363:ILE:HG22 | 1        | 0.23          |
| (1,946) | 1:A:358:ASP:H    | 1:A:363:ILE:HG23 | 1        | 0.23          |
| (1,94)  | 1:A:366:ILE:HB   | 1:A:413:PHE:HZ   | 2        | 0.23          |
| (1,844) | 1:A:359:LYS:HA   | 1:A:361:SER:H    | 10       | 0.23          |
| (1,824) | 1:A:375:LEU:HB2  | 1:A:378:ASN:HD21 | 6        | 0.23          |
| (1,824) | 1:A:375:LEU:HB3  | 1:A:378:ASN:HD21 | 6        | 0.23          |
| (1,791) | 1:A:355:ARG:H    | 1:A:364:PHE:HD2  | 2        | 0.23          |
| (1,712) | 1:A:404:ARG:H    | 1:A:416:MET:HG2  | 4        | 0.23          |
| (1,712) | 1:A:404:ARG:H    | 1:A:416:MET:HG3  | 4        | 0.23          |
| (1,686) | 1:A:424:SER:HA   | 1:A:426:ARG:H    | 2        | 0.23          |
| (1,626) | 1:A:355:ARG:H    | 1:A:367:VAL:H    | 7        | 0.23          |
| (1,590) | 1:A:369:PRO:HA   | 1:A:372:LEU:HB2  | 4        | 0.23          |
| (1,542) | 1:A:369:PRO:HA   | 1:A:411:LEU:HD21 | 5        | 0.23          |
| (1,542) | 1:A:369:PRO:HA   | 1:A:411:LEU:HD22 | 5        | 0.23          |
| (1,542) | 1:A:369:PRO:HA   | 1:A:411:LEU:HD23 | 5        | 0.23          |
| (1,499) | 1:A:369:PRO:HA   | 1:A:411:LEU:HD11 | 8        | 0.23          |
| (1,499) | 1:A:369:PRO:HA   | 1:A:411:LEU:HD12 | 8        | 0.23          |
| (1,499) | 1:A:369:PRO:HA   | 1:A:411:LEU:HD13 | 8        | 0.23          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,48)   | 1:A:385:MET:HB2  | 1:A:386:THR:HA   | 4        | 0.23          |
| (1,48)   | 1:A:385:MET:HB2  | 1:A:386:THR:HA   | 5        | 0.23          |
| (1,448)  | 1:A:374:ARG:H    | 1:A:385:MET:HB3  | 3        | 0.23          |
| (1,359)  | 1:A:403:ILE:HG21 | 1:A:415:PHE:HE1  | 9        | 0.23          |
| (1,359)  | 1:A:403:ILE:HG22 | 1:A:415:PHE:HE1  | 9        | 0.23          |
| (1,359)  | 1:A:403:ILE:HG23 | 1:A:415:PHE:HE1  | 9        | 0.23          |
| (1,344)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG21 | 2        | 0.23          |
| (1,344)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG22 | 2        | 0.23          |
| (1,344)  | 1:A:352:ASN:HA   | 1:A:367:VAL:HG23 | 2        | 0.23          |
| (1,34)   | 1:A:372:LEU:H    | 1:A:390:MET:HE1  | 3        | 0.23          |
| (1,34)   | 1:A:372:LEU:H    | 1:A:390:MET:HE2  | 3        | 0.23          |
| (1,34)   | 1:A:372:LEU:H    | 1:A:390:MET:HE3  | 3        | 0.23          |
| (1,335)  | 1:A:361:SER:HB3  | 1:A:363:ILE:HB   | 5        | 0.23          |
| (1,204)  | 1:A:355:ARG:HA   | 1:A:367:VAL:HG21 | 1        | 0.23          |
| (1,204)  | 1:A:355:ARG:HA   | 1:A:367:VAL:HG22 | 1        | 0.23          |
| (1,204)  | 1:A:355:ARG:HA   | 1:A:367:VAL:HG23 | 1        | 0.23          |
| (1,184)  | 1:A:365:ARG:HA   | 1:A:413:PHE:HE1  | 8        | 0.23          |
| (1,1460) | 1:A:392:ARG:H    | 1:A:392:ARG:HG2  | 2        | 0.23          |
| (1,1460) | 1:A:392:ARG:H    | 1:A:392:ARG:HG3  | 2        | 0.23          |
| (1,1410) | 1:A:372:LEU:HD11 | 1:A:375:LEU:H    | 5        | 0.23          |
| (1,1410) | 1:A:372:LEU:HD12 | 1:A:375:LEU:H    | 5        | 0.23          |
| (1,1410) | 1:A:372:LEU:HD13 | 1:A:375:LEU:H    | 5        | 0.23          |
| (1,1410) | 1:A:372:LEU:HD21 | 1:A:375:LEU:H    | 5        | 0.23          |
| (1,1410) | 1:A:372:LEU:HD22 | 1:A:375:LEU:H    | 5        | 0.23          |
| (1,1410) | 1:A:372:LEU:HD23 | 1:A:375:LEU:H    | 5        | 0.23          |
| (1,1361) | 1:A:352:ASN:HB2  | 1:A:367:VAL:HG11 | 6        | 0.23          |
| (1,1361) | 1:A:352:ASN:HB2  | 1:A:367:VAL:HG12 | 6        | 0.23          |
| (1,1361) | 1:A:352:ASN:HB2  | 1:A:367:VAL:HG13 | 6        | 0.23          |
| (1,1361) | 1:A:352:ASN:HB3  | 1:A:367:VAL:HG11 | 6        | 0.23          |
| (1,1361) | 1:A:352:ASN:HB3  | 1:A:367:VAL:HG12 | 6        | 0.23          |
| (1,1361) | 1:A:352:ASN:HB3  | 1:A:367:VAL:HG13 | 6        | 0.23          |
| (1,1234) | 1:A:327:HIS:HB2  | 1:A:328:MET:H    | 5        | 0.23          |
| (1,1234) | 1:A:327:HIS:HB3  | 1:A:328:MET:H    | 5        | 0.23          |
| (1,1222) | 1:A:366:ILE:HG12 | 1:A:387:TYR:HE2  | 5        | 0.23          |
| (1,1222) | 1:A:366:ILE:HG13 | 1:A:387:TYR:HE2  | 5        | 0.23          |
| (1,1218) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HG   | 1        | 0.23          |
| (1,1160) | 1:A:387:TYR:HB2  | 1:A:387:TYR:HD2  | 5        | 0.23          |
| (1,1107) | 1:A:328:MET:H    | 1:A:329:GLY:HA2  | 2        | 0.23          |
| (1,1107) | 1:A:328:MET:H    | 1:A:329:GLY:HA3  | 2        | 0.23          |
| (1,1034) | 1:A:356:TRP:HB3  | 1:A:360:GLU:H    | 10       | 0.23          |
| (1,937)  | 1:A:348:SER:HA   | 1:A:350:TYR:H    | 2        | 0.22          |
| (1,88)   | 1:A:370:ASN:HA   | 1:A:387:TYR:HB3  | 8        | 0.22          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,88)   | 1:A:370:ASN:HA   | 1:A:387:TYR:HB3  | 9        | 0.22          |
| (1,863)  | 1:A:386:THR:H    | 1:A:389:LYS:HE2  | 1        | 0.22          |
| (1,863)  | 1:A:386:THR:H    | 1:A:389:LYS:HE3  | 1        | 0.22          |
| (1,764)  | 1:A:364:PHE:HE1  | 1:A:413:PHE:H    | 1        | 0.22          |
| (1,645)  | 1:A:406:GLU:H    | 1:A:412:LEU:HB3  | 4        | 0.22          |
| (1,61)   | 1:A:343:GLN:H    | 1:A:343:GLN:HG2  | 9        | 0.22          |
| (1,61)   | 1:A:343:GLN:H    | 1:A:343:GLN:HG3  | 9        | 0.22          |
| (1,587)  | 1:A:353:PHE:HB3  | 1:A:369:PRO:HA   | 3        | 0.22          |
| (1,587)  | 1:A:353:PHE:HB3  | 1:A:369:PRO:HA   | 6        | 0.22          |
| (1,540)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD21 | 5        | 0.22          |
| (1,540)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD22 | 5        | 0.22          |
| (1,540)  | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD23 | 5        | 0.22          |
| (1,49)   | 1:A:366:ILE:HG21 | 1:A:369:PRO:HB2  | 2        | 0.22          |
| (1,49)   | 1:A:366:ILE:HG22 | 1:A:369:PRO:HB2  | 2        | 0.22          |
| (1,49)   | 1:A:366:ILE:HG23 | 1:A:369:PRO:HB2  | 2        | 0.22          |
| (1,46)   | 1:A:385:MET:HB3  | 1:A:386:THR:HG21 | 2        | 0.22          |
| (1,46)   | 1:A:385:MET:HB3  | 1:A:386:THR:HG22 | 2        | 0.22          |
| (1,46)   | 1:A:385:MET:HB3  | 1:A:386:THR:HG23 | 2        | 0.22          |
| (1,46)   | 1:A:385:MET:HB3  | 1:A:386:THR:HG21 | 10       | 0.22          |
| (1,46)   | 1:A:385:MET:HB3  | 1:A:386:THR:HG22 | 10       | 0.22          |
| (1,46)   | 1:A:385:MET:HB3  | 1:A:386:THR:HG23 | 10       | 0.22          |
| (1,398)  | 1:A:354:ILE:HA   | 1:A:366:ILE:HG21 | 2        | 0.22          |
| (1,398)  | 1:A:354:ILE:HA   | 1:A:366:ILE:HG22 | 2        | 0.22          |
| (1,398)  | 1:A:354:ILE:HA   | 1:A:366:ILE:HG23 | 2        | 0.22          |
| (1,365)  | 1:A:364:PHE:HE1  | 1:A:403:ILE:HG21 | 9        | 0.22          |
| (1,365)  | 1:A:364:PHE:HE1  | 1:A:403:ILE:HG22 | 9        | 0.22          |
| (1,365)  | 1:A:364:PHE:HE1  | 1:A:403:ILE:HG23 | 9        | 0.22          |
| (1,359)  | 1:A:403:ILE:HG21 | 1:A:415:PHE:HE1  | 10       | 0.22          |
| (1,359)  | 1:A:403:ILE:HG22 | 1:A:415:PHE:HE1  | 10       | 0.22          |
| (1,359)  | 1:A:403:ILE:HG23 | 1:A:415:PHE:HE1  | 10       | 0.22          |
| (1,335)  | 1:A:361:SER:HB3  | 1:A:363:ILE:HB   | 6        | 0.22          |
| (1,252)  | 1:A:359:LYS:HA   | 1:A:359:LYS:HG2  | 2        | 0.22          |
| (1,197)  | 1:A:363:ILE:HD11 | 1:A:414:ARG:HA   | 2        | 0.22          |
| (1,197)  | 1:A:363:ILE:HD12 | 1:A:414:ARG:HA   | 2        | 0.22          |
| (1,197)  | 1:A:363:ILE:HD13 | 1:A:414:ARG:HA   | 2        | 0.22          |
| (1,1501) | 1:A:406:GLU:HG2  | 1:A:412:LEU:HB2  | 7        | 0.22          |
| (1,1501) | 1:A:406:GLU:HG3  | 1:A:412:LEU:HB2  | 7        | 0.22          |
| (1,1501) | 1:A:406:GLU:HG2  | 1:A:412:LEU:HB3  | 7        | 0.22          |
| (1,1501) | 1:A:406:GLU:HG3  | 1:A:412:LEU:HB3  | 7        | 0.22          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD11 | 8        | 0.22          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD12 | 8        | 0.22          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD13 | 8        | 0.22          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD21 | 8        | 0.22          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD22 | 8        | 0.22          |
| (1,1473) | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD23 | 8        | 0.22          |
| (1,1470) | 1:A:394:LEU:HD11 | 1:A:413:PHE:HZ   | 10       | 0.22          |
| (1,1470) | 1:A:394:LEU:HD12 | 1:A:413:PHE:HZ   | 10       | 0.22          |
| (1,1470) | 1:A:394:LEU:HD13 | 1:A:413:PHE:HZ   | 10       | 0.22          |
| (1,1470) | 1:A:394:LEU:HD21 | 1:A:413:PHE:HZ   | 10       | 0.22          |
| (1,1470) | 1:A:394:LEU:HD22 | 1:A:413:PHE:HZ   | 10       | 0.22          |
| (1,1470) | 1:A:394:LEU:HD23 | 1:A:413:PHE:HZ   | 10       | 0.22          |
| (1,1409) | 1:A:372:LEU:HD11 | 1:A:374:ARG:H    | 7        | 0.22          |
| (1,1409) | 1:A:372:LEU:HD12 | 1:A:374:ARG:H    | 7        | 0.22          |
| (1,1409) | 1:A:372:LEU:HD13 | 1:A:374:ARG:H    | 7        | 0.22          |
| (1,1409) | 1:A:372:LEU:HD21 | 1:A:374:ARG:H    | 7        | 0.22          |
| (1,1409) | 1:A:372:LEU:HD22 | 1:A:374:ARG:H    | 7        | 0.22          |
| (1,1409) | 1:A:372:LEU:HD23 | 1:A:374:ARG:H    | 7        | 0.22          |
| (1,1291) | 1:A:341:VAL:HG11 | 1:A:364:PHE:HD2  | 4        | 0.22          |
| (1,1291) | 1:A:341:VAL:HG12 | 1:A:364:PHE:HD2  | 4        | 0.22          |
| (1,1291) | 1:A:341:VAL:HG13 | 1:A:364:PHE:HD2  | 4        | 0.22          |
| (1,1291) | 1:A:341:VAL:HG21 | 1:A:364:PHE:HD2  | 4        | 0.22          |
| (1,1291) | 1:A:341:VAL:HG22 | 1:A:364:PHE:HD2  | 4        | 0.22          |
| (1,1291) | 1:A:341:VAL:HG23 | 1:A:364:PHE:HD2  | 4        | 0.22          |
| (1,1256) | 1:A:337:LEU:HD11 | 1:A:341:VAL:HA   | 7        | 0.22          |
| (1,1256) | 1:A:337:LEU:HD12 | 1:A:341:VAL:HA   | 7        | 0.22          |
| (1,1256) | 1:A:337:LEU:HD13 | 1:A:341:VAL:HA   | 7        | 0.22          |
| (1,1256) | 1:A:337:LEU:HD21 | 1:A:341:VAL:HA   | 7        | 0.22          |
| (1,1256) | 1:A:337:LEU:HD22 | 1:A:341:VAL:HA   | 7        | 0.22          |
| (1,1256) | 1:A:337:LEU:HD23 | 1:A:341:VAL:HA   | 7        | 0.22          |
| (1,1235) | 1:A:328:MET:H    | 1:A:328:MET:HG2  | 4        | 0.22          |
| (1,1235) | 1:A:328:MET:H    | 1:A:328:MET:HG3  | 4        | 0.22          |
| (1,1191) | 1:A:336:LEU:HB2  | 1:A:338:TRP:HD1  | 4        | 0.22          |
| (1,1191) | 1:A:336:LEU:HB3  | 1:A:338:TRP:HD1  | 4        | 0.22          |
| (1,1160) | 1:A:387:TYR:HB2  | 1:A:387:TYR:HD2  | 7        | 0.22          |
| (1,1141) | 1:A:352:ASN:H    | 1:A:352:ASN:HD22 | 1        | 0.22          |
| (1,1127) | 1:A:348:SER:H    | 1:A:350:TYR:H    | 10       | 0.22          |
| (1,1108) | 1:A:354:ILE:H    | 1:A:367:VAL:H    | 10       | 0.22          |
| (1,1084) | 1:A:376:TRP:H    | 1:A:378:ASN:HB2  | 8        | 0.22          |
| (1,1084) | 1:A:376:TRP:H    | 1:A:378:ASN:HB2  | 10       | 0.22          |
| (1,1058) | 1:A:373:ALA:H    | 1:A:387:TYR:HB2  | 7        | 0.22          |
| (1,937)  | 1:A:348:SER:HA   | 1:A:350:TYR:H    | 10       | 0.21          |
| (1,923)  | 1:A:397:TYR:H    | 1:A:403:ILE:HB   | 7        | 0.21          |
| (1,908)  | 1:A:366:ILE:HA   | 1:A:368:ASP:H    | 4        | 0.21          |
| (1,860)  | 1:A:385:MET:HB3  | 1:A:386:THR:H    | 1        | 0.21          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,846)  | 1:A:361:SER:H    | 1:A:363:ILE:HD11 | 9        | 0.21          |
| (1,846)  | 1:A:361:SER:H    | 1:A:363:ILE:HD12 | 9        | 0.21          |
| (1,846)  | 1:A:361:SER:H    | 1:A:363:ILE:HD13 | 9        | 0.21          |
| (1,777)  | 1:A:344:LEU:H    | 1:A:344:LEU:HG   | 3        | 0.21          |
| (1,764)  | 1:A:364:PHE:HE1  | 1:A:413:PHE:H    | 5        | 0.21          |
| (1,628)  | 1:A:353:PHE:HA   | 1:A:367:VAL:H    | 2        | 0.21          |
| (1,569)  | 1:A:354:ILE:H    | 1:A:367:VAL:HG11 | 8        | 0.21          |
| (1,569)  | 1:A:354:ILE:H    | 1:A:367:VAL:HG12 | 8        | 0.21          |
| (1,569)  | 1:A:354:ILE:H    | 1:A:367:VAL:HG13 | 8        | 0.21          |
| (1,539)  | 1:A:366:ILE:H    | 1:A:411:LEU:HD21 | 7        | 0.21          |
| (1,539)  | 1:A:366:ILE:H    | 1:A:411:LEU:HD22 | 7        | 0.21          |
| (1,539)  | 1:A:366:ILE:H    | 1:A:411:LEU:HD23 | 7        | 0.21          |
| (1,47)   | 1:A:418:THR:HG21 | 1:A:419:PRO:HB3  | 1        | 0.21          |
| (1,47)   | 1:A:418:THR:HG22 | 1:A:419:PRO:HB3  | 1        | 0.21          |
| (1,47)   | 1:A:418:THR:HG23 | 1:A:419:PRO:HB3  | 1        | 0.21          |
| (1,451)  | 1:A:337:LEU:HG   | 1:A:341:VAL:HB   | 3        | 0.21          |
| (1,435)  | 1:A:370:ASN:HA   | 1:A:387:TYR:HB2  | 9        | 0.21          |
| (1,380)  | 1:A:363:ILE:HG21 | 1:A:364:PHE:HD1  | 10       | 0.21          |
| (1,380)  | 1:A:363:ILE:HG22 | 1:A:364:PHE:HD1  | 10       | 0.21          |
| (1,380)  | 1:A:363:ILE:HG23 | 1:A:364:PHE:HD1  | 10       | 0.21          |
| (1,358)  | 1:A:397:TYR:H    | 1:A:403:ILE:HG21 | 4        | 0.21          |
| (1,358)  | 1:A:397:TYR:H    | 1:A:403:ILE:HG22 | 4        | 0.21          |
| (1,358)  | 1:A:397:TYR:H    | 1:A:403:ILE:HG23 | 4        | 0.21          |
| (1,300)  | 1:A:383:THR:HA   | 1:A:385:MET:H    | 3        | 0.21          |
| (1,230)  | 1:A:376:TRP:HA   | 1:A:376:TRP:HZ3  | 1        | 0.21          |
