



Full wwPDB EM Validation Report ⓘ

Jun 8, 2024 – 06:36 PM EDT

PDB ID : 8EJ4
EMDB ID : EMD-28175
Title : Cryo-EM structure of the active NLRP3 inflammasome disk
Authors : Hao, W.; Le, X.
Deposited on : 2022-09-16
Resolution : 3.40 Å (reported)

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

We welcome your comments at validation@mail.wwpdb.org

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

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

EMDB validation analysis : 0.0.1.dev92
Mogul : 1.8.5 (274361), CSD as541be (2020)
MolProbity : 4.02b-467
buster-report : 1.1.7 (2018)
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.36.2

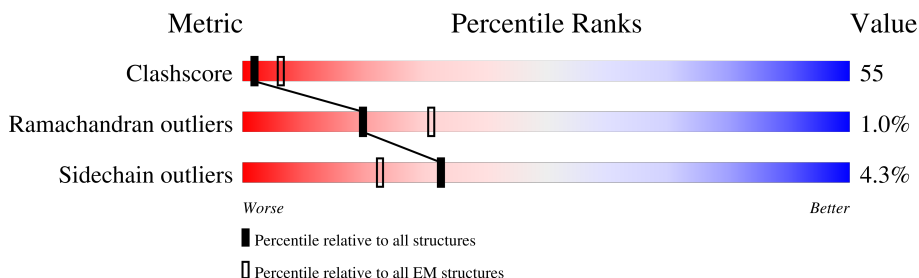
1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 3.40 Å.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.





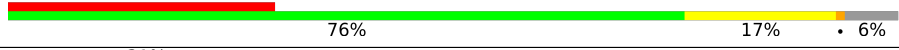



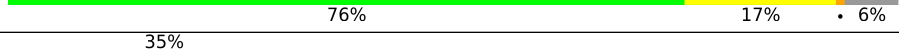
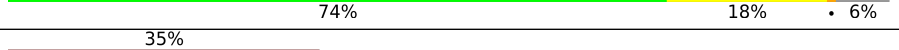
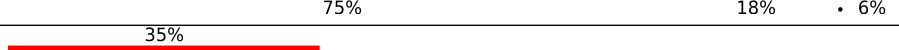
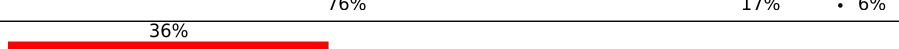

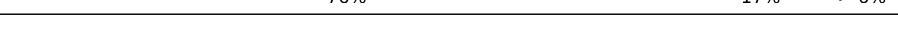
| Metric | Whole archive (#Entries) | EM structures (#Entries) |
|-----------------------|--------------------------|--------------------------|
| Clashscore | 158937 | 4297 |
| Ramachandran outliers | 154571 | 4023 |
| Sidechain outliers | 154315 | 3826 |

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria respectively. 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 $\leq 5\%$. The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion $< 40\%$). The numeric value is given above the bar.

| Mol | Chain | Length | Quality of chain |
|-----|-------|--------|------------------|
| 1 | A | 902 | |
| 1 | B | 902 | |
| 1 | C | 902 | |
| 1 | D | 902 | |
| 1 | E | 902 | |
| 1 | F | 902 | |
| 1 | G | 902 | |
| 1 | H | 902 | |

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| Mol | Chain | Length | Quality of chain |
|-----|-------|--------|--|
| 1 | I | 902 |  |
| 1 | J | 902 |  |
| 2 | K | 278 |  |
| 2 | L | 278 |  |
| 2 | M | 278 |  |
| 2 | N | 278 |  |
| 2 | O | 278 |  |
| 2 | P | 278 |  |
| 2 | Q | 278 |  |
| 2 | R | 278 |  |
| 2 | S | 278 |  |
| 2 | T | 278 |  |

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

| Mol | Type | Chain | Res | Chirality | Geometry | Clashes | Electron density |
|-----|------|-------|------|-----------|----------|---------|------------------|
| 3 | AGS | A | 1101 | - | - | X | - |
| 3 | AGS | B | 1101 | - | - | X | - |
| 3 | AGS | C | 1101 | - | - | X | - |
| 3 | AGS | D | 1101 | - | - | X | - |
| 3 | AGS | E | 1101 | - | - | X | - |
| 3 | AGS | F | 1101 | - | - | X | - |
| 3 | AGS | G | 1101 | - | - | X | - |
| 3 | AGS | H | 1101 | - | - | X | - |
| 3 | AGS | I | 1101 | - | - | X | - |
| 3 | AGS | J | 1101 | - | - | X | - |

2 Entry composition [i](#)

There are 4 unique types of molecules in this entry. The entry contains 100240 atoms, of which 14480 are hydrogens and 0 are deuteriums.

In the tables below, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a protein called NACHT, LRR and PYD domains-containing protein 3.

| Mol | Chain | Residues | Atoms | | | | | AltConf | Trace |
|-----|-------|----------|-------|------|------|------|----|---------|-------|
| | | | Total | C | N | O | S | | |
| 1 | A | 850 | 6737 | 4285 | 1145 | 1250 | 57 | 0 | 0 |
| 1 | B | 850 | 6737 | 4285 | 1145 | 1250 | 57 | 0 | 0 |
| 1 | C | 850 | 6737 | 4285 | 1145 | 1250 | 57 | 0 | 0 |
| 1 | D | 850 | 6737 | 4285 | 1145 | 1250 | 57 | 0 | 0 |
| 1 | E | 850 | 6737 | 4285 | 1145 | 1250 | 57 | 0 | 0 |
| 1 | F | 850 | 6737 | 4285 | 1145 | 1250 | 57 | 0 | 0 |
| 1 | G | 850 | 6737 | 4285 | 1145 | 1250 | 57 | 0 | 0 |
| 1 | H | 850 | 6737 | 4285 | 1145 | 1250 | 57 | 0 | 0 |
| 1 | I | 850 | 6737 | 4285 | 1145 | 1250 | 57 | 0 | 0 |
| 1 | J | 850 | 6737 | 4285 | 1145 | 1250 | 57 | 0 | 0 |

- Molecule 2 is a protein called Serine/threonine-protein kinase Nek7.

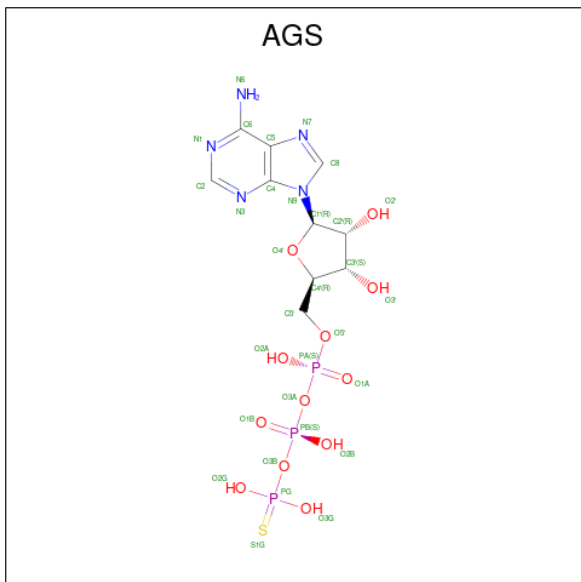
| Mol | Chain | Residues | Atoms | | | | | AltConf | Trace | |
|-----|-------|----------|-------|------|------|-----|-----|---------|-------|---|
| | | | Total | C | H | N | O | | | S |
| 2 | K | 261 | 3255 | 1158 | 1448 | 303 | 333 | 13 | 0 | 0 |
| 2 | L | 261 | 3255 | 1158 | 1448 | 303 | 333 | 13 | 0 | 0 |
| 2 | M | 261 | 3255 | 1158 | 1448 | 303 | 333 | 13 | 0 | 0 |
| 2 | N | 261 | 3255 | 1158 | 1448 | 303 | 333 | 13 | 0 | 0 |
| 2 | O | 261 | 3255 | 1158 | 1448 | 303 | 333 | 13 | 0 | 0 |

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| Mol | Chain | Residues | Atoms | | | | | AltConf | Trace | |
|-----|-------|----------|-------|------|------|-----|-----|---------|-------|---|
| | | | Total | C | H | N | O | | | S |
| 2 | P | 261 | Total | C | H | N | O | S | 0 | 0 |
| | | | 3255 | 1158 | 1448 | 303 | 333 | 13 | | |
| 2 | Q | 261 | Total | C | H | N | O | S | 0 | 0 |
| | | | 3255 | 1158 | 1448 | 303 | 333 | 13 | | |
| 2 | R | 261 | Total | C | H | N | O | S | 0 | 0 |
| | | | 3255 | 1158 | 1448 | 303 | 333 | 13 | | |
| 2 | S | 261 | Total | C | H | N | O | S | 0 | 0 |
| | | | 3255 | 1158 | 1448 | 303 | 333 | 13 | | |
| 2 | T | 261 | Total | C | H | N | O | S | 0 | 0 |
| | | | 3255 | 1158 | 1448 | 303 | 333 | 13 | | |

- Molecule 3 is PHOSPHOTHIOPHOSPHORIC ACID-ADENYLATE ESTER (three-letter code: AGS) (formula: C₁₀H₁₆N₅O₁₂P₃S) (labeled as "Ligand of Interest" by depositor).



| Mol | Chain | Residues | Atoms | | | | | AltConf | |
|-----|-------|----------|-------|----|---|----|---|---------|---|
| | | | Total | C | N | O | P | | S |
| 3 | A | 1 | Total | C | N | O | P | S | 0 |
| | | | 31 | 10 | 5 | 12 | 3 | 1 | |
| 3 | B | 1 | Total | C | N | O | P | S | 0 |
| | | | 31 | 10 | 5 | 12 | 3 | 1 | |
| 3 | C | 1 | Total | C | N | O | P | S | 0 |
| | | | 31 | 10 | 5 | 12 | 3 | 1 | |
| 3 | D | 1 | Total | C | N | O | P | S | 0 |
| | | | 31 | 10 | 5 | 12 | 3 | 1 | |
| 3 | E | 1 | Total | C | N | O | P | S | 0 |
| | | | 31 | 10 | 5 | 12 | 3 | 1 | |
| 3 | F | 1 | Total | C | N | O | P | S | 0 |
| | | | 31 | 10 | 5 | 12 | 3 | 1 | |

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| Mol | Chain | Residues | Atoms | | | | | | AltConf |
|-----|-------|----------|-------------|---------|--------|---------|--------|--------|---------|
| | | | Total | C | N | O | P | S | |
| 3 | G | 1 | Total 31 | C 10 | N 5 | O 12 | P 3 | S 1 | 0 |
| 3 | H | 1 | Total 31 | C 10 | N 5 | O 12 | P 3 | S 1 | 0 |
| 3 | I | 1 | Total 31 | C 10 | N 5 | O 12 | P 3 | S 1 | 0 |
| 3 | J | 1 | Total 31 | C 10 | N 5 | O 12 | P 3 | S 1 | 0 |

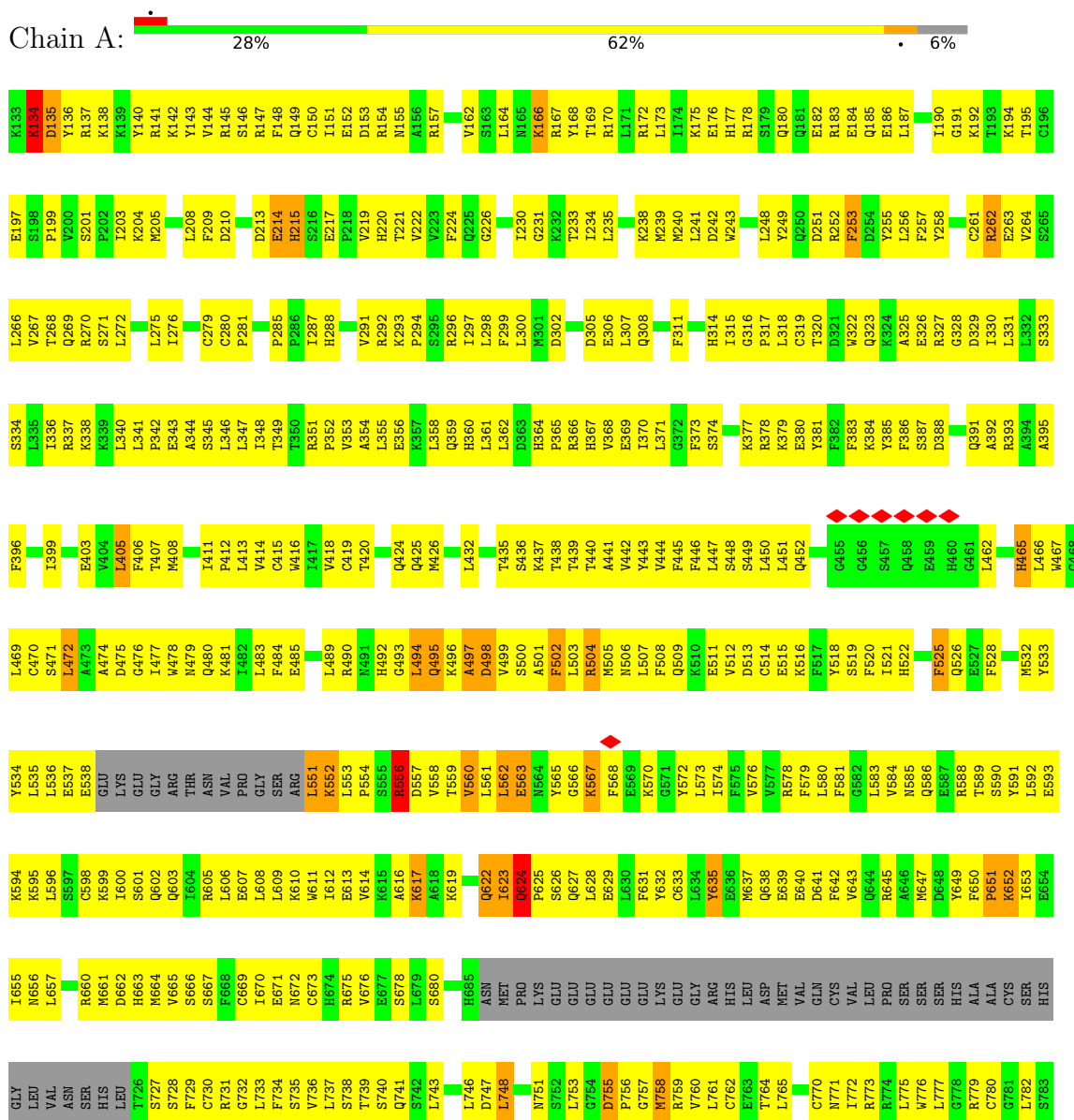
- Molecule 4 is MAGNESIUM ION (three-letter code: MG) (formula: Mg) (labeled as "Ligand of Interest" by depositor).

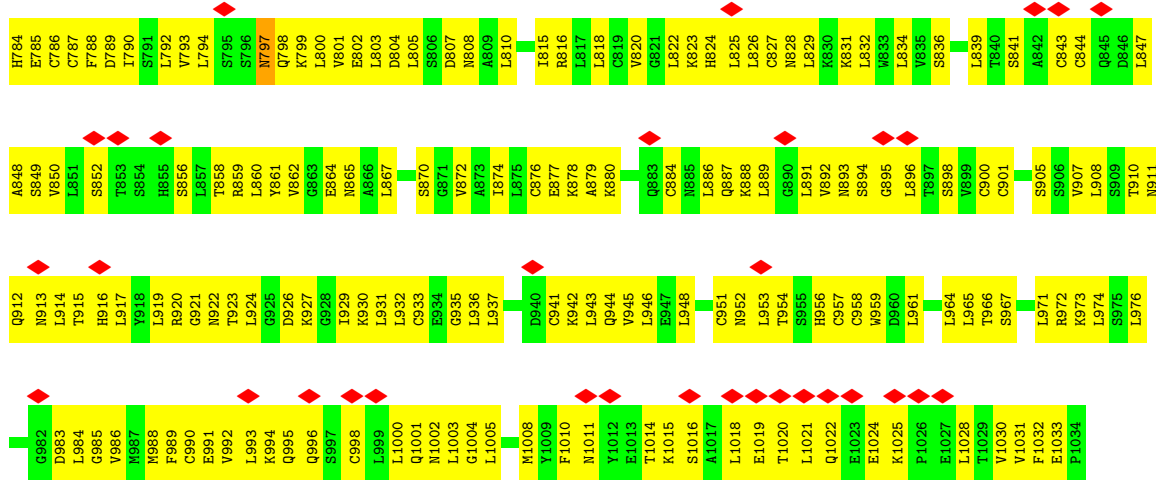
| Mol | Chain | Residues | Atoms | | AltConf |
|-----|-------|----------|------------|---------|---------|
| 4 | A | 1 | Total 1 | Mg 1 | 0 |
| 4 | B | 1 | Total 1 | Mg 1 | 0 |
| 4 | C | 1 | Total 1 | Mg 1 | 0 |
| 4 | D | 1 | Total 1 | Mg 1 | 0 |
| 4 | E | 1 | Total 1 | Mg 1 | 0 |
| 4 | F | 1 | Total 1 | Mg 1 | 0 |
| 4 | G | 1 | Total 1 | Mg 1 | 0 |
| 4 | H | 1 | Total 1 | Mg 1 | 0 |
| 4 | I | 1 | Total 1 | Mg 1 | 0 |
| 4 | J | 1 | Total 1 | Mg 1 | 0 |

3 Residue-property plots

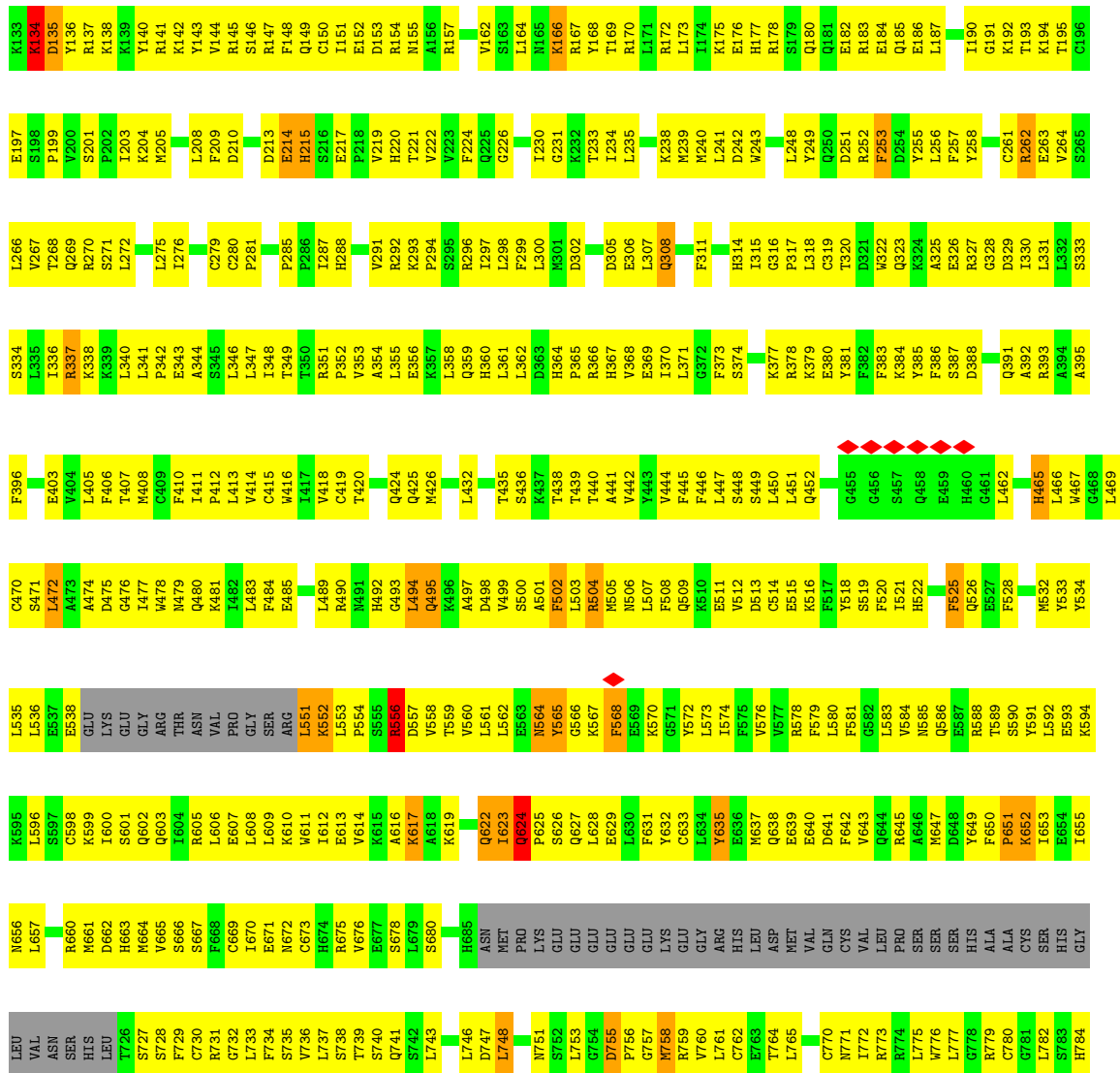
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map density. Residues are color-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. A red diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

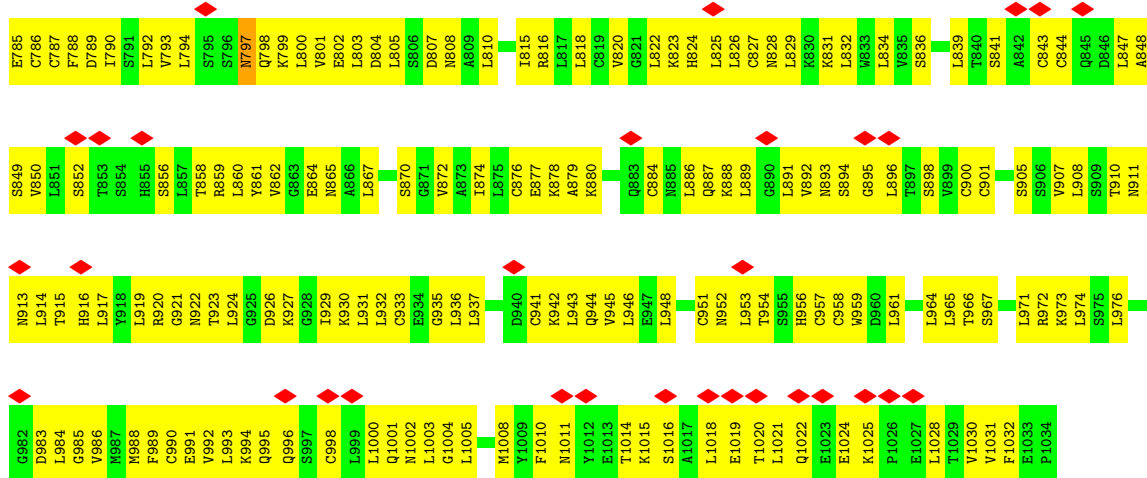
- Molecule 1: NACHT, LRR and PYD domains-containing protein 3



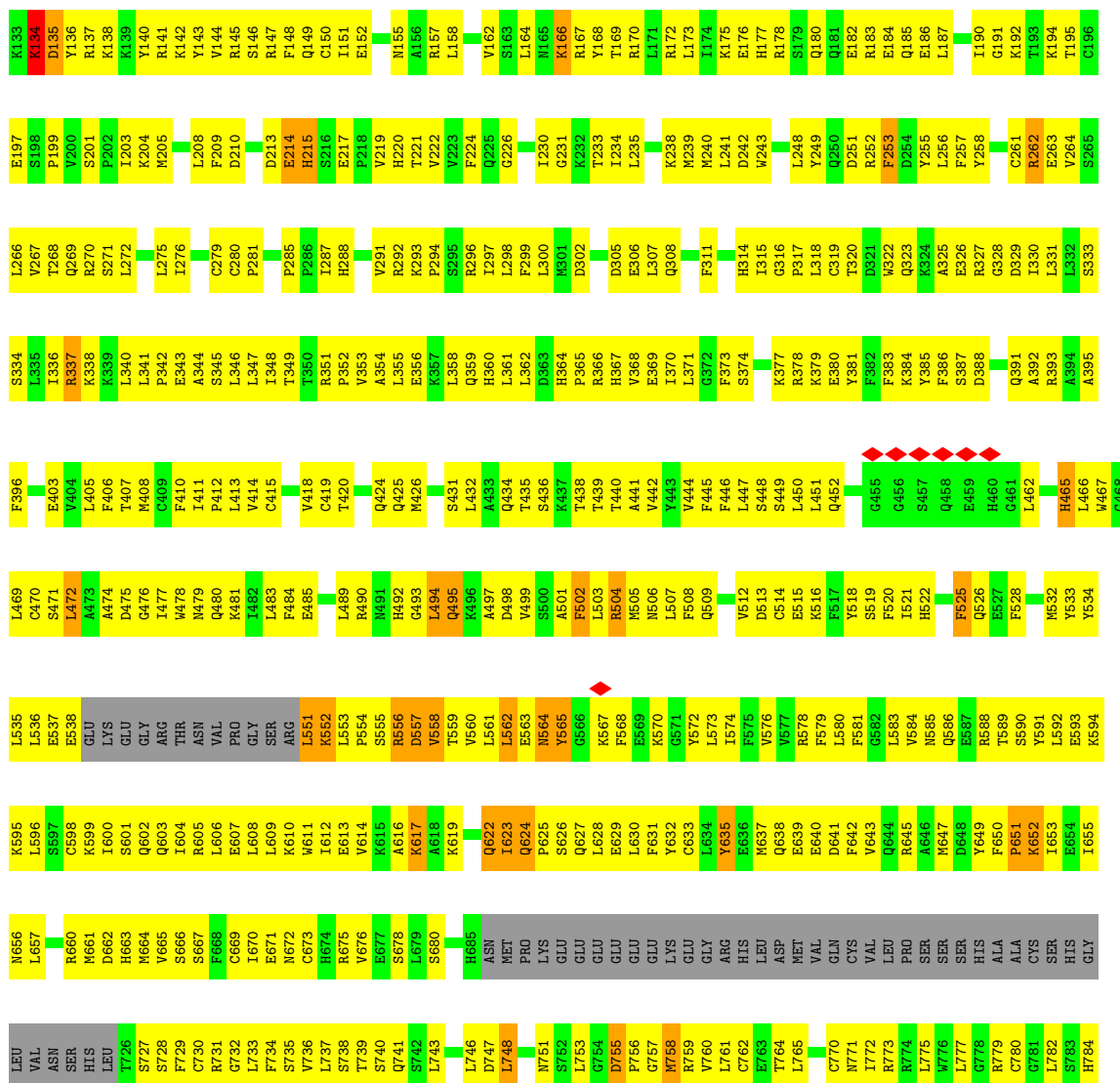


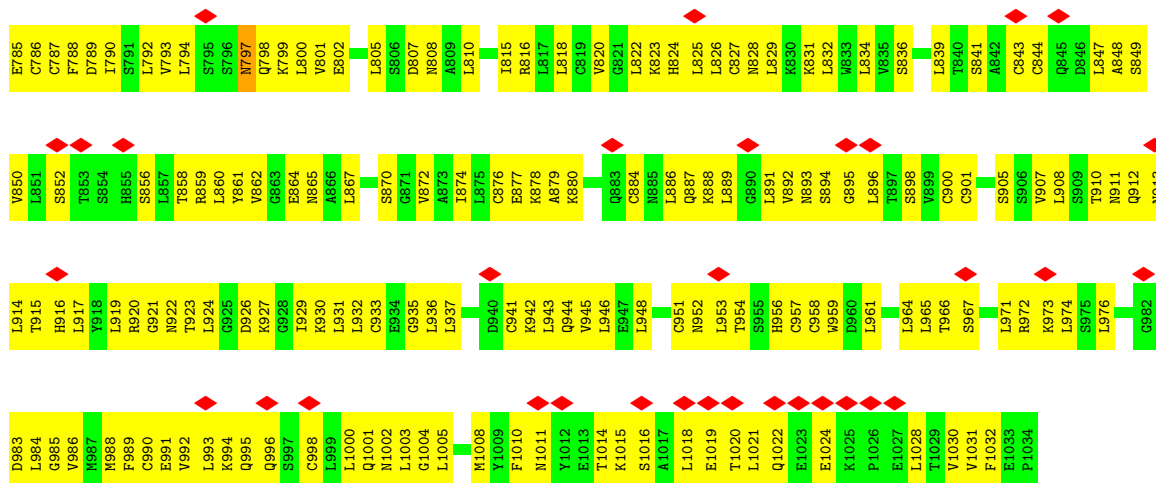
● Molecule 1: NACHT, LRR and PYD domains-containing protein 3



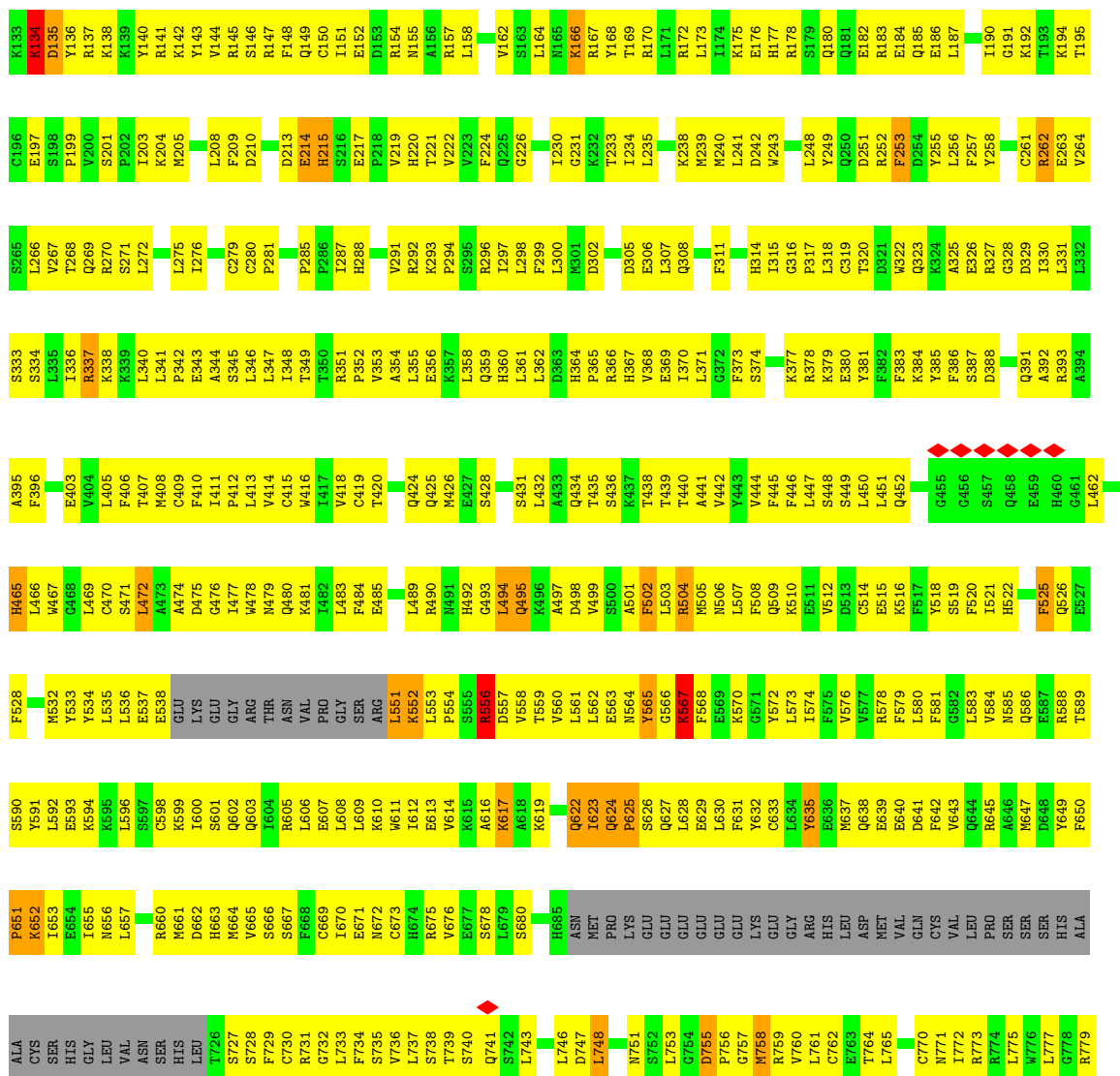


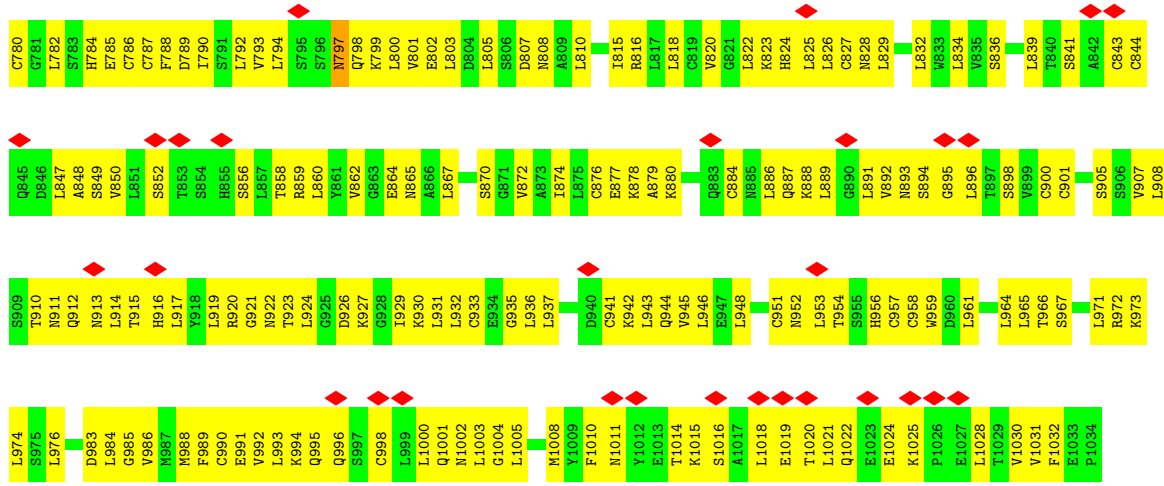
● Molecule 1: NACHT, LRR and PYD domains-containing protein 3



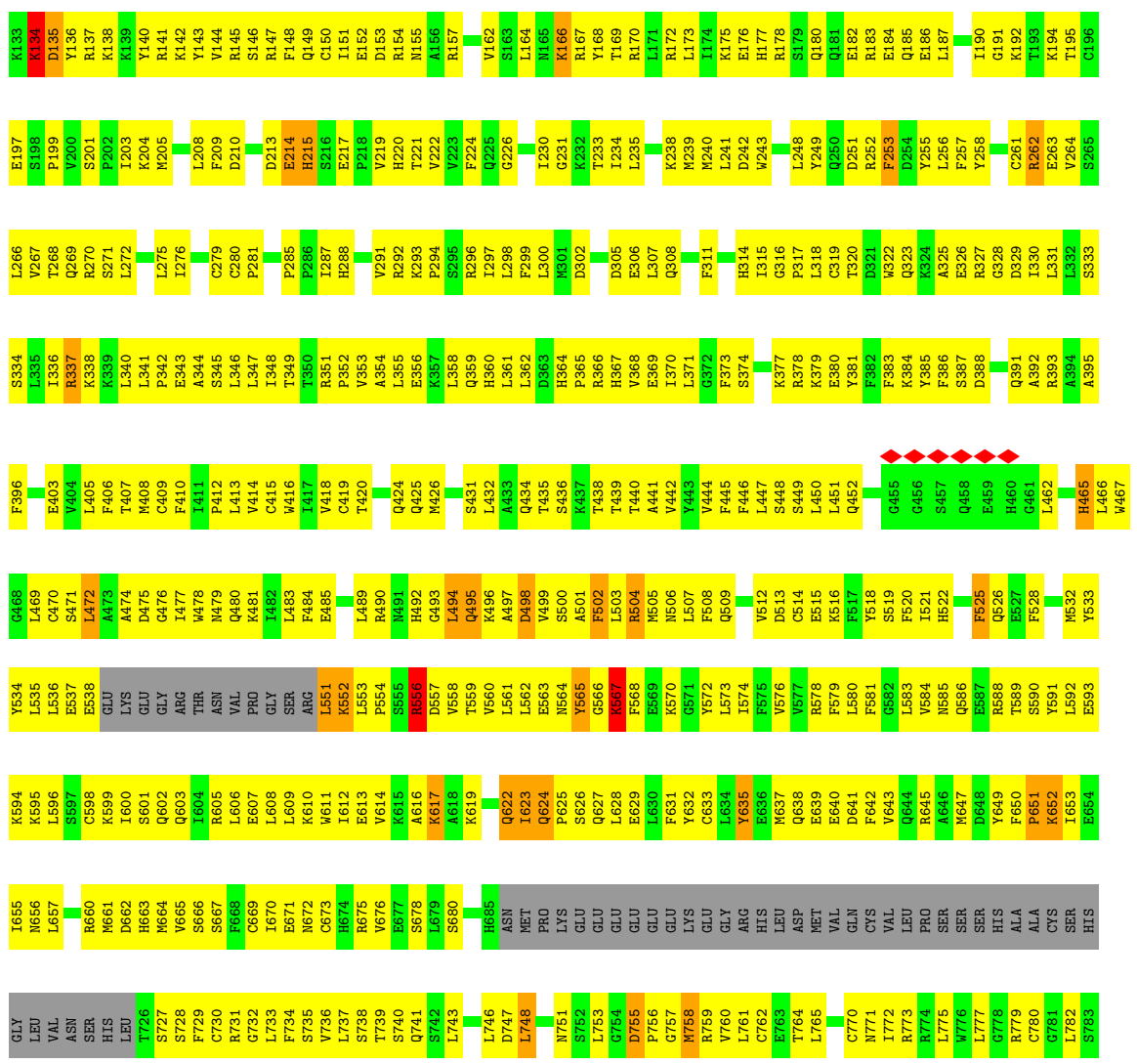


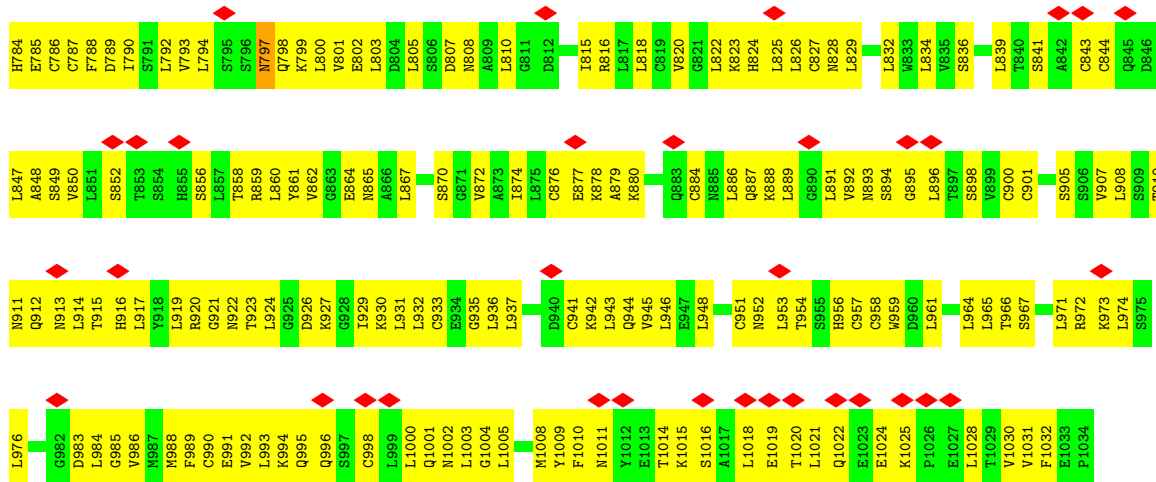
● Molecule 1: NACHT, LRR and PYD domains-containing protein 3



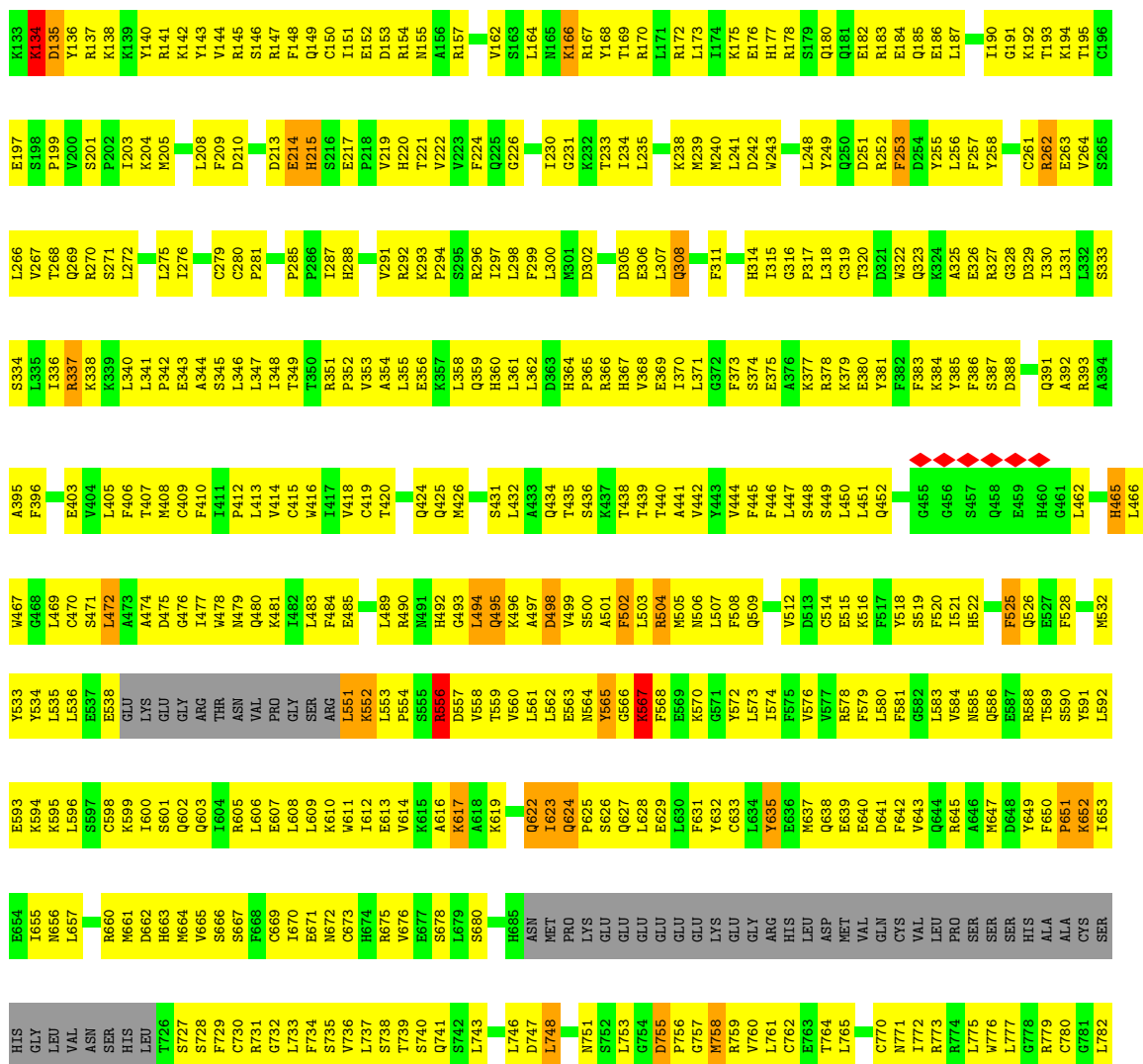


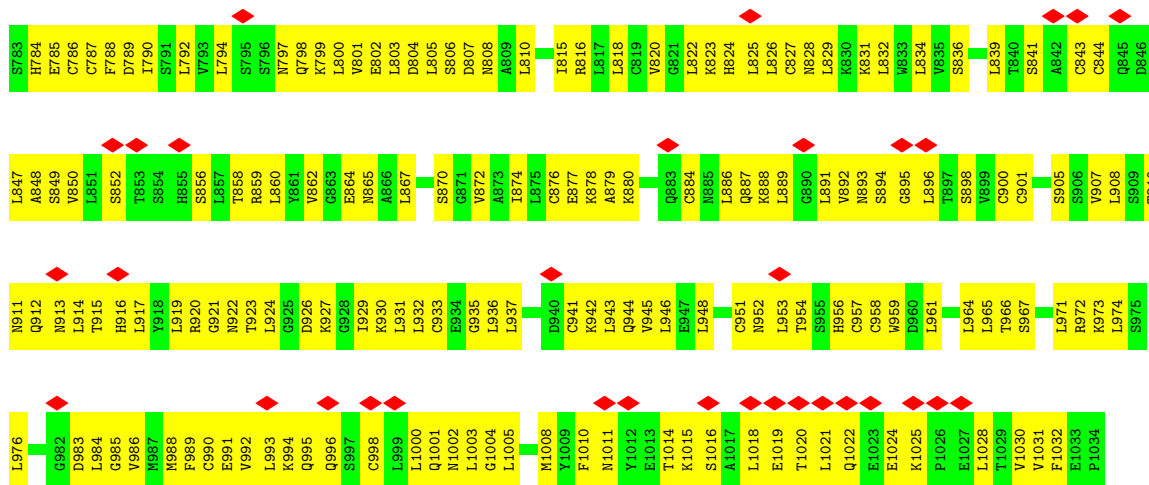
● Molecule 1: NACHT, LRR and PYD domains-containing protein 3



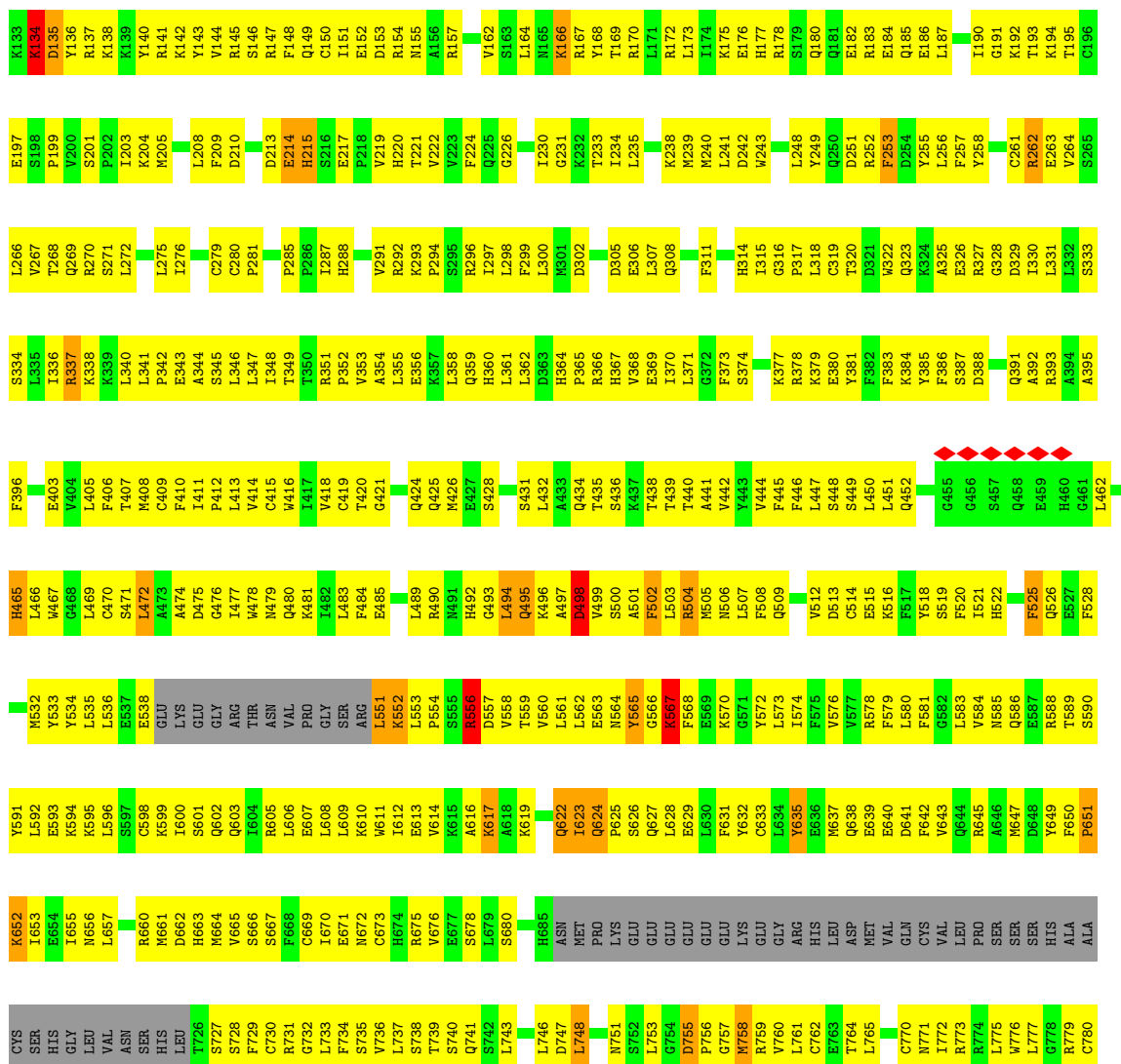


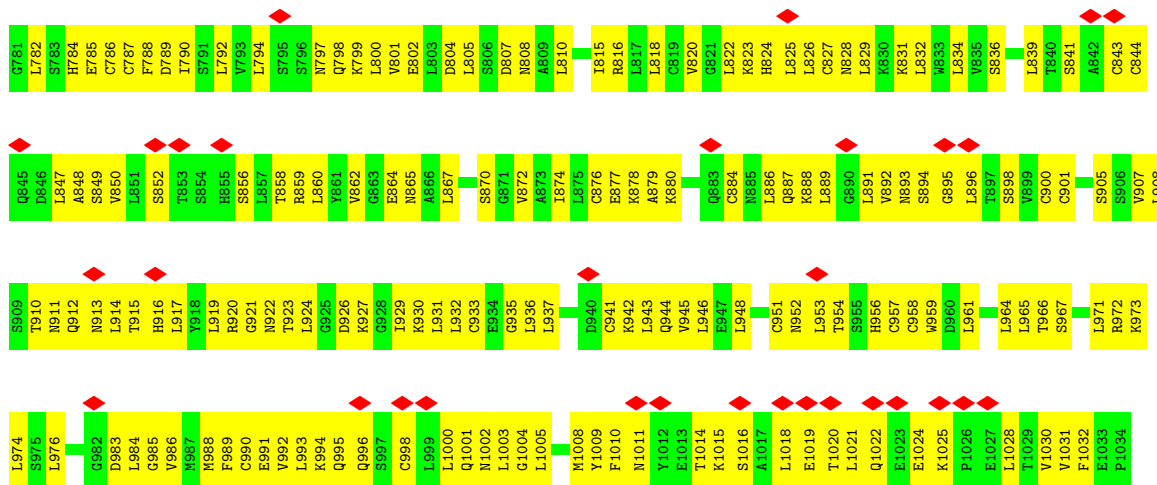
● Molecule 1: NACHT, LRR and PYD domains-containing protein 3



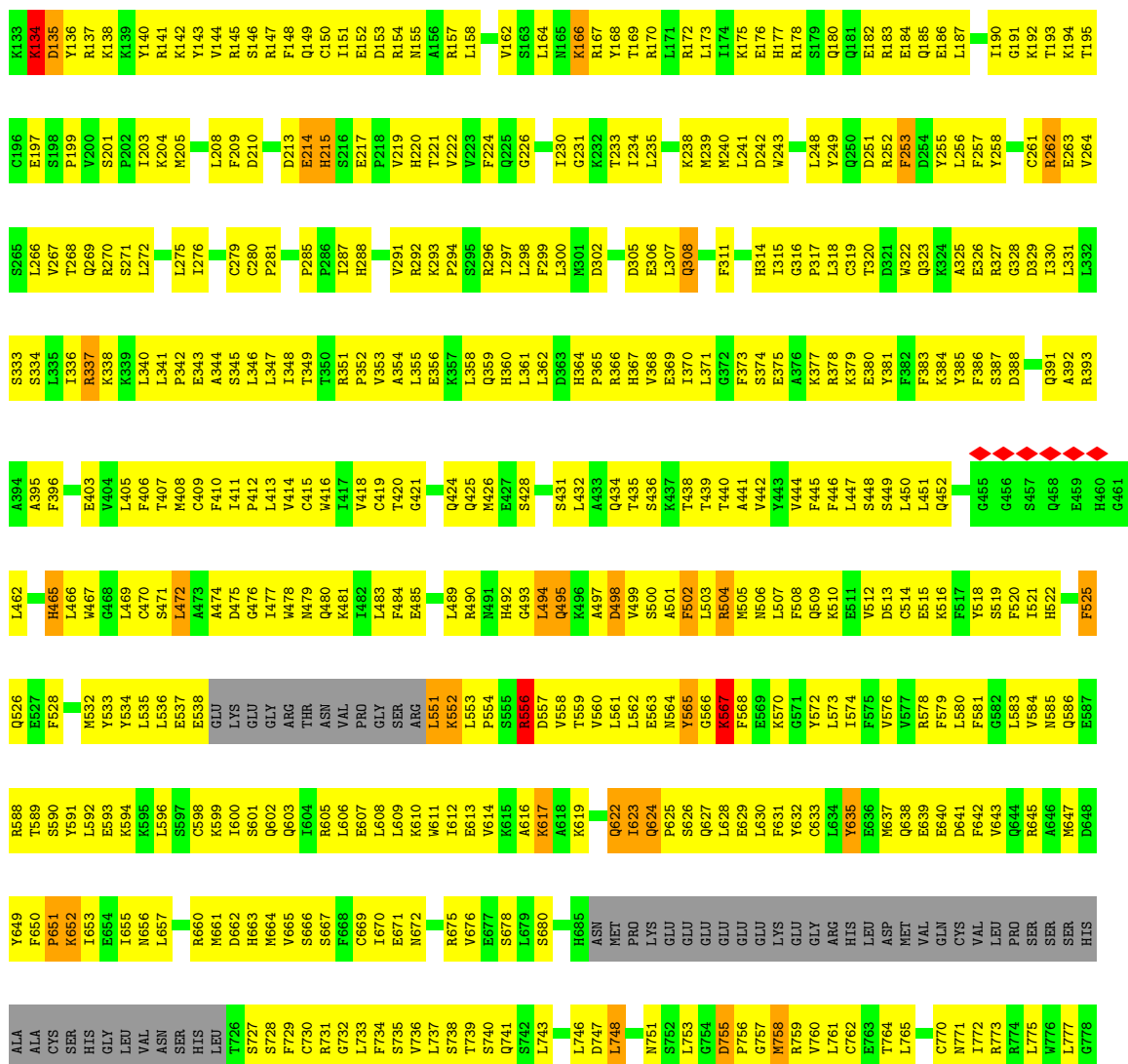


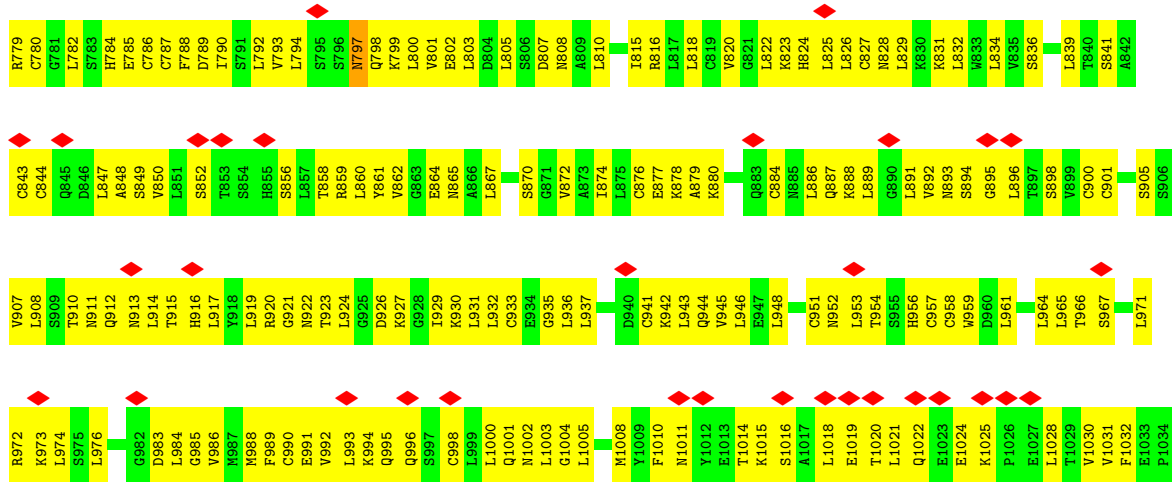
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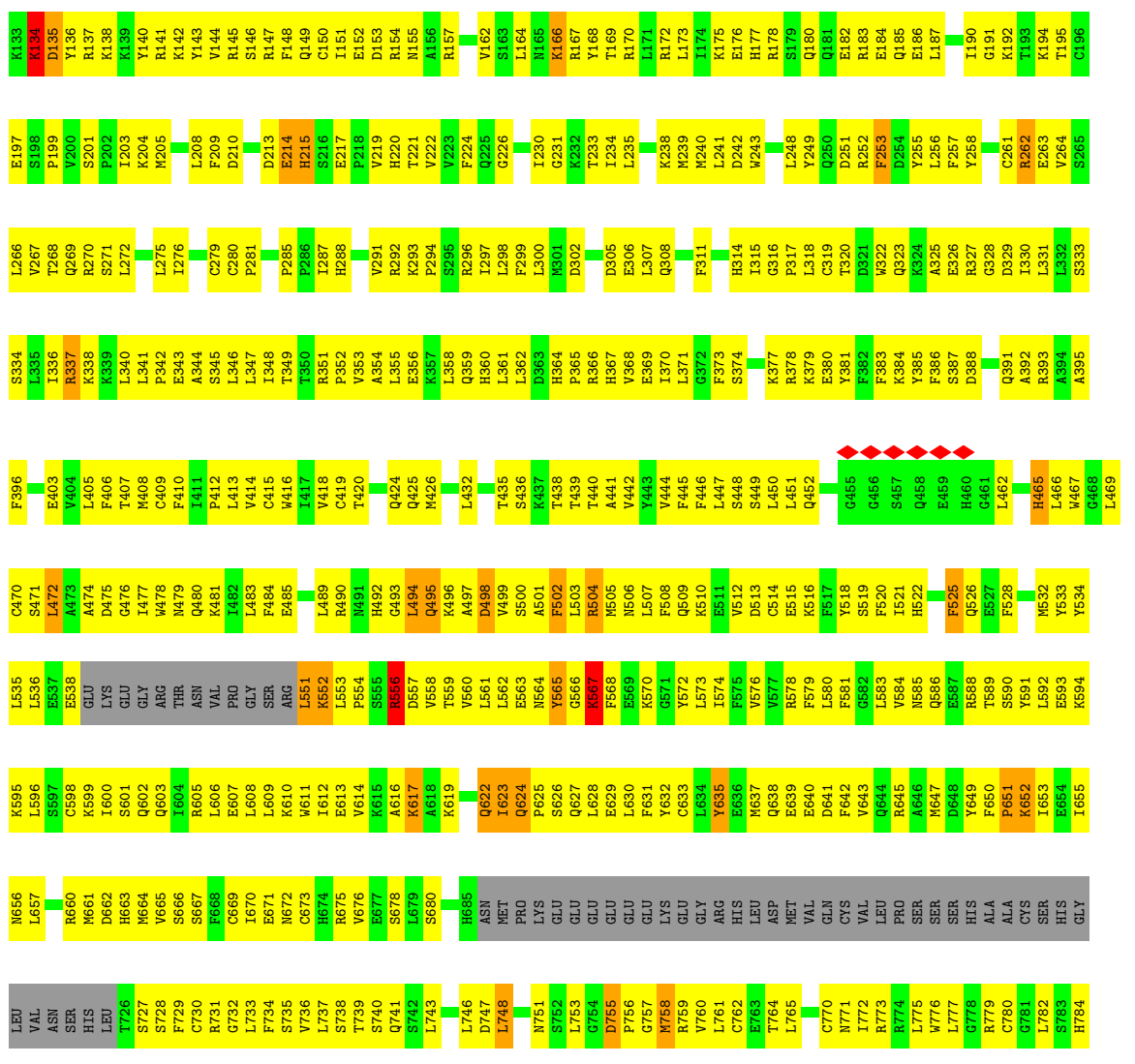


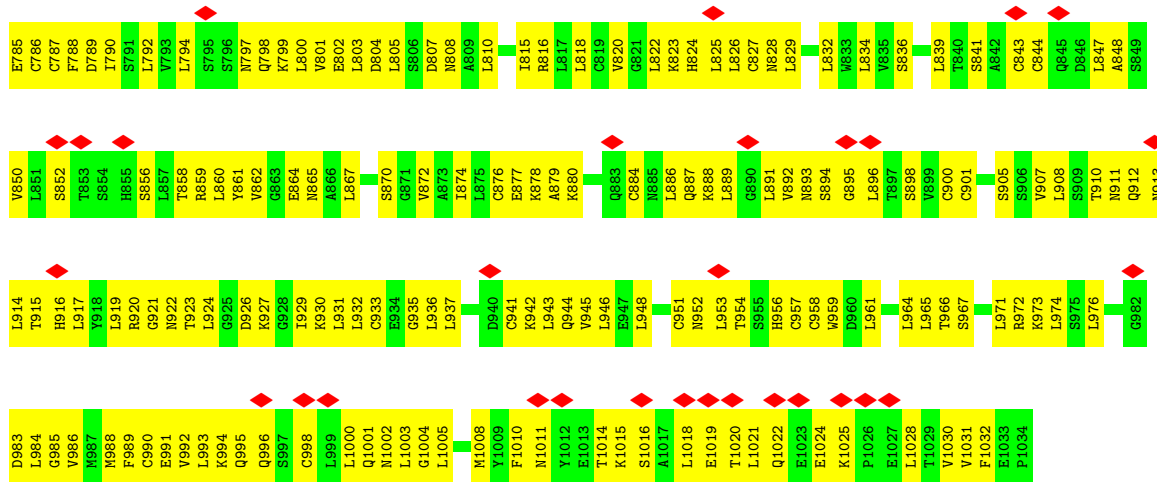
● Molecule 1: NACHT, LRR and PYD domains-containing protein 3