| (1,1537) | 1:A:426:ARG:H    | 1:A:426:ARG:HB2  | 9        | 0.21          |
| (1,1537) | 1:A:426:ARG:H    | 1:A:426:ARG:HB3  | 9        | 0.21          |
| (1,1501) | 1:A:406:GLU:HG2  | 1:A:412:LEU:HB2  | 1        | 0.21          |
| (1,1501) | 1:A:406:GLU:HG3  | 1:A:412:LEU:HB2  | 1        | 0.21          |
| (1,1501) | 1:A:406:GLU:HG2  | 1:A:412:LEU:HB3  | 1        | 0.21          |
| (1,1501) | 1:A:406:GLU:HG3  | 1:A:412:LEU:HB3  | 1        | 0.21          |
| (1,149)  | 1:A:355:ARG:HD2  | 1:A:356:TRP:H    | 8        | 0.21          |
| (1,149)  | 1:A:355:ARG:HD3  | 1:A:356:TRP:H    | 8        | 0.21          |
| (1,1390) | 1:A:366:ILE:H    | 1:A:411:LEU:HD11 | 3        | 0.21          |
| (1,1390) | 1:A:366:ILE:H    | 1:A:411:LEU:HD12 | 3        | 0.21          |
| (1,1390) | 1:A:366:ILE:H    | 1:A:411:LEU:HD13 | 3        | 0.21          |
| (1,1390) | 1:A:366:ILE:H    | 1:A:411:LEU:HD21 | 3        | 0.21          |
| (1,1390) | 1:A:366:ILE:H    | 1:A:411:LEU:HD22 | 3        | 0.21          |
| (1,1390) | 1:A:366:ILE:H    | 1:A:411:LEU:HD23 | 3        | 0.21          |
| (1,1340) | 1:A:345:LEU:HD11 | 1:A:365:ARG:H    | 7        | 0.21          |
| (1,1340) | 1:A:345:LEU:HD12 | 1:A:365:ARG:H    | 7        | 0.21          |
| (1,1340) | 1:A:345:LEU:HD13 | 1:A:365:ARG:H    | 7        | 0.21          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1340) | 1:A:345:LEU:HD21 | 1:A:365:ARG:H    | 7        | 0.21          |
| (1,1340) | 1:A:345:LEU:HD22 | 1:A:365:ARG:H    | 7        | 0.21          |
| (1,1340) | 1:A:345:LEU:HD23 | 1:A:365:ARG:H    | 7        | 0.21          |
| (1,1321) | 1:A:345:LEU:HD11 | 1:A:354:ILE:HA   | 6        | 0.21          |
| (1,1321) | 1:A:345:LEU:HD12 | 1:A:354:ILE:HA   | 6        | 0.21          |
| (1,1321) | 1:A:345:LEU:HD13 | 1:A:354:ILE:HA   | 6        | 0.21          |
| (1,1321) | 1:A:345:LEU:HD21 | 1:A:354:ILE:HA   | 6        | 0.21          |
| (1,1321) | 1:A:345:LEU:HD22 | 1:A:354:ILE:HA   | 6        | 0.21          |
| (1,1321) | 1:A:345:LEU:HD23 | 1:A:354:ILE:HA   | 6        | 0.21          |
| (1,1307) | 1:A:344:LEU:HD11 | 1:A:353:PHE:H    | 10       | 0.21          |
| (1,1307) | 1:A:344:LEU:HD12 | 1:A:353:PHE:H    | 10       | 0.21          |
| (1,1307) | 1:A:344:LEU:HD13 | 1:A:353:PHE:H    | 10       | 0.21          |
| (1,1307) | 1:A:344:LEU:HD21 | 1:A:353:PHE:H    | 10       | 0.21          |
| (1,1307) | 1:A:344:LEU:HD22 | 1:A:353:PHE:H    | 10       | 0.21          |
| (1,1307) | 1:A:344:LEU:HD23 | 1:A:353:PHE:H    | 10       | 0.21          |
| (1,1267) | 1:A:337:LEU:HD11 | 1:A:393:ALA:H    | 4        | 0.21          |
| (1,1267) | 1:A:337:LEU:HD12 | 1:A:393:ALA:H    | 4        | 0.21          |
| (1,1267) | 1:A:337:LEU:HD13 | 1:A:393:ALA:H    | 4        | 0.21          |
| (1,1267) | 1:A:337:LEU:HD21 | 1:A:393:ALA:H    | 4        | 0.21          |
| (1,1267) | 1:A:337:LEU:HD22 | 1:A:393:ALA:H    | 4        | 0.21          |
| (1,1267) | 1:A:337:LEU:HD23 | 1:A:393:ALA:H    | 4        | 0.21          |
| (1,1226) | 1:A:376:TRP:HZ2  | 1:A:380:LYS:HD2  | 5        | 0.21          |
| (1,1226) | 1:A:376:TRP:HZ2  | 1:A:380:LYS:HD3  | 5        | 0.21          |
| (1,1218) | 1:A:340:TYR:HE1  | 1:A:344:LEU:HG   | 8        | 0.21          |
| (1,1187) | 1:A:356:TRP:HD1  | 1:A:359:LYS:HD2  | 4        | 0.21          |
| (1,1187) | 1:A:356:TRP:HD1  | 1:A:359:LYS:HD3  | 4        | 0.21          |
| (1,992)  | 1:A:359:LYS:HA   | 1:A:363:ILE:H    | 6        | 0.2           |
| (1,937)  | 1:A:348:SER:HA   | 1:A:350:TYR:H    | 1        | 0.2           |
| (1,936)  | 1:A:358:ASP:H    | 1:A:364:PHE:HA   | 10       | 0.2           |
| (1,929)  | 1:A:358:ASP:H    | 1:A:364:PHE:H    | 6        | 0.2           |
| (1,913)  | 1:A:362:LYS:H    | 1:A:363:ILE:HD11 | 7        | 0.2           |
| (1,913)  | 1:A:362:LYS:H    | 1:A:363:ILE:HD12 | 7        | 0.2           |
| (1,913)  | 1:A:362:LYS:H    | 1:A:363:ILE:HD13 | 7        | 0.2           |
| (1,872)  | 1:A:352:ASN:H    | 1:A:354:ILE:HG21 | 1        | 0.2           |
| (1,872)  | 1:A:352:ASN:H    | 1:A:354:ILE:HG22 | 1        | 0.2           |
| (1,872)  | 1:A:352:ASN:H    | 1:A:354:ILE:HG23 | 1        | 0.2           |
| (1,82)   | 1:A:352:ASN:HB2  | 1:A:367:VAL:HG11 | 1        | 0.2           |
| (1,82)   | 1:A:352:ASN:HB2  | 1:A:367:VAL:HG12 | 1        | 0.2           |
| (1,82)   | 1:A:352:ASN:HB2  | 1:A:367:VAL:HG13 | 1        | 0.2           |
| (1,8)    | 1:A:377:GLY:H    | 1:A:385:MET:HE1  | 10       | 0.2           |
| (1,8)    | 1:A:377:GLY:H    | 1:A:385:MET:HE2  | 10       | 0.2           |
| (1,8)    | 1:A:377:GLY:H    | 1:A:385:MET:HE3  | 10       | 0.2           |

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| Key     | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|---------|------------------|------------------|----------|---------------|
| (1,741) | 1:A:347:ASP:H    | 1:A:347:ASP:HB2  | 10       | 0.2           |
| (1,721) | 1:A:347:ASP:HB3  | 1:A:349:ARG:H    | 9        | 0.2           |
| (1,719) | 1:A:349:ARG:H    | 1:A:350:TYR:HB3  | 7        | 0.2           |
| (1,703) | 1:A:404:ARG:H    | 1:A:413:PHE:HD2  | 7        | 0.2           |
| (1,686) | 1:A:424:SER:HA   | 1:A:426:ARG:H    | 4        | 0.2           |
| (1,670) | 1:A:354:ILE:HA   | 1:A:366:ILE:H    | 6        | 0.2           |
| (1,663) | 1:A:357:GLU:H    | 1:A:412:LEU:HD21 | 4        | 0.2           |
| (1,663) | 1:A:357:GLU:H    | 1:A:412:LEU:HD22 | 4        | 0.2           |
| (1,663) | 1:A:357:GLU:H    | 1:A:412:LEU:HD23 | 4        | 0.2           |
| (1,632) | 1:A:367:VAL:H    | 1:A:368:ASP:HB2  | 6        | 0.2           |
| (1,574) | 1:A:353:PHE:HA   | 1:A:367:VAL:HG11 | 1        | 0.2           |
| (1,574) | 1:A:353:PHE:HA   | 1:A:367:VAL:HG12 | 1        | 0.2           |
| (1,574) | 1:A:353:PHE:HA   | 1:A:367:VAL:HG13 | 1        | 0.2           |
| (1,496) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD11 | 10       | 0.2           |
| (1,496) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD12 | 10       | 0.2           |
| (1,496) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD13 | 10       | 0.2           |
| (1,48)  | 1:A:385:MET:HB2  | 1:A:386:THR:HA   | 3        | 0.2           |
| (1,443) | 1:A:332:ALA:HB1  | 1:A:333:ASP:HA   | 5        | 0.2           |
| (1,443) | 1:A:332:ALA:HB2  | 1:A:333:ASP:HA   | 5        | 0.2           |
| (1,443) | 1:A:332:ALA:HB3  | 1:A:333:ASP:HA   | 5        | 0.2           |
| (1,426) | 1:A:410:ARG:HA   | 1:A:410:ARG:HD2  | 2        | 0.2           |
| (1,426) | 1:A:410:ARG:HA   | 1:A:410:ARG:HD3  | 2        | 0.2           |
| (1,316) | 1:A:354:ILE:HD11 | 1:A:355:ARG:H    | 2        | 0.2           |
| (1,316) | 1:A:354:ILE:HD12 | 1:A:355:ARG:H    | 2        | 0.2           |
| (1,316) | 1:A:354:ILE:HD13 | 1:A:355:ARG:H    | 2        | 0.2           |
| (1,303) | 1:A:382:ARG:HG2  | 1:A:383:THR:HA   | 6        | 0.2           |
| (1,303) | 1:A:382:ARG:HG3  | 1:A:383:THR:HA   | 6        | 0.2           |
| (1,279) | 1:A:363:ILE:HD11 | 1:A:412:LEU:HD11 | 2        | 0.2           |
| (1,279) | 1:A:363:ILE:HD11 | 1:A:412:LEU:HD12 | 2        | 0.2           |
| (1,279) | 1:A:363:ILE:HD11 | 1:A:412:LEU:HD13 | 2        | 0.2           |
| (1,279) | 1:A:363:ILE:HD12 | 1:A:412:LEU:HD11 | 2        | 0.2           |
| (1,279) | 1:A:363:ILE:HD12 | 1:A:412:LEU:HD12 | 2        | 0.2           |
| (1,279) | 1:A:363:ILE:HD12 | 1:A:412:LEU:HD13 | 2        | 0.2           |
| (1,279) | 1:A:363:ILE:HD13 | 1:A:412:LEU:HD11 | 2        | 0.2           |
| (1,279) | 1:A:363:ILE:HD13 | 1:A:412:LEU:HD12 | 2        | 0.2           |
| (1,279) | 1:A:363:ILE:HD13 | 1:A:412:LEU:HD13 | 2        | 0.2           |
| (1,279) | 1:A:363:ILE:HD11 | 1:A:412:LEU:HD11 | 6        | 0.2           |
| (1,279) | 1:A:363:ILE:HD11 | 1:A:412:LEU:HD12 | 6        | 0.2           |
| (1,279) | 1:A:363:ILE:HD11 | 1:A:412:LEU:HD13 | 6        | 0.2           |
| (1,279) | 1:A:363:ILE:HD12 | 1:A:412:LEU:HD11 | 6        | 0.2           |
| (1,279) | 1:A:363:ILE:HD12 | 1:A:412:LEU:HD12 | 6        | 0.2           |
| (1,279) | 1:A:363:ILE:HD12 | 1:A:412:LEU:HD13 | 6        | 0.2           |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,279)  | 1:A:363:ILE:HD13 | 1:A:412:LEU:HD11 | 6        | 0.2           |
| (1,279)  | 1:A:363:ILE:HD13 | 1:A:412:LEU:HD12 | 6        | 0.2           |
| (1,279)  | 1:A:363:ILE:HD13 | 1:A:412:LEU:HD13 | 6        | 0.2           |
| (1,1470) | 1:A:394:LEU:HD11 | 1:A:413:PHE:HZ   | 4        | 0.2           |
| (1,1470) | 1:A:394:LEU:HD12 | 1:A:413:PHE:HZ   | 4        | 0.2           |
| (1,1470) | 1:A:394:LEU:HD13 | 1:A:413:PHE:HZ   | 4        | 0.2           |
| (1,1470) | 1:A:394:LEU:HD21 | 1:A:413:PHE:HZ   | 4        | 0.2           |
| (1,1470) | 1:A:394:LEU:HD22 | 1:A:413:PHE:HZ   | 4        | 0.2           |
| (1,1470) | 1:A:394:LEU:HD23 | 1:A:413:PHE:HZ   | 4        | 0.2           |
| (1,1400) | 1:A:370:ASN:HB2  | 1:A:373:ALA:HB1  | 5        | 0.2           |
| (1,1400) | 1:A:370:ASN:HB2  | 1:A:373:ALA:HB2  | 5        | 0.2           |
| (1,1400) | 1:A:370:ASN:HB2  | 1:A:373:ALA:HB3  | 5        | 0.2           |
| (1,1400) | 1:A:370:ASN:HB3  | 1:A:373:ALA:HB1  | 5        | 0.2           |
| (1,1400) | 1:A:370:ASN:HB3  | 1:A:373:ALA:HB2  | 5        | 0.2           |
| (1,1400) | 1:A:370:ASN:HB3  | 1:A:373:ALA:HB3  | 5        | 0.2           |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD11 | 4        | 0.2           |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD12 | 4        | 0.2           |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD13 | 4        | 0.2           |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD21 | 4        | 0.2           |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD22 | 4        | 0.2           |
| (1,1355) | 1:A:351:GLU:H    | 1:A:375:LEU:HD23 | 4        | 0.2           |
| (1,1235) | 1:A:328:MET:H    | 1:A:328:MET:HG2  | 8        | 0.2           |
| (1,1235) | 1:A:328:MET:H    | 1:A:328:MET:HG3  | 8        | 0.2           |
| (1,1202) | 1:A:397:TYR:HA   | 1:A:397:TYR:HE1  | 3        | 0.2           |
| (1,1176) | 1:A:397:TYR:HD2  | 1:A:403:ILE:HB   | 9        | 0.2           |
| (1,1129) | 1:A:398:TYR:H    | 1:A:402:ILE:HD11 | 1        | 0.2           |
| (1,1129) | 1:A:398:TYR:H    | 1:A:402:ILE:HD12 | 1        | 0.2           |
| (1,1129) | 1:A:398:TYR:H    | 1:A:402:ILE:HD13 | 1        | 0.2           |
| (1,1127) | 1:A:348:SER:H    | 1:A:350:TYR:H    | 8        | 0.2           |
| (1,1070) | 1:A:417:LYS:HE2  | 1:A:421:GLU:H    | 9        | 0.2           |
| (1,1070) | 1:A:417:LYS:HE3  | 1:A:421:GLU:H    | 9        | 0.2           |
| (1,1057) | 1:A:373:ALA:H    | 1:A:376:TRP:HB2  | 6        | 0.2           |
| (1,1057) | 1:A:373:ALA:H    | 1:A:376:TRP:HB3  | 6        | 0.2           |
| (1,1051) | 1:A:378:ASN:H    | 1:A:378:ASN:HD21 | 5        | 0.2           |
| (1,99)   | 1:A:375:LEU:HB2  | 1:A:378:ASN:HB2  | 8        | 0.19          |
| (1,99)   | 1:A:375:LEU:HB3  | 1:A:378:ASN:HB2  | 8        | 0.19          |
| (1,929)  | 1:A:358:ASP:H    | 1:A:364:PHE:H    | 5        | 0.19          |
| (1,900)  | 1:A:353:PHE:H    | 1:A:354:ILE:HA   | 8        | 0.19          |
| (1,844)  | 1:A:359:LYS:HA   | 1:A:361:SER:H    | 4        | 0.19          |
| (1,821)  | 1:A:371:GLY:H    | 1:A:372:LEU:HB2  | 2        | 0.19          |
| (1,821)  | 1:A:371:GLY:H    | 1:A:372:LEU:HB2  | 8        | 0.19          |
| (1,820)  | 1:A:366:ILE:HG21 | 1:A:371:GLY:H    | 2        | 0.19          |

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| Key      | Atom-1           | Atom-2          | Model ID | Violation (Å) |
|----------|------------------|-----------------|----------|---------------|
| (1,820)  | 1:A:366:ILE:HG22 | 1:A:371:GLY:H   | 2        | 0.19          |
| (1,820)  | 1:A:366:ILE:HG23 | 1:A:371:GLY:H   | 2        | 0.19          |
| (1,8)    | 1:A:377:GLY:H    | 1:A:385:MET:HE1 | 6        | 0.19          |
| (1,8)    | 1:A:377:GLY:H    | 1:A:385:MET:HE2 | 6        | 0.19          |
| (1,8)    | 1:A:377:GLY:H    | 1:A:385:MET:HE3 | 6        | 0.19          |
| (1,785)  | 1:A:355:ARG:H    | 1:A:366:ILE:HA  | 5        | 0.19          |
| (1,785)  | 1:A:355:ARG:H    | 1:A:366:ILE:HA  | 7        | 0.19          |
| (1,785)  | 1:A:355:ARG:H    | 1:A:366:ILE:HA  | 10       | 0.19          |
| (1,767)  | 1:A:412:LEU:HB3  | 1:A:413:PHE:H   | 3        | 0.19          |
| (1,767)  | 1:A:412:LEU:HB3  | 1:A:413:PHE:H   | 6        | 0.19          |
| (1,719)  | 1:A:349:ARG:H    | 1:A:350:TYR:HB3 | 6        | 0.19          |
| (1,590)  | 1:A:369:PRO:HA   | 1:A:372:LEU:HB2 | 8        | 0.19          |
| (1,436)  | 1:A:330:ARG:HA   | 1:A:330:ARG:HD2 | 2        | 0.19          |
| (1,436)  | 1:A:330:ARG:HA   | 1:A:330:ARG:HD3 | 2        | 0.19          |
| (1,426)  | 1:A:410:ARG:HA   | 1:A:410:ARG:HD2 | 10       | 0.19          |
| (1,426)  | 1:A:410:ARG:HA   | 1:A:410:ARG:HD3 | 10       | 0.19          |
| (1,421)  | 1:A:405:LYS:HA   | 1:A:413:PHE:HB3 | 7        | 0.19          |
| (1,357)  | 1:A:332:ALA:HB1  | 1:A:333:ASP:HB2 | 3        | 0.19          |
| (1,357)  | 1:A:332:ALA:HB1  | 1:A:333:ASP:HB3 | 3        | 0.19          |
| (1,357)  | 1:A:332:ALA:HB2  | 1:A:333:ASP:HB2 | 3        | 0.19          |
| (1,357)  | 1:A:332:ALA:HB2  | 1:A:333:ASP:HB3 | 3        | 0.19          |
| (1,357)  | 1:A:332:ALA:HB3  | 1:A:333:ASP:HB2 | 3        | 0.19          |