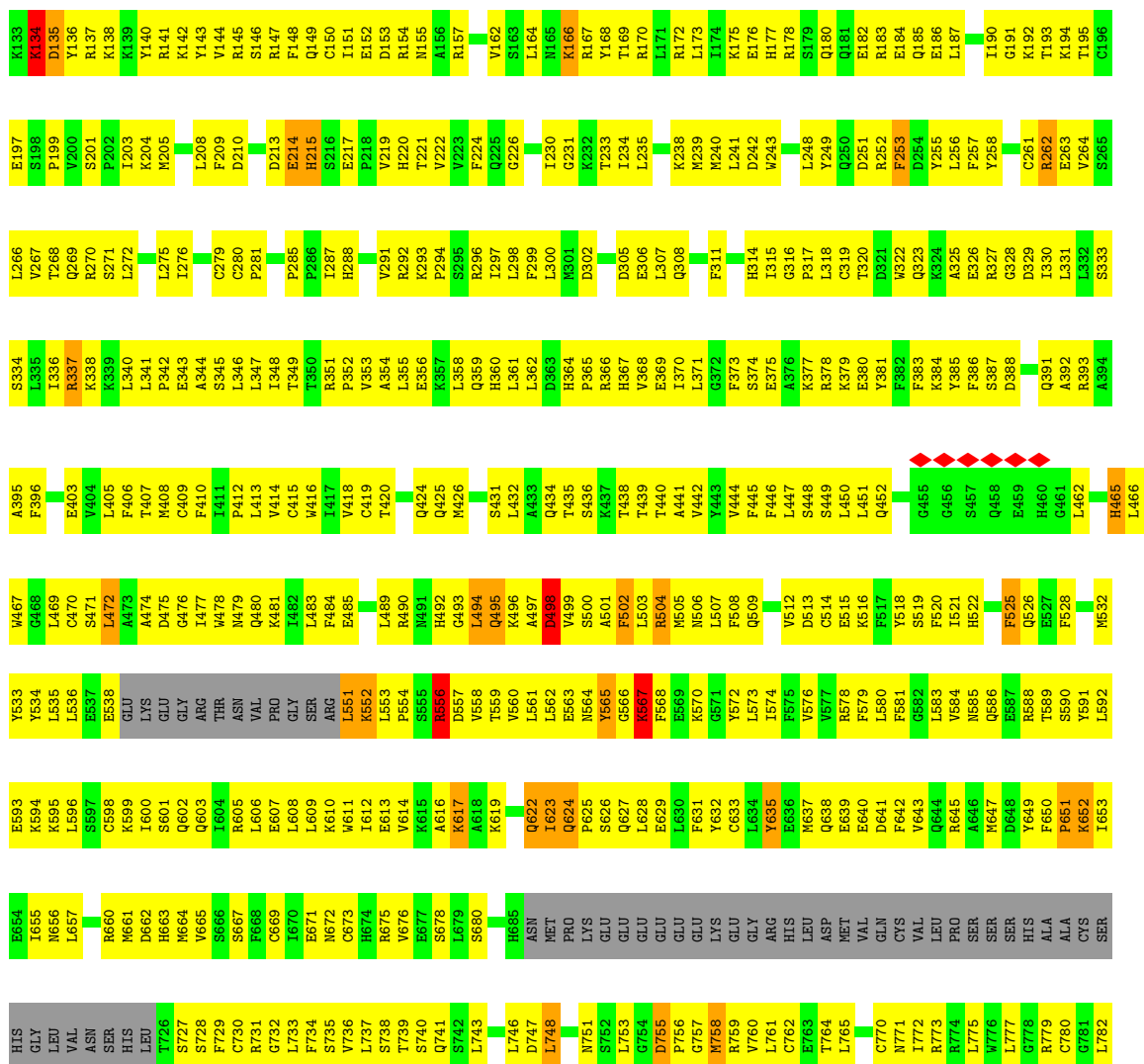
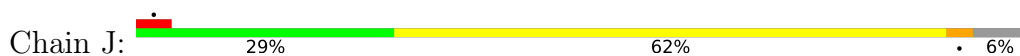


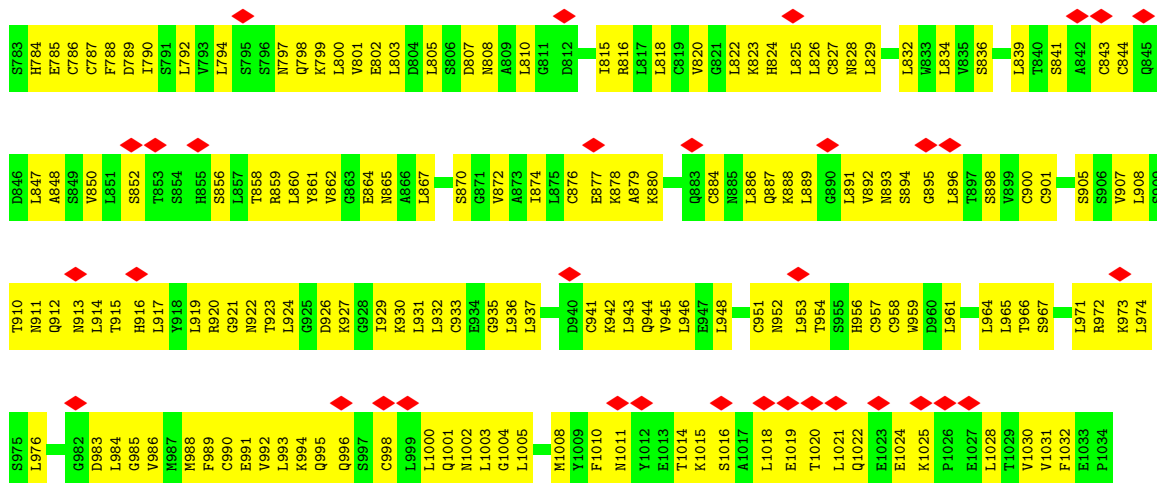
● Molecule 1: NACHT, LRR and PYD domains-containing protein 3



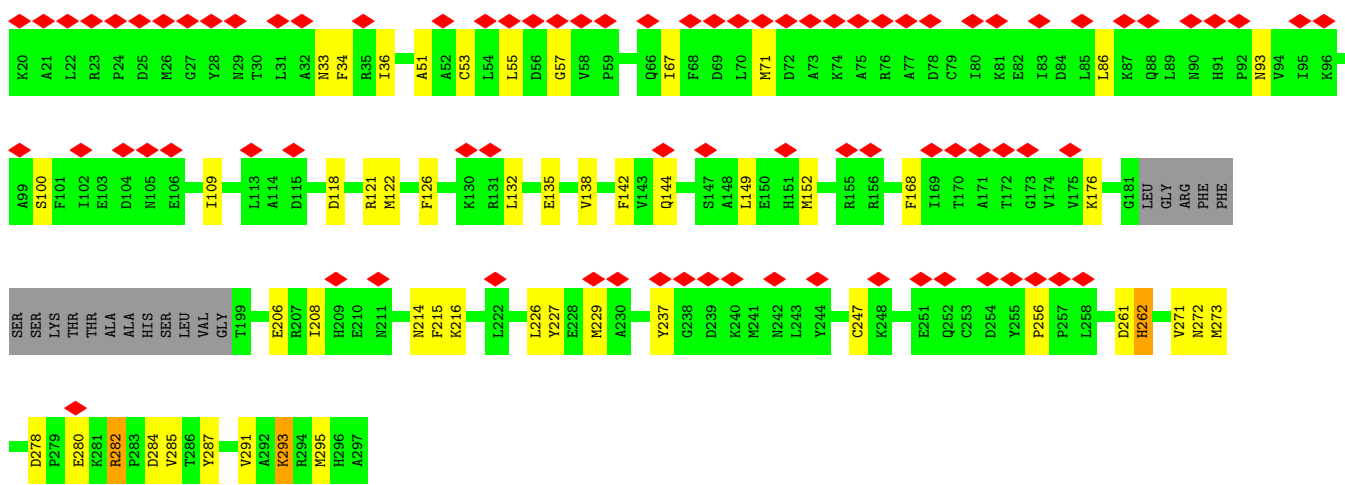
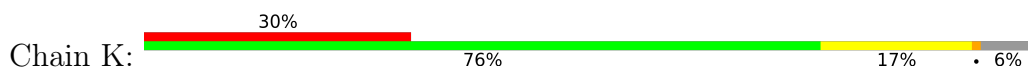


● Molecule 1: NACHT, LRR and PYD domains-containing protein 3

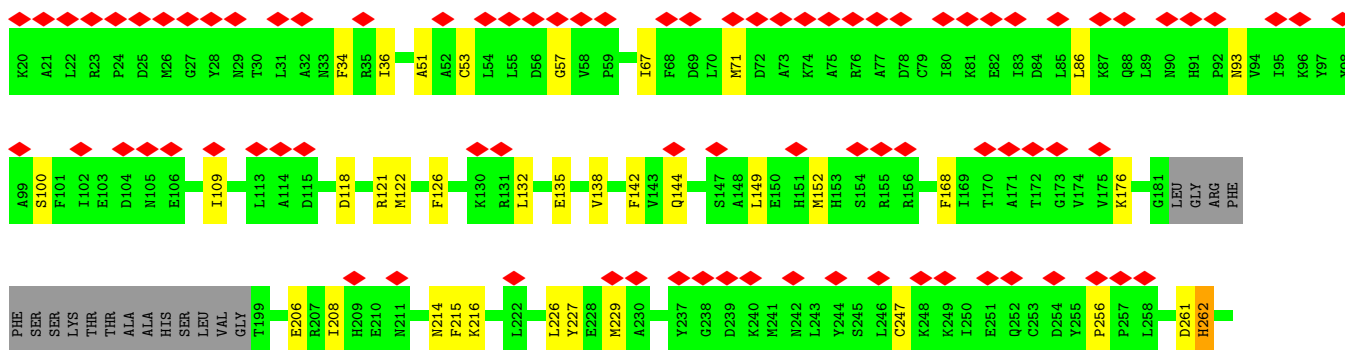
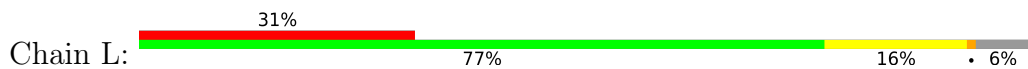


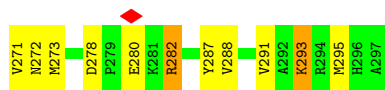


• Molecule 2: Serine/threonine-protein kinase Nek7

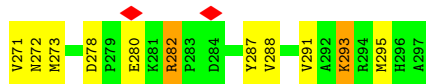
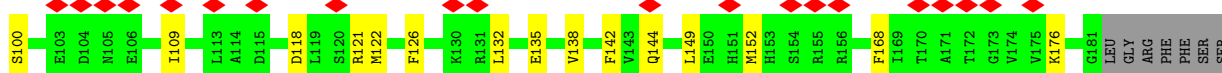
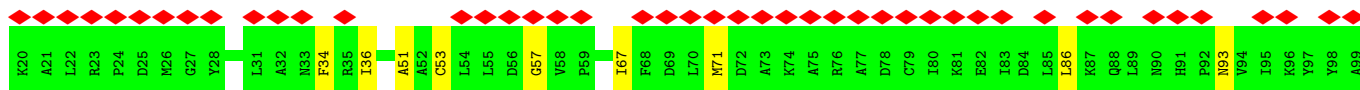
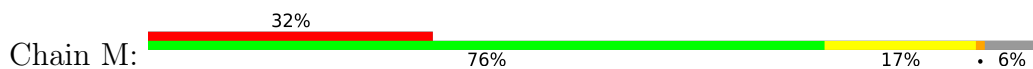


• Molecule 2: Serine/threonine-protein kinase Nek7

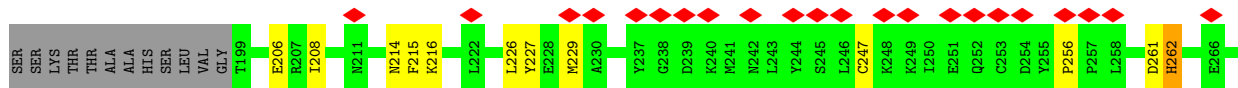
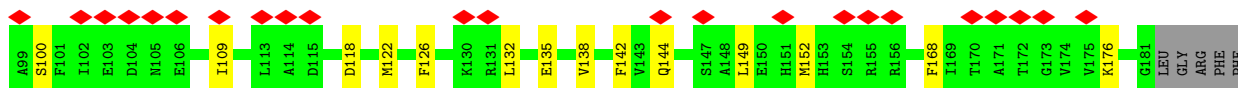
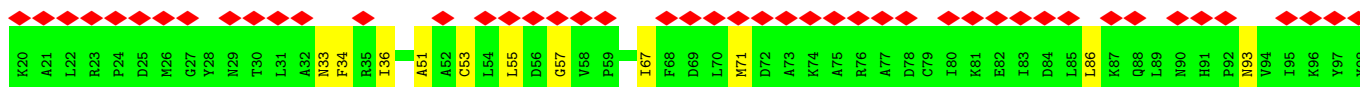
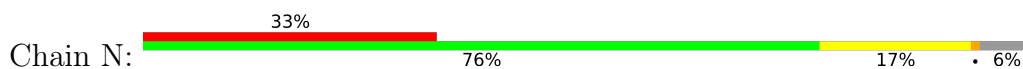




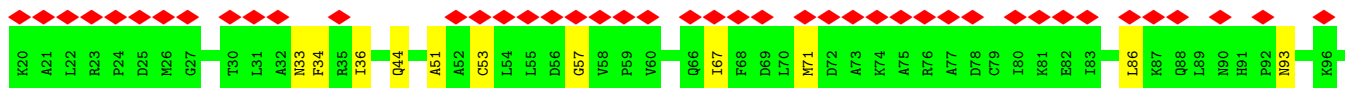
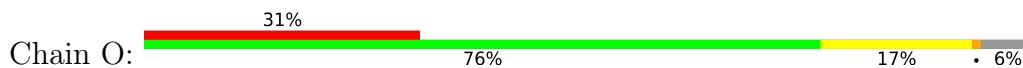
• Molecule 2: Serine/threonine-protein kinase Nek7

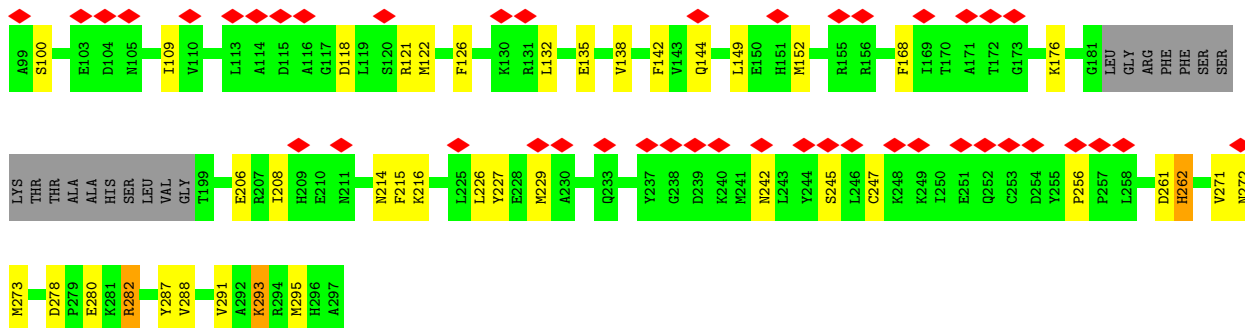


• Molecule 2: Serine/threonine-protein kinase Nek7

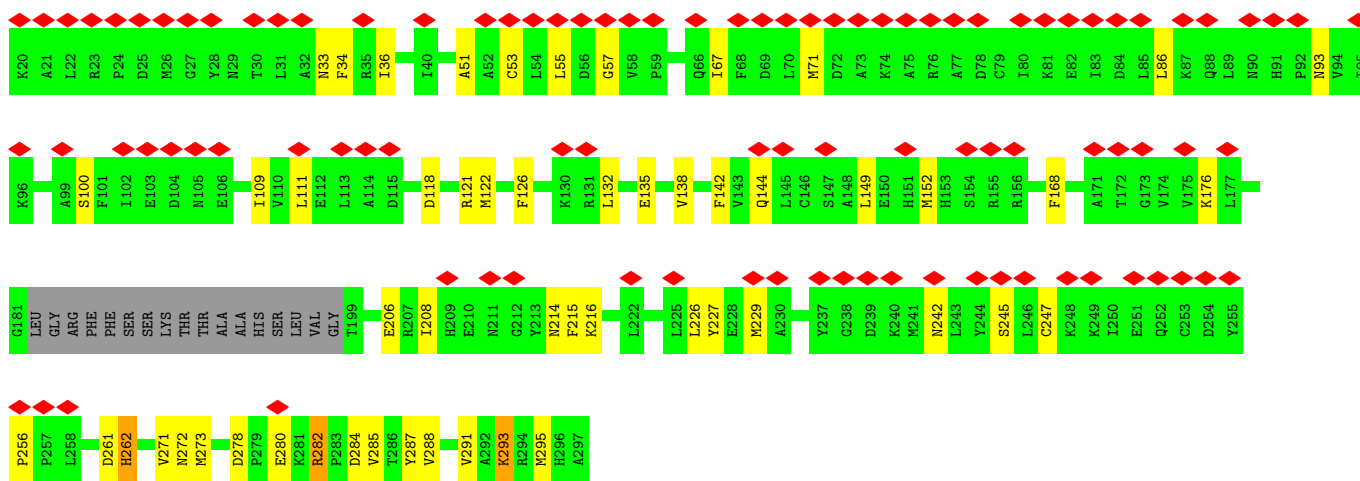
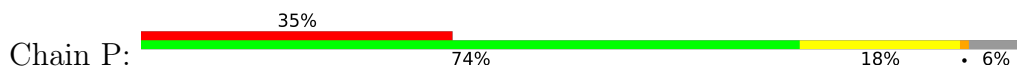


• Molecule 2: Serine/threonine-protein kinase Nek7

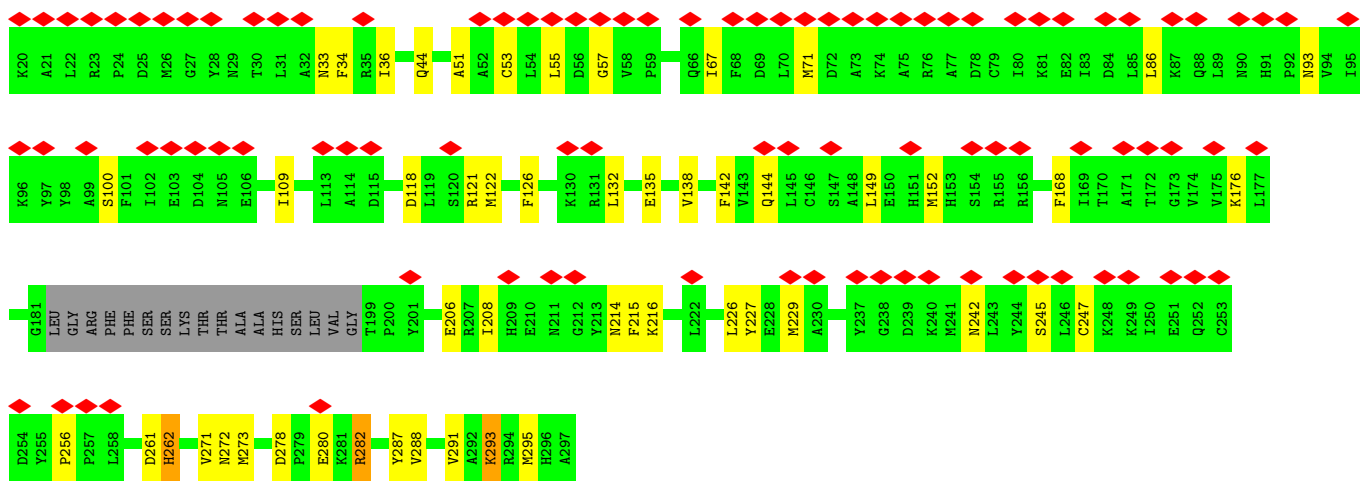
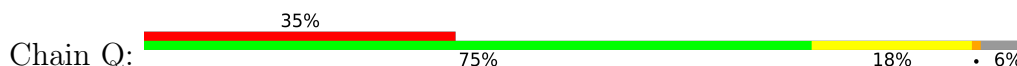




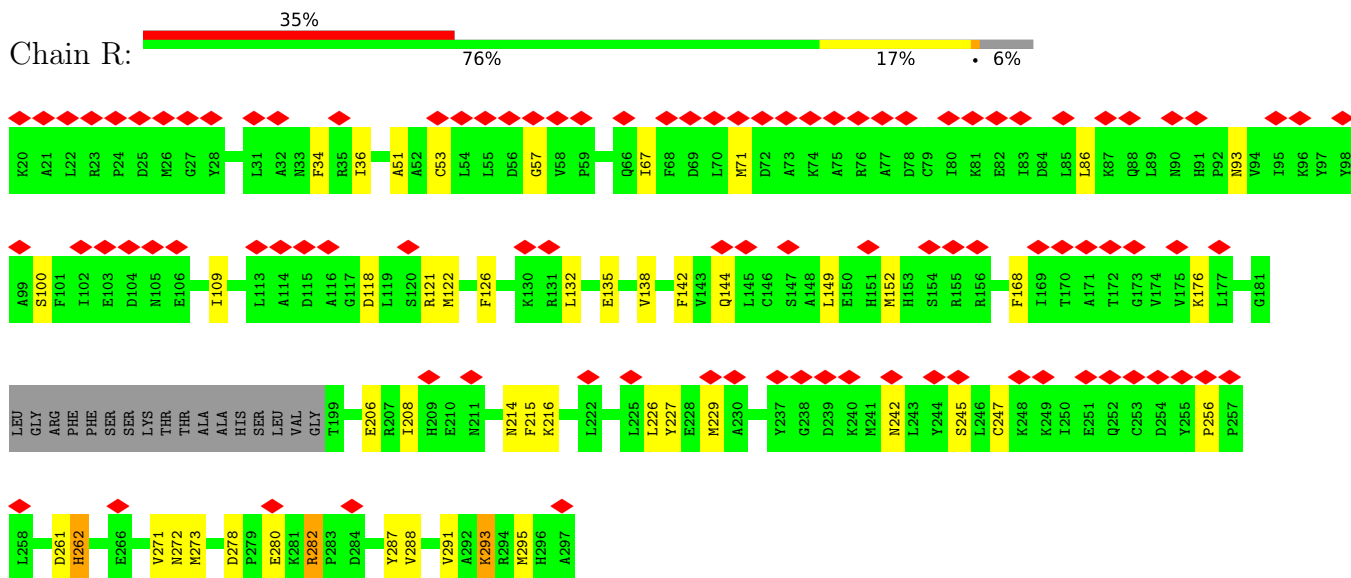
• Molecule 2: Serine/threonine-protein kinase Nek7



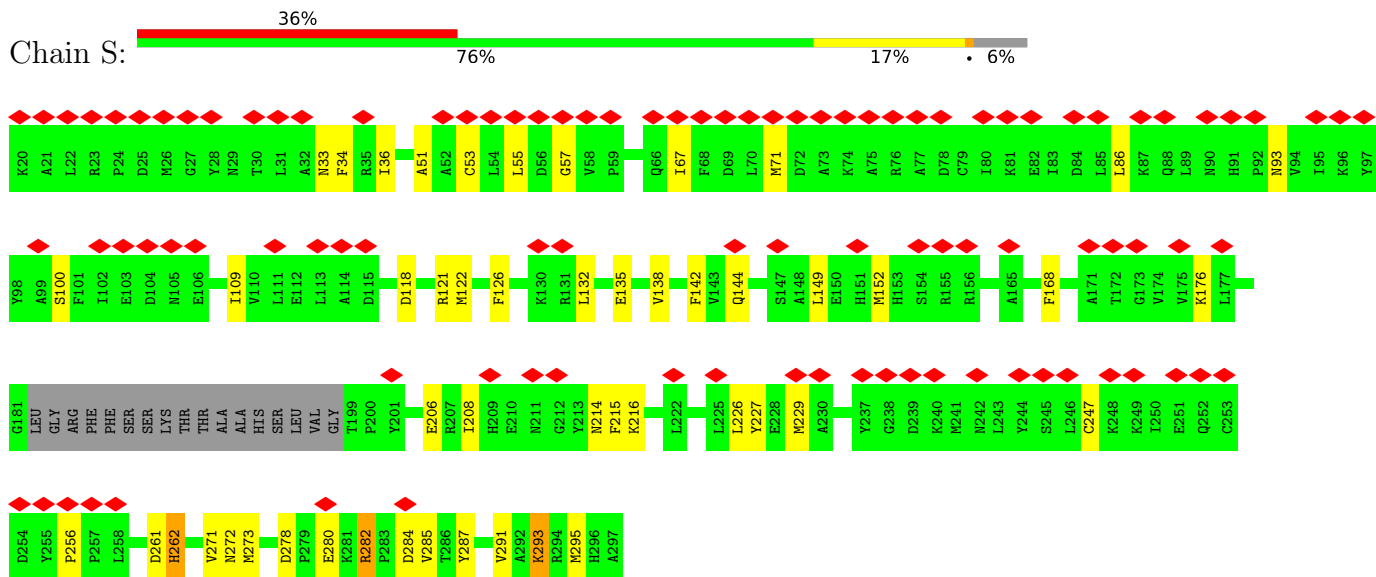
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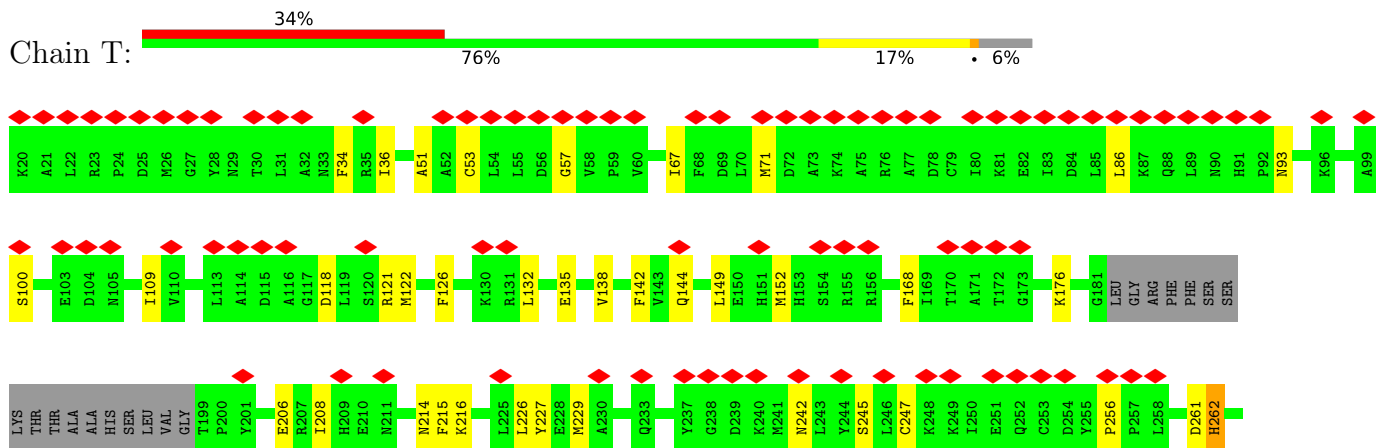
• Molecule 2: Serine/threonine-protein kinase Nek7

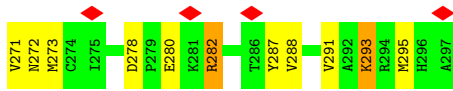


• Molecule 2: Serine/threonine-protein kinase Nek7



• Molecule 2: Serine/threonine-protein kinase Nek7





4 Experimental information

| Property | Value | Source |
|--------------------------------------|------------------------|-----------|
| EM reconstruction method | SINGLE PARTICLE | Depositor |
| Imposed symmetry | POINT, Not provided | |
| Number of particles used | 51576 | Depositor |
| Resolution determination method | FSC 0.143 CUT-OFF | Depositor |
| CTF correction method | NONE | Depositor |
| Microscope | FEI TITAN KRIOS | Depositor |
| Voltage (kV) | 300 | Depositor |
| Electron dose ($e^-/\text{\AA}^2$) | 50 | Depositor |
| Minimum defocus (nm) | 1000 | Depositor |
| Maximum defocus (nm) | 2000 | Depositor |
| Magnification | Not provided | |
| Image detector | GATAN K3 (6k x 4k) | Depositor |
| Maximum map value | 2.569 | Depositor |
| Minimum map value | -1.496 | Depositor |
| Average map value | 0.004 | Depositor |
| Map value standard deviation | 0.048 | Depositor |
| Recommended contour level | 0.2 | Depositor |
| Map size (\AA) | 542.72, 542.72, 542.72 | wwPDB |
| Map dimensions | 512, 512, 512 | wwPDB |
| Map angles ($^\circ$) | 90.0, 90.0, 90.0 | wwPDB |
| Pixel spacing (\AA) | 1.06, 1.06, 1.06 | Depositor |

5 Model quality

5.1 Standard geometry

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

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

| Mol | Chain | Bond lengths | | Bond angles | |
|-----|-------|--------------|---------|-------------|----------|
| | | RMSZ | # Z >5 | RMSZ | # Z >5 |
| 1 | A | 0.30 | 0/6863 | 0.49 | 0/9261 |
| 1 | B | 0.27 | 0/6863 | 0.50 | 0/9261 |
| 1 | C | 0.28 | 0/6863 | 0.49 | 0/9261 |
| 1 | D | 0.27 | 0/6863 | 0.48 | 0/9261 |
| 1 | E | 0.27 | 0/6863 | 0.48 | 0/9261 |
| 1 | F | 0.27 | 0/6863 | 0.48 | 0/9261 |
| 1 | G | 0.27 | 0/6863 | 0.48 | 0/9261 |
| 1 | H | 0.27 | 0/6863 | 0.48 | 0/9261 |
| 1 | I | 0.27 | 0/6863 | 0.48 | 0/9261 |
| 1 | J | 0.27 | 0/6863 | 0.48 | 0/9261 |
| 2 | K | 0.26 | 0/1850 | 0.45 | 0/2544 |
| 2 | L | 0.28 | 0/1850 | 0.45 | 0/2544 |
| 2 | M | 0.26 | 0/1850 | 0.45 | 0/2544 |
| 2 | N | 0.26 | 0/1850 | 0.45 | 0/2544 |
| 2 | O | 0.25 | 0/1850 | 0.45 | 0/2544 |
| 2 | P | 0.26 | 0/1850 | 0.44 | 0/2544 |
| 2 | Q | 0.26 | 0/1850 | 0.45 | 0/2544 |
| 2 | R | 0.26 | 0/1850 | 0.45 | 0/2544 |
| 2 | S | 0.26 | 0/1850 | 0.45 | 0/2544 |
| 2 | T | 0.25 | 0/1850 | 0.45 | 0/2544 |
| All | All | 0.27 | 0/87130 | 0.48 | 0/118050 |

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the 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 within the asymmetric unit, whereas Symm-Clashes lists symmetry-related clashes.

| Mol | Chain | Non-H | H(model) | H(added) | Clashes | Symm-Clashes |
|-----|-------|-------|----------|----------|---------|--------------|
| 1 | A | 6737 | 0 | 6749 | 932 | 0 |
| 1 | B | 6737 | 0 | 6749 | 915 | 0 |
| 1 | C | 6737 | 0 | 6749 | 908 | 0 |
| 1 | D | 6737 | 0 | 6749 | 920 | 0 |
| 1 | E | 6737 | 0 | 6749 | 918 | 0 |
| 1 | F | 6737 | 0 | 6749 | 909 | 0 |
| 1 | G | 6737 | 0 | 6749 | 914 | 0 |
| 1 | H | 6737 | 0 | 6749 | 909 | 0 |
| 1 | I | 6737 | 0 | 6749 | 912 | 0 |
| 1 | J | 6737 | 0 | 6749 | 918 | 0 |
| 2 | K | 1807 | 1448 | 1522 | 36 | 0 |
| 2 | L | 1807 | 1448 | 1522 | 34 | 0 |
| 2 | M | 1807 | 1448 | 1522 | 35 | 0 |
| 2 | N | 1807 | 1448 | 1522 | 36 | 0 |
| 2 | O | 1807 | 1448 | 1522 | 38 | 0 |
| 2 | P | 1807 | 1448 | 1522 | 39 | 0 |
| 2 | Q | 1807 | 1448 | 1522 | 41 | 0 |
| 2 | R | 1807 | 1448 | 1522 | 35 | 0 |
| 2 | S | 1807 | 1448 | 1522 | 38 | 0 |
| 2 | T | 1807 | 1448 | 1522 | 33 | 0 |
| 3 | A | 31 | 0 | 12 | 12 | 0 |
| 3 | B | 31 | 0 | 12 | 12 | 0 |
| 3 | C | 31 | 0 | 12 | 12 | 0 |
| 3 | D | 31 | 0 | 12 | 12 | 0 |
| 3 | E | 31 | 0 | 12 | 13 | 0 |
| 3 | F | 31 | 0 | 12 | 12 | 0 |
| 3 | G | 31 | 0 | 12 | 12 | 0 |
| 3 | H | 31 | 0 | 12 | 13 | 0 |
| 3 | I | 31 | 0 | 12 | 12 | 0 |
| 3 | J | 31 | 0 | 12 | 12 | 0 |
| 4 | A | 1 | 0 | 0 | 0 | 0 |
| 4 | B | 1 | 0 | 0 | 0 | 0 |
| 4 | C | 1 | 0 | 0 | 0 | 0 |
| 4 | D | 1 | 0 | 0 | 0 | 0 |
| 4 | E | 1 | 0 | 0 | 0 | 0 |
| 4 | F | 1 | 0 | 0 | 0 | 0 |
| 4 | G | 1 | 0 | 0 | 0 | 0 |

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| Mol | Chain | Non-H | H(model) | H(added) | Clashes | Symm-Clashes |
|-----|-------|-------|----------|----------|---------|--------------|
| 4 | H | 1 | 0 | 0 | 0 | 0 |
| 4 | I | 1 | 0 | 0 | 0 | 0 |
| 4 | J | 1 | 0 | 0 | 0 | 0 |
| All | All | 85760 | 14480 | 82830 | 9264 | 0 |

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 55.

All (9264) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:A:562:LEU:HD21 | 1:A:611:TRP:CD2 | 1.50 | 1.44 |
| 1:H:492:HIS:CE1 | 1:H:553:LEU:HD11 | 1.75 | 1.22 |
| 1:C:492:HIS:CE1 | 1:C:553:LEU:HD11 | 1.75 | 1.21 |
| 1:G:896:LEU:HG | 1:G:922:ASN:ND2 | 1.55 | 1.21 |
| 1:B:492:HIS:CE1 | 1:B:553:LEU:HD11 | 1.75 | 1.21 |
| 1:F:492:HIS:CE1 | 1:F:553:LEU:HD11 | 1.75 | 1.21 |
| 1:F:896:LEU:HG | 1:F:922:ASN:ND2 | 1.55 | 1.21 |
| 1:I:492:HIS:CE1 | 1:I:553:LEU:HD11 | 1.75 | 1.20 |
| 1:J:492:HIS:CE1 | 1:J:553:LEU:HD11 | 1.75 | 1.20 |
| 1:J:896:LEU:HG | 1:J:922:ASN:ND2 | 1.55 | 1.20 |
| 1:C:896:LEU:HG | 1:C:922:ASN:ND2 | 1.55 | 1.20 |
| 1:D:492:HIS:CE1 | 1:D:553:LEU:HD11 | 1.75 | 1.20 |
| 1:B:896:LEU:HG | 1:B:922:ASN:ND2 | 1.55 | 1.20 |
| 1:I:896:LEU:HG | 1:I:922:ASN:ND2 | 1.55 | 1.20 |
| 1:D:896:LEU:HG | 1:D:922:ASN:ND2 | 1.55 | 1.20 |
| 1:G:492:HIS:CE1 | 1:G:553:LEU:HD11 | 1.75 | 1.20 |
| 1:H:896:LEU:HG | 1:H:922:ASN:ND2 | 1.55 | 1.20 |
| 1:A:492:HIS:CE1 | 1:A:553:LEU:HD11 | 1.75 | 1.19 |
| 1:A:896:LEU:HG | 1:A:922:ASN:ND2 | 1.55 | 1.19 |
| 1:D:657:LEU:HA | 1:D:662:ASP:OD2 | 1.43 | 1.19 |
| 1:E:492:HIS:CE1 | 1:E:553:LEU:HD11 | 1.75 | 1.19 |
| 1:E:657:LEU:HA | 1:E:662:ASP:OD2 | 1.42 | 1.19 |
| 1:E:896:LEU:HG | 1:E:922:ASN:ND2 | 1.55 | 1.18 |
| 1:G:657:LEU:HA | 1:G:662:ASP:OD2 | 1.43 | 1.18 |
| 1:H:657:LEU:HA | 1:H:662:ASP:OD2 | 1.43 | 1.18 |
| 1:E:619:LYS:CB | 2:O:261:ASP:HA | 1.72 | 1.18 |
| 1:C:270:ARG:HH11 | 1:C:275:LEU:CD1 | 1.57 | 1.18 |
| 1:F:270:ARG:HH11 | 1:F:275:LEU:CD1 | 1.58 | 1.18 |
| 1:A:657:LEU:HA | 1:A:662:ASP:OD2 | 1.43 | 1.17 |
| 1:J:619:LYS:CB | 2:T:261:ASP:HA | 1.73 | 1.17 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:H:270:ARG:HH11 | 1:H:275:LEU:CD1 | 1.57 | 1.17 |
| 1:J:270:ARG:HH11 | 1:J:275:LEU:CD1 | 1.58 | 1.17 |
| 1:B:270:ARG:HH11 | 1:B:275:LEU:CD1 | 1.58 | 1.17 |
| 1:C:657:LEU:HA | 1:C:662:ASP:OD2 | 1.43 | 1.17 |
| 1:D:270:ARG:HH11 | 1:D:275:LEU:CD1 | 1.58 | 1.17 |
| 1:G:619:LYS:CB | 2:Q:261:ASP:HA | 1.74 | 1.17 |
| 1:A:270:ARG:HH11 | 1:A:275:LEU:CD1 | 1.58 | 1.16 |
| 1:B:305:ASP:HB2 | 1:B:499:VAL:HG11 | 1.24 | 1.16 |
| 1:E:270:ARG:HH11 | 1:E:275:LEU:CD1 | 1.57 | 1.16 |
| 1:I:657:LEU:HA | 1:I:662:ASP:OD2 | 1.43 | 1.16 |
| 1:F:657:LEU:HA | 1:F:662:ASP:OD2 | 1.43 | 1.15 |
| 1:G:270:ARG:HH11 | 1:G:275:LEU:CD1 | 1.57 | 1.15 |
| 1:I:270:ARG:HH11 | 1:I:275:LEU:CD1 | 1.58 | 1.15 |
| 1:A:562:LEU:HD21 | 1:A:611:TRP:CE2 | 1.81 | 1.15 |
| 1:C:567:LYS:NZ | 1:C:623:ILE:HG21 | 1.59 | 1.15 |
| 1:J:657:LEU:HA | 1:J:662:ASP:OD2 | 1.43 | 1.15 |
| 1:B:305:ASP:HB2 | 1:B:499:VAL:CG1 | 1.77 | 1.14 |
| 1:B:657:LEU:HA | 1:B:662:ASP:OD2 | 1.42 | 1.14 |
| 1:F:619:LYS:CB | 2:P:261:ASP:HA | 1.77 | 1.14 |
| 1:E:501:ALA:O | 1:E:521:ILE:HD11 | 1.48 | 1.12 |
| 1:J:471:SER:HB2 | 1:J:553:LEU:HD12 | 1.32 | 1.11 |
| 1:F:501:ALA:O | 1:F:521:ILE:HD11 | 1.50 | 1.11 |
| 1:I:471:SER:HB2 | 1:I:553:LEU:HD12 | 1.32 | 1.11 |
| 1:D:305:ASP:HB2 | 1:D:499:VAL:CG2 | 1.79 | 1.10 |
| 1:F:471:SER:HB2 | 1:F:553:LEU:HD12 | 1.32 | 1.10 |
| 1:H:270:ARG:HH11 | 1:H:275:LEU:HD13 | 1.16 | 1.10 |
| 1:C:562:LEU:H | 1:C:562:LEU:HD12 | 1.16 | 1.10 |
| 1:F:270:ARG:HH11 | 1:F:275:LEU:HD13 | 1.16 | 1.10 |
| 1:G:471:SER:HB2 | 1:G:553:LEU:HD12 | 1.32 | 1.10 |
| 1:E:270:ARG:HH11 | 1:E:275:LEU:HD13 | 1.16 | 1.10 |
| 1:F:305:ASP:HB2 | 1:F:499:VAL:HG11 | 1.32 | 1.10 |
| 1:H:305:ASP:HB2 | 1:H:499:VAL:CG1 | 1.82 | 1.10 |
| 1:B:270:ARG:HH11 | 1:B:275:LEU:HD13 | 1.16 | 1.09 |
| 1:A:534:TYR:CD2 | 1:A:561:LEU:HD22 | 1.86 | 1.09 |
| 1:I:270:ARG:HH11 | 1:I:275:LEU:HD13 | 1.16 | 1.09 |
| 1:A:270:ARG:HH11 | 1:A:275:LEU:HD13 | 1.16 | 1.09 |
| 1:C:305:ASP:HB2 | 1:C:499:VAL:CG2 | 1.82 | 1.09 |
| 1:C:270:ARG:HH11 | 1:C:275:LEU:HD13 | 1.16 | 1.09 |
| 1:D:619:LYS:CB | 2:N:261:ASP:HA | 1.84 | 1.08 |
| 1:A:471:SER:HB2 | 1:A:553:LEU:HD12 | 1.32 | 1.08 |
| 1:E:471:SER:HB2 | 1:E:553:LEU:HD12 | 1.32 | 1.08 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:C:501:ALA:O | 1:C:521:ILE:HD11 | 1.53 | 1.08 |
| 1:G:501:ALA:O | 1:G:521:ILE:HD11 | 1.54 | 1.08 |
| 1:D:305:ASP:HB2 | 1:D:499:VAL:HG21 | 1.25 | 1.07 |
| 1:D:501:ALA:O | 1:D:521:ILE:HD11 | 1.54 | 1.07 |
| 1:H:305:ASP:HB2 | 1:H:499:VAL:HG11 | 1.27 | 1.07 |
| 1:H:501:ALA:O | 1:H:521:ILE:HD11 | 1.53 | 1.07 |
| 1:I:475:ASP:HB3 | 1:I:553:LEU:HD22 | 1.07 | 1.07 |
| 1:D:471:SER:HB2 | 1:D:553:LEU:CD1 | 1.85 | 1.07 |
| 1:J:475:ASP:HB3 | 1:J:553:LEU:HD22 | 1.07 | 1.07 |
| 1:C:471:SER:HB2 | 1:C:553:LEU:CD1 | 1.85 | 1.06 |
| 1:E:471:SER:HB2 | 1:E:553:LEU:CD1 | 1.85 | 1.06 |
| 1:H:475:ASP:HB3 | 1:H:553:LEU:HD22 | 1.07 | 1.06 |
| 1:H:619:LYS:CB | 2:R:261:ASP:HA | 1.85 | 1.06 |
| 1:A:562:LEU:CD2 | 1:A:611:TRP:CD2 | 2.36 | 1.06 |
| 1:F:308:GLN:NE2 | 1:F:499:VAL:HG22 | 1.69 | 1.06 |
| 1:H:471:SER:HB2 | 1:H:553:LEU:HD12 | 1.32 | 1.06 |
| 1:A:475:ASP:HB3 | 1:A:553:LEU:HD22 | 1.07 | 1.06 |
| 1:C:568:PHE:CD2 | 1:C:570:LYS:HE3 | 1.91 | 1.06 |
| 1:F:471:SER:HB2 | 1:F:553:LEU:CD1 | 1.85 | 1.06 |
| 1:B:471:SER:HB2 | 1:B:553:LEU:CD1 | 1.85 | 1.06 |
| 1:E:475:ASP:HB3 | 1:E:553:LEU:HD22 | 1.07 | 1.06 |
| 1:D:475:ASP:HB3 | 1:D:553:LEU:HD22 | 1.07 | 1.05 |
| 1:I:501:ALA:O | 1:I:521:ILE:HD11 | 1.54 | 1.05 |
| 1:J:270:ARG:HH11 | 1:J:275:LEU:HD13 | 1.16 | 1.05 |
| 1:J:471:SER:HB2 | 1:J:553:LEU:CD1 | 1.85 | 1.05 |
| 1:C:305:ASP:HB2 | 1:C:499:VAL:HG21 | 1.27 | 1.05 |
| 1:D:471:SER:HB2 | 1:D:553:LEU:HD12 | 1.32 | 1.05 |
| 1:I:475:ASP:CB | 1:I:553:LEU:HD22 | 1.86 | 1.05 |
| 1:J:475:ASP:CB | 1:J:553:LEU:HD22 | 1.86 | 1.05 |
| 1:A:475:ASP:CB | 1:A:553:LEU:HD22 | 1.86 | 1.05 |
| 1:E:475:ASP:CB | 1:E:553:LEU:HD22 | 1.86 | 1.05 |
| 1:F:475:ASP:CB | 1:F:553:LEU:HD22 | 1.86 | 1.05 |
| 1:G:471:SER:HB2 | 1:G:553:LEU:CD1 | 1.85 | 1.05 |
| 1:A:471:SER:HB2 | 1:A:553:LEU:CD1 | 1.85 | 1.05 |
| 1:B:475:ASP:HB3 | 1:B:553:LEU:HD22 | 1.07 | 1.05 |
| 1:D:270:ARG:HH11 | 1:D:275:LEU:HD13 | 1.16 | 1.05 |
| 1:G:270:ARG:HH11 | 1:G:275:LEU:HD13 | 1.16 | 1.05 |
| 1:J:501:ALA:O | 1:J:521:ILE:HD11 | 1.54 | 1.05 |
| 1:H:475:ASP:CB | 1:H:553:LEU:HD22 | 1.86 | 1.04 |
| 1:I:492:HIS:CE1 | 1:I:553:LEU:HD21 | 1.93 | 1.04 |
| 1:F:475:ASP:HB3 | 1:F:553:LEU:HD22 | 1.07 | 1.04 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:H:471:SER:HB2 | 1:H:553:LEU:CD1 | 1.85 | 1.04 |
| 1:B:475:ASP:CB | 1:B:553:LEU:HD22 | 1.86 | 1.04 |
| 1:C:475:ASP:CB | 1:C:553:LEU:HD22 | 1.86 | 1.04 |
| 1:I:471:SER:HB2 | 1:I:553:LEU:CD1 | 1.85 | 1.04 |
| 1:E:492:HIS:CE1 | 1:E:553:LEU:HD21 | 1.93 | 1.04 |
| 1:G:475:ASP:CB | 1:G:553:LEU:HD22 | 1.86 | 1.04 |
| 1:B:471:SER:HB2 | 1:B:553:LEU:HD12 | 1.32 | 1.03 |
| 1:C:475:ASP:HB3 | 1:C:553:LEU:HD22 | 1.07 | 1.03 |
| 1:D:475:ASP:CB | 1:D:553:LEU:HD22 | 1.86 | 1.03 |
| 1:G:475:ASP:HB3 | 1:G:553:LEU:HD22 | 1.07 | 1.03 |
| 1:C:471:SER:HB2 | 1:C:553:LEU:HD12 | 1.32 | 1.03 |
| 1:J:492:HIS:CE1 | 1:J:553:LEU:HD21 | 1.93 | 1.03 |
| 1:A:492:HIS:CE1 | 1:A:553:LEU:HD21 | 1.93 | 1.03 |
| 1:E:356:GLU:HG3 | 1:E:516:LYS:HE3 | 1.41 | 1.03 |
| 1:C:492:HIS:CE1 | 1:C:553:LEU:HD21 | 1.93 | 1.03 |
| 1:D:356:GLU:HG3 | 1:D:516:LYS:HE3 | 1.41 | 1.03 |
| 1:D:492:HIS:CE1 | 1:D:553:LEU:HD21 | 1.93 | 1.03 |
| 1:C:567:LYS:HZ2 | 1:C:623:ILE:HG21 | 1.08 | 1.03 |
| 1:F:356:GLU:HG3 | 1:F:516:LYS:HE3 | 1.41 | 1.03 |
| 1:G:492:HIS:CE1 | 1:G:553:LEU:HD21 | 1.93 | 1.03 |
| 1:I:311:PHE:HE1 | 1:I:329:ASP:OD1 | 1.41 | 1.03 |
| 1:C:568:PHE:HD2 | 1:C:570:LYS:HE3 | 1.20 | 1.02 |
| 1:G:908:LEU:HA | 1:G:914:LEU:HD21 | 1.41 | 1.02 |
| 1:H:492:HIS:CE1 | 1:H:553:LEU:HD21 | 1.93 | 1.02 |
| 1:A:311:PHE:HE1 | 1:A:329:ASP:OD1 | 1.41 | 1.02 |
| 1:B:492:HIS:CE1 | 1:B:553:LEU:HD21 | 1.93 | 1.02 |
| 1:C:356:GLU:HG3 | 1:C:516:LYS:HE3 | 1.41 | 1.02 |
| 1:C:908:LEU:HA | 1:C:914:LEU:HD21 | 1.41 | 1.02 |
| 1:I:291:VAL:HG23 | 1:I:341:LEU:HD21 | 1.42 | 1.02 |
| 1:J:291:VAL:HG23 | 1:J:341:LEU:HD21 | 1.42 | 1.02 |
| 1:J:305:ASP:HB2 | 1:J:499:VAL:HG21 | 1.41 | 1.02 |
| 1:I:619:LYS:CB | 2:S:261:ASP:HA | 1.90 | 1.02 |
| 1:J:311:PHE:HE1 | 1:J:329:ASP:OD1 | 1.41 | 1.02 |
| 1:B:908:LEU:HA | 1:B:914:LEU:HD21 | 1.40 | 1.02 |
| 1:F:565:TYR:HE2 | 1:F:625:PRO:HB3 | 1.24 | 1.02 |
| 1:A:291:VAL:HG23 | 1:A:341:LEU:HD21 | 1.41 | 1.02 |
| 1:F:492:HIS:CE1 | 1:F:553:LEU:HD21 | 1.93 | 1.02 |
| 1:F:908:LEU:HA | 1:F:914:LEU:HD21 | 1.41 | 1.02 |
| 1:H:291:VAL:HG23 | 1:H:341:LEU:HD21 | 1.41 | 1.02 |
| 1:B:311:PHE:HE1 | 1:B:329:ASP:OD1 | 1.41 | 1.01 |
| 1:B:535:LEU:HD13 | 1:B:583:LEU:HB3 | 1.42 | 1.01 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:D:311:PHE:HE1 | 1:D:329:ASP:OD1 | 1.41 | 1.01 |
| 1:G:311:PHE:HE1 | 1:G:329:ASP:OD1 | 1.41 | 1.01 |
| 1:H:908:LEU:HA | 1:H:914:LEU:HD21 | 1.41 | 1.01 |
| 1:I:565:TYR:HE2 | 1:I:625:PRO:HB3 | 1.18 | 1.01 |
| 1:D:908:LEU:HA | 1:D:914:LEU:HD21 | 1.40 | 1.01 |
| 1:H:311:PHE:HE1 | 1:H:329:ASP:OD1 | 1.41 | 1.01 |
| 1:J:356:GLU:HG3 | 1:J:516:LYS:HE3 | 1.41 | 1.01 |
| 1:A:535:LEU:HD13 | 1:A:583:LEU:HB3 | 1.42 | 1.01 |
| 1:F:311:PHE:HE1 | 1:F:329:ASP:OD1 | 1.41 | 1.01 |
| 1:G:356:GLU:HG3 | 1:G:516:LYS:HE3 | 1.41 | 1.01 |
| 1:I:356:GLU:HG3 | 1:I:516:LYS:HE3 | 1.41 | 1.01 |
| 1:C:619:LYS:CB | 2:M:261:ASP:HA | 1.89 | 1.01 |
| 1:H:391:GLN:HA | 1:H:426:MET:HE1 | 1.43 | 1.01 |
| 1:B:356:GLU:HG3 | 1:B:516:LYS:HE3 | 1.41 | 1.00 |
| 1:C:311:PHE:HE1 | 1:C:329:ASP:OD1 | 1.41 | 1.00 |
| 1:J:535:LEU:HD13 | 1:J:583:LEU:HB3 | 1.42 | 1.00 |
| 1:B:291:VAL:HG23 | 1:B:341:LEU:HD21 | 1.42 | 1.00 |
| 1:C:535:LEU:HD13 | 1:C:583:LEU:HB3 | 1.42 | 1.00 |
| 1:I:535:LEU:HD13 | 1:I:583:LEU:HB3 | 1.42 | 1.00 |
| 1:C:391:GLN:HA | 1:C:426:MET:HE1 | 1.43 | 1.00 |
| 1:H:929:ILE:HG21 | 1:H:957:CYS:HB2 | 1.44 | 1.00 |
| 1:G:291:VAL:HG23 | 1:G:341:LEU:HD21 | 1.42 | 1.00 |
| 1:I:929:ILE:HG21 | 1:I:957:CYS:HB2 | 1.44 | 1.00 |
| 1:F:391:GLN:HA | 1:F:426:MET:HE1 | 1.43 | 1.00 |
| 1:E:311:PHE:HE1 | 1:E:329:ASP:OD1 | 1.41 | 1.00 |
| 1:J:391:GLN:HA | 1:J:426:MET:HE1 | 1.44 | 1.00 |
| 1:A:356:GLU:HG3 | 1:A:516:LYS:HE3 | 1.41 | 0.99 |
| 1:A:908:LEU:HA | 1:A:914:LEU:HD21 | 1.41 | 0.99 |
| 1:B:619:LYS:CB | 2:L:261:ASP:HA | 1.91 | 0.99 |
| 1:C:291:VAL:HG23 | 1:C:341:LEU:HD21 | 1.41 | 0.99 |
| 1:E:908:LEU:HA | 1:E:914:LEU:HD21 | 1.41 | 0.99 |
| 1:G:929:ILE:HG21 | 1:G:957:CYS:HB2 | 1.44 | 0.99 |
| 1:D:391:GLN:HA | 1:D:426:MET:HE1 | 1.44 | 0.99 |
| 1:H:535:LEU:HD13 | 1:H:583:LEU:HB3 | 1.42 | 0.99 |
| 1:E:896:LEU:HG | 1:E:922:ASN:HD21 | 1.25 | 0.99 |
| 1:G:565:TYR:HE2 | 1:G:625:PRO:HB3 | 1.20 | 0.99 |
| 1:B:565:TYR:OH | 1:B:625:PRO:HA | 1.62 | 0.99 |
| 1:H:356:GLU:HG3 | 1:H:516:LYS:HE3 | 1.41 | 0.99 |
| 1:F:291:VAL:HG23 | 1:F:341:LEU:HD21 | 1.41 | 0.99 |
| 1:J:492:HIS:NE2 | 1:J:553:LEU:HD21 | 1.78 | 0.99 |
| 1:D:775:LEU:HG | 1:D:777:LEU:HD11 | 1.45 | 0.98 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:F:492:HIS:NE2 | 1:F:553:LEU:HD21 | 1.78 | 0.98 |
| 1:I:908:LEU:HA | 1:I:914:LEU:HD21 | 1.40 | 0.98 |
| 1:D:217:GLU:OE2 | 1:E:145:ARG:HD2 | 1.63 | 0.98 |
| 1:D:291:VAL:HG23 | 1:D:341:LEU:HD21 | 1.42 | 0.98 |
| 1:J:929:ILE:HG21 | 1:J:957:CYS:HB2 | 1.44 | 0.98 |
| 1:A:492:HIS:NE2 | 1:A:553:LEU:HD21 | 1.78 | 0.98 |
| 1:A:565:TYR:CE2 | 1:A:625:PRO:HB3 | 1.98 | 0.98 |
| 1:F:775:LEU:HG | 1:F:777:LEU:HD11 | 1.45 | 0.98 |
| 1:E:291:VAL:HG23 | 1:E:341:LEU:HD21 | 1.41 | 0.98 |
| 1:G:492:HIS:NE2 | 1:G:553:LEU:HD21 | 1.78 | 0.98 |
| 1:E:492:HIS:NE2 | 1:E:553:LEU:HD21 | 1.78 | 0.98 |
| 1:A:565:TYR:HE2 | 1:A:625:PRO:HB3 | 1.27 | 0.98 |
| 1:D:535:LEU:HD13 | 1:D:583:LEU:HB3 | 1.42 | 0.98 |
| 1:F:535:LEU:HD13 | 1:F:583:LEU:HB3 | 1.42 | 0.98 |
| 1:H:136:TYR:HH | 1:H:280:CYS:HG | 1.11 | 0.98 |
| 1:F:305:ASP:HB2 | 1:F:499:VAL:CG1 | 1.94 | 0.98 |
| 1:E:775:LEU:HG | 1:E:777:LEU:HD11 | 1.45 | 0.98 |
| 1:I:391:GLN:HA | 1:I:426:MET:HE1 | 1.42 | 0.98 |
| 1:C:492:HIS:NE2 | 1:C:553:LEU:HD21 | 1.78 | 0.98 |
| 1:E:391:GLN:HA | 1:E:426:MET:HE1 | 1.42 | 0.98 |
| 1:C:775:LEU:HG | 1:C:777:LEU:HD11 | 1.45 | 0.97 |
| 1:B:775:LEU:HG | 1:B:777:LEU:HD11 | 1.45 | 0.97 |
| 1:D:492:HIS:NE2 | 1:D:553:LEU:HD21 | 1.78 | 0.97 |
| 1:G:535:LEU:HD13 | 1:G:583:LEU:HB3 | 1.42 | 0.97 |
| 1:J:908:LEU:HA | 1:J:914:LEU:HD21 | 1.41 | 0.97 |
| 1:E:535:LEU:HD13 | 1:E:583:LEU:HB3 | 1.42 | 0.97 |
| 1:F:896:LEU:HG | 1:F:922:ASN:HD21 | 1.25 | 0.97 |
| 1:G:775:LEU:HG | 1:G:777:LEU:HD11 | 1.45 | 0.97 |
| 1:H:492:HIS:NE2 | 1:H:553:LEU:HD21 | 1.78 | 0.97 |
| 1:I:492:HIS:NE2 | 1:I:553:LEU:HD21 | 1.78 | 0.97 |
| 1:B:929:ILE:HG21 | 1:B:957:CYS:HB2 | 1.44 | 0.97 |
| 1:C:929:ILE:HG21 | 1:C:957:CYS:HB2 | 1.44 | 0.97 |
| 1:B:217:GLU:OE2 | 1:C:145:ARG:HD2 | 1.64 | 0.97 |
| 1:H:896:LEU:HG | 1:H:922:ASN:HD21 | 1.25 | 0.97 |
| 1:F:929:ILE:HG21 | 1:F:957:CYS:HB2 | 1.44 | 0.97 |
| 1:H:775:LEU:HG | 1:H:777:LEU:HD11 | 1.45 | 0.97 |
| 1:A:305:ASP:HB2 | 1:A:499:VAL:CG2 | 1.94 | 0.97 |
| 1:B:492:HIS:NE2 | 1:B:553:LEU:HD21 | 1.78 | 0.97 |
| 1:D:929:ILE:HG21 | 1:D:957:CYS:HB2 | 1.44 | 0.97 |
| 1:I:305:ASP:HB2 | 1:I:499:VAL:HG21 | 1.43 | 0.97 |
| 1:I:896:LEU:HG | 1:I:922:ASN:HD21 | 1.24 | 0.96 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:A:145:ARG:HD2 | 1:J:217:GLU:OE2 | 1.65 | 0.96 |
| 1:E:270:ARG:NH1 | 1:E:275:LEU:CD1 | 2.29 | 0.96 |
| 1:F:217:GLU:OE2 | 1:G:145:ARG:HD2 | 1.65 | 0.96 |
| 1:C:217:GLU:OE2 | 1:D:145:ARG:HD2 | 1.66 | 0.96 |
| 1:A:775:LEU:HG | 1:A:777:LEU:HD11 | 1.45 | 0.96 |
| 1:D:270:ARG:NH1 | 1:D:275:LEU:CD1 | 2.29 | 0.96 |
| 1:I:217:GLU:OE2 | 1:J:145:ARG:HD2 | 1.65 | 0.96 |
| 1:A:929:ILE:HG21 | 1:A:957:CYS:HB2 | 1.44 | 0.96 |
| 1:C:270:ARG:NH1 | 1:C:275:LEU:CD1 | 2.29 | 0.96 |
| 1:C:974:LEU:HD11 | 1:C:976:LEU:HD21 | 1.48 | 0.96 |
| 1:B:974:LEU:HD11 | 1:B:976:LEU:HD21 | 1.48 | 0.96 |
| 1:E:929:ILE:HG21 | 1:E:957:CYS:HB2 | 1.44 | 0.96 |
| 1:B:270:ARG:NH1 | 1:B:275:LEU:CD1 | 2.29 | 0.95 |
| 1:B:568:PHE:O | 1:B:570:LYS:HG2 | 1.66 | 0.95 |
| 1:E:974:LEU:HD11 | 1:E:976:LEU:HD21 | 1.48 | 0.95 |
| 1:F:270:ARG:NH1 | 1:F:275:LEU:CD1 | 2.29 | 0.95 |
| 1:I:775:LEU:HG | 1:I:777:LEU:HD11 | 1.45 | 0.95 |
| 1:B:501:ALA:O | 1:B:521:ILE:HD11 | 1.65 | 0.95 |
| 1:D:974:LEU:HD11 | 1:D:976:LEU:HD21 | 1.48 | 0.95 |
| 1:A:623:ILE:H | 1:A:623:ILE:HD12 | 1.28 | 0.95 |
| 1:G:217:GLU:OE2 | 1:H:145:ARG:HD2 | 1.65 | 0.95 |
| 1:A:586:GLN:O | 1:A:589:THR:HG22 | 1.67 | 0.95 |
| 1:A:974:LEU:HD11 | 1:A:976:LEU:HD21 | 1.48 | 0.95 |
| 1:A:270:ARG:NH1 | 1:A:275:LEU:CD1 | 2.29 | 0.95 |
| 1:B:586:GLN:O | 1:B:589:THR:HG22 | 1.67 | 0.95 |
| 1:F:974:LEU:HD11 | 1:F:976:LEU:HD21 | 1.48 | 0.95 |
| 1:J:492:HIS:HE1 | 1:J:553:LEU:HD11 | 1.32 | 0.95 |
| 1:A:492:HIS:HE1 | 1:A:553:LEU:HD11 | 1.32 | 0.95 |
| 1:B:391:GLN:HA | 1:B:426:MET:HE1 | 1.47 | 0.95 |
| 1:D:586:GLN:O | 1:D:589:THR:HG22 | 1.67 | 0.95 |
| 1:I:270:ARG:NH1 | 1:I:275:LEU:CD1 | 2.29 | 0.95 |
| 1:E:586:GLN:O | 1:E:589:THR:HG22 | 1.67 | 0.95 |
| 1:G:305:ASP:HB2 | 1:G:499:VAL:HG21 | 1.46 | 0.95 |
| 1:H:586:GLN:O | 1:H:589:THR:HG22 | 1.67 | 0.95 |
| 1:J:586:GLN:O | 1:J:589:THR:HG22 | 1.67 | 0.95 |
| 1:A:217:GLU:OE2 | 1:B:145:ARG:HD2 | 1.66 | 0.94 |
| 1:C:586:GLN:O | 1:C:589:THR:HG22 | 1.67 | 0.94 |
| 1:D:896:LEU:HG | 1:D:922:ASN:HD21 | 1.25 | 0.94 |
| 1:F:586:GLN:O | 1:F:589:THR:HG22 | 1.67 | 0.94 |
| 1:G:136:TYR:HH | 1:G:280:CYS:HG | 1.12 | 0.94 |
| 1:G:586:GLN:O | 1:G:589:THR:HG22 | 1.67 | 0.94 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:J:775:LEU:HG | 1:J:777:LEU:HD11 | 1.45 | 0.94 |
| 1:G:974:LEU:HD11 | 1:G:976:LEU:HD21 | 1.48 | 0.94 |
| 1:A:501:ALA:O | 1:A:521:ILE:HD11 | 1.66 | 0.94 |
| 1:H:217:GLU:OE2 | 1:I:145:ARG:HD2 | 1.66 | 0.94 |
| 1:H:270:ARG:NH1 | 1:H:275:LEU:CD1 | 2.29 | 0.94 |
| 1:J:974:LEU:HD11 | 1:J:976:LEU:HD21 | 1.48 | 0.94 |
| 1:A:565:TYR:HE2 | 1:A:625:PRO:CB | 1.80 | 0.94 |
| 1:D:270:ARG:HD2 | 1:D:275:LEU:HD13 | 1.48 | 0.94 |
| 1:I:586:GLN:O | 1:I:589:THR:HG22 | 1.67 | 0.94 |
| 1:J:270:ARG:HD2 | 1:J:275:LEU:HD13 | 1.48 | 0.94 |
| 1:J:270:ARG:NH1 | 1:J:275:LEU:CD1 | 2.29 | 0.94 |
| 1:E:217:GLU:OE2 | 1:F:145:ARG:HD2 | 1.66 | 0.94 |
| 1:E:270:ARG:HD2 | 1:E:275:LEU:HD13 | 1.48 | 0.94 |
| 1:H:974:LEU:HD11 | 1:H:976:LEU:HD21 | 1.48 | 0.94 |
| 1:I:974:LEU:HD11 | 1:I:976:LEU:HD21 | 1.48 | 0.94 |
| 1:A:270:ARG:HD2 | 1:A:275:LEU:HD13 | 1.48 | 0.94 |
| 1:G:391:GLN:HA | 1:G:426:MET:HE1 | 1.45 | 0.94 |
| 1:I:492:HIS:HE1 | 1:I:553:LEU:HD11 | 1.32 | 0.94 |
| 1:E:264:VAL:HG22 | 1:E:270:ARG:HH12 | 1.34 | 0.93 |
| 1:G:270:ARG:NH1 | 1:G:275:LEU:CD1 | 2.29 | 0.93 |
| 1:I:270:ARG:HD2 | 1:I:275:LEU:HD13 | 1.48 | 0.93 |
| 1:A:534:TYR:HE2 | 1:A:561:LEU:HB2 | 1.34 | 0.93 |
| 1:B:270:ARG:HD2 | 1:B:275:LEU:HD13 | 1.48 | 0.93 |
| 1:G:264:VAL:HG22 | 1:G:270:ARG:HH12 | 1.34 | 0.93 |
| 1:B:264:VAL:HG22 | 1:B:270:ARG:HH12 | 1.34 | 0.93 |
| 1:H:264:VAL:HG22 | 1:H:270:ARG:HH12 | 1.34 | 0.93 |
| 1:D:288:HIS:CE1 | 1:D:322:TRP:CH2 | 2.57 | 0.93 |
| 1:I:565:TYR:CE2 | 1:I:625:PRO:HB3 | 2.04 | 0.93 |
| 1:C:270:ARG:HD2 | 1:C:275:LEU:HD13 | 1.48 | 0.92 |
| 1:H:565:TYR:HE2 | 1:H:625:PRO:HB3 | 1.32 | 0.92 |
| 1:E:288:HIS:CE1 | 1:E:322:TRP:CH2 | 2.57 | 0.92 |
| 1:E:492:HIS:HE1 | 1:E:553:LEU:HD11 | 1.32 | 0.92 |
| 1:J:896:LEU:HG | 1:J:922:ASN:HD21 | 1.25 | 0.92 |
| 1:A:391:GLN:HA | 1:A:426:MET:HE1 | 1.49 | 0.92 |
| 1:F:288:HIS:CE1 | 1:F:322:TRP:CH2 | 2.58 | 0.92 |
| 1:G:288:HIS:CE1 | 1:G:322:TRP:CH2 | 2.58 | 0.92 |
| 1:H:288:HIS:CE1 | 1:H:322:TRP:CH2 | 2.58 | 0.92 |
| 1:J:264:VAL:HG22 | 1:J:270:ARG:HH12 | 1.34 | 0.92 |
| 1:C:288:HIS:CE1 | 1:C:322:TRP:CH2 | 2.58 | 0.92 |
| 1:G:619:LYS:CB | 2:Q:261:ASP:CA | 2.48 | 0.92 |
| 1:H:270:ARG:HD2 | 1:H:275:LEU:HD13 | 1.48 | 0.92 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:D:264:VAL:HG22 | 1:D:270:ARG:HH12 | 1.34 | 0.92 |
| 1:E:565:TYR:HE2 | 1:E:625:PRO:HB3 | 1.32 | 0.92 |
| 1:F:270:ARG:HD2 | 1:F:275:LEU:HD13 | 1.48 | 0.92 |
| 1:G:270:ARG:HD2 | 1:G:275:LEU:HD13 | 1.48 | 0.92 |
| 1:G:896:LEU:HG | 1:G:922:ASN:HD21 | 1.25 | 0.92 |
| 1:H:492:HIS:HE1 | 1:H:553:LEU:HD11 | 1.32 | 0.92 |
| 1:B:492:HIS:HE1 | 1:B:553:LEU:HD11 | 1.32 | 0.92 |
| 1:C:264:VAL:HG22 | 1:C:270:ARG:HH12 | 1.34 | 0.92 |
| 1:I:288:HIS:CE1 | 1:I:322:TRP:CH2 | 2.58 | 0.92 |
| 1:B:896:LEU:HG | 1:B:922:ASN:HD21 | 1.25 | 0.92 |
| 1:E:581:PHE:CD2 | 1:E:633:CYS:HB3 | 2.05 | 0.92 |
| 1:E:920:ARG:HH12 | 2:O:121:ARG:HA | 1.35 | 0.91 |
| 1:H:581:PHE:CD2 | 1:H:633:CYS:HB3 | 2.05 | 0.91 |
| 1:I:305:ASP:HB2 | 1:I:499:VAL:CG2 | 2.00 | 0.91 |
| 1:I:581:PHE:CD2 | 1:I:633:CYS:HB3 | 2.05 | 0.91 |
| 1:A:562:LEU:CD2 | 1:A:611:TRP:CE2 | 2.53 | 0.91 |
| 1:B:288:HIS:CE1 | 1:B:322:TRP:CH2 | 2.58 | 0.91 |
| 1:D:136:TYR:HH | 1:D:280:CYS:HG | 1.04 | 0.91 |
| 1:D:581:PHE:CD2 | 1:D:633:CYS:HB3 | 2.05 | 0.91 |
| 1:I:512:VAL:HG21 | 1:J:445:PHE:HB3 | 1.52 | 0.91 |
| 1:J:581:PHE:CD2 | 1:J:633:CYS:HB3 | 2.05 | 0.91 |
| 1:C:512:VAL:HG21 | 1:D:445:PHE:HB3 | 1.52 | 0.91 |
| 1:D:492:HIS:HE1 | 1:D:553:LEU:HD11 | 1.32 | 0.91 |
| 1:A:562:LEU:CD2 | 1:A:611:TRP:CG | 2.53 | 0.91 |
| 1:F:581:PHE:CD2 | 1:F:633:CYS:HB3 | 2.05 | 0.91 |
| 1:J:288:HIS:CE1 | 1:J:322:TRP:CH2 | 2.58 | 0.91 |
| 1:D:512:VAL:HG21 | 1:E:445:PHE:HB3 | 1.53 | 0.91 |
| 1:F:264:VAL:HG22 | 1:F:270:ARG:HH12 | 1.34 | 0.91 |
| 1:J:565:TYR:HE2 | 1:J:625:PRO:HB3 | 1.33 | 0.91 |
| 1:A:581:PHE:CD2 | 1:A:633:CYS:HB3 | 2.05 | 0.91 |
| 1:A:288:HIS:CE1 | 1:A:322:TRP:CH2 | 2.58 | 0.91 |
| 1:C:492:HIS:CE1 | 1:C:553:LEU:CD1 | 2.54 | 0.91 |
| 1:H:432:LEU:HA | 1:H:435:THR:HB | 1.53 | 0.91 |
| 1:G:581:PHE:CD2 | 1:G:633:CYS:HB3 | 2.05 | 0.91 |
| 1:A:492:HIS:CE1 | 1:A:553:LEU:CD1 | 2.54 | 0.90 |
| 1:F:492:HIS:HE1 | 1:F:553:LEU:HD11 | 1.32 | 0.90 |
| 1:B:581:PHE:CD2 | 1:B:633:CYS:HB3 | 2.05 | 0.90 |
| 1:G:565:TYR:CE2 | 1:G:625:PRO:HB3 | 2.05 | 0.90 |
| 1:I:264:VAL:HG22 | 1:I:270:ARG:HH12 | 1.34 | 0.90 |
| 1:C:581:PHE:CD2 | 1:C:633:CYS:HB3 | 2.05 | 0.90 |
| 1:J:136:TYR:HH | 1:J:280:CYS:HG | 1.19 | 0.90 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:A:445:PHE:HB3 | 1:J:512:VAL:HG21 | 1.54 | 0.90 |
| 1:G:492:HIS:CE1 | 1:G:553:LEU:CD1 | 2.54 | 0.90 |
| 1:A:512:VAL:HG21 | 1:B:445:PHE:HB3 | 1.52 | 0.90 |
| 1:A:567:LYS:HZ2 | 1:A:567:LYS:HA | 1.32 | 0.90 |
| 1:E:565:TYR:CE2 | 1:E:625:PRO:HB3 | 2.06 | 0.90 |
| 1:J:492:HIS:CE1 | 1:J:553:LEU:CD1 | 2.54 | 0.90 |
| 1:D:492:HIS:CE1 | 1:D:553:LEU:CD1 | 2.54 | 0.90 |
| 1:A:844:CYS:HA | 1:A:847:LEU:HD12 | 1.54 | 0.90 |
| 1:B:844:CYS:HA | 1:B:847:LEU:HD12 | 1.54 | 0.90 |
| 1:F:565:TYR:CE2 | 1:F:625:PRO:HB3 | 2.07 | 0.90 |
| 1:H:512:VAL:HG21 | 1:I:445:PHE:HB3 | 1.53 | 0.90 |
| 1:G:432:LEU:HA | 1:G:435:THR:HB | 1.53 | 0.89 |
| 1:A:264:VAL:HG22 | 1:A:270:ARG:HH12 | 1.34 | 0.89 |
| 1:B:492:HIS:CE1 | 1:B:553:LEU:CD1 | 2.54 | 0.89 |
| 1:C:896:LEU:HG | 1:C:922:ASN:HD21 | 1.25 | 0.89 |
| 1:E:432:LEU:HA | 1:E:435:THR:HB | 1.53 | 0.89 |
| 1:E:512:VAL:HG21 | 1:F:445:PHE:HB3 | 1.53 | 0.89 |
| 1:F:512:VAL:HG21 | 1:G:445:PHE:HB3 | 1.52 | 0.89 |
| 1:J:305:ASP:HB2 | 1:J:499:VAL:CG2 | 2.02 | 0.89 |
| 1:B:512:VAL:HG21 | 1:C:445:PHE:HB3 | 1.53 | 0.89 |
| 1:C:844:CYS:HA | 1:C:847:LEU:HD12 | 1.54 | 0.89 |
| 1:E:343:GLU:OE1 | 1:E:343:GLU:N | 2.06 | 0.89 |
| 1:A:896:LEU:HG | 1:A:922:ASN:HD21 | 1.25 | 0.89 |
| 1:F:492:HIS:CE1 | 1:F:553:LEU:CD1 | 2.54 | 0.89 |
| 1:I:492:HIS:CE1 | 1:I:553:LEU:CD1 | 2.54 | 0.89 |
| 1:J:844:CYS:HA | 1:J:847:LEU:HD12 | 1.54 | 0.89 |
| 1:G:305:ASP:HB2 | 1:G:499:VAL:CG2 | 2.01 | 0.89 |
| 1:I:753:LEU:HD21 | 1:I:761:LEU:HD13 | 1.55 | 0.89 |
| 1:E:492:HIS:CE1 | 1:E:553:LEU:CD1 | 2.54 | 0.89 |
| 1:H:492:HIS:CE1 | 1:H:553:LEU:CD1 | 2.54 | 0.89 |
| 1:F:343:GLU:OE1 | 1:F:343:GLU:N | 2.06 | 0.88 |
| 1:F:844:CYS:HA | 1:F:847:LEU:HD12 | 1.54 | 0.88 |
| 1:G:512:VAL:HG21 | 1:H:445:PHE:HB3 | 1.54 | 0.88 |
| 1:J:753:LEU:HD21 | 1:J:761:LEU:HD13 | 1.55 | 0.88 |
| 1:C:432:LEU:HA | 1:C:435:THR:HB | 1.53 | 0.88 |
| 1:B:492:HIS:HE1 | 1:B:553:LEU:CD1 | 1.87 | 0.88 |
| 1:D:343:GLU:OE1 | 1:D:343:GLU:N | 2.06 | 0.88 |
| 1:H:844:CYS:HA | 1:H:847:LEU:HD12 | 1.54 | 0.88 |
| 1:B:432:LEU:HA | 1:B:435:THR:HB | 1.53 | 0.88 |
| 1:E:920:ARG:NH1 | 2:O:121:ARG:HA | 1.89 | 0.88 |
| 1:I:432:LEU:HA | 1:I:435:THR:HB | 1.53 | 0.88 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:C:492:HIS:HE1 | 1:C:553:LEU:CD1 | 1.87 | 0.88 |
| 1:F:432:LEU:HA | 1:F:435:THR:HB | 1.53 | 0.88 |
| 1:F:619:LYS:CB | 2:P:261:ASP:CA | 2.51 | 0.88 |
| 1:H:753:LEU:HD21 | 1:H:761:LEU:HD13 | 1.55 | 0.88 |
| 1:E:305:ASP:HB2 | 1:E:499:VAL:HG21 | 1.54 | 0.88 |
| 1:F:492:HIS:HE1 | 1:F:553:LEU:CD1 | 1.87 | 0.88 |
| 1:G:844:CYS:HA | 1:G:847:LEU:HD12 | 1.54 | 0.88 |
| 1:H:973:LYS:HG3 | 1:H:1002:ASN:HB2 | 1.56 | 0.88 |
| 1:J:432:LEU:HA | 1:J:435:THR:HB | 1.53 | 0.88 |
| 1:H:343:GLU:OE1 | 1:H:343:GLU:N | 2.06 | 0.88 |
| 1:I:492:HIS:HE1 | 1:I:553:LEU:CD1 | 1.87 | 0.88 |
| 1:B:343:GLU:OE1 | 1:B:343:GLU:N | 2.06 | 0.88 |
| 1:E:973:LYS:HG3 | 1:E:1002:ASN:HB2 | 1.56 | 0.88 |
| 1:F:973:LYS:HG3 | 1:F:1002:ASN:HB2 | 1.56 | 0.88 |
| 1:J:343:GLU:OE1 | 1:J:343:GLU:N | 2.06 | 0.88 |
| 1:D:432:LEU:HA | 1:D:435:THR:HB | 1.53 | 0.87 |
| 1:E:469:LEU:HD12 | 1:E:498:ASP:OD2 | 1.73 | 0.87 |
| 1:A:753:LEU:HD21 | 1:A:761:LEU:HD13 | 1.55 | 0.87 |
| 1:C:353:VAL:HG11 | 1:C:499:VAL:HG23 | 1.55 | 0.87 |
| 1:G:492:HIS:HE1 | 1:G:553:LEU:HD11 | 1.32 | 0.87 |
| 1:D:844:CYS:HA | 1:D:847:LEU:HD12 | 1.54 | 0.87 |
| 1:G:973:LYS:HG3 | 1:G:1002:ASN:HB2 | 1.56 | 0.87 |
| 1:A:343:GLU:OE1 | 1:A:343:GLU:N | 2.06 | 0.87 |
| 1:B:753:LEU:HD21 | 1:B:761:LEU:HD13 | 1.55 | 0.87 |
| 1:C:343:GLU:OE1 | 1:C:343:GLU:N | 2.06 | 0.87 |
| 1:F:552:LYS:O | 1:F:552:LYS:NZ | 2.08 | 0.87 |
| 1:I:343:GLU:OE1 | 1:I:343:GLU:N | 2.06 | 0.87 |
| 1:A:432:LEU:HA | 1:A:435:THR:HB | 1.53 | 0.87 |
| 1:E:844:CYS:HA | 1:E:847:LEU:HD12 | 1.54 | 0.87 |
| 1:J:552:LYS:O | 1:J:552:LYS:NZ | 2.08 | 0.87 |
| 1:E:552:LYS:O | 1:E:552:LYS:NZ | 2.08 | 0.87 |
| 1:G:343:GLU:OE1 | 1:G:343:GLU:N | 2.06 | 0.87 |
| 1:H:552:LYS:NZ | 1:H:552:LYS:O | 2.08 | 0.87 |
| 1:J:565:TYR:CE2 | 1:J:625:PRO:HB3 | 2.08 | 0.87 |
| 1:A:552:LYS:O | 1:A:552:LYS:NZ | 2.08 | 0.87 |
| 1:C:552:LYS:O | 1:C:552:LYS:NZ | 2.08 | 0.87 |
| 1:D:353:VAL:HG11 | 1:D:499:VAL:HG23 | 1.56 | 0.87 |
| 1:D:492:HIS:HE1 | 1:D:553:LEU:CD1 | 1.87 | 0.87 |
| 1:D:973:LYS:HG3 | 1:D:1002:ASN:HB2 | 1.56 | 0.87 |
| 1:I:844:CYS:HA | 1:I:847:LEU:HD12 | 1.54 | 0.87 |
| 1:E:886:LEU:HD21 | 1:E:889:LEU:HD13 | 1.57 | 0.87 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:F:623:ILE:H | 1:F:623:ILE:HD12 | 1.39 | 0.87 |
| 1:F:886:LEU:HD21 | 1:F:889:LEU:HD13 | 1.57 | 0.87 |
| 1:G:492:HIS:HE1 | 1:G:553:LEU:CD1 | 1.87 | 0.87 |
| 1:G:753:LEU:HD21 | 1:G:761:LEU:HD13 | 1.55 | 0.87 |
| 1:J:492:HIS:HE1 | 1:J:553:LEU:CD1 | 1.87 | 0.87 |
| 1:I:886:LEU:HD21 | 1:I:889:LEU:HD13 | 1.57 | 0.86 |
| 1:I:973:LYS:HG3 | 1:I:1002:ASN:HB2 | 1.56 | 0.86 |
| 1:E:753:LEU:HD21 | 1:E:761:LEU:HD13 | 1.55 | 0.86 |
| 1:G:886:LEU:HD21 | 1:G:889:LEU:HD13 | 1.57 | 0.86 |
| 1:H:886:LEU:HD21 | 1:H:889:LEU:HD13 | 1.57 | 0.86 |
| 1:I:896:LEU:CG | 1:I:922:ASN:ND2 | 2.39 | 0.86 |
| 1:C:753:LEU:HD21 | 1:C:761:LEU:HD13 | 1.55 | 0.86 |
| 1:D:552:LYS:O | 1:D:552:LYS:NZ | 2.08 | 0.86 |
| 1:H:896:LEU:CG | 1:H:922:ASN:ND2 | 2.39 | 0.86 |
| 1:I:552:LYS:O | 1:I:552:LYS:NZ | 2.08 | 0.86 |
| 1:J:886:LEU:HD21 | 1:J:889:LEU:HD13 | 1.57 | 0.86 |
| 1:F:753:LEU:HD21 | 1:F:761:LEU:HD13 | 1.55 | 0.86 |
| 1:H:565:TYR:CE2 | 1:H:625:PRO:HB3 | 2.10 | 0.86 |
| 1:B:552:LYS:HZ1 | 1:B:552:LYS:H | 1.19 | 0.86 |
| 1:B:973:LYS:HG3 | 1:B:1002:ASN:HB2 | 1.56 | 0.86 |
| 1:D:886:LEU:HD21 | 1:D:889:LEU:HD13 | 1.57 | 0.86 |
| 1:J:973:LYS:HG3 | 1:J:1002:ASN:HB2 | 1.56 | 0.86 |
| 1:A:973:LYS:HG3 | 1:A:1002:ASN:HB2 | 1.56 | 0.86 |
| 1:B:136:TYR:HH | 1:B:280:CYS:HG | 1.13 | 0.86 |
| 1:B:552:LYS:O | 1:B:552:LYS:NZ | 2.08 | 0.86 |
| 1:E:896:LEU:CG | 1:E:922:ASN:ND2 | 2.39 | 0.86 |
| 1:G:552:LYS:O | 1:G:552:LYS:NZ | 2.08 | 0.86 |
| 1:H:624:GLN:HB2 | 1:H:625:PRO:CD | 2.06 | 0.86 |
| 1:J:315:ILE:HD12 | 1:J:330:ILE:HA | 1.58 | 0.86 |
| 1:A:315:ILE:HD12 | 1:A:330:ILE:HA | 1.58 | 0.85 |
| 1:B:315:ILE:HD12 | 1:B:330:ILE:HA | 1.58 | 0.85 |
| 1:D:753:LEU:HD21 | 1:D:761:LEU:HD13 | 1.55 | 0.85 |
| 1:E:315:ILE:HD12 | 1:E:330:ILE:HA | 1.58 | 0.85 |
| 1:H:552:LYS:H | 1:H:552:LYS:HZ1 | 1.22 | 0.85 |
| 1:C:973:LYS:HG3 | 1:C:1002:ASN:HB2 | 1.56 | 0.85 |
| 1:F:315:ILE:HD12 | 1:F:330:ILE:HA | 1.58 | 0.85 |
| 1:I:315:ILE:HD12 | 1:I:330:ILE:HA | 1.58 | 0.85 |
| 1:J:552:LYS:HZ1 | 1:J:552:LYS:H | 1.23 | 0.85 |
| 1:A:886:LEU:HD21 | 1:A:889:LEU:HD13 | 1.57 | 0.85 |
| 1:D:315:ILE:HD12 | 1:D:330:ILE:HA | 1.58 | 0.85 |
| 1:G:315:ILE:HD12 | 1:G:330:ILE:HA | 1.58 | 0.85 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:G:623:ILE:H | 1:G:623:ILE:HD12 | 1.42 | 0.85 |
| 1:H:315:ILE:HD12 | 1:H:330:ILE:HA | 1.58 | 0.85 |
| 1:C:315:ILE:HD12 | 1:C:330:ILE:HA | 1.58 | 0.85 |
| 1:C:886:LEU:HD21 | 1:C:889:LEU:HD13 | 1.57 | 0.85 |
| 1:B:818:LEU:CD1 | 1:B:822:LEU:HD21 | 2.07 | 0.85 |
| 1:C:624:GLN:HB2 | 1:C:625:PRO:CD | 2.05 | 0.85 |
| 1:J:896:LEU:CG | 1:J:922:ASN:ND2 | 2.39 | 0.85 |
| 1:F:136:TYR:HH | 1:F:280:CYS:HG | 1.20 | 0.85 |
| 1:C:818:LEU:CD1 | 1:C:822:LEU:HD21 | 2.07 | 0.85 |
| 1:F:896:LEU:CG | 1:F:922:ASN:ND2 | 2.39 | 0.85 |
| 1:J:353:VAL:HG11 | 1:J:499:VAL:HG23 | 1.57 | 0.85 |
| 1:B:886:LEU:HD21 | 1:B:889:LEU:HD13 | 1.57 | 0.84 |
| 1:E:492:HIS:HE1 | 1:E:553:LEU:CD1 | 1.87 | 0.84 |
| 1:F:818:LEU:CD1 | 1:F:822:LEU:HD21 | 2.07 | 0.84 |
| 1:I:818:LEU:CD1 | 1:I:822:LEU:HD21 | 2.07 | 0.84 |
| 1:H:483:LEU:HD23 | 1:H:519:SER:HB2 | 1.59 | 0.84 |
| 1:I:483:LEU:HD23 | 1:I:519:SER:HB2 | 1.59 | 0.84 |
| 1:A:492:HIS:HE1 | 1:A:553:LEU:CD1 | 1.87 | 0.84 |
| 1:A:818:LEU:CD1 | 1:A:822:LEU:HD21 | 2.07 | 0.84 |
| 1:G:818:LEU:CD1 | 1:G:822:LEU:HD21 | 2.07 | 0.84 |
| 1:H:818:LEU:CD1 | 1:H:822:LEU:HD21 | 2.07 | 0.84 |
| 1:J:818:LEU:CD1 | 1:J:822:LEU:HD21 | 2.07 | 0.84 |
| 1:B:364:HIS:ND1 | 1:C:150:CYS:SG | 2.51 | 0.84 |
| 1:C:818:LEU:HD11 | 1:C:822:LEU:HD21 | 1.60 | 0.84 |
| 1:D:619:LYS:CB | 2:N:261:ASP:OD2 | 2.25 | 0.84 |
| 1:E:818:LEU:CD1 | 1:E:822:LEU:HD21 | 2.07 | 0.84 |
| 1:I:624:GLN:HB2 | 1:I:625:PRO:CD | 2.08 | 0.84 |
| 1:B:818:LEU:HD11 | 1:B:822:LEU:HD21 | 1.60 | 0.84 |
| 1:F:224:PHE:HE2 | 1:F:347:LEU:HD11 | 1.42 | 0.84 |
| 1:G:483:LEU:HD23 | 1:G:519:SER:HB2 | 1.59 | 0.84 |
| 1:B:224:PHE:HE2 | 1:B:347:LEU:HD11 | 1.42 | 0.84 |
| 1:B:896:LEU:CG | 1:B:922:ASN:ND2 | 2.39 | 0.84 |
| 1:G:364:HIS:ND1 | 1:H:150:CYS:SG | 2.51 | 0.84 |
| 1:J:483:LEU:HD23 | 1:J:519:SER:HB2 | 1.59 | 0.84 |
| 1:C:364:HIS:ND1 | 1:D:150:CYS:SG | 2.51 | 0.84 |
| 1:D:818:LEU:HD11 | 1:D:822:LEU:HD21 | 1.60 | 0.84 |
| 1:H:492:HIS:HE1 | 1:H:553:LEU:CD1 | 1.87 | 0.84 |
| 1:H:619:LYS:CB | 2:R:261:ASP:CA | 2.56 | 0.84 |
| 1:C:896:LEU:CG | 1:C:922:ASN:ND2 | 2.39 | 0.83 |
| 1:D:565:TYR:HE2 | 1:D:625:PRO:HB3 | 1.42 | 0.83 |
| 1:E:623:ILE:HD12 | 1:E:623:ILE:H | 1.43 | 0.83 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:H:801:VAL:HG12 | 1:H:802:GLU:HG3 | 1.61 | 0.83 |
| 1:I:224:PHE:HE2 | 1:I:347:LEU:HD11 | 1.42 | 0.83 |
| 1:J:224:PHE:HE2 | 1:J:347:LEU:HD11 | 1.42 | 0.83 |
| 1:D:818:LEU:CD1 | 1:D:822:LEU:HD21 | 2.07 | 0.83 |
| 1:D:552:LYS:HZ1 | 1:D:552:LYS:H | 1.23 | 0.83 |
| 1:G:896:LEU:CG | 1:G:922:ASN:ND2 | 2.39 | 0.83 |
| 1:A:562:LEU:HD22 | 1:A:611:TRP:CG | 2.13 | 0.83 |
| 1:J:502:PHE:HA | 1:J:521:ILE:HG13 | 1.61 | 0.83 |
| 1:A:896:LEU:CG | 1:A:922:ASN:ND2 | 2.39 | 0.83 |
| 1:B:308:GLN:NE2 | 1:B:499:VAL:HG22 | 1.93 | 0.83 |
| 1:B:503:LEU:HD21 | 1:B:520:PHE:CE1 | 2.14 | 0.83 |
| 1:D:224:PHE:HE2 | 1:D:347:LEU:HD11 | 1.42 | 0.83 |
| 1:D:483:LEU:HD23 | 1:D:519:SER:HB2 | 1.59 | 0.83 |
| 1:I:801:VAL:HG12 | 1:I:802:GLU:HG3 | 1.60 | 0.83 |
| 1:A:305:ASP:HB2 | 1:A:499:VAL:HG21 | 1.61 | 0.83 |
| 1:F:364:HIS:ND1 | 1:G:150:CYS:SG | 2.52 | 0.83 |
| 1:C:224:PHE:HE2 | 1:C:347:LEU:HD11 | 1.42 | 0.83 |
| 1:D:364:HIS:ND1 | 1:E:150:CYS:SG | 2.52 | 0.83 |
| 1:G:801:VAL:HG12 | 1:G:802:GLU:HG3 | 1.61 | 0.83 |
| 1:H:364:HIS:ND1 | 1:I:150:CYS:SG | 2.52 | 0.83 |
| 1:A:483:LEU:HD23 | 1:A:519:SER:HB2 | 1.59 | 0.83 |
| 1:C:483:LEU:HD23 | 1:C:519:SER:HB2 | 1.59 | 0.83 |
| 1:I:364:HIS:ND1 | 1:J:150:CYS:SG | 2.51 | 0.83 |
| 1:D:896:LEU:CG | 1:D:922:ASN:ND2 | 2.39 | 0.83 |
| 1:J:624:GLN:HB2 | 1:J:625:PRO:CD | 2.09 | 0.83 |
| 1:J:852:SER:HB3 | 1:J:878:LYS:HD2 | 1.61 | 0.83 |
| 1:A:552:LYS:H | 1:A:552:LYS:HZ1 | 1.25 | 0.82 |
| 1:A:818:LEU:HD11 | 1:A:822:LEU:HD21 | 1.60 | 0.82 |
| 1:D:619:LYS:CB | 2:N:261:ASP:CA | 2.55 | 0.82 |
| 1:C:492:HIS:HE1 | 1:C:553:LEU:HD11 | 1.32 | 0.82 |
| 1:F:483:LEU:HD23 | 1:F:519:SER:HB2 | 1.59 | 0.82 |
| 1:I:852:SER:HB3 | 1:I:878:LYS:HD2 | 1.61 | 0.82 |
| 1:A:224:PHE:HE2 | 1:A:347:LEU:HD11 | 1.42 | 0.82 |
| 1:A:364:HIS:ND1 | 1:B:150:CYS:SG | 2.52 | 0.82 |
| 1:E:224:PHE:HE2 | 1:E:347:LEU:HD11 | 1.42 | 0.82 |
| 1:A:852:SER:HB3 | 1:A:878:LYS:HD2 | 1.61 | 0.82 |
| 1:E:364:HIS:ND1 | 1:F:150:CYS:SG | 2.53 | 0.82 |
| 1:G:224:PHE:HE2 | 1:G:347:LEU:HD11 | 1.42 | 0.82 |
| 1:B:483:LEU:HD23 | 1:B:519:SER:HB2 | 1.59 | 0.82 |
| 1:E:483:LEU:HD23 | 1:E:519:SER:HB2 | 1.59 | 0.82 |
| 1:F:353:VAL:HG11 | 1:F:499:VAL:HG13 | 1.60 | 0.82 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:A:150:CYS:SG | 1:J:364:HIS:ND1 | 2.51 | 0.82 |
| 1:B:801:VAL:HG12 | 1:B:802:GLU:HG3 | 1.61 | 0.82 |
| 1:A:801:VAL:HG12 | 1:A:802:GLU:HG3 | 1.61 | 0.82 |
| 1:H:224:PHE:HE2 | 1:H:347:LEU:HD11 | 1.42 | 0.82 |
| 1:I:353:VAL:HG11 | 1:I:499:VAL:HG23 | 1.61 | 0.82 |
| 1:J:426:MET:HG3 | 1:J:432:LEU:HD11 | 1.62 | 0.82 |
| 1:C:567:LYS:NZ | 1:C:623:ILE:CG2 | 2.42 | 0.82 |
| 1:C:801:VAL:HG12 | 1:C:802:GLU:HG3 | 1.60 | 0.82 |
| 1:D:624:GLN:HB2 | 1:D:625:PRO:CD | 2.09 | 0.82 |
| 1:E:818:LEU:HD11 | 1:E:822:LEU:HD21 | 1.60 | 0.82 |
| 1:I:426:MET:HG3 | 1:I:432:LEU:HD11 | 1.62 | 0.82 |
| 1:E:305:ASP:HB2 | 1:E:499:VAL:CG2 | 2.10 | 0.82 |
| 1:A:326:GLU:HG3 | 1:A:331:LEU:HD12 | 1.62 | 0.82 |
| 1:E:552:LYS:HZ1 | 1:E:552:LYS:H | 1.25 | 0.82 |
| 1:F:619:LYS:CB | 2:P:261:ASP:OD2 | 2.27 | 0.82 |
| 1:H:818:LEU:HD11 | 1:H:822:LEU:HD21 | 1.60 | 0.82 |
| 1:H:852:SER:HB3 | 1:H:878:LYS:HD2 | 1.61 | 0.82 |
| 1:I:818:LEU:HD11 | 1:I:822:LEU:HD21 | 1.60 | 0.82 |
| 1:B:326:GLU:HG3 | 1:B:331:LEU:HD12 | 1.62 | 0.81 |
| 1:B:852:SER:HB3 | 1:B:878:LYS:HD2 | 1.61 | 0.81 |
| 1:C:326:GLU:HG3 | 1:C:331:LEU:HD12 | 1.62 | 0.81 |
| 1:D:801:VAL:HG12 | 1:D:802:GLU:HG3 | 1.60 | 0.81 |
| 1:F:624:GLN:HB2 | 1:F:625:PRO:CD | 2.10 | 0.81 |
| 1:B:650:PHE:HB3 | 1:B:653:ILE:HD11 | 1.62 | 0.81 |
| 1:E:624:GLN:HB2 | 1:E:625:PRO:CD | 2.09 | 0.81 |
| 1:E:801:VAL:HG12 | 1:E:802:GLU:HG3 | 1.60 | 0.81 |
| 1:I:502:PHE:HA | 1:I:521:ILE:HG13 | 1.63 | 0.81 |
| 1:J:326:GLU:HG3 | 1:J:331:LEU:HD12 | 1.62 | 0.81 |
| 1:A:426:MET:HG3 | 1:A:432:LEU:HD11 | 1.62 | 0.81 |
| 1:A:650:PHE:HB3 | 1:A:653:ILE:HD11 | 1.62 | 0.81 |
| 1:C:269:GLN:OE1 | 1:C:325:ALA:HB1 | 1.81 | 0.81 |
| 1:C:624:GLN:HB2 | 1:C:625:PRO:HD3 | 1.62 | 0.81 |
| 1:D:852:SER:HB3 | 1:D:878:LYS:HD2 | 1.61 | 0.81 |
| 1:E:852:SER:HB3 | 1:E:878:LYS:HD2 | 1.61 | 0.81 |
| 1:F:269:GLN:OE1 | 1:F:325:ALA:HB1 | 1.81 | 0.81 |
| 1:H:269:GLN:OE1 | 1:H:325:ALA:HB1 | 1.81 | 0.81 |
| 1:H:308:GLN:NE2 | 1:H:499:VAL:HG22 | 1.95 | 0.81 |
| 1:C:568:PHE:HB3 | 1:C:570:LYS:CG | 2.10 | 0.81 |
| 1:G:818:LEU:HD11 | 1:G:822:LEU:HD21 | 1.60 | 0.81 |
| 1:J:801:VAL:HG12 | 1:J:802:GLU:HG3 | 1.61 | 0.81 |
| 1:A:136:TYR:HH | 1:A:280:CYS:HG | 1.19 | 0.81 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:A:619:LYS:CB | 2:K:261:ASP:HA | 2.11 | 0.81 |
| 1:C:552:LYS:H | 1:C:552:LYS:HZ1 | 1.25 | 0.81 |
| 1:C:650:PHE:HB3 | 1:C:653:ILE:HD11 | 1.62 | 0.81 |
| 1:E:502:PHE:HA | 1:E:521:ILE:HG13 | 1.62 | 0.81 |
| 1:E:635:TYR:HD2 | 1:E:665:VAL:HA | 1.46 | 0.81 |
| 1:F:801:VAL:HG12 | 1:F:802:GLU:HG3 | 1.61 | 0.81 |
| 1:F:818:LEU:HD11 | 1:F:822:LEU:HD21 | 1.60 | 0.81 |
| 1:I:269:GLN:OE1 | 1:I:325:ALA:HB1 | 1.81 | 0.81 |
| 1:I:326:GLU:HG3 | 1:I:331:LEU:HD12 | 1.62 | 0.81 |
| 1:A:567:LYS:HA | 1:A:567:LYS:NZ | 1.95 | 0.81 |
| 1:H:326:GLU:HG3 | 1:H:331:LEU:HD12 | 1.62 | 0.81 |
| 1:H:426:MET:HG3 | 1:H:432:LEU:HD11 | 1.62 | 0.81 |
| 1:J:269:GLN:OE1 | 1:J:325:ALA:HB1 | 1.81 | 0.81 |
| 1:D:288:HIS:CE1 | 1:D:322:TRP:HH2 | 1.99 | 0.81 |
| 1:D:635:TYR:HD2 | 1:D:665:VAL:HA | 1.46 | 0.81 |
| 1:E:269:GLN:OE1 | 1:E:325:ALA:HB1 | 1.81 | 0.81 |
| 1:F:552:LYS:H | 1:F:552:LYS:HZ1 | 1.25 | 0.81 |
| 1:G:635:TYR:HD2 | 1:G:665:VAL:HA | 1.46 | 0.81 |
| 1:J:818:LEU:HD11 | 1:J:822:LEU:HD21 | 1.60 | 0.81 |
| 1:G:326:GLU:HG3 | 1:G:331:LEU:HD12 | 1.62 | 0.81 |
| 1:G:852:SER:HB3 | 1:G:878:LYS:HD2 | 1.61 | 0.81 |
| 1:I:565:TYR:OH | 1:I:625:PRO:HA | 1.81 | 0.81 |
| 1:J:650:PHE:HB3 | 1:J:653:ILE:HD11 | 1.62 | 0.81 |
| 1:D:326:GLU:HG3 | 1:D:331:LEU:HD12 | 1.62 | 0.81 |
| 1:E:288:HIS:CE1 | 1:E:322:TRP:HH2 | 1.99 | 0.81 |
| 1:F:635:TYR:HD2 | 1:F:665:VAL:HA | 1.46 | 0.81 |
| 1:A:269:GLN:OE1 | 1:A:325:ALA:HB1 | 1.81 | 0.80 |
| 1:B:269:GLN:OE1 | 1:B:325:ALA:HB1 | 1.81 | 0.80 |
| 1:F:326:GLU:HG3 | 1:F:331:LEU:HD12 | 1.62 | 0.80 |
| 1:C:852:SER:HB3 | 1:C:878:LYS:HD2 | 1.61 | 0.80 |
| 1:D:269:GLN:OE1 | 1:D:325:ALA:HB1 | 1.81 | 0.80 |
| 1:E:326:GLU:HG3 | 1:E:331:LEU:HD12 | 1.62 | 0.80 |
| 1:E:565:TYR:OH | 1:E:625:PRO:HA | 1.81 | 0.80 |