| (1,357)  | 1:A:332:ALA:HB3  | 1:A:333:ASP:HB3 | 3        | 0.19          |
| (1,350)  | 1:A:337:LEU:HD11 | 1:A:393:ALA:HB1 | 8        | 0.19          |
| (1,350)  | 1:A:337:LEU:HD11 | 1:A:393:ALA:HB2 | 8        | 0.19          |
| (1,350)  | 1:A:337:LEU:HD11 | 1:A:393:ALA:HB3 | 8        | 0.19          |
| (1,350)  | 1:A:337:LEU:HD12 | 1:A:393:ALA:HB1 | 8        | 0.19          |
| (1,350)  | 1:A:337:LEU:HD12 | 1:A:393:ALA:HB2 | 8        | 0.19          |
| (1,350)  | 1:A:337:LEU:HD12 | 1:A:393:ALA:HB3 | 8        | 0.19          |
| (1,350)  | 1:A:337:LEU:HD13 | 1:A:393:ALA:HB1 | 8        | 0.19          |
| (1,350)  | 1:A:337:LEU:HD13 | 1:A:393:ALA:HB2 | 8        | 0.19          |
| (1,350)  | 1:A:337:LEU:HD13 | 1:A:393:ALA:HB3 | 8        | 0.19          |
| (1,240)  | 1:A:415:PHE:HA   | 1:A:415:PHE:HE1 | 10       | 0.19          |
| (1,230)  | 1:A:376:TRP:HA   | 1:A:376:TRP:HZ3 | 5        | 0.19          |
| (1,228)  | 1:A:376:TRP:HA   | 1:A:379:HIS:H   | 5        | 0.19          |
| (1,215)  | 1:A:380:LYS:HA   | 1:A:380:LYS:HD2 | 9        | 0.19          |
| (1,215)  | 1:A:380:LYS:HA   | 1:A:380:LYS:HD3 | 9        | 0.19          |
| (1,1502) | 1:A:406:GLU:HG2  | 1:A:414:ARG:H   | 7        | 0.19          |
| (1,1502) | 1:A:406:GLU:HG3  | 1:A:414:ARG:H   | 7        | 0.19          |
| (1,1460) | 1:A:392:ARG:H    | 1:A:392:ARG:HG2 | 7        | 0.19          |
| (1,1460) | 1:A:392:ARG:H    | 1:A:392:ARG:HG3 | 7        | 0.19          |
| (1,1416) | 1:A:372:LEU:HD11 | 1:A:390:MET:HE1 | 4        | 0.19          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1416) | 1:A:372:LEU:HD11 | 1:A:390:MET:HE2  | 4        | 0.19          |
| (1,1416) | 1:A:372:LEU:HD11 | 1:A:390:MET:HE3  | 4        | 0.19          |
| (1,1416) | 1:A:372:LEU:HD12 | 1:A:390:MET:HE1  | 4        | 0.19          |
| (1,1416) | 1:A:372:LEU:HD12 | 1:A:390:MET:HE2  | 4        | 0.19          |
| (1,1416) | 1:A:372:LEU:HD12 | 1:A:390:MET:HE3  | 4        | 0.19          |
| (1,1416) | 1:A:372:LEU:HD13 | 1:A:390:MET:HE1  | 4        | 0.19          |
| (1,1416) | 1:A:372:LEU:HD13 | 1:A:390:MET:HE2  | 4        | 0.19          |
| (1,1416) | 1:A:372:LEU:HD13 | 1:A:390:MET:HE3  | 4        | 0.19          |
| (1,1416) | 1:A:372:LEU:HD21 | 1:A:390:MET:HE1  | 4        | 0.19          |
| (1,1416) | 1:A:372:LEU:HD21 | 1:A:390:MET:HE2  | 4        | 0.19          |
| (1,1416) | 1:A:372:LEU:HD21 | 1:A:390:MET:HE3  | 4        | 0.19          |
| (1,1416) | 1:A:372:LEU:HD22 | 1:A:390:MET:HE1  | 4        | 0.19          |
| (1,1416) | 1:A:372:LEU:HD22 | 1:A:390:MET:HE2  | 4        | 0.19          |
| (1,1416) | 1:A:372:LEU:HD22 | 1:A:390:MET:HE3  | 4        | 0.19          |
| (1,1416) | 1:A:372:LEU:HD23 | 1:A:390:MET:HE1  | 4        | 0.19          |
| (1,1416) | 1:A:372:LEU:HD23 | 1:A:390:MET:HE2  | 4        | 0.19          |
| (1,1416) | 1:A:372:LEU:HD23 | 1:A:390:MET:HE3  | 4        | 0.19          |
| (1,1379) | 1:A:362:LYS:H    | 1:A:362:LYS:HE2  | 5        | 0.19          |
| (1,1379) | 1:A:362:LYS:H    | 1:A:362:LYS:HE3  | 5        | 0.19          |
| (1,1365) | 1:A:353:PHE:HB3  | 1:A:372:LEU:HD11 | 8        | 0.19          |
| (1,1365) | 1:A:353:PHE:HB3  | 1:A:372:LEU:HD12 | 8        | 0.19          |
| (1,1365) | 1:A:353:PHE:HB3  | 1:A:372:LEU:HD13 | 8        | 0.19          |
| (1,1365) | 1:A:353:PHE:HB3  | 1:A:372:LEU:HD21 | 8        | 0.19          |
| (1,1365) | 1:A:353:PHE:HB3  | 1:A:372:LEU:HD22 | 8        | 0.19          |
| (1,1365) | 1:A:353:PHE:HB3  | 1:A:372:LEU:HD23 | 8        | 0.19          |
| (1,1337) | 1:A:345:LEU:HD11 | 1:A:357:GLU:H    | 8        | 0.19          |
| (1,1337) | 1:A:345:LEU:HD12 | 1:A:357:GLU:H    | 8        | 0.19          |
| (1,1337) | 1:A:345:LEU:HD13 | 1:A:357:GLU:H    | 8        | 0.19          |
| (1,1337) | 1:A:345:LEU:HD21 | 1:A:357:GLU:H    | 8        | 0.19          |
| (1,1337) | 1:A:345:LEU:HD22 | 1:A:357:GLU:H    | 8        | 0.19          |
| (1,1337) | 1:A:345:LEU:HD23 | 1:A:357:GLU:H    | 8        | 0.19          |
| (1,1326) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HA   | 10       | 0.19          |
| (1,1326) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HA   | 10       | 0.19          |
| (1,1326) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HA   | 10       | 0.19          |
| (1,1326) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HA   | 10       | 0.19          |
| (1,1326) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HA   | 10       | 0.19          |
| (1,1326) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HA   | 10       | 0.19          |
| (1,1256) | 1:A:337:LEU:HD11 | 1:A:341:VAL:HA   | 5        | 0.19          |
| (1,1256) | 1:A:337:LEU:HD12 | 1:A:341:VAL:HA   | 5        | 0.19          |
| (1,1256) | 1:A:337:LEU:HD13 | 1:A:341:VAL:HA   | 5        | 0.19          |
| (1,1256) | 1:A:337:LEU:HD21 | 1:A:341:VAL:HA   | 5        | 0.19          |
| (1,1256) | 1:A:337:LEU:HD22 | 1:A:341:VAL:HA   | 5        | 0.19          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1256) | 1:A:337:LEU:HD23 | 1:A:341:VAL:HA   | 5        | 0.19          |
| (1,1244) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HE1  | 5        | 0.19          |
| (1,1244) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HE1  | 5        | 0.19          |
| (1,1244) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HE1  | 5        | 0.19          |
| (1,1244) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HE1  | 5        | 0.19          |
| (1,1244) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HE1  | 5        | 0.19          |
| (1,1244) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HE1  | 5        | 0.19          |
| (1,1187) | 1:A:356:TRP:HD1  | 1:A:359:LYS:HD2  | 9        | 0.19          |
| (1,1187) | 1:A:356:TRP:HD1  | 1:A:359:LYS:HD3  | 9        | 0.19          |
| (1,1172) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HG   | 2        | 0.19          |
| (1,1107) | 1:A:328:MET:H    | 1:A:329:GLY:HA2  | 5        | 0.19          |
| (1,1107) | 1:A:328:MET:H    | 1:A:329:GLY:HA3  | 5        | 0.19          |
| (1,1106) | 1:A:352:ASN:HA   | 1:A:354:ILE:H    | 4        | 0.19          |
| (1,1084) | 1:A:376:TRP:H    | 1:A:378:ASN:HB2  | 7        | 0.19          |
| (1,982)  | 1:A:394:LEU:H    | 1:A:396:HIS:HB2  | 5        | 0.18          |
| (1,982)  | 1:A:394:LEU:H    | 1:A:396:HIS:HB3  | 5        | 0.18          |
| (1,950)  | 1:A:350:TYR:H    | 1:A:351:GLU:HG2  | 4        | 0.18          |
| (1,950)  | 1:A:350:TYR:H    | 1:A:351:GLU:HG3  | 4        | 0.18          |
| (1,911)  | 1:A:366:ILE:HG21 | 1:A:368:ASP:H    | 9        | 0.18          |
| (1,911)  | 1:A:366:ILE:HG22 | 1:A:368:ASP:H    | 9        | 0.18          |
| (1,911)  | 1:A:366:ILE:HG23 | 1:A:368:ASP:H    | 9        | 0.18          |
| (1,846)  | 1:A:361:SER:H    | 1:A:363:ILE:HD11 | 4        | 0.18          |
| (1,846)  | 1:A:361:SER:H    | 1:A:363:ILE:HD12 | 4        | 0.18          |
| (1,846)  | 1:A:361:SER:H    | 1:A:363:ILE:HD13 | 4        | 0.18          |
| (1,785)  | 1:A:355:ARG:H    | 1:A:366:ILE:HA   | 3        | 0.18          |
| (1,767)  | 1:A:412:LEU:HB3  | 1:A:413:PHE:H    | 4        | 0.18          |
| (1,760)  | 1:A:345:LEU:HB3  | 1:A:356:TRP:H    | 7        | 0.18          |
| (1,755)  | 1:A:355:ARG:HG2  | 1:A:356:TRP:H    | 6        | 0.18          |
| (1,755)  | 1:A:355:ARG:HG3  | 1:A:356:TRP:H    | 6        | 0.18          |
| (1,755)  | 1:A:355:ARG:HG2  | 1:A:356:TRP:H    | 9        | 0.18          |
| (1,755)  | 1:A:355:ARG:HG3  | 1:A:356:TRP:H    | 9        | 0.18          |
| (1,747)  | 1:A:392:ARG:H    | 1:A:392:ARG:HG3  | 2        | 0.18          |
| (1,726)  | 1:A:387:TYR:HD2  | 1:A:390:MET:H    | 3        | 0.18          |
| (1,534)  | 1:A:345:LEU:HD11 | 1:A:364:PHE:HD2  | 1        | 0.18          |
| (1,534)  | 1:A:345:LEU:HD12 | 1:A:364:PHE:HD2  | 1        | 0.18          |
| (1,534)  | 1:A:345:LEU:HD13 | 1:A:364:PHE:HD2  | 1        | 0.18          |
| (1,528)  | 1:A:362:LYS:H    | 1:A:362:LYS:HG3  | 8        | 0.18          |
| (1,528)  | 1:A:362:LYS:H    | 1:A:362:LYS:HG3  | 9        | 0.18          |
| (1,517)  | 1:A:355:ARG:HG2  | 1:A:367:VAL:HG21 | 1        | 0.18          |
| (1,517)  | 1:A:355:ARG:HG2  | 1:A:367:VAL:HG22 | 1        | 0.18          |
| (1,517)  | 1:A:355:ARG:HG2  | 1:A:367:VAL:HG23 | 1        | 0.18          |
| (1,517)  | 1:A:355:ARG:HG3  | 1:A:367:VAL:HG21 | 1        | 0.18          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,517)  | 1:A:355:ARG:HG3  | 1:A:367:VAL:HG22 | 1        | 0.18          |
| (1,517)  | 1:A:355:ARG:HG3  | 1:A:367:VAL:HG23 | 1        | 0.18          |
| (1,503)  | 1:A:406:GLU:H    | 1:A:412:LEU:HD21 | 4        | 0.18          |
| (1,503)  | 1:A:406:GLU:H    | 1:A:412:LEU:HD22 | 4        | 0.18          |
| (1,503)  | 1:A:406:GLU:H    | 1:A:412:LEU:HD23 | 4        | 0.18          |
| (1,49)   | 1:A:366:ILE:HG21 | 1:A:369:PRO:HB2  | 7        | 0.18          |
| (1,49)   | 1:A:366:ILE:HG22 | 1:A:369:PRO:HB2  | 7        | 0.18          |
| (1,49)   | 1:A:366:ILE:HG23 | 1:A:369:PRO:HB2  | 7        | 0.18          |
| (1,473)  | 1:A:426:ARG:H    | 1:A:426:ARG:HG2  | 7        | 0.18          |
| (1,473)  | 1:A:426:ARG:H    | 1:A:426:ARG:HG3  | 7        | 0.18          |
| (1,466)  | 1:A:392:ARG:H    | 1:A:392:ARG:HG2  | 7        | 0.18          |
| (1,380)  | 1:A:363:ILE:HG21 | 1:A:364:PHE:HD1  | 6        | 0.18          |
| (1,380)  | 1:A:363:ILE:HG22 | 1:A:364:PHE:HD1  | 6        | 0.18          |
| (1,380)  | 1:A:363:ILE:HG23 | 1:A:364:PHE:HD1  | 6        | 0.18          |
| (1,326)  | 1:A:341:VAL:HA   | 1:A:354:ILE:HD11 | 1        | 0.18          |
| (1,326)  | 1:A:341:VAL:HA   | 1:A:354:ILE:HD12 | 1        | 0.18          |
| (1,326)  | 1:A:341:VAL:HA   | 1:A:354:ILE:HD13 | 1        | 0.18          |
| (1,252)  | 1:A:359:LYS:HA   | 1:A:359:LYS:HG2  | 10       | 0.18          |
| (1,1432) | 1:A:376:TRP:HD1  | 1:A:385:MET:HG2  | 2        | 0.18          |
| (1,1432) | 1:A:376:TRP:HD1  | 1:A:385:MET:HG3  | 2        | 0.18          |
| (1,1414) | 1:A:372:LEU:HD11 | 1:A:376:TRP:HE3  | 7        | 0.18          |
| (1,1414) | 1:A:372:LEU:HD12 | 1:A:376:TRP:HE3  | 7        | 0.18          |
| (1,1414) | 1:A:372:LEU:HD13 | 1:A:376:TRP:HE3  | 7        | 0.18          |
| (1,1414) | 1:A:372:LEU:HD21 | 1:A:376:TRP:HE3  | 7        | 0.18          |
| (1,1414) | 1:A:372:LEU:HD22 | 1:A:376:TRP:HE3  | 7        | 0.18          |
| (1,1414) | 1:A:372:LEU:HD23 | 1:A:376:TRP:HE3  | 7        | 0.18          |
| (1,1395) | 1:A:369:PRO:HB3  | 1:A:411:LEU:HD11 | 1        | 0.18          |
| (1,1395) | 1:A:369:PRO:HB3  | 1:A:411:LEU:HD12 | 1        | 0.18          |
| (1,1395) | 1:A:369:PRO:HB3  | 1:A:411:LEU:HD13 | 1        | 0.18          |
| (1,1395) | 1:A:369:PRO:HB3  | 1:A:411:LEU:HD21 | 1        | 0.18          |
| (1,1395) | 1:A:369:PRO:HB3  | 1:A:411:LEU:HD22 | 1        | 0.18          |
| (1,1395) | 1:A:369:PRO:HB3  | 1:A:411:LEU:HD23 | 1        | 0.18          |
| (1,136)  | 1:A:356:TRP:HZ2  | 1:A:359:LYS:HE2  | 2        | 0.18          |
| (1,136)  | 1:A:356:TRP:HZ2  | 1:A:359:LYS:HE3  | 2        | 0.18          |
| (1,1341) | 1:A:345:LEU:HD11 | 1:A:367:VAL:HG21 | 2        | 0.18          |
| (1,1341) | 1:A:345:LEU:HD11 | 1:A:367:VAL:HG22 | 2        | 0.18          |
| (1,1341) | 1:A:345:LEU:HD11 | 1:A:367:VAL:HG23 | 2        | 0.18          |
| (1,1341) | 1:A:345:LEU:HD12 | 1:A:367:VAL:HG21 | 2        | 0.18          |
| (1,1341) | 1:A:345:LEU:HD12 | 1:A:367:VAL:HG22 | 2        | 0.18          |
| (1,1341) | 1:A:345:LEU:HD12 | 1:A:367:VAL:HG23 | 2        | 0.18          |
| (1,1341) | 1:A:345:LEU:HD13 | 1:A:367:VAL:HG21 | 2        | 0.18          |
| (1,1341) | 1:A:345:LEU:HD13 | 1:A:367:VAL:HG22 | 2        | 0.18          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1341) | 1:A:345:LEU:HD13 | 1:A:367:VAL:HG23 | 2        | 0.18          |
| (1,1341) | 1:A:345:LEU:HD21 | 1:A:367:VAL:HG21 | 2        | 0.18          |
| (1,1341) | 1:A:345:LEU:HD21 | 1:A:367:VAL:HG22 | 2        | 0.18          |
| (1,1341) | 1:A:345:LEU:HD21 | 1:A:367:VAL:HG23 | 2        | 0.18          |
| (1,1341) | 1:A:345:LEU:HD22 | 1:A:367:VAL:HG21 | 2        | 0.18          |
| (1,1341) | 1:A:345:LEU:HD22 | 1:A:367:VAL:HG22 | 2        | 0.18          |
| (1,1341) | 1:A:345:LEU:HD22 | 1:A:367:VAL:HG23 | 2        | 0.18          |
| (1,1341) | 1:A:345:LEU:HD23 | 1:A:367:VAL:HG21 | 2        | 0.18          |
| (1,1341) | 1:A:345:LEU:HD23 | 1:A:367:VAL:HG22 | 2        | 0.18          |
| (1,1341) | 1:A:345:LEU:HD23 | 1:A:367:VAL:HG23 | 2        | 0.18          |
| (1,1307) | 1:A:344:LEU:HD11 | 1:A:353:PHE:H    | 1        | 0.18          |
| (1,1307) | 1:A:344:LEU:HD12 | 1:A:353:PHE:H    | 1        | 0.18          |
| (1,1307) | 1:A:344:LEU:HD13 | 1:A:353:PHE:H    | 1        | 0.18          |
| (1,1307) | 1:A:344:LEU:HD21 | 1:A:353:PHE:H    | 1        | 0.18          |
| (1,1307) | 1:A:344:LEU:HD22 | 1:A:353:PHE:H    | 1        | 0.18          |
| (1,1307) | 1:A:344:LEU:HD23 | 1:A:353:PHE:H    | 1        | 0.18          |
| (1,1307) | 1:A:344:LEU:HD11 | 1:A:353:PHE:H    | 9        | 0.18          |
| (1,1307) | 1:A:344:LEU:HD12 | 1:A:353:PHE:H    | 9        | 0.18          |
| (1,1307) | 1:A:344:LEU:HD13 | 1:A:353:PHE:H    | 9        | 0.18          |
| (1,1307) | 1:A:344:LEU:HD21 | 1:A:353:PHE:H    | 9        | 0.18          |
| (1,1307) | 1:A:344:LEU:HD22 | 1:A:353:PHE:H    | 9        | 0.18          |
| (1,1307) | 1:A:344:LEU:HD23 | 1:A:353:PHE:H    | 9        | 0.18          |
| (1,1256) | 1:A:337:LEU:HD11 | 1:A:341:VAL:HA   | 10       | 0.18          |
| (1,1256) | 1:A:337:LEU:HD12 | 1:A:341:VAL:HA   | 10       | 0.18          |
| (1,1256) | 1:A:337:LEU:HD13 | 1:A:341:VAL:HA   | 10       | 0.18          |
| (1,1256) | 1:A:337:LEU:HD21 | 1:A:341:VAL:HA   | 10       | 0.18          |
| (1,1256) | 1:A:337:LEU:HD22 | 1:A:341:VAL:HA   | 10       | 0.18          |
| (1,1256) | 1:A:337:LEU:HD23 | 1:A:341:VAL:HA   | 10       | 0.18          |
| (1,1245) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HZ2  | 6        | 0.18          |
| (1,1245) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HZ2  | 6        | 0.18          |
| (1,1245) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HZ2  | 6        | 0.18          |
| (1,1245) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HZ2  | 6        | 0.18          |
| (1,1245) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HZ2  | 6        | 0.18          |
| (1,1245) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HZ2  | 6        | 0.18          |
| (1,1244) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HE1  | 9        | 0.18          |
| (1,1244) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HE1  | 9        | 0.18          |
| (1,1244) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HE1  | 9        | 0.18          |
| (1,1244) | 1:A:336:LEU:HD21 | 1:A:338:TRP:HE1  | 9        | 0.18          |
| (1,1244) | 1:A:336:LEU:HD22 | 1:A:338:TRP:HE1  | 9        | 0.18          |
| (1,1244) | 1:A:336:LEU:HD23 | 1:A:338:TRP:HE1  | 9        | 0.18          |
| (1,1235) | 1:A:328:MET:H    | 1:A:328:MET:HG2  | 9        | 0.18          |
| (1,1235) | 1:A:328:MET:H    | 1:A:328:MET:HG3  | 9        | 0.18          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1199) | 1:A:393:ALA:HA   | 1:A:396:HIS:HD2  | 5        | 0.18          |
| (1,1176) | 1:A:397:TYR:HD2  | 1:A:403:ILE:HB   | 10       | 0.18          |
| (1,1130) | 1:A:340:TYR:H    | 1:A:340:TYR:HD2  | 5        | 0.18          |
| (1,1113) | 1:A:354:ILE:H    | 1:A:367:VAL:HB   | 1        | 0.18          |
| (1,1084) | 1:A:376:TRP:H    | 1:A:378:ASN:HB2  | 5        | 0.18          |
| (1,937)  | 1:A:348:SER:HA   | 1:A:350:TYR:H    | 5        | 0.17          |
| (1,923)  | 1:A:397:TYR:H    | 1:A:403:ILE:HB   | 5        | 0.17          |
| (1,785)  | 1:A:355:ARG:H    | 1:A:366:ILE:HA   | 9        | 0.17          |
| (1,74)   | 1:A:360:GLU:HG2  | 1:A:361:SER:H    | 3        | 0.17          |
| (1,74)   | 1:A:360:GLU:HG3  | 1:A:361:SER:H    | 3        | 0.17          |
| (1,701)  | 1:A:363:ILE:HD11 | 1:A:415:PHE:H    | 7        | 0.17          |
| (1,701)  | 1:A:363:ILE:HD12 | 1:A:415:PHE:H    | 7        | 0.17          |
| (1,701)  | 1:A:363:ILE:HD13 | 1:A:415:PHE:H    | 7        | 0.17          |
| (1,688)  | 1:A:425:GLY:HA2  | 1:A:426:ARG:H    | 6        | 0.17          |
| (1,688)  | 1:A:425:GLY:HA3  | 1:A:426:ARG:H    | 6        | 0.17          |
| (1,645)  | 1:A:406:GLU:H    | 1:A:412:LEU:HB3  | 6        | 0.17          |
| (1,626)  | 1:A:355:ARG:H    | 1:A:367:VAL:H    | 5        | 0.17          |
| (1,539)  | 1:A:366:ILE:H    | 1:A:411:LEU:HD21 | 3        | 0.17          |
| (1,539)  | 1:A:366:ILE:H    | 1:A:411:LEU:HD22 | 3        | 0.17          |
| (1,539)  | 1:A:366:ILE:H    | 1:A:411:LEU:HD23 | 3        | 0.17          |
| (1,48)   | 1:A:385:MET:HB2  | 1:A:386:THR:HA   | 2        | 0.17          |
| (1,437)  | 1:A:330:ARG:HA   | 1:A:331:ILE:HG21 | 8        | 0.17          |
| (1,437)  | 1:A:330:ARG:HA   | 1:A:331:ILE:HG22 | 8        | 0.17          |
| (1,437)  | 1:A:330:ARG:HA   | 1:A:331:ILE:HG23 | 8        | 0.17          |
| (1,376)  | 1:A:373:ALA:HB1  | 1:A:376:TRP:HB3  | 9        | 0.17          |
| (1,376)  | 1:A:373:ALA:HB2  | 1:A:376:TRP:HB3  | 9        | 0.17          |
| (1,376)  | 1:A:373:ALA:HB3  | 1:A:376:TRP:HB3  | 9        | 0.17          |
| (1,315)  | 1:A:345:LEU:HA   | 1:A:354:ILE:HD11 | 2        | 0.17          |
| (1,315)  | 1:A:345:LEU:HA   | 1:A:354:ILE:HD12 | 2        | 0.17          |
| (1,315)  | 1:A:345:LEU:HA   | 1:A:354:ILE:HD13 | 2        | 0.17          |
| (1,296)  | 1:A:340:TYR:HA   | 1:A:340:TYR:HD2  | 5        | 0.17          |
| (1,265)  | 1:A:391:SER:HA   | 1:A:394:LEU:HG   | 5        | 0.17          |
| (1,235)  | 1:A:397:TYR:HA   | 1:A:400:LEU:HB2  | 10       | 0.17          |
| (1,200)  | 1:A:355:ARG:HA   | 1:A:355:ARG:HD2  | 9        | 0.17          |
| (1,200)  | 1:A:355:ARG:HA   | 1:A:355:ARG:HD3  | 9        | 0.17          |
| (1,187)  | 1:A:365:ARG:HA   | 1:A:412:LEU:HD21 | 1        | 0.17          |
| (1,187)  | 1:A:365:ARG:HA   | 1:A:412:LEU:HD22 | 1        | 0.17          |
| (1,187)  | 1:A:365:ARG:HA   | 1:A:412:LEU:HD23 | 1        | 0.17          |
| (1,161)  | 1:A:409:GLN:HG2  | 1:A:412:LEU:HB3  | 1        | 0.17          |
| (1,161)  | 1:A:409:GLN:HG3  | 1:A:412:LEU:HB3  | 1        | 0.17          |
| (1,1522) | 1:A:416:MET:H    | 1:A:417:LYS:HB2  | 7        | 0.17          |
| (1,1522) | 1:A:416:MET:H    | 1:A:417:LYS:HB3  | 7        | 0.17          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD11 | 3        | 0.17          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD12 | 3        | 0.17          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD13 | 3        | 0.17          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD21 | 3        | 0.17          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD22 | 3        | 0.17          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD23 | 3        | 0.17          |
| (1,1413) | 1:A:372:LEU:HD11 | 1:A:376:TRP:H    | 9        | 0.17          |
| (1,1413) | 1:A:372:LEU:HD12 | 1:A:376:TRP:H    | 9        | 0.17          |
| (1,1413) | 1:A:372:LEU:HD13 | 1:A:376:TRP:H    | 9        | 0.17          |
| (1,1413) | 1:A:372:LEU:HD21 | 1:A:376:TRP:H    | 9        | 0.17          |
| (1,1413) | 1:A:372:LEU:HD22 | 1:A:376:TRP:H    | 9        | 0.17          |
| (1,1413) | 1:A:372:LEU:HD23 | 1:A:376:TRP:H    | 9        | 0.17          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD11 | 4        | 0.17          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD12 | 4        | 0.17          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD13 | 4        | 0.17          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD21 | 4        | 0.17          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD22 | 4        | 0.17          |
| (1,1368) | 1:A:353:PHE:HD2  | 1:A:372:LEU:HD23 | 4        | 0.17          |
| (1,1307) | 1:A:344:LEU:HD11 | 1:A:353:PHE:H    | 5        | 0.17          |
| (1,1307) | 1:A:344:LEU:HD12 | 1:A:353:PHE:H    | 5        | 0.17          |
| (1,1307) | 1:A:344:LEU:HD13 | 1:A:353:PHE:H    | 5        | 0.17          |
| (1,1307) | 1:A:344:LEU:HD21 | 1:A:353:PHE:H    | 5        | 0.17          |
| (1,1307) | 1:A:344:LEU:HD22 | 1:A:353:PHE:H    | 5        | 0.17          |
| (1,1307) | 1:A:344:LEU:HD23 | 1:A:353:PHE:H    | 5        | 0.17          |
| (1,1307) | 1:A:344:LEU:HD11 | 1:A:353:PHE:H    | 8        | 0.17          |
| (1,1307) | 1:A:344:LEU:HD12 | 1:A:353:PHE:H    | 8        | 0.17          |
| (1,1307) | 1:A:344:LEU:HD13 | 1:A:353:PHE:H    | 8        | 0.17          |
| (1,1307) | 1:A:344:LEU:HD21 | 1:A:353:PHE:H    | 8        | 0.17          |
| (1,1307) | 1:A:344:LEU:HD22 | 1:A:353:PHE:H    | 8        | 0.17          |
| (1,1307) | 1:A:344:LEU:HD23 | 1:A:353:PHE:H    | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG11 | 1:A:344:LEU:HD11 | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG11 | 1:A:344:LEU:HD12 | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG11 | 1:A:344:LEU:HD13 | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG11 | 1:A:344:LEU:HD21 | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG11 | 1:A:344:LEU:HD22 | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG11 | 1:A:344:LEU:HD23 | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG12 | 1:A:344:LEU:HD11 | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG12 | 1:A:344:LEU:HD12 | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG12 | 1:A:344:LEU:HD13 | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG12 | 1:A:344:LEU:HD21 | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG12 | 1:A:344:LEU:HD22 | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG12 | 1:A:344:LEU:HD23 | 8        | 0.17          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1286) | 1:A:341:VAL:HG13 | 1:A:344:LEU:HD11 | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG13 | 1:A:344:LEU:HD12 | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG13 | 1:A:344:LEU:HD13 | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG13 | 1:A:344:LEU:HD21 | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG13 | 1:A:344:LEU:HD22 | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG13 | 1:A:344:LEU:HD23 | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG21 | 1:A:344:LEU:HD11 | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG21 | 1:A:344:LEU:HD12 | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG21 | 1:A:344:LEU:HD13 | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG21 | 1:A:344:LEU:HD21 | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG21 | 1:A:344:LEU:HD22 | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG21 | 1:A:344:LEU:HD23 | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG22 | 1:A:344:LEU:HD11 | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG22 | 1:A:344:LEU:HD12 | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG22 | 1:A:344:LEU:HD13 | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG22 | 1:A:344:LEU:HD21 | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG22 | 1:A:344:LEU:HD22 | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG22 | 1:A:344:LEU:HD23 | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG23 | 1:A:344:LEU:HD11 | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG23 | 1:A:344:LEU:HD12 | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG23 | 1:A:344:LEU:HD13 | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG23 | 1:A:344:LEU:HD21 | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG23 | 1:A:344:LEU:HD22 | 8        | 0.17          |
| (1,1286) | 1:A:341:VAL:HG23 | 1:A:344:LEU:HD23 | 8        | 0.17          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD11 | 10       | 0.17          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD12 | 10       | 0.17          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD13 | 10       | 0.17          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD21 | 10       | 0.17          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD22 | 10       | 0.17          |
| (1,1276) | 1:A:340:TYR:HD1  | 1:A:344:LEU:HD23 | 10       | 0.17          |
| (1,1235) | 1:A:328:MET:H    | 1:A:328:MET:HG2  | 10       | 0.17          |
| (1,1235) | 1:A:328:MET:H    | 1:A:328:MET:HG3  | 10       | 0.17          |
| (1,1130) | 1:A:340:TYR:H    | 1:A:340:TYR:HD2  | 4        | 0.17          |
| (1,1057) | 1:A:373:ALA:H    | 1:A:376:TRP:HB2  | 8        | 0.17          |
| (1,1057) | 1:A:373:ALA:H    | 1:A:376:TRP:HB3  | 8        | 0.17          |
| (1,1035) | 1:A:358:ASP:HB2  | 1:A:360:GLU:H    | 9        | 0.17          |
| (1,1035) | 1:A:358:ASP:HB3  | 1:A:360:GLU:H    | 9        | 0.17          |
| (1,1035) | 1:A:358:ASP:HB2  | 1:A:360:GLU:H    | 10       | 0.17          |
| (1,1035) | 1:A:358:ASP:HB3  | 1:A:360:GLU:H    | 10       | 0.17          |
| (1,923)  | 1:A:397:TYR:H    | 1:A:403:ILE:HB   | 6        | 0.16          |
| (1,921)  | 1:A:397:TYR:H    | 1:A:402:ILE:HD11 | 8        | 0.16          |
| (1,921)  | 1:A:397:TYR:H    | 1:A:402:ILE:HD12 | 8        | 0.16          |

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| Key     | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|---------|------------------|------------------|----------|---------------|
| (1,921) | 1:A:397:TYR:H    | 1:A:402:ILE:HD13 | 8        | 0.16          |
| (1,911) | 1:A:366:ILE:HG21 | 1:A:368:ASP:H    | 5        | 0.16          |
| (1,911) | 1:A:366:ILE:HG22 | 1:A:368:ASP:H    | 5        | 0.16          |
| (1,911) | 1:A:366:ILE:HG23 | 1:A:368:ASP:H    | 5        | 0.16          |
| (1,895) | 1:A:353:PHE:H    | 1:A:354:ILE:HG21 | 2        | 0.16          |
| (1,895) | 1:A:353:PHE:H    | 1:A:354:ILE:HG22 | 2        | 0.16          |
| (1,895) | 1:A:353:PHE:H    | 1:A:354:ILE:HG23 | 2        | 0.16          |
| (1,895) | 1:A:353:PHE:H    | 1:A:354:ILE:HG21 | 5        | 0.16          |
| (1,895) | 1:A:353:PHE:H    | 1:A:354:ILE:HG22 | 5        | 0.16          |
| (1,895) | 1:A:353:PHE:H    | 1:A:354:ILE:HG23 | 5        | 0.16          |
| (1,833) | 1:A:418:THR:H    | 1:A:421:GLU:H    | 5        | 0.16          |
| (1,826) | 1:A:378:ASN:HB3  | 1:A:378:ASN:HD22 | 3        | 0.16          |
| (1,826) | 1:A:378:ASN:HB3  | 1:A:378:ASN:HD22 | 10       | 0.16          |
| (1,802) | 1:A:354:ILE:HD11 | 1:A:365:ARG:H    | 7        | 0.16          |
| (1,802) | 1:A:354:ILE:HD12 | 1:A:365:ARG:H    | 7        | 0.16          |
| (1,802) | 1:A:354:ILE:HD13 | 1:A:365:ARG:H    | 7        | 0.16          |
| (1,767) | 1:A:412:LEU:HB3  | 1:A:413:PHE:H    | 2        | 0.16          |
| (1,726) | 1:A:387:TYR:HD2  | 1:A:390:MET:H    | 8        | 0.16          |