| 1:E:951:CYS:HB3 | 1:E:953:LEU:HD21 | 1.64 | 0.80 |
| 1:F:951:CYS:HB3 | 1:F:953:LEU:HD21 | 1.63 | 0.80 |
| 1:G:502:PHE:HA | 1:G:521:ILE:HG13 | 1.62 | 0.80 |
| 1:H:650:PHE:HB3 | 1:H:653:ILE:HD11 | 1.62 | 0.80 |
| 1:F:471:SER:CB | 1:F:553:LEU:CD1 | 2.60 | 0.80 |
| 1:D:142:LYS:HA | 1:D:145:ARG:HH21 | 1.46 | 0.80 |
| 1:D:426:MET:HG3 | 1:D:432:LEU:HD11 | 1.62 | 0.80 |
| 1:F:650:PHE:HB3 | 1:F:653:ILE:HD11 | 1.62 | 0.80 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:I:288:HIS:CE1 | 1:I:322:TRP:HH2 | 1.99 | 0.80 |
| 1:D:568:PHE:O | 1:D:570:LYS:HG2 | 1.80 | 0.80 |
| 1:G:471:SER:CB | 1:G:553:LEU:CD1 | 2.60 | 0.80 |
| 1:I:142:LYS:HA | 1:I:145:ARG:HH21 | 1.46 | 0.80 |
| 1:J:288:HIS:CE1 | 1:J:322:TRP:HH2 | 1.99 | 0.80 |
| 1:A:471:SER:CB | 1:A:553:LEU:CD1 | 2.60 | 0.80 |
| 1:C:288:HIS:CE1 | 1:C:322:TRP:HH2 | 1.99 | 0.80 |
| 1:D:650:PHE:HB3 | 1:D:653:ILE:HD11 | 1.62 | 0.80 |
| 1:E:471:SER:CB | 1:E:553:LEU:CD1 | 2.60 | 0.80 |
| 1:H:142:LYS:HA | 1:H:145:ARG:HH21 | 1.46 | 0.80 |
| 1:D:951:CYS:HB3 | 1:D:953:LEU:HD21 | 1.64 | 0.80 |
| 1:G:624:GLN:HB2 | 1:G:625:PRO:CD | 2.11 | 0.80 |
| 1:G:951:CYS:HB3 | 1:G:953:LEU:HD21 | 1.64 | 0.80 |
| 1:J:635:TYR:HD2 | 1:J:665:VAL:HA | 1.46 | 0.80 |
| 1:A:288:HIS:CE1 | 1:A:322:TRP:HH2 | 1.99 | 0.80 |
| 1:B:471:SER:CB | 1:B:553:LEU:CD1 | 2.60 | 0.80 |
| 1:B:568:PHE:O | 1:B:570:LYS:CG | 2.30 | 0.80 |
| 1:C:426:MET:HG3 | 1:C:432:LEU:HD11 | 1.62 | 0.80 |
| 1:E:650:PHE:HB3 | 1:E:653:ILE:HD11 | 1.62 | 0.80 |
| 1:J:471:SER:CB | 1:J:553:LEU:CD1 | 2.60 | 0.80 |
| 1:G:650:PHE:HB3 | 1:G:653:ILE:HD11 | 1.62 | 0.80 |
| 1:H:471:SER:CB | 1:H:553:LEU:CD1 | 2.60 | 0.80 |
| 1:H:624:GLN:HB2 | 1:H:625:PRO:HD3 | 1.63 | 0.80 |
| 1:J:142:LYS:HA | 1:J:145:ARG:HH21 | 1.46 | 0.80 |
| 1:A:152:GLU:OE1 | 1:A:152:GLU:N | 2.13 | 0.80 |
| 1:B:635:TYR:HD2 | 1:B:665:VAL:HA | 1.46 | 0.80 |
| 1:G:565:TYR:OH | 1:G:625:PRO:HA | 1.82 | 0.80 |
| 1:H:951:CYS:HB3 | 1:H:953:LEU:HD21 | 1.64 | 0.80 |
| 1:C:635:TYR:HD2 | 1:C:665:VAL:HA | 1.46 | 0.79 |
| 1:E:426:MET:HG3 | 1:E:432:LEU:HD11 | 1.62 | 0.79 |
| 1:F:288:HIS:CE1 | 1:F:322:TRP:HH2 | 1.99 | 0.79 |
| 1:G:843:CYS:O | 1:G:847:LEU:HG | 1.83 | 0.79 |
| 1:H:353:VAL:HG11 | 1:H:499:VAL:HG13 | 1.64 | 0.79 |
| 1:I:471:SER:CB | 1:I:553:LEU:CD1 | 2.60 | 0.79 |
| 1:A:217:GLU:HG3 | 1:B:146:SER:HA | 1.64 | 0.79 |
| 1:C:619:LYS:CB | 2:M:261:ASP:CA | 2.60 | 0.79 |
| 1:D:471:SER:CB | 1:D:553:LEU:CD1 | 2.60 | 0.79 |
| 1:G:619:LYS:CB | 2:Q:261:ASP:CB | 2.59 | 0.79 |
| 1:I:635:TYR:HD2 | 1:I:665:VAL:HA | 1.46 | 0.79 |
| 1:I:650:PHE:HB3 | 1:I:653:ILE:HD11 | 1.62 | 0.79 |
| 1:F:426:MET:HG3 | 1:F:432:LEU:HD11 | 1.62 | 0.79 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:F:852:SER:HB3 | 1:F:878:LYS:HD2 | 1.61 | 0.79 |
| 1:D:843:CYS:O | 1:D:847:LEU:HG | 1.83 | 0.79 |
| 1:G:269:GLN:OE1 | 1:G:325:ALA:HB1 | 1.81 | 0.79 |
| 1:G:288:HIS:CE1 | 1:G:322:TRP:HH2 | 1.99 | 0.79 |
| 1:G:552:LYS:HZ1 | 1:G:552:LYS:H | 1.29 | 0.79 |
| 1:B:426:MET:HG3 | 1:B:432:LEU:HD11 | 1.62 | 0.79 |
| 1:C:471:SER:CB | 1:C:553:LEU:CD1 | 2.60 | 0.79 |
| 1:D:552:LYS:NZ | 1:D:552:LYS:H | 1.81 | 0.79 |
| 1:F:843:CYS:O | 1:F:847:LEU:HG | 1.83 | 0.79 |
| 1:G:142:LYS:HA | 1:G:145:ARG:HH21 | 1.46 | 0.79 |
| 1:J:152:GLU:OE1 | 1:J:152:GLU:N | 2.13 | 0.79 |
| 1:A:635:TYR:HD2 | 1:A:665:VAL:HA | 1.46 | 0.79 |
| 1:E:136:TYR:HH | 1:E:280:CYS:HG | 1.26 | 0.79 |
| 1:E:326:GLU:HB2 | 1:E:331:LEU:HB2 | 1.65 | 0.79 |
| 1:I:951:CYS:HB3 | 1:I:953:LEU:HD21 | 1.63 | 0.79 |
| 1:C:136:TYR:HH | 1:C:280:CYS:HG | 1.27 | 0.79 |
| 1:F:326:GLU:HB2 | 1:F:331:LEU:HB2 | 1.65 | 0.79 |
| 1:F:552:LYS:NZ | 1:F:552:LYS:H | 1.81 | 0.79 |
| 1:G:353:VAL:HG11 | 1:G:499:VAL:HG23 | 1.65 | 0.79 |
| 1:I:217:GLU:HG3 | 1:J:146:SER:HA | 1.65 | 0.79 |
| 1:A:559:THR:O | 1:A:563:GLU:HB2 | 1.82 | 0.79 |
| 1:E:142:LYS:HA | 1:E:145:ARG:HH21 | 1.46 | 0.79 |
| 1:E:619:LYS:CB | 2:O:261:ASP:CA | 2.58 | 0.79 |
| 1:A:142:LYS:HA | 1:A:145:ARG:HH21 | 1.46 | 0.79 |
| 1:B:152:GLU:OE1 | 1:B:152:GLU:N | 2.13 | 0.79 |
| 1:B:552:LYS:H | 1:B:552:LYS:NZ | 1.81 | 0.79 |
| 1:C:951:CYS:HB3 | 1:C:953:LEU:HD21 | 1.64 | 0.79 |
| 1:D:475:ASP:HB3 | 1:D:553:LEU:CD2 | 2.03 | 0.79 |
| 1:H:217:GLU:HG3 | 1:I:146:SER:HA | 1.65 | 0.79 |
| 1:H:288:HIS:CE1 | 1:H:322:TRP:HH2 | 1.99 | 0.79 |
| 1:I:136:TYR:OH | 1:I:280:CYS:SG | 2.41 | 0.79 |
| 1:I:552:LYS:H | 1:I:552:LYS:HZ1 | 1.30 | 0.79 |
| 1:J:637:MET:HE2 | 1:J:639:GLU:OE1 | 1.83 | 0.79 |
| 1:G:426:MET:HG3 | 1:G:432:LEU:HD11 | 1.62 | 0.79 |
| 1:G:552:LYS:NZ | 1:G:552:LYS:H | 1.81 | 0.79 |
| 1:H:635:TYR:HD2 | 1:H:665:VAL:HA | 1.46 | 0.79 |
| 1:J:565:TYR:OH | 1:J:625:PRO:HA | 1.83 | 0.79 |
| 1:F:502:PHE:HA | 1:F:521:ILE:HG13 | 1.65 | 0.78 |
| 1:I:552:LYS:NZ | 1:I:552:LYS:H | 1.81 | 0.78 |
| 1:J:623:ILE:H | 1:J:623:ILE:HD12 | 1.48 | 0.78 |
| 1:A:146:SER:HA | 1:J:217:GLU:HG3 | 1.65 | 0.78 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:B:353:VAL:HG11 | 1:B:499:VAL:HG13 | 1.64 | 0.78 |
| 1:D:326:GLU:HB2 | 1:D:331:LEU:HB2 | 1.65 | 0.78 |
| 1:F:142:LYS:HA | 1:F:145:ARG:HH21 | 1.46 | 0.78 |
| 1:G:326:GLU:HB2 | 1:G:331:LEU:HB2 | 1.65 | 0.78 |
| 1:H:637:MET:HE2 | 1:H:639:GLU:OE1 | 1.83 | 0.78 |
| 1:H:843:CYS:O | 1:H:847:LEU:HG | 1.83 | 0.78 |
| 1:I:843:CYS:O | 1:I:847:LEU:HG | 1.83 | 0.78 |
| 1:J:843:CYS:O | 1:J:847:LEU:HG | 1.82 | 0.78 |
| 1:A:552:LYS:NZ | 1:A:552:LYS:H | 1.81 | 0.78 |
| 1:C:217:GLU:HB2 | 1:D:149:GLN:NE2 | 1.99 | 0.78 |
| 1:J:136:TYR:OH | 1:J:280:CYS:SG | 2.41 | 0.78 |
| 1:J:951:CYS:HB3 | 1:J:953:LEU:HD21 | 1.63 | 0.78 |
| 1:B:565:TYR:CE2 | 1:B:625:PRO:HB3 | 2.18 | 0.78 |
| 1:B:843:CYS:O | 1:B:847:LEU:HG | 1.83 | 0.78 |
| 1:G:152:GLU:OE1 | 1:G:152:GLU:N | 2.14 | 0.78 |
| 1:I:637:MET:HE2 | 1:I:639:GLU:OE1 | 1.83 | 0.78 |
| 1:B:951:CYS:HB3 | 1:B:953:LEU:HD21 | 1.64 | 0.78 |
| 1:C:326:GLU:HB2 | 1:C:331:LEU:HB2 | 1.65 | 0.78 |
| 2:P:272:ASN:ND2 | 2:P:273:MET:SD | 2.57 | 0.78 |
| 2:R:272:ASN:ND2 | 2:R:273:MET:SD | 2.57 | 0.78 |
| 2:O:272:ASN:ND2 | 2:O:273:MET:SD | 2.57 | 0.78 |
| 2:Q:272:ASN:ND2 | 2:Q:273:MET:SD | 2.57 | 0.78 |
| 1:A:475:ASP:HB3 | 1:A:553:LEU:CD2 | 2.03 | 0.78 |
| 1:A:951:CYS:HB3 | 1:A:953:LEU:HD21 | 1.63 | 0.78 |
| 1:C:152:GLU:OE1 | 1:C:152:GLU:N | 2.14 | 0.78 |
| 1:A:562:LEU:HD21 | 1:A:611:TRP:CE3 | 2.16 | 0.78 |
| 1:E:552:LYS:NZ | 1:E:552:LYS:H | 1.81 | 0.78 |
| 1:E:843:CYS:O | 1:E:847:LEU:HG | 1.83 | 0.78 |
| 1:F:637:MET:HE2 | 1:F:639:GLU:OE1 | 1.84 | 0.78 |
| 1:H:552:LYS:NZ | 1:H:552:LYS:H | 1.81 | 0.78 |
| 1:B:326:GLU:HB2 | 1:B:331:LEU:HB2 | 1.65 | 0.78 |
| 1:C:142:LYS:HA | 1:C:145:ARG:HH21 | 1.46 | 0.78 |
| 1:E:217:GLU:HG3 | 1:F:146:SER:HA | 1.64 | 0.78 |
| 1:I:217:GLU:HB2 | 1:J:149:GLN:NE2 | 1.99 | 0.78 |
| 1:I:474:ALA:O | 1:I:477:ILE:HG22 | 1.84 | 0.78 |
| 1:I:573:LEU:HD22 | 1:I:576:VAL:HG11 | 1.66 | 0.78 |
| 2:K:272:ASN:ND2 | 2:K:273:MET:SD | 2.57 | 0.78 |
| 2:L:272:ASN:ND2 | 2:L:273:MET:SD | 2.57 | 0.78 |
| 2:M:272:ASN:ND2 | 2:M:273:MET:SD | 2.57 | 0.78 |
| 1:A:492:HIS:CE1 | 1:A:553:LEU:CD2 | 2.67 | 0.78 |
| 1:F:474:ALA:O | 1:F:477:ILE:HG22 | 1.84 | 0.78 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:H:475:ASP:HB3 | 1:H:553:LEU:CD2 | 2.03 | 0.78 |
| 1:J:746:LEU:HG | 1:J:775:LEU:HD13 | 1.66 | 0.78 |
| 2:T:272:ASN:ND2 | 2:T:273:MET:SD | 2.57 | 0.78 |
| 1:A:746:LEU:HG | 1:A:775:LEU:HD13 | 1.66 | 0.77 |
| 1:B:142:LYS:HA | 1:B:145:ARG:HH21 | 1.46 | 0.77 |
| 1:C:552:LYS:NZ | 1:C:552:LYS:H | 1.81 | 0.77 |
| 1:E:186:GLU:OE1 | 1:E:187:LEU:HD23 | 1.84 | 0.77 |
| 1:H:573:LEU:HD22 | 1:H:576:VAL:HG11 | 1.67 | 0.77 |
| 1:I:746:LEU:HG | 1:I:775:LEU:HD13 | 1.66 | 0.77 |
| 1:C:746:LEU:HG | 1:C:775:LEU:HD13 | 1.66 | 0.77 |
| 1:D:152:GLU:OE1 | 1:D:152:GLU:N | 2.14 | 0.77 |
| 1:D:474:ALA:O | 1:D:477:ILE:HG22 | 1.84 | 0.77 |
| 1:G:217:GLU:HG3 | 1:H:146:SER:HA | 1.65 | 0.77 |
| 1:G:573:LEU:HD22 | 1:G:576:VAL:HG11 | 1.67 | 0.77 |
| 1:H:326:GLU:HB2 | 1:H:331:LEU:HB2 | 1.65 | 0.77 |
| 1:I:492:HIS:CE1 | 1:I:553:LEU:CD2 | 2.67 | 0.77 |
| 1:A:637:MET:HE2 | 1:A:639:GLU:OE1 | 1.83 | 0.77 |
| 1:C:843:CYS:O | 1:C:847:LEU:HG | 1.83 | 0.77 |
| 1:D:565:TYR:CE2 | 1:D:625:PRO:HB3 | 2.19 | 0.77 |
| 1:I:619:LYS:CB | 2:S:261:ASP:CA | 2.61 | 0.77 |
| 1:J:624:GLN:HB2 | 1:J:625:PRO:HD3 | 1.66 | 0.77 |
| 1:A:843:CYS:O | 1:A:847:LEU:HG | 1.83 | 0.77 |
| 1:D:624:GLN:HB2 | 1:D:625:PRO:HD3 | 1.66 | 0.77 |
| 1:F:308:GLN:NE2 | 1:F:499:VAL:CG2 | 2.46 | 0.77 |
| 1:G:637:MET:HE2 | 1:G:639:GLU:OE1 | 1.84 | 0.77 |
| 1:H:492:HIS:CE1 | 1:H:553:LEU:CD2 | 2.67 | 0.77 |
| 1:J:552:LYS:NZ | 1:J:552:LYS:H | 1.81 | 0.77 |
| 1:J:573:LEU:HD22 | 1:J:576:VAL:HG11 | 1.66 | 0.77 |
| 1:B:217:GLU:HB2 | 1:C:149:GLN:NE2 | 1.99 | 0.77 |
| 1:B:288:HIS:CE1 | 1:B:322:TRP:HH2 | 1.99 | 0.77 |
| 1:B:746:LEU:HG | 1:B:775:LEU:HD13 | 1.66 | 0.77 |
| 1:B:818:LEU:O | 1:B:822:LEU:HG | 1.85 | 0.77 |
| 1:D:217:GLU:HB2 | 1:E:149:GLN:NE2 | 2.00 | 0.77 |
| 1:D:270:ARG:NH1 | 1:D:275:LEU:HD13 | 1.97 | 0.77 |
| 1:D:637:MET:HE2 | 1:D:639:GLU:OE1 | 1.84 | 0.77 |
| 1:E:637:MET:HE2 | 1:E:639:GLU:OE1 | 1.84 | 0.77 |
| 1:F:624:GLN:HB2 | 1:F:625:PRO:HD3 | 1.67 | 0.77 |
| 1:H:818:LEU:O | 1:H:822:LEU:HG | 1.85 | 0.77 |
| 1:J:474:ALA:O | 1:J:477:ILE:HG22 | 1.84 | 0.77 |
| 1:A:217:GLU:HB2 | 1:B:149:GLN:NE2 | 1.99 | 0.77 |
| 1:A:818:LEU:O | 1:A:822:LEU:HG | 1.85 | 0.77 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:C:474:ALA:O | 1:C:477:ILE:HG22 | 1.84 | 0.77 |
| 1:G:474:ALA:O | 1:G:477:ILE:HG22 | 1.84 | 0.77 |
| 1:I:152:GLU:OE1 | 1:I:152:GLU:N | 2.14 | 0.77 |
| 2:N:272:ASN:ND2 | 2:N:273:MET:SD | 2.57 | 0.77 |
| 1:A:326:GLU:HB2 | 1:A:331:LEU:HB2 | 1.65 | 0.77 |
| 1:A:640:GLU:OE1 | 1:A:640:GLU:N | 2.18 | 0.77 |
| 1:D:186:GLU:OE1 | 1:D:187:LEU:HD23 | 1.84 | 0.77 |
| 1:D:746:LEU:HG | 1:D:775:LEU:HD13 | 1.66 | 0.77 |
| 1:E:640:GLU:OE1 | 1:E:640:GLU:N | 2.18 | 0.77 |
| 1:E:818:LEU:O | 1:E:822:LEU:HG | 1.85 | 0.77 |
| 1:H:746:LEU:HG | 1:H:775:LEU:HD13 | 1.66 | 0.77 |
| 1:J:818:LEU:O | 1:J:822:LEU:HG | 1.85 | 0.77 |
| 1:A:149:GLN:NE2 | 1:J:217:GLU:HB2 | 2.00 | 0.77 |
| 1:A:474:ALA:O | 1:A:477:ILE:HG22 | 1.84 | 0.77 |
| 1:A:573:LEU:HD22 | 1:A:576:VAL:HG11 | 1.67 | 0.77 |
| 1:A:993:LEU:HA | 1:A:998:CYS:SG | 2.25 | 0.77 |
| 1:B:492:HIS:CE1 | 1:B:553:LEU:CD2 | 2.68 | 0.77 |
| 1:F:573:LEU:HD22 | 1:F:576:VAL:HG11 | 1.67 | 0.77 |
| 1:H:474:ALA:O | 1:H:477:ILE:HG22 | 1.84 | 0.77 |
| 1:J:640:GLU:N | 1:J:640:GLU:OE1 | 2.18 | 0.77 |
| 2:S:272:ASN:ND2 | 2:S:273:MET:SD | 2.57 | 0.77 |
| 1:B:186:GLU:OE1 | 1:B:187:LEU:HD23 | 1.84 | 0.77 |
| 1:B:640:GLU:OE1 | 1:B:640:GLU:N | 2.18 | 0.77 |
| 1:D:217:GLU:HG3 | 1:E:146:SER:HA | 1.65 | 0.77 |
| 1:F:152:GLU:OE1 | 1:F:152:GLU:N | 2.13 | 0.77 |
| 1:F:217:GLU:HB2 | 1:G:149:GLN:NE2 | 2.00 | 0.77 |
| 1:G:818:LEU:O | 1:G:822:LEU:HG | 1.85 | 0.77 |
| 1:G:993:LEU:HA | 1:G:998:CYS:SG | 2.25 | 0.77 |
| 1:I:640:GLU:OE1 | 1:I:640:GLU:N | 2.18 | 0.77 |
| 1:J:326:GLU:HB2 | 1:J:331:LEU:HB2 | 1.65 | 0.77 |
| 1:B:993:LEU:HA | 1:B:998:CYS:SG | 2.25 | 0.77 |
| 1:D:362:LEU:HD12 | 1:D:365:PRO:HG3 | 1.67 | 0.77 |
| 1:E:362:LEU:HD12 | 1:E:365:PRO:HG3 | 1.67 | 0.77 |
| 1:H:168:TYR:CE2 | 1:H:238:LYS:HE2 | 2.20 | 0.77 |
| 1:H:502:PHE:HA | 1:H:521:ILE:HG13 | 1.67 | 0.77 |
| 1:A:168:TYR:CE2 | 1:A:238:LYS:HE2 | 2.20 | 0.76 |
| 1:A:186:GLU:OE1 | 1:A:187:LEU:HD23 | 1.84 | 0.76 |
| 1:A:943:LEU:HD22 | 1:A:971:LEU:HD12 | 1.68 | 0.76 |
| 1:B:168:TYR:CE2 | 1:B:238:LYS:HE2 | 2.20 | 0.76 |
| 1:B:217:GLU:HG3 | 1:C:146:SER:HA | 1.66 | 0.76 |
| 1:C:270:ARG:NH1 | 1:C:275:LEU:HD13 | 1.97 | 0.76 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:C:568:PHE:HB3 | 1:C:570:LYS:HG3 | 1.65 | 0.76 |
| 1:C:993:LEU:HA | 1:C:998:CYS:SG | 2.25 | 0.76 |
| 1:D:535:LEU:CD1 | 1:D:583:LEU:HB3 | 2.15 | 0.76 |
| 1:F:217:GLU:HG3 | 1:G:146:SER:HA | 1.64 | 0.76 |
| 1:G:217:GLU:HB2 | 1:H:149:GLN:NE2 | 1.99 | 0.76 |
| 1:I:623:ILE:H | 1:I:623:ILE:HD12 | 1.50 | 0.76 |
| 1:I:993:LEU:HA | 1:I:998:CYS:SG | 2.25 | 0.76 |
| 1:J:993:LEU:HA | 1:J:998:CYS:SG | 2.25 | 0.76 |
| 1:A:405:LEU:HD11 | 1:A:418:VAL:HG21 | 1.68 | 0.76 |
| 1:A:492:HIS:HE2 | 1:A:553:LEU:HD21 | 1.50 | 0.76 |
| 1:D:492:HIS:CE1 | 1:D:553:LEU:CD2 | 2.67 | 0.76 |
| 1:D:623:ILE:H | 1:D:623:ILE:HD12 | 1.49 | 0.76 |
| 1:F:168:TYR:CE2 | 1:F:238:LYS:HE2 | 2.20 | 0.76 |
| 1:F:733:LEU:O | 1:F:736:VAL:HG22 | 1.85 | 0.76 |
| 1:H:217:GLU:HB2 | 1:I:149:GLN:NE2 | 2.00 | 0.76 |
| 1:H:640:GLU:OE1 | 1:H:640:GLU:N | 2.18 | 0.76 |
| 1:I:168:TYR:CE2 | 1:I:238:LYS:HE2 | 2.20 | 0.76 |
| 1:J:186:GLU:OE1 | 1:J:187:LEU:HD23 | 1.84 | 0.76 |
| 1:D:818:LEU:O | 1:D:822:LEU:HG | 1.85 | 0.76 |
| 1:D:993:LEU:HA | 1:D:998:CYS:SG | 2.25 | 0.76 |
| 1:E:204:LYS:HG2 | 1:E:205:MET:H | 1.51 | 0.76 |
| 1:E:492:HIS:CE1 | 1:E:553:LEU:CD2 | 2.68 | 0.76 |
| 1:F:535:LEU:CD1 | 1:F:583:LEU:HB3 | 2.15 | 0.76 |
| 1:F:640:GLU:OE1 | 1:F:640:GLU:N | 2.18 | 0.76 |
| 1:G:535:LEU:CD1 | 1:G:583:LEU:HB3 | 2.15 | 0.76 |
| 1:B:474:ALA:O | 1:B:477:ILE:HG22 | 1.84 | 0.76 |
| 1:B:492:HIS:HE2 | 1:B:553:LEU:HD21 | 1.50 | 0.76 |
| 1:B:573:LEU:HD22 | 1:B:576:VAL:HG11 | 1.66 | 0.76 |
| 1:C:168:TYR:CE2 | 1:C:238:LYS:HE2 | 2.20 | 0.76 |
| 1:C:818:LEU:O | 1:C:822:LEU:HG | 1.85 | 0.76 |
| 1:E:136:TYR:OH | 1:E:280:CYS:SG | 2.41 | 0.76 |
| 1:E:168:TYR:CE2 | 1:E:238:LYS:HE2 | 2.20 | 0.76 |
| 1:E:217:GLU:HB2 | 1:F:149:GLN:NE2 | 2.00 | 0.76 |
| 1:E:573:LEU:HD22 | 1:E:576:VAL:HG11 | 1.66 | 0.76 |
| 1:E:746:LEU:HG | 1:E:775:LEU:HD13 | 1.66 | 0.76 |
| 1:G:168:TYR:CE2 | 1:G:238:LYS:HE2 | 2.20 | 0.76 |
| 1:G:746:LEU:HG | 1:G:775:LEU:HD13 | 1.66 | 0.76 |
| 1:H:943:LEU:HD22 | 1:H:971:LEU:HD12 | 1.68 | 0.76 |
| 1:I:326:GLU:HB2 | 1:I:331:LEU:HB2 | 1.65 | 0.76 |
| 1:I:818:LEU:O | 1:I:822:LEU:HG | 1.85 | 0.76 |
| 1:J:168:TYR:CE2 | 1:J:238:LYS:HE2 | 2.20 | 0.76 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:J:733:LEU:O | 1:J:736:VAL:HG22 | 1.85 | 0.76 |
| 1:A:733:LEU:O | 1:A:736:VAL:HG22 | 1.85 | 0.76 |
| 1:C:362:LEU:HD12 | 1:C:365:PRO:HG3 | 1.67 | 0.76 |
| 1:C:535:LEU:CD1 | 1:C:583:LEU:HB3 | 2.15 | 0.76 |
| 1:C:567:LYS:NZ | 1:C:623:ILE:HG12 | 2.01 | 0.76 |
| 1:D:640:GLU:N | 1:D:640:GLU:OE1 | 2.18 | 0.76 |
| 1:D:761:LEU:O | 1:D:765:LEU:HD23 | 1.85 | 0.76 |
| 1:E:474:ALA:O | 1:E:477:ILE:HG22 | 1.84 | 0.76 |
| 1:E:733:LEU:O | 1:E:736:VAL:HG22 | 1.86 | 0.76 |
| 1:F:362:LEU:HD12 | 1:F:365:PRO:HG3 | 1.67 | 0.76 |
| 1:G:943:LEU:HD22 | 1:G:971:LEU:HD12 | 1.68 | 0.76 |
| 1:H:733:LEU:O | 1:H:736:VAL:HG22 | 1.85 | 0.76 |
| 1:B:204:LYS:HG2 | 1:B:205:MET:H | 1.51 | 0.76 |
| 1:B:311:PHE:CE1 | 1:B:329:ASP:OD1 | 2.34 | 0.76 |
| 1:B:943:LEU:HD22 | 1:B:971:LEU:HD12 | 1.68 | 0.76 |
| 1:B:945:VAL:HG22 | 1:B:973:LYS:HB3 | 1.68 | 0.76 |
| 1:E:993:LEU:HA | 1:E:998:CYS:SG | 2.25 | 0.76 |
| 1:F:945:VAL:HG22 | 1:F:973:LYS:HB3 | 1.68 | 0.76 |
| 1:H:152:GLU:OE1 | 1:H:152:GLU:N | 2.13 | 0.76 |
| 1:I:186:GLU:OE1 | 1:I:187:LEU:HD23 | 1.84 | 0.76 |
| 1:A:204:LYS:HG2 | 1:A:205:MET:H | 1.51 | 0.76 |
| 1:A:945:VAL:HG22 | 1:A:973:LYS:HB3 | 1.68 | 0.76 |
| 1:C:217:GLU:HG3 | 1:D:146:SER:HA | 1.65 | 0.76 |
| 1:C:640:GLU:OE1 | 1:C:640:GLU:N | 2.18 | 0.76 |
| 1:G:186:GLU:OE1 | 1:G:187:LEU:HD23 | 1.84 | 0.76 |
| 1:G:619:LYS:CB | 2:Q:261:ASP:CG | 2.54 | 0.76 |
| 1:J:761:LEU:O | 1:J:765:LEU:HD23 | 1.85 | 0.76 |
| 1:A:761:LEU:O | 1:A:765:LEU:HD23 | 1.85 | 0.76 |
| 1:F:635:TYR:O | 1:F:638:GLN:HG2 | 1.86 | 0.76 |
| 1:F:761:LEU:O | 1:F:765:LEU:HD23 | 1.85 | 0.76 |
| 1:G:635:TYR:O | 1:G:638:GLN:HG2 | 1.86 | 0.76 |
| 1:H:993:LEU:HA | 1:H:998:CYS:SG | 2.25 | 0.76 |
| 1:J:492:HIS:CE1 | 1:J:553:LEU:CD2 | 2.67 | 0.76 |
| 1:B:362:LEU:HD12 | 1:B:365:PRO:HG3 | 1.67 | 0.76 |
| 1:C:637:MET:HE2 | 1:C:639:GLU:OE1 | 1.84 | 0.76 |
| 1:C:733:LEU:O | 1:C:736:VAL:HG22 | 1.85 | 0.76 |
| 1:C:919:LEU:O | 1:C:919:LEU:HD23 | 1.86 | 0.76 |
| 1:D:168:TYR:CE2 | 1:D:238:LYS:HE2 | 2.20 | 0.76 |
| 1:D:573:LEU:HD22 | 1:D:576:VAL:HG11 | 1.66 | 0.76 |
| 1:D:635:TYR:O | 1:D:638:GLN:HG2 | 1.86 | 0.76 |
| 1:D:919:LEU:O | 1:D:919:LEU:HD23 | 1.86 | 0.76 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:E:152:GLU:OE1 | 1:E:152:GLU:N | 2.14 | 0.76 |
| 1:E:919:LEU:HD23 | 1:E:919:LEU:O | 1.86 | 0.76 |
| 1:E:945:VAL:HG22 | 1:E:973:LYS:HB3 | 1.68 | 0.76 |
| 1:G:945:VAL:HG22 | 1:G:973:LYS:HB3 | 1.68 | 0.76 |
| 1:H:919:LEU:HD23 | 1:H:919:LEU:O | 1.86 | 0.76 |
| 1:B:635:TYR:O | 1:B:638:GLN:HG2 | 1.86 | 0.76 |
| 1:B:637:MET:HE2 | 1:B:639:GLU:OE1 | 1.85 | 0.76 |
| 1:C:573:LEU:HD22 | 1:C:576:VAL:HG11 | 1.66 | 0.76 |
| 1:D:311:PHE:CE1 | 1:D:329:ASP:OD1 | 2.34 | 0.76 |
| 1:F:186:GLU:OE1 | 1:F:187:LEU:HD23 | 1.84 | 0.76 |
| 1:F:492:HIS:CE1 | 1:F:553:LEU:CD2 | 2.68 | 0.76 |
| 1:F:919:LEU:O | 1:F:919:LEU:HD23 | 1.86 | 0.76 |
| 1:G:640:GLU:N | 1:G:640:GLU:OE1 | 2.18 | 0.76 |
| 1:G:761:LEU:O | 1:G:765:LEU:HD23 | 1.85 | 0.76 |
| 1:J:943:LEU:HD22 | 1:J:971:LEU:HD12 | 1.68 | 0.76 |
| 2:N:33:ASN:OD1 | 2:N:33:ASN:O | 2.04 | 0.76 |
| 1:A:637:MET:CE | 1:A:639:GLU:OE1 | 2.34 | 0.75 |
| 1:B:815:ILE:HG13 | 1:B:839:LEU:HD13 | 1.69 | 0.75 |
| 1:C:945:VAL:HG22 | 1:C:973:LYS:HB3 | 1.68 | 0.75 |
| 1:F:204:LYS:HG2 | 1:F:205:MET:H | 1.51 | 0.75 |
| 1:F:619:LYS:CB | 2:P:261:ASP:CG | 2.55 | 0.75 |
| 1:F:746:LEU:HG | 1:F:775:LEU:HD13 | 1.66 | 0.75 |
| 1:F:993:LEU:HA | 1:F:998:CYS:SG | 2.25 | 0.75 |
| 1:H:635:TYR:O | 1:H:638:GLN:HG2 | 1.86 | 0.75 |
| 1:I:535:LEU:CD1 | 1:I:583:LEU:HB3 | 2.15 | 0.75 |
| 1:I:733:LEU:O | 1:I:736:VAL:HG22 | 1.86 | 0.75 |
| 2:Q:33:ASN:OD1 | 2:Q:33:ASN:O | 2.04 | 0.75 |
| 1:A:535:LEU:CD1 | 1:A:583:LEU:HB3 | 2.15 | 0.75 |
| 1:B:624:GLN:HG3 | 1:B:625:PRO:CD | 2.16 | 0.75 |
| 1:B:733:LEU:O | 1:B:736:VAL:HG22 | 1.86 | 0.75 |
| 1:C:623:ILE:H | 1:C:623:ILE:HD12 | 1.50 | 0.75 |
| 1:E:624:GLN:HB2 | 1:E:625:PRO:HD3 | 1.67 | 0.75 |
| 1:G:637:MET:CE | 1:G:639:GLU:OE1 | 2.34 | 0.75 |
| 1:H:186:GLU:OE1 | 1:H:187:LEU:HD23 | 1.84 | 0.75 |
| 1:I:637:MET:CE | 1:I:639:GLU:OE1 | 2.34 | 0.75 |
| 1:B:637:MET:CE | 1:B:639:GLU:OE1 | 2.34 | 0.75 |
| 1:B:761:LEU:O | 1:B:765:LEU:HD23 | 1.85 | 0.75 |
| 1:C:186:GLU:OE1 | 1:C:187:LEU:HD23 | 1.84 | 0.75 |
| 1:D:945:VAL:HG22 | 1:D:973:LYS:HB3 | 1.68 | 0.75 |
| 1:E:635:TYR:O | 1:E:638:GLN:HG2 | 1.86 | 0.75 |
| 1:E:637:MET:CE | 1:E:639:GLU:OE1 | 2.34 | 0.75 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:E:761:LEU:O | 1:E:765:LEU:HD23 | 1.85 | 0.75 |
| 1:F:818:LEU:O | 1:F:822:LEU:HG | 1.85 | 0.75 |
| 1:G:270:ARG:NH1 | 1:G:275:LEU:HD13 | 1.97 | 0.75 |
| 1:I:761:LEU:O | 1:I:765:LEU:HD23 | 1.85 | 0.75 |
| 2:P:33:ASN:O | 2:P:33:ASN:OD1 | 2.05 | 0.75 |
| 2:S:33:ASN:OD1 | 2:S:33:ASN:O | 2.05 | 0.75 |
| 1:A:815:ILE:HG13 | 1:A:839:LEU:HD13 | 1.69 | 0.75 |
| 1:B:919:LEU:HD23 | 1:B:919:LEU:O | 1.86 | 0.75 |
| 1:E:492:HIS:HE2 | 1:E:553:LEU:HD21 | 1.50 | 0.75 |
| 1:E:535:LEU:CD1 | 1:E:583:LEU:HB3 | 2.15 | 0.75 |
| 1:F:619:LYS:CB | 2:P:261:ASP:CB | 2.64 | 0.75 |
| 1:G:492:HIS:CE1 | 1:G:553:LEU:CD2 | 2.68 | 0.75 |
| 1:J:945:VAL:HG22 | 1:J:973:LYS:HB3 | 1.68 | 0.75 |
| 2:K:33:ASN:OD1 | 2:K:33:ASN:O | 2.04 | 0.75 |
| 1:A:362:LEU:HD12 | 1:A:365:PRO:HG3 | 1.67 | 0.75 |
| 1:D:619:LYS:CB | 2:N:261:ASP:CB | 2.64 | 0.75 |
| 1:G:733:LEU:O | 1:G:736:VAL:HG22 | 1.86 | 0.75 |
| 1:C:815:ILE:HG13 | 1:C:839:LEU:HD13 | 1.69 | 0.75 |
| 1:E:190:ILE:HA | 1:E:194:LYS:HB2 | 1.69 | 0.75 |
| 1:E:562:LEU:HD11 | 1:E:611:TRP:CD2 | 2.22 | 0.75 |
| 1:G:204:LYS:HG2 | 1:G:205:MET:H | 1.51 | 0.75 |
| 1:G:362:LEU:HD12 | 1:G:365:PRO:HG3 | 1.67 | 0.75 |
| 1:G:562:LEU:HD11 | 1:G:611:TRP:CD2 | 2.22 | 0.75 |
| 1:H:815:ILE:HG13 | 1:H:839:LEU:HD13 | 1.69 | 0.75 |
| 1:I:624:GLN:HB2 | 1:I:625:PRO:HD3 | 1.66 | 0.75 |
| 1:I:635:TYR:O | 1:I:638:GLN:HG2 | 1.86 | 0.75 |
| 1:I:943:LEU:HD22 | 1:I:971:LEU:HD12 | 1.68 | 0.75 |
| 1:J:204:LYS:HG2 | 1:J:205:MET:H | 1.51 | 0.75 |
| 1:A:919:LEU:O | 1:A:919:LEU:HD23 | 1.86 | 0.75 |
| 1:B:143:TYR:CD1 | 1:B:281:PRO:HG2 | 2.22 | 0.75 |
| 1:C:190:ILE:HA | 1:C:194:LYS:HB2 | 1.69 | 0.75 |
| 1:C:440:THR:O | 1:C:444:VAL:HG23 | 1.87 | 0.75 |
| 1:D:637:MET:CE | 1:D:639:GLU:OE1 | 2.34 | 0.75 |
| 1:F:562:LEU:HD11 | 1:F:611:TRP:CD2 | 2.22 | 0.75 |
| 1:F:943:LEU:HD22 | 1:F:971:LEU:HD12 | 1.68 | 0.75 |
| 1:G:815:ILE:HG13 | 1:G:839:LEU:HD13 | 1.69 | 0.75 |
| 1:H:535:LEU:CD1 | 1:H:583:LEU:HB3 | 2.15 | 0.75 |
| 1:H:945:VAL:HG22 | 1:H:973:LYS:HB3 | 1.68 | 0.75 |
| 1:I:475:ASP:HB3 | 1:I:553:LEU:CD2 | 2.03 | 0.75 |
| 1:I:919:LEU:O | 1:I:919:LEU:HD23 | 1.86 | 0.75 |
| 1:A:143:TYR:CD1 | 1:A:281:PRO:HG2 | 2.22 | 0.75 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:A:635:TYR:O | 1:A:638:GLN:HG2 | 1.86 | 0.75 |
| 1:C:562:LEU:H | 1:C:562:LEU:CD1 | 1.96 | 0.75 |
| 1:D:204:LYS:HG2 | 1:D:205:MET:H | 1.51 | 0.75 |
| 1:D:492:HIS:HE2 | 1:D:553:LEU:HD21 | 1.50 | 0.75 |
| 1:G:919:LEU:O | 1:G:919:LEU:HD23 | 1.86 | 0.75 |
| 1:I:136:TYR:HH | 1:I:280:CYS:HG | 1.30 | 0.75 |
| 1:J:635:TYR:O | 1:J:638:GLN:HG2 | 1.86 | 0.75 |
| 1:B:623:ILE:H | 1:B:623:ILE:HD12 | 1.50 | 0.75 |
| 1:C:637:MET:CE | 1:C:639:GLU:OE1 | 2.34 | 0.75 |
| 1:D:733:LEU:O | 1:D:736:VAL:HG22 | 1.86 | 0.75 |
| 1:E:143:TYR:CD1 | 1:E:281:PRO:HG2 | 2.22 | 0.75 |
| 1:E:440:THR:O | 1:E:444:VAL:HG23 | 1.87 | 0.75 |
| 1:E:475:ASP:HB3 | 1:E:553:LEU:CD2 | 2.03 | 0.75 |
| 1:F:143:TYR:CD1 | 1:F:281:PRO:HG2 | 2.22 | 0.75 |
| 1:F:440:THR:O | 1:F:444:VAL:HG23 | 1.87 | 0.75 |
| 1:H:637:MET:CE | 1:H:639:GLU:OE1 | 2.34 | 0.75 |
| 1:H:761:LEU:O | 1:H:765:LEU:HD23 | 1.85 | 0.75 |
| 1:B:505:MET:HB2 | 1:B:518:TYR:CE1 | 2.22 | 0.74 |
| 1:C:143:TYR:CD1 | 1:C:281:PRO:HG2 | 2.22 | 0.74 |
| 1:D:190:ILE:HA | 1:D:194:LYS:HB2 | 1.69 | 0.74 |
| 1:F:637:MET:CE | 1:F:639:GLU:OE1 | 2.34 | 0.74 |
| 1:H:362:LEU:HD12 | 1:H:365:PRO:HG3 | 1.67 | 0.74 |
| 1:I:945:VAL:HG22 | 1:I:973:LYS:HB3 | 1.68 | 0.74 |
| 1:B:270:ARG:NH1 | 1:B:275:LEU:HD13 | 1.97 | 0.74 |
| 1:B:535:LEU:CD1 | 1:B:583:LEU:HB3 | 2.15 | 0.74 |
| 1:C:492:HIS:CE1 | 1:C:553:LEU:CD2 | 2.68 | 0.74 |
| 1:D:503:LEU:HD21 | 1:D:520:PHE:CE1 | 2.22 | 0.74 |
| 1:D:505:MET:HB2 | 1:D:518:TYR:CE1 | 2.22 | 0.74 |
| 1:D:815:ILE:HG13 | 1:D:839:LEU:HD13 | 1.69 | 0.74 |
| 1:G:143:TYR:CD1 | 1:G:281:PRO:HG2 | 2.22 | 0.74 |
| 1:G:311:PHE:CE1 | 1:G:329:ASP:OD1 | 2.34 | 0.74 |
| 1:G:603:GLN:HA | 1:G:606:LEU:HD13 | 1.69 | 0.74 |
| 1:I:562:LEU:HD11 | 1:I:611:TRP:CD2 | 2.22 | 0.74 |
| 1:C:943:LEU:HD22 | 1:C:971:LEU:HD12 | 1.68 | 0.74 |
| 1:F:190:ILE:HA | 1:F:194:LYS:HB2 | 1.69 | 0.74 |
| 1:J:362:LEU:HD12 | 1:J:365:PRO:HG3 | 1.67 | 0.74 |
| 1:A:505:MET:HB2 | 1:A:518:TYR:CE1 | 2.22 | 0.74 |
| 1:E:505:MET:HB2 | 1:E:518:TYR:CE1 | 2.22 | 0.74 |
| 1:G:190:ILE:HA | 1:G:194:LYS:HB2 | 1.69 | 0.74 |
| 1:H:440:THR:O | 1:H:444:VAL:HG23 | 1.87 | 0.74 |
| 1:I:204:LYS:HG2 | 1:I:205:MET:H | 1.51 | 0.74 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:J:143:TYR:CD1 | 1:J:281:PRO:HG2 | 2.22 | 0.74 |
| 1:J:311:PHE:CE1 | 1:J:329:ASP:OD1 | 2.34 | 0.74 |
| 1:J:637:MET:CE | 1:J:639:GLU:OE1 | 2.34 | 0.74 |
| 1:J:919:LEU:HD23 | 1:J:919:LEU:O | 1.86 | 0.74 |
| 1:B:440:THR:O | 1:B:444:VAL:HG23 | 1.87 | 0.74 |
| 1:C:761:LEU:O | 1:C:765:LEU:HD23 | 1.85 | 0.74 |
| 1:D:919:LEU:HD22 | 1:D:924:LEU:HD11 | 1.70 | 0.74 |
| 1:D:1010:PHE:HB3 | 1:D:1014:THR:OG1 | 1.88 | 0.74 |
| 1:E:560:VAL:HA | 1:E:563:GLU:OE1 | 1.88 | 0.74 |
| 1:F:560:VAL:HA | 1:F:563:GLU:OE1 | 1.88 | 0.74 |
| 1:I:815:ILE:HG13 | 1:I:839:LEU:HD13 | 1.69 | 0.74 |
| 1:I:919:LEU:HD22 | 1:I:924:LEU:HD11 | 1.70 | 0.74 |
| 1:J:492:HIS:HE2 | 1:J:553:LEU:HD21 | 1.50 | 0.74 |
| 1:A:190:ILE:HA | 1:A:194:LYS:HB2 | 1.69 | 0.74 |
| 1:A:534:TYR:CE2 | 1:A:561:LEU:HD22 | 2.22 | 0.74 |
| 1:C:204:LYS:HG2 | 1:C:205:MET:H | 1.51 | 0.74 |
| 1:C:635:TYR:O | 1:C:638:GLN:HG2 | 1.86 | 0.74 |
| 1:F:492:HIS:HE2 | 1:F:553:LEU:HD21 | 1.50 | 0.74 |
| 1:F:565:TYR:OH | 1:F:625:PRO:HA | 1.87 | 0.74 |
| 1:F:603:GLN:HA | 1:F:606:LEU:HD13 | 1.69 | 0.74 |
| 1:G:1010:PHE:HB3 | 1:G:1014:THR:OG1 | 1.88 | 0.74 |
| 1:H:204:LYS:HG2 | 1:H:205:MET:H | 1.51 | 0.74 |
| 1:I:362:LEU:HD12 | 1:I:365:PRO:HG3 | 1.67 | 0.74 |
| 1:B:190:ILE:HA | 1:B:194:LYS:HB2 | 1.69 | 0.74 |
| 1:D:143:TYR:CD1 | 1:D:281:PRO:HG2 | 2.22 | 0.74 |
| 1:G:440:THR:O | 1:G:444:VAL:HG23 | 1.87 | 0.74 |
| 1:H:270:ARG:NH1 | 1:H:275:LEU:HD13 | 1.97 | 0.74 |
| 1:I:619:LYS:CB | 2:S:261:ASP:CB | 2.65 | 0.74 |
| 1:A:440:THR:O | 1:A:444:VAL:HG23 | 1.87 | 0.74 |
| 1:C:492:HIS:HE2 | 1:C:553:LEU:HD21 | 1.50 | 0.74 |
| 1:C:919:LEU:HD22 | 1:C:924:LEU:HD11 | 1.70 | 0.74 |
| 1:D:560:VAL:HA | 1:D:563:GLU:OE1 | 1.88 | 0.74 |
| 1:E:815:ILE:HG13 | 1:E:839:LEU:HD13 | 1.69 | 0.74 |
| 1:G:560:VAL:HA | 1:G:563:GLU:OE1 | 1.88 | 0.74 |
| 1:G:624:GLN:HB2 | 1:G:625:PRO:HD3 | 1.68 | 0.74 |
| 1:H:562:LEU:HD11 | 1:H:611:TRP:CD2 | 2.22 | 0.74 |
| 1:H:603:GLN:HA | 1:H:606:LEU:HD13 | 1.69 | 0.74 |
| 1:H:919:LEU:HD22 | 1:H:924:LEU:HD11 | 1.70 | 0.74 |
| 1:I:440:THR:O | 1:I:444:VAL:HG23 | 1.87 | 0.74 |
| 1:D:562:LEU:HD11 | 1:D:611:TRP:CD2 | 2.22 | 0.74 |
| 1:E:919:LEU:HD22 | 1:E:924:LEU:HD11 | 1.70 | 0.74 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:F:505:MET:HB2 | 1:F:518:TYR:CE1 | 2.22 | 0.74 |
| 1:D:619:LYS:CB | 2:N:261:ASP:CG | 2.57 | 0.74 |
| 1:E:943:LEU:HD22 | 1:E:971:LEU:HD12 | 1.68 | 0.74 |
| 1:G:505:MET:HB2 | 1:G:518:TYR:CE1 | 2.22 | 0.74 |
| 1:H:560:VAL:HA | 1:H:563:GLU:OE1 | 1.88 | 0.74 |
| 1:I:143:TYR:CD1 | 1:I:281:PRO:HG2 | 2.22 | 0.74 |
| 1:J:919:LEU:HD22 | 1:J:924:LEU:HD11 | 1.70 | 0.74 |
| 1:D:440:THR:O | 1:D:444:VAL:HG23 | 1.87 | 0.73 |
| 1:D:562:LEU:HD21 | 1:D:611:TRP:CD1 | 2.23 | 0.73 |
| 1:H:623:ILE:HD12 | 1:H:623:ILE:H | 1.51 | 0.73 |
| 1:J:190:ILE:HA | 1:J:194:LYS:HB2 | 1.69 | 0.73 |
| 1:J:815:ILE:HG13 | 1:J:839:LEU:HD13 | 1.69 | 0.73 |
| 1:F:1010:PHE:HB3 | 1:F:1014:THR:OG1 | 1.88 | 0.73 |
| 1:G:908:LEU:HA | 1:G:914:LEU:CD2 | 2.18 | 0.73 |
| 1:H:505:MET:HB2 | 1:H:518:TYR:CE1 | 2.22 | 0.73 |
| 1:H:562:LEU:HD21 | 1:H:611:TRP:CD1 | 2.23 | 0.73 |
| 1:A:624:GLN:HG3 | 1:A:625:PRO:CD | 2.18 | 0.73 |
| 1:A:919:LEU:HD22 | 1:A:924:LEU:HD11 | 1.70 | 0.73 |
| 1:B:562:LEU:HD21 | 1:B:611:TRP:CD1 | 2.23 | 0.73 |
| 1:B:1010:PHE:HB3 | 1:B:1014:THR:OG1 | 1.88 | 0.73 |
| 1:C:505:MET:HB2 | 1:C:518:TYR:CE1 | 2.22 | 0.73 |
| 1:C:1010:PHE:HB3 | 1:C:1014:THR:OG1 | 1.88 | 0.73 |
| 1:E:1010:PHE:HB3 | 1:E:1014:THR:OG1 | 1.88 | 0.73 |
| 1:F:815:ILE:HG13 | 1:F:839:LEU:HD13 | 1.69 | 0.73 |
| 1:F:919:LEU:HD22 | 1:F:924:LEU:HD11 | 1.70 | 0.73 |
| 1:G:475:ASP:HB3 | 1:G:553:LEU:CD2 | 2.03 | 0.73 |
| 1:H:565:TYR:OH | 1:H:625:PRO:HA | 1.86 | 0.73 |
| 1:J:562:LEU:HD11 | 1:J:611:TRP:CD2 | 2.22 | 0.73 |
| 1:A:1010:PHE:HB3 | 1:A:1014:THR:OG1 | 1.88 | 0.73 |
| 1:G:919:LEU:HD22 | 1:G:924:LEU:HD11 | 1.70 | 0.73 |
| 1:H:190:ILE:HA | 1:H:194:LYS:HB2 | 1.69 | 0.73 |
| 1:I:270:ARG:NH1 | 1:I:275:LEU:HD13 | 1.97 | 0.73 |
| 1:A:574:ILE:O | 1:A:578:ARG:HG3 | 1.89 | 0.73 |
| 1:A:741:GLN:O | 1:A:771:ASN:ND2 | 2.21 | 0.73 |
| 1:B:919:LEU:HD22 | 1:B:924:LEU:HD11 | 1.70 | 0.73 |
| 1:C:603:GLN:HA | 1:C:606:LEU:HD13 | 1.69 | 0.73 |
| 1:D:574:ILE:O | 1:D:578:ARG:HG3 | 1.89 | 0.73 |
| 1:F:908:LEU:HA | 1:F:914:LEU:CD2 | 2.18 | 0.73 |
| 1:G:562:LEU:HD21 | 1:G:611:TRP:CD1 | 2.23 | 0.73 |
| 1:I:562:LEU:HD21 | 1:I:611:TRP:CD1 | 2.23 | 0.73 |
| 1:J:440:THR:O | 1:J:444:VAL:HG23 | 1.87 | 0.73 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:J:505:MET:HB2 | 1:J:518:TYR:CE1 | 2.22 | 0.73 |
| 1:E:603:GLN:HA | 1:E:606:LEU:HD13 | 1.69 | 0.73 |
| 1:G:492:HIS:HE2 | 1:G:553:LEU:HD21 | 1.50 | 0.73 |
| 1:H:143:TYR:CD1 | 1:H:281:PRO:HG2 | 2.22 | 0.73 |
| 1:H:574:ILE:O | 1:H:578:ARG:HG3 | 1.89 | 0.73 |
| 1:H:1010:PHE:HB3 | 1:H:1014:THR:OG1 | 1.88 | 0.73 |
| 1:B:603:GLN:HA | 1:B:606:LEU:HD13 | 1.69 | 0.73 |
| 1:E:562:LEU:HD21 | 1:E:611:TRP:CD1 | 2.23 | 0.73 |
| 1:I:603:GLN:HA | 1:I:606:LEU:HD13 | 1.69 | 0.73 |
| 1:J:535:LEU:CD1 | 1:J:583:LEU:HB3 | 2.15 | 0.73 |
| 2:R:149:LEU:HD12 | 2:R:152:MET:HE3 | 1.70 | 0.73 |
| 1:D:943:LEU:HD22 | 1:D:971:LEU:HD12 | 1.68 | 0.73 |
| 1:I:505:MET:HB2 | 1:I:518:TYR:CE1 | 2.22 | 0.73 |
| 1:J:475:ASP:OD2 | 1:J:492:HIS:NE2 | 2.22 | 0.73 |
| 1:J:1010:PHE:HB3 | 1:J:1014:THR:OG1 | 1.88 | 0.73 |
| 2:P:149:LEU:HD12 | 2:P:152:MET:HE3 | 1.71 | 0.73 |
| 1:E:908:LEU:HA | 1:E:914:LEU:CD2 | 2.18 | 0.73 |
| 1:G:574:ILE:O | 1:G:578:ARG:HG3 | 1.89 | 0.73 |
| 1:B:562:LEU:HD11 | 1:B:611:TRP:CD2 | 2.22 | 0.72 |
| 1:B:574:ILE:O | 1:B:578:ARG:HG3 | 1.89 | 0.72 |
| 1:F:562:LEU:HD21 | 1:F:611:TRP:CD1 | 2.23 | 0.72 |
| 1:H:492:HIS:HE2 | 1:H:553:LEU:HD21 | 1.50 | 0.72 |
| 1:H:619:LYS:CB | 2:R:261:ASP:CB | 2.67 | 0.72 |
| 1:I:190:ILE:HA | 1:I:194:LYS:HB2 | 1.69 | 0.72 |
| 1:I:475:ASP:OD2 | 1:I:492:HIS:NE2 | 2.22 | 0.72 |
| 1:I:741:GLN:O | 1:I:771:ASN:ND2 | 2.21 | 0.72 |
| 1:J:562:LEU:HD21 | 1:J:611:TRP:CD1 | 2.23 | 0.72 |
| 1:A:733:LEU:O | 1:A:737:LEU:HG | 1.89 | 0.72 |
| 1:I:1010:PHE:HB3 | 1:I:1014:THR:OG1 | 1.88 | 0.72 |
| 1:C:733:LEU:O | 1:C:737:LEU:HG | 1.89 | 0.72 |
| 2:N:149:LEU:HD12 | 2:N:152:MET:HE3 | 1.70 | 0.72 |
| 1:B:733:LEU:O | 1:B:737:LEU:HG | 1.89 | 0.72 |
| 1:D:603:GLN:HA | 1:D:606:LEU:HD13 | 1.69 | 0.72 |
| 1:D:908:LEU:HA | 1:D:914:LEU:CD2 | 2.18 | 0.72 |
| 1:J:733:LEU:O | 1:J:737:LEU:HG | 1.89 | 0.72 |
| 1:A:475:ASP:OD2 | 1:A:492:HIS:NE2 | 2.22 | 0.72 |
| 1:A:748:LEU:HD23 | 1:A:780:CYS:SG | 2.30 | 0.72 |
| 1:E:574:ILE:O | 1:E:578:ARG:HG3 | 1.89 | 0.72 |
| 1:I:733:LEU:O | 1:I:737:LEU:HG | 1.89 | 0.72 |
| 1:J:240:MET:HE2 | 1:J:258:TYR:HB2 | 1.70 | 0.72 |
| 1:J:603:GLN:HA | 1:J:606:LEU:HD13 | 1.69 | 0.72 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:A:581:PHE:HD2 | 1:A:633:CYS:HB3 | 1.55 | 0.72 |
| 1:B:748:LEU:HD23 | 1:B:780:CYS:SG | 2.30 | 0.72 |
| 1:C:748:LEU:HD23 | 1:C:780:CYS:SG | 2.30 | 0.72 |
| 1:F:270:ARG:NH1 | 1:F:275:LEU:HD13 | 1.97 | 0.72 |
| 1:I:574:ILE:O | 1:I:578:ARG:HG3 | 1.89 | 0.72 |
| 1:I:622:GLN:NE2 | 1:I:627:GLN:OE1 | 2.22 | 0.72 |
| 2:O:149:LEU:HD12 | 2:O:152:MET:HE3 | 1.71 | 0.72 |
| 1:A:311:PHE:CE1 | 1:A:329:ASP:OD1 | 2.34 | 0.72 |
| 1:B:475:ASP:HB3 | 1:B:553:LEU:CD2 | 2.03 | 0.72 |
| 1:D:748:LEU:HD23 | 1:D:780:CYS:SG | 2.30 | 0.72 |
| 1:F:574:ILE:O | 1:F:578:ARG:HG3 | 1.89 | 0.72 |
| 1:J:581:PHE:HD2 | 1:J:633:CYS:HB3 | 1.55 | 0.72 |
| 1:A:534:TYR:CE2 | 1:A:561:LEU:HB2 | 2.21 | 0.72 |
| 1:D:581:PHE:HD2 | 1:D:633:CYS:HB3 | 1.54 | 0.72 |
| 1:E:748:LEU:HD23 | 1:E:780:CYS:SG | 2.30 | 0.72 |
| 1:H:733:LEU:O | 1:H:737:LEU:HG | 1.89 | 0.72 |
| 1:I:609:LEU:HD13 | 1:I:642:PHE:HE1 | 1.55 | 0.72 |
| 1:I:748:LEU:HD23 | 1:I:780:CYS:SG | 2.30 | 0.72 |
| 2:S:149:LEU:HD12 | 2:S:152:MET:HE3 | 1.70 | 0.72 |
| 1:A:603:GLN:HA | 1:A:606:LEU:HD13 | 1.69 | 0.72 |
| 1:C:574:ILE:O | 1:C:578:ARG:HG3 | 1.89 | 0.72 |
| 1:C:609:LEU:HD13 | 1:C:642:PHE:HE1 | 1.55 | 0.72 |
| 1:D:655:ILE:HD12 | 1:D:656:ASN:H | 1.55 | 0.72 |
| 1:E:475:ASP:OD2 | 1:E:492:HIS:NE2 | 2.22 | 0.72 |
| 1:E:581:PHE:HD2 | 1:E:633:CYS:HB3 | 1.55 | 0.72 |
| 1:G:609:LEU:HD13 | 1:G:642:PHE:HE1 | 1.55 | 0.72 |
| 1:I:492:HIS:HE2 | 1:I:553:LEU:HD21 | 1.50 | 0.72 |
| 1:J:253:PHE:CE2 | 1:J:298:LEU:HD13 | 2.25 | 0.72 |
| 1:J:748:LEU:HD23 | 1:J:780:CYS:SG | 2.30 | 0.72 |
| 1:J:908:LEU:HA | 1:J:914:LEU:CD2 | 2.18 | 0.72 |
| 1:A:470:CYS:SG | 1:A:533:TYR:N | 2.63 | 0.72 |
| 1:C:470:CYS:SG | 1:C:533:TYR:N | 2.63 | 0.72 |
| 1:E:609:LEU:HD13 | 1:E:642:PHE:HE1 | 1.55 | 0.72 |
| 1:H:748:LEU:HD23 | 1:H:780:CYS:SG | 2.30 | 0.72 |
| 2:N:67:ILE:O | 2:N:71:MET:CB | 2.38 | 0.72 |
| 1:C:475:ASP:OD2 | 1:C:492:HIS:NE2 | 2.22 | 0.71 |
| 1:D:475:ASP:OD2 | 1:D:492:HIS:NE2 | 2.22 | 0.71 |
| 1:F:581:PHE:HD2 | 1:F:633:CYS:HB3 | 1.54 | 0.71 |
| 1:G:475:ASP:OD2 | 1:G:492:HIS:NE2 | 2.22 | 0.71 |
| 1:G:655:ILE:HD12 | 1:G:656:ASN:H | 1.55 | 0.71 |
| 1:J:560:VAL:HA | 1:J:563:GLU:OE1 | 1.88 | 0.71 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:J:574:ILE:O | 1:J:578:ARG:HG3 | 1.89 | 0.71 |
| 2:S:67:ILE:O | 2:S:71:MET:CB | 2.38 | 0.71 |
| 2:T:149:LEU:HD12 | 2:T:152:MET:HE3 | 1.70 | 0.71 |
| 1:A:908:LEU:HA | 1:A:914:LEU:CD2 | 2.18 | 0.71 |
| 1:C:741:GLN:O | 1:C:771:ASN:ND2 | 2.21 | 0.71 |
| 1:D:741:GLN:O | 1:D:771:ASN:ND2 | 2.21 | 0.71 |
| 1:E:311:PHE:CE1 | 1:E:329:ASP:OD1 | 2.34 | 0.71 |
| 1:G:562:LEU:HD21 | 1:G:611:TRP:CE2 | 2.25 | 0.71 |
| 1:G:748:LEU:HD23 | 1:G:780:CYS:SG | 2.30 | 0.71 |
| 1:I:253:PHE:CE2 | 1:I:298:LEU:HD13 | 2.25 | 0.71 |
| 1:I:560:VAL:HA | 1:I:563:GLU:OE1 | 1.88 | 0.71 |
| 1:J:470:CYS:SG | 1:J:533:TYR:N | 2.63 | 0.71 |
| 1:J:509:GLN:HB3 | 1:J:514:CYS:HB3 | 1.73 | 0.71 |
| 2:M:67:ILE:O | 2:M:71:MET:CB | 2.38 | 0.71 |
| 1:A:609:LEU:HD13 | 1:A:642:PHE:HE1 | 1.55 | 0.71 |
| 1:B:475:ASP:OD2 | 1:B:492:HIS:NE2 | 2.22 | 0.71 |
| 1:B:562:LEU:HD21 | 1:B:611:TRP:CE2 | 2.26 | 0.71 |
| 1:D:253:PHE:CE2 | 1:D:298:LEU:HD13 | 2.25 | 0.71 |
| 1:D:733:LEU:O | 1:D:737:LEU:HG | 1.89 | 0.71 |
| 1:D:779:ARG:NH2 | 1:D:807:ASP:OD2 | 2.24 | 0.71 |
| 1:E:562:LEU:HD21 | 1:E:611:TRP:NE1 | 2.05 | 0.71 |
| 1:F:470:CYS:SG | 1:F:533:TYR:N | 2.63 | 0.71 |
| 1:F:562:LEU:HD21 | 1:F:611:TRP:NE1 | 2.05 | 0.71 |
| 1:G:253:PHE:CE2 | 1:G:298:LEU:HD13 | 2.25 | 0.71 |
| 1:I:509:GLN:HB3 | 1:I:514:CYS:HB3 | 1.73 | 0.71 |
| 1:J:475:ASP:HB3 | 1:J:553:LEU:CD2 | 2.03 | 0.71 |
| 1:J:562:LEU:HD21 | 1:J:611:TRP:NE1 | 2.05 | 0.71 |
| 1:J:619:LYS:CB | 2:T:261:ASP:CA | 2.64 | 0.71 |
| 1:J:629:GLU:OE1 | 1:J:629:GLU:N | 2.23 | 0.71 |
| 2:K:67:ILE:O | 2:K:71:MET:CB | 2.38 | 0.71 |
| 2:L:67:ILE:O | 2:L:71:MET:CB | 2.38 | 0.71 |
| 1:A:240:MET:HE2 | 1:A:258:TYR:HB2 | 1.72 | 0.71 |
| 1:A:253:PHE:CE2 | 1:A:298:LEU:HD13 | 2.25 | 0.71 |
| 1:B:240:MET:HE2 | 1:B:258:TYR:H | 1.55 | 0.71 |
| 1:B:470:CYS:SG | 1:B:533:TYR:N | 2.63 | 0.71 |
| 1:B:916:HIS:O | 1:B:917:LEU:HD23 | 1.91 | 0.71 |
| 1:C:908:LEU:HA | 1:C:914:LEU:CD2 | 2.18 | 0.71 |
| 1:D:629:GLU:OE1 | 1:D:629:GLU:N | 2.23 | 0.71 |
| 1:F:253:PHE:CE2 | 1:F:298:LEU:HD13 | 2.25 | 0.71 |
| 1:F:908:LEU:HD23 | 1:F:914:LEU:HD13 | 1.72 | 0.71 |
| 1:F:916:HIS:O | 1:F:917:LEU:HD23 | 1.91 | 0.71 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:G:470:CYS:SG | 1:G:533:TYR:N | 2.63 | 0.71 |
| 1:H:253:PHE:CE2 | 1:H:298:LEU:HD13 | 2.25 | 0.71 |
| 1:I:908:LEU:HA | 1:I:914:LEU:CD2 | 2.18 | 0.71 |
| 1:J:562:LEU:HD21 | 1:J:611:TRP:CE2 | 2.25 | 0.71 |
| 1:J:741:GLN:O | 1:J:771:ASN:ND2 | 2.21 | 0.71 |
| 1:J:908:LEU:HD21 | 1:J:917:LEU:HD11 | 1.73 | 0.71 |
| 2:K:149:LEU:HD12 | 2:K:152:MET:HE3 | 1.72 | 0.71 |
| 1:A:509:GLN:HB3 | 1:A:514:CYS:HB3 | 1.73 | 0.71 |
| 1:B:609:LEU:HD13 | 1:B:642:PHE:HE1 | 1.55 | 0.71 |
| 1:B:655:ILE:HD12 | 1:B:656:ASN:H | 1.55 | 0.71 |
| 1:C:240:MET:HE2 | 1:C:258:TYR:H | 1.55 | 0.71 |
| 1:C:779:ARG:NH2 | 1:C:807:ASP:OD2 | 2.24 | 0.71 |
| 1:E:655:ILE:HD12 | 1:E:656:ASN:H | 1.55 | 0.71 |
| 1:F:562:LEU:HD21 | 1:F:611:TRP:CE2 | 2.26 | 0.71 |
| 1:H:470:CYS:SG | 1:H:533:TYR:N | 2.63 | 0.71 |
| 1:H:475:ASP:OD2 | 1:H:492:HIS:NE2 | 2.22 | 0.71 |
| 1:H:562:LEU:HD21 | 1:H:611:TRP:NE1 | 2.05 | 0.71 |
| 1:J:655:ILE:HD12 | 1:J:656:ASN:H | 1.55 | 0.71 |
| 1:J:779:ARG:NH2 | 1:J:807:ASP:OD2 | 2.24 | 0.71 |
| 2:M:149:LEU:HD12 | 2:M:152:MET:HE3 | 1.71 | 0.71 |
| 2:O:67:ILE:O | 2:O:71:MET:CB | 2.38 | 0.71 |
| 2:Q:149:LEU:HD12 | 2:Q:152:MET:HE3 | 1.70 | 0.71 |