| (1,604) | 1:A:376:TRP:HE1  | 1:A:393:ALA:HB1  | 9        | 0.16          |
| (1,604) | 1:A:376:TRP:HE1  | 1:A:393:ALA:HB2  | 9        | 0.16          |
| (1,604) | 1:A:376:TRP:HE1  | 1:A:393:ALA:HB3  | 9        | 0.16          |
| (1,481) | 1:A:355:ARG:H    | 1:A:365:ARG:HG2  | 7        | 0.16          |
| (1,472) | 1:A:354:ILE:HG12 | 1:A:367:VAL:H    | 3        | 0.16          |
| (1,472) | 1:A:354:ILE:HG12 | 1:A:367:VAL:H    | 4        | 0.16          |
| (1,426) | 1:A:410:ARG:HA   | 1:A:410:ARG:HD2  | 4        | 0.16          |
| (1,426) | 1:A:410:ARG:HA   | 1:A:410:ARG:HD3  | 4        | 0.16          |
| (1,387) | 1:A:358:ASP:HB2  | 1:A:363:ILE:HG21 | 10       | 0.16          |
| (1,387) | 1:A:358:ASP:HB2  | 1:A:363:ILE:HG22 | 10       | 0.16          |
| (1,387) | 1:A:358:ASP:HB2  | 1:A:363:ILE:HG23 | 10       | 0.16          |
| (1,387) | 1:A:358:ASP:HB3  | 1:A:363:ILE:HG21 | 10       | 0.16          |
| (1,387) | 1:A:358:ASP:HB3  | 1:A:363:ILE:HG22 | 10       | 0.16          |
| (1,387) | 1:A:358:ASP:HB3  | 1:A:363:ILE:HG23 | 10       | 0.16          |
| (1,359) | 1:A:403:ILE:HG21 | 1:A:415:PHE:HE1  | 3        | 0.16          |
| (1,359) | 1:A:403:ILE:HG22 | 1:A:415:PHE:HE1  | 3        | 0.16          |
| (1,359) | 1:A:403:ILE:HG23 | 1:A:415:PHE:HE1  | 3        | 0.16          |
| (1,344) | 1:A:352:ASN:HA   | 1:A:367:VAL:HG21 | 7        | 0.16          |
| (1,344) | 1:A:352:ASN:HA   | 1:A:367:VAL:HG22 | 7        | 0.16          |
| (1,344) | 1:A:352:ASN:HA   | 1:A:367:VAL:HG23 | 7        | 0.16          |
| (1,263) | 1:A:348:SER:HA   | 1:A:351:GLU:HG2  | 8        | 0.16          |
| (1,263) | 1:A:348:SER:HA   | 1:A:351:GLU:HG3  | 8        | 0.16          |
| (1,20)  | 1:A:345:LEU:H    | 1:A:354:ILE:HG21 | 2        | 0.16          |
| (1,20)  | 1:A:345:LEU:H    | 1:A:354:ILE:HG22 | 2        | 0.16          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,20)   | 1:A:345:LEU:H    | 1:A:354:ILE:HG23 | 2        | 0.16          |
| (1,20)   | 1:A:345:LEU:H    | 1:A:354:ILE:HG21 | 7        | 0.16          |
| (1,20)   | 1:A:345:LEU:H    | 1:A:354:ILE:HG22 | 7        | 0.16          |
| (1,20)   | 1:A:345:LEU:H    | 1:A:354:ILE:HG23 | 7        | 0.16          |
| (1,1440) | 1:A:377:GLY:HA2  | 1:A:385:MET:HE1  | 3        | 0.16          |
| (1,1440) | 1:A:377:GLY:HA2  | 1:A:385:MET:HE2  | 3        | 0.16          |
| (1,1440) | 1:A:377:GLY:HA2  | 1:A:385:MET:HE3  | 3        | 0.16          |
| (1,1440) | 1:A:377:GLY:HA3  | 1:A:385:MET:HE1  | 3        | 0.16          |
| (1,1440) | 1:A:377:GLY:HA3  | 1:A:385:MET:HE2  | 3        | 0.16          |
| (1,1440) | 1:A:377:GLY:HA3  | 1:A:385:MET:HE3  | 3        | 0.16          |
| (1,1416) | 1:A:372:LEU:HD11 | 1:A:390:MET:HE1  | 8        | 0.16          |
| (1,1416) | 1:A:372:LEU:HD11 | 1:A:390:MET:HE2  | 8        | 0.16          |
| (1,1416) | 1:A:372:LEU:HD11 | 1:A:390:MET:HE3  | 8        | 0.16          |
| (1,1416) | 1:A:372:LEU:HD12 | 1:A:390:MET:HE1  | 8        | 0.16          |
| (1,1416) | 1:A:372:LEU:HD12 | 1:A:390:MET:HE2  | 8        | 0.16          |
| (1,1416) | 1:A:372:LEU:HD12 | 1:A:390:MET:HE3  | 8        | 0.16          |
| (1,1416) | 1:A:372:LEU:HD13 | 1:A:390:MET:HE1  | 8        | 0.16          |
| (1,1416) | 1:A:372:LEU:HD13 | 1:A:390:MET:HE2  | 8        | 0.16          |
| (1,1416) | 1:A:372:LEU:HD13 | 1:A:390:MET:HE3  | 8        | 0.16          |
| (1,1416) | 1:A:372:LEU:HD21 | 1:A:390:MET:HE1  | 8        | 0.16          |
| (1,1416) | 1:A:372:LEU:HD21 | 1:A:390:MET:HE2  | 8        | 0.16          |
| (1,1416) | 1:A:372:LEU:HD21 | 1:A:390:MET:HE3  | 8        | 0.16          |
| (1,1416) | 1:A:372:LEU:HD22 | 1:A:390:MET:HE1  | 8        | 0.16          |
| (1,1416) | 1:A:372:LEU:HD22 | 1:A:390:MET:HE2  | 8        | 0.16          |
| (1,1416) | 1:A:372:LEU:HD22 | 1:A:390:MET:HE3  | 8        | 0.16          |
| (1,1416) | 1:A:372:LEU:HD23 | 1:A:390:MET:HE1  | 8        | 0.16          |
| (1,1416) | 1:A:372:LEU:HD23 | 1:A:390:MET:HE2  | 8        | 0.16          |
| (1,1416) | 1:A:372:LEU:HD23 | 1:A:390:MET:HE3  | 8        | 0.16          |
| (1,1410) | 1:A:372:LEU:HD11 | 1:A:375:LEU:H    | 1        | 0.16          |
| (1,1410) | 1:A:372:LEU:HD12 | 1:A:375:LEU:H    | 1        | 0.16          |
| (1,1410) | 1:A:372:LEU:HD13 | 1:A:375:LEU:H    | 1        | 0.16          |
| (1,1410) | 1:A:372:LEU:HD21 | 1:A:375:LEU:H    | 1        | 0.16          |
| (1,1410) | 1:A:372:LEU:HD22 | 1:A:375:LEU:H    | 1        | 0.16          |
| (1,1410) | 1:A:372:LEU:HD23 | 1:A:375:LEU:H    | 1        | 0.16          |
| (1,1390) | 1:A:366:ILE:H    | 1:A:411:LEU:HD11 | 2        | 0.16          |
| (1,1390) | 1:A:366:ILE:H    | 1:A:411:LEU:HD12 | 2        | 0.16          |
| (1,1390) | 1:A:366:ILE:H    | 1:A:411:LEU:HD13 | 2        | 0.16          |
| (1,1390) | 1:A:366:ILE:H    | 1:A:411:LEU:HD21 | 2        | 0.16          |
| (1,1390) | 1:A:366:ILE:H    | 1:A:411:LEU:HD22 | 2        | 0.16          |
| (1,1390) | 1:A:366:ILE:H    | 1:A:411:LEU:HD23 | 2        | 0.16          |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD11 | 1        | 0.16          |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD12 | 1        | 0.16          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD13 | 1        | 0.16          |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD21 | 1        | 0.16          |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD22 | 1        | 0.16          |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD23 | 1        | 0.16          |
| (1,1362) | 1:A:353:PHE:H    | 1:A:372:LEU:HD11 | 3        | 0.16          |
| (1,1362) | 1:A:353:PHE:H    | 1:A:372:LEU:HD12 | 3        | 0.16          |
| (1,1362) | 1:A:353:PHE:H    | 1:A:372:LEU:HD13 | 3        | 0.16          |
| (1,1362) | 1:A:353:PHE:H    | 1:A:372:LEU:HD21 | 3        | 0.16          |
| (1,1362) | 1:A:353:PHE:H    | 1:A:372:LEU:HD22 | 3        | 0.16          |
| (1,1362) | 1:A:353:PHE:H    | 1:A:372:LEU:HD23 | 3        | 0.16          |
| (1,1343) | 1:A:348:SER:HA   | 1:A:351:GLU:HB2  | 5        | 0.16          |
| (1,1343) | 1:A:348:SER:HA   | 1:A:351:GLU:HB3  | 5        | 0.16          |
| (1,1328) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HG2  | 1        | 0.16          |
| (1,1328) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HG3  | 1        | 0.16          |
| (1,1328) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HG2  | 1        | 0.16          |
| (1,1328) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HG3  | 1        | 0.16          |
| (1,1328) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HG2  | 1        | 0.16          |
| (1,1328) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HG3  | 1        | 0.16          |
| (1,1328) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HG2  | 1        | 0.16          |
| (1,1328) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HG3  | 1        | 0.16          |
| (1,1328) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HG2  | 1        | 0.16          |
| (1,1328) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HG3  | 1        | 0.16          |
| (1,1328) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HG2  | 1        | 0.16          |
| (1,1328) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HG3  | 1        | 0.16          |
| (1,1306) | 1:A:344:LEU:HD11 | 1:A:350:TYR:HE1  | 5        | 0.16          |
| (1,1306) | 1:A:344:LEU:HD12 | 1:A:350:TYR:HE1  | 5        | 0.16          |
| (1,1306) | 1:A:344:LEU:HD13 | 1:A:350:TYR:HE1  | 5        | 0.16          |
| (1,1306) | 1:A:344:LEU:HD21 | 1:A:350:TYR:HE1  | 5        | 0.16          |
| (1,1306) | 1:A:344:LEU:HD22 | 1:A:350:TYR:HE1  | 5        | 0.16          |
| (1,1306) | 1:A:344:LEU:HD23 | 1:A:350:TYR:HE1  | 5        | 0.16          |
| (1,1204) | 1:A:398:TYR:HE1  | 1:A:404:ARG:HA   | 7        | 0.16          |
| (1,1202) | 1:A:397:TYR:HA   | 1:A:397:TYR:HE1  | 1        | 0.16          |
| (1,1187) | 1:A:356:TRP:HD1  | 1:A:359:LYS:HD2  | 7        | 0.16          |
| (1,1187) | 1:A:356:TRP:HD1  | 1:A:359:LYS:HD3  | 7        | 0.16          |
| (1,1160) | 1:A:387:TYR:HB2  | 1:A:387:TYR:HD2  | 1        | 0.16          |
| (1,1160) | 1:A:387:TYR:HB2  | 1:A:387:TYR:HD2  | 4        | 0.16          |
| (1,1108) | 1:A:354:ILE:H    | 1:A:367:VAL:H    | 4        | 0.16          |
| (1,1107) | 1:A:328:MET:H    | 1:A:329:GLY:HA2  | 7        | 0.16          |
| (1,1107) | 1:A:328:MET:H    | 1:A:329:GLY:HA3  | 7        | 0.16          |
| (1,1106) | 1:A:352:ASN:HA   | 1:A:354:ILE:H    | 2        | 0.16          |
| (1,1072) | 1:A:421:GLU:H    | 1:A:422:ILE:HB   | 8        | 0.16          |
| (1,1035) | 1:A:358:ASP:HB2  | 1:A:360:GLU:H    | 4        | 0.16          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1035) | 1:A:358:ASP:HB3  | 1:A:360:GLU:H    | 4        | 0.16          |
| (1,1014) | 1:A:409:GLN:HB2  | 1:A:412:LEU:H    | 2        | 0.16          |
| (1,1008) | 1:A:412:LEU:H    | 1:A:413:PHE:HD1  | 9        | 0.16          |
| (1,896)  | 1:A:353:PHE:H    | 1:A:354:ILE:HB   | 10       | 0.15          |
| (1,844)  | 1:A:359:LYS:HA   | 1:A:361:SER:H    | 7        | 0.15          |
| (1,84)   | 1:A:358:ASP:HA   | 1:A:360:GLU:HG2  | 8        | 0.15          |
| (1,84)   | 1:A:358:ASP:HA   | 1:A:360:GLU:HG3  | 8        | 0.15          |
| (1,820)  | 1:A:366:ILE:HG21 | 1:A:371:GLY:H    | 10       | 0.15          |
| (1,820)  | 1:A:366:ILE:HG22 | 1:A:371:GLY:H    | 10       | 0.15          |
| (1,820)  | 1:A:366:ILE:HG23 | 1:A:371:GLY:H    | 10       | 0.15          |
| (1,74)   | 1:A:360:GLU:HG2  | 1:A:361:SER:H    | 1        | 0.15          |
| (1,74)   | 1:A:360:GLU:HG3  | 1:A:361:SER:H    | 1        | 0.15          |
| (1,677)  | 1:A:366:ILE:H    | 1:A:366:ILE:HD11 | 5        | 0.15          |
| (1,677)  | 1:A:366:ILE:H    | 1:A:366:ILE:HD12 | 5        | 0.15          |
| (1,677)  | 1:A:366:ILE:H    | 1:A:366:ILE:HD13 | 5        | 0.15          |
| (1,677)  | 1:A:366:ILE:H    | 1:A:366:ILE:HD11 | 10       | 0.15          |
| (1,677)  | 1:A:366:ILE:H    | 1:A:366:ILE:HD12 | 10       | 0.15          |
| (1,677)  | 1:A:366:ILE:H    | 1:A:366:ILE:HD13 | 10       | 0.15          |
| (1,675)  | 1:A:365:ARG:HB2  | 1:A:366:ILE:H    | 2        | 0.15          |
| (1,675)  | 1:A:365:ARG:HB3  | 1:A:366:ILE:H    | 2        | 0.15          |
| (1,49)   | 1:A:366:ILE:HG21 | 1:A:369:PRO:HB2  | 9        | 0.15          |
| (1,49)   | 1:A:366:ILE:HG22 | 1:A:369:PRO:HB2  | 9        | 0.15          |
| (1,49)   | 1:A:366:ILE:HG23 | 1:A:369:PRO:HB2  | 9        | 0.15          |
| (1,484)  | 1:A:404:ARG:HA   | 1:A:404:ARG:HG2  | 10       | 0.15          |
| (1,466)  | 1:A:392:ARG:H    | 1:A:392:ARG:HG2  | 10       | 0.15          |
| (1,46)   | 1:A:385:MET:HB3  | 1:A:386:THR:HG21 | 4        | 0.15          |
| (1,46)   | 1:A:385:MET:HB3  | 1:A:386:THR:HG22 | 4        | 0.15          |
| (1,46)   | 1:A:385:MET:HB3  | 1:A:386:THR:HG23 | 4        | 0.15          |
| (1,421)  | 1:A:405:LYS:HA   | 1:A:413:PHE:HB3  | 10       | 0.15          |
| (1,37)   | 1:A:376:TRP:HE1  | 1:A:390:MET:HE1  | 9        | 0.15          |
| (1,37)   | 1:A:376:TRP:HE1  | 1:A:390:MET:HE2  | 9        | 0.15          |
| (1,37)   | 1:A:376:TRP:HE1  | 1:A:390:MET:HE3  | 9        | 0.15          |
| (1,330)  | 1:A:358:ASP:HA   | 1:A:361:SER:HB2  | 1        | 0.15          |
| (1,240)  | 1:A:415:PHE:HA   | 1:A:415:PHE:HE1  | 9        | 0.15          |
| (1,152)  | 1:A:354:ILE:H    | 1:A:355:ARG:HD2  | 10       | 0.15          |
| (1,152)  | 1:A:354:ILE:H    | 1:A:355:ARG:HD3  | 10       | 0.15          |
| (1,1505) | 1:A:408:GLY:HA2  | 1:A:409:GLN:HG2  | 2        | 0.15          |
| (1,1505) | 1:A:408:GLY:HA2  | 1:A:409:GLN:HG3  | 2        | 0.15          |
| (1,1505) | 1:A:408:GLY:HA3  | 1:A:409:GLN:HG2  | 2        | 0.15          |
| (1,1505) | 1:A:408:GLY:HA3  | 1:A:409:GLN:HG3  | 2        | 0.15          |
| (1,1434) | 1:A:376:TRP:HZ2  | 1:A:380:LYS:HE2  | 2        | 0.15          |
| (1,1434) | 1:A:376:TRP:HZ2  | 1:A:380:LYS:HE3  | 2        | 0.15          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1400) | 1:A:370:ASN:HB2  | 1:A:373:ALA:HB1  | 4        | 0.15          |
| (1,1400) | 1:A:370:ASN:HB2  | 1:A:373:ALA:HB2  | 4        | 0.15          |
| (1,1400) | 1:A:370:ASN:HB2  | 1:A:373:ALA:HB3  | 4        | 0.15          |
| (1,1400) | 1:A:370:ASN:HB3  | 1:A:373:ALA:HB1  | 4        | 0.15          |
| (1,1400) | 1:A:370:ASN:HB3  | 1:A:373:ALA:HB2  | 4        | 0.15          |
| (1,1400) | 1:A:370:ASN:HB3  | 1:A:373:ALA:HB3  | 4        | 0.15          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD11 | 8        | 0.15          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD12 | 8        | 0.15          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD13 | 8        | 0.15          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD21 | 8        | 0.15          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD22 | 8        | 0.15          |
| (1,1389) | 1:A:365:ARG:HD3  | 1:A:411:LEU:HD23 | 8        | 0.15          |
| (1,1375) | 1:A:357:GLU:HG2  | 1:A:412:LEU:HA   | 7        | 0.15          |
| (1,1375) | 1:A:357:GLU:HG3  | 1:A:412:LEU:HA   | 7        | 0.15          |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD11 | 7        | 0.15          |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD12 | 7        | 0.15          |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD13 | 7        | 0.15          |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD21 | 7        | 0.15          |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD22 | 7        | 0.15          |