| 1:A:270:ARG:NH1 | 1:A:275:LEU:HD13 | 1.97 | 0.71 |
| 1:A:779:ARG:NH2 | 1:A:807:ASP:OD2 | 2.24 | 0.71 |
| 1:C:619:LYS:CB | 2:M:261:ASP:OD2 | 2.38 | 0.71 |
| 1:C:908:LEU:HD21 | 1:C:917:LEU:HD11 | 1.73 | 0.71 |
| 1:E:733:LEU:O | 1:E:737:LEU:HG | 1.89 | 0.71 |
| 1:E:916:HIS:O | 1:E:917:LEU:HD23 | 1.91 | 0.71 |
| 1:F:655:ILE:HD12 | 1:F:656:ASN:H | 1.55 | 0.71 |
| 1:F:748:LEU:HD23 | 1:F:780:CYS:SG | 2.30 | 0.71 |
| 1:G:733:LEU:O | 1:G:737:LEU:HG | 1.89 | 0.71 |
| 1:H:509:GLN:HB3 | 1:H:514:CYS:HB3 | 1.73 | 0.71 |
| 1:H:741:GLN:O | 1:H:771:ASN:ND2 | 2.21 | 0.71 |
| 1:I:243:TRP:CD2 | 1:I:256:LEU:HD13 | 2.26 | 0.71 |
| 1:J:916:HIS:O | 1:J:917:LEU:HD23 | 1.91 | 0.71 |
| 2:Q:67:ILE:O | 2:Q:71:MET:CB | 2.39 | 0.71 |
| 2:R:67:ILE:O | 2:R:71:MET:CB | 2.38 | 0.71 |
| 1:B:253:PHE:CE2 | 1:B:298:LEU:HD13 | 2.25 | 0.71 |
| 1:C:908:LEU:HD23 | 1:C:914:LEU:HD13 | 1.72 | 0.71 |
| 1:D:562:LEU:HD21 | 1:D:611:TRP:NE1 | 2.05 | 0.71 |
| 1:D:609:LEU:HD13 | 1:D:642:PHE:HE1 | 1.55 | 0.71 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:E:253:PHE:CE2 | 1:E:298:LEU:HD13 | 2.25 | 0.71 |
| 1:F:243:TRP:CD2 | 1:F:256:LEU:HD13 | 2.26 | 0.71 |
| 1:F:475:ASP:OD2 | 1:F:492:HIS:NE2 | 2.22 | 0.71 |
| 1:G:509:GLN:HB3 | 1:G:514:CYS:HB3 | 1.73 | 0.71 |
| 1:I:470:CYS:SG | 1:I:533:TYR:N | 2.63 | 0.71 |
| 1:B:562:LEU:HD21 | 1:B:611:TRP:NE1 | 2.05 | 0.71 |
| 1:B:782:LEU:HB3 | 1:B:786:CYS:SG | 2.31 | 0.71 |
| 1:D:490:ARG:NH2 | 1:D:495:GLN:HA | 2.06 | 0.71 |
| 1:E:490:ARG:NH2 | 1:E:495:GLN:HA | 2.06 | 0.71 |
| 1:F:507:LEU:CD1 | 1:G:157:ARG:HG2 | 2.21 | 0.71 |
| 1:G:562:LEU:HD21 | 1:G:611:TRP:NE1 | 2.05 | 0.71 |
| 1:G:581:PHE:HD2 | 1:G:633:CYS:HB3 | 1.54 | 0.71 |
| 1:H:562:LEU:HD21 | 1:H:611:TRP:CE2 | 2.25 | 0.71 |
| 1:I:581:PHE:HD2 | 1:I:633:CYS:HB3 | 1.55 | 0.71 |
| 1:I:916:HIS:O | 1:I:917:LEU:HD23 | 1.91 | 0.71 |
| 1:C:311:PHE:CE1 | 1:C:329:ASP:OD1 | 2.34 | 0.71 |
| 1:D:782:LEU:HB3 | 1:D:786:CYS:SG | 2.31 | 0.71 |
| 1:E:782:LEU:HB3 | 1:E:786:CYS:SG | 2.31 | 0.71 |
| 1:H:311:PHE:CE1 | 1:H:329:ASP:OD1 | 2.34 | 0.71 |
| 1:B:509:GLN:HB3 | 1:B:514:CYS:HB3 | 1.73 | 0.71 |
| 1:B:908:LEU:HA | 1:B:914:LEU:CD2 | 2.18 | 0.71 |
| 1:C:253:PHE:CE2 | 1:C:298:LEU:HD13 | 2.25 | 0.71 |
| 1:C:490:ARG:NH2 | 1:C:495:GLN:HA | 2.06 | 0.71 |
| 1:D:562:LEU:HD21 | 1:D:611:TRP:CE2 | 2.26 | 0.71 |
| 1:D:908:LEU:HD21 | 1:D:917:LEU:HD11 | 1.73 | 0.71 |
| 1:E:908:LEU:HD23 | 1:E:914:LEU:HD13 | 1.72 | 0.71 |
| 1:F:509:GLN:HB3 | 1:F:514:CYS:HB3 | 1.73 | 0.71 |
| 1:F:733:LEU:O | 1:F:737:LEU:HG | 1.89 | 0.71 |
| 1:G:243:TRP:CD2 | 1:G:256:LEU:HD13 | 2.26 | 0.71 |
| 1:G:908:LEU:HD23 | 1:G:914:LEU:HD13 | 1.72 | 0.71 |
| 1:I:507:LEU:CD1 | 1:J:157:ARG:HG2 | 2.21 | 0.71 |
| 1:A:490:ARG:NH2 | 1:A:495:GLN:HA | 2.06 | 0.70 |
| 1:E:470:CYS:SG | 1:E:533:TYR:N | 2.63 | 0.70 |
| 1:G:629:GLU:OE1 | 1:G:629:GLU:N | 2.23 | 0.70 |
| 1:H:629:GLU:OE1 | 1:H:629:GLU:N | 2.23 | 0.70 |
| 1:I:908:LEU:HD21 | 1:I:917:LEU:HD11 | 1.73 | 0.70 |
| 2:L:149:LEU:HD12 | 2:L:152:MET:HE3 | 1.72 | 0.70 |
| 2:P:67:ILE:O | 2:P:71:MET:CB | 2.38 | 0.70 |
| 1:A:356:GLU:CG | 1:A:516:LYS:HE3 | 2.21 | 0.70 |
| 1:A:908:LEU:HD21 | 1:A:917:LEU:HD11 | 1.73 | 0.70 |
| 1:C:475:ASP:HB3 | 1:C:553:LEU:CD2 | 2.03 | 0.70 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:E:240:MET:HE2 | 1:E:258:TYR:HB2 | 1.71 | 0.70 |
| 1:G:779:ARG:NH2 | 1:G:807:ASP:OD2 | 2.24 | 0.70 |
| 1:H:243:TRP:CD2 | 1:H:256:LEU:HD13 | 2.26 | 0.70 |
| 1:H:356:GLU:CG | 1:H:516:LYS:HE3 | 2.21 | 0.70 |
| 1:I:311:PHE:CE1 | 1:I:329:ASP:OD1 | 2.34 | 0.70 |
| 1:I:356:GLU:CG | 1:I:516:LYS:HE3 | 2.21 | 0.70 |
| 2:T:67:ILE:O | 2:T:71:MET:CB | 2.38 | 0.70 |
| 1:B:779:ARG:NH2 | 1:B:807:ASP:OD2 | 2.24 | 0.70 |
| 1:C:655:ILE:HD12 | 1:C:656:ASN:H | 1.55 | 0.70 |
| 1:C:916:HIS:O | 1:C:917:LEU:HD23 | 1.91 | 0.70 |
| 1:E:779:ARG:NH2 | 1:E:807:ASP:OD2 | 2.24 | 0.70 |
| 1:F:240:MET:HE2 | 1:F:258:TYR:H | 1.56 | 0.70 |
| 1:F:490:ARG:NH2 | 1:F:495:GLN:HA | 2.06 | 0.70 |
| 1:I:562:LEU:HD21 | 1:I:611:TRP:CE2 | 2.26 | 0.70 |
| 1:B:243:TRP:CD2 | 1:B:256:LEU:HD13 | 2.26 | 0.70 |
| 1:B:507:LEU:CD1 | 1:C:157:ARG:HG2 | 2.21 | 0.70 |
| 1:C:509:GLN:HB3 | 1:C:514:CYS:HB3 | 1.73 | 0.70 |
| 1:C:581:PHE:HD2 | 1:C:633:CYS:HB3 | 1.55 | 0.70 |
| 1:D:243:TRP:CD2 | 1:D:256:LEU:HD13 | 2.26 | 0.70 |
| 1:D:908:LEU:HD23 | 1:D:914:LEU:HD13 | 1.72 | 0.70 |
| 1:F:779:ARG:NH2 | 1:F:807:ASP:OD2 | 2.24 | 0.70 |
| 1:G:741:GLN:O | 1:G:771:ASN:ND2 | 2.21 | 0.70 |
| 1:G:916:HIS:O | 1:G:917:LEU:HD23 | 1.91 | 0.70 |
| 1:I:562:LEU:HD21 | 1:I:611:TRP:NE1 | 2.06 | 0.70 |
| 1:I:779:ARG:NH2 | 1:I:807:ASP:OD2 | 2.24 | 0.70 |
| 1:J:490:ARG:NH2 | 1:J:495:GLN:HA | 2.06 | 0.70 |
| 1:A:562:LEU:HD21 | 1:A:611:TRP:CG | 2.12 | 0.70 |
| 1:B:908:LEU:HD21 | 1:B:917:LEU:HD11 | 1.73 | 0.70 |
| 1:E:562:LEU:HD21 | 1:E:611:TRP:CE2 | 2.26 | 0.70 |
| 1:H:270:ARG:HB3 | 1:H:328:GLY:HA2 | 1.73 | 0.70 |
| 1:H:356:GLU:OE2 | 1:H:507:LEU:HD22 | 1.92 | 0.70 |
| 1:I:167:ARG:NH1 | 1:I:167:ARG:HB3 | 2.07 | 0.70 |
| 1:I:270:ARG:HB3 | 1:I:328:GLY:HA2 | 1.74 | 0.70 |
| 1:I:490:ARG:NH2 | 1:I:495:GLN:HA | 2.06 | 0.70 |
| 1:J:500:SER:CB | 1:J:503:LEU:O | 2.40 | 0.70 |
| 1:J:908:LEU:HD23 | 1:J:914:LEU:HD13 | 1.72 | 0.70 |
| 2:M:216:LYS:NZ | 2:M:280:GLU:OE1 | 2.24 | 0.70 |
| 2:N:216:LYS:NZ | 2:N:280:GLU:OE1 | 2.24 | 0.70 |
| 1:A:655:ILE:HD12 | 1:A:656:ASN:H | 1.55 | 0.70 |
| 1:B:167:ARG:HB3 | 1:B:167:ARG:NH1 | 2.07 | 0.70 |
| 1:B:908:LEU:HD23 | 1:B:914:LEU:HD13 | 1.72 | 0.70 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:D:470:CYS:SG | 1:D:533:TYR:N | 2.63 | 0.70 |
| 1:F:741:GLN:O | 1:F:771:ASN:ND2 | 2.21 | 0.70 |
| 1:H:655:ILE:HD12 | 1:H:656:ASN:H | 1.55 | 0.70 |
| 1:H:779:ARG:NH2 | 1:H:807:ASP:OD2 | 2.24 | 0.70 |
| 1:H:908:LEU:HA | 1:H:914:LEU:CD2 | 2.18 | 0.70 |
| 1:I:655:ILE:HD12 | 1:I:656:ASN:H | 1.55 | 0.70 |
| 2:K:216:LYS:NZ | 2:K:280:GLU:OE1 | 2.24 | 0.70 |
| 1:A:136:TYR:OH | 1:A:280:CYS:SG | 2.41 | 0.70 |
| 1:A:157:ARG:HG2 | 1:J:507:LEU:CD1 | 2.21 | 0.70 |
| 1:A:629:GLU:N | 1:A:629:GLU:OE1 | 2.23 | 0.70 |
| 1:B:356:GLU:OE2 | 1:B:507:LEU:HD22 | 1.92 | 0.70 |
| 1:B:356:GLU:CG | 1:B:516:LYS:HE3 | 2.21 | 0.70 |
| 1:B:490:ARG:NH2 | 1:B:495:GLN:HA | 2.06 | 0.70 |
| 1:B:565:TYR:HE2 | 1:B:625:PRO:HB3 | 1.55 | 0.70 |
| 1:C:507:LEU:CD1 | 1:D:157:ARG:HG2 | 2.21 | 0.70 |
| 1:C:565:TYR:HA | 1:C:570:LYS:HB2 | 1.72 | 0.70 |
| 1:C:568:PHE:HD2 | 1:C:570:LYS:CE | 2.00 | 0.70 |
| 1:E:507:LEU:CD1 | 1:F:157:ARG:HG2 | 2.22 | 0.70 |
| 1:I:908:LEU:HD23 | 1:I:914:LEU:HD13 | 1.72 | 0.70 |
| 2:L:216:LYS:NZ | 2:L:280:GLU:OE1 | 2.24 | 0.70 |
| 2:P:216:LYS:NZ | 2:P:280:GLU:OE1 | 2.24 | 0.70 |
| 2:S:216:LYS:NZ | 2:S:280:GLU:OE1 | 2.24 | 0.70 |
| 1:A:908:LEU:HD23 | 1:A:914:LEU:HD13 | 1.72 | 0.70 |
| 1:A:916:HIS:O | 1:A:917:LEU:HD23 | 1.91 | 0.70 |
| 1:D:623:ILE:HD12 | 1:D:623:ILE:N | 2.07 | 0.70 |
| 1:F:782:LEU:HB3 | 1:F:786:CYS:SG | 2.31 | 0.70 |
| 1:F:893:ASN:N | 1:F:920:ARG:O | 2.20 | 0.70 |
| 1:G:619:LYS:CB | 2:Q:261:ASP:OD1 | 2.39 | 0.70 |
| 1:H:167:ARG:HB3 | 1:H:167:ARG:NH1 | 2.07 | 0.70 |
| 1:H:609:LEU:HD13 | 1:H:642:PHE:HE1 | 1.55 | 0.70 |
| 1:H:916:HIS:O | 1:H:917:LEU:HD23 | 1.91 | 0.70 |
| 1:I:782:LEU:HB3 | 1:I:786:CYS:SG | 2.31 | 0.70 |
| 1:J:243:TRP:CD2 | 1:J:256:LEU:HD13 | 2.26 | 0.70 |
| 1:A:167:ARG:NH1 | 1:A:167:ARG:HB3 | 2.07 | 0.70 |
| 1:B:619:LYS:CB | 2:L:261:ASP:CA | 2.69 | 0.70 |
| 1:B:623:ILE:HD12 | 1:B:623:ILE:N | 2.07 | 0.70 |
| 1:D:217:GLU:HB2 | 1:E:149:GLN:CD | 2.13 | 0.70 |
| 1:D:509:GLN:HB3 | 1:D:514:CYS:HB3 | 1.73 | 0.70 |
| 1:D:916:HIS:O | 1:D:917:LEU:HD23 | 1.91 | 0.70 |
| 1:E:167:ARG:HB3 | 1:E:167:ARG:NH1 | 2.07 | 0.70 |
| 1:E:243:TRP:CD2 | 1:E:256:LEU:HD13 | 2.26 | 0.70 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:G:270:ARG:HB3 | 1:G:328:GLY:HA2 | 1.74 | 0.70 |
| 1:H:581:PHE:HD2 | 1:H:633:CYS:HB3 | 1.55 | 0.70 |
| 1:H:623:ILE:HD12 | 1:H:623:ILE:N | 2.07 | 0.70 |
| 2:R:216:LYS:NZ | 2:R:280:GLU:OE1 | 2.24 | 0.70 |
| 1:D:502:PHE:HA | 1:D:521:ILE:HG13 | 1.73 | 0.70 |
| 1:E:356:GLU:OE2 | 1:E:507:LEU:HD22 | 1.92 | 0.70 |
| 1:E:509:GLN:HB3 | 1:E:514:CYS:HB3 | 1.73 | 0.70 |
| 1:F:475:ASP:HB3 | 1:F:553:LEU:CD2 | 2.03 | 0.70 |
| 1:G:507:LEU:CD1 | 1:H:157:ARG:HG2 | 2.22 | 0.70 |
| 1:H:490:ARG:NH2 | 1:H:495:GLN:HA | 2.06 | 0.70 |
| 1:J:609:LEU:HD13 | 1:J:642:PHE:HE1 | 1.55 | 0.70 |
| 1:J:782:LEU:HB3 | 1:J:786:CYS:SG | 2.31 | 0.70 |
| 1:A:756:PRO:O | 1:A:760:VAL:HG23 | 1.92 | 0.69 |
| 1:C:356:GLU:OE2 | 1:C:507:LEU:HD22 | 1.92 | 0.69 |
| 1:C:756:PRO:O | 1:C:760:VAL:HG23 | 1.92 | 0.69 |
| 1:C:782:LEU:HB3 | 1:C:786:CYS:SG | 2.31 | 0.69 |
| 1:D:167:ARG:NH1 | 1:D:167:ARG:HB3 | 2.07 | 0.69 |
| 1:E:741:GLN:O | 1:E:771:ASN:ND2 | 2.21 | 0.69 |
| 1:F:167:ARG:NH1 | 1:F:167:ARG:HB3 | 2.07 | 0.69 |
| 1:F:609:LEU:HD13 | 1:F:642:PHE:HE1 | 1.55 | 0.69 |
| 1:G:356:GLU:OE2 | 1:G:507:LEU:HD22 | 1.92 | 0.69 |
| 1:H:756:PRO:O | 1:H:760:VAL:HG23 | 1.92 | 0.69 |
| 1:H:782:LEU:HB3 | 1:H:786:CYS:SG | 2.31 | 0.69 |
| 1:J:270:ARG:NH1 | 1:J:275:LEU:HD13 | 1.97 | 0.69 |
| 1:A:243:TRP:CD2 | 1:A:256:LEU:HD13 | 2.26 | 0.69 |
| 1:A:782:LEU:HB3 | 1:A:786:CYS:SG | 2.31 | 0.69 |
| 1:D:756:PRO:O | 1:D:760:VAL:HG23 | 1.93 | 0.69 |
| 1:G:240:MET:HE2 | 1:G:258:TYR:H | 1.56 | 0.69 |
| 1:H:507:LEU:CD1 | 1:I:157:ARG:HG2 | 2.22 | 0.69 |
| 1:I:356:GLU:OE2 | 1:I:507:LEU:HD22 | 1.92 | 0.69 |
| 1:J:270:ARG:HB3 | 1:J:328:GLY:HA2 | 1.74 | 0.69 |
| 1:J:623:ILE:HD12 | 1:J:623:ILE:N | 2.07 | 0.69 |
| 1:B:756:PRO:O | 1:B:760:VAL:HG23 | 1.92 | 0.69 |
| 1:E:908:LEU:HD21 | 1:E:917:LEU:HD11 | 1.73 | 0.69 |
| 1:G:356:GLU:CG | 1:G:516:LYS:HE3 | 2.21 | 0.69 |
| 1:G:557:ASP:OD2 | 1:G:560:VAL:HG23 | 1.93 | 0.69 |
| 1:G:623:ILE:HD12 | 1:G:623:ILE:N | 2.07 | 0.69 |
| 1:A:270:ARG:HB3 | 1:A:328:GLY:HA2 | 1.74 | 0.69 |
| 1:B:629:GLU:OE1 | 1:B:629:GLU:N | 2.23 | 0.69 |
| 1:B:741:GLN:O | 1:B:771:ASN:ND2 | 2.21 | 0.69 |
| 1:B:958:CYS:HB3 | 1:B:988:MET:SD | 2.33 | 0.69 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:C:243:TRP:CD2 | 1:C:256:LEU:HD13 | 2.26 | 0.69 |
| 1:D:356:GLU:OE2 | 1:D:507:LEU:HD22 | 1.92 | 0.69 |
| 1:D:507:LEU:CD1 | 1:E:157:ARG:HG2 | 2.22 | 0.69 |
| 1:G:490:ARG:NH2 | 1:G:495:GLN:HA | 2.06 | 0.69 |
| 1:H:354:ALA:O | 1:H:356:GLU:N | 2.25 | 0.69 |
| 1:A:173:LEU:HB3 | 1:A:368:VAL:HG11 | 1.74 | 0.69 |
| 1:B:354:ALA:O | 1:B:356:GLU:N | 2.25 | 0.69 |
| 1:C:958:CYS:HB3 | 1:C:988:MET:SD | 2.33 | 0.69 |
| 1:E:270:ARG:NH1 | 1:E:275:LEU:HD13 | 1.97 | 0.69 |
| 1:E:756:PRO:O | 1:E:760:VAL:HG23 | 1.92 | 0.69 |
| 1:F:354:ALA:O | 1:F:356:GLU:N | 2.25 | 0.69 |
| 1:G:354:ALA:O | 1:G:356:GLU:N | 2.25 | 0.69 |
| 1:G:756:PRO:O | 1:G:760:VAL:HG23 | 1.92 | 0.69 |
| 1:H:908:LEU:HD21 | 1:H:917:LEU:HD11 | 1.73 | 0.69 |
| 1:I:623:ILE:HD12 | 1:I:623:ILE:N | 2.07 | 0.69 |
| 1:I:756:PRO:O | 1:I:760:VAL:HG23 | 1.92 | 0.69 |
| 1:J:167:ARG:HB3 | 1:J:167:ARG:NH1 | 2.07 | 0.69 |
| 2:T:216:LYS:NZ | 2:T:280:GLU:OE1 | 2.24 | 0.69 |
| 1:B:217:GLU:HB2 | 1:C:149:GLN:CD | 2.13 | 0.69 |
| 1:C:167:ARG:NH1 | 1:C:167:ARG:HB3 | 2.07 | 0.69 |
| 1:E:354:ALA:O | 1:E:356:GLU:N | 2.25 | 0.69 |
| 1:E:958:CYS:HB3 | 1:E:988:MET:SD | 2.33 | 0.69 |
| 1:F:908:LEU:HD21 | 1:F:917:LEU:HD11 | 1.73 | 0.69 |
| 1:G:489:LEU:CD2 | 1:G:494:LEU:HB3 | 2.23 | 0.69 |
| 1:G:782:LEU:HB3 | 1:G:786:CYS:SG | 2.31 | 0.69 |
| 1:H:315:ILE:CD1 | 1:H:330:ILE:HA | 2.23 | 0.69 |
| 1:H:908:LEU:HD23 | 1:H:914:LEU:HD13 | 1.72 | 0.69 |
| 1:H:958:CYS:HB3 | 1:H:988:MET:SD | 2.33 | 0.69 |
| 1:I:557:ASP:OD2 | 1:I:560:VAL:HG23 | 1.93 | 0.69 |
| 1:J:502:PHE:HA | 1:J:521:ILE:CG1 | 2.23 | 0.69 |
| 1:A:354:ALA:O | 1:A:356:GLU:N | 2.25 | 0.69 |
| 1:B:624:GLN:HG3 | 1:B:625:PRO:HD3 | 1.73 | 0.69 |
| 1:E:603:GLN:HA | 1:E:606:LEU:CD1 | 2.23 | 0.69 |
| 1:F:315:ILE:CD1 | 1:F:330:ILE:HA | 2.23 | 0.69 |
| 1:F:629:GLU:OE1 | 1:F:629:GLU:N | 2.23 | 0.69 |
| 1:G:908:LEU:HD21 | 1:G:917:LEU:HD11 | 1.73 | 0.69 |
| 1:I:489:LEU:CD2 | 1:I:494:LEU:HB3 | 2.23 | 0.69 |
| 1:J:356:GLU:CG | 1:J:516:LYS:HE3 | 2.21 | 0.69 |
| 1:J:557:ASP:OD2 | 1:J:560:VAL:HG23 | 1.93 | 0.69 |
| 2:Q:216:LYS:NZ | 2:Q:280:GLU:OE1 | 2.24 | 0.69 |
| 1:A:315:ILE:CD1 | 1:A:330:ILE:HA | 2.23 | 0.69 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:A:958:CYS:HB3 | 1:A:988:MET:SD | 2.33 | 0.69 |
| 1:C:356:GLU:CG | 1:C:516:LYS:HE3 | 2.21 | 0.69 |
| 1:D:354:ALA:O | 1:D:356:GLU:N | 2.25 | 0.69 |
| 1:E:288:HIS:ND1 | 1:E:322:TRP:CH2 | 2.61 | 0.69 |
| 1:E:557:ASP:OD2 | 1:E:560:VAL:HG23 | 1.93 | 0.69 |
| 1:F:217:GLU:HB2 | 1:G:149:GLN:CD | 2.13 | 0.69 |
| 1:F:270:ARG:HB3 | 1:F:328:GLY:HA2 | 1.74 | 0.69 |
| 1:F:356:GLU:OE2 | 1:F:507:LEU:HD22 | 1.92 | 0.69 |
| 1:F:490:ARG:HH21 | 1:F:495:GLN:HA | 1.58 | 0.69 |
| 1:G:217:GLU:HB2 | 1:H:149:GLN:CD | 2.13 | 0.69 |
| 1:G:557:ASP:HB3 | 1:G:560:VAL:HB | 1.75 | 0.69 |
| 1:G:603:GLN:HA | 1:G:606:LEU:CD1 | 2.23 | 0.69 |
| 1:H:557:ASP:HB3 | 1:H:560:VAL:HB | 1.75 | 0.69 |
| 1:I:603:GLN:HA | 1:I:606:LEU:CD1 | 2.23 | 0.69 |
| 1:I:629:GLU:OE1 | 1:I:629:GLU:N | 2.23 | 0.69 |
| 1:I:958:CYS:HB3 | 1:I:988:MET:SD | 2.33 | 0.69 |
| 1:J:173:LEU:HB3 | 1:J:368:VAL:HG11 | 1.74 | 0.69 |
| 1:J:288:HIS:ND1 | 1:J:322:TRP:CH2 | 2.61 | 0.69 |
| 1:J:315:ILE:HD11 | 1:J:333:SER:HB3 | 1.75 | 0.69 |
| 1:J:490:ARG:HH21 | 1:J:495:GLN:HA | 1.58 | 0.69 |
| 1:J:775:LEU:HG | 1:J:777:LEU:CD1 | 2.23 | 0.69 |
| 1:J:920:ARG:HH12 | 2:T:121:ARG:HA | 1.56 | 0.69 |
| 2:O:216:LYS:NZ | 2:O:280:GLU:OE1 | 2.24 | 0.69 |
| 1:A:315:ILE:HD11 | 1:A:333:SER:HB3 | 1.75 | 0.69 |
| 1:B:291:VAL:CG2 | 1:B:341:LEU:HD21 | 2.22 | 0.69 |
| 1:B:315:ILE:HD11 | 1:B:333:SER:HB3 | 1.75 | 0.69 |
| 1:C:475:ASP:O | 1:C:479:ASN:ND2 | 2.26 | 0.69 |
| 1:D:240:MET:HE2 | 1:D:258:TYR:HB2 | 1.72 | 0.69 |
| 1:D:475:ASP:O | 1:D:479:ASN:ND2 | 2.26 | 0.69 |
| 1:D:958:CYS:HB3 | 1:D:988:MET:SD | 2.33 | 0.69 |
| 1:E:623:ILE:HD12 | 1:E:623:ILE:N | 2.07 | 0.69 |
| 1:G:490:ARG:HH21 | 1:G:495:GLN:HA | 1.58 | 0.69 |
| 1:H:557:ASP:OD2 | 1:H:560:VAL:HG23 | 1.93 | 0.69 |
| 1:H:603:GLN:HA | 1:H:606:LEU:CD1 | 2.23 | 0.69 |
| 1:H:775:LEU:HG | 1:H:777:LEU:CD1 | 2.23 | 0.69 |
| 1:I:315:ILE:CD1 | 1:I:330:ILE:HA | 2.23 | 0.69 |
| 1:I:354:ALA:O | 1:I:356:GLU:N | 2.25 | 0.69 |
| 1:J:315:ILE:CD1 | 1:J:330:ILE:HA | 2.23 | 0.69 |
| 1:A:507:LEU:CD1 | 1:B:157:ARG:HG2 | 2.22 | 0.69 |
| 1:B:475:ASP:O | 1:B:479:ASN:ND2 | 2.26 | 0.69 |
| 1:B:557:ASP:OD2 | 1:B:560:VAL:HG23 | 1.93 | 0.69 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:C:619:LYS:CB | 2:M:261:ASP:CB | 2.70 | 0.69 |
| 1:C:623:ILE:HD12 | 1:C:623:ILE:N | 2.07 | 0.69 |
| 1:D:173:LEU:HB3 | 1:D:368:VAL:CG1 | 2.23 | 0.69 |
| 1:F:288:HIS:ND1 | 1:F:322:TRP:CH2 | 2.61 | 0.69 |
| 1:F:603:GLN:HA | 1:F:606:LEU:CD1 | 2.23 | 0.69 |
| 1:G:167:ARG:HB3 | 1:G:167:ARG:NH1 | 2.07 | 0.69 |
| 1:I:173:LEU:HB3 | 1:I:368:VAL:CG1 | 2.23 | 0.69 |
| 1:I:315:ILE:HD11 | 1:I:333:SER:HB3 | 1.75 | 0.69 |
| 2:Q:33:ASN:HD21 | 2:Q:55:LEU:HB3 | 1.58 | 0.69 |
| 1:A:217:GLU:HB2 | 1:B:149:GLN:CD | 2.13 | 0.68 |
| 1:A:291:VAL:CG2 | 1:A:341:LEU:HD21 | 2.22 | 0.68 |
| 1:A:475:ASP:O | 1:A:479:ASN:ND2 | 2.26 | 0.68 |
| 1:A:489:LEU:CD2 | 1:A:494:LEU:HB3 | 2.23 | 0.68 |
| 1:B:173:LEU:HB3 | 1:B:368:VAL:HG11 | 1.75 | 0.68 |
| 1:B:315:ILE:CD1 | 1:B:330:ILE:HA | 2.23 | 0.68 |
| 1:C:173:LEU:HB3 | 1:C:368:VAL:HG11 | 1.74 | 0.68 |
| 1:C:217:GLU:HB2 | 1:D:149:GLN:CD | 2.13 | 0.68 |
| 1:C:270:ARG:HB3 | 1:C:328:GLY:HA2 | 1.74 | 0.68 |
| 1:C:354:ALA:O | 1:C:356:GLU:N | 2.25 | 0.68 |
| 1:C:624:GLN:H | 1:C:625:PRO:HD2 | 1.58 | 0.68 |
| 1:D:567:LYS:HD3 | 1:D:624:GLN:HG2 | 1.75 | 0.68 |
| 1:E:489:LEU:CD2 | 1:E:494:LEU:HB3 | 2.23 | 0.68 |
| 1:E:490:ARG:HH21 | 1:E:495:GLN:HA | 1.58 | 0.68 |
| 1:E:629:GLU:OE1 | 1:E:629:GLU:N | 2.23 | 0.68 |
| 1:F:623:ILE:HD12 | 1:F:623:ILE:N | 2.07 | 0.68 |
| 1:G:173:LEU:HB3 | 1:G:368:VAL:HG11 | 1.74 | 0.68 |
| 1:G:958:CYS:HB3 | 1:G:988:MET:SD | 2.33 | 0.68 |
| 1:J:240:MET:CE | 1:J:258:TYR:HB2 | 2.24 | 0.68 |
| 1:J:354:ALA:O | 1:J:356:GLU:N | 2.25 | 0.68 |
| 1:J:756:PRO:O | 1:J:760:VAL:HG23 | 1.92 | 0.68 |
| 1:A:173:LEU:HB3 | 1:A:368:VAL:CG1 | 2.23 | 0.68 |
| 1:A:462:LEU:HA | 1:A:465:HIS:ND1 | 2.09 | 0.68 |
| 1:B:270:ARG:HB3 | 1:B:328:GLY:HA2 | 1.74 | 0.68 |
| 1:C:629:GLU:OE1 | 1:C:629:GLU:N | 2.23 | 0.68 |
| 1:C:823:LYS:HG3 | 1:C:850:VAL:HG22 | 1.75 | 0.68 |
| 1:D:315:ILE:CD1 | 1:D:330:ILE:HA | 2.23 | 0.68 |
| 1:E:475:ASP:O | 1:E:479:ASN:ND2 | 2.27 | 0.68 |
| 1:F:756:PRO:O | 1:F:760:VAL:HG23 | 1.92 | 0.68 |
| 1:H:489:LEU:CD2 | 1:H:494:LEU:HB3 | 2.23 | 0.68 |
| 1:I:490:ARG:HH21 | 1:I:495:GLN:HA | 1.58 | 0.68 |
| 1:I:557:ASP:HB3 | 1:I:560:VAL:HB | 1.75 | 0.68 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:J:356:GLU:OE2 | 1:J:507:LEU:HD22 | 1.92 | 0.68 |
| 1:A:356:GLU:OE2 | 1:A:507:LEU:HD22 | 1.92 | 0.68 |
| 1:A:490:ARG:HH21 | 1:A:495:GLN:HA | 1.58 | 0.68 |
| 1:A:563:GLU:HA | 1:A:563:GLU:OE2 | 1.93 | 0.68 |
| 1:E:169:THR:HG22 | 1:E:170:ARG:H | 1.59 | 0.68 |
| 1:E:270:ARG:HB3 | 1:E:328:GLY:HA2 | 1.74 | 0.68 |
| 1:F:173:LEU:HB3 | 1:F:368:VAL:HG11 | 1.74 | 0.68 |
| 1:H:475:ASP:O | 1:H:479:ASN:ND2 | 2.26 | 0.68 |
| 1:I:240:MET:CE | 1:I:258:TYR:HB2 | 2.24 | 0.68 |
| 1:J:270:ARG:HH11 | 1:J:275:LEU:HD11 | 1.56 | 0.68 |
| 1:A:288:HIS:ND1 | 1:A:322:TRP:CH2 | 2.61 | 0.68 |
| 1:B:408:MET:HG3 | 1:B:408:MET:O | 1.94 | 0.68 |
| 1:B:823:LYS:HG3 | 1:B:850:VAL:HG22 | 1.75 | 0.68 |
| 1:C:315:ILE:HD11 | 1:C:333:SER:HB3 | 1.75 | 0.68 |
| 1:C:732:GLY:O | 1:C:736:VAL:HG13 | 1.94 | 0.68 |
| 1:D:270:ARG:HB3 | 1:D:328:GLY:HA2 | 1.74 | 0.68 |
| 1:D:288:HIS:ND1 | 1:D:322:TRP:CH2 | 2.61 | 0.68 |
| 1:D:380:GLU:OE2 | 1:D:384:LYS:HE3 | 1.94 | 0.68 |
| 1:D:408:MET:O | 1:D:408:MET:HG3 | 1.94 | 0.68 |
| 1:E:462:LEU:HA | 1:E:465:HIS:ND1 | 2.09 | 0.68 |
| 1:F:489:LEU:CD2 | 1:F:494:LEU:HB3 | 2.23 | 0.68 |
| 1:F:958:CYS:HB3 | 1:F:988:MET:SD | 2.33 | 0.68 |
| 1:G:169:THR:HG22 | 1:G:170:ARG:H | 1.59 | 0.68 |
| 1:G:173:LEU:HB3 | 1:G:368:VAL:CG1 | 2.23 | 0.68 |
| 1:G:240:MET:CE | 1:G:258:TYR:HB2 | 2.24 | 0.68 |
| 1:H:380:GLU:OE2 | 1:H:384:LYS:HE3 | 1.94 | 0.68 |
| 1:H:462:LEU:HA | 1:H:465:HIS:ND1 | 2.08 | 0.68 |
| 1:H:1019:GLU:O | 1:H:1022:GLN:HG2 | 1.94 | 0.68 |
| 1:I:169:THR:HG22 | 1:I:170:ARG:H | 1.59 | 0.68 |
| 1:A:149:GLN:CD | 1:J:217:GLU:HB2 | 2.14 | 0.68 |
| 1:A:624:GLN:H | 1:A:625:PRO:HD2 | 1.57 | 0.68 |
| 1:B:557:ASP:HB3 | 1:B:560:VAL:HB | 1.75 | 0.68 |
| 1:C:169:THR:HG22 | 1:C:170:ARG:H | 1.59 | 0.68 |
| 1:C:173:LEU:HB3 | 1:C:368:VAL:CG1 | 2.23 | 0.68 |
| 1:C:315:ILE:CD1 | 1:C:330:ILE:HA | 2.23 | 0.68 |
| 1:E:135:ASP:O | 1:E:138:LYS:N | 2.27 | 0.68 |
| 1:E:173:LEU:HB3 | 1:E:368:VAL:CG1 | 2.23 | 0.68 |
| 1:E:380:GLU:OE2 | 1:E:384:LYS:HE3 | 1.94 | 0.68 |
| 1:F:173:LEU:HB3 | 1:F:368:VAL:CG1 | 2.23 | 0.68 |
| 1:G:315:ILE:CD1 | 1:G:330:ILE:HA | 2.23 | 0.68 |
| 1:I:173:LEU:HB3 | 1:I:368:VAL:HG11 | 1.74 | 0.68 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:I:217:GLU:HB2 | 1:J:149:GLN:CD | 2.13 | 0.68 |
| 1:I:270:ARG:HH11 | 1:I:275:LEU:HD11 | 1.56 | 0.68 |
| 1:J:462:LEU:HA | 1:J:465:HIS:ND1 | 2.08 | 0.68 |
| 1:J:475:ASP:O | 1:J:479:ASN:ND2 | 2.26 | 0.68 |
| 1:J:958:CYS:HB3 | 1:J:988:MET:SD | 2.33 | 0.68 |
| 1:A:380:GLU:OE2 | 1:A:384:LYS:HE3 | 1.94 | 0.68 |
| 1:A:425:GLN:OE1 | 1:A:425:GLN:N | 2.27 | 0.68 |
| 1:D:169:THR:HG22 | 1:D:170:ARG:H | 1.59 | 0.68 |
| 1:E:1019:GLU:O | 1:E:1022:GLN:HG2 | 1.94 | 0.68 |
| 1:F:475:ASP:O | 1:F:479:ASN:ND2 | 2.26 | 0.68 |
| 1:F:1019:GLU:O | 1:F:1022:GLN:HG2 | 1.94 | 0.68 |
| 1:G:288:HIS:ND1 | 1:G:322:TRP:CH2 | 2.61 | 0.68 |
| 1:G:732:GLY:O | 1:G:736:VAL:HG13 | 1.94 | 0.68 |
| 1:G:823:LYS:HG3 | 1:G:850:VAL:HG22 | 1.75 | 0.68 |
| 1:G:893:ASN:N | 1:G:920:ARG:O | 2.20 | 0.68 |
| 1:J:173:LEU:HB3 | 1:J:368:VAL:CG1 | 2.23 | 0.68 |
| 1:J:489:LEU:CD2 | 1:J:494:LEU:HB3 | 2.23 | 0.68 |
| 1:B:135:ASP:O | 1:B:138:LYS:N | 2.27 | 0.68 |
| 1:B:380:GLU:OE2 | 1:B:384:LYS:HE3 | 1.94 | 0.68 |
| 1:B:489:LEU:CD2 | 1:B:494:LEU:HB3 | 2.23 | 0.68 |
| 1:C:425:GLN:OE1 | 1:C:425:GLN:N | 2.27 | 0.68 |
| 1:C:489:LEU:CD2 | 1:C:494:LEU:HB3 | 2.23 | 0.68 |
| 1:C:603:GLN:HA | 1:C:606:LEU:CD1 | 2.23 | 0.68 |
| 1:E:315:ILE:CD1 | 1:E:330:ILE:HA | 2.23 | 0.68 |
| 1:E:425:GLN:N | 1:E:425:GLN:OE1 | 2.27 | 0.68 |
| 1:E:502:PHE:HA | 1:E:521:ILE:CG1 | 2.23 | 0.68 |
| 1:F:135:ASP:O | 1:F:138:LYS:N | 2.27 | 0.68 |
| 1:F:356:GLU:CG | 1:F:516:LYS:HE3 | 2.21 | 0.68 |
| 1:F:425:GLN:OE1 | 1:F:425:GLN:N | 2.27 | 0.68 |
| 1:F:557:ASP:HB3 | 1:F:560:VAL:HB | 1.75 | 0.68 |
| 1:F:557:ASP:OD2 | 1:F:560:VAL:HG23 | 1.93 | 0.68 |
| 1:G:462:LEU:HA | 1:G:465:HIS:ND1 | 2.09 | 0.68 |
| 1:H:217:GLU:HB2 | 1:I:149:GLN:CD | 2.14 | 0.68 |
| 1:J:291:VAL:CG2 | 1:J:341:LEU:HD21 | 2.22 | 0.68 |
| 1:J:920:ARG:NH1 | 2:T:121:ARG:HA | 2.07 | 0.68 |
| 1:A:270:ARG:HH11 | 1:A:275:LEU:HD11 | 1.56 | 0.68 |
| 1:B:173:LEU:HB3 | 1:B:368:VAL:CG1 | 2.23 | 0.68 |
| 1:B:240:MET:CE | 1:B:258:TYR:HB2 | 2.24 | 0.68 |
| 1:B:562:LEU:O | 1:B:566:GLY:N | 2.27 | 0.68 |
| 1:B:775:LEU:HG | 1:B:777:LEU:CD1 | 2.23 | 0.68 |
| 1:D:173:LEU:HB3 | 1:D:368:VAL:HG11 | 1.74 | 0.68 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:D:425:GLN:OE1 | 1:D:425:GLN:N | 2.27 | 0.68 |
| 1:D:1019:GLU:O | 1:D:1022:GLN:HG2 | 1.94 | 0.68 |
| 1:F:380:GLU:OE2 | 1:F:384:LYS:HE3 | 1.94 | 0.68 |
| 1:F:408:MET:HG3 | 1:F:408:MET:O | 1.94 | 0.68 |
| 1:F:823:LYS:HG3 | 1:F:850:VAL:HG22 | 1.75 | 0.68 |
| 1:G:380:GLU:OE2 | 1:G:384:LYS:HE3 | 1.94 | 0.68 |
| 1:G:475:ASP:O | 1:G:479:ASN:ND2 | 2.26 | 0.68 |
| 1:H:135:ASP:O | 1:H:138:LYS:N | 2.27 | 0.68 |
| 1:I:475:ASP:O | 1:I:479:ASN:ND2 | 2.26 | 0.68 |
| 1:J:408:MET:HG3 | 1:J:408:MET:O | 1.94 | 0.68 |
| 1:A:169:THR:HG22 | 1:A:170:ARG:H | 1.59 | 0.68 |
| 1:A:565:TYR:CD2 | 1:A:565:TYR:O | 2.46 | 0.68 |
| 1:B:1019:GLU:O | 1:B:1022:GLN:HG2 | 1.94 | 0.68 |
| 1:C:380:GLU:OE2 | 1:C:384:LYS:HE3 | 1.94 | 0.68 |
| 1:C:462:LEU:HA | 1:C:465:HIS:ND1 | 2.09 | 0.68 |
| 1:C:502:PHE:HA | 1:C:521:ILE:HG13 | 1.74 | 0.68 |
| 1:D:356:GLU:CG | 1:D:516:LYS:HE3 | 2.21 | 0.68 |
| 1:D:490:ARG:HH21 | 1:D:495:GLN:HA | 1.58 | 0.68 |
| 1:D:557:ASP:OD2 | 1:D:560:VAL:HG23 | 1.93 | 0.68 |
| 1:D:732:GLY:O | 1:D:736:VAL:HG13 | 1.94 | 0.68 |
| 1:D:823:LYS:HG3 | 1:D:850:VAL:HG22 | 1.75 | 0.68 |
| 1:F:315:ILE:HD11 | 1:F:333:SER:HB3 | 1.75 | 0.68 |
| 1:H:240:MET:HE2 | 1:H:258:TYR:H | 1.57 | 0.68 |
| 1:I:135:ASP:O | 1:I:138:LYS:N | 2.27 | 0.68 |
| 1:J:1019:GLU:O | 1:J:1022:GLN:HG2 | 1.94 | 0.68 |
| 1:A:649:TYR:C | 1:A:651:PRO:HD2 | 2.15 | 0.68 |
| 1:B:136:TYR:OH | 1:B:280:CYS:SG | 2.41 | 0.68 |
| 1:B:462:LEU:HA | 1:B:465:HIS:ND1 | 2.09 | 0.68 |
| 1:B:603:GLN:HA | 1:B:606:LEU:CD1 | 2.23 | 0.68 |
| 1:C:1019:GLU:O | 1:C:1022:GLN:HG2 | 1.94 | 0.68 |
| 1:D:217:GLU:OE2 | 1:E:145:ARG:CD | 2.40 | 0.68 |
| 1:D:462:LEU:HA | 1:D:465:HIS:ND1 | 2.09 | 0.68 |
| 1:H:173:LEU:HB3 | 1:H:368:VAL:CG1 | 2.23 | 0.68 |
| 1:H:288:HIS:ND1 | 1:H:322:TRP:CH2 | 2.61 | 0.68 |
| 1:H:315:ILE:HD11 | 1:H:333:SER:HB3 | 1.75 | 0.68 |
| 1:H:425:GLN:N | 1:H:425:GLN:OE1 | 2.27 | 0.68 |
| 1:I:240:MET:HE2 | 1:I:258:TYR:H | 1.59 | 0.68 |
| 1:I:288:HIS:ND1 | 1:I:322:TRP:CH2 | 2.61 | 0.68 |
| 1:J:557:ASP:HB3 | 1:J:560:VAL:HB | 1.75 | 0.68 |
| 1:A:823:LYS:HG3 | 1:A:850:VAL:HG22 | 1.75 | 0.67 |
| 1:A:893:ASN:N | 1:A:920:ARG:O | 2.20 | 0.67 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:A:1019:GLU:O | 1:A:1022:GLN:HG2 | 1.94 | 0.67 |
| 1:B:288:HIS:ND1 | 1:B:322:TRP:CH2 | 2.61 | 0.67 |
| 1:C:240:MET:CE | 1:C:258:TYR:HB2 | 2.23 | 0.67 |
| 1:D:135:ASP:O | 1:D:138:LYS:N | 2.27 | 0.67 |
| 1:D:603:GLN:HA | 1:D:606:LEU:CD1 | 2.23 | 0.67 |
| 1:E:315:ILE:HD11 | 1:E:333:SER:HB3 | 1.75 | 0.67 |
| 1:E:896:LEU:H | 1:E:922:ASN:CG | 1.98 | 0.67 |
| 1:F:240:MET:CE | 1:F:258:TYR:HB2 | 2.24 | 0.67 |
| 1:F:775:LEU:HG | 1:F:777:LEU:CD1 | 2.23 | 0.67 |
| 1:G:1019:GLU:O | 1:G:1022:GLN:HG2 | 1.94 | 0.67 |
| 1:H:173:LEU:HB3 | 1:H:368:VAL:HG11 | 1.74 | 0.67 |
| 1:H:270:ARG:HH11 | 1:H:275:LEU:HD11 | 1.56 | 0.67 |
| 1:J:425:GLN:OE1 | 1:J:425:GLN:N | 2.27 | 0.67 |
| 1:J:732:GLY:O | 1:J:736:VAL:HG13 | 1.94 | 0.67 |
| 1:A:240:MET:CE | 1:A:258:TYR:HB2 | 2.24 | 0.67 |
| 1:A:302:ASP:HA | 1:A:349:THR:OG1 | 1.95 | 0.67 |
| 1:B:490:ARG:HH21 | 1:B:495:GLN:HA | 1.58 | 0.67 |
| 1:B:649:TYR:C | 1:B:651:PRO:HD2 | 2.15 | 0.67 |
| 1:C:627:GLN:N | 1:C:627:GLN:OE1 | 2.28 | 0.67 |
| 1:D:557:ASP:HB3 | 1:D:560:VAL:HB | 1.75 | 0.67 |
| 1:E:624:GLN:H | 1:E:625:PRO:HD2 | 1.59 | 0.67 |
| 1:F:311:PHE:CE1 | 1:F:329:ASP:OD1 | 2.34 | 0.67 |
| 1:F:462:LEU:HA | 1:F:465:HIS:ND1 | 2.09 | 0.67 |
| 1:G:627:GLN:OE1 | 1:G:627:GLN:N | 2.28 | 0.67 |
| 1:I:380:GLU:OE2 | 1:I:384:LYS:HE3 | 1.94 | 0.67 |
| 1:I:732:GLY:O | 1:I:736:VAL:HG13 | 1.94 | 0.67 |
| 1:J:302:ASP:HA | 1:J:349:THR:OG1 | 1.95 | 0.67 |
| 1:J:380:GLU:OE2 | 1:J:384:LYS:HE3 | 1.94 | 0.67 |
| 1:J:893:ASN:N | 1:J:920:ARG:O | 2.20 | 0.67 |
| 1:A:562:LEU:CD2 | 1:A:611:TRP:CD1 | 2.77 | 0.67 |
| 1:B:425:GLN:OE1 | 1:B:425:GLN:N | 2.27 | 0.67 |
| 1:B:581:PHE:HD2 | 1:B:633:CYS:HB3 | 1.55 | 0.67 |
| 1:B:608:LEU:O | 1:B:612:ILE:HG13 | 1.95 | 0.67 |
| 1:B:619:LYS:CB | 2:L:261:ASP:OD2 | 2.42 | 0.67 |
| 1:B:732:GLY:O | 1:B:736:VAL:HG13 | 1.94 | 0.67 |
| 1:C:135:ASP:O | 1:C:138:LYS:N | 2.27 | 0.67 |
| 1:D:592:LEU:HD11 | 1:D:596:LEU:HD11 | 1.77 | 0.67 |
| 1:D:627:GLN:OE1 | 1:D:627:GLN:N | 2.28 | 0.67 |
| 1:H:268:THR:O | 1:H:269:GLN:NE2 | 2.28 | 0.67 |
| 1:H:268:THR:OG1 | 1:H:269:GLN:N | 2.27 | 0.67 |
| 1:H:649:TYR:C | 1:H:651:PRO:HD2 | 2.15 | 0.67 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:I:649:TYR:C | 1:I:651:PRO:HD2 | 2.15 | 0.67 |
| 1:J:649:TYR:C | 1:J:651:PRO:HD2 | 2.15 | 0.67 |
| 1:A:624:GLN:HG3 | 1:A:625:PRO:HD3 | 1.75 | 0.67 |
| 1:C:592:LEU:HD11 | 1:C:596:LEU:HD11 | 1.77 | 0.67 |
| 1:C:649:TYR:C | 1:C:651:PRO:HD2 | 2.15 | 0.67 |
| 1:D:268:THR:O | 1:D:269:GLN:NE2 | 2.28 | 0.67 |
| 1:E:173:LEU:HB3 | 1:E:368:VAL:HG11 | 1.74 | 0.67 |
| 1:E:240:MET:CE | 1:E:258:TYR:HB2 | 2.24 | 0.67 |
| 1:E:268:THR:O | 1:E:269:GLN:NE2 | 2.28 | 0.67 |
| 1:G:268:THR:O | 1:G:269:GLN:NE2 | 2.28 | 0.67 |
| 1:G:302:ASP:HA | 1:G:349:THR:OG1 | 1.95 | 0.67 |
| 1:H:732:GLY:O | 1:H:736:VAL:HG13 | 1.94 | 0.67 |
| 1:H:823:LYS:HG3 | 1:H:850:VAL:HG22 | 1.75 | 0.67 |
| 1:I:291:VAL:CG2 | 1:I:341:LEU:HD21 | 2.22 | 0.67 |
| 1:I:775:LEU:HG | 1:I:777:LEU:CD1 | 2.23 | 0.67 |
| 1:B:302:ASP:HA | 1:B:349:THR:OG1 | 1.95 | 0.67 |
| 1:C:788:PHE:CE2 | 1:C:792:LEU:HD11 | 2.30 | 0.67 |
| 1:E:788:PHE:CE2 | 1:E:792:LEU:HD11 | 2.30 | 0.67 |
| 1:E:823:LYS:HG3 | 1:E:850:VAL:HG22 | 1.75 | 0.67 |
| 1:F:608:LEU:O | 1:F:612:ILE:HG13 | 1.95 | 0.67 |
| 1:F:732:GLY:O | 1:F:736:VAL:HG13 | 1.94 | 0.67 |
| 1:F:788:PHE:CE2 | 1:F:792:LEU:HD11 | 2.30 | 0.67 |
| 1:G:775:LEU:HG | 1:G:777:LEU:CD1 | 2.23 | 0.67 |
| 1:H:169:THR:HG22 | 1:H:170:ARG:H | 1.59 | 0.67 |
| 1:H:500:SER:CB | 1:H:503:LEU:O | 2.43 | 0.67 |
| 1:I:302:ASP:HA | 1:I:349:THR:OG1 | 1.95 | 0.67 |
| 1:I:425:GLN:OE1 | 1:I:425:GLN:N | 2.27 | 0.67 |
| 1:A:145:ARG:CD | 1:J:217:GLU:OE2 | 2.43 | 0.67 |
| 1:A:920:ARG:HH12 | 2:K:121:ARG:HA | 1.58 | 0.67 |
| 1:B:217:GLU:OE2 | 1:C:145:ARG:CD | 2.42 | 0.67 |
| 1:D:489:LEU:CD2 | 1:D:494:LEU:HB3 | 2.23 | 0.67 |
| 1:E:356:GLU:CG | 1:E:516:LYS:HE3 | 2.21 | 0.67 |
| 1:F:169:THR:HG22 | 1:F:170:ARG:H | 1.59 | 0.67 |
| 1:F:624:GLN:H | 1:F:625:PRO:HD2 | 1.59 | 0.67 |
| 1:G:135:ASP:O | 1:G:138:LYS:N | 2.27 | 0.67 |
| 1:G:219:VAL:HG12 | 1:G:221:THR:H | 1.60 | 0.67 |
| 1:G:425:GLN:OE1 | 1:G:425:GLN:N | 2.27 | 0.67 |
| 1:H:608:LEU:O | 1:H:612:ILE:HG13 | 1.95 | 0.67 |
| 1:H:619:LYS:CB | 2:R:261:ASP:OD2 | 2.43 | 0.67 |
| 1:H:627:GLN:N | 1:H:627:GLN:OE1 | 2.28 | 0.67 |
| 1:I:240:MET:HE2 | 1:I:258:TYR:HB2 | 1.75 | 0.67 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:J:972:ARG:O | 1:J:1000:LEU:HG | 1.95 | 0.67 |
| 1:A:841:SER:HA | 1:A:844:CYS:SG | 2.35 | 0.67 |
| 1:B:169:THR:HG22 | 1:B:170:ARG:H | 1.59 | 0.67 |
| 1:B:972:ARG:O | 1:B:1000:LEU:HG | 1.95 | 0.67 |
| 1:C:268:THR:O | 1:C:269:GLN:NE2 | 2.28 | 0.67 |
| 1:C:893:ASN:N | 1:C:920:ARG:O | 2.20 | 0.67 |
| 1:D:922:ASN:O | 1:D:951:CYS:HA | 1.95 | 0.67 |
| 1:E:336:ILE:HD12 | 1:E:348:ILE:HD11 | 1.77 | 0.67 |
| 1:F:302:ASP:HA | 1:F:349:THR:OG1 | 1.95 | 0.67 |
| 1:F:336:ILE:HD12 | 1:F:348:ILE:HD11 | 1.77 | 0.67 |
| 1:G:136:TYR:OH | 1:G:280:CYS:SG | 2.41 | 0.67 |
| 1:G:268:THR:OG1 | 1:G:269:GLN:N | 2.27 | 0.67 |
| 1:G:649:TYR:C | 1:G:651:PRO:HD2 | 2.15 | 0.67 |
| 1:H:219:VAL:HG12 | 1:H:221:THR:H | 1.60 | 0.67 |
| 1:H:240:MET:CE | 1:H:258:TYR:HB2 | 2.24 | 0.67 |
| 1:H:302:ASP:HA | 1:H:349:THR:OG1 | 1.95 | 0.67 |
| 1:H:490:ARG:HH21 | 1:H:495:GLN:HA | 1.58 | 0.67 |
| 1:H:592:LEU:HD11 | 1:H:596:LEU:HD11 | 1.77 | 0.67 |
| 1:I:1019:GLU:O | 1:I:1022:GLN:HG2 | 1.94 | 0.67 |
| 2:S:33:ASN:HD21 | 2:S:55:LEU:HB3 | 1.58 | 0.67 |
| 1:A:219:VAL:HG12 | 1:A:221:THR:H | 1.60 | 0.67 |
| 1:A:603:GLN:HA | 1:A:606:LEU:CD1 | 2.23 | 0.67 |
| 1:B:788:PHE:CE2 | 1:B:792:LEU:HD11 | 2.30 | 0.67 |
| 1:C:608:LEU:O | 1:C:612:ILE:HG13 | 1.95 | 0.67 |
| 1:D:315:ILE:HD11 | 1:D:333:SER:HB3 | 1.75 | 0.67 |
| 1:D:775:LEU:HG | 1:D:777:LEU:CD1 | 2.23 | 0.67 |
| 1:D:788:PHE:CE2 | 1:D:792:LEU:HD11 | 2.30 | 0.67 |
| 1:E:732:GLY:O | 1:E:736:VAL:HG13 | 1.94 | 0.67 |
| 1:G:315:ILE:HD11 | 1:G:333:SER:HB3 | 1.75 | 0.67 |
| 1:G:841:SER:HA | 1:G:844:CYS:SG | 2.35 | 0.67 |
| 1:H:922:ASN:O | 1:H:951:CYS:HA | 1.95 | 0.67 |
| 1:I:219:VAL:HG12 | 1:I:221:THR:H | 1.60 | 0.67 |
| 1:I:319:CYS:SG | 1:I:340:LEU:HD11 | 2.35 | 0.67 |
| 1:I:462:LEU:HA | 1:I:465:HIS:ND1 | 2.09 | 0.67 |
| 1:J:169:THR:HG22 | 1:J:170:ARG:H | 1.59 | 0.67 |
| 1:J:603:GLN:HA | 1:J:606:LEU:CD1 | 2.23 | 0.67 |
| 1:J:922:ASN:O | 1:J:951:CYS:HA | 1.95 | 0.67 |
| 1:A:608:LEU:O | 1:A:612:ILE:HG13 | 1.95 | 0.67 |
| 1:B:219:VAL:HG12 | 1:B:221:THR:H | 1.60 | 0.67 |
| 1:B:270:ARG:HH11 | 1:B:275:LEU:HD11 | 1.56 | 0.67 |
| 1:B:592:LEU:HD11 | 1:B:596:LEU:HD11 | 1.77 | 0.67 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:C:490:ARG:HH21 | 1:C:495:GLN:HA | 1.58 | 0.67 |
| 1:C:775:LEU:HG | 1:C:777:LEU:CD1 | 2.23 | 0.67 |
| 1:D:240:MET:CE | 1:D:258:TYR:HB2 | 2.24 | 0.67 |
| 1:E:217:GLU:OE2 | 1:F:145:ARG:CD | 2.43 | 0.67 |
| 1:E:922:ASN:O | 1:E:951:CYS:HA | 1.95 | 0.67 |
| 1:F:268:THR:O | 1:F:269:GLN:NE2 | 2.28 | 0.67 |
| 1:F:627:GLN:OE1 | 1:F:627:GLN:N | 2.28 | 0.67 |
| 1:F:635:TYR:CD2 | 1:F:665:VAL:HA | 2.30 | 0.67 |
| 1:F:649:TYR:C | 1:F:651:PRO:HD2 | 2.15 | 0.67 |
| 1:G:624:GLN:H | 1:G:625:PRO:HD2 | 1.60 | 0.67 |
| 1:G:788:PHE:CE2 | 1:G:792:LEU:HD11 | 2.30 | 0.67 |
| 1:H:841:SER:HA | 1:H:844:CYS:SG | 2.35 | 0.67 |
| 1:I:896:LEU:H | 1:I:922:ASN:CG | 1.98 | 0.67 |
| 1:J:135:ASP:O | 1:J:138:LYS:N | 2.27 | 0.67 |
| 1:J:219:VAL:HG12 | 1:J:221:THR:H | 1.60 | 0.67 |
| 1:J:268:THR:O | 1:J:269:GLN:NE2 | 2.28 | 0.67 |
| 1:J:319:CYS:SG | 1:J:340:LEU:HD11 | 2.35 | 0.67 |
| 1:J:823:LYS:HG3 | 1:J:850:VAL:HG22 | 1.75 | 0.67 |
| 1:J:896:LEU:H | 1:J:922:ASN:CG | 1.98 | 0.67 |
| 1:A:732:GLY:O | 1:A:736:VAL:HG13 | 1.94 | 0.67 |
| 1:B:441:ALA:HB2 | 1:B:588:ARG:NH1 | 2.10 | 0.67 |
| 1:C:288:HIS:ND1 | 1:C:322:TRP:CH2 | 2.61 | 0.67 |
| 1:D:649:TYR:C | 1:D:651:PRO:HD2 | 2.15 | 0.67 |
| 1:E:592:LEU:HD11 | 1:E:596:LEU:HD11 | 1.77 | 0.67 |
| 1:G:408:MET:HG3 | 1:G:408:MET:O | 1.94 | 0.67 |
| 1:G:608:LEU:O | 1:G:612:ILE:HG13 | 1.95 | 0.67 |
| 1:H:319:CYS:SG | 1:H:340:LEU:HD11 | 2.35 | 0.67 |
| 1:A:240:MET:HE2 | 1:A:258:TYR:H | 1.60 | 0.66 |
| 1:A:319:CYS:SG | 1:A:340:LEU:HD11 | 2.35 | 0.66 |
| 1:A:623:ILE:HD12 | 1:A:623:ILE:N | 2.06 | 0.66 |
| 1:A:896:LEU:H | 1:A:922:ASN:CG | 1.98 | 0.66 |
| 1:B:624:GLN:H | 1:B:625:PRO:HD2 | 1.59 | 0.66 |
| 1:D:240:MET:HE2 | 1:D:258:TYR:H | 1.60 | 0.66 |
| 1:E:500:SER:CB | 1:E:503:LEU:O | 2.43 | 0.66 |
| 1:E:608:LEU:O | 1:E:612:ILE:HG13 | 1.95 | 0.66 |
| 1:G:592:LEU:HD11 | 1:G:596:LEU:HD11 | 1.77 | 0.66 |
| 1:H:296:ARG:HG3 | 1:H:296:ARG:HH11 | 1.61 | 0.66 |
| 1:I:271:SER:HA | 1:I:326:GLU:HG2 | 1.77 | 0.66 |
| 1:I:408:MET:O | 1:I:408:MET:HG3 | 1.94 | 0.66 |
| 1:I:922:ASN:O | 1:I:951:CYS:HA | 1.95 | 0.66 |
| 1:I:972:ARG:O | 1:I:1000:LEU:HG | 1.95 | 0.66 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:A:922:ASN:O | 1:A:951:CYS:HA | 1.95 | 0.66 |
| 1:C:302:ASP:HA | 1:C:349:THR:OG1 | 1.95 | 0.66 |
| 1:D:639:GLU:O | 1:D:643:VAL:HG23 | 1.96 | 0.66 |
| 1:E:353:VAL:HG11 | 1:E:499:VAL:HG23 | 1.77 | 0.66 |
| 1:E:408:MET:HG3 | 1:E:408:MET:O | 1.94 | 0.66 |
| 1:E:557:ASP:HB3 | 1:E:560:VAL:HB | 1.75 | 0.66 |
| 1:E:627:GLN:OE1 | 1:E:627:GLN:N | 2.28 | 0.66 |
| 1:E:635:TYR:CD2 | 1:E:665:VAL:HA | 2.30 | 0.66 |
| 1:G:270:ARG:HH11 | 1:G:275:LEU:HD11 | 1.56 | 0.66 |
| 1:G:296:ARG:HH11 | 1:G:296:ARG:HG3 | 1.61 | 0.66 |
| 1:G:462:LEU:HA | 1:G:465:HIS:CE1 | 2.31 | 0.66 |
| 1:G:502:PHE:HA | 1:G:521:ILE:CG1 | 2.26 | 0.66 |
| 1:I:336:ILE:HD12 | 1:I:348:ILE:HD11 | 1.77 | 0.66 |
| 1:I:592:LEU:HD11 | 1:I:596:LEU:HD11 | 1.77 | 0.66 |
| 1:I:608:LEU:O | 1:I:612:ILE:HG13 | 1.95 | 0.66 |
| 1:I:841:SER:HA | 1:I:844:CYS:SG | 2.35 | 0.66 |
| 1:B:462:LEU:HA | 1:B:465:HIS:CE1 | 2.31 | 0.66 |
| 1:C:268:THR:OG1 | 1:C:269:GLN:N | 2.27 | 0.66 |
| 1:C:922:ASN:O | 1:C:951:CYS:HA | 1.95 | 0.66 |
| 1:C:972:ARG:O | 1:C:1000:LEU:HG | 1.95 | 0.66 |
| 1:E:217:GLU:HB2 | 1:F:149:GLN:CD | 2.14 | 0.66 |
| 1:E:649:TYR:C | 1:E:651:PRO:HD2 | 2.15 | 0.66 |
| 1:F:219:VAL:HG12 | 1:F:221:THR:H | 1.60 | 0.66 |
| 1:F:462:LEU:HA | 1:F:465:HIS:CE1 | 2.31 | 0.66 |
| 1:F:841:SER:HA | 1:F:844:CYS:SG | 2.35 | 0.66 |
| 1:G:972:ARG:O | 1:G:1000:LEU:HG | 1.95 | 0.66 |
| 1:I:296:ARG:HH11 | 1:I:296:ARG:HG3 | 1.61 | 0.66 |
| 1:J:462:LEU:HA | 1:J:465:HIS:CE1 | 2.31 | 0.66 |
| 1:A:268:THR:O | 1:A:269:GLN:NE2 | 2.28 | 0.66 |
| 1:A:592:LEU:HD11 | 1:A:596:LEU:HD11 | 1.77 | 0.66 |
| 1:A:639:GLU:O | 1:A:643:VAL:HG23 | 1.96 | 0.66 |
| 1:B:551:LEU:HD23 | 1:B:551:LEU:O | 1.96 | 0.66 |
| 1:B:893:ASN:N | 1:B:920:ARG:O | 2.20 | 0.66 |
| 1:D:624:GLN:H | 1:D:625:PRO:HD2 | 1.58 | 0.66 |
| 1:E:240:MET:HE2 | 1:E:258:TYR:H | 1.61 | 0.66 |
| 1:E:271:SER:HA | 1:E:326:GLU:HG2 | 1.78 | 0.66 |
| 1:E:302:ASP:HA | 1:E:349:THR:OG1 | 1.95 | 0.66 |
| 1:E:639:GLU:O | 1:E:643:VAL:HG23 | 1.96 | 0.66 |
| 1:F:296:ARG:HH11 | 1:F:296:ARG:HG3 | 1.61 | 0.66 |
| 1:F:639:GLU:O | 1:F:643:VAL:HG23 | 1.96 | 0.66 |
| 1:G:639:GLU:O | 1:G:643:VAL:HG23 | 1.96 | 0.66 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:H:896:LEU:H | 1:H:922:ASN:CG | 1.98 | 0.66 |
| 1:I:551:LEU:O | 1:I:551:LEU:HD23 | 1.96 | 0.66 |
| 1:I:823:LYS:HG3 | 1:I:850:VAL:HG22 | 1.75 | 0.66 |
| 1:J:271:SER:HA | 1:J:326:GLU:HG2 | 1.77 | 0.66 |
| 1:J:336:ILE:HD12 | 1:J:348:ILE:HD11 | 1.77 | 0.66 |
| 1:J:841:SER:HA | 1:J:844:CYS:SG | 2.35 | 0.66 |
| 1:A:559:THR:O | 1:A:563:GLU:N | 2.28 | 0.66 |
| 1:A:566:GLY:HA2 | 1:A:624:GLN:HG3 | 1.76 | 0.66 |
| 1:C:408:MET:HG3 | 1:C:408:MET:O | 1.94 | 0.66 |
| 1:C:551:LEU:HD23 | 1:C:551:LEU:O | 1.96 | 0.66 |
| 1:D:271:SER:HA | 1:D:326:GLU:HG2 | 1.78 | 0.66 |
| 1:E:841:SER:HA | 1:E:844:CYS:SG | 2.35 | 0.66 |
| 1:G:217:GLU:OE2 | 1:H:145:ARG:CD | 2.43 | 0.66 |
| 1:H:291:VAL:CG2 | 1:H:341:LEU:HD21 | 2.22 | 0.66 |
| 1:H:551:LEU:HD23 | 1:H:551:LEU:O | 1.96 | 0.66 |
| 1:I:268:THR:O | 1:I:269:GLN:NE2 | 2.28 | 0.66 |
| 1:I:788:PHE:CE2 | 1:I:792:LEU:HD11 | 2.30 | 0.66 |
| 1:J:296:ARG:HH11 | 1:J:296:ARG:HG3 | 1.61 | 0.66 |
| 1:A:336:ILE:HD12 | 1:A:348:ILE:HD11 | 1.77 | 0.66 |
| 1:A:775:LEU:HG | 1:A:777:LEU:CD1 | 2.23 | 0.66 |
| 1:A:972:ARG:O | 1:A:1000:LEU:HG | 1.95 | 0.66 |
| 1:B:268:THR:O | 1:B:269:GLN:NE2 | 2.28 | 0.66 |
| 1:B:319:CYS:SG | 1:B:340:LEU:HD11 | 2.35 | 0.66 |
| 1:B:334:SER:HB3 | 1:B:340:LEU:HD13 | 1.78 | 0.66 |
| 1:B:336:ILE:HD12 | 1:B:348:ILE:HD11 | 1.77 | 0.66 |
| 1:B:639:GLU:O | 1:B:643:VAL:HG23 | 1.95 | 0.66 |
| 1:B:896:LEU:H | 1:B:922:ASN:CG | 1.98 | 0.66 |
| 1:C:239:MET:CE | 1:C:300:LEU:HD21 | 2.26 | 0.66 |
| 1:C:441:ALA:HB2 | 1:C:588:ARG:NH1 | 2.10 | 0.66 |
| 1:F:896:LEU:H | 1:F:922:ASN:CG | 1.98 | 0.66 |
| 1:G:215:HIS:ND1 | 1:G:215:HIS:O | 2.29 | 0.66 |
| 1:G:922:ASN:O | 1:G:951:CYS:HA | 1.95 | 0.66 |
| 1:H:336:ILE:HD12 | 1:H:348:ILE:HD11 | 1.77 | 0.66 |
| 1:H:788:PHE:CE2 | 1:H:792:LEU:HD11 | 2.30 | 0.66 |
| 1:J:624:GLN:H | 1:J:625:PRO:HD2 | 1.59 | 0.66 |
| 1:A:441:ALA:HB2 | 1:A:588:ARG:NH1 | 2.10 | 0.66 |
| 1:A:551:LEU:O | 1:A:551:LEU:HD23 | 1.96 | 0.66 |
| 1:C:219:VAL:HG12 | 1:C:221:THR:H | 1.60 | 0.66 |
| 1:C:462:LEU:HA | 1:C:465:HIS:CE1 | 2.31 | 0.66 |
| 1:D:319:CYS:SG | 1:D:340:LEU:HD11 | 2.35 | 0.66 |
| 1:D:462:LEU:HA | 1:D:465:HIS:CE1 | 2.31 | 0.66 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:D:972:ARG:O | 1:D:1000:LEU:HG | 1.95 | 0.66 |
| 1:E:319:CYS:SG | 1:E:340:LEU:HD11 | 2.35 | 0.66 |
| 1:F:502:PHE:HA | 1:F:521:ILE:CG1 | 2.25 | 0.66 |
| 1:H:462:LEU:HA | 1:H:465:HIS:CE1 | 2.31 | 0.66 |
| 1:H:972:ARG:O | 1:H:1000:LEU:HG | 1.95 | 0.66 |
| 1:I:502:PHE:HA | 1:I:521:ILE:CG1 | 2.25 | 0.66 |
| 1:I:893:ASN:N | 1:I:920:ARG:O | 2.20 | 0.66 |
| 1:J:215:HIS:ND1 | 1:J:215:HIS:O | 2.29 | 0.66 |
| 2:P:33:ASN:HD21 | 2:P:55:LEU:HB3 | 1.60 | 0.66 |
| 1:A:788:PHE:CE2 | 1:A:792:LEU:HD11 | 2.30 | 0.66 |
| 1:B:215:HIS:ND1 | 1:B:215:HIS:O | 2.29 | 0.66 |
| 1:C:264:VAL:HG22 | 1:C:270:ARG:NH1 | 2.10 | 0.66 |
| 1:C:334:SER:HB3 | 1:C:340:LEU:HD13 | 1.78 | 0.66 |
| 1:D:239:MET:CE | 1:D:300:LEU:HD21 | 2.26 | 0.66 |
| 1:D:336:ILE:HD12 | 1:D:348:ILE:HD11 | 1.77 | 0.66 |
| 1:G:319:CYS:SG | 1:G:340:LEU:HD11 | 2.35 | 0.66 |
| 1:H:239:MET:CE | 1:H:300:LEU:HD21 | 2.26 | 0.66 |
| 1:H:884:CYS:HB3 | 1:H:911:ASN:ND2 | 2.11 | 0.66 |
| 1:I:217:GLU:OE2 | 1:J:145:ARG:CD | 2.42 | 0.66 |
| 1:J:441:ALA:HB2 | 1:J:588:ARG:NH1 | 2.10 | 0.66 |
| 1:A:215:HIS:ND1 | 1:A:215:HIS:O | 2.29 | 0.66 |
| 1:B:268:THR:OG1 | 1:B:269:GLN:N | 2.27 | 0.66 |
| 1:C:214:GLU:OE1 | 1:C:214:GLU:N | 2.29 | 0.66 |
| 1:E:972:ARG:O | 1:E:1000:LEU:HG | 1.95 | 0.66 |
| 1:G:214:GLU:OE1 | 1:G:214:GLU:N | 2.29 | 0.66 |
| 1:G:336:ILE:HD12 | 1:G:348:ILE:HD11 | 1.77 | 0.66 |
| 1:H:214:GLU:OE1 | 1:H:214:GLU:N | 2.29 | 0.66 |
| 1:H:271:SER:HA | 1:H:326:GLU:HG2 | 1.78 | 0.66 |
| 1:H:639:GLU:O | 1:H:643:VAL:HG23 | 1.96 | 0.66 |
| 1:I:214:GLU:N | 1:I:214:GLU:OE1 | 2.29 | 0.66 |
| 1:I:239:MET:CE | 1:I:300:LEU:HD21 | 2.26 | 0.66 |
| 1:I:462:LEU:HA | 1:I:465:HIS:CE1 | 2.31 | 0.66 |
| 1:A:155:ASN:HB3 | 1:J:512:VAL:O | 1.96 | 0.66 |
| 1:A:296:ARG:HH11 | 1:A:296:ARG:HG3 | 1.61 | 0.66 |
| 1:A:884:CYS:HB3 | 1:A:911:ASN:ND2 | 2.11 | 0.66 |
| 1:B:214:GLU:OE1 | 1:B:214:GLU:N | 2.29 | 0.66 |
| 1:C:215:HIS:ND1 | 1:C:215:HIS:O | 2.29 | 0.66 |
| 1:D:302:ASP:HA | 1:D:349:THR:OG1 | 1.95 | 0.66 |
| 1:D:841:SER:HA | 1:D:844:CYS:SG | 2.35 | 0.66 |
| 1:E:296:ARG:HG3 | 1:E:296:ARG:HH11 | 1.61 | 0.66 |
| 1:F:214:GLU:N | 1:F:214:GLU:OE1 | 2.29 | 0.66 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:F:972:ARG:O | 1:F:1000:LEU:HG | 1.95 | 0.66 |
| 1:F:973:LYS:HE2 | 1:F:1002:ASN:ND2 | 2.11 | 0.66 |
| 1:G:973:LYS:HE2 | 1:G:1002:ASN:ND2 | 2.11 | 0.66 |
| 1:J:788:PHE:CE2 | 1:J:792:LEU:HD11 | 2.30 | 0.66 |
| 1:J:884:CYS:HB3 | 1:J:911:ASN:ND2 | 2.11 | 0.66 |
| 1:A:221:THR:HG21 | 1:A:362:LEU:CD1 | 2.26 | 0.65 |
| 1:A:334:SER:HB3 | 1:A:340:LEU:HD13 | 1.78 | 0.65 |
| 1:A:973:LYS:HE2 | 1:A:1002:ASN:ND2 | 2.11 | 0.65 |
| 1:B:296:ARG:HH11 | 1:B:296:ARG:HG3 | 1.60 | 0.65 |
| 1:B:922:ASN:O | 1:B:951:CYS:HA | 1.95 | 0.65 |
| 1:C:336:ILE:HD12 | 1:C:348:ILE:HD11 | 1.77 | 0.65 |
| 1:C:841:SER:HA | 1:C:844:CYS:SG | 2.35 | 0.65 |
| 1:D:551:LEU:O | 1:D:551:LEU:HD23 | 1.96 | 0.65 |
| 1:E:239:MET:CE | 1:E:300:LEU:HD21 | 2.26 | 0.65 |
| 1:E:775:LEU:HG | 1:E:777:LEU:CD1 | 2.23 | 0.65 |
| 1:F:971:LEU:HD21 | 1:F:973:LYS:O | 1.97 | 0.65 |
| 1:G:551:LEU:O | 1:G:551:LEU:HD23 | 1.96 | 0.65 |
| 1:G:896:LEU:H | 1:G:922:ASN:CG | 1.98 | 0.65 |
| 1:H:221:THR:HG21 | 1:H:362:LEU:CD1 | 2.26 | 0.65 |
| 1:H:408:MET:HG3 | 1:H:408:MET:O | 1.94 | 0.65 |
| 1:J:592:LEU:HD11 | 1:J:596:LEU:HD11 | 1.77 | 0.65 |
| 1:C:917:LEU:HB2 | 1:C:943:LEU:HD11 | 1.79 | 0.65 |
| 1:D:296:ARG:HH11 | 1:D:296:ARG:HG3 | 1.61 | 0.65 |
| 1:D:441:ALA:HB2 | 1:D:588:ARG:NH1 | 2.10 | 0.65 |
| 1:E:441:ALA:HB2 | 1:E:588:ARG:NH1 | 2.10 | 0.65 |
| 1:E:973:LYS:HE2 | 1:E:1002:ASN:ND2 | 2.11 | 0.65 |
| 1:E:1009:TYR:HE2 | 2:O:44:GLN:CB | 2.10 | 0.65 |
| 1:F:215:HIS:ND1 | 1:F:215:HIS:O | 2.29 | 0.65 |
| 1:F:271:SER:HA | 1:F:326:GLU:HG2 | 1.78 | 0.65 |
| 1:F:441:ALA:HB2 | 1:F:588:ARG:NH1 | 2.11 | 0.65 |
| 1:F:446:PHE:CE1 | 1:F:450:LEU:HD11 | 2.32 | 0.65 |
| 1:G:441:ALA:HB2 | 1:G:588:ARG:NH1 | 2.10 | 0.65 |
| 1:H:299:PHE:HB2 | 1:H:346:LEU:HD12 | 1.79 | 0.65 |
| 1:J:214:GLU:OE1 | 1:J:214:GLU:N | 2.29 | 0.65 |
| 1:J:239:MET:CE | 1:J:300:LEU:HD21 | 2.26 | 0.65 |
| 1:J:608:LEU:O | 1:J:612:ILE:HG13 | 1.95 | 0.65 |
| 1:B:841:SER:HA | 1:B:844:CYS:SG | 2.35 | 0.65 |
| 1:C:271:SER:HA | 1:C:326:GLU:HG2 | 1.77 | 0.65 |
| 1:C:319:CYS:SG | 1:C:340:LEU:HD11 | 2.35 | 0.65 |
| 1:C:896:LEU:H | 1:C:922:ASN:CG | 1.98 | 0.65 |
| 1:D:568:PHE:HD2 | 1:D:570:LYS:HD2 | 1.61 | 0.65 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:F:319:CYS:SG | 1:F:340:LEU:HD11 | 2.35 | 0.65 |
| 1:I:215:HIS:ND1 | 1:I:215:HIS:O | 2.29 | 0.65 |
| 1:J:221:THR:HG21 | 1:J:362:LEU:CD1 | 2.26 | 0.65 |
| 1:J:602:GLN:OE1 | 1:J:602:GLN:N | 2.30 | 0.65 |
| 1:J:917:LEU:HB2 | 1:J:943:LEU:HD11 | 1.79 | 0.65 |
| 1:A:271:SER:HA | 1:A:326:GLU:HG2 | 1.77 | 0.65 |
| 1:A:446:PHE:CE1 | 1:A:450:LEU:HD11 | 2.32 | 0.65 |
| 1:A:462:LEU:HA | 1:A:465:HIS:CE1 | 2.31 | 0.65 |
| 1:B:239:MET:CE | 1:B:300:LEU:HD21 | 2.26 | 0.65 |
| 1:B:299:PHE:HB2 | 1:B:346:LEU:HD12 | 1.79 | 0.65 |
| 1:D:219:VAL:HG12 | 1:D:221:THR:H | 1.60 | 0.65 |
| 1:D:334:SER:HB3 | 1:D:340:LEU:HD13 | 1.78 | 0.65 |
| 1:D:896:LEU:H | 1:D:922:ASN:CG | 1.98 | 0.65 |
| 1:D:973:LYS:HE2 | 1:D:1002:ASN:ND2 | 2.11 | 0.65 |
| 1:E:219:VAL:HG12 | 1:E:221:THR:H | 1.60 | 0.65 |
| 1:F:239:MET:CE | 1:F:300:LEU:HD21 | 2.26 | 0.65 |
| 1:G:239:MET:CE | 1:G:300:LEU:HD21 | 2.26 | 0.65 |
| 1:G:884:CYS:HB3 | 1:G:911:ASN:ND2 | 2.11 | 0.65 |
| 1:H:441:ALA:HB2 | 1:H:588:ARG:NH1 | 2.10 | 0.65 |
| 1:I:602:GLN:OE1 | 1:I:602:GLN:N | 2.30 | 0.65 |
| 1:I:917:LEU:HB2 | 1:I:943:LEU:HD11 | 1.79 | 0.65 |
| 1:A:268:THR:OG1 | 1:A:269:GLN:N | 2.27 | 0.65 |
| 1:A:299:PHE:HB2 | 1:A:346:LEU:HD12 | 1.79 | 0.65 |
| 1:A:917:LEU:HB2 | 1:A:943:LEU:HD11 | 1.79 | 0.65 |
| 1:B:512:VAL:O | 1:C:155:ASN:HB3 | 1.97 | 0.65 |
| 1:C:296:ARG:HH11 | 1:C:296:ARG:HG3 | 1.61 | 0.65 |
| 1:C:635:TYR:CD2 | 1:C:665:VAL:HA | 2.30 | 0.65 |
| 1:D:214:GLU:OE1 | 1:D:214:GLU:N | 2.29 | 0.65 |
| 1:D:268:THR:OG1 | 1:D:269:GLN:N | 2.27 | 0.65 |
| 1:D:657:LEU:HD23 | 1:D:663:HIS:CG | 2.32 | 0.65 |
| 1:E:214:GLU:OE1 | 1:E:214:GLU:N | 2.29 | 0.65 |
| 1:E:215:HIS:ND1 | 1:E:215:HIS:O | 2.29 | 0.65 |
| 1:E:462:LEU:HA | 1:E:465:HIS:CE1 | 2.31 | 0.65 |
| 1:F:221:THR:HG21 | 1:F:362:LEU:CD1 | 2.26 | 0.65 |
| 1:F:270:ARG:HH11 | 1:F:275:LEU:HD11 | 1.56 | 0.65 |
| 1:F:922:ASN:O | 1:F:951:CYS:HA | 1.95 | 0.65 |
| 1:G:446:PHE:CE1 | 1:G:450:LEU:HD11 | 2.32 | 0.65 |
| 1:G:637:MET:HG2 | 1:G:642:PHE:CD2 | 2.32 | 0.65 |
| 1:G:920:ARG:HH12 | 2:Q:121:ARG:HA | 1.61 | 0.65 |
| 1:H:512:VAL:O | 1:I:155:ASN:HB3 | 1.96 | 0.65 |
| 1:H:973:LYS:HE2 | 1:H:1002:ASN:ND2 | 2.11 | 0.65 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:I:884:CYS:HB3 | 1:I:911:ASN:ND2 | 2.11 | 0.65 |
| 1:J:627:GLN:OE1 | 1:J:627:GLN:N | 2.28 | 0.65 |
| 1:J:973:LYS:HE2 | 1:J:1002:ASN:ND2 | 2.11 | 0.65 |
| 1:A:135:ASP:O | 1:A:138:LYS:N | 2.27 | 0.65 |
| 1:A:562:LEU:HD22 | 1:A:611:TRP:CD1 | 2.30 | 0.65 |
| 1:B:264:VAL:HG22 | 1:B:270:ARG:NH1 | 2.10 | 0.65 |
| 1:B:917:LEU:HB2 | 1:B:943:LEU:HD11 | 1.79 | 0.65 |
| 1:C:270:ARG:HH11 | 1:C:275:LEU:HD11 | 1.56 | 0.65 |
| 1:C:639:GLU:O | 1:C:643:VAL:HG23 | 1.96 | 0.65 |
| 1:D:215:HIS:ND1 | 1:D:215:HIS:O | 2.29 | 0.65 |
| 1:D:917:LEU:HB2 | 1:D:943:LEU:HD11 | 1.79 | 0.65 |
| 1:E:446:PHE:CE1 | 1:E:450:LEU:HD11 | 2.32 | 0.65 |
| 1:E:512:VAL:O | 1:F:155:ASN:HB3 | 1.96 | 0.65 |
| 1:E:551:LEU:HD23 | 1:E:551:LEU:O | 1.96 | 0.65 |
| 1:F:592:LEU:HD11 | 1:F:596:LEU:HD11 | 1.77 | 0.65 |
| 1:G:221:THR:HG21 | 1:G:362:LEU:CD1 | 2.26 | 0.65 |
| 1:G:299:PHE:HB2 | 1:G:346:LEU:HD12 | 1.79 | 0.65 |
| 1:I:441:ALA:HB2 | 1:I:588:ARG:NH1 | 2.10 | 0.65 |
| 1:A:239:MET:CE | 1:A:300:LEU:HD21 | 2.26 | 0.65 |
| 1:D:551:LEU:HD23 | 1:D:551:LEU:C | 2.17 | 0.65 |
| 1:D:608:LEU:O | 1:D:612:ILE:HG13 | 1.95 | 0.65 |
| 1:E:221:THR:HG21 | 1:E:362:LEU:CD1 | 2.26 | 0.65 |
| 1:E:971:LEU:HD21 | 1:E:973:LYS:O | 1.97 | 0.65 |
| 1:F:334:SER:HB3 | 1:F:340:LEU:HD13 | 1.78 | 0.65 |
| 1:F:362:LEU:HB3 | 1:F:365:PRO:HD3 | 1.79 | 0.65 |
| 1:F:884:CYS:HB3 | 1:F:911:ASN:ND2 | 2.11 | 0.65 |
| 1:G:512:VAL:O | 1:H:155:ASN:HB3 | 1.96 | 0.65 |
| 1:G:971:LEU:HD21 | 1:G:973:LYS:O | 1.97 | 0.65 |
| 1:I:299:PHE:HB2 | 1:I:346:LEU:HD12 | 1.79 | 0.65 |
| 1:I:446:PHE:CE1 | 1:I:450:LEU:HD11 | 2.31 | 0.65 |
| 1:I:551:LEU:HD23 | 1:I:551:LEU:C | 2.17 | 0.65 |
| 1:J:446:PHE:CE1 | 1:J:450:LEU:HD11 | 2.32 | 0.65 |
| 1:J:639:GLU:O | 1:J:643:VAL:HG23 | 1.96 | 0.65 |
| 1:A:204:LYS:HG2 | 1:A:205:MET:N | 2.12 | 0.65 |
| 1:A:627:GLN:OE1 | 1:A:627:GLN:N | 2.28 | 0.65 |
| 1:B:362:LEU:HB3 | 1:B:365:PRO:HD3 | 1.79 | 0.65 |
| 1:C:136:TYR:OH | 1:C:280:CYS:SG | 2.41 | 0.65 |
| 1:C:562:LEU:HD23 | 1:C:611:TRP:CE3 | 2.31 | 0.65 |
| 1:F:637:MET:HG2 | 1:F:642:PHE:CD2 | 2.32 | 0.65 |
| 1:G:204:LYS:HG2 | 1:G:205:MET:N | 2.12 | 0.65 |
| 1:G:264:VAL:HG22 | 1:G:270:ARG:NH1 | 2.10 | 0.65 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:G:271:SER:HA | 1:G:326:GLU:HG2 | 1.78 | 0.65 |
| 1:G:291:VAL:CG2 | 1:G:341:LEU:HD21 | 2.22 | 0.65 |
| 1:H:215:HIS:ND1 | 1:H:215:HIS:O | 2.29 | 0.65 |
| 1:H:657:LEU:HD23 | 1:H:663:HIS:CG | 2.32 | 0.65 |
| 1:J:268:THR:OG1 | 1:J:269:GLN:N | 2.27 | 0.65 |
| 1:A:214:GLU:N | 1:A:214:GLU:OE1 | 2.29 | 0.65 |
| 1:C:362:LEU:HB3 | 1:C:365:PRO:HD3 | 1.79 | 0.65 |
| 1:E:657:LEU:HD23 | 1:E:663:HIS:CG | 2.32 | 0.65 |
| 1:E:917:LEU:HB2 | 1:E:943:LEU:HD11 | 1.79 | 0.65 |
| 1:F:515:GLU:N | 1:F:515:GLU:OE1 | 2.30 | 0.65 |
| 1:G:334:SER:HB3 | 1:G:340:LEU:HD13 | 1.78 | 0.65 |
| 1:H:893:ASN:N | 1:H:920:ARG:O | 2.20 | 0.65 |
| 1:I:204:LYS:HG2 | 1:I:205:MET:N | 2.12 | 0.65 |
| 1:I:627:GLN:OE1 | 1:I:627:GLN:N | 2.28 | 0.65 |
| 1:I:639:GLU:O | 1:I:643:VAL:HG23 | 1.96 | 0.65 |
| 1:J:240:MET:HE2 | 1:J:258:TYR:H | 1.61 | 0.65 |
| 1:J:551:LEU:O | 1:J:551:LEU:HD23 | 1.96 | 0.65 |
| 1:A:623:ILE:H | 1:A:623:ILE:CD1 | 1.97 | 0.65 |
| 1:A:657:LEU:HD23 | 1:A:663:HIS:CG | 2.32 | 0.65 |
| 1:B:627:GLN:OE1 | 1:B:627:GLN:N | 2.28 | 0.65 |
| 1:B:971:LEU:HD21 | 1:B:973:LYS:O | 1.97 | 0.65 |
| 1:C:204:LYS:HG2 | 1:C:205:MET:N | 2.12 | 0.65 |
| 1:C:515:GLU:OE1 | 1:C:515:GLU:N | 2.30 | 0.65 |
| 1:C:973:LYS:HE2 | 1:C:1002:ASN:ND2 | 2.11 | 0.65 |
| 1:D:221:THR:HG21 | 1:D:362:LEU:CD1 | 2.26 | 0.65 |
| 1:D:512:VAL:O | 1:E:155:ASN:HB3 | 1.97 | 0.65 |
| 1:D:635:TYR:CD2 | 1:D:665:VAL:HA | 2.30 | 0.65 |
| 1:D:790:ILE:O | 1:D:794:LEU:HG | 1.97 | 0.65 |
| 1:E:884:CYS:HB3 | 1:E:911:ASN:ND2 | 2.11 | 0.65 |
| 1:F:551:LEU:HD23 | 1:F:551:LEU:C | 2.17 | 0.65 |
| 1:F:551:LEU:HD23 | 1:F:551:LEU:O | 1.96 | 0.65 |
| 1:G:602:GLN:OE1 | 1:G:602:GLN:N | 2.30 | 0.65 |
| 1:H:637:MET:HG2 | 1:H:642:PHE:CD2 | 2.32 | 0.65 |
| 1:I:300:LEU:HD23 | 1:I:347:LEU:HD22 | 1.79 | 0.65 |
| 1:I:334:SER:HB3 | 1:I:340:LEU:HD13 | 1.78 | 0.65 |
| 1:I:512:VAL:O | 1:J:155:ASN:HB3 | 1.97 | 0.65 |
| 1:I:637:MET:HG2 | 1:I:642:PHE:CD2 | 2.32 | 0.65 |
| 1:J:300:LEU:HD23 | 1:J:347:LEU:HD22 | 1.80 | 0.65 |
| 1:A:790:ILE:O | 1:A:794:LEU:HG | 1.97 | 0.64 |
| 1:B:221:THR:HG21 | 1:B:362:LEU:CD1 | 2.26 | 0.64 |
| 1:B:657:LEU:HD23 | 1:B:663:HIS:CG | 2.32 | 0.64 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:C:299:PHE:HB2 | 1:C:346:LEU:HD12 | 1.79 | 0.64 |
| 1:C:657:LEU:HD23 | 1:C:663:HIS:CG | 2.32 | 0.64 |
| 1:C:971:LEU:HD21 | 1:C:973:LYS:O | 1.97 | 0.64 |
| 1:E:362:LEU:HB3 | 1:E:365:PRO:HD3 | 1.79 | 0.64 |
| 1:E:505:MET:O | 1:E:505:MET:HG2 | 1.98 | 0.64 |
| 1:E:515:GLU:OE1 | 1:E:515:GLU:N | 2.30 | 0.64 |
| 1:F:917:LEU:HB2 | 1:F:943:LEU:HD11 | 1.79 | 0.64 |
| 1:G:300:LEU:HD23 | 1:G:347:LEU:HD22 | 1.79 | 0.64 |
| 1:G:790:ILE:O | 1:G:794:LEU:HG | 1.97 | 0.64 |
| 1:G:917:LEU:HB2 | 1:G:943:LEU:HD11 | 1.79 | 0.64 |
| 1:H:300:LEU:HD23 | 1:H:347:LEU:HD22 | 1.80 | 0.64 |
| 1:H:551:LEU:HD23 | 1:H:551:LEU:C | 2.17 | 0.64 |
| 1:I:920:ARG:HH12 | 2:S:121:ARG:HA | 1.61 | 0.64 |
| 1:J:790:ILE:O | 1:J:794:LEU:HG | 1.97 | 0.64 |
| 1:A:300:LEU:HD23 | 1:A:347:LEU:HD22 | 1.79 | 0.64 |
| 1:A:602:GLN:OE1 | 1:A:602:GLN:N | 2.30 | 0.64 |
| 1:B:446:PHE:CE1 | 1:B:450:LEU:HD11 | 2.32 | 0.64 |
| 1:F:264:VAL:HG22 | 1:F:270:ARG:NH1 | 2.10 | 0.64 |
| 1:H:602:GLN:N | 1:H:602:GLN:OE1 | 2.30 | 0.64 |
| 2:L:293:LYS:HE2 | 2:L:293:LYS:HA | 1.80 | 0.64 |
| 1:B:551:LEU:HD23 | 1:B:551:LEU:C | 2.18 | 0.64 |
| 1:B:637:MET:HG2 | 1:B:642:PHE:CD2 | 2.32 | 0.64 |
| 1:B:973:LYS:HE2 | 1:B:1002:ASN:ND2 | 2.11 | 0.64 |
| 1:C:446:PHE:CE1 | 1:C:450:LEU:HD11 | 2.32 | 0.64 |
| 1:D:446:PHE:CE1 | 1:D:450:LEU:HD11 | 2.32 | 0.64 |
| 1:E:270:ARG:HH11 | 1:E:275:LEU:HD11 | 1.56 | 0.64 |
| 1:E:334:SER:HB3 | 1:E:340:LEU:HD13 | 1.78 | 0.64 |
| 1:H:872:VAL:HG21 | 1:H:896:LEU:HD13 | 1.80 | 0.64 |
| 1:I:221:THR:HG21 | 1:I:362:LEU:CD1 | 2.26 | 0.64 |
| 2:N:293:LYS:HE2 | 2:N:293:LYS:HA | 1.80 | 0.64 |
| 2:P:293:LYS:HA | 2:P:293:LYS:HE2 | 1.79 | 0.64 |
| 1:A:512:VAL:O | 1:B:155:ASN:HB3 | 1.97 | 0.64 |
| 1:B:515:GLU:OE1 | 1:B:515:GLU:N | 2.30 | 0.64 |
| 1:B:593:GLU:HG2 | 1:B:598:CYS:O | 1.98 | 0.64 |
| 1:B:602:GLN:OE1 | 1:B:602:GLN:N | 2.30 | 0.64 |
| 1:B:788:PHE:O | 1:B:792:LEU:HG | 1.98 | 0.64 |
| 1:C:221:THR:HG21 | 1:C:362:LEU:CD1 | 2.26 | 0.64 |
| 1:C:858:THR:O | 1:C:886:LEU:HA | 1.98 | 0.64 |
| 1:D:204:LYS:HG2 | 1:D:205:MET:N | 2.12 | 0.64 |
| 1:E:264:VAL:HG22 | 1:E:270:ARG:NH1 | 2.10 | 0.64 |
| 1:E:993:LEU:HD22 | 1:E:1028:LEU:HD11 | 1.79 | 0.64 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:F:788:PHE:O | 1:F:792:LEU:HG | 1.98 | 0.64 |
| 1:G:657:LEU:HD23 | 1:G:663:HIS:CG | 2.32 | 0.64 |
| 1:H:502:PHE:HA | 1:H:521:ILE:CG1 | 2.27 | 0.64 |
| 1:H:515:GLU:OE1 | 1:H:515:GLU:N | 2.30 | 0.64 |
| 1:H:917:LEU:HB2 | 1:H:943:LEU:HD11 | 1.79 | 0.64 |
| 1:I:657:LEU:HD23 | 1:I:663:HIS:CG | 2.32 | 0.64 |
| 1:I:971:LEU:HD21 | 1:I:973:LYS:O | 1.97 | 0.64 |
| 1:J:334:SER:HB3 | 1:J:340:LEU:HD13 | 1.78 | 0.64 |
| 1:J:971:LEU:HD21 | 1:J:973:LYS:O | 1.97 | 0.64 |
| 1:A:362:LEU:HB3 | 1:A:365:PRO:HD3 | 1.79 | 0.64 |
| 1:A:565:TYR:CD2 | 1:A:565:TYR:C | 2.71 | 0.64 |
| 1:D:505:MET:HG2 | 1:D:505:MET:O | 1.98 | 0.64 |
| 1:D:593:GLU:HG2 | 1:D:598:CYS:O | 1.98 | 0.64 |
| 1:D:637:MET:HG2 | 1:D:642:PHE:CD2 | 2.32 | 0.64 |
| 1:D:858:THR:O | 1:D:886:LEU:HA | 1.98 | 0.64 |
| 1:D:859:ARG:CZ | 1:D:888:LYS:HE3 | 2.27 | 0.64 |
| 1:D:884:CYS:HB3 | 1:D:911:ASN:ND2 | 2.11 | 0.64 |
| 1:D:993:LEU:HD22 | 1:D:1028:LEU:HD11 | 1.79 | 0.64 |
| 1:G:362:LEU:HB3 | 1:G:365:PRO:HD3 | 1.79 | 0.64 |
| 1:G:788:PHE:O | 1:G:792:LEU:HG | 1.98 | 0.64 |
| 1:H:334:SER:HB3 | 1:H:340:LEU:HD13 | 1.78 | 0.64 |
| 1:J:635:TYR:CD2 | 1:J:665:VAL:HA | 2.30 | 0.64 |
| 2:T:293:LYS:HE2 | 2:T:293:LYS:HA | 1.80 | 0.64 |
| 1:A:971:LEU:HD21 | 1:A:973:LYS:O | 1.97 | 0.64 |
| 1:B:288:HIS:ND1 | 1:B:322:TRP:CZ2 | 2.66 | 0.64 |
| 1:B:300:LEU:HD23 | 1:B:347:LEU:HD22 | 1.79 | 0.64 |
| 1:B:858:THR:O | 1:B:886:LEU:HA | 1.98 | 0.64 |
| 1:C:173:LEU:CD2 | 1:C:370:ILE:HG12 | 2.28 | 0.64 |
| 1:C:512:VAL:O | 1:D:155:ASN:HB3 | 1.97 | 0.64 |
| 1:C:859:ARG:CZ | 1:C:888:LYS:HE3 | 2.27 | 0.64 |
| 1:C:884:CYS:HB3 | 1:C:911:ASN:ND2 | 2.11 | 0.64 |
| 1:E:790:ILE:O | 1:E:794:LEU:HG | 1.97 | 0.64 |
| 1:F:204:LYS:HG2 | 1:F:205:MET:N | 2.12 | 0.64 |
| 1:F:300:LEU:HD23 | 1:F:347:LEU:HD22 | 1.79 | 0.64 |
| 1:F:512:VAL:O | 1:G:155:ASN:HB3 | 1.98 | 0.64 |
| 1:H:288:HIS:ND1 | 1:H:322:TRP:CZ2 | 2.66 | 0.64 |
| 1:H:446:PHE:CE1 | 1:H:450:LEU:HD11 | 2.32 | 0.64 |
| 1:H:971:LEU:HD21 | 1:H:973:LYS:O | 1.97 | 0.64 |
| 1:J:299:PHE:HB2 | 1:J:346:LEU:HD12 | 1.79 | 0.64 |
| 1:J:593:GLU:HG2 | 1:J:598:CYS:O | 1.98 | 0.64 |
| 2:Q:226:LEU:HD22 | 2:Q:271:VAL:HB | 1.80 | 0.64 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 2:R:226:LEU:HD22 | 2:R:271:VAL:HB | 1.80 | 0.64 |
| 1:A:593:GLU:HG2 | 1:A:598:CYS:O | 1.98 | 0.64 |
| 1:B:790:ILE:O | 1:B:794:LEU:HG | 1.97 | 0.64 |
| 1:D:270:ARG:HH11 | 1:D:275:LEU:HD11 | 1.56 | 0.64 |
| 1:D:333:SER:OG | 1:D:337:ARG:NH1 | 2.30 | 0.64 |
| 1:E:859:ARG:CZ | 1:E:888:LYS:HE3 | 2.27 | 0.64 |
| 1:F:217:GLU:OE2 | 1:G:145:ARG:CD | 2.42 | 0.64 |
| 1:H:217:GLU:OE2 | 1:I:145:ARG:CD | 2.43 | 0.64 |
| 1:H:475:ASP:CB | 1:H:553:LEU:CD2 | 2.72 | 0.64 |
| 1:H:505:MET:O | 1:H:505:MET:HG2 | 1.98 | 0.64 |
| 1:H:788:PHE:O | 1:H:792:LEU:HG | 1.98 | 0.64 |
| 1:I:505:MET:HG2 | 1:I:505:MET:O | 1.97 | 0.64 |
| 1:I:593:GLU:HG2 | 1:I:598:CYS:O | 1.98 | 0.64 |
| 1:I:858:THR:O | 1:I:886:LEU:HA | 1.98 | 0.64 |
| 1:I:973:LYS:HE2 | 1:I:1002:ASN:ND2 | 2.12 | 0.64 |
| 1:J:551:LEU:HD23 | 1:J:551:LEU:C | 2.17 | 0.64 |
| 1:J:657:LEU:HD23 | 1:J:663:HIS:CG | 2.32 | 0.64 |
| 2:N:226:LEU:HD22 | 2:N:271:VAL:HB | 1.80 | 0.64 |
| 1:A:515:GLU:N | 1:A:515:GLU:OE1 | 2.30 | 0.64 |
| 1:A:637:MET:HG2 | 1:A:642:PHE:CD2 | 2.32 | 0.64 |
| 1:A:858:THR:O | 1:A:886:LEU:HA | 1.98 | 0.64 |
| 1:C:551:LEU:HD23 | 1:C:551:LEU:C | 2.17 | 0.64 |
| 1:D:602:GLN:OE1 | 1:D:602:GLN:N | 2.30 | 0.64 |
| 1:E:333:SER:OG | 1:E:337:ARG:NH1 | 2.30 | 0.64 |
| 1:E:788:PHE:O | 1:E:792:LEU:HG | 1.98 | 0.64 |
| 1:F:173:LEU:CD2 | 1:F:370:ILE:HG12 | 2.28 | 0.64 |
| 1:F:505:MET:O | 1:F:505:MET:HG2 | 1.98 | 0.64 |
| 1:F:993:LEU:HD22 | 1:F:1028:LEU:HD11 | 1.79 | 0.64 |
| 1:H:624:GLN:H | 1:H:625:PRO:HD2 | 1.61 | 0.64 |
| 1:I:790:ILE:O | 1:I:794:LEU:HG | 1.97 | 0.64 |
| 1:J:515:GLU:OE1 | 1:J:515:GLU:N | 2.30 | 0.64 |
| 1:J:993:LEU:HD22 | 1:J:1028:LEU:HD11 | 1.79 | 0.64 |
| 2:M:226:LEU:HD22 | 2:M:271:VAL:HB | 1.80 | 0.64 |
| 1:A:635:TYR:CD2 | 1:A:665:VAL:HA | 2.30 | 0.64 |
| 1:C:562:LEU:HD12 | 1:C:562:LEU:N | 2.02 | 0.64 |
| 1:D:299:PHE:HB2 | 1:D:346:LEU:HD12 | 1.79 | 0.64 |
| 1:E:593:GLU:HG2 | 1:E:598:CYS:O | 1.98 | 0.64 |
| 1:E:602:GLN:N | 1:E:602:GLN:OE1 | 2.30 | 0.64 |
| 1:E:637:MET:HG2 | 1:E:642:PHE:CD2 | 2.32 | 0.64 |
| 1:E:858:THR:O | 1:E:886:LEU:HA | 1.98 | 0.64 |
| 1:G:173:LEU:CD2 | 1:G:370:ILE:HG12 | 2.28 | 0.64 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:G:515:GLU:OE1 | 1:G:515:GLU:N | 2.30 | 0.64 |
| 1:G:973:LYS:HG3 | 1:G:1002:ASN:CB | 2.28 | 0.64 |
| 1:H:790:ILE:O | 1:H:794:LEU:HG | 1.97 | 0.64 |
| 1:I:624:GLN:H | 1:I:625:PRO:HD2 | 1.62 | 0.64 |
| 1:I:635:TYR:CD2 | 1:I:665:VAL:HA | 2.30 | 0.64 |
| 1:I:993:LEU:HD22 | 1:I:1028:LEU:HD11 | 1.79 | 0.64 |
| 2:K:293:LYS:HE2 | 2:K:293:LYS:HA | 1.79 | 0.64 |
| 2:L:226:LEU:HD22 | 2:L:271:VAL:HB | 1.80 | 0.64 |
| 1:A:264:VAL:HG22 | 1:A:270:ARG:NH1 | 2.10 | 0.64 |
| 1:A:551:LEU:HD23 | 1:A:551:LEU:C | 2.18 | 0.64 |
| 1:B:884:CYS:HB3 | 1:B:911:ASN:ND2 | 2.11 | 0.64 |
| 1:D:788:PHE:O | 1:D:792:LEU:HG | 1.98 | 0.64 |
| 1:D:971:LEU:HD21 | 1:D:973:LYS:O | 1.97 | 0.64 |
| 1:E:268:THR:OG1 | 1:E:269:GLN:N | 2.27 | 0.64 |
| 1:E:300:LEU:HD23 | 1:E:347:LEU:HD22 | 1.79 | 0.64 |
| 1:G:593:GLU:HG2 | 1:G:598:CYS:O | 1.98 | 0.64 |
| 1:H:593:GLU:HG2 | 1:H:598:CYS:O | 1.98 | 0.64 |
| 1:I:432:LEU:O | 1:I:435:THR:HG22 | 1.98 | 0.64 |
| 1:J:637:MET:HG2 | 1:J:642:PHE:CD2 | 2.32 | 0.64 |
| 1:A:288:HIS:ND1 | 1:A:322:TRP:CZ2 | 2.66 | 0.63 |
| 1:A:353:VAL:HG11 | 1:A:499:VAL:HG23 | 1.79 | 0.63 |
| 1:A:432:LEU:O | 1:A:435:THR:HG22 | 1.98 | 0.63 |
| 1:B:204:LYS:HG2 | 1:B:205:MET:N | 2.12 | 0.63 |
| 1:B:271:SER:HA | 1:B:326:GLU:HG2 | 1.78 | 0.63 |
| 1:B:859:ARG:CZ | 1:B:888:LYS:HE3 | 2.27 | 0.63 |
| 1:C:300:LEU:HD23 | 1:C:347:LEU:HD22 | 1.79 | 0.63 |
| 1:C:788:PHE:O | 1:C:792:LEU:HG | 1.98 | 0.63 |
| 1:D:173:LEU:CD2 | 1:D:370:ILE:HG12 | 2.28 | 0.63 |
| 1:D:515:GLU:OE1 | 1:D:515:GLU:N | 2.30 | 0.63 |
| 1:E:204:LYS:HG2 | 1:E:205:MET:N | 2.12 | 0.63 |
| 1:E:551:LEU:HD23 | 1:E:551:LEU:C | 2.17 | 0.63 |
| 1:F:299:PHE:HB2 | 1:F:346:LEU:HD12 | 1.79 | 0.63 |
| 1:F:593:GLU:HG2 | 1:F:598:CYS:O | 1.98 | 0.63 |
| 1:F:1024:GLU:HG3 | 1:F:1025:LYS:HG2 | 1.81 | 0.63 |
| 1:J:788:PHE:O | 1:J:792:LEU:HG | 1.98 | 0.63 |
| 2:O:226:LEU:HD22 | 2:O:271:VAL:HB | 1.80 | 0.63 |
| 1:A:859:ARG:CZ | 1:A:888:LYS:HE3 | 2.28 | 0.63 |
| 1:A:872:VAL:HG21 | 1:A:896:LEU:HD13 | 1.80 | 0.63 |
| 1:A:1024:GLU:HG3 | 1:A:1025:LYS:HG2 | 1.80 | 0.63 |
| 1:B:173:LEU:CD2 | 1:B:370:ILE:HG12 | 2.28 | 0.63 |
| 1:C:288:HIS:ND1 | 1:C:322:TRP:CZ2 | 2.66 | 0.63 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:C:326:GLU:CB | 1:C:331:LEU:HB2 | 2.28 | 0.63 |
| 1:C:333:SER:OG | 1:C:337:ARG:NH1 | 2.30 | 0.63 |
| 1:C:503:LEU:HD21 | 1:C:520:PHE:CE1 | 2.33 | 0.63 |
| 1:D:566:GLY:HA2 | 1:D:625:PRO:HD3 | 1.80 | 0.63 |
| 1:F:291:VAL:CG2 | 1:F:341:LEU:HD21 | 2.22 | 0.63 |
| 1:F:500:SER:CB | 1:F:503:LEU:O | 2.46 | 0.63 |
| 1:F:657:LEU:HD23 | 1:F:663:HIS:CG | 2.32 | 0.63 |
| 1:G:872:VAL:HG21 | 1:G:896:LEU:HD13 | 1.80 | 0.63 |
| 1:I:288:HIS:ND1 | 1:I:322:TRP:CZ2 | 2.66 | 0.63 |
| 1:I:872:VAL:HG21 | 1:I:896:LEU:HD13 | 1.80 | 0.63 |
| 2:K:226:LEU:HD22 | 2:K:271:VAL:HB | 1.80 | 0.63 |
| 2:R:293:LYS:HE2 | 2:R:293:LYS:HA | 1.79 | 0.63 |
| 1:B:326:GLU:CB | 1:B:331:LEU:HB2 | 2.28 | 0.63 |
| 1:B:623:ILE:H | 1:B:623:ILE:CD1 | 2.09 | 0.63 |
| 1:C:432:LEU:O | 1:C:435:THR:HG22 | 1.99 | 0.63 |
| 1:C:637:MET:HG2 | 1:C:642:PHE:CD2 | 2.32 | 0.63 |
| 1:D:300:LEU:HD23 | 1:D:347:LEU:HD22 | 1.79 | 0.63 |
| 1:F:136:TYR:OH | 1:F:280:CYS:SG | 2.41 | 0.63 |
| 1:F:296:ARG:O | 1:F:297:ILE:HG13 | 1.99 | 0.63 |
| 1:G:288:HIS:ND1 | 1:G:322:TRP:CZ2 | 2.66 | 0.63 |
| 1:G:552:LYS:O | 1:G:552:LYS:HD2 | 1.99 | 0.63 |
| 1:G:585:ASN:HA | 1:G:637:MET:CE | 2.29 | 0.63 |
| 1:H:204:LYS:HG2 | 1:H:205:MET:N | 2.12 | 0.63 |
| 1:I:268:THR:OG1 | 1:I:269:GLN:N | 2.27 | 0.63 |
| 1:I:515:GLU:N | 1:I:515:GLU:OE1 | 2.30 | 0.63 |
| 2:S:293:LYS:HA | 2:S:293:LYS:HE2 | 1.79 | 0.63 |
| 1:A:173:LEU:CD2 | 1:A:370:ILE:HG12 | 2.28 | 0.63 |
| 1:A:333:SER:OG | 1:A:337:ARG:NH1 | 2.30 | 0.63 |
| 1:A:471:SER:CB | 1:A:553:LEU:HD12 | 2.20 | 0.63 |
| 1:B:759:ARG:HG2 | 1:B:789:ASP:OD2 | 1.99 | 0.63 |
| 1:C:242:ASP:HB3 | 1:C:248:LEU:HD22 | 1.80 | 0.63 |
| 1:C:993:LEU:HD22 | 1:C:1028:LEU:HD11 | 1.79 | 0.63 |
| 1:D:288:HIS:ND1 | 1:D:322:TRP:CZ2 | 2.66 | 0.63 |
| 1:D:755:ASP:OD2 | 1:D:785:GLU:HB2 | 1.99 | 0.63 |
| 1:E:432:LEU:O | 1:E:435:THR:HG22 | 1.99 | 0.63 |
| 1:F:268:THR:OG1 | 1:F:269:GLN:N | 2.27 | 0.63 |
| 1:F:585:ASN:HA | 1:F:637:MET:CE | 2.29 | 0.63 |
| 1:F:859:ARG:CZ | 1:F:888:LYS:HE3 | 2.27 | 0.63 |
| 1:G:432:LEU:O | 1:G:435:THR:HG22 | 1.99 | 0.63 |
| 1:G:551:LEU:HD23 | 1:G:551:LEU:C | 2.18 | 0.63 |
| 1:G:993:LEU:HD22 | 1:G:1028:LEU:HD11 | 1.79 | 0.63 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:G:1024:GLU:HG3 | 1:G:1025:LYS:HG2 | 1.81 | 0.63 |
| 1:I:217:GLU:HB2 | 1:J:149:GLN:OE1 | 1.99 | 0.63 |
| 1:I:788:PHE:O | 1:I:792:LEU:HG | 1.98 | 0.63 |
| 1:J:859:ARG:CZ | 1:J:888:LYS:HE3 | 2.27 | 0.63 |
| 1:J:1024:GLU:HG3 | 1:J:1025:LYS:HG2 | 1.81 | 0.63 |
| 2:M:293:LYS:HE2 | 2:M:293:LYS:HA | 1.79 | 0.63 |
| 1:A:296:ARG:O | 1:A:297:ILE:HG13 | 1.99 | 0.63 |
| 1:A:552:LYS:O | 1:A:552:LYS:HD2 | 1.99 | 0.63 |
| 1:A:759:ARG:HG2 | 1:A:789:ASP:OD2 | 1.99 | 0.63 |
| 1:C:567:LYS:HZ3 | 1:C:623:ILE:CB | 2.11 | 0.63 |
| 1:C:790:ILE:O | 1:C:794:LEU:HG | 1.98 | 0.63 |
| 1:D:326:GLU:CB | 1:D:331:LEU:HB2 | 2.28 | 0.63 |
| 1:E:288:HIS:ND1 | 1:E:322:TRP:CZ2 | 2.66 | 0.63 |
| 1:E:299:PHE:HB2 | 1:E:346:LEU:HD12 | 1.79 | 0.63 |
| 1:F:333:SER:OG | 1:F:337:ARG:NH1 | 2.30 | 0.63 |
| 1:F:858:THR:O | 1:F:886:LEU:HA | 1.98 | 0.63 |
| 1:H:173:LEU:CD2 | 1:H:370:ILE:HG12 | 2.28 | 0.63 |
| 1:J:204:LYS:HG2 | 1:J:205:MET:N | 2.12 | 0.63 |
| 1:J:755:ASP:OD2 | 1:J:785:GLU:HB2 | 1.99 | 0.63 |
| 1:J:858:THR:O | 1:J:886:LEU:HA | 1.98 | 0.63 |
| 1:J:872:VAL:HG21 | 1:J:896:LEU:HD13 | 1.79 | 0.63 |
| 2:O:293:LYS:HE2 | 2:O:293:LYS:HA | 1.80 | 0.63 |
| 2:P:226:LEU:HD22 | 2:P:271:VAL:HB | 1.80 | 0.63 |
| 1:A:326:GLU:CB | 1:A:331:LEU:HB2 | 2.28 | 0.63 |
| 1:A:565:TYR:HE2 | 1:A:625:PRO:CA | 2.11 | 0.63 |
| 1:B:242:ASP:HB3 | 1:B:248:LEU:HD22 | 1.81 | 0.63 |
| 1:B:505:MET:O | 1:B:505:MET:HG2 | 1.98 | 0.63 |
| 1:C:602:GLN:OE1 | 1:C:602:GLN:N | 2.30 | 0.63 |
| 1:C:759:ARG:HG2 | 1:C:789:ASP:OD2 | 1.99 | 0.63 |
| 1:D:264:VAL:HG22 | 1:D:270:ARG:NH1 | 2.10 | 0.63 |
| 1:D:362:LEU:HB3 | 1:D:365:PRO:HD3 | 1.79 | 0.63 |
| 1:E:173:LEU:CD2 | 1:E:370:ILE:HG12 | 2.28 | 0.63 |
| 1:E:296:ARG:O | 1:E:297:ILE:HG13 | 1.99 | 0.63 |
| 1:E:326:GLU:CB | 1:E:331:LEU:HB2 | 2.28 | 0.63 |
| 1:E:585:ASN:HA | 1:E:637:MET:CE | 2.29 | 0.63 |
| 1:F:623:ILE:H | 1:F:623:ILE:CD1 | 2.02 | 0.63 |
| 1:F:790:ILE:O | 1:F:794:LEU:HG | 1.97 | 0.63 |
| 1:H:362:LEU:HB3 | 1:H:365:PRO:HD3 | 1.79 | 0.63 |
| 1:H:585:ASN:HA | 1:H:637:MET:CE | 2.29 | 0.63 |
| 1:I:755:ASP:OD2 | 1:I:785:GLU:HB2 | 1.99 | 0.63 |
| 1:I:859:ARG:CZ | 1:I:888:LYS:HE3 | 2.28 | 0.63 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:J:296:ARG:O | 1:J:297:ILE:HG13 | 1.99 | 0.63 |
| 1:A:475:ASP:CB | 1:A:553:LEU:CD2 | 2.72 | 0.63 |
| 1:A:585:ASN:HA | 1:A:637:MET:CE | 2.29 | 0.63 |
| 1:C:755:ASP:OD2 | 1:C:785:GLU:HB2 | 1.99 | 0.63 |
| 1:D:136:TYR:OH | 1:D:280:CYS:SG | 2.41 | 0.63 |
| 1:D:568:PHE:HD2 | 1:D:570:LYS:CD | 2.12 | 0.63 |
| 1:D:872:VAL:HG21 | 1:D:896:LEU:HD13 | 1.80 | 0.63 |
| 1:E:1024:GLU:HG3 | 1:E:1025:LYS:HG2 | 1.81 | 0.63 |
| 1:F:602:GLN:OE1 | 1:F:602:GLN:N | 2.30 | 0.63 |
| 1:G:858:THR:O | 1:G:886:LEU:HA | 1.98 | 0.63 |
| 1:H:552:LYS:O | 1:H:552:LYS:HD2 | 1.99 | 0.63 |
| 1:H:859:ARG:CZ | 1:H:888:LYS:HE3 | 2.27 | 0.63 |
| 1:J:552:LYS:O | 1:J:552:LYS:HD2 | 1.99 | 0.63 |
| 1:J:585:ASN:HA | 1:J:637:MET:CE | 2.29 | 0.63 |
| 1:A:217:GLU:OE2 | 1:B:145:ARG:CD | 2.43 | 0.63 |
| 1:A:399:ILE:HD12 | 1:A:405:LEU:HD12 | 1.80 | 0.63 |
| 1:C:180:GLN:HA | 1:C:508:PHE:CE1 | 2.34 | 0.63 |
| 1:C:296:ARG:O | 1:C:297:ILE:HG13 | 1.99 | 0.63 |
| 1:C:593:GLU:HG2 | 1:C:598:CYS:O | 1.98 | 0.63 |
| 1:C:985:GLY:HA2 | 1:C:988:MET:SD | 2.39 | 0.63 |
| 1:D:173:LEU:HD22 | 1:D:370:ILE:HG12 | 1.81 | 0.63 |
| 1:D:180:GLN:HA | 1:D:508:PHE:CE1 | 2.34 | 0.63 |
| 1:D:759:ARG:HG2 | 1:D:789:ASP:OD2 | 1.99 | 0.63 |
| 1:G:242:ASP:HB3 | 1:G:248:LEU:HD22 | 1.80 | 0.63 |
| 1:G:505:MET:HG2 | 1:G:505:MET:O | 1.97 | 0.63 |
| 1:H:326:GLU:CB | 1:H:331:LEU:HB2 | 2.28 | 0.63 |
| 1:H:635:TYR:CD2 | 1:H:665:VAL:HA | 2.30 | 0.63 |
| 1:I:759:ARG:HG2 | 1:I:789:ASP:OD2 | 1.99 | 0.63 |
| 1:I:985:GLY:HA2 | 1:I:988:MET:SD | 2.39 | 0.63 |
| 1:J:362:LEU:HB3 | 1:J:365:PRO:HD3 | 1.79 | 0.63 |
| 2:Q:293:LYS:HE2 | 2:Q:293:LYS:HA | 1.79 | 0.63 |
| 1:B:432:LEU:O | 1:B:435:THR:HG22 | 1.98 | 0.63 |
| 1:B:872:VAL:HG21 | 1:B:896:LEU:HD13 | 1.80 | 0.63 |
| 1:B:1024:GLU:HG3 | 1:B:1025:LYS:HG2 | 1.80 | 0.63 |
| 1:C:872:VAL:HG21 | 1:C:896:LEU:HD13 | 1.80 | 0.63 |
| 1:D:432:LEU:O | 1:D:435:THR:HG22 | 1.98 | 0.63 |
| 1:D:623:ILE:H | 1:D:623:ILE:CD1 | 2.08 | 0.63 |
| 1:D:893:ASN:N | 1:D:920:ARG:O | 2.20 | 0.63 |
| 1:E:926:ASP:OD2 | 1:E:956:HIS:ND1 | 2.32 | 0.63 |
| 1:F:326:GLU:CB | 1:F:331:LEU:HB2 | 2.28 | 0.63 |
| 1:F:552:LYS:O | 1:F:552:LYS:HD2 | 1.99 | 0.63 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:G:326:GLU:CB | 1:G:331:LEU:HB2 | 2.28 | 0.63 |
| 1:G:480:GLN:NE2 | 1:G:572:TYR:OH | 2.32 | 0.63 |
| 1:H:242:ASP:HB3 | 1:H:248:LEU:HD22 | 1.80 | 0.63 |
| 1:H:759:ARG:HG2 | 1:H:789:ASP:OD2 | 1.99 | 0.63 |
| 1:H:858:THR:O | 1:H:886:LEU:HA | 1.98 | 0.63 |
| 1:I:856:SER:O | 1:I:858:THR:HG23 | 1.99 | 0.63 |
| 1:A:242:ASP:HB3 | 1:A:248:LEU:HD22 | 1.80 | 0.62 |
| 1:A:735:SER:O | 1:A:739:THR:HG23 | 2.00 | 0.62 |
| 1:B:173:LEU:HD22 | 1:B:370:ILE:HG12 | 1.81 | 0.62 |
| 1:B:585:ASN:HA | 1:B:637:MET:CE | 2.29 | 0.62 |
| 1:B:624:GLN:HG3 | 1:B:625:PRO:HD2 | 1.80 | 0.62 |
| 1:B:635:TYR:CD2 | 1:B:665:VAL:HA | 2.30 | 0.62 |
| 1:C:173:LEU:HD22 | 1:C:370:ILE:HG12 | 1.81 | 0.62 |
| 1:C:266:LEU:HB2 | 1:C:329:ASP:HB2 | 1.81 | 0.62 |
| 1:C:856:SER:O | 1:C:858:THR:HG23 | 1.99 | 0.62 |
| 1:D:242:ASP:HB3 | 1:D:248:LEU:HD22 | 1.80 | 0.62 |
| 1:D:266:LEU:HB2 | 1:D:329:ASP:HB2 | 1.81 | 0.62 |
| 1:D:585:ASN:HA | 1:D:637:MET:CE | 2.29 | 0.62 |
| 1:D:917:LEU:HG | 1:D:943:LEU:HD12 | 1.81 | 0.62 |
| 1:E:180:GLN:HA | 1:E:508:PHE:CE1 | 2.34 | 0.62 |
| 1:E:385:TYR:HD2 | 1:E:419:CYS:SG | 2.22 | 0.62 |
| 1:E:755:ASP:OD2 | 1:E:785:GLU:HB2 | 1.99 | 0.62 |
| 1:E:917:LEU:HG | 1:E:943:LEU:HD12 | 1.81 | 0.62 |
| 1:G:296:ARG:O | 1:G:297:ILE:HG13 | 1.98 | 0.62 |
| 1:H:735:SER:O | 1:H:739:THR:HG23 | 1.99 | 0.62 |
| 1:H:755:ASP:OD2 | 1:H:785:GLU:HB2 | 1.99 | 0.62 |
| 1:H:836:SER:H | 1:H:864:GLU:HB2 | 1.64 | 0.62 |
| 1:H:985:GLY:HA2 | 1:H:988:MET:SD | 2.39 | 0.62 |
| 1:J:288:HIS:ND1 | 1:J:322:TRP:CZ2 | 2.66 | 0.62 |
| 1:J:326:GLU:CB | 1:J:331:LEU:HB2 | 2.28 | 0.62 |
| 2:S:226:LEU:HD22 | 2:S:271:VAL:HB | 1.80 | 0.62 |
| 1:A:480:GLN:NE2 | 1:A:572:TYR:OH | 2.32 | 0.62 |
| 1:A:505:MET:HG2 | 1:A:505:MET:O | 1.98 | 0.62 |
| 1:A:755:ASP:OD2 | 1:A:785:GLU:HB2 | 1.99 | 0.62 |
| 1:A:770:CYS:SG | 1:A:772:ILE:HD12 | 2.40 | 0.62 |
| 1:B:296:ARG:O | 1:B:297:ILE:HG13 | 1.99 | 0.62 |
| 1:B:586:GLN:O | 1:B:589:THR:CG2 | 2.46 | 0.62 |
| 1:B:735:SER:O | 1:B:739:THR:HG23 | 1.99 | 0.62 |
| 1:B:770:CYS:SG | 1:B:772:ILE:HD12 | 2.40 | 0.62 |
| 1:C:385:TYR:HD2 | 1:C:419:CYS:SG | 2.22 | 0.62 |
| 1:D:420:THR:O | 1:D:424:GLN:HG2 | 2.00 | 0.62 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:D:926:ASP:OD2 | 1:D:956:HIS:ND1 | 2.32 | 0.62 |
| 1:G:735:SER:O | 1:G:739:THR:HG23 | 2.00 | 0.62 |
| 1:G:836:SER:H | 1:G:864:GLU:HB2 | 1.64 | 0.62 |
| 1:G:859:ARG:CZ | 1:G:888:LYS:HE3 | 2.27 | 0.62 |
| 1:G:985:GLY:HA2 | 1:G:988:MET:SD | 2.39 | 0.62 |
| 1:H:175:LYS:HE2 | 1:H:366:ARG:HD3 | 1.81 | 0.62 |
| 1:H:190:ILE:HA | 1:H:194:LYS:CB | 2.29 | 0.62 |
| 1:H:264:VAL:HG22 | 1:H:270:ARG:NH1 | 2.10 | 0.62 |
| 1:I:420:THR:O | 1:I:424:GLN:HG2 | 2.00 | 0.62 |
| 1:J:985:GLY:HA2 | 1:J:988:MET:SD | 2.39 | 0.62 |
| 2:T:226:LEU:HD22 | 2:T:271:VAL:HB | 1.80 | 0.62 |
| 1:A:448:SER:HA | 1:A:451:LEU:CD2 | 2.30 | 0.62 |
| 1:A:788:PHE:O | 1:A:792:LEU:HG | 1.98 | 0.62 |
| 1:B:180:GLN:HA | 1:B:508:PHE:CE1 | 2.34 | 0.62 |
| 1:B:559:THR:HG22 | 1:B:607:GLU:OE2 | 1.99 | 0.62 |
| 1:B:856:SER:O | 1:B:858:THR:HG23 | 1.99 | 0.62 |
| 1:C:770:CYS:SG | 1:C:772:ILE:HD12 | 2.39 | 0.62 |
| 1:E:291:VAL:CG2 | 1:E:341:LEU:HD21 | 2.22 | 0.62 |
| 1:E:856:SER:O | 1:E:858:THR:HG23 | 1.99 | 0.62 |
| 1:F:180:GLN:HA | 1:F:508:PHE:CE1 | 2.34 | 0.62 |
| 1:F:288:HIS:ND1 | 1:F:322:TRP:CZ2 | 2.66 | 0.62 |
| 1:F:735:SER:O | 1:F:739:THR:HG23 | 1.99 | 0.62 |
| 1:G:926:ASP:OD2 | 1:G:956:HIS:ND1 | 2.32 | 0.62 |
| 1:H:559:THR:HG22 | 1:H:607:GLU:OE2 | 1.99 | 0.62 |
| 1:H:973:LYS:HG3 | 1:H:1002:ASN:CB | 2.28 | 0.62 |
| 1:H:993:LEU:HD22 | 1:H:1028:LEU:HD11 | 1.79 | 0.62 |
| 1:I:559:THR:HG22 | 1:I:607:GLU:OE2 | 1.99 | 0.62 |
| 1:I:585:ASN:HA | 1:I:637:MET:CE | 2.29 | 0.62 |
| 1:J:173:LEU:CD2 | 1:J:370:ILE:HG12 | 2.28 | 0.62 |
| 1:J:333:SER:OG | 1:J:337:ARG:NH1 | 2.30 | 0.62 |
| 1:A:385:TYR:HD2 | 1:A:419:CYS:SG | 2.22 | 0.62 |
| 1:A:985:GLY:HA2 | 1:A:988:MET:SD | 2.39 | 0.62 |
| 1:A:993:LEU:HD22 | 1:A:1028:LEU:HD11 | 1.79 | 0.62 |
| 1:B:175:LYS:HE2 | 1:B:366:ARG:HD3 | 1.82 | 0.62 |
| 1:B:266:LEU:HB2 | 1:B:329:ASP:HB2 | 1.81 | 0.62 |
| 1:B:552:LYS:O | 1:B:552:LYS:HD2 | 1.99 | 0.62 |
| 1:B:818:LEU:HG | 1:B:822:LEU:HD11 | 1.81 | 0.62 |
| 1:B:993:LEU:HD22 | 1:B:1028:LEU:HD11 | 1.79 | 0.62 |
| 1:C:448:SER:HA | 1:C:451:LEU:CD2 | 2.30 | 0.62 |
| 1:C:557:ASP:HB3 | 1:C:560:VAL:HB | 1.80 | 0.62 |
| 1:D:856:SER:O | 1:D:858:THR:HG23 | 1.99 | 0.62 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:E:173:LEU:HD22 | 1:E:370:ILE:HG12 | 1.81 | 0.62 |
| 1:E:586:GLN:O | 1:E:589:THR:CG2 | 2.46 | 0.62 |
| 1:E:759:ARG:HG2 | 1:E:789:ASP:OD2 | 1.99 | 0.62 |
| 1:F:480:GLN:NE2 | 1:F:572:TYR:OH | 2.32 | 0.62 |
| 1:F:762:CYS:SG | 1:F:789:ASP:HB3 | 2.40 | 0.62 |
| 1:G:217:GLU:HB2 | 1:H:149:GLN:OE1 | 1.99 | 0.62 |
| 1:G:385:TYR:HD2 | 1:G:419:CYS:SG | 2.22 | 0.62 |
| 1:G:559:THR:HG22 | 1:G:607:GLU:OE2 | 1.99 | 0.62 |
| 1:H:296:ARG:O | 1:H:297:ILE:HG13 | 1.99 | 0.62 |
| 1:H:480:GLN:NE2 | 1:H:572:TYR:OH | 2.32 | 0.62 |
| 1:I:190:ILE:HA | 1:I:194:LYS:CB | 2.29 | 0.62 |
| 1:I:385:TYR:HD2 | 1:I:419:CYS:SG | 2.22 | 0.62 |
| 1:I:1024:GLU:HG3 | 1:I:1025:LYS:HG2 | 1.81 | 0.62 |
| 1:J:190:ILE:HA | 1:J:194:LYS:CB | 2.29 | 0.62 |
| 1:A:175:LYS:HE2 | 1:A:366:ARG:HD3 | 1.81 | 0.62 |
| 1:A:505:MET:HB2 | 1:A:518:TYR:HE1 | 1.65 | 0.62 |
| 1:B:333:SER:OG | 1:B:337:ARG:NH1 | 2.30 | 0.62 |
| 1:B:926:ASP:OD2 | 1:B:956:HIS:ND1 | 2.32 | 0.62 |
| 1:C:926:ASP:OD2 | 1:C:956:HIS:ND1 | 2.32 | 0.62 |
| 1:D:559:THR:HG22 | 1:D:607:GLU:OE2 | 1.99 | 0.62 |
| 1:F:770:CYS:SG | 1:F:772:ILE:HD12 | 2.40 | 0.62 |
| 1:F:985:GLY:HA2 | 1:F:988:MET:SD | 2.39 | 0.62 |
| 1:G:420:THR:O | 1:G:424:GLN:HG2 | 2.00 | 0.62 |
| 1:G:635:TYR:CD2 | 1:G:665:VAL:HA | 2.30 | 0.62 |
| 1:H:240:MET:HE2 | 1:H:258:TYR:HB2 | 1.80 | 0.62 |
| 1:H:856:SER:O | 1:H:858:THR:HG23 | 1.99 | 0.62 |
| 1:J:175:LYS:HE2 | 1:J:366:ARG:HD3 | 1.81 | 0.62 |
| 1:J:836:SER:H | 1:J:864:GLU:HB2 | 1.64 | 0.62 |
| 1:A:149:GLN:OE1 | 1:J:217:GLU:HB2 | 2.00 | 0.62 |
| 1:B:818:LEU:HD12 | 1:B:822:LEU:HD21 | 1.81 | 0.62 |
| 1:C:420:THR:O | 1:C:424:GLN:HG2 | 2.00 | 0.62 |
| 1:C:762:CYS:SG | 1:C:789:ASP:HB3 | 2.40 | 0.62 |
| 1:C:917:LEU:HG | 1:C:943:LEU:HD12 | 1.81 | 0.62 |
| 1:D:770:CYS:SG | 1:D:772:ILE:HD12 | 2.40 | 0.62 |
| 1:D:773:ARG:HG2 | 1:D:799:LYS:HD2 | 1.82 | 0.62 |
| 1:E:266:LEU:HB2 | 1:E:329:ASP:HB2 | 1.81 | 0.62 |
| 1:E:505:MET:HB2 | 1:E:518:TYR:HE1 | 1.65 | 0.62 |
| 1:E:872:VAL:HG21 | 1:E:896:LEU:HD13 | 1.80 | 0.62 |
| 1:F:420:THR:O | 1:F:424:GLN:HG2 | 2.00 | 0.62 |
| 1:F:917:LEU:HG | 1:F:943:LEU:HD12 | 1.81 | 0.62 |
| 1:G:175:LYS:HE2 | 1:G:366:ARG:HD3 | 1.81 | 0.62 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:G:333:SER:OG | 1:G:337:ARG:NH1 | 2.30 | 0.62 |
| 1:G:762:CYS:SG | 1:G:789:ASP:HB3 | 2.40 | 0.62 |
| 1:H:818:LEU:HG | 1:H:822:LEU:HD11 | 1.81 | 0.62 |
| 1:I:175:LYS:HE2 | 1:I:366:ARG:HD3 | 1.82 | 0.62 |
| 1:I:242:ASP:HB3 | 1:I:248:LEU:HD22 | 1.80 | 0.62 |