| (1,1370) | 1:A:354:ILE:H    | 1:A:375:LEU:HD23 | 7        | 0.15          |
| (1,1321) | 1:A:345:LEU:HD11 | 1:A:354:ILE:HA   | 7        | 0.15          |
| (1,1321) | 1:A:345:LEU:HD12 | 1:A:354:ILE:HA   | 7        | 0.15          |
| (1,1321) | 1:A:345:LEU:HD13 | 1:A:354:ILE:HA   | 7        | 0.15          |
| (1,1321) | 1:A:345:LEU:HD21 | 1:A:354:ILE:HA   | 7        | 0.15          |
| (1,1321) | 1:A:345:LEU:HD22 | 1:A:354:ILE:HA   | 7        | 0.15          |
| (1,1321) | 1:A:345:LEU:HD23 | 1:A:354:ILE:HA   | 7        | 0.15          |
| (1,1310) | 1:A:344:LEU:HD11 | 1:A:354:ILE:HG21 | 9        | 0.15          |
| (1,1310) | 1:A:344:LEU:HD11 | 1:A:354:ILE:HG22 | 9        | 0.15          |
| (1,1310) | 1:A:344:LEU:HD11 | 1:A:354:ILE:HG23 | 9        | 0.15          |
| (1,1310) | 1:A:344:LEU:HD12 | 1:A:354:ILE:HG21 | 9        | 0.15          |
| (1,1310) | 1:A:344:LEU:HD12 | 1:A:354:ILE:HG22 | 9        | 0.15          |
| (1,1310) | 1:A:344:LEU:HD12 | 1:A:354:ILE:HG23 | 9        | 0.15          |
| (1,1310) | 1:A:344:LEU:HD13 | 1:A:354:ILE:HG21 | 9        | 0.15          |
| (1,1310) | 1:A:344:LEU:HD13 | 1:A:354:ILE:HG22 | 9        | 0.15          |
| (1,1310) | 1:A:344:LEU:HD13 | 1:A:354:ILE:HG23 | 9        | 0.15          |
| (1,1310) | 1:A:344:LEU:HD21 | 1:A:354:ILE:HG21 | 9        | 0.15          |
| (1,1310) | 1:A:344:LEU:HD21 | 1:A:354:ILE:HG22 | 9        | 0.15          |
| (1,1310) | 1:A:344:LEU:HD21 | 1:A:354:ILE:HG23 | 9        | 0.15          |
| (1,1310) | 1:A:344:LEU:HD22 | 1:A:354:ILE:HG21 | 9        | 0.15          |
| (1,1310) | 1:A:344:LEU:HD22 | 1:A:354:ILE:HG22 | 9        | 0.15          |
| (1,1310) | 1:A:344:LEU:HD22 | 1:A:354:ILE:HG23 | 9        | 0.15          |
| (1,1310) | 1:A:344:LEU:HD23 | 1:A:354:ILE:HG21 | 9        | 0.15          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1310) | 1:A:344:LEU:HD23 | 1:A:354:ILE:HG22 | 9        | 0.15          |
| (1,1310) | 1:A:344:LEU:HD23 | 1:A:354:ILE:HG23 | 9        | 0.15          |
| (1,1182) | 1:A:353:PHE:HD2  | 1:A:375:LEU:HG   | 2        | 0.15          |
| (1,118)  | 1:A:353:PHE:HB3  | 1:A:372:LEU:HG   | 6        | 0.15          |
| (1,115)  | 1:A:353:PHE:HB2  | 1:A:372:LEU:HB2  | 10       | 0.15          |
| (1,1130) | 1:A:340:TYR:H    | 1:A:340:TYR:HD2  | 7        | 0.15          |
| (1,1057) | 1:A:373:ALA:H    | 1:A:376:TRP:HB2  | 9        | 0.15          |
| (1,1057) | 1:A:373:ALA:H    | 1:A:376:TRP:HB3  | 9        | 0.15          |
| (1,1034) | 1:A:356:TRP:HB3  | 1:A:360:GLU:H    | 6        | 0.15          |
| (1,10)   | 1:A:376:TRP:HZ2  | 1:A:385:MET:HE1  | 9        | 0.15          |
| (1,10)   | 1:A:376:TRP:HZ2  | 1:A:385:MET:HE2  | 9        | 0.15          |
| (1,10)   | 1:A:376:TRP:HZ2  | 1:A:385:MET:HE3  | 9        | 0.15          |
| (1,946)  | 1:A:358:ASP:H    | 1:A:363:ILE:HG21 | 7        | 0.14          |
| (1,946)  | 1:A:358:ASP:H    | 1:A:363:ILE:HG22 | 7        | 0.14          |
| (1,946)  | 1:A:358:ASP:H    | 1:A:363:ILE:HG23 | 7        | 0.14          |
| (1,915)  | 1:A:359:LYS:HA   | 1:A:362:LYS:H    | 3        | 0.14          |
| (1,908)  | 1:A:366:ILE:HA   | 1:A:368:ASP:H    | 5        | 0.14          |
| (1,893)  | 1:A:369:PRO:HB2  | 1:A:370:ASN:H    | 5        | 0.14          |
| (1,88)   | 1:A:370:ASN:HA   | 1:A:387:TYR:HB3  | 10       | 0.14          |
| (1,872)  | 1:A:352:ASN:H    | 1:A:354:ILE:HG21 | 3        | 0.14          |
| (1,872)  | 1:A:352:ASN:H    | 1:A:354:ILE:HG22 | 3        | 0.14          |
| (1,872)  | 1:A:352:ASN:H    | 1:A:354:ILE:HG23 | 3        | 0.14          |
| (1,848)  | 1:A:361:SER:H    | 1:A:363:ILE:HB   | 2        | 0.14          |
| (1,821)  | 1:A:371:GLY:H    | 1:A:372:LEU:HB2  | 9        | 0.14          |
| (1,688)  | 1:A:425:GLY:HA2  | 1:A:426:ARG:H    | 7        | 0.14          |
| (1,688)  | 1:A:425:GLY:HA3  | 1:A:426:ARG:H    | 7        | 0.14          |
| (1,655)  | 1:A:331:ILE:HB   | 1:A:332:ALA:H    | 8        | 0.14          |
| (1,631)  | 1:A:365:ARG:HD3  | 1:A:367:VAL:H    | 4        | 0.14          |
| (1,594)  | 1:A:346:SER:HB2  | 1:A:356:TRP:HE1  | 3        | 0.14          |
| (1,594)  | 1:A:346:SER:HB3  | 1:A:356:TRP:HE1  | 3        | 0.14          |
| (1,520)  | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD11 | 9        | 0.14          |
| (1,520)  | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD12 | 9        | 0.14          |
| (1,520)  | 1:A:396:HIS:HD2  | 1:A:400:LEU:HD13 | 9        | 0.14          |
| (1,357)  | 1:A:332:ALA:HB1  | 1:A:333:ASP:HB2  | 8        | 0.14          |
| (1,357)  | 1:A:332:ALA:HB1  | 1:A:333:ASP:HB3  | 8        | 0.14          |
| (1,357)  | 1:A:332:ALA:HB2  | 1:A:333:ASP:HB2  | 8        | 0.14          |
| (1,357)  | 1:A:332:ALA:HB2  | 1:A:333:ASP:HB3  | 8        | 0.14          |
| (1,357)  | 1:A:332:ALA:HB3  | 1:A:333:ASP:HB2  | 8        | 0.14          |
| (1,357)  | 1:A:332:ALA:HB3  | 1:A:333:ASP:HB3  | 8        | 0.14          |
| (1,343)  | 1:A:353:PHE:HA   | 1:A:367:VAL:HG21 | 5        | 0.14          |
| (1,343)  | 1:A:353:PHE:HA   | 1:A:367:VAL:HG22 | 5        | 0.14          |
| (1,343)  | 1:A:353:PHE:HA   | 1:A:367:VAL:HG23 | 5        | 0.14          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,18)   | 1:A:354:ILE:HG21 | 1:A:366:ILE:HA   | 6        | 0.14          |
| (1,18)   | 1:A:354:ILE:HG22 | 1:A:366:ILE:HA   | 6        | 0.14          |
| (1,18)   | 1:A:354:ILE:HG23 | 1:A:366:ILE:HA   | 6        | 0.14          |
| (1,1409) | 1:A:372:LEU:HD11 | 1:A:374:ARG:H    | 9        | 0.14          |
| (1,1409) | 1:A:372:LEU:HD12 | 1:A:374:ARG:H    | 9        | 0.14          |
| (1,1409) | 1:A:372:LEU:HD13 | 1:A:374:ARG:H    | 9        | 0.14          |
| (1,1409) | 1:A:372:LEU:HD21 | 1:A:374:ARG:H    | 9        | 0.14          |
| (1,1409) | 1:A:372:LEU:HD22 | 1:A:374:ARG:H    | 9        | 0.14          |
| (1,1409) | 1:A:372:LEU:HD23 | 1:A:374:ARG:H    | 9        | 0.14          |
| (1,1396) | 1:A:369:PRO:HG2  | 1:A:411:LEU:HD11 | 4        | 0.14          |
| (1,1396) | 1:A:369:PRO:HG2  | 1:A:411:LEU:HD12 | 4        | 0.14          |
| (1,1396) | 1:A:369:PRO:HG2  | 1:A:411:LEU:HD13 | 4        | 0.14          |
| (1,1396) | 1:A:369:PRO:HG2  | 1:A:411:LEU:HD21 | 4        | 0.14          |
| (1,1396) | 1:A:369:PRO:HG2  | 1:A:411:LEU:HD22 | 4        | 0.14          |
| (1,1396) | 1:A:369:PRO:HG2  | 1:A:411:LEU:HD23 | 4        | 0.14          |
| (1,1396) | 1:A:369:PRO:HG3  | 1:A:411:LEU:HD11 | 4        | 0.14          |
| (1,1396) | 1:A:369:PRO:HG3  | 1:A:411:LEU:HD12 | 4        | 0.14          |
| (1,1396) | 1:A:369:PRO:HG3  | 1:A:411:LEU:HD13 | 4        | 0.14          |
| (1,1396) | 1:A:369:PRO:HG3  | 1:A:411:LEU:HD21 | 4        | 0.14          |
| (1,1396) | 1:A:369:PRO:HG3  | 1:A:411:LEU:HD22 | 4        | 0.14          |
| (1,1396) | 1:A:369:PRO:HG3  | 1:A:411:LEU:HD23 | 4        | 0.14          |
| (1,1375) | 1:A:357:GLU:HG2  | 1:A:412:LEU:HA   | 1        | 0.14          |
| (1,1375) | 1:A:357:GLU:HG3  | 1:A:412:LEU:HA   | 1        | 0.14          |
| (1,1358) | 1:A:352:ASN:H    | 1:A:352:ASN:HB2  | 5        | 0.14          |
| (1,1358) | 1:A:352:ASN:H    | 1:A:352:ASN:HB3  | 5        | 0.14          |
| (1,1344) | 1:A:348:SER:HB2  | 1:A:351:GLU:HB2  | 5        | 0.14          |
| (1,1344) | 1:A:348:SER:HB2  | 1:A:351:GLU:HB3  | 5        | 0.14          |
| (1,1344) | 1:A:348:SER:HB3  | 1:A:351:GLU:HB2  | 5        | 0.14          |
| (1,1344) | 1:A:348:SER:HB3  | 1:A:351:GLU:HB3  | 5        | 0.14          |
| (1,1291) | 1:A:341:VAL:HG11 | 1:A:364:PHE:HD2  | 6        | 0.14          |
| (1,1291) | 1:A:341:VAL:HG12 | 1:A:364:PHE:HD2  | 6        | 0.14          |
| (1,1291) | 1:A:341:VAL:HG13 | 1:A:364:PHE:HD2  | 6        | 0.14          |
| (1,1291) | 1:A:341:VAL:HG21 | 1:A:364:PHE:HD2  | 6        | 0.14          |
| (1,1291) | 1:A:341:VAL:HG22 | 1:A:364:PHE:HD2  | 6        | 0.14          |
| (1,1291) | 1:A:341:VAL:HG23 | 1:A:364:PHE:HD2  | 6        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG11 | 1:A:344:LEU:HD11 | 2        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG11 | 1:A:344:LEU:HD12 | 2        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG11 | 1:A:344:LEU:HD13 | 2        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG11 | 1:A:344:LEU:HD21 | 2        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG11 | 1:A:344:LEU:HD22 | 2        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG11 | 1:A:344:LEU:HD23 | 2        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG12 | 1:A:344:LEU:HD11 | 2        | 0.14          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1286) | 1:A:341:VAL:HG12 | 1:A:344:LEU:HD12 | 2        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG12 | 1:A:344:LEU:HD13 | 2        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG12 | 1:A:344:LEU:HD21 | 2        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG12 | 1:A:344:LEU:HD22 | 2        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG12 | 1:A:344:LEU:HD23 | 2        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG13 | 1:A:344:LEU:HD11 | 2        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG13 | 1:A:344:LEU:HD12 | 2        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG13 | 1:A:344:LEU:HD13 | 2        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG13 | 1:A:344:LEU:HD21 | 2        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG13 | 1:A:344:LEU:HD22 | 2        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG13 | 1:A:344:LEU:HD23 | 2        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG21 | 1:A:344:LEU:HD11 | 2        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG21 | 1:A:344:LEU:HD12 | 2        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG21 | 1:A:344:LEU:HD13 | 2        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG21 | 1:A:344:LEU:HD21 | 2        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG21 | 1:A:344:LEU:HD22 | 2        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG21 | 1:A:344:LEU:HD23 | 2        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG22 | 1:A:344:LEU:HD11 | 2        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG22 | 1:A:344:LEU:HD12 | 2        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG22 | 1:A:344:LEU:HD13 | 2        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG22 | 1:A:344:LEU:HD21 | 2        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG22 | 1:A:344:LEU:HD22 | 2        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG22 | 1:A:344:LEU:HD23 | 2        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG23 | 1:A:344:LEU:HD11 | 2        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG23 | 1:A:344:LEU:HD12 | 2        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG23 | 1:A:344:LEU:HD13 | 2        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG23 | 1:A:344:LEU:HD21 | 2        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG23 | 1:A:344:LEU:HD22 | 2        | 0.14          |
| (1,1286) | 1:A:341:VAL:HG23 | 1:A:344:LEU:HD23 | 2        | 0.14          |
| (1,1252) | 1:A:337:LEU:HD11 | 1:A:340:TYR:H    | 5        | 0.14          |
| (1,1252) | 1:A:337:LEU:HD12 | 1:A:340:TYR:H    | 5        | 0.14          |
| (1,1252) | 1:A:337:LEU:HD13 | 1:A:340:TYR:H    | 5        | 0.14          |
| (1,1252) | 1:A:337:LEU:HD21 | 1:A:340:TYR:H    | 5        | 0.14          |
| (1,1252) | 1:A:337:LEU:HD22 | 1:A:340:TYR:H    | 5        | 0.14          |
| (1,1252) | 1:A:337:LEU:HD23 | 1:A:340:TYR:H    | 5        | 0.14          |
| (1,125)  | 1:A:405:LYS:HG3  | 1:A:405:LYS:HE3  | 7        | 0.14          |
| (1,1216) | 1:A:340:TYR:HE2  | 1:A:379:HIS:HB2  | 8        | 0.14          |
| (1,1216) | 1:A:340:TYR:HE2  | 1:A:379:HIS:HB3  | 8        | 0.14          |
| (1,1186) | 1:A:356:TRP:HD1  | 1:A:359:LYS:HE2  | 6        | 0.14          |
| (1,1186) | 1:A:356:TRP:HD1  | 1:A:359:LYS:HE3  | 6        | 0.14          |
| (1,1127) | 1:A:348:SER:H    | 1:A:350:TYR:H    | 7        | 0.14          |
| (1,1033) | 1:A:360:GLU:H    | 1:A:361:SER:HB2  | 10       | 0.14          |

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| Key     | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|---------|------------------|------------------|----------|---------------|
| (1,10)  | 1:A:376:TRP:HZ2  | 1:A:385:MET:HE1  | 6        | 0.14          |
| (1,10)  | 1:A:376:TRP:HZ2  | 1:A:385:MET:HE2  | 6        | 0.14          |
| (1,10)  | 1:A:376:TRP:HZ2  | 1:A:385:MET:HE3  | 6        | 0.14          |
| (1,94)  | 1:A:366:ILE:HB   | 1:A:413:PHE:HZ   | 3        | 0.13          |
| (1,911) | 1:A:366:ILE:HG21 | 1:A:368:ASP:H    | 4        | 0.13          |
| (1,911) | 1:A:366:ILE:HG22 | 1:A:368:ASP:H    | 4        | 0.13          |
| (1,911) | 1:A:366:ILE:HG23 | 1:A:368:ASP:H    | 4        | 0.13          |
| (1,900) | 1:A:353:PHE:H    | 1:A:354:ILE:HA   | 7        | 0.13          |
| (1,860) | 1:A:385:MET:HB3  | 1:A:386:THR:H    | 3        | 0.13          |
| (1,830) | 1:A:417:LYS:HE2  | 1:A:418:THR:H    | 9        | 0.13          |
| (1,830) | 1:A:417:LYS:HE3  | 1:A:418:THR:H    | 9        | 0.13          |
| (1,821) | 1:A:371:GLY:H    | 1:A:372:LEU:HB2  | 3        | 0.13          |