| 1:I:326:GLU:CB | 1:I:331:LEU:HB2 | 2.28 | 0.62 |
| 1:I:480:GLN:NE2 | 1:I:572:TYR:OH | 2.32 | 0.62 |
| 1:J:432:LEU:O | 1:J:435:THR:HG22 | 1.99 | 0.62 |
| 1:J:856:SER:O | 1:J:858:THR:HG23 | 1.99 | 0.62 |
| 1:A:166:LYS:O | 1:A:384:LYS:HD3 | 2.00 | 0.62 |
| 1:B:305:ASP:CB | 1:B:499:VAL:HG11 | 2.16 | 0.62 |
| 1:B:480:GLN:NE2 | 1:B:572:TYR:OH | 2.32 | 0.62 |
| 1:C:175:LYS:HE2 | 1:C:366:ARG:HD3 | 1.82 | 0.62 |
| 1:C:973:LYS:HG3 | 1:C:1002:ASN:CB | 2.28 | 0.62 |
| 1:E:480:GLN:NE2 | 1:E:572:TYR:OH | 2.32 | 0.62 |
| 1:E:552:LYS:O | 1:E:552:LYS:HD2 | 1.99 | 0.62 |
| 1:E:762:CYS:SG | 1:E:789:ASP:HB3 | 2.40 | 0.62 |
| 1:E:985:GLY:HA2 | 1:E:988:MET:SD | 2.39 | 0.62 |
| 1:E:1009:TYR:CE2 | 2:O:44:GLN:CB | 2.82 | 0.62 |
| 1:F:242:ASP:HB3 | 1:F:248:LEU:HD22 | 1.80 | 0.62 |
| 1:F:432:LEU:O | 1:F:435:THR:HG22 | 1.99 | 0.62 |
| 1:F:559:THR:HG22 | 1:F:607:GLU:OE2 | 1.99 | 0.62 |
| 1:G:190:ILE:HA | 1:G:194:LYS:CB | 2.29 | 0.62 |
| 1:G:270:ARG:CD | 1:G:275:LEU:HD13 | 2.26 | 0.62 |
| 1:H:762:CYS:SG | 1:H:789:ASP:HB3 | 2.40 | 0.62 |
| 1:I:836:SER:H | 1:I:864:GLU:HB2 | 1.64 | 0.62 |
| 1:J:385:TYR:HD2 | 1:J:419:CYS:SG | 2.22 | 0.62 |
| 1:J:559:THR:HG22 | 1:J:607:GLU:OE2 | 1.99 | 0.62 |
| 1:J:762:CYS:SG | 1:J:789:ASP:HB3 | 2.40 | 0.62 |
| 1:J:770:CYS:SG | 1:J:772:ILE:HD12 | 2.40 | 0.62 |
| 1:A:818:LEU:HD12 | 1:A:822:LEU:HD21 | 1.81 | 0.62 |
| 1:A:818:LEU:HG | 1:A:822:LEU:HD11 | 1.81 | 0.62 |
| 1:A:917:LEU:HG | 1:A:943:LEU:HD12 | 1.81 | 0.62 |
| 1:B:166:LYS:O | 1:B:384:LYS:HD3 | 2.00 | 0.62 |
| 1:B:755:ASP:OD2 | 1:B:785:GLU:HB2 | 1.99 | 0.62 |
| 1:C:505:MET:O | 1:C:505:MET:HG2 | 1.98 | 0.62 |
| 1:D:270:ARG:CD | 1:D:275:LEU:HD13 | 2.26 | 0.62 |
| 1:D:794:LEU:HD23 | 1:D:800:LEU:HD23 | 1.82 | 0.62 |
| 1:D:1024:GLU:HG3 | 1:D:1025:LYS:HG2 | 1.81 | 0.62 |
| 1:E:773:ARG:HG2 | 1:E:799:LYS:HD2 | 1.82 | 0.62 |
| 1:G:475:ASP:CB | 1:G:553:LEU:CD2 | 2.72 | 0.62 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:H:926:ASP:OD2 | 1:H:956:HIS:ND1 | 2.32 | 0.62 |
| 1:H:1024:GLU:HG3 | 1:H:1025:LYS:HG2 | 1.81 | 0.62 |
| 1:I:509:GLN:HA | 1:I:514:CYS:HA | 1.82 | 0.62 |
| 1:J:252:ARG:HD2 | 1:J:253:PHE:CZ | 2.35 | 0.62 |
| 1:J:264:VAL:HG22 | 1:J:270:ARG:NH1 | 2.10 | 0.62 |
| 1:J:509:GLN:HA | 1:J:514:CYS:HA | 1.82 | 0.62 |
| 1:J:735:SER:O | 1:J:739:THR:HG23 | 1.99 | 0.62 |
| 1:J:794:LEU:HD23 | 1:J:800:LEU:HD23 | 1.82 | 0.62 |
| 1:A:180:GLN:HA | 1:A:508:PHE:CZ | 2.35 | 0.62 |
| 1:A:180:GLN:HA | 1:A:508:PHE:CE1 | 2.34 | 0.62 |
| 1:A:190:ILE:HA | 1:A:194:LYS:CB | 2.29 | 0.62 |
| 1:A:509:GLN:HA | 1:A:514:CYS:HA | 1.82 | 0.62 |
| 1:A:762:CYS:SG | 1:A:789:ASP:HB3 | 2.40 | 0.62 |
| 1:B:794:LEU:HD23 | 1:B:800:LEU:HD23 | 1.82 | 0.62 |
| 1:C:270:ARG:NH1 | 1:C:275:LEU:HD11 | 2.14 | 0.62 |
| 1:C:480:GLN:NE2 | 1:C:572:TYR:OH | 2.32 | 0.62 |
| 1:C:567:LYS:HZ3 | 1:C:623:ILE:HG12 | 1.65 | 0.62 |
| 1:C:585:ASN:HA | 1:C:637:MET:CE | 2.29 | 0.62 |
| 1:C:818:LEU:HG | 1:C:822:LEU:HD11 | 1.81 | 0.62 |
| 1:D:296:ARG:O | 1:D:297:ILE:HG13 | 1.99 | 0.62 |
| 1:D:480:GLN:NE2 | 1:D:572:TYR:OH | 2.32 | 0.62 |
| 1:D:973:LYS:HG3 | 1:D:1002:ASN:CB | 2.28 | 0.62 |
| 1:E:270:ARG:CD | 1:E:275:LEU:HD13 | 2.26 | 0.62 |
| 1:F:266:LEU:HB2 | 1:F:329:ASP:HB2 | 1.81 | 0.62 |
| 1:F:759:ARG:HG2 | 1:F:789:ASP:OD2 | 1.99 | 0.62 |
| 1:F:856:SER:O | 1:F:858:THR:HG23 | 1.99 | 0.62 |
| 1:G:166:LYS:O | 1:G:384:LYS:HD3 | 2.00 | 0.62 |
| 1:G:252:ARG:HD2 | 1:G:253:PHE:CZ | 2.35 | 0.62 |
| 1:G:755:ASP:OD2 | 1:G:785:GLU:HB2 | 1.99 | 0.62 |
| 1:H:166:LYS:O | 1:H:384:LYS:HD3 | 2.00 | 0.62 |
| 1:H:432:LEU:O | 1:H:435:THR:HG22 | 1.99 | 0.62 |
| 1:H:759:ARG:HA | 1:H:762:CYS:SG | 2.40 | 0.62 |
| 1:H:794:LEU:HD23 | 1:H:800:LEU:HD23 | 1.82 | 0.62 |
| 1:I:362:LEU:HB3 | 1:I:365:PRO:HD3 | 1.79 | 0.62 |
| 1:I:735:SER:O | 1:I:739:THR:HG23 | 1.99 | 0.62 |
| 1:I:818:LEU:HG | 1:I:822:LEU:HD11 | 1.81 | 0.62 |
| 1:J:180:GLN:HA | 1:J:508:PHE:CZ | 2.35 | 0.62 |
| 1:J:242:ASP:HB3 | 1:J:248:LEU:HD22 | 1.80 | 0.62 |
| 1:J:505:MET:O | 1:J:505:MET:HG2 | 1.98 | 0.62 |
| 1:J:759:ARG:HG2 | 1:J:789:ASP:OD2 | 1.99 | 0.62 |
| 1:A:613:GLU:HG2 | 1:A:649:TYR:CE2 | 2.35 | 0.62 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:A:759:ARG:HA | 1:A:762:CYS:SG | 2.40 | 0.62 |
| 1:A:937:LEU:HD21 | 1:A:964:LEU:HD12 | 1.82 | 0.62 |
| 1:B:448:SER:HA | 1:B:451:LEU:CD2 | 2.30 | 0.62 |
| 1:B:762:CYS:SG | 1:B:789:ASP:HB3 | 2.40 | 0.62 |
| 1:B:836:SER:H | 1:B:864:GLU:HB2 | 1.64 | 0.62 |
| 1:B:937:LEU:HD21 | 1:B:964:LEU:HD12 | 1.82 | 0.62 |
| 1:B:973:LYS:HG3 | 1:B:1002:ASN:CB | 2.28 | 0.62 |
| 1:B:985:GLY:HA2 | 1:B:988:MET:SD | 2.39 | 0.62 |
| 1:C:735:SER:O | 1:C:739:THR:HG23 | 1.99 | 0.62 |
| 1:D:175:LYS:HE2 | 1:D:366:ARG:HD3 | 1.81 | 0.62 |
| 1:E:448:SER:HA | 1:E:451:LEU:CD2 | 2.30 | 0.62 |
| 1:F:173:LEU:HD22 | 1:F:370:ILE:HG12 | 1.81 | 0.62 |
| 1:F:175:LYS:HE2 | 1:F:366:ARG:HD3 | 1.82 | 0.62 |
| 1:F:270:ARG:CD | 1:F:275:LEU:HD13 | 2.26 | 0.62 |
| 1:F:505:MET:HB2 | 1:F:518:TYR:HE1 | 1.65 | 0.62 |
| 1:F:926:ASP:OD2 | 1:F:956:HIS:ND1 | 2.32 | 0.62 |
| 1:G:180:GLN:HA | 1:G:508:PHE:CE1 | 2.34 | 0.62 |
| 1:G:818:LEU:HG | 1:G:822:LEU:HD11 | 1.81 | 0.62 |
| 1:H:385:TYR:HD2 | 1:H:419:CYS:SG | 2.22 | 0.62 |
| 1:I:173:LEU:CD2 | 1:I:370:ILE:HG12 | 2.28 | 0.62 |
| 1:I:333:SER:OG | 1:I:337:ARG:NH1 | 2.30 | 0.62 |
| 1:I:448:SER:HA | 1:I:451:LEU:CD2 | 2.30 | 0.62 |
| 1:I:926:ASP:OD2 | 1:I:956:HIS:ND1 | 2.32 | 0.62 |
| 1:J:917:LEU:HG | 1:J:943:LEU:HD12 | 1.81 | 0.62 |
| 1:A:420:THR:O | 1:A:424:GLN:HG2 | 2.00 | 0.61 |
| 1:B:385:TYR:HD2 | 1:B:419:CYS:SG | 2.22 | 0.61 |
| 1:B:613:GLU:HG2 | 1:B:649:TYR:CE2 | 2.35 | 0.61 |
| 1:C:759:ARG:HA | 1:C:762:CYS:SG | 2.40 | 0.61 |
| 1:C:937:LEU:HD21 | 1:C:964:LEU:HD12 | 1.82 | 0.61 |
| 1:D:552:LYS:O | 1:D:552:LYS:HD2 | 1.99 | 0.61 |
| 1:D:759:ARG:HA | 1:D:762:CYS:SG | 2.40 | 0.61 |
| 1:D:762:CYS:SG | 1:D:789:ASP:HB3 | 2.40 | 0.61 |
| 1:E:420:THR:O | 1:E:424:GLN:HG2 | 2.00 | 0.61 |
| 1:F:180:GLN:HA | 1:F:508:PHE:CZ | 2.35 | 0.61 |
| 1:F:217:GLU:HB2 | 1:G:149:GLN:OE1 | 1.99 | 0.61 |
| 1:F:872:VAL:HG21 | 1:F:896:LEU:HD13 | 1.80 | 0.61 |
| 1:G:180:GLN:HA | 1:G:508:PHE:CZ | 2.35 | 0.61 |
| 1:G:566:GLY:HA2 | 1:G:625:PRO:HD3 | 1.82 | 0.61 |
| 1:G:613:GLU:HG2 | 1:G:649:TYR:CE2 | 2.35 | 0.61 |
| 1:G:794:LEU:HD23 | 1:G:800:LEU:HD23 | 1.82 | 0.61 |
| 1:H:217:GLU:HB2 | 1:I:149:GLN:OE1 | 2.00 | 0.61 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:H:333:SER:OG | 1:H:337:ARG:NH1 | 2.30 | 0.61 |
| 1:H:505:MET:HB2 | 1:H:518:TYR:HE1 | 1.65 | 0.61 |
| 1:H:818:LEU:HD12 | 1:H:822:LEU:HD21 | 1.81 | 0.61 |
| 1:I:252:ARG:HD2 | 1:I:253:PHE:CZ | 2.35 | 0.61 |
| 1:I:270:ARG:NH1 | 1:I:275:LEU:HD11 | 2.14 | 0.61 |
| 1:I:762:CYS:SG | 1:I:789:ASP:HB3 | 2.40 | 0.61 |
| 1:J:420:THR:O | 1:J:424:GLN:HG2 | 2.00 | 0.61 |
| 1:A:173:LEU:HD22 | 1:A:370:ILE:HG12 | 1.81 | 0.61 |
| 1:A:266:LEU:HB2 | 1:A:329:ASP:HB2 | 1.81 | 0.61 |
| 1:A:559:THR:HG22 | 1:A:607:GLU:OE2 | 1.99 | 0.61 |
| 1:B:505:MET:HB2 | 1:B:518:TYR:HE1 | 1.65 | 0.61 |
| 1:D:985:GLY:HA2 | 1:D:988:MET:SD | 2.39 | 0.61 |
| 1:E:613:GLU:HG2 | 1:E:649:TYR:CE2 | 2.35 | 0.61 |
| 1:E:735:SER:O | 1:E:739:THR:HG23 | 2.00 | 0.61 |
| 1:F:381:TYR:HD2 | 1:F:415:CYS:HG | 1.46 | 0.61 |
| 1:F:755:ASP:OD2 | 1:F:785:GLU:HB2 | 1.99 | 0.61 |
| 1:F:818:LEU:HD12 | 1:F:822:LEU:HD21 | 1.81 | 0.61 |
| 1:G:759:ARG:HG2 | 1:G:789:ASP:OD2 | 1.99 | 0.61 |
| 1:H:448:SER:HA | 1:H:451:LEU:CD2 | 2.30 | 0.61 |
| 1:J:180:GLN:HA | 1:J:508:PHE:CE1 | 2.34 | 0.61 |
| 1:A:773:ARG:HG2 | 1:A:799:LYS:HD2 | 1.82 | 0.61 |
| 1:A:856:SER:O | 1:A:858:THR:HG23 | 1.99 | 0.61 |
| 1:B:420:THR:O | 1:B:424:GLN:HG2 | 2.00 | 0.61 |
| 1:C:190:ILE:HA | 1:C:194:LYS:CB | 2.29 | 0.61 |
| 1:C:836:SER:H | 1:C:864:GLU:HB2 | 1.64 | 0.61 |
| 1:D:190:ILE:HA | 1:D:194:LYS:CB | 2.29 | 0.61 |
| 1:D:448:SER:HA | 1:D:451:LEU:CD2 | 2.30 | 0.61 |
| 1:E:242:ASP:HB3 | 1:E:248:LEU:HD22 | 1.80 | 0.61 |
| 1:E:770:CYS:SG | 1:E:772:ILE:HD12 | 2.40 | 0.61 |
| 1:H:567:LYS:HD3 | 1:H:624:GLN:HG2 | 1.82 | 0.61 |
| 1:H:917:LEU:HG | 1:H:943:LEU:HD12 | 1.81 | 0.61 |
| 1:I:180:GLN:HA | 1:I:508:PHE:CE1 | 2.34 | 0.61 |
| 1:I:296:ARG:O | 1:I:297:ILE:HG13 | 1.99 | 0.61 |
| 1:I:552:LYS:O | 1:I:552:LYS:HD2 | 1.99 | 0.61 |
| 1:I:770:CYS:SG | 1:I:772:ILE:HD12 | 2.39 | 0.61 |
| 1:I:917:LEU:HG | 1:I:943:LEU:HD12 | 1.81 | 0.61 |
| 1:A:581:PHE:CE1 | 1:A:608:LEU:HB3 | 2.36 | 0.61 |
| 1:A:926:ASP:OD2 | 1:A:956:HIS:ND1 | 2.32 | 0.61 |
| 1:A:945:VAL:HG22 | 1:A:973:LYS:CB | 2.31 | 0.61 |
| 1:B:759:ARG:HA | 1:B:762:CYS:SG | 2.40 | 0.61 |
| 1:C:509:GLN:HA | 1:C:514:CYS:HA | 1.82 | 0.61 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:C:773:ARG:HG2 | 1:C:799:LYS:HD2 | 1.82 | 0.61 |
| 1:D:217:GLU:HB2 | 1:E:149:GLN:OE1 | 1.98 | 0.61 |
| 1:D:818:LEU:HG | 1:D:822:LEU:HD11 | 1.81 | 0.61 |
| 1:F:748:LEU:HD13 | 1:F:761:LEU:HD21 | 1.83 | 0.61 |
| 1:G:748:LEU:HD13 | 1:G:761:LEU:HD21 | 1.83 | 0.61 |
| 1:H:180:GLN:HA | 1:H:508:PHE:CE1 | 2.34 | 0.61 |
| 1:H:613:GLU:HG2 | 1:H:649:TYR:CE2 | 2.36 | 0.61 |
| 1:H:770:CYS:SG | 1:H:772:ILE:HD12 | 2.39 | 0.61 |
| 1:I:613:GLU:HG2 | 1:I:649:TYR:CE2 | 2.36 | 0.61 |
| 1:J:448:SER:HA | 1:J:451:LEU:CD2 | 2.30 | 0.61 |
| 1:J:818:LEU:HG | 1:J:822:LEU:HD11 | 1.81 | 0.61 |
| 1:J:926:ASP:OD2 | 1:J:956:HIS:ND1 | 2.32 | 0.61 |
| 1:A:252:ARG:HD2 | 1:A:253:PHE:CZ | 2.35 | 0.61 |
| 1:B:180:GLN:HA | 1:B:508:PHE:CZ | 2.35 | 0.61 |
| 1:B:509:GLN:HA | 1:B:514:CYS:HA | 1.82 | 0.61 |
| 1:D:505:MET:HB2 | 1:D:518:TYR:HE1 | 1.65 | 0.61 |
| 1:E:175:LYS:HE2 | 1:E:366:ARG:HD3 | 1.81 | 0.61 |
| 1:E:180:GLN:HA | 1:E:508:PHE:CZ | 2.35 | 0.61 |
| 1:E:759:ARG:HA | 1:E:762:CYS:SG | 2.40 | 0.61 |
| 1:E:794:LEU:HD23 | 1:E:800:LEU:HD23 | 1.82 | 0.61 |
| 1:F:818:LEU:HG | 1:F:822:LEU:HD11 | 1.81 | 0.61 |
| 1:G:173:LEU:HD22 | 1:G:370:ILE:HG12 | 1.81 | 0.61 |
| 1:G:266:LEU:HB2 | 1:G:329:ASP:HB2 | 1.81 | 0.61 |
| 1:G:917:LEU:HG | 1:G:943:LEU:HD12 | 1.81 | 0.61 |
| 1:H:509:GLN:HA | 1:H:514:CYS:HA | 1.82 | 0.61 |
| 1:J:480:GLN:NE2 | 1:J:572:TYR:OH | 2.32 | 0.61 |
| 1:A:836:SER:H | 1:A:864:GLU:HB2 | 1.64 | 0.61 |
| 1:B:190:ILE:HA | 1:B:194:LYS:CB | 2.29 | 0.61 |
| 1:C:217:GLU:OE2 | 1:D:145:ARG:CD | 2.43 | 0.61 |
| 1:C:552:LYS:O | 1:C:552:LYS:HD2 | 1.99 | 0.61 |
| 1:C:559:THR:HA | 1:C:562:LEU:HD13 | 1.81 | 0.61 |
| 1:D:499:VAL:HG22 | 1:D:499:VAL:O | 2.00 | 0.61 |
| 1:E:748:LEU:HD13 | 1:E:761:LEU:HD21 | 1.83 | 0.61 |
| 1:F:190:ILE:HA | 1:F:194:LYS:CB | 2.29 | 0.61 |
| 1:F:836:SER:H | 1:F:864:GLU:HB2 | 1.64 | 0.61 |
| 1:G:448:SER:HA | 1:G:451:LEU:CD2 | 2.30 | 0.61 |
| 1:G:509:GLN:HA | 1:G:514:CYS:HA | 1.82 | 0.61 |
| 1:G:856:SER:O | 1:G:858:THR:HG23 | 1.99 | 0.61 |
| 1:H:581:PHE:CE1 | 1:H:608:LEU:HB3 | 2.36 | 0.61 |
| 1:H:623:ILE:H | 1:H:623:ILE:CD1 | 2.10 | 0.61 |
| 1:H:748:LEU:HD13 | 1:H:761:LEU:HD21 | 1.83 | 0.61 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:I:180:GLN:HA | 1:I:508:PHE:CZ | 2.35 | 0.61 |
| 1:I:945:VAL:HG22 | 1:I:973:LYS:CB | 2.31 | 0.61 |
| 1:J:166:LYS:O | 1:J:384:LYS:HD3 | 2.00 | 0.61 |
| 1:J:266:LEU:HB2 | 1:J:329:ASP:HB2 | 1.81 | 0.61 |
| 2:N:33:ASN:HD21 | 2:N:55:LEU:HB3 | 1.65 | 0.61 |
| 1:C:166:LYS:O | 1:C:384:LYS:HD3 | 2.00 | 0.61 |
| 1:C:217:GLU:HB2 | 1:D:149:GLN:OE1 | 1.99 | 0.61 |
| 1:C:613:GLU:HG2 | 1:C:649:TYR:CE2 | 2.36 | 0.61 |
| 1:E:559:THR:HG22 | 1:E:607:GLU:OE2 | 1.99 | 0.61 |
| 1:E:651:PRO:HB3 | 1:E:675:ARG:O | 2.01 | 0.61 |
| 1:E:973:LYS:HG3 | 1:E:1002:ASN:CB | 2.28 | 0.61 |
| 1:F:166:LYS:O | 1:F:384:LYS:HD3 | 2.00 | 0.61 |
| 1:F:651:PRO:HB3 | 1:F:675:ARG:O | 2.01 | 0.61 |
| 1:F:759:ARG:HA | 1:F:762:CYS:SG | 2.40 | 0.61 |
| 1:F:945:VAL:HG22 | 1:F:973:LYS:CB | 2.31 | 0.61 |
| 1:G:908:LEU:HD21 | 1:G:917:LEU:CD1 | 2.31 | 0.61 |
| 1:H:173:LEU:HD22 | 1:H:370:ILE:HG12 | 1.81 | 0.61 |
| 1:H:252:ARG:HD2 | 1:H:253:PHE:CZ | 2.35 | 0.61 |
| 1:H:420:THR:O | 1:H:424:GLN:HG2 | 2.00 | 0.61 |
| 1:H:945:VAL:HG22 | 1:H:973:LYS:CB | 2.31 | 0.61 |
| 1:I:566:GLY:HA2 | 1:I:625:PRO:HD3 | 1.81 | 0.61 |
| 1:I:748:LEU:HD13 | 1:I:761:LEU:HD21 | 1.83 | 0.61 |
| 1:J:581:PHE:CE1 | 1:J:608:LEU:HB3 | 2.36 | 0.61 |
| 1:J:748:LEU:HD13 | 1:J:761:LEU:HD21 | 1.83 | 0.61 |
| 1:J:759:ARG:HA | 1:J:762:CYS:SG | 2.40 | 0.61 |
| 1:A:651:PRO:HB3 | 1:A:675:ARG:O | 2.01 | 0.61 |
| 1:A:748:LEU:HD13 | 1:A:761:LEU:HD21 | 1.83 | 0.61 |
| 1:A:880:LYS:HG2 | 1:A:907:VAL:HA | 1.83 | 0.61 |
| 1:B:217:GLU:HB2 | 1:C:149:GLN:OE1 | 1.99 | 0.61 |
| 1:B:334:SER:HB3 | 1:B:340:LEU:CD1 | 2.31 | 0.61 |
| 1:B:880:LYS:HG2 | 1:B:907:VAL:HA | 1.83 | 0.61 |
| 1:D:180:GLN:HA | 1:D:508:PHE:CZ | 2.35 | 0.61 |
| 1:D:291:VAL:CG2 | 1:D:341:LEU:HD21 | 2.22 | 0.61 |
| 1:E:836:SER:H | 1:E:864:GLU:HB2 | 1.64 | 0.61 |
| 1:G:759:ARG:HA | 1:G:762:CYS:SG | 2.40 | 0.61 |
| 1:G:945:VAL:HG22 | 1:G:973:LYS:CB | 2.31 | 0.61 |
| 1:H:180:GLN:HA | 1:H:508:PHE:CZ | 2.35 | 0.61 |
| 1:I:166:LYS:O | 1:I:384:LYS:HD3 | 2.00 | 0.61 |
| 1:J:773:ARG:HG2 | 1:J:799:LYS:HD2 | 1.82 | 0.61 |
| 1:J:880:LYS:HG2 | 1:J:907:VAL:HA | 1.83 | 0.61 |
| 1:A:217:GLU:HB2 | 1:B:149:GLN:OE1 | 2.00 | 0.61 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:A:502:PHE:HA | 1:A:521:ILE:HG13 | 1.83 | 0.61 |
| 1:A:973:LYS:HG3 | 1:A:1002:ASN:CB | 2.28 | 0.61 |
| 1:B:252:ARG:HD2 | 1:B:253:PHE:CZ | 2.35 | 0.61 |
| 1:B:773:ARG:HG2 | 1:B:799:LYS:HD2 | 1.82 | 0.61 |
| 1:B:917:LEU:HG | 1:B:943:LEU:HD12 | 1.81 | 0.61 |
| 1:D:613:GLU:HG2 | 1:D:649:TYR:CE2 | 2.36 | 0.61 |
| 1:D:624:GLN:O | 1:D:626:SER:N | 2.34 | 0.61 |
| 1:D:735:SER:O | 1:D:739:THR:HG23 | 2.00 | 0.61 |
| 1:D:880:LYS:HG2 | 1:D:907:VAL:HA | 1.83 | 0.61 |
| 1:D:937:LEU:HD21 | 1:D:964:LEU:HD12 | 1.82 | 0.61 |
| 1:E:190:ILE:HA | 1:E:194:LYS:CB | 2.29 | 0.61 |
| 1:F:252:ARG:HD2 | 1:F:253:PHE:CZ | 2.35 | 0.61 |
| 1:F:448:SER:HA | 1:F:451:LEU:CD2 | 2.30 | 0.61 |
| 1:F:740:SER:HB3 | 1:F:743:LEU:HD11 | 1.83 | 0.61 |
| 1:G:334:SER:HB3 | 1:G:340:LEU:CD1 | 2.31 | 0.61 |
| 1:G:770:CYS:SG | 1:G:772:ILE:HD12 | 2.39 | 0.61 |
| 1:H:270:ARG:CD | 1:H:275:LEU:HD13 | 2.26 | 0.61 |
| 1:H:566:GLY:HA2 | 1:H:625:PRO:HD3 | 1.82 | 0.61 |
| 1:H:937:LEU:HD21 | 1:H:964:LEU:HD12 | 1.82 | 0.61 |
| 1:I:264:VAL:HG22 | 1:I:270:ARG:NH1 | 2.10 | 0.61 |
| 1:J:586:GLN:O | 1:J:589:THR:CG2 | 2.46 | 0.61 |
| 2:K:33:ASN:HD21 | 2:K:55:LEU:HB3 | 1.65 | 0.61 |
| 1:B:651:PRO:HB3 | 1:B:675:ARG:O | 2.01 | 0.61 |
| 1:C:252:ARG:HD2 | 1:C:253:PHE:CZ | 2.35 | 0.61 |
| 1:C:334:SER:HB3 | 1:C:340:LEU:CD1 | 2.31 | 0.61 |
| 1:D:509:GLN:HA | 1:D:514:CYS:HA | 1.82 | 0.61 |
| 1:F:385:TYR:HD2 | 1:F:419:CYS:SG | 2.22 | 0.61 |
| 1:F:908:LEU:HD21 | 1:F:917:LEU:CD1 | 2.31 | 0.61 |
| 1:G:581:PHE:CE1 | 1:G:608:LEU:HB3 | 2.36 | 0.61 |
| 1:H:234:ILE:HG21 | 3:H:1101:AGS:N7 | 2.16 | 0.61 |
| 1:H:266:LEU:HB2 | 1:H:329:ASP:HB2 | 1.81 | 0.61 |
| 1:I:499:VAL:HG22 | 1:I:499:VAL:O | 2.01 | 0.61 |
| 1:I:794:LEU:HD23 | 1:I:800:LEU:HD23 | 1.82 | 0.61 |
| 1:I:937:LEU:HD21 | 1:I:964:LEU:HD12 | 1.82 | 0.61 |
| 1:J:173:LEU:HD22 | 1:J:370:ILE:HG12 | 1.81 | 0.61 |
| 1:J:234:ILE:HG21 | 3:J:1101:AGS:N7 | 2.16 | 0.61 |
| 1:J:505:MET:HB2 | 1:J:518:TYR:HE1 | 1.65 | 0.61 |
| 1:J:613:GLU:HG2 | 1:J:649:TYR:CE2 | 2.35 | 0.61 |
| 1:A:217:GLU:HB2 | 1:B:149:GLN:HE22 | 1.65 | 0.60 |
| 1:C:270:ARG:CD | 1:C:275:LEU:HD13 | 2.26 | 0.60 |
| 1:C:593:GLU:HB2 | 1:C:600:ILE:CD1 | 2.31 | 0.60 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:D:385:TYR:HD2 | 1:D:419:CYS:SG | 2.22 | 0.60 |
| 1:D:651:PRO:HB3 | 1:D:675:ARG:O | 2.01 | 0.60 |
| 1:E:351:ARG:NH1 | 1:E:499:VAL:HG13 | 2.15 | 0.60 |
| 1:E:880:LYS:HG2 | 1:E:907:VAL:HA | 1.83 | 0.60 |
| 1:F:334:SER:HB3 | 1:F:340:LEU:CD1 | 2.31 | 0.60 |
| 1:F:794:LEU:HD23 | 1:F:800:LEU:HD23 | 1.82 | 0.60 |
| 1:G:593:GLU:HB2 | 1:G:600:ILE:CD1 | 2.31 | 0.60 |
| 1:G:937:LEU:HD21 | 1:G:964:LEU:HD12 | 1.82 | 0.60 |
| 1:H:593:GLU:HB2 | 1:H:600:ILE:CD1 | 2.31 | 0.60 |
| 1:H:773:ARG:HG2 | 1:H:799:LYS:HD2 | 1.82 | 0.60 |
| 1:H:908:LEU:HD21 | 1:H:917:LEU:CD1 | 2.31 | 0.60 |
| 1:I:234:ILE:HG21 | 3:I:1101:AGS:N7 | 2.16 | 0.60 |
| 1:I:266:LEU:HB2 | 1:I:329:ASP:HB2 | 1.81 | 0.60 |
| 1:I:581:PHE:CE1 | 1:I:608:LEU:HB3 | 2.36 | 0.60 |
| 1:J:566:GLY:HA2 | 1:J:625:PRO:HD3 | 1.82 | 0.60 |
| 1:J:937:LEU:HD21 | 1:J:964:LEU:HD12 | 1.82 | 0.60 |
| 1:A:270:ARG:CD | 1:A:275:LEU:HD13 | 2.26 | 0.60 |
| 1:A:334:SER:HB3 | 1:A:340:LEU:CD1 | 2.31 | 0.60 |
| 1:A:358:LEU:HD11 | 1:A:362:LEU:HD21 | 1.84 | 0.60 |
| 1:B:581:PHE:CE1 | 1:B:608:LEU:HB3 | 2.36 | 0.60 |
| 1:B:585:ASN:HA | 1:B:637:MET:HE3 | 1.83 | 0.60 |
| 1:C:180:GLN:HA | 1:C:508:PHE:CZ | 2.35 | 0.60 |
| 1:C:945:VAL:HG22 | 1:C:973:LYS:CB | 2.31 | 0.60 |
| 1:C:1020:THR:O | 1:C:1024:GLU:HG2 | 2.01 | 0.60 |
| 1:D:252:ARG:HD2 | 1:D:253:PHE:CZ | 2.35 | 0.60 |
| 1:D:748:LEU:HD13 | 1:D:761:LEU:HD21 | 1.83 | 0.60 |
| 1:E:818:LEU:HG | 1:E:822:LEU:HD11 | 1.81 | 0.60 |
| 1:E:945:VAL:HG22 | 1:E:973:LYS:CB | 2.31 | 0.60 |
| 1:F:240:MET:HE2 | 1:F:258:TYR:HB2 | 1.83 | 0.60 |
| 1:F:252:ARG:CD | 1:F:253:PHE:CE2 | 2.85 | 0.60 |
| 1:F:475:ASP:CB | 1:F:553:LEU:CD2 | 2.72 | 0.60 |
| 1:F:499:VAL:O | 1:F:499:VAL:HG12 | 2.00 | 0.60 |
| 1:F:613:GLU:HG2 | 1:F:649:TYR:CE2 | 2.35 | 0.60 |
| 1:F:773:ARG:HG2 | 1:F:799:LYS:HD2 | 1.82 | 0.60 |
| 1:H:262:ARG:HB2 | 1:H:306:GLU:OE1 | 2.02 | 0.60 |
| 1:H:334:SER:HB3 | 1:H:340:LEU:CD1 | 2.31 | 0.60 |
| 1:H:374:SER:O | 1:H:378:ARG:NH2 | 2.34 | 0.60 |
| 1:I:880:LYS:HG2 | 1:I:907:VAL:HA | 1.83 | 0.60 |
| 1:J:651:PRO:HB3 | 1:J:675:ARG:O | 2.01 | 0.60 |
| 1:J:895:GLY:N | 1:J:922:ASN:OD1 | 2.35 | 0.60 |
| 1:J:945:VAL:HG22 | 1:J:973:LYS:CB | 2.31 | 0.60 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:A:234:ILE:HG21 | 3:A:1101:AGS:N7 | 2.16 | 0.60 |
| 1:B:252:ARG:CD | 1:B:253:PHE:CE2 | 2.85 | 0.60 |
| 1:B:593:GLU:HB2 | 1:B:600:ILE:CD1 | 2.31 | 0.60 |
| 1:B:748:LEU:HD13 | 1:B:761:LEU:HD21 | 1.83 | 0.60 |
| 1:C:231:GLY:CA | 3:C:1101:AGS:O2A | 2.50 | 0.60 |
| 1:C:358:LEU:HD11 | 1:C:362:LEU:HD21 | 1.84 | 0.60 |
| 1:C:581:PHE:CE1 | 1:C:608:LEU:HB3 | 2.36 | 0.60 |
| 1:C:748:LEU:HD13 | 1:C:761:LEU:HD21 | 1.82 | 0.60 |
| 1:C:818:LEU:HD12 | 1:C:822:LEU:HD21 | 1.81 | 0.60 |
| 1:C:880:LYS:HG2 | 1:C:907:VAL:HA | 1.83 | 0.60 |
| 1:D:818:LEU:HD12 | 1:D:822:LEU:HD21 | 1.81 | 0.60 |
| 1:D:1004:GLY:HA2 | 1:D:1031:VAL:CG1 | 2.32 | 0.60 |
| 1:E:740:SER:HB3 | 1:E:743:LEU:HD11 | 1.83 | 0.60 |
| 1:E:893:ASN:N | 1:E:920:ARG:O | 2.20 | 0.60 |
| 1:F:586:GLN:O | 1:F:589:THR:CG2 | 2.46 | 0.60 |
| 1:F:641:ASP:OD1 | 1:F:642:PHE:N | 2.35 | 0.60 |
| 1:F:1004:GLY:HA2 | 1:F:1031:VAL:CG1 | 2.32 | 0.60 |
| 1:I:173:LEU:HD22 | 1:I:370:ILE:HG12 | 1.81 | 0.60 |
| 1:I:374:SER:O | 1:I:378:ARG:NH2 | 2.35 | 0.60 |
| 1:I:773:ARG:HG2 | 1:I:799:LYS:HD2 | 1.82 | 0.60 |
| 1:A:262:ARG:HB2 | 1:A:306:GLU:OE1 | 2.02 | 0.60 |
| 1:A:756:PRO:HA | 1:A:759:ARG:HE | 1.67 | 0.60 |
| 1:B:622:GLN:NE2 | 1:B:627:GLN:OE1 | 2.33 | 0.60 |
| 1:D:231:GLY:CA | 3:D:1101:AGS:O2A | 2.50 | 0.60 |
| 1:D:836:SER:H | 1:D:864:GLU:HB2 | 1.64 | 0.60 |
| 1:E:358:LEU:HD11 | 1:E:362:LEU:HD21 | 1.84 | 0.60 |
| 1:E:499:VAL:O | 1:E:499:VAL:HG22 | 2.02 | 0.60 |
| 1:E:509:GLN:HA | 1:E:514:CYS:HA | 1.82 | 0.60 |
| 1:F:231:GLY:CA | 3:F:1101:AGS:O2A | 2.50 | 0.60 |
| 1:G:252:ARG:CD | 1:G:253:PHE:CE2 | 2.85 | 0.60 |
| 1:G:374:SER:O | 1:G:378:ARG:NH2 | 2.34 | 0.60 |
| 1:G:641:ASP:OD1 | 1:G:642:PHE:N | 2.35 | 0.60 |
| 1:G:740:SER:HB3 | 1:G:743:LEU:HD11 | 1.83 | 0.60 |
| 1:G:773:ARG:HG2 | 1:G:799:LYS:HD2 | 1.82 | 0.60 |
| 1:H:562:LEU:HD11 | 1:H:611:TRP:CG | 2.36 | 0.60 |
| 1:H:880:LYS:HG2 | 1:H:907:VAL:HA | 1.83 | 0.60 |
| 1:I:500:SER:CB | 1:I:503:LEU:O | 2.50 | 0.60 |
| 1:I:593:GLU:HB2 | 1:I:600:ILE:CD1 | 2.31 | 0.60 |
| 1:I:759:ARG:HA | 1:I:762:CYS:SG | 2.40 | 0.60 |
| 1:J:567:LYS:HD3 | 1:J:624:GLN:HG2 | 1.83 | 0.60 |
| 1:A:624:GLN:HG3 | 1:A:625:PRO:HD2 | 1.82 | 0.60 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:B:641:ASP:OD1 | 1:B:642:PHE:N | 2.35 | 0.60 |
| 1:B:945:VAL:HG22 | 1:B:973:LYS:CB | 2.31 | 0.60 |
| 1:D:252:ARG:CD | 1:D:253:PHE:CE2 | 2.85 | 0.60 |
| 1:D:334:SER:HB3 | 1:D:340:LEU:CD1 | 2.31 | 0.60 |
| 1:D:593:GLU:HB2 | 1:D:600:ILE:CD1 | 2.31 | 0.60 |
| 1:D:945:VAL:HG22 | 1:D:973:LYS:CB | 2.31 | 0.60 |
| 1:E:231:GLY:CA | 3:E:1101:AGS:O2A | 2.50 | 0.60 |
| 1:E:818:LEU:HD12 | 1:E:822:LEU:HD21 | 1.81 | 0.60 |
| 1:E:1004:GLY:HA2 | 1:E:1031:VAL:CG1 | 2.32 | 0.60 |
| 1:F:509:GLN:HA | 1:F:514:CYS:HA | 1.82 | 0.60 |
| 1:F:581:PHE:CE1 | 1:F:608:LEU:HB3 | 2.36 | 0.60 |
| 1:F:895:GLY:N | 1:F:922:ASN:OD1 | 2.35 | 0.60 |
| 1:F:946:LEU:HD21 | 1:F:948:LEU:HD11 | 1.84 | 0.60 |
| 1:H:561:LEU:HD12 | 1:H:573:LEU:HD13 | 1.84 | 0.60 |
| 1:H:1004:GLY:HA2 | 1:H:1031:VAL:CG1 | 2.31 | 0.60 |
| 1:I:252:ARG:HG2 | 1:I:253:PHE:CD2 | 2.36 | 0.60 |
| 1:I:641:ASP:OD1 | 1:I:642:PHE:N | 2.35 | 0.60 |
| 1:I:651:PRO:HB3 | 1:I:675:ARG:O | 2.01 | 0.60 |
| 1:J:252:ARG:HG2 | 1:J:253:PHE:CD2 | 2.37 | 0.60 |
| 1:J:641:ASP:OD1 | 1:J:642:PHE:N | 2.35 | 0.60 |
| 1:B:358:LEU:HD11 | 1:B:362:LEU:HD21 | 1.84 | 0.60 |
| 1:C:475:ASP:CB | 1:C:553:LEU:CD2 | 2.72 | 0.60 |
| 1:C:794:LEU:HD23 | 1:C:800:LEU:HD23 | 1.82 | 0.60 |
| 1:D:562:LEU:HD11 | 1:D:611:TRP:CG | 2.36 | 0.60 |
| 1:E:166:LYS:O | 1:E:384:LYS:HD3 | 2.00 | 0.60 |
| 1:E:641:ASP:OD1 | 1:E:642:PHE:N | 2.35 | 0.60 |
| 1:E:937:LEU:HD21 | 1:E:964:LEU:HD12 | 1.82 | 0.60 |
| 1:E:946:LEU:HD21 | 1:E:948:LEU:HD11 | 1.84 | 0.60 |
| 1:G:252:ARG:HG2 | 1:G:253:PHE:CD2 | 2.36 | 0.60 |
| 1:G:341:LEU:HB3 | 1:G:344:ALA:HB2 | 1.84 | 0.60 |
| 1:G:651:PRO:HB3 | 1:G:675:ARG:O | 2.01 | 0.60 |
| 1:I:561:LEU:HD12 | 1:I:573:LEU:HD13 | 1.84 | 0.60 |
| 1:J:262:ARG:HB2 | 1:J:306:GLU:OE1 | 2.02 | 0.60 |
| 1:J:374:SER:O | 1:J:378:ARG:NH2 | 2.34 | 0.60 |
| 2:Q:261:ASP:OD1 | 2:Q:261:ASP:O | 2.18 | 0.60 |
| 1:A:916:HIS:CD2 | 1:A:945:VAL:HB | 2.37 | 0.60 |
| 1:A:946:LEU:HD21 | 1:A:948:LEU:HD11 | 1.84 | 0.60 |
| 1:B:231:GLY:CA | 3:B:1101:AGS:O2A | 2.50 | 0.60 |
| 1:B:240:MET:HE3 | 1:B:258:TYR:HB2 | 1.83 | 0.60 |
| 1:B:305:ASP:OD2 | 1:B:351:ARG:NE | 2.35 | 0.60 |
| 1:C:499:VAL:O | 1:C:499:VAL:HG22 | 2.00 | 0.60 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:C:586:GLN:O | 1:C:589:THR:CG2 | 2.46 | 0.60 |
| 1:C:895:GLY:N | 1:C:922:ASN:OD1 | 2.35 | 0.60 |
| 1:D:252:ARG:HG2 | 1:D:253:PHE:CD2 | 2.36 | 0.60 |
| 1:D:358:LEU:HD11 | 1:D:362:LEU:HD21 | 1.84 | 0.60 |
| 1:D:374:SER:O | 1:D:378:ARG:NH2 | 2.35 | 0.60 |
| 1:E:252:ARG:CD | 1:E:253:PHE:CE2 | 2.85 | 0.60 |
| 1:E:262:ARG:HB2 | 1:E:306:GLU:OE1 | 2.02 | 0.60 |
| 1:E:502:PHE:HA | 1:E:521:ILE:CD1 | 2.32 | 0.60 |
| 1:E:581:PHE:CE1 | 1:E:608:LEU:HB3 | 2.36 | 0.60 |
| 1:E:756:PRO:HA | 1:E:759:ARG:HE | 1.67 | 0.60 |
| 1:F:252:ARG:O | 1:F:296:ARG:HD2 | 2.02 | 0.60 |
| 1:F:262:ARG:HB2 | 1:F:306:GLU:OE1 | 2.02 | 0.60 |
| 1:F:270:ARG:NH1 | 1:F:275:LEU:HD11 | 2.14 | 0.60 |
| 1:G:447:LEU:O | 1:G:451:LEU:HD23 | 2.02 | 0.60 |
| 1:G:562:LEU:HD11 | 1:G:611:TRP:CG | 2.36 | 0.60 |
| 1:G:1004:GLY:HA2 | 1:G:1031:VAL:CG1 | 2.32 | 0.60 |
| 1:H:916:HIS:CD2 | 1:H:945:VAL:HB | 2.37 | 0.60 |
| 1:I:562:LEU:HD11 | 1:I:611:TRP:CG | 2.36 | 0.60 |
| 1:I:895:GLY:N | 1:I:922:ASN:OD1 | 2.35 | 0.60 |
| 1:J:561:LEU:HD12 | 1:J:573:LEU:HD13 | 1.84 | 0.60 |
| 1:A:305:ASP:OD2 | 1:A:351:ARG:NE | 2.35 | 0.60 |
| 1:A:794:LEU:HD23 | 1:A:800:LEU:HD23 | 1.82 | 0.60 |
| 1:B:234:ILE:HG21 | 3:B:1101:AGS:N7 | 2.16 | 0.60 |
| 1:B:447:LEU:O | 1:B:451:LEU:HD23 | 2.02 | 0.60 |
| 1:C:447:LEU:O | 1:C:451:LEU:HD23 | 2.02 | 0.60 |
| 1:C:756:PRO:HA | 1:C:759:ARG:HE | 1.67 | 0.60 |
| 1:D:581:PHE:CE1 | 1:D:608:LEU:HB3 | 2.36 | 0.60 |
| 1:D:641:ASP:OD1 | 1:D:642:PHE:N | 2.35 | 0.60 |
| 1:D:753:LEU:HD23 | 1:D:758:MET:SD | 2.42 | 0.60 |
| 1:D:946:LEU:HD21 | 1:D:948:LEU:HD11 | 1.84 | 0.60 |
| 1:E:252:ARG:HD2 | 1:E:253:PHE:CZ | 2.35 | 0.60 |
| 1:E:334:SER:HB3 | 1:E:340:LEU:CD1 | 2.31 | 0.60 |
| 1:F:562:LEU:HD11 | 1:F:611:TRP:CG | 2.36 | 0.60 |
| 1:F:593:GLU:HB2 | 1:F:600:ILE:CD1 | 2.32 | 0.60 |
| 1:F:880:LYS:HG2 | 1:F:907:VAL:HA | 1.83 | 0.60 |
| 1:F:937:LEU:HD21 | 1:F:964:LEU:HD12 | 1.82 | 0.60 |
| 1:G:753:LEU:HD23 | 1:G:758:MET:SD | 2.42 | 0.60 |
| 1:G:946:LEU:HD21 | 1:G:948:LEU:HD11 | 1.84 | 0.60 |
| 1:H:641:ASP:OD1 | 1:H:642:PHE:N | 2.35 | 0.60 |
| 1:H:946:LEU:HD21 | 1:H:948:LEU:HD11 | 1.84 | 0.60 |
| 1:I:758:MET:HE3 | 1:I:761:LEU:HB2 | 1.84 | 0.60 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:I:818:LEU:HD12 | 1:I:822:LEU:HD21 | 1.81 | 0.60 |
| 1:J:305:ASP:OD2 | 1:J:351:ARG:NE | 2.35 | 0.60 |
| 1:J:562:LEU:HD11 | 1:J:611:TRP:CE3 | 2.37 | 0.60 |
| 1:J:916:HIS:CD2 | 1:J:945:VAL:HB | 2.37 | 0.60 |
| 1:J:946:LEU:HD21 | 1:J:948:LEU:HD11 | 1.84 | 0.60 |
| 1:A:252:ARG:CD | 1:A:253:PHE:CE2 | 2.85 | 0.60 |
| 1:A:740:SER:HB3 | 1:A:743:LEU:HD11 | 1.83 | 0.60 |
| 1:B:740:SER:HB3 | 1:B:743:LEU:HD11 | 1.83 | 0.60 |
| 1:B:895:GLY:N | 1:B:922:ASN:OD1 | 2.35 | 0.60 |
| 1:B:908:LEU:HD21 | 1:B:917:LEU:CD1 | 2.31 | 0.60 |
| 1:B:946:LEU:HD21 | 1:B:948:LEU:HD11 | 1.84 | 0.60 |
| 1:C:291:VAL:CG2 | 1:C:341:LEU:HD21 | 2.22 | 0.60 |
| 1:C:305:ASP:OD2 | 1:C:351:ARG:NE | 2.35 | 0.60 |
| 1:C:753:LEU:HD23 | 1:C:758:MET:SD | 2.42 | 0.60 |
| 1:E:341:LEU:HB3 | 1:E:344:ALA:HB2 | 1.84 | 0.60 |
| 1:E:562:LEU:HD11 | 1:E:611:TRP:CG | 2.36 | 0.60 |
| 1:F:341:LEU:HB3 | 1:F:344:ALA:HB2 | 1.84 | 0.60 |
| 1:F:374:SER:O | 1:F:378:ARG:NH2 | 2.34 | 0.60 |
| 1:F:447:LEU:O | 1:F:451:LEU:HD23 | 2.02 | 0.60 |
| 1:F:562:LEU:HD11 | 1:F:611:TRP:CE3 | 2.37 | 0.60 |
| 1:F:753:LEU:HD23 | 1:F:758:MET:SD | 2.42 | 0.60 |
| 1:F:756:PRO:HA | 1:F:759:ARG:HE | 1.67 | 0.60 |
| 1:G:880:LYS:HG2 | 1:G:907:VAL:HA | 1.83 | 0.60 |
| 1:H:252:ARG:CD | 1:H:253:PHE:CE2 | 2.85 | 0.60 |
| 1:H:294:PRO:O | 1:H:344:ALA:HA | 2.02 | 0.60 |
| 1:H:341:LEU:HB3 | 1:H:344:ALA:HB2 | 1.84 | 0.60 |
| 1:H:651:PRO:HB3 | 1:H:675:ARG:O | 2.01 | 0.60 |
| 1:H:753:LEU:HD23 | 1:H:758:MET:SD | 2.42 | 0.60 |
| 1:I:358:LEU:HD11 | 1:I:362:LEU:HD21 | 1.84 | 0.60 |
| 1:I:381:TYR:HD2 | 1:I:415:CYS:HG | 1.48 | 0.60 |
| 1:I:756:PRO:HA | 1:I:759:ARG:HE | 1.67 | 0.60 |
| 1:I:946:LEU:HD21 | 1:I:948:LEU:HD11 | 1.84 | 0.60 |
| 1:J:358:LEU:HD11 | 1:J:362:LEU:HD21 | 1.84 | 0.60 |
| 1:J:753:LEU:HD23 | 1:J:758:MET:SD | 2.42 | 0.60 |
| 1:J:818:LEU:HD12 | 1:J:822:LEU:HD21 | 1.81 | 0.60 |
| 1:A:270:ARG:NH1 | 1:A:275:LEU:HD11 | 2.14 | 0.60 |
| 1:A:758:MET:HE3 | 1:A:761:LEU:HB2 | 1.84 | 0.60 |
| 1:A:908:LEU:HD21 | 1:A:917:LEU:CD1 | 2.31 | 0.60 |
| 1:B:168:TYR:CZ | 1:B:238:LYS:HG2 | 2.37 | 0.60 |
| 1:B:374:SER:O | 1:B:378:ARG:NH2 | 2.34 | 0.60 |
| 1:B:916:HIS:CD2 | 1:B:945:VAL:HB | 2.37 | 0.60 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:B:1004:GLY:HA2 | 1:B:1031:VAL:CG1 | 2.32 | 0.60 |
| 1:C:234:ILE:HG21 | 3:C:1101:AGS:N7 | 2.16 | 0.60 |
| 1:C:252:ARG:HG2 | 1:C:253:PHE:CD2 | 2.36 | 0.60 |
| 1:C:252:ARG:CD | 1:C:253:PHE:CE2 | 2.85 | 0.60 |
| 1:C:946:LEU:HD21 | 1:C:948:LEU:HD11 | 1.84 | 0.60 |
| 1:D:166:LYS:O | 1:D:384:LYS:HD3 | 2.00 | 0.60 |
| 1:D:581:PHE:HE1 | 1:D:608:LEU:HB3 | 1.67 | 0.60 |
| 1:D:740:SER:HB3 | 1:D:743:LEU:HD11 | 1.83 | 0.60 |
| 1:D:756:PRO:HA | 1:D:759:ARG:HE | 1.67 | 0.60 |
| 1:E:209:PHE:CZ | 1:E:298:LEU:HD11 | 2.37 | 0.60 |
| 1:E:234:ILE:HG21 | 3:E:1101:AGS:N7 | 2.16 | 0.60 |
| 1:E:475:ASP:CB | 1:E:553:LEU:CD2 | 2.72 | 0.60 |
| 1:E:908:LEU:HD21 | 1:E:917:LEU:CD1 | 2.31 | 0.60 |
| 1:F:566:GLY:HA2 | 1:F:625:PRO:HD3 | 1.82 | 0.60 |
| 1:F:973:LYS:HG3 | 1:F:1002:ASN:CB | 2.28 | 0.60 |
| 1:G:168:TYR:CZ | 1:G:238:LYS:HG2 | 2.37 | 0.60 |
| 1:G:240:MET:HE2 | 1:G:258:TYR:HB2 | 1.83 | 0.60 |
| 1:G:561:LEU:HD12 | 1:G:573:LEU:HD13 | 1.84 | 0.60 |
| 1:H:586:GLN:O | 1:H:589:THR:CG2 | 2.46 | 0.60 |
| 1:I:252:ARG:CD | 1:I:253:PHE:CE2 | 2.85 | 0.60 |
| 1:I:581:PHE:HE1 | 1:I:608:LEU:HB3 | 1.67 | 0.60 |
| 1:I:753:LEU:HD23 | 1:I:758:MET:SD | 2.42 | 0.60 |
| 1:I:916:HIS:CD2 | 1:I:945:VAL:HB | 2.37 | 0.60 |
| 1:I:1004:GLY:HA2 | 1:I:1031:VAL:CG1 | 2.32 | 0.60 |
| 1:J:908:LEU:HD21 | 1:J:917:LEU:CD1 | 2.31 | 0.60 |
| 1:A:168:TYR:CZ | 1:A:238:LYS:HG2 | 2.37 | 0.59 |
| 1:A:374:SER:O | 1:A:378:ARG:NH2 | 2.35 | 0.59 |
| 1:A:753:LEU:HD23 | 1:A:758:MET:SD | 2.42 | 0.59 |
| 1:A:895:GLY:N | 1:A:922:ASN:OD1 | 2.35 | 0.59 |
| 1:B:270:ARG:NH1 | 1:B:275:LEU:HD11 | 2.14 | 0.59 |
| 1:B:562:LEU:HD11 | 1:B:611:TRP:CG | 2.36 | 0.59 |
| 1:C:168:TYR:CZ | 1:C:238:LYS:HG2 | 2.37 | 0.59 |
| 1:C:217:GLU:HB2 | 1:D:149:GLN:HE22 | 1.65 | 0.59 |
| 1:C:505:MET:HB2 | 1:C:518:TYR:HE1 | 1.65 | 0.59 |
| 1:C:552:LYS:H | 1:C:552:LYS:CE | 2.15 | 0.59 |
| 1:C:651:PRO:HB3 | 1:C:675:ARG:O | 2.01 | 0.59 |
| 1:C:1004:GLY:HA2 | 1:C:1031:VAL:CG1 | 2.32 | 0.59 |
| 1:D:209:PHE:CZ | 1:D:298:LEU:HD11 | 2.37 | 0.59 |
| 1:D:294:PRO:O | 1:D:344:ALA:HA | 2.02 | 0.59 |
| 1:D:341:LEU:HB3 | 1:D:344:ALA:HB2 | 1.84 | 0.59 |
| 1:E:252:ARG:O | 1:E:296:ARG:HD2 | 2.02 | 0.59 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:E:566:GLY:HA2 | 1:E:625:PRO:HD3 | 1.82 | 0.59 |
| 1:F:209:PHE:CZ | 1:F:298:LEU:HD11 | 2.37 | 0.59 |
| 1:F:294:PRO:O | 1:F:344:ALA:HA | 2.02 | 0.59 |
| 1:F:358:LEU:HD11 | 1:F:362:LEU:HD21 | 1.84 | 0.59 |
| 1:G:252:ARG:O | 1:G:296:ARG:HD2 | 2.02 | 0.59 |
| 1:G:294:PRO:O | 1:G:344:ALA:HA | 2.02 | 0.59 |
| 1:G:916:HIS:CD2 | 1:G:945:VAL:HB | 2.37 | 0.59 |
| 1:H:252:ARG:HG2 | 1:H:253:PHE:CD2 | 2.36 | 0.59 |
| 1:H:758:MET:HE3 | 1:H:761:LEU:HB2 | 1.84 | 0.59 |
| 1:I:334:SER:HB3 | 1:I:340:LEU:CD1 | 2.31 | 0.59 |
| 1:J:499:VAL:O | 1:J:499:VAL:HG22 | 2.01 | 0.59 |
| 1:J:562:LEU:HD11 | 1:J:611:TRP:CG | 2.36 | 0.59 |
| 1:A:252:ARG:HG2 | 1:A:253:PHE:CD2 | 2.37 | 0.59 |
| 1:A:305:ASP:HB2 | 1:A:499:VAL:HG22 | 1.84 | 0.59 |
| 1:A:558:VAL:O | 1:A:561:LEU:HB3 | 2.02 | 0.59 |
| 1:A:593:GLU:HB2 | 1:A:600:ILE:CD1 | 2.31 | 0.59 |
| 1:B:753:LEU:HD23 | 1:B:758:MET:SD | 2.42 | 0.59 |
| 1:D:168:TYR:CZ | 1:D:238:LYS:HG2 | 2.37 | 0.59 |
| 1:D:234:ILE:HG21 | 3:D:1101:AGS:N7 | 2.16 | 0.59 |
| 1:D:262:ARG:HB2 | 1:D:306:GLU:OE1 | 2.02 | 0.59 |
| 1:D:908:LEU:HD21 | 1:D:917:LEU:CD1 | 2.31 | 0.59 |
| 1:E:252:ARG:HG2 | 1:E:253:PHE:CD2 | 2.36 | 0.59 |
| 1:E:374:SER:O | 1:E:378:ARG:NH2 | 2.34 | 0.59 |
| 1:E:593:GLU:HB2 | 1:E:600:ILE:CD1 | 2.31 | 0.59 |
| 1:E:753:LEU:HD23 | 1:E:758:MET:SD | 2.42 | 0.59 |
| 1:E:895:GLY:N | 1:E:922:ASN:OD1 | 2.35 | 0.59 |
| 1:F:552:LYS:H | 1:F:552:LYS:CE | 2.15 | 0.59 |
| 1:G:234:ILE:HG21 | 3:G:1101:AGS:N7 | 2.16 | 0.59 |
| 1:G:499:VAL:HG22 | 1:G:499:VAL:O | 2.01 | 0.59 |
| 1:G:500:SER:CB | 1:G:503:LEU:O | 2.50 | 0.59 |
| 1:H:168:TYR:CZ | 1:H:238:LYS:HG2 | 2.37 | 0.59 |
| 1:H:358:LEU:HD11 | 1:H:362:LEU:HD21 | 1.84 | 0.59 |
| 1:I:562:LEU:HD11 | 1:I:611:TRP:CE3 | 2.37 | 0.59 |
| 1:J:168:TYR:CZ | 1:J:238:LYS:HG2 | 2.37 | 0.59 |
| 1:J:334:SER:HB3 | 1:J:340:LEU:CD1 | 2.31 | 0.59 |
| 1:J:758:MET:HE3 | 1:J:761:LEU:HB2 | 1.84 | 0.59 |
| 1:C:136:TYR:HH | 1:C:285:PRO:HB3 | 1.68 | 0.59 |
| 1:C:641:ASP:OD1 | 1:C:642:PHE:N | 2.35 | 0.59 |
| 1:C:908:LEU:HD21 | 1:C:917:LEU:CD1 | 2.31 | 0.59 |
| 1:D:305:ASP:OD2 | 1:D:351:ARG:NE | 2.35 | 0.59 |
| 1:D:895:GLY:N | 1:D:922:ASN:OD1 | 2.35 | 0.59 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:E:447:LEU:O | 1:E:451:LEU:HD23 | 2.02 | 0.59 |
| 1:E:552:LYS:H | 1:E:552:LYS:CE | 2.15 | 0.59 |
| 1:E:562:LEU:HD11 | 1:E:611:TRP:CE3 | 2.37 | 0.59 |
| 1:F:528:PHE:HB2 | 1:F:579:PHE:CD2 | 2.38 | 0.59 |
| 1:G:262:ARG:HB2 | 1:G:306:GLU:OE1 | 2.02 | 0.59 |
| 1:G:505:MET:HB2 | 1:G:518:TYR:HE1 | 1.65 | 0.59 |
| 1:G:650:PHE:O | 1:G:652:LYS:N | 2.36 | 0.59 |
| 1:G:818:LEU:HD12 | 1:G:822:LEU:HD21 | 1.81 | 0.59 |
| 1:G:895:GLY:N | 1:G:922:ASN:OD1 | 2.35 | 0.59 |
| 1:I:168:TYR:CZ | 1:I:238:LYS:HG2 | 2.37 | 0.59 |
| 1:I:262:ARG:HB2 | 1:I:306:GLU:OE1 | 2.02 | 0.59 |
| 1:I:270:ARG:CD | 1:I:275:LEU:HD13 | 2.26 | 0.59 |
| 1:I:294:PRO:O | 1:I:344:ALA:HA | 2.02 | 0.59 |
| 1:J:593:GLU:HB2 | 1:J:600:ILE:CD1 | 2.32 | 0.59 |
| 1:J:973:LYS:HG3 | 1:J:1002:ASN:CB | 2.28 | 0.59 |
| 1:J:1004:GLY:HA2 | 1:J:1031:VAL:CG1 | 2.32 | 0.59 |
| 1:C:601:SER:HB2 | 1:C:603:GLN:HE22 | 1.67 | 0.59 |
| 1:C:616:ALA:CB | 1:C:649:TYR:HB2 | 2.33 | 0.59 |
| 1:D:528:PHE:HB2 | 1:D:579:PHE:CD2 | 2.38 | 0.59 |
| 1:D:650:PHE:O | 1:D:652:LYS:N | 2.36 | 0.59 |
| 1:E:217:GLU:HB2 | 1:F:149:GLN:HE22 | 1.67 | 0.59 |
| 1:E:217:GLU:HB2 | 1:F:149:GLN:OE1 | 2.01 | 0.59 |
| 1:E:528:PHE:HB2 | 1:E:579:PHE:CD2 | 2.38 | 0.59 |
| 1:F:234:ILE:HG21 | 3:F:1101:AGS:N7 | 2.16 | 0.59 |
| 1:I:305:ASP:OD2 | 1:I:351:ARG:NE | 2.35 | 0.59 |
| 1:I:341:LEU:HB3 | 1:I:344:ALA:HB2 | 1.84 | 0.59 |
| 1:I:908:LEU:HD21 | 1:I:917:LEU:CD1 | 2.31 | 0.59 |
| 1:J:252:ARG:O | 1:J:296:ARG:HD2 | 2.02 | 0.59 |
| 1:A:534:TYR:HD2 | 1:A:561:LEU:HD22 | 1.62 | 0.59 |
| 1:A:877:GLU:HA | 1:A:880:LYS:HE2 | 1.84 | 0.59 |
| 1:C:261:CYS:HB2 | 1:C:302:ASP:O | 2.03 | 0.59 |
| 1:D:616:ALA:CB | 1:D:649:TYR:HB2 | 2.33 | 0.59 |
| 1:E:601:SER:HB2 | 1:E:603:GLN:HE22 | 1.67 | 0.59 |
| 1:F:252:ARG:HG2 | 1:F:253:PHE:CD2 | 2.36 | 0.59 |
| 1:F:261:CYS:HB2 | 1:F:302:ASP:O | 2.03 | 0.59 |
| 1:F:581:PHE:HE1 | 1:F:608:LEU:HB3 | 1.67 | 0.59 |
| 1:G:143:TYR:CG | 1:G:281:PRO:HG2 | 2.38 | 0.59 |
| 1:G:209:PHE:CZ | 1:G:298:LEU:HD11 | 2.37 | 0.59 |
| 1:G:305:ASP:OD2 | 1:G:351:ARG:NE | 2.35 | 0.59 |
| 1:G:562:LEU:HD11 | 1:G:611:TRP:CE3 | 2.37 | 0.59 |
| 1:G:622:GLN:NE2 | 1:G:627:GLN:OE1 | 2.36 | 0.59 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:H:581:PHE:CE1 | 1:H:608:LEU:HD22 | 2.38 | 0.59 |
| 1:H:593:GLU:HB2 | 1:H:600:ILE:HD11 | 1.84 | 0.59 |
| 1:H:601:SER:HB2 | 1:H:603:GLN:HE22 | 1.67 | 0.59 |
| 1:I:593:GLU:HB2 | 1:I:600:ILE:HD11 | 1.84 | 0.59 |
| 1:J:231:GLY:CA | 3:J:1101:AGS:O2A | 2.50 | 0.59 |
| 1:J:252:ARG:CD | 1:J:253:PHE:CE2 | 2.85 | 0.59 |
| 1:J:447:LEU:O | 1:J:451:LEU:HD23 | 2.02 | 0.59 |
| 1:J:581:PHE:HE1 | 1:J:608:LEU:HB3 | 1.67 | 0.59 |
| 1:A:231:GLY:CA | 3:A:1101:AGS:O2A | 2.50 | 0.59 |
| 1:A:252:ARG:O | 1:A:296:ARG:HD2 | 2.02 | 0.59 |
| 1:A:641:ASP:OD1 | 1:A:642:PHE:N | 2.35 | 0.59 |
| 1:B:252:ARG:HG2 | 1:B:253:PHE:CD2 | 2.37 | 0.59 |
| 1:B:262:ARG:HB2 | 1:B:306:GLU:OE1 | 2.02 | 0.59 |
| 1:B:561:LEU:HD12 | 1:B:573:LEU:HD13 | 1.84 | 0.59 |
| 1:B:877:GLU:HA | 1:B:880:LYS:HE2 | 1.84 | 0.59 |
| 1:C:209:PHE:CZ | 1:C:298:LEU:HD11 | 2.37 | 0.59 |
| 1:C:740:SER:HB3 | 1:C:743:LEU:HD11 | 1.83 | 0.59 |
| 1:C:887:GLN:HA | 1:C:913:ASN:O | 2.03 | 0.59 |
| 1:D:565:TYR:OH | 1:D:625:PRO:HA | 2.01 | 0.59 |
| 1:E:567:LYS:HD3 | 1:E:624:GLN:HG2 | 1.84 | 0.59 |
| 1:E:650:PHE:O | 1:E:652:LYS:N | 2.36 | 0.59 |
| 1:F:168:TYR:CZ | 1:F:238:LYS:HG2 | 2.37 | 0.59 |
| 1:F:561:LEU:HD12 | 1:F:573:LEU:HD13 | 1.84 | 0.59 |
| 1:G:231:GLY:CA | 3:G:1101:AGS:O2A | 2.50 | 0.59 |
| 1:G:358:LEU:HD11 | 1:G:362:LEU:HD21 | 1.84 | 0.59 |
| 1:G:528:PHE:HB2 | 1:G:579:PHE:CD2 | 2.38 | 0.59 |
| 1:H:143:TYR:CG | 1:H:281:PRO:HG2 | 2.38 | 0.59 |
| 1:H:447:LEU:O | 1:H:451:LEU:HD23 | 2.02 | 0.59 |
| 1:H:552:LYS:H | 1:H:552:LYS:CE | 2.15 | 0.59 |
| 1:I:231:GLY:CA | 3:I:1101:AGS:O2A | 2.50 | 0.59 |
| 1:I:447:LEU:O | 1:I:451:LEU:HD23 | 2.02 | 0.59 |
| 1:I:971:LEU:CD2 | 1:I:1000:LEU:HD12 | 2.33 | 0.59 |
| 1:J:294:PRO:O | 1:J:344:ALA:HA | 2.02 | 0.59 |
| 1:J:740:SER:HB3 | 1:J:743:LEU:HD11 | 1.83 | 0.59 |
| 1:J:756:PRO:HA | 1:J:759:ARG:HE | 1.67 | 0.59 |