| (1,760) | 1:A:345:LEU:HB3  | 1:A:356:TRP:H    | 8        | 0.13          |
| (1,702) | 1:A:353:PHE:HD2  | 1:A:372:LEU:H    | 8        | 0.13          |
| (1,7)   | 1:A:385:MET:HA   | 1:A:385:MET:HE1  | 9        | 0.13          |
| (1,7)   | 1:A:385:MET:HA   | 1:A:385:MET:HE2  | 9        | 0.13          |
| (1,7)   | 1:A:385:MET:HA   | 1:A:385:MET:HE3  | 9        | 0.13          |
| (1,683) | 1:A:405:LYS:H    | 1:A:413:PHE:HD2  | 7        | 0.13          |
| (1,675) | 1:A:365:ARG:HB2  | 1:A:366:ILE:H    | 10       | 0.13          |
| (1,675) | 1:A:365:ARG:HB3  | 1:A:366:ILE:H    | 10       | 0.13          |
| (1,673) | 1:A:365:ARG:HD2  | 1:A:366:ILE:H    | 1        | 0.13          |
| (1,655) | 1:A:331:ILE:HB   | 1:A:332:ALA:H    | 6        | 0.13          |
| (1,631) | 1:A:365:ARG:HD3  | 1:A:367:VAL:H    | 9        | 0.13          |
| (1,621) | 1:A:357:GLU:HB2  | 1:A:364:PHE:H    | 7        | 0.13          |
| (1,621) | 1:A:357:GLU:HB3  | 1:A:364:PHE:H    | 7        | 0.13          |
| (1,592) | 1:A:356:TRP:HA   | 1:A:356:TRP:HE1  | 5        | 0.13          |
| (1,574) | 1:A:353:PHE:HA   | 1:A:367:VAL:HG11 | 2        | 0.13          |
| (1,574) | 1:A:353:PHE:HA   | 1:A:367:VAL:HG12 | 2        | 0.13          |
| (1,574) | 1:A:353:PHE:HA   | 1:A:367:VAL:HG13 | 2        | 0.13          |
| (1,574) | 1:A:353:PHE:HA   | 1:A:367:VAL:HG11 | 3        | 0.13          |
| (1,574) | 1:A:353:PHE:HA   | 1:A:367:VAL:HG12 | 3        | 0.13          |
| (1,574) | 1:A:353:PHE:HA   | 1:A:367:VAL:HG13 | 3        | 0.13          |
| (1,568) | 1:A:386:THR:HG21 | 1:A:389:LYS:HE2  | 7        | 0.13          |
| (1,568) | 1:A:386:THR:HG21 | 1:A:389:LYS:HE3  | 7        | 0.13          |
| (1,568) | 1:A:386:THR:HG22 | 1:A:389:LYS:HE2  | 7        | 0.13          |
| (1,568) | 1:A:386:THR:HG22 | 1:A:389:LYS:HE3  | 7        | 0.13          |
| (1,568) | 1:A:386:THR:HG23 | 1:A:389:LYS:HE2  | 7        | 0.13          |
| (1,568) | 1:A:386:THR:HG23 | 1:A:389:LYS:HE3  | 7        | 0.13          |
| (1,510) | 1:A:406:GLU:H    | 1:A:412:LEU:HD11 | 5        | 0.13          |
| (1,510) | 1:A:406:GLU:H    | 1:A:412:LEU:HD12 | 5        | 0.13          |
| (1,510) | 1:A:406:GLU:H    | 1:A:412:LEU:HD13 | 5        | 0.13          |
| (1,5)   | 1:A:376:TRP:HB3  | 1:A:385:MET:HE1  | 3        | 0.13          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,5)    | 1:A:376:TRP:HB3  | 1:A:385:MET:HE2  | 3        | 0.13          |
| (1,5)    | 1:A:376:TRP:HB3  | 1:A:385:MET:HE3  | 3        | 0.13          |
| (1,473)  | 1:A:426:ARG:H    | 1:A:426:ARG:HG2  | 8        | 0.13          |
| (1,473)  | 1:A:426:ARG:H    | 1:A:426:ARG:HG3  | 8        | 0.13          |
| (1,466)  | 1:A:392:ARG:H    | 1:A:392:ARG:HG2  | 2        | 0.13          |
| (1,462)  | 1:A:417:LYS:HD2  | 1:A:418:THR:H    | 1        | 0.13          |
| (1,462)  | 1:A:417:LYS:HD3  | 1:A:418:THR:H    | 1        | 0.13          |
| (1,384)  | 1:A:363:ILE:HG21 | 1:A:412:LEU:HA   | 4        | 0.13          |
| (1,384)  | 1:A:363:ILE:HG22 | 1:A:412:LEU:HA   | 4        | 0.13          |
| (1,384)  | 1:A:363:ILE:HG23 | 1:A:412:LEU:HA   | 4        | 0.13          |
| (1,330)  | 1:A:358:ASP:HA   | 1:A:361:SER:HB2  | 3        | 0.13          |
| (1,263)  | 1:A:348:SER:HA   | 1:A:351:GLU:HG2  | 2        | 0.13          |
| (1,263)  | 1:A:348:SER:HA   | 1:A:351:GLU:HG3  | 2        | 0.13          |
| (1,252)  | 1:A:359:LYS:HA   | 1:A:359:LYS:HG2  | 3        | 0.13          |
| (1,252)  | 1:A:359:LYS:HA   | 1:A:359:LYS:HG2  | 4        | 0.13          |
| (1,204)  | 1:A:355:ARG:HA   | 1:A:367:VAL:HG21 | 2        | 0.13          |
| (1,204)  | 1:A:355:ARG:HA   | 1:A:367:VAL:HG22 | 2        | 0.13          |
| (1,204)  | 1:A:355:ARG:HA   | 1:A:367:VAL:HG23 | 2        | 0.13          |
| (1,20)   | 1:A:345:LEU:H    | 1:A:354:ILE:HG21 | 4        | 0.13          |
| (1,20)   | 1:A:345:LEU:H    | 1:A:354:ILE:HG22 | 4        | 0.13          |
| (1,20)   | 1:A:345:LEU:H    | 1:A:354:ILE:HG23 | 4        | 0.13          |
| (1,179)  | 1:A:365:ARG:HB2  | 1:A:412:LEU:HA   | 4        | 0.13          |
| (1,179)  | 1:A:365:ARG:HB3  | 1:A:412:LEU:HA   | 4        | 0.13          |
| (1,1501) | 1:A:406:GLU:HG2  | 1:A:412:LEU:HB2  | 3        | 0.13          |
| (1,1501) | 1:A:406:GLU:HG3  | 1:A:412:LEU:HB2  | 3        | 0.13          |
| (1,1501) | 1:A:406:GLU:HG2  | 1:A:412:LEU:HB3  | 3        | 0.13          |
| (1,1501) | 1:A:406:GLU:HG3  | 1:A:412:LEU:HB3  | 3        | 0.13          |
| (1,1501) | 1:A:406:GLU:HG2  | 1:A:412:LEU:HB2  | 4        | 0.13          |
| (1,1501) | 1:A:406:GLU:HG3  | 1:A:412:LEU:HB2  | 4        | 0.13          |
| (1,1501) | 1:A:406:GLU:HG2  | 1:A:412:LEU:HB3  | 4        | 0.13          |
| (1,1501) | 1:A:406:GLU:HG3  | 1:A:412:LEU:HB3  | 4        | 0.13          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD11 | 8        | 0.13          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD12 | 8        | 0.13          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD13 | 8        | 0.13          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD21 | 8        | 0.13          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD22 | 8        | 0.13          |
| (1,1477) | 1:A:397:TYR:HD1  | 1:A:400:LEU:HD23 | 8        | 0.13          |
| (1,1366) | 1:A:353:PHE:HB3  | 1:A:375:LEU:HD11 | 4        | 0.13          |
| (1,1366) | 1:A:353:PHE:HB3  | 1:A:375:LEU:HD12 | 4        | 0.13          |
| (1,1366) | 1:A:353:PHE:HB3  | 1:A:375:LEU:HD13 | 4        | 0.13          |
| (1,1366) | 1:A:353:PHE:HB3  | 1:A:375:LEU:HD21 | 4        | 0.13          |
| (1,1366) | 1:A:353:PHE:HB3  | 1:A:375:LEU:HD22 | 4        | 0.13          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1366) | 1:A:353:PHE:HB3  | 1:A:375:LEU:HD23 | 4        | 0.13          |
| (1,1360) | 1:A:352:ASN:HB2  | 1:A:367:VAL:HB   | 1        | 0.13          |
| (1,1360) | 1:A:352:ASN:HB3  | 1:A:367:VAL:HB   | 1        | 0.13          |
| (1,1360) | 1:A:352:ASN:HB2  | 1:A:367:VAL:HB   | 9        | 0.13          |
| (1,1360) | 1:A:352:ASN:HB3  | 1:A:367:VAL:HB   | 9        | 0.13          |
| (1,1346) | 1:A:349:ARG:H    | 1:A:349:ARG:HD2  | 8        | 0.13          |
| (1,1346) | 1:A:349:ARG:H    | 1:A:349:ARG:HD3  | 8        | 0.13          |
| (1,1340) | 1:A:345:LEU:HD11 | 1:A:365:ARG:H    | 4        | 0.13          |
| (1,1340) | 1:A:345:LEU:HD12 | 1:A:365:ARG:H    | 4        | 0.13          |
| (1,1340) | 1:A:345:LEU:HD13 | 1:A:365:ARG:H    | 4        | 0.13          |
| (1,1340) | 1:A:345:LEU:HD21 | 1:A:365:ARG:H    | 4        | 0.13          |
| (1,1340) | 1:A:345:LEU:HD22 | 1:A:365:ARG:H    | 4        | 0.13          |
| (1,1340) | 1:A:345:LEU:HD23 | 1:A:365:ARG:H    | 4        | 0.13          |
| (1,1267) | 1:A:337:LEU:HD11 | 1:A:393:ALA:H    | 1        | 0.13          |
| (1,1267) | 1:A:337:LEU:HD12 | 1:A:393:ALA:H    | 1        | 0.13          |
| (1,1267) | 1:A:337:LEU:HD13 | 1:A:393:ALA:H    | 1        | 0.13          |
| (1,1267) | 1:A:337:LEU:HD21 | 1:A:393:ALA:H    | 1        | 0.13          |
| (1,1267) | 1:A:337:LEU:HD22 | 1:A:393:ALA:H    | 1        | 0.13          |
| (1,1267) | 1:A:337:LEU:HD23 | 1:A:393:ALA:H    | 1        | 0.13          |
| (1,1265) | 1:A:337:LEU:HD11 | 1:A:390:MET:HA   | 8        | 0.13          |
| (1,1265) | 1:A:337:LEU:HD12 | 1:A:390:MET:HA   | 8        | 0.13          |
| (1,1265) | 1:A:337:LEU:HD13 | 1:A:390:MET:HA   | 8        | 0.13          |
| (1,1265) | 1:A:337:LEU:HD21 | 1:A:390:MET:HA   | 8        | 0.13          |
| (1,1265) | 1:A:337:LEU:HD22 | 1:A:390:MET:HA   | 8        | 0.13          |
| (1,1265) | 1:A:337:LEU:HD23 | 1:A:390:MET:HA   | 8        | 0.13          |
| (1,1256) | 1:A:337:LEU:HD11 | 1:A:341:VAL:HA   | 1        | 0.13          |
| (1,1256) | 1:A:337:LEU:HD12 | 1:A:341:VAL:HA   | 1        | 0.13          |
| (1,1256) | 1:A:337:LEU:HD13 | 1:A:341:VAL:HA   | 1        | 0.13          |
| (1,1256) | 1:A:337:LEU:HD21 | 1:A:341:VAL:HA   | 1        | 0.13          |
| (1,1256) | 1:A:337:LEU:HD22 | 1:A:341:VAL:HA   | 1        | 0.13          |
| (1,1256) | 1:A:337:LEU:HD23 | 1:A:341:VAL:HA   | 1        | 0.13          |
| (1,1187) | 1:A:356:TRP:HD1  | 1:A:359:LYS:HD2  | 2        | 0.13          |
| (1,1187) | 1:A:356:TRP:HD1  | 1:A:359:LYS:HD3  | 2        | 0.13          |
| (1,1129) | 1:A:398:TYR:H    | 1:A:402:ILE:HD11 | 9        | 0.13          |
| (1,1129) | 1:A:398:TYR:H    | 1:A:402:ILE:HD12 | 9        | 0.13          |
| (1,1129) | 1:A:398:TYR:H    | 1:A:402:ILE:HD13 | 9        | 0.13          |
| (1,1108) | 1:A:354:ILE:H    | 1:A:367:VAL:H    | 2        | 0.13          |
| (1,1108) | 1:A:354:ILE:H    | 1:A:367:VAL:H    | 3        | 0.13          |
| (1,1072) | 1:A:421:GLU:H    | 1:A:422:ILE:HB   | 2        | 0.13          |
| (1,1008) | 1:A:412:LEU:H    | 1:A:413:PHE:HD1  | 6        | 0.13          |
| (1,993)  | 1:A:358:ASP:HB2  | 1:A:363:ILE:H    | 7        | 0.12          |
| (1,993)  | 1:A:358:ASP:HB3  | 1:A:363:ILE:H    | 7        | 0.12          |

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| Key     | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|---------|------------------|------------------|----------|---------------|
| (1,908) | 1:A:366:ILE:HA   | 1:A:368:ASP:H    | 2        | 0.12          |
| (1,900) | 1:A:353:PHE:H    | 1:A:354:ILE:HA   | 1        | 0.12          |
| (1,862) | 1:A:373:ALA:HB1  | 1:A:386:THR:H    | 6        | 0.12          |
| (1,862) | 1:A:373:ALA:HB2  | 1:A:386:THR:H    | 6        | 0.12          |
| (1,862) | 1:A:373:ALA:HB3  | 1:A:386:THR:H    | 6        | 0.12          |
| (1,857) | 1:A:402:ILE:H    | 1:A:403:ILE:HG12 | 3        | 0.12          |
| (1,857) | 1:A:402:ILE:H    | 1:A:403:ILE:HG13 | 3        | 0.12          |
| (1,821) | 1:A:371:GLY:H    | 1:A:372:LEU:HB2  | 1        | 0.12          |
| (1,800) | 1:A:365:ARG:H    | 1:A:365:ARG:HG2  | 2        | 0.12          |
| (1,721) | 1:A:347:ASP:HB3  | 1:A:349:ARG:H    | 10       | 0.12          |
| (1,677) | 1:A:366:ILE:H    | 1:A:366:ILE:HD11 | 6        | 0.12          |
| (1,677) | 1:A:366:ILE:H    | 1:A:366:ILE:HD12 | 6        | 0.12          |
| (1,677) | 1:A:366:ILE:H    | 1:A:366:ILE:HD13 | 6        | 0.12          |
| (1,675) | 1:A:365:ARG:HB2  | 1:A:366:ILE:H    | 1        | 0.12          |
| (1,675) | 1:A:365:ARG:HB3  | 1:A:366:ILE:H    | 1        | 0.12          |
| (1,655) | 1:A:331:ILE:HB   | 1:A:332:ALA:H    | 2        | 0.12          |
| (1,655) | 1:A:331:ILE:HB   | 1:A:332:ALA:H    | 10       | 0.12          |
| (1,640) | 1:A:406:GLU:H    | 1:A:413:PHE:HA   | 6        | 0.12          |
| (1,628) | 1:A:353:PHE:HA   | 1:A:367:VAL:H    | 1        | 0.12          |
| (1,624) | 1:A:363:ILE:HG12 | 1:A:364:PHE:H    | 9        | 0.12          |
| (1,624) | 1:A:363:ILE:HG13 | 1:A:364:PHE:H    | 9        | 0.12          |
| (1,621) | 1:A:357:GLU:HB2  | 1:A:364:PHE:H    | 9        | 0.12          |
| (1,621) | 1:A:357:GLU:HB3  | 1:A:364:PHE:H    | 9        | 0.12          |
| (1,546) | 1:A:336:LEU:HD11 | 1:A:338:TRP:HH2  | 9        | 0.12          |
| (1,546) | 1:A:336:LEU:HD12 | 1:A:338:TRP:HH2  | 9        | 0.12          |
| (1,546) | 1:A:336:LEU:HD13 | 1:A:338:TRP:HH2  | 9        | 0.12          |
| (1,501) | 1:A:336:LEU:HA   | 1:A:336:LEU:HD21 | 6        | 0.12          |
| (1,501) | 1:A:336:LEU:HA   | 1:A:336:LEU:HD22 | 6        | 0.12          |
| (1,501) | 1:A:336:LEU:HA   | 1:A:336:LEU:HD23 | 6        | 0.12          |
| (1,483) | 1:A:363:ILE:HD11 | 1:A:414:ARG:HG2  | 6        | 0.12          |
| (1,483) | 1:A:363:ILE:HD11 | 1:A:414:ARG:HG3  | 6        | 0.12          |
| (1,483) | 1:A:363:ILE:HD12 | 1:A:414:ARG:HG2  | 6        | 0.12          |
| (1,483) | 1:A:363:ILE:HD12 | 1:A:414:ARG:HG3  | 6        | 0.12          |
| (1,483) | 1:A:363:ILE:HD13 | 1:A:414:ARG:HG2  | 6        | 0.12          |
| (1,483) | 1:A:363:ILE:HD13 | 1:A:414:ARG:HG3  | 6        | 0.12          |
| (1,481) | 1:A:355:ARG:H    | 1:A:365:ARG:HG2  | 6        | 0.12          |
| (1,448) | 1:A:374:ARG:H    | 1:A:385:MET:HB3  | 4        | 0.12          |
| (1,443) | 1:A:332:ALA:HB1  | 1:A:333:ASP:HA   | 10       | 0.12          |
| (1,443) | 1:A:332:ALA:HB2  | 1:A:333:ASP:HA   | 10       | 0.12          |
| (1,443) | 1:A:332:ALA:HB3  | 1:A:333:ASP:HA   | 10       | 0.12          |
| (1,44)  | 1:A:357:GLU:HB2  | 1:A:363:ILE:H    | 3        | 0.12          |
| (1,44)  | 1:A:357:GLU:HB3  | 1:A:363:ILE:H    | 3        | 0.12          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,439)  | 1:A:378:ASN:HA   | 1:A:378:ASN:HD21 | 2        | 0.12          |
| (1,426)  | 1:A:410:ARG:HA   | 1:A:410:ARG:HD2  | 3        | 0.12          |
| (1,426)  | 1:A:410:ARG:HA   | 1:A:410:ARG:HD3  | 3        | 0.12          |
| (1,384)  | 1:A:363:ILE:HG21 | 1:A:412:LEU:HA   | 6        | 0.12          |
| (1,384)  | 1:A:363:ILE:HG22 | 1:A:412:LEU:HA   | 6        | 0.12          |
| (1,384)  | 1:A:363:ILE:HG23 | 1:A:412:LEU:HA   | 6        | 0.12          |
| (1,330)  | 1:A:358:ASP:HA   | 1:A:361:SER:HB2  | 2        | 0.12          |
| (1,26)   | 1:A:387:TYR:HA   | 1:A:390:MET:HE1  | 2        | 0.12          |
| (1,26)   | 1:A:387:TYR:HA   | 1:A:390:MET:HE2  | 2        | 0.12          |
| (1,26)   | 1:A:387:TYR:HA   | 1:A:390:MET:HE3  | 2        | 0.12          |
| (1,252)  | 1:A:359:LYS:HA   | 1:A:359:LYS:HG2  | 1        | 0.12          |
| (1,250)  | 1:A:358:ASP:H    | 1:A:359:LYS:HA   | 9        | 0.12          |
| (1,192)  | 1:A:332:ALA:HA   | 1:A:333:ASP:HB2  | 9        | 0.12          |
| (1,192)  | 1:A:332:ALA:HA   | 1:A:333:ASP:HB3  | 9        | 0.12          |
| (1,166)  | 1:A:328:MET:HB2  | 1:A:329:GLY:HA2  | 10       | 0.12          |
| (1,166)  | 1:A:328:MET:HB2  | 1:A:329:GLY:HA3  | 10       | 0.12          |
| (1,166)  | 1:A:328:MET:HB3  | 1:A:329:GLY:HA2  | 10       | 0.12          |
| (1,166)  | 1:A:328:MET:HB3  | 1:A:329:GLY:HA3  | 10       | 0.12          |
| (1,1493) | 1:A:405:LYS:HG2  | 1:A:406:GLU:H    | 8        | 0.12          |
| (1,1493) | 1:A:405:LYS:HG3  | 1:A:406:GLU:H    | 8        | 0.12          |
| (1,1400) | 1:A:370:ASN:HB2  | 1:A:373:ALA:HB1  | 7        | 0.12          |
| (1,1400) | 1:A:370:ASN:HB2  | 1:A:373:ALA:HB2  | 7        | 0.12          |
| (1,1400) | 1:A:370:ASN:HB2  | 1:A:373:ALA:HB3  | 7        | 0.12          |
| (1,1400) | 1:A:370:ASN:HB3  | 1:A:373:ALA:HB1  | 7        | 0.12          |
| (1,1400) | 1:A:370:ASN:HB3  | 1:A:373:ALA:HB2  | 7        | 0.12          |
| (1,1400) | 1:A:370:ASN:HB3  | 1:A:373:ALA:HB3  | 7        | 0.12          |
| (1,1388) | 1:A:365:ARG:HA   | 1:A:411:LEU:HD11 | 7        | 0.12          |
| (1,1388) | 1:A:365:ARG:HA   | 1:A:411:LEU:HD12 | 7        | 0.12          |
| (1,1388) | 1:A:365:ARG:HA   | 1:A:411:LEU:HD13 | 7        | 0.12          |
| (1,1388) | 1:A:365:ARG:HA   | 1:A:411:LEU:HD21 | 7        | 0.12          |
| (1,1388) | 1:A:365:ARG:HA   | 1:A:411:LEU:HD22 | 7        | 0.12          |
| (1,1388) | 1:A:365:ARG:HA   | 1:A:411:LEU:HD23 | 7        | 0.12          |
| (1,1376) | 1:A:359:LYS:HA   | 1:A:362:LYS:HG2  | 2        | 0.12          |
| (1,1376) | 1:A:359:LYS:HA   | 1:A:362:LYS:HG3  | 2        | 0.12          |
| (1,1325) | 1:A:345:LEU:HD11 | 1:A:355:ARG:H    | 1        | 0.12          |
| (1,1325) | 1:A:345:LEU:HD12 | 1:A:355:ARG:H    | 1        | 0.12          |
| (1,1325) | 1:A:345:LEU:HD13 | 1:A:355:ARG:H    | 1        | 0.12          |
| (1,1325) | 1:A:345:LEU:HD21 | 1:A:355:ARG:H    | 1        | 0.12          |
| (1,1325) | 1:A:345:LEU:HD22 | 1:A:355:ARG:H    | 1        | 0.12          |
| (1,1325) | 1:A:345:LEU:HD23 | 1:A:355:ARG:H    | 1        | 0.12          |
| (1,1315) | 1:A:344:LEU:HD11 | 1:A:390:MET:HE1  | 10       | 0.12          |
| (1,1315) | 1:A:344:LEU:HD11 | 1:A:390:MET:HE2  | 10       | 0.12          |

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| Key      | Atom-1           | Atom-2          | Model ID | Violation (Å) |
|----------|------------------|-----------------|----------|---------------|
| (1,1315) | 1:A:344:LEU:HD11 | 1:A:390:MET:HE3 | 10       | 0.12          |
| (1,1315) | 1:A:344:LEU:HD12 | 1:A:390:MET:HE1 | 10       | 0.12          |
| (1,1315) | 1:A:344:LEU:HD12 | 1:A:390:MET:HE2 | 10       | 0.12          |
| (1,1315) | 1:A:344:LEU:HD12 | 1:A:390:MET:HE3 | 10       | 0.12          |
| (1,1315) | 1:A:344:LEU:HD13 | 1:A:390:MET:HE1 | 10       | 0.12          |
| (1,1315) | 1:A:344:LEU:HD13 | 1:A:390:MET:HE2 | 10       | 0.12          |
| (1,1315) | 1:A:344:LEU:HD13 | 1:A:390:MET:HE3 | 10       | 0.12          |
| (1,1315) | 1:A:344:LEU:HD21 | 1:A:390:MET:HE1 | 10       | 0.12          |
| (1,1315) | 1:A:344:LEU:HD21 | 1:A:390:MET:HE2 | 10       | 0.12          |
| (1,1315) | 1:A:344:LEU:HD21 | 1:A:390:MET:HE3 | 10       | 0.12          |
| (1,1315) | 1:A:344:LEU:HD22 | 1:A:390:MET:HE1 | 10       | 0.12          |
| (1,1315) | 1:A:344:LEU:HD22 | 1:A:390:MET:HE2 | 10       | 0.12          |
| (1,1315) | 1:A:344:LEU:HD22 | 1:A:390:MET:HE3 | 10       | 0.12          |
| (1,1315) | 1:A:344:LEU:HD23 | 1:A:390:MET:HE1 | 10       | 0.12          |
| (1,1315) | 1:A:344:LEU:HD23 | 1:A:390:MET:HE2 | 10       | 0.12          |
| (1,1315) | 1:A:344:LEU:HD23 | 1:A:390:MET:HE3 | 10       | 0.12          |
| (1,1290) | 1:A:341:VAL:HG11 | 1:A:364:PHE:HE2 | 7        | 0.12          |
| (1,1290) | 1:A:341:VAL:HG12 | 1:A:364:PHE:HE2 | 7        | 0.12          |
| (1,1290) | 1:A:341:VAL:HG13 | 1:A:364:PHE:HE2 | 7        | 0.12          |
| (1,1290) | 1:A:341:VAL:HG21 | 1:A:364:PHE:HE2 | 7        | 0.12          |
| (1,1290) | 1:A:341:VAL:HG22 | 1:A:364:PHE:HE2 | 7        | 0.12          |
| (1,1290) | 1:A:341:VAL:HG23 | 1:A:364:PHE:HE2 | 7        | 0.12          |
| (1,1262) | 1:A:337:LEU:HD11 | 1:A:376:TRP:HZ2 | 8        | 0.12          |
| (1,1262) | 1:A:337:LEU:HD12 | 1:A:376:TRP:HZ2 | 8        | 0.12          |
| (1,1262) | 1:A:337:LEU:HD13 | 1:A:376:TRP:HZ2 | 8        | 0.12          |
| (1,1262) | 1:A:337:LEU:HD21 | 1:A:376:TRP:HZ2 | 8        | 0.12          |
| (1,1262) | 1:A:337:LEU:HD22 | 1:A:376:TRP:HZ2 | 8        | 0.12          |
| (1,1262) | 1:A:337:LEU:HD23 | 1:A:376:TRP:HZ2 | 8        | 0.12          |
| (1,1250) | 1:A:337:LEU:HB2  | 1:A:341:VAL:HB  | 2        | 0.12          |
| (1,1250) | 1:A:337:LEU:HB3  | 1:A:341:VAL:HB  | 2        | 0.12          |
| (1,1216) | 1:A:340:TYR:HE2  | 1:A:379:HIS:HB2 | 3        | 0.12          |
| (1,1216) | 1:A:340:TYR:HE2  | 1:A:379:HIS:HB3 | 3        | 0.12          |
| (1,1191) | 1:A:336:LEU:HB2  | 1:A:338:TRP:HD1 | 8        | 0.12          |
| (1,1191) | 1:A:336:LEU:HB3  | 1:A:338:TRP:HD1 | 8        | 0.12          |
| (1,1035) | 1:A:358:ASP:HB2  | 1:A:360:GLU:H   | 7        | 0.12          |
| (1,1035) | 1:A:358:ASP:HB3  | 1:A:360:GLU:H   | 7        | 0.12          |
| (1,1009) | 1:A:412:LEU:H    | 1:A:413:PHE:HZ  | 10       | 0.12          |
| (1,982)  | 1:A:394:LEU:H    | 1:A:396:HIS:HB2 | 10       | 0.11          |
| (1,982)  | 1:A:394:LEU:H    | 1:A:396:HIS:HB3 | 10       | 0.11          |
| (1,900)  | 1:A:353:PHE:H    | 1:A:354:ILE:HA  | 4        | 0.11          |
| (1,900)  | 1:A:353:PHE:H    | 1:A:354:ILE:HA  | 6        | 0.11          |
| (1,891)  | 1:A:369:PRO:HG2  | 1:A:370:ASN:H   | 1        | 0.11          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,891)  | 1:A:369:PRO:HG3  | 1:A:370:ASN:H    | 1        | 0.11          |
| (1,848)  | 1:A:361:SER:H    | 1:A:363:ILE:HB   | 3        | 0.11          |
| (1,824)  | 1:A:375:LEU:HB2  | 1:A:378:ASN:HD21 | 4        | 0.11          |
| (1,824)  | 1:A:375:LEU:HB3  | 1:A:378:ASN:HD21 | 4        | 0.11          |
| (1,741)  | 1:A:347:ASP:H    | 1:A:347:ASP:HB2  | 2        | 0.11          |
| (1,700)  | 1:A:363:ILE:HG21 | 1:A:415:PHE:H    | 3        | 0.11          |
| (1,700)  | 1:A:363:ILE:HG22 | 1:A:415:PHE:H    | 3        | 0.11          |
| (1,700)  | 1:A:363:ILE:HG23 | 1:A:415:PHE:H    | 3        | 0.11          |
| (1,677)  | 1:A:366:ILE:H    | 1:A:366:ILE:HD11 | 1        | 0.11          |
| (1,677)  | 1:A:366:ILE:H    | 1:A:366:ILE:HD12 | 1        | 0.11          |
| (1,677)  | 1:A:366:ILE:H    | 1:A:366:ILE:HD13 | 1        | 0.11          |
| (1,670)  | 1:A:354:ILE:HA   | 1:A:366:ILE:H    | 2        | 0.11          |
| (1,592)  | 1:A:356:TRP:HA   | 1:A:356:TRP:HE1  | 2        | 0.11          |
| (1,5)    | 1:A:376:TRP:HB3  | 1:A:385:MET:HE1  | 2        | 0.11          |
| (1,5)    | 1:A:376:TRP:HB3  | 1:A:385:MET:HE2  | 2        | 0.11          |
| (1,5)    | 1:A:376:TRP:HB3  | 1:A:385:MET:HE3  | 2        | 0.11          |
| (1,439)  | 1:A:378:ASN:HA   | 1:A:378:ASN:HD21 | 6        | 0.11          |
| (1,435)  | 1:A:370:ASN:HA   | 1:A:387:TYR:HB2  | 4        | 0.11          |
| (1,398)  | 1:A:354:ILE:HA   | 1:A:366:ILE:HG21 | 4        | 0.11          |
| (1,398)  | 1:A:354:ILE:HA   | 1:A:366:ILE:HG22 | 4        | 0.11          |
| (1,398)  | 1:A:354:ILE:HA   | 1:A:366:ILE:HG23 | 4        | 0.11          |
| (1,385)  | 1:A:358:ASP:HA   | 1:A:363:ILE:HG21 | 2        | 0.11          |
| (1,385)  | 1:A:358:ASP:HA   | 1:A:363:ILE:HG22 | 2        | 0.11          |
| (1,385)  | 1:A:358:ASP:HA   | 1:A:363:ILE:HG23 | 2        | 0.11          |
| (1,252)  | 1:A:359:LYS:HA   | 1:A:359:LYS:HG2  | 8        | 0.11          |
| (1,220)  | 1:A:356:TRP:HB2  | 1:A:359:LYS:HD2  | 10       | 0.11          |
| (1,220)  | 1:A:356:TRP:HB2  | 1:A:359:LYS:HD3  | 10       | 0.11          |
| (1,1478) | 1:A:398:TYR:HE1  | 1:A:405:LYS:HE2  | 6        | 0.11          |
| (1,1478) | 1:A:398:TYR:HE1  | 1:A:405:LYS:HE3  | 6        | 0.11          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD11 | 6        | 0.11          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD12 | 6        | 0.11          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD13 | 6        | 0.11          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD21 | 6        | 0.11          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD22 | 6        | 0.11          |
| (1,1449) | 1:A:387:TYR:HE1  | 1:A:411:LEU:HD23 | 6        | 0.11          |
| (1,1423) | 1:A:374:ARG:HB2  | 1:A:378:ASN:HD21 | 5        | 0.11          |
| (1,1423) | 1:A:374:ARG:HB3  | 1:A:378:ASN:HD21 | 5        | 0.11          |
| (1,1409) | 1:A:372:LEU:HD11 | 1:A:374:ARG:H    | 1        | 0.11          |
| (1,1409) | 1:A:372:LEU:HD12 | 1:A:374:ARG:H    | 1        | 0.11          |
| (1,1409) | 1:A:372:LEU:HD13 | 1:A:374:ARG:H    | 1        | 0.11          |
| (1,1409) | 1:A:372:LEU:HD21 | 1:A:374:ARG:H    | 1        | 0.11          |
| (1,1409) | 1:A:372:LEU:HD22 | 1:A:374:ARG:H    | 1        | 0.11          |

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| Key      | Atom-1           | Atom-2           | Model ID | Violation (Å) |
|----------|------------------|------------------|----------|---------------|
| (1,1409) | 1:A:372:LEU:HD23 | 1:A:374:ARG:H    | 1        | 0.11          |
| (1,1350) | 1:A:349:ARG:HD2  | 1:A:350:TYR:H    | 1        | 0.11          |
| (1,1350) | 1:A:349:ARG:HD3  | 1:A:350:TYR:H    | 1        | 0.11          |
| (1,1340) | 1:A:345:LEU:HD11 | 1:A:365:ARG:H    | 3        | 0.11          |
| (1,1340) | 1:A:345:LEU:HD12 | 1:A:365:ARG:H    | 3        | 0.11          |
| (1,1340) | 1:A:345:LEU:HD13 | 1:A:365:ARG:H    | 3        | 0.11          |
| (1,1340) | 1:A:345:LEU:HD21 | 1:A:365:ARG:H    | 3        | 0.11          |
| (1,1340) | 1:A:345:LEU:HD22 | 1:A:365:ARG:H    | 3        | 0.11          |
| (1,1340) | 1:A:345:LEU:HD23 | 1:A:365:ARG:H    | 3        | 0.11          |
| (1,1327) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HB2  | 5        | 0.11          |
| (1,1327) | 1:A:345:LEU:HD11 | 1:A:355:ARG:HB3  | 5        | 0.11          |
| (1,1327) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HB2  | 5        | 0.11          |
| (1,1327) | 1:A:345:LEU:HD12 | 1:A:355:ARG:HB3  | 5        | 0.11          |
| (1,1327) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HB2  | 5        | 0.11          |
| (1,1327) | 1:A:345:LEU:HD13 | 1:A:355:ARG:HB3  | 5        | 0.11          |
| (1,1327) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HB2  | 5        | 0.11          |
| (1,1327) | 1:A:345:LEU:HD21 | 1:A:355:ARG:HB3  | 5        | 0.11          |
| (1,1327) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HB2  | 5        | 0.11          |
| (1,1327) | 1:A:345:LEU:HD22 | 1:A:355:ARG:HB3  | 5        | 0.11          |
| (1,1327) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HB2  | 5        | 0.11          |
| (1,1327) | 1:A:345:LEU:HD23 | 1:A:355:ARG:HB3  | 5        | 0.11          |
| (1,1323) | 1:A:345:LEU:HD11 | 1:A:354:ILE:HG21 | 3        | 0.11          |
| (1,1323) | 1:A:345:LEU:HD11 | 1:A:354:ILE:HG22 | 3        | 0.11          |
| (1,1323) | 1:A:345:LEU:HD11 | 1:A:354:ILE:HG23 | 3        | 0.11          |
| (1,1323) | 1:A:345:LEU:HD12 | 1:A:354:ILE:HG21 | 3        | 0.11          |
| (1,1323) | 1:A:345:LEU:HD12 | 1:A:354:ILE:HG22 | 3        | 0.11          |
| (1,1323) | 1:A:345:LEU:HD12 | 1:A:354:ILE:HG23 | 3        | 0.11          |
| (1,1323) | 1:A:345:LEU:HD13 | 1:A:354:ILE:HG21 | 3        | 0.11          |
| (1,1323) | 1:A:345:LEU:HD13 | 1:A:354:ILE:HG22 | 3        | 0.11          |
| (1,1323) | 1:A:345:LEU:HD13 | 1:A:354:ILE:HG23 | 3        | 0.11          |
| (1,1323) | 1:A:345:LEU:HD21 | 1:A:354:ILE:HG21 | 3        | 0.11          |
| (1,1323) | 1:A:345:LEU:HD21 | 1:A:354:ILE:HG22 | 3        | 0.11          |
| (1,1323) | 1:A:345:LEU:HD21 | 1:A:354:ILE:HG23 | 3        | 0.11          |
| (1,1323) | 1:A:345:LEU:HD22 | 1:A:354:ILE:HG21 | 3        | 0.11          |
| (1,1323) | 1:A:345:LEU:HD22 | 1:A:354:ILE:HG22 | 3        | 0.11          |
| (1,1323) | 1:A:345:LEU:HD22 | 1:A:354:ILE:HG23 | 3        | 0.11          |
| (1,1323) | 1:A:345:LEU:HD23 | 1:A:354:ILE:HG21 | 3        | 0.11          |
| (1,1323) | 1:A:345:LEU:HD23 | 1:A:354:ILE:HG22 | 3        | 0.11          |
| (1,1323) | 1:A:345:LEU:HD23 | 1:A:354:ILE:HG23 | 3        | 0.11          |
| (1,1113) | 1:A:354:ILE:H    | 1:A:367:VAL:HB   | 2        | 0.11          |
| (1,1110) | 1:A:327:HIS:HE1  | 1:A:328:MET:H    | 2        | 0.11          |
| (1,104)  | 1:A:420:ASP:H    | 1:A:420:ASP:HB2  | 4        | 0.11          |

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| <b>Key</b> | <b>Atom-1</b>  | <b>Atom-2</b>  | <b>Model ID</b> | <b>Violation (Å)</b> |
|------------|----------------|----------------|-----------------|----------------------|
| (1,1038)   | 1:A:358:ASP:HA | 1:A:360:GLU:H  | 8               | 0.11                 |
| (1,1036)   | 1:A:403:ILE:HA | 1:A:414:ARG:H  | 8               | 0.11                 |
| (1,1009)   | 1:A:412:LEU:H  | 1:A:413:PHE:HZ | 2               | 0.11                 |

## 10 Dihedral-angle violation analysis

Dihedral angle analysis failed due to data error in the dihedral angle restraints, possibly missing target value