| 1:B:616:ALA:CB | 1:B:649:TYR:HB2 | 2.33 | 0.59 |
| 1:B:758:MET:HE3 | 1:B:761:LEU:HB2 | 1.84 | 0.59 |
| 1:C:143:TYR:CG | 1:C:281:PRO:HG2 | 2.38 | 0.59 |
| 1:C:294:PRO:O | 1:C:344:ALA:HA | 2.02 | 0.59 |
| 1:D:447:LEU:O | 1:D:451:LEU:HD23 | 2.02 | 0.59 |
| 1:D:475:ASP:CB | 1:D:553:LEU:CD2 | 2.72 | 0.59 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:E:810:LEU:CD1 | 1:E:834:LEU:HD22 | 2.32 | 0.59 |
| 1:F:143:TYR:CG | 1:F:281:PRO:HG2 | 2.38 | 0.59 |
| 1:F:217:GLU:HB2 | 1:G:149:GLN:HE22 | 1.67 | 0.59 |
| 1:G:756:PRO:HA | 1:G:759:ARG:HE | 1.67 | 0.59 |
| 1:H:222:VAL:HG13 | 1:H:366:ARG:O | 2.03 | 0.59 |
| 1:H:650:PHE:O | 1:H:652:LYS:N | 2.36 | 0.59 |
| 1:H:971:LEU:CD2 | 1:H:1000:LEU:HD12 | 2.33 | 0.59 |
| 1:I:252:ARG:O | 1:I:296:ARG:HD2 | 2.02 | 0.59 |
| 1:I:261:CYS:HB2 | 1:I:302:ASP:O | 2.03 | 0.59 |
| 1:J:222:VAL:HG13 | 1:J:366:ARG:O | 2.03 | 0.59 |
| 1:J:601:SER:HB2 | 1:J:603:GLN:HE22 | 1.67 | 0.59 |
| 1:J:877:GLU:HA | 1:J:880:LYS:HE2 | 1.84 | 0.59 |
| 1:A:209:PHE:CZ | 1:A:298:LEU:HD11 | 2.37 | 0.59 |
| 1:A:294:PRO:O | 1:A:344:ALA:HA | 2.02 | 0.59 |
| 1:B:252:ARG:O | 1:B:296:ARG:HD2 | 2.02 | 0.59 |
| 1:B:270:ARG:CD | 1:B:275:LEU:HD13 | 2.26 | 0.59 |
| 1:B:581:PHE:HE1 | 1:B:608:LEU:HB3 | 1.67 | 0.59 |
| 1:B:844:CYS:HA | 1:B:847:LEU:CD1 | 2.32 | 0.59 |
| 1:C:262:ARG:HB2 | 1:C:306:GLU:OE1 | 2.02 | 0.59 |
| 1:C:341:LEU:HB3 | 1:C:344:ALA:HB2 | 1.84 | 0.59 |
| 1:C:374:SER:O | 1:C:378:ARG:NH2 | 2.34 | 0.59 |
| 1:C:528:PHE:HB2 | 1:C:579:PHE:CD2 | 2.38 | 0.59 |
| 1:C:758:MET:HE3 | 1:C:761:LEU:HB2 | 1.84 | 0.59 |
| 1:C:916:HIS:CD2 | 1:C:945:VAL:HB | 2.37 | 0.59 |
| 1:D:261:CYS:HB2 | 1:D:302:ASP:O | 2.03 | 0.59 |
| 1:F:601:SER:HB2 | 1:F:603:GLN:HE22 | 1.67 | 0.59 |
| 1:F:825:LEU:HD23 | 1:F:826:LEU:HD23 | 1.85 | 0.59 |
| 1:H:231:GLY:CA | 3:H:1101:AGS:O2A | 2.50 | 0.59 |
| 1:H:573:LEU:HA | 1:H:576:VAL:HG12 | 1.85 | 0.59 |
| 1:H:581:PHE:HE1 | 1:H:608:LEU:HB3 | 1.67 | 0.59 |
| 1:H:895:GLY:N | 1:H:922:ASN:OD1 | 2.34 | 0.59 |
| 1:J:475:ASP:CB | 1:J:553:LEU:CD2 | 2.72 | 0.59 |
| 1:A:447:LEU:O | 1:A:451:LEU:HD23 | 2.02 | 0.59 |
| 1:A:1004:GLY:HA2 | 1:A:1031:VAL:CG1 | 2.32 | 0.59 |
| 1:B:552:LYS:H | 1:B:552:LYS:CE | 2.15 | 0.59 |
| 1:B:562:LEU:HD11 | 1:B:611:TRP:CE3 | 2.37 | 0.59 |
| 1:B:580:LEU:O | 1:B:584:VAL:HG22 | 2.03 | 0.59 |
| 1:B:756:PRO:HA | 1:B:759:ARG:HE | 1.67 | 0.59 |
| 1:B:971:LEU:CD2 | 1:B:1000:LEU:HD12 | 2.33 | 0.59 |
| 1:C:581:PHE:HE1 | 1:C:608:LEU:HB3 | 1.67 | 0.59 |
| 1:D:916:HIS:CD2 | 1:D:945:VAL:HB | 2.37 | 0.59 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:E:143:TYR:CG | 1:E:281:PRO:HG2 | 2.38 | 0.59 |
| 1:F:650:PHE:O | 1:F:652:LYS:N | 2.36 | 0.59 |
| 1:G:581:PHE:HE1 | 1:G:608:LEU:HB3 | 1.67 | 0.59 |
| 1:G:810:LEU:CD1 | 1:G:834:LEU:HD22 | 2.33 | 0.59 |
| 1:G:825:LEU:HD23 | 1:G:826:LEU:HD23 | 1.85 | 0.59 |
| 1:H:562:LEU:HD11 | 1:H:611:TRP:CE3 | 2.37 | 0.59 |
| 1:H:740:SER:HB3 | 1:H:743:LEU:HD11 | 1.83 | 0.59 |
| 1:H:810:LEU:CD1 | 1:H:834:LEU:HD22 | 2.32 | 0.59 |
| 1:I:650:PHE:O | 1:I:652:LYS:N | 2.36 | 0.59 |
| 1:J:341:LEU:HB3 | 1:J:344:ALA:HB2 | 1.84 | 0.59 |
| 1:A:222:VAL:HG13 | 1:A:366:ARG:O | 2.03 | 0.59 |
| 1:A:552:LYS:H | 1:A:552:LYS:CE | 2.15 | 0.59 |
| 1:A:810:LEU:CD1 | 1:A:834:LEU:HD22 | 2.32 | 0.59 |
| 1:B:810:LEU:CD1 | 1:B:834:LEU:HD22 | 2.32 | 0.59 |
| 1:B:815:ILE:HG21 | 1:B:843:CYS:HB2 | 1.85 | 0.59 |
| 1:C:815:ILE:HG21 | 1:C:843:CYS:HB2 | 1.85 | 0.59 |
| 1:D:143:TYR:CG | 1:D:281:PRO:HG2 | 2.38 | 0.59 |
| 1:D:919:LEU:HG | 1:D:922:ASN:HD22 | 1.68 | 0.59 |
| 1:E:168:TYR:CZ | 1:E:238:LYS:HG2 | 2.37 | 0.59 |
| 1:E:210:ASP:OD1 | 1:E:252:ARG:NH2 | 2.35 | 0.59 |
| 1:E:561:LEU:HD12 | 1:E:573:LEU:HD13 | 1.84 | 0.59 |
| 1:E:825:LEU:HD23 | 1:E:826:LEU:HD23 | 1.85 | 0.59 |
| 1:F:222:VAL:HG13 | 1:F:366:ARG:O | 2.03 | 0.59 |
| 1:F:305:ASP:OD2 | 1:F:351:ARG:NE | 2.35 | 0.59 |
| 1:G:581:PHE:CE1 | 1:G:608:LEU:HD22 | 2.38 | 0.59 |
| 1:G:593:GLU:HB2 | 1:G:600:ILE:HD11 | 1.85 | 0.59 |
| 1:G:758:MET:HE3 | 1:G:761:LEU:HB2 | 1.84 | 0.59 |
| 1:H:528:PHE:HB2 | 1:H:579:PHE:CD2 | 2.38 | 0.59 |
| 1:H:844:CYS:HA | 1:H:847:LEU:CD1 | 2.32 | 0.59 |
| 1:I:573:LEU:HA | 1:I:576:VAL:HG12 | 1.85 | 0.59 |
| 1:I:815:ILE:HG21 | 1:I:843:CYS:HB2 | 1.85 | 0.59 |
| 1:I:887:GLN:HA | 1:I:913:ASN:O | 2.03 | 0.59 |
| 1:J:552:LYS:H | 1:J:552:LYS:CE | 2.15 | 0.59 |
| 1:J:971:LEU:CD2 | 1:J:1000:LEU:HD12 | 2.33 | 0.59 |
| 1:A:624:GLN:CB | 1:A:625:PRO:CD | 2.81 | 0.58 |
| 1:B:143:TYR:CG | 1:B:281:PRO:HG2 | 2.38 | 0.58 |
| 1:B:209:PHE:CZ | 1:B:298:LEU:HD11 | 2.37 | 0.58 |
| 1:B:341:LEU:HB3 | 1:B:344:ALA:HB2 | 1.84 | 0.58 |
| 1:B:609:LEU:HD13 | 1:B:642:PHE:CE1 | 2.38 | 0.58 |
| 1:C:252:ARG:O | 1:C:296:ARG:HD2 | 2.02 | 0.58 |
| 1:C:810:LEU:CD1 | 1:C:834:LEU:HD22 | 2.33 | 0.58 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:C:972:ARG:HD2 | 1:C:1001:GLN:OE1 | 2.04 | 0.58 |
| 1:D:758:MET:HE3 | 1:D:761:LEU:HB2 | 1.84 | 0.58 |
| 1:D:825:LEU:HD23 | 1:D:826:LEU:HD23 | 1.85 | 0.58 |
| 1:D:887:GLN:HA | 1:D:913:ASN:O | 2.03 | 0.58 |
| 1:E:581:PHE:CE1 | 1:E:608:LEU:HD22 | 2.38 | 0.58 |
| 1:E:616:ALA:CB | 1:E:649:TYR:HB2 | 2.33 | 0.58 |
| 1:E:971:LEU:CD2 | 1:E:1000:LEU:HD12 | 2.33 | 0.58 |
| 1:G:738:SER:HB3 | 1:G:764:THR:HG22 | 1.85 | 0.58 |
| 1:G:874:ILE:O | 1:G:877:GLU:HG3 | 2.03 | 0.58 |
| 1:H:287:ILE:O | 1:H:291:VAL:HG12 | 2.03 | 0.58 |
| 1:H:825:LEU:HD23 | 1:H:826:LEU:HD23 | 1.85 | 0.58 |
| 1:H:874:ILE:O | 1:H:877:GLU:HG3 | 2.03 | 0.58 |
| 1:I:877:GLU:HA | 1:I:880:LYS:HE2 | 1.84 | 0.58 |
| 1:J:261:CYS:HB2 | 1:J:302:ASP:O | 2.03 | 0.58 |
| 1:A:149:GLN:HE22 | 1:J:217:GLU:HB2 | 1.66 | 0.58 |
| 1:A:580:LEU:O | 1:A:584:VAL:HG22 | 2.03 | 0.58 |
| 1:A:593:GLU:HB2 | 1:A:600:ILE:HD11 | 1.85 | 0.58 |
| 1:A:616:ALA:CB | 1:A:649:TYR:HB2 | 2.33 | 0.58 |
| 1:A:738:SER:HB3 | 1:A:764:THR:HG22 | 1.86 | 0.58 |
| 1:A:919:LEU:HG | 1:A:922:ASN:HD22 | 1.69 | 0.58 |
| 1:B:210:ASP:OD1 | 1:B:252:ARG:NH2 | 2.35 | 0.58 |
| 1:B:581:PHE:CE1 | 1:B:608:LEU:HD22 | 2.38 | 0.58 |
| 1:B:601:SER:HB2 | 1:B:603:GLN:HE22 | 1.67 | 0.58 |
| 1:B:887:GLN:HA | 1:B:913:ASN:O | 2.03 | 0.58 |
| 1:B:972:ARG:HD2 | 1:B:1001:GLN:OE1 | 2.04 | 0.58 |
| 1:C:580:LEU:O | 1:C:584:VAL:HG22 | 2.03 | 0.58 |
| 1:C:619:LYS:CB | 2:M:261:ASP:CG | 2.71 | 0.58 |
| 1:C:877:GLU:HA | 1:C:880:LYS:HE2 | 1.84 | 0.58 |
| 1:E:294:PRO:O | 1:E:344:ALA:HA | 2.02 | 0.58 |
| 1:E:916:HIS:CD2 | 1:E:945:VAL:HB | 2.37 | 0.58 |
| 1:F:500:SER:OG | 1:F:503:LEU:O | 2.21 | 0.58 |
| 1:F:758:MET:HE3 | 1:F:761:LEU:HB2 | 1.84 | 0.58 |
| 1:F:810:LEU:CD1 | 1:F:834:LEU:HD22 | 2.33 | 0.58 |
| 1:F:874:ILE:O | 1:F:877:GLU:HG3 | 2.03 | 0.58 |
| 1:G:815:ILE:HG21 | 1:G:843:CYS:HB2 | 1.85 | 0.58 |
| 1:H:209:PHE:CZ | 1:H:298:LEU:HD11 | 2.37 | 0.58 |
| 1:H:252:ARG:O | 1:H:296:ARG:HD2 | 2.02 | 0.58 |
| 1:H:261:CYS:HB2 | 1:H:302:ASP:O | 2.03 | 0.58 |
| 1:H:270:ARG:NH1 | 1:H:275:LEU:HD11 | 2.14 | 0.58 |
| 1:H:499:VAL:O | 1:H:499:VAL:HG12 | 2.02 | 0.58 |
| 1:H:815:ILE:HG21 | 1:H:843:CYS:HB2 | 1.85 | 0.58 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:H:1018:LEU:HD22 | 1:H:1030:VAL:HG11 | 1.85 | 0.58 |
| 1:I:222:VAL:HG13 | 1:I:366:ARG:O | 2.03 | 0.58 |
| 1:I:581:PHE:CE1 | 1:I:608:LEU:HD22 | 2.38 | 0.58 |
| 1:I:609:LEU:HD13 | 1:I:642:PHE:CE1 | 2.38 | 0.58 |
| 1:J:209:PHE:CZ | 1:J:298:LEU:HD11 | 2.37 | 0.58 |
| 1:J:593:GLU:HB2 | 1:J:600:ILE:HD11 | 1.85 | 0.58 |
| 1:J:815:ILE:HG21 | 1:J:843:CYS:HB2 | 1.85 | 0.58 |
| 1:A:143:TYR:CG | 1:A:281:PRO:HG2 | 2.38 | 0.58 |
| 1:B:222:VAL:HG13 | 1:B:366:ARG:O | 2.03 | 0.58 |
| 1:B:528:PHE:HB2 | 1:B:579:PHE:CD2 | 2.38 | 0.58 |
| 1:B:650:PHE:O | 1:B:652:LYS:N | 2.36 | 0.58 |
| 1:B:738:SER:HB3 | 1:B:764:THR:HG22 | 1.85 | 0.58 |
| 1:C:609:LEU:HD13 | 1:C:642:PHE:CE1 | 2.38 | 0.58 |
| 1:C:912:GLN:NE2 | 1:C:942:LYS:HE2 | 2.19 | 0.58 |
| 1:C:971:LEU:CD2 | 1:C:1000:LEU:HD12 | 2.33 | 0.58 |
| 1:D:270:ARG:NH1 | 1:D:275:LEU:HD11 | 2.14 | 0.58 |
| 1:F:381:TYR:CE1 | 3:F:1101:AGS:H2 | 2.39 | 0.58 |
| 1:G:971:LEU:HD22 | 1:G:1000:LEU:HD12 | 1.85 | 0.58 |
| 1:H:210:ASP:OD1 | 1:H:252:ARG:NH2 | 2.35 | 0.58 |
| 1:J:143:TYR:CG | 1:J:281:PRO:HG2 | 2.38 | 0.58 |
| 1:J:573:LEU:HA | 1:J:576:VAL:HG12 | 1.85 | 0.58 |
| 1:J:652:LYS:HA | 1:J:678:SER:OG | 2.04 | 0.58 |
| 1:J:810:LEU:CD1 | 1:J:834:LEU:HD22 | 2.33 | 0.58 |
| 1:J:887:GLN:HA | 1:J:913:ASN:O | 2.03 | 0.58 |
| 1:A:573:LEU:HA | 1:A:576:VAL:HG12 | 1.85 | 0.58 |
| 1:A:601:SER:HB2 | 1:A:603:GLN:HE22 | 1.67 | 0.58 |
| 1:A:912:GLN:NE2 | 1:A:942:LYS:HE2 | 2.19 | 0.58 |
| 1:B:565:TYR:OH | 1:B:625:PRO:CA | 2.45 | 0.58 |
| 1:C:738:SER:HB3 | 1:C:764:THR:HG22 | 1.85 | 0.58 |
| 1:C:825:LEU:HD23 | 1:C:826:LEU:HD23 | 1.85 | 0.58 |
| 1:D:552:LYS:H | 1:D:552:LYS:CE | 2.16 | 0.58 |
| 1:D:561:LEU:HD12 | 1:D:573:LEU:HD13 | 1.84 | 0.58 |
| 1:D:580:LEU:O | 1:D:584:VAL:HG22 | 2.03 | 0.58 |
| 1:D:581:PHE:CE1 | 1:D:608:LEU:HD22 | 2.38 | 0.58 |
| 1:D:810:LEU:CD1 | 1:D:834:LEU:HD22 | 2.32 | 0.58 |
| 1:D:972:ARG:HD2 | 1:D:1001:GLN:OE1 | 2.04 | 0.58 |
| 1:E:305:ASP:OD2 | 1:E:351:ARG:NE | 2.35 | 0.58 |
| 1:E:381:TYR:CE1 | 3:E:1101:AGS:H2 | 2.39 | 0.58 |
| 1:E:738:SER:HB3 | 1:E:764:THR:HG22 | 1.85 | 0.58 |
| 1:F:581:PHE:CE1 | 1:F:608:LEU:HD22 | 2.38 | 0.58 |
| 1:F:738:SER:HB3 | 1:F:764:THR:HG22 | 1.85 | 0.58 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:F:971:LEU:CD2 | 1:F:1000:LEU:HD12 | 2.33 | 0.58 |
| 1:G:552:LYS:H | 1:G:552:LYS:CE | 2.15 | 0.58 |
| 1:G:573:LEU:HA | 1:G:576:VAL:HG12 | 1.85 | 0.58 |
| 1:G:971:LEU:CD2 | 1:G:1000:LEU:HD12 | 2.33 | 0.58 |
| 1:G:1018:LEU:HD22 | 1:G:1030:VAL:HG11 | 1.85 | 0.58 |
| 1:H:449:SER:O | 1:H:452:GLN:HG3 | 2.04 | 0.58 |
| 1:H:756:PRO:HA | 1:H:759:ARG:HE | 1.67 | 0.58 |
| 1:H:887:GLN:HA | 1:H:913:ASN:O | 2.03 | 0.58 |
| 1:H:1000:LEU:HD21 | 1:H:1002:ASN:O | 2.04 | 0.58 |
| 1:I:287:ILE:O | 1:I:291:VAL:HG12 | 2.03 | 0.58 |
| 1:I:740:SER:HB3 | 1:I:743:LEU:HD11 | 1.83 | 0.58 |
| 1:J:210:ASP:OD1 | 1:J:252:ARG:NH2 | 2.35 | 0.58 |
| 1:J:581:PHE:CE1 | 1:J:608:LEU:HD22 | 2.38 | 0.58 |
| 1:J:738:SER:HB3 | 1:J:764:THR:HG22 | 1.86 | 0.58 |
| 1:A:341:LEU:HB3 | 1:A:344:ALA:HB2 | 1.84 | 0.58 |
| 1:A:652:LYS:HA | 1:A:678:SER:OG | 2.04 | 0.58 |
| 1:A:972:ARG:HD2 | 1:A:1001:GLN:OE1 | 2.04 | 0.58 |
| 1:B:565:TYR:HH | 1:B:625:PRO:HA | 1.64 | 0.58 |
| 1:D:252:ARG:O | 1:D:296:ARG:HD2 | 2.02 | 0.58 |
| 1:D:449:SER:O | 1:D:452:GLN:HG3 | 2.04 | 0.58 |
| 1:D:912:GLN:NE2 | 1:D:942:LYS:HE2 | 2.19 | 0.58 |
| 1:E:580:LEU:O | 1:E:584:VAL:HG22 | 2.03 | 0.58 |
| 1:E:815:ILE:HG21 | 1:E:843:CYS:HB2 | 1.85 | 0.58 |
| 1:E:1000:LEU:HD21 | 1:E:1002:ASN:O | 2.04 | 0.58 |
| 1:F:287:ILE:O | 1:F:291:VAL:HG12 | 2.03 | 0.58 |
| 1:F:815:ILE:HG21 | 1:F:843:CYS:HB2 | 1.85 | 0.58 |
| 1:F:887:GLN:HA | 1:F:913:ASN:O | 2.03 | 0.58 |
| 1:F:912:GLN:NE2 | 1:F:942:LYS:HE2 | 2.19 | 0.58 |
| 1:G:222:VAL:HG13 | 1:G:366:ARG:O | 2.03 | 0.58 |
| 1:G:449:SER:O | 1:G:452:GLN:HG3 | 2.04 | 0.58 |
| 1:H:305:ASP:CB | 1:H:499:VAL:HG11 | 2.19 | 0.58 |
| 1:H:637:MET:HE3 | 1:H:639:GLU:HB2 | 1.85 | 0.58 |
| 1:I:449:SER:O | 1:I:452:GLN:HG3 | 2.04 | 0.58 |
| 1:I:825:LEU:HD23 | 1:I:826:LEU:HD23 | 1.85 | 0.58 |
| 1:J:287:ILE:O | 1:J:291:VAL:HG12 | 2.03 | 0.58 |
| 1:J:528:PHE:HB2 | 1:J:579:PHE:CD2 | 2.38 | 0.58 |
| 1:J:972:ARG:HD2 | 1:J:1001:GLN:OE1 | 2.03 | 0.58 |
| 1:A:261:CYS:HB2 | 1:A:302:ASP:O | 2.03 | 0.58 |
| 1:A:405:LEU:CD1 | 1:A:418:VAL:HG21 | 2.33 | 0.58 |
| 1:A:446:PHE:CZ | 1:A:450:LEU:HD11 | 2.39 | 0.58 |
| 1:A:637:MET:HE3 | 1:A:639:GLU:HB2 | 1.85 | 0.58 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:A:825:LEU:HD23 | 1:A:826:LEU:HD23 | 1.85 | 0.58 |
| 1:A:874:ILE:O | 1:A:877:GLU:HG3 | 2.03 | 0.58 |
| 1:A:971:LEU:CD2 | 1:A:1000:LEU:HD12 | 2.33 | 0.58 |
| 1:A:1000:LEU:HD21 | 1:A:1002:ASN:O | 2.04 | 0.58 |
| 1:B:294:PRO:O | 1:B:344:ALA:HA | 2.02 | 0.58 |
| 1:B:624:GLN:CB | 1:B:625:PRO:CD | 2.82 | 0.58 |
| 1:C:222:VAL:HG13 | 1:C:366:ARG:O | 2.03 | 0.58 |
| 1:C:593:GLU:HB2 | 1:C:600:ILE:HD11 | 1.84 | 0.58 |
| 1:D:593:GLU:HB2 | 1:D:600:ILE:HD11 | 1.85 | 0.58 |
| 1:D:815:ILE:HG21 | 1:D:843:CYS:HB2 | 1.85 | 0.58 |
| 1:E:136:TYR:HH | 1:E:285:PRO:HB3 | 1.68 | 0.58 |
| 1:E:261:CYS:HB2 | 1:E:302:ASP:O | 2.03 | 0.58 |
| 1:E:728:SER:HA | 1:E:731:ARG:HH11 | 1.69 | 0.58 |
| 1:F:916:HIS:CD2 | 1:F:945:VAL:HB | 2.37 | 0.58 |
| 1:G:261:CYS:HB2 | 1:G:302:ASP:O | 2.03 | 0.58 |
| 1:G:381:TYR:CE1 | 3:G:1101:AGS:H2 | 2.39 | 0.58 |
| 1:H:305:ASP:OD2 | 1:H:351:ARG:NE | 2.35 | 0.58 |
| 1:H:605:ARG:HA | 1:H:608:LEU:HD12 | 1.86 | 0.58 |
| 1:H:647:MET:HE2 | 1:H:669:CYS:HB3 | 1.84 | 0.58 |
| 1:H:738:SER:HB3 | 1:H:764:THR:HG22 | 1.86 | 0.58 |
| 1:I:143:TYR:CG | 1:I:281:PRO:HG2 | 2.38 | 0.58 |
| 1:I:601:SER:HB2 | 1:I:603:GLN:HE22 | 1.67 | 0.58 |
| 1:I:738:SER:HB3 | 1:I:764:THR:HG22 | 1.85 | 0.58 |
| 1:I:973:LYS:HG3 | 1:I:1002:ASN:CB | 2.28 | 0.58 |
| 1:I:1018:LEU:HD22 | 1:I:1030:VAL:HG11 | 1.85 | 0.58 |
| 1:J:449:SER:O | 1:J:452:GLN:HG3 | 2.04 | 0.58 |
| 1:J:912:GLN:NE2 | 1:J:942:LYS:HE2 | 2.19 | 0.58 |
| 1:A:449:SER:O | 1:A:452:GLN:HG3 | 2.04 | 0.58 |
| 1:A:581:PHE:CE1 | 1:A:608:LEU:HD22 | 2.38 | 0.58 |
| 1:A:728:SER:HA | 1:A:731:ARG:HH11 | 1.69 | 0.58 |
| 1:A:815:ILE:HG21 | 1:A:843:CYS:HB2 | 1.85 | 0.58 |
| 1:B:449:SER:O | 1:B:452:GLN:HG3 | 2.04 | 0.58 |
| 1:B:593:GLU:HB2 | 1:B:600:ILE:HD11 | 1.84 | 0.58 |
| 1:B:825:LEU:HD23 | 1:B:826:LEU:HD23 | 1.85 | 0.58 |
| 1:B:983:ASP:OD1 | 1:B:1014:THR:HG21 | 2.04 | 0.58 |
| 1:C:1016:SER:O | 1:C:1020:THR:HG23 | 2.04 | 0.58 |
| 1:D:222:VAL:HG13 | 1:D:366:ARG:O | 2.03 | 0.58 |
| 1:D:573:LEU:HA | 1:D:576:VAL:HG12 | 1.85 | 0.58 |
| 1:D:971:LEU:CD2 | 1:D:1000:LEU:HD12 | 2.33 | 0.58 |
| 1:E:581:PHE:HE1 | 1:E:608:LEU:HB3 | 1.67 | 0.58 |
| 1:E:758:MET:HE3 | 1:E:761:LEU:HB2 | 1.84 | 0.58 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:E:912:GLN:NE2 | 1:E:942:LYS:HE2 | 2.19 | 0.58 |
| 1:F:449:SER:O | 1:F:452:GLN:HG3 | 2.04 | 0.58 |
| 1:F:502:PHE:HA | 1:F:521:ILE:CD1 | 2.34 | 0.58 |
| 1:F:983:ASP:OD1 | 1:F:1014:THR:HG21 | 2.04 | 0.58 |
| 1:G:142:LYS:HG2 | 1:G:145:ARG:NH2 | 2.19 | 0.58 |
| 1:G:887:GLN:HA | 1:G:913:ASN:O | 2.03 | 0.58 |
| 1:H:381:TYR:CE1 | 3:H:1101:AGS:H2 | 2.39 | 0.58 |
| 1:I:528:PHE:HB2 | 1:I:579:PHE:CD2 | 2.38 | 0.58 |
| 1:I:552:LYS:H | 1:I:552:LYS:CE | 2.15 | 0.58 |
| 1:I:605:ARG:HA | 1:I:608:LEU:HD12 | 1.86 | 0.58 |
| 1:I:616:ALA:CB | 1:I:649:TYR:HB2 | 2.33 | 0.58 |
| 1:I:810:LEU:CD1 | 1:I:834:LEU:HD22 | 2.33 | 0.58 |
| 1:I:874:ILE:O | 1:I:877:GLU:HG3 | 2.03 | 0.58 |
| 1:J:650:PHE:O | 1:J:652:LYS:N | 2.36 | 0.58 |
| 1:A:230:ILE:HA | 1:A:412:PRO:HD2 | 1.86 | 0.58 |
| 1:A:448:SER:HA | 1:A:451:LEU:HD23 | 1.86 | 0.58 |
| 1:A:528:PHE:HB2 | 1:A:579:PHE:CD2 | 2.38 | 0.58 |
| 1:A:591:TYR:HA | 1:A:594:LYS:HG2 | 1.86 | 0.58 |
| 1:A:650:PHE:O | 1:A:652:LYS:N | 2.36 | 0.58 |
| 1:B:448:SER:HA | 1:B:451:LEU:HD23 | 1.86 | 0.58 |
| 1:B:728:SER:HA | 1:B:731:ARG:HH11 | 1.69 | 0.58 |
| 1:B:912:GLN:NE2 | 1:B:942:LYS:HE2 | 2.19 | 0.58 |
| 1:B:919:LEU:HG | 1:B:922:ASN:HD22 | 1.69 | 0.58 |
| 1:B:1000:LEU:HD21 | 1:B:1002:ASN:O | 2.04 | 0.58 |
| 1:B:1016:SER:O | 1:B:1020:THR:HG23 | 2.04 | 0.58 |
| 1:D:217:GLU:HB2 | 1:E:149:GLN:HE22 | 1.67 | 0.58 |
| 1:D:381:TYR:CE1 | 3:D:1101:AGS:H2 | 2.39 | 0.58 |
| 1:D:562:LEU:HD11 | 1:D:611:TRP:CE3 | 2.37 | 0.58 |
| 1:E:623:ILE:H | 1:E:623:ILE:CD1 | 2.04 | 0.58 |
| 1:E:643:VAL:HG12 | 1:E:672:ASN:HB3 | 1.86 | 0.58 |
| 1:E:734:PHE:HD1 | 1:E:737:LEU:HD12 | 1.69 | 0.58 |
| 1:E:877:GLU:HA | 1:E:880:LYS:HE2 | 1.84 | 0.58 |
| 1:F:567:LYS:HD3 | 1:F:624:GLN:HG2 | 1.86 | 0.58 |
| 1:F:877:GLU:HA | 1:F:880:LYS:HE2 | 1.84 | 0.58 |
| 1:I:637:MET:HE3 | 1:I:639:GLU:HB2 | 1.85 | 0.58 |
| 1:I:983:ASP:OD1 | 1:I:1014:THR:HG21 | 2.04 | 0.58 |
| 1:J:728:SER:HA | 1:J:731:ARG:HH11 | 1.69 | 0.58 |
| 1:J:825:LEU:HD23 | 1:J:826:LEU:HD23 | 1.85 | 0.58 |
| 1:A:142:LYS:HG2 | 1:A:145:ARG:NH2 | 2.19 | 0.58 |
| 1:A:287:ILE:O | 1:A:291:VAL:HG12 | 2.04 | 0.58 |
| 1:A:581:PHE:HE1 | 1:A:608:LEU:HB3 | 1.67 | 0.58 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:A:609:LEU:HD13 | 1:A:642:PHE:CE1 | 2.38 | 0.58 |
| 1:A:887:GLN:HA | 1:A:913:ASN:O | 2.03 | 0.58 |
| 1:B:217:GLU:HB2 | 1:C:149:GLN:HE22 | 1.66 | 0.58 |
| 1:B:261:CYS:HB2 | 1:B:302:ASP:O | 2.03 | 0.58 |
| 1:B:734:PHE:HD1 | 1:B:737:LEU:HD12 | 1.69 | 0.58 |
| 1:C:581:PHE:CE1 | 1:C:608:LEU:HD22 | 2.38 | 0.58 |
| 1:C:650:PHE:O | 1:C:652:LYS:N | 2.36 | 0.58 |
| 1:C:983:ASP:OD1 | 1:C:1014:THR:HG21 | 2.04 | 0.58 |
| 1:D:446:PHE:CZ | 1:D:450:LEU:HD11 | 2.39 | 0.58 |
| 1:D:652:LYS:HA | 1:D:678:SER:OG | 2.04 | 0.58 |
| 1:D:844:CYS:HA | 1:D:847:LEU:CD1 | 2.32 | 0.58 |
| 1:D:877:GLU:HA | 1:D:880:LYS:HE2 | 1.84 | 0.58 |
| 1:E:222:VAL:HG13 | 1:E:366:ARG:O | 2.03 | 0.58 |
| 1:E:446:PHE:CZ | 1:E:450:LEU:HD11 | 2.39 | 0.58 |
| 1:E:573:LEU:HA | 1:E:576:VAL:HG12 | 1.85 | 0.58 |
| 1:E:734:PHE:O | 1:E:764:THR:HG21 | 2.04 | 0.58 |
| 1:E:887:GLN:HA | 1:E:913:ASN:O | 2.03 | 0.58 |
| 1:E:972:ARG:HD2 | 1:E:1001:GLN:OE1 | 2.04 | 0.58 |
| 1:F:643:VAL:HG12 | 1:F:672:ASN:HB3 | 1.86 | 0.58 |
| 1:G:217:GLU:HB2 | 1:H:149:GLN:HE22 | 1.66 | 0.58 |
| 1:G:287:ILE:O | 1:G:291:VAL:HG12 | 2.03 | 0.58 |
| 1:G:586:GLN:O | 1:G:589:THR:CG2 | 2.47 | 0.58 |
| 1:G:728:SER:HA | 1:G:731:ARG:HH11 | 1.69 | 0.58 |
| 1:G:1000:LEU:HD21 | 1:G:1002:ASN:O | 2.04 | 0.58 |
| 1:H:609:LEU:HD13 | 1:H:642:PHE:CE1 | 2.38 | 0.58 |
| 1:I:209:PHE:CZ | 1:I:298:LEU:HD11 | 2.37 | 0.58 |
| 1:I:652:LYS:HA | 1:I:678:SER:OG | 2.04 | 0.58 |
| 1:J:448:SER:HA | 1:J:451:LEU:HD23 | 1.86 | 0.58 |
| 1:A:586:GLN:O | 1:A:589:THR:CG2 | 2.47 | 0.58 |
| 1:B:142:LYS:HG2 | 1:B:145:ARG:NH2 | 2.19 | 0.58 |
| 1:B:446:PHE:CZ | 1:B:450:LEU:HD11 | 2.39 | 0.58 |
| 1:B:1018:LEU:HD22 | 1:B:1030:VAL:HG11 | 1.85 | 0.58 |
| 1:C:230:ILE:HA | 1:C:412:PRO:HD2 | 1.86 | 0.58 |
| 1:D:643:VAL:HG12 | 1:D:672:ASN:HB3 | 1.86 | 0.58 |
| 1:D:734:PHE:HD1 | 1:D:737:LEU:HD12 | 1.69 | 0.58 |
| 1:F:919:LEU:HG | 1:F:922:ASN:HD22 | 1.69 | 0.58 |
| 1:H:580:LEU:O | 1:H:584:VAL:HG22 | 2.03 | 0.58 |
| 1:H:616:ALA:CB | 1:H:649:TYR:HB2 | 2.33 | 0.58 |
| 1:H:877:GLU:HA | 1:H:880:LYS:HE2 | 1.84 | 0.58 |
| 1:H:971:LEU:HD22 | 1:H:1000:LEU:HD12 | 1.85 | 0.58 |
| 1:H:983:ASP:OD1 | 1:H:1014:THR:HG21 | 2.04 | 0.58 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:I:728:SER:HA | 1:I:731:ARG:HH11 | 1.69 | 0.58 |
| 1:J:230:ILE:HA | 1:J:412:PRO:HD2 | 1.86 | 0.58 |
| 1:J:616:ALA:CB | 1:J:649:TYR:HB2 | 2.33 | 0.58 |
| 1:A:622:GLN:NE2 | 1:A:627:GLN:OE1 | 2.36 | 0.57 |
| 1:A:983:ASP:OD1 | 1:A:1014:THR:HG21 | 2.04 | 0.57 |
| 1:B:230:ILE:HA | 1:B:412:PRO:HD2 | 1.86 | 0.57 |
| 1:B:734:PHE:O | 1:B:764:THR:HG21 | 2.04 | 0.57 |
| 1:B:971:LEU:HD22 | 1:B:1000:LEU:HD12 | 1.85 | 0.57 |
| 1:C:652:LYS:HA | 1:C:678:SER:OG | 2.04 | 0.57 |
| 1:C:874:ILE:O | 1:C:877:GLU:HG3 | 2.03 | 0.57 |
| 1:C:971:LEU:HD22 | 1:C:1000:LEU:HD12 | 1.85 | 0.57 |
| 1:D:142:LYS:HG2 | 1:D:145:ARG:NH2 | 2.19 | 0.57 |
| 1:D:448:SER:HA | 1:D:451:LEU:HD23 | 1.86 | 0.57 |
| 1:D:528:PHE:HA | 1:D:579:PHE:HD2 | 1.69 | 0.57 |
| 1:D:601:SER:HB2 | 1:D:603:GLN:HE22 | 1.67 | 0.57 |
| 1:D:738:SER:HB3 | 1:D:764:THR:HG22 | 1.86 | 0.57 |
| 1:E:605:ARG:HA | 1:E:608:LEU:HD12 | 1.86 | 0.57 |
| 1:F:593:GLU:HB2 | 1:F:600:ILE:HD11 | 1.85 | 0.57 |
| 1:F:616:ALA:CB | 1:F:649:TYR:HB2 | 2.33 | 0.57 |
| 1:G:643:VAL:HG12 | 1:G:672:ASN:HB3 | 1.86 | 0.57 |
| 1:H:381:TYR:HD2 | 1:H:415:CYS:HG | 1.52 | 0.57 |
| 1:H:502:PHE:HA | 1:H:521:ILE:CD1 | 2.34 | 0.57 |
| 1:H:528:PHE:HA | 1:H:579:PHE:HD2 | 1.69 | 0.57 |
| 1:H:643:VAL:HG12 | 1:H:672:ASN:HB3 | 1.86 | 0.57 |
| 1:I:230:ILE:HA | 1:I:412:PRO:HD2 | 1.86 | 0.57 |
| 1:I:475:ASP:CB | 1:I:553:LEU:CD2 | 2.72 | 0.57 |
| 1:I:580:LEU:O | 1:I:584:VAL:HG22 | 2.03 | 0.57 |
| 1:I:623:ILE:H | 1:I:623:ILE:CD1 | 2.09 | 0.57 |
| 1:B:381:TYR:CE1 | 3:B:1101:AGS:H2 | 2.39 | 0.57 |
| 1:B:499:VAL:HG12 | 1:B:499:VAL:O | 2.02 | 0.57 |
| 1:B:573:LEU:HA | 1:B:576:VAL:HG12 | 1.85 | 0.57 |
| 1:B:874:ILE:O | 1:B:877:GLU:HG3 | 2.03 | 0.57 |
| 1:C:142:LYS:HG2 | 1:C:145:ARG:NH2 | 2.19 | 0.57 |
| 1:C:449:SER:O | 1:C:452:GLN:HG3 | 2.04 | 0.57 |
| 1:C:585:ASN:HA | 1:C:637:MET:HE3 | 1.86 | 0.57 |
| 1:E:449:SER:O | 1:E:452:GLN:HG3 | 2.04 | 0.57 |
| 1:E:593:GLU:HB2 | 1:E:600:ILE:HD11 | 1.85 | 0.57 |
| 1:E:983:ASP:OD1 | 1:E:1014:THR:HG21 | 2.04 | 0.57 |
| 1:F:844:CYS:HA | 1:F:847:LEU:CD1 | 2.32 | 0.57 |
| 1:G:734:PHE:HD1 | 1:G:737:LEU:HD12 | 1.69 | 0.57 |
| 1:G:912:GLN:NE2 | 1:G:942:LYS:HE2 | 2.19 | 0.57 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:H:217:GLU:HB2 | 1:I:149:GLN:HE22 | 1.67 | 0.57 |
| 1:H:919:LEU:HG | 1:H:922:ASN:HD22 | 1.69 | 0.57 |
| 1:I:381:TYR:CE1 | 3:I:1101:AGS:H2 | 2.39 | 0.57 |
| 1:I:919:LEU:HG | 1:I:922:ASN:HD22 | 1.69 | 0.57 |
| 1:J:315:ILE:HD11 | 1:J:333:SER:CB | 2.34 | 0.57 |
| 1:J:381:TYR:HD2 | 1:J:415:CYS:HG | 1.52 | 0.57 |
| 1:J:500:SER:HB2 | 1:J:503:LEU:O | 2.03 | 0.57 |
| 1:J:591:TYR:HA | 1:J:594:LYS:HG2 | 1.86 | 0.57 |
| 1:J:734:PHE:O | 1:J:764:THR:HG21 | 2.04 | 0.57 |
| 1:A:315:ILE:HD11 | 1:A:333:SER:CB | 2.34 | 0.57 |
| 1:A:1018:LEU:HD22 | 1:A:1030:VAL:HG11 | 1.85 | 0.57 |
| 1:B:178:ARG:HG3 | 1:B:183:ARG:NH2 | 2.20 | 0.57 |
| 1:B:591:TYR:HA | 1:B:594:LYS:HG2 | 1.86 | 0.57 |
| 1:B:919:LEU:CD2 | 1:B:922:ASN:HB2 | 2.35 | 0.57 |
| 1:C:381:TYR:CE1 | 3:C:1101:AGS:H2 | 2.39 | 0.57 |
| 1:C:448:SER:HA | 1:C:451:LEU:HD23 | 1.86 | 0.57 |
| 1:C:573:LEU:HA | 1:C:576:VAL:HG12 | 1.85 | 0.57 |
| 1:C:643:VAL:HG12 | 1:C:672:ASN:HB3 | 1.86 | 0.57 |
| 1:C:983:ASP:O | 1:C:986:VAL:HG12 | 2.05 | 0.57 |
| 1:C:1018:LEU:HD22 | 1:C:1030:VAL:HG11 | 1.85 | 0.57 |
| 1:D:230:ILE:HA | 1:D:412:PRO:HD2 | 1.86 | 0.57 |
| 1:D:605:ARG:HA | 1:D:608:LEU:HD12 | 1.86 | 0.57 |
| 1:D:983:ASP:O | 1:D:986:VAL:HG12 | 2.05 | 0.57 |
| 1:D:1000:LEU:HD21 | 1:D:1002:ASN:O | 2.04 | 0.57 |
| 1:E:142:LYS:HG2 | 1:E:145:ARG:NH2 | 2.19 | 0.57 |
| 1:E:178:ARG:HG3 | 1:E:183:ARG:NH2 | 2.20 | 0.57 |
| 1:E:652:LYS:HA | 1:E:678:SER:OG | 2.03 | 0.57 |
| 1:E:874:ILE:O | 1:E:877:GLU:HG3 | 2.03 | 0.57 |
| 1:F:573:LEU:HA | 1:F:576:VAL:HG12 | 1.85 | 0.57 |
| 1:G:580:LEU:O | 1:G:584:VAL:HG22 | 2.03 | 0.57 |
| 1:H:734:PHE:O | 1:H:764:THR:HG21 | 2.04 | 0.57 |
| 1:I:217:GLU:HB2 | 1:J:149:GLN:HE22 | 1.66 | 0.57 |
| 1:I:643:VAL:HG12 | 1:I:672:ASN:HB3 | 1.86 | 0.57 |
| 1:I:734:PHE:O | 1:I:764:THR:HG21 | 2.04 | 0.57 |
| 1:J:362:LEU:HD12 | 1:J:365:PRO:CG | 2.34 | 0.57 |
| 1:J:446:PHE:CZ | 1:J:450:LEU:HD11 | 2.39 | 0.57 |
| 1:J:643:VAL:HG12 | 1:J:672:ASN:HB3 | 1.86 | 0.57 |
| 1:J:971:LEU:HD22 | 1:J:1000:LEU:HD12 | 1.85 | 0.57 |
| 1:J:1000:LEU:HD21 | 1:J:1002:ASN:O | 2.04 | 0.57 |
| 1:A:178:ARG:HG3 | 1:A:183:ARG:NH2 | 2.20 | 0.57 |
| 1:A:217:GLU:HG2 | 1:B:149:GLN:OE1 | 2.05 | 0.57 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:A:643:VAL:HG12 | 1:A:672:ASN:HB3 | 1.86 | 0.57 |
| 1:B:287:ILE:O | 1:B:291:VAL:HG12 | 2.04 | 0.57 |
| 1:B:643:VAL:HG12 | 1:B:672:ASN:HB3 | 1.86 | 0.57 |
| 1:B:652:LYS:HA | 1:B:678:SER:OG | 2.04 | 0.57 |
| 1:C:567:LYS:HZ1 | 1:C:623:ILE:HG12 | 1.67 | 0.57 |
| 1:C:605:ARG:HA | 1:C:608:LEU:HD12 | 1.86 | 0.57 |
| 1:C:1000:LEU:HD21 | 1:C:1002:ASN:O | 2.04 | 0.57 |
| 1:D:874:ILE:O | 1:D:877:GLU:HG3 | 2.03 | 0.57 |
| 1:F:142:LYS:HG2 | 1:F:145:ARG:NH2 | 2.19 | 0.57 |
| 1:F:734:PHE:O | 1:F:764:THR:HG21 | 2.04 | 0.57 |
| 1:F:919:LEU:CD2 | 1:F:922:ASN:HB2 | 2.35 | 0.57 |
| 1:F:971:LEU:HD22 | 1:F:1000:LEU:HD12 | 1.85 | 0.57 |
| 1:H:446:PHE:CZ | 1:H:450:LEU:HD11 | 2.39 | 0.57 |
| 1:H:912:GLN:NE2 | 1:H:942:LYS:HE2 | 2.19 | 0.57 |
| 1:I:315:ILE:HD11 | 1:I:333:SER:CB | 2.34 | 0.57 |
| 1:I:789:ASP:HA | 1:I:792:LEU:HG | 1.87 | 0.57 |
| 1:I:912:GLN:NE2 | 1:I:942:LYS:HE2 | 2.19 | 0.57 |
| 1:I:972:ARG:HD2 | 1:I:1001:GLN:OE1 | 2.04 | 0.57 |
| 1:J:270:ARG:CD | 1:J:275:LEU:HD13 | 2.26 | 0.57 |
| 1:J:605:ARG:HA | 1:J:608:LEU:HD12 | 1.86 | 0.57 |
| 1:J:789:ASP:HA | 1:J:792:LEU:HG | 1.87 | 0.57 |
| 1:J:874:ILE:O | 1:J:877:GLU:HG3 | 2.03 | 0.57 |
| 1:A:528:PHE:HA | 1:A:579:PHE:HD2 | 1.69 | 0.57 |
| 1:B:983:ASP:O | 1:B:986:VAL:HG12 | 2.05 | 0.57 |
| 1:C:528:PHE:HA | 1:C:579:PHE:HD2 | 1.69 | 0.57 |
| 1:C:728:SER:HA | 1:C:731:ARG:HH11 | 1.69 | 0.57 |
| 1:C:919:LEU:CD2 | 1:C:922:ASN:HB2 | 2.35 | 0.57 |
| 1:D:728:SER:HA | 1:D:731:ARG:HH11 | 1.69 | 0.57 |
| 1:D:734:PHE:O | 1:D:764:THR:HG21 | 2.04 | 0.57 |
| 1:E:789:ASP:HA | 1:E:792:LEU:HG | 1.87 | 0.57 |
| 1:E:965:LEU:HD11 | 1:E:998:CYS:SG | 2.45 | 0.57 |
| 1:E:1016:SER:O | 1:E:1020:THR:HG23 | 2.04 | 0.57 |
| 1:F:965:LEU:HD11 | 1:F:998:CYS:SG | 2.45 | 0.57 |
| 1:G:601:SER:HB2 | 1:G:603:GLN:HE22 | 1.67 | 0.57 |
| 1:G:652:LYS:HA | 1:G:678:SER:OG | 2.04 | 0.57 |
| 1:H:142:LYS:HG2 | 1:H:145:ARG:NH2 | 2.19 | 0.57 |
| 1:H:920:ARG:HH12 | 2:R:121:ARG:HA | 1.69 | 0.57 |
| 1:I:919:LEU:CD2 | 1:I:922:ASN:HB2 | 2.35 | 0.57 |
| 1:I:983:ASP:O | 1:I:986:VAL:HG12 | 2.05 | 0.57 |
| 1:J:178:ARG:HG3 | 1:J:183:ARG:NH2 | 2.19 | 0.57 |
| 1:J:919:LEU:CD2 | 1:J:922:ASN:HB2 | 2.35 | 0.57 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:J:919:LEU:HG | 1:J:922:ASN:HD22 | 1.69 | 0.57 |
| 1:J:1016:SER:O | 1:J:1020:THR:HG23 | 2.04 | 0.57 |
| 1:J:1018:LEU:HD22 | 1:J:1030:VAL:HG11 | 1.85 | 0.57 |
| 1:B:500:SER:HB2 | 1:B:503:LEU:O | 2.04 | 0.57 |
| 1:B:605:ARG:HA | 1:B:608:LEU:HD12 | 1.86 | 0.57 |
| 1:C:176:GLU:HB3 | 1:C:367:HIS:CE1 | 2.40 | 0.57 |
| 1:D:178:ARG:HG3 | 1:D:183:ARG:NH2 | 2.19 | 0.57 |
| 1:D:287:ILE:O | 1:D:291:VAL:HG12 | 2.03 | 0.57 |
| 1:D:789:ASP:HA | 1:D:792:LEU:HG | 1.87 | 0.57 |
| 1:D:905:SER:HA | 1:D:908:LEU:HD12 | 1.87 | 0.57 |
| 1:D:919:LEU:CD2 | 1:D:922:ASN:HB2 | 2.35 | 0.57 |
| 1:D:965:LEU:HD11 | 1:D:998:CYS:SG | 2.45 | 0.57 |
| 1:D:983:ASP:OD1 | 1:D:1014:THR:HG21 | 2.04 | 0.57 |
| 1:E:291:VAL:HG11 | 1:E:322:TRP:NE1 | 2.20 | 0.57 |
| 1:E:905:SER:HA | 1:E:908:LEU:HD12 | 1.87 | 0.57 |
| 1:F:446:PHE:CZ | 1:F:450:LEU:HD11 | 2.39 | 0.57 |
| 1:F:605:ARG:HA | 1:F:608:LEU:HD12 | 1.86 | 0.57 |
| 1:F:972:ARG:HD2 | 1:F:1001:GLN:OE1 | 2.04 | 0.57 |
| 1:F:1018:LEU:HD22 | 1:F:1030:VAL:HG11 | 1.86 | 0.57 |
| 1:G:210:ASP:OD1 | 1:G:252:ARG:NH2 | 2.35 | 0.57 |
| 1:G:567:LYS:HD3 | 1:G:624:GLN:HG2 | 1.86 | 0.57 |
| 1:G:605:ARG:HA | 1:G:608:LEU:HD12 | 1.86 | 0.57 |
| 1:G:877:GLU:HA | 1:G:880:LYS:HE2 | 1.84 | 0.57 |
| 1:G:983:ASP:O | 1:G:986:VAL:HG12 | 2.05 | 0.57 |
| 1:H:624:GLN:O | 1:H:626:SER:N | 2.37 | 0.57 |
| 1:H:919:LEU:CD2 | 1:H:922:ASN:HB2 | 2.35 | 0.57 |
| 1:I:210:ASP:OD1 | 1:I:252:ARG:NH2 | 2.35 | 0.57 |
| 1:J:142:LYS:HG2 | 1:J:145:ARG:NH2 | 2.19 | 0.57 |
| 1:J:734:PHE:HD1 | 1:J:737:LEU:HD12 | 1.69 | 0.57 |
| 1:A:353:VAL:HB | 1:A:500:SER:OG | 2.04 | 0.57 |
| 1:A:381:TYR:CE1 | 3:A:1101:AGS:H2 | 2.39 | 0.57 |
| 1:A:971:LEU:HD22 | 1:A:1000:LEU:HD12 | 1.85 | 0.57 |
| 1:B:176:GLU:HB3 | 1:B:367:HIS:CE1 | 2.40 | 0.57 |
| 1:B:315:ILE:HD11 | 1:B:333:SER:CB | 2.34 | 0.57 |
| 1:C:734:PHE:O | 1:C:764:THR:HG21 | 2.04 | 0.57 |
| 1:D:168:TYR:CD1 | 3:D:1101:AGS:N6 | 2.73 | 0.57 |
| 1:D:971:LEU:HD22 | 1:D:1000:LEU:HD12 | 1.85 | 0.57 |
| 1:E:230:ILE:HA | 1:E:412:PRO:HD2 | 1.86 | 0.57 |
| 1:E:528:PHE:HA | 1:E:579:PHE:HD2 | 1.69 | 0.57 |
| 1:E:919:LEU:CD2 | 1:E:922:ASN:HB2 | 2.35 | 0.57 |
| 1:F:905:SER:HA | 1:F:908:LEU:HD12 | 1.87 | 0.57 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:G:528:PHE:HA | 1:G:579:PHE:HD2 | 1.70 | 0.57 |
| 1:G:616:ALA:CB | 1:G:649:TYR:HB2 | 2.33 | 0.57 |
| 1:G:905:SER:HA | 1:G:908:LEU:HD12 | 1.87 | 0.57 |
| 1:H:230:ILE:HA | 1:H:412:PRO:HD2 | 1.86 | 0.57 |
| 1:H:291:VAL:HG11 | 1:H:322:TRP:NE1 | 2.20 | 0.57 |
| 1:H:652:LYS:HA | 1:H:678:SER:OG | 2.04 | 0.57 |
| 1:H:728:SER:HA | 1:H:731:ARG:HH11 | 1.69 | 0.57 |
| 1:H:734:PHE:HD1 | 1:H:737:LEU:HD12 | 1.69 | 0.57 |
| 1:H:905:SER:HA | 1:H:908:LEU:HD12 | 1.87 | 0.57 |
| 1:I:362:LEU:HD12 | 1:I:365:PRO:CG | 2.34 | 0.57 |
| 1:J:220:HIS:O | 1:J:221:THR:OG1 | 2.21 | 0.57 |
| 1:J:502:PHE:HA | 1:J:521:ILE:CD1 | 2.34 | 0.57 |
| 1:J:983:ASP:OD1 | 1:J:1014:THR:HG21 | 2.04 | 0.57 |
| 1:A:176:GLU:HB3 | 1:A:367:HIS:CE1 | 2.40 | 0.57 |
| 1:A:637:MET:HG2 | 1:A:642:PHE:HD2 | 1.70 | 0.57 |
| 1:A:789:ASP:HA | 1:A:792:LEU:HG | 1.87 | 0.57 |
| 1:A:919:LEU:CD2 | 1:A:922:ASN:HB2 | 2.35 | 0.57 |
| 1:A:983:ASP:O | 1:A:986:VAL:HG12 | 2.05 | 0.57 |
| 1:B:503:LEU:CD2 | 1:B:520:PHE:CD1 | 2.88 | 0.57 |
| 1:C:240:MET:HE3 | 1:C:258:TYR:HB2 | 1.85 | 0.57 |
| 1:C:287:ILE:O | 1:C:291:VAL:HG12 | 2.04 | 0.57 |
| 1:C:919:LEU:HG | 1:C:922:ASN:HD22 | 1.69 | 0.57 |
| 1:D:362:LEU:HD12 | 1:D:365:PRO:CG | 2.34 | 0.57 |
| 1:E:168:TYR:CD1 | 3:E:1101:AGS:N6 | 2.73 | 0.57 |
| 1:E:362:LEU:HD12 | 1:E:365:PRO:CG | 2.34 | 0.57 |
| 1:E:637:MET:HG2 | 1:E:642:PHE:HD2 | 1.70 | 0.57 |
| 1:E:919:LEU:HG | 1:E:922:ASN:HD22 | 1.69 | 0.57 |
| 1:F:148:PHE:O | 1:F:241:LEU:HD12 | 2.05 | 0.57 |
| 1:F:168:TYR:CD1 | 3:F:1101:AGS:N6 | 2.73 | 0.57 |
| 1:F:178:ARG:HG3 | 1:F:183:ARG:NH2 | 2.20 | 0.57 |
| 1:F:728:SER:HA | 1:F:731:ARG:HH11 | 1.69 | 0.57 |
| 1:F:789:ASP:HA | 1:F:792:LEU:HG | 1.87 | 0.57 |
| 1:F:1000:LEU:HD21 | 1:F:1002:ASN:O | 2.04 | 0.57 |
| 1:G:217:GLU:HG2 | 1:H:149:GLN:OE1 | 2.05 | 0.57 |
| 1:G:609:LEU:HD13 | 1:G:642:PHE:CE1 | 2.38 | 0.57 |
| 1:H:168:TYR:CD1 | 3:H:1101:AGS:N6 | 2.73 | 0.57 |
| 1:I:448:SER:HA | 1:I:451:LEU:HD23 | 1.86 | 0.57 |
| 1:I:1000:LEU:HD21 | 1:I:1002:ASN:O | 2.04 | 0.57 |
| 1:J:362:LEU:HB3 | 1:J:365:PRO:HG3 | 1.87 | 0.57 |
| 1:J:379:LYS:HG3 | 1:J:396:PHE:CE1 | 2.40 | 0.57 |
| 1:J:965:LEU:HD11 | 1:J:998:CYS:SG | 2.45 | 0.57 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:A:217:GLU:CG | 1:B:149:GLN:OE1 | 2.53 | 0.57 |
| 1:A:965:LEU:HD11 | 1:A:998:CYS:SG | 2.45 | 0.57 |
| 1:B:168:TYR:CD1 | 3:B:1101:AGS:N6 | 2.73 | 0.57 |
| 1:C:789:ASP:HA | 1:C:792:LEU:HG | 1.87 | 0.57 |
| 1:C:905:SER:HA | 1:C:908:LEU:HD12 | 1.87 | 0.57 |
| 1:D:176:GLU:HB3 | 1:D:367:HIS:CE1 | 2.40 | 0.57 |
| 1:D:637:MET:HG2 | 1:D:642:PHE:HD2 | 1.70 | 0.57 |
| 1:E:287:ILE:O | 1:E:291:VAL:HG12 | 2.04 | 0.57 |
| 1:E:983:ASP:O | 1:E:986:VAL:HG12 | 2.05 | 0.57 |
| 1:F:983:ASP:O | 1:F:986:VAL:HG12 | 2.05 | 0.57 |
| 1:G:168:TYR:CD1 | 3:G:1101:AGS:N6 | 2.73 | 0.57 |
| 1:G:446:PHE:CZ | 1:G:450:LEU:HD11 | 2.39 | 0.57 |
| 1:G:965:LEU:HD11 | 1:G:998:CYS:SG | 2.45 | 0.57 |
| 1:G:983:ASP:OD1 | 1:G:1014:THR:HG21 | 2.04 | 0.57 |
| 1:H:622:GLN:NE2 | 1:H:627:GLN:OE1 | 2.38 | 0.57 |
| 1:I:136:TYR:HH | 1:I:285:PRO:HB3 | 1.69 | 0.57 |
| 1:I:971:LEU:HD22 | 1:I:1000:LEU:HD12 | 1.85 | 0.57 |
| 1:J:270:ARG:NH1 | 1:J:275:LEU:HD11 | 2.14 | 0.57 |
| 1:J:291:VAL:HG11 | 1:J:322:TRP:NE1 | 2.20 | 0.57 |
| 1:J:580:LEU:O | 1:J:584:VAL:HG22 | 2.03 | 0.57 |
| 1:J:637:MET:HE3 | 1:J:639:GLU:HB2 | 1.85 | 0.57 |
| 1:A:178:ARG:HD2 | 1:A:182:GLU:HG3 | 1.87 | 0.57 |
| 1:A:266:LEU:HD22 | 1:A:329:ASP:HB2 | 1.87 | 0.57 |
| 1:A:734:PHE:HD1 | 1:A:737:LEU:HD12 | 1.69 | 0.57 |
| 1:B:266:LEU:HD22 | 1:B:329:ASP:HB2 | 1.87 | 0.57 |
| 1:C:291:VAL:HG11 | 1:C:322:TRP:NE1 | 2.20 | 0.57 |
| 1:E:176:GLU:HB3 | 1:E:367:HIS:CE1 | 2.40 | 0.57 |
| 1:F:134:LYS:O | 1:F:136:TYR:N | 2.38 | 0.57 |
| 1:F:580:LEU:O | 1:F:584:VAL:HG22 | 2.03 | 0.57 |
| 1:F:652:LYS:HA | 1:F:678:SER:OG | 2.04 | 0.57 |
| 1:G:379:LYS:HG3 | 1:G:396:PHE:CE1 | 2.40 | 0.57 |
| 1:G:919:LEU:HG | 1:G:922:ASN:HD22 | 1.69 | 0.57 |
| 1:G:972:ARG:HD2 | 1:G:1001:GLN:OE1 | 2.03 | 0.57 |
| 1:H:178:ARG:HD2 | 1:H:182:GLU:HG3 | 1.87 | 0.57 |
| 1:H:315:ILE:HD11 | 1:H:333:SER:CB | 2.34 | 0.57 |
| 1:H:777:LEU:HB2 | 1:H:805:LEU:HD23 | 1.87 | 0.57 |
| 1:H:789:ASP:HA | 1:H:792:LEU:HG | 1.87 | 0.57 |
| 1:I:142:LYS:HG2 | 1:I:145:ARG:NH2 | 2.19 | 0.57 |
| 1:I:176:GLU:HB3 | 1:I:367:HIS:CE1 | 2.40 | 0.57 |
| 1:I:178:ARG:HG3 | 1:I:183:ARG:NH2 | 2.20 | 0.57 |
| 1:I:379:LYS:HG3 | 1:I:396:PHE:CE1 | 2.40 | 0.57 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:I:446:PHE:CZ | 1:I:450:LEU:HD11 | 2.39 | 0.57 |
| 1:I:567:LYS:HD3 | 1:I:624:GLN:HG2 | 1.86 | 0.57 |
| 1:I:734:PHE:HD1 | 1:I:737:LEU:HD12 | 1.69 | 0.57 |
| 1:I:777:LEU:HB2 | 1:I:805:LEU:HD23 | 1.87 | 0.57 |
| 1:I:905:SER:HA | 1:I:908:LEU:HD12 | 1.87 | 0.57 |
| 1:J:176:GLU:HB3 | 1:J:367:HIS:CE1 | 2.40 | 0.57 |
| 1:B:178:ARG:HD2 | 1:B:182:GLU:HG3 | 1.87 | 0.56 |
| 1:B:528:PHE:HA | 1:B:579:PHE:HD2 | 1.69 | 0.56 |
| 1:B:905:SER:HA | 1:B:908:LEU:HD12 | 1.87 | 0.56 |
| 1:C:446:PHE:CZ | 1:C:450:LEU:HD11 | 2.39 | 0.56 |
| 1:D:134:LYS:O | 1:D:136:TYR:N | 2.38 | 0.56 |
| 1:E:134:LYS:O | 1:E:136:TYR:N | 2.38 | 0.56 |
| 1:F:178:ARG:HD2 | 1:F:182:GLU:HG3 | 1.87 | 0.56 |
| 1:F:291:VAL:HG11 | 1:F:322:TRP:NE1 | 2.20 | 0.56 |
| 1:F:379:LYS:HG3 | 1:F:396:PHE:CE1 | 2.40 | 0.56 |
| 1:F:528:PHE:HA | 1:F:579:PHE:HD2 | 1.69 | 0.56 |
| 1:F:1016:SER:O | 1:F:1020:THR:HG23 | 2.04 | 0.56 |
| 1:G:134:LYS:O | 1:G:136:TYR:N | 2.39 | 0.56 |
| 1:G:217:GLU:CG | 1:H:149:GLN:OE1 | 2.53 | 0.56 |
| 1:G:291:VAL:HG11 | 1:G:322:TRP:NE1 | 2.20 | 0.56 |
| 1:G:651:PRO:HD3 | 1:G:675:ARG:HE | 1.70 | 0.56 |
| 1:G:777:LEU:HB2 | 1:G:805:LEU:HD23 | 1.87 | 0.56 |
| 1:G:789:ASP:HA | 1:G:792:LEU:HG | 1.87 | 0.56 |
| 1:H:266:LEU:HD22 | 1:H:329:ASP:HB2 | 1.87 | 0.56 |
| 1:I:178:ARG:HD2 | 1:I:182:GLU:HG3 | 1.87 | 0.56 |
| 1:I:266:LEU:HD22 | 1:I:329:ASP:HB2 | 1.87 | 0.56 |
| 1:I:333:SER:HG | 1:I:337:ARG:HH12 | 1.52 | 0.56 |
| 1:I:505:MET:HB2 | 1:I:518:TYR:HE1 | 1.65 | 0.56 |
| 1:I:528:PHE:HA | 1:I:579:PHE:HD2 | 1.69 | 0.56 |
| 1:I:1016:SER:O | 1:I:1020:THR:HG23 | 2.04 | 0.56 |
| 1:J:148:PHE:O | 1:J:241:LEU:HD12 | 2.05 | 0.56 |
| 1:J:204:LYS:CG | 1:J:205:MET:H | 2.18 | 0.56 |
| 1:J:266:LEU:HD22 | 1:J:329:ASP:HB2 | 1.87 | 0.56 |
| 1:J:381:TYR:CE1 | 3:J:1101:AGS:H2 | 2.39 | 0.56 |
| 1:J:983:ASP:O | 1:J:986:VAL:HG12 | 2.05 | 0.56 |
| 1:A:291:VAL:HG11 | 1:A:322:TRP:CE2 | 2.41 | 0.56 |
| 1:C:651:PRO:HD3 | 1:C:675:ARG:HE | 1.70 | 0.56 |
| 1:C:965:LEU:HD11 | 1:C:998:CYS:SG | 2.45 | 0.56 |
| 1:D:178:ARG:HD2 | 1:D:182:GLU:HG3 | 1.87 | 0.56 |
| 1:D:266:LEU:HD22 | 1:D:329:ASP:HB2 | 1.87 | 0.56 |
| 1:D:362:LEU:HB3 | 1:D:365:PRO:HG3 | 1.87 | 0.56 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:D:586:GLN:O | 1:D:589:THR:CG2 | 2.46 | 0.56 |
| 1:D:1018:LEU:HD22 | 1:D:1030:VAL:HG11 | 1.85 | 0.56 |
| 1:E:178:ARG:HD2 | 1:E:182:GLU:HG3 | 1.87 | 0.56 |
| 1:E:266:LEU:HD22 | 1:E:329:ASP:HB2 | 1.87 | 0.56 |
| 1:E:624:GLN:O | 1:E:626:SER:N | 2.38 | 0.56 |
| 1:F:176:GLU:HB3 | 1:F:367:HIS:CE1 | 2.40 | 0.56 |
| 1:F:266:LEU:HD12 | 1:F:266:LEU:O | 2.05 | 0.56 |
| 1:F:266:LEU:HD22 | 1:F:329:ASP:HB2 | 1.87 | 0.56 |
| 1:F:471:SER:CB | 1:F:553:LEU:HD12 | 2.20 | 0.56 |
| 1:F:591:TYR:HA | 1:F:594:LYS:HG2 | 1.86 | 0.56 |
| 1:F:651:PRO:HD3 | 1:F:675:ARG:HE | 1.70 | 0.56 |
| 1:F:734:PHE:HD1 | 1:F:737:LEU:HD12 | 1.69 | 0.56 |
| 1:G:178:ARG:HG3 | 1:G:183:ARG:NH2 | 2.19 | 0.56 |
| 1:G:230:ILE:HA | 1:G:412:PRO:HD2 | 1.86 | 0.56 |
| 1:G:266:LEU:HD22 | 1:G:329:ASP:HB2 | 1.87 | 0.56 |
| 1:G:734:PHE:O | 1:G:764:THR:HG21 | 2.04 | 0.56 |
| 1:G:864:GLU:N | 1:G:892:VAL:O | 2.36 | 0.56 |
| 1:I:217:GLU:CG | 1:J:149:GLN:OE1 | 2.53 | 0.56 |
| 1:I:291:VAL:HG11 | 1:I:322:TRP:CE2 | 2.41 | 0.56 |
| 1:I:291:VAL:HG11 | 1:I:322:TRP:NE1 | 2.20 | 0.56 |
| 1:I:651:PRO:HD3 | 1:I:675:ARG:HE | 1.70 | 0.56 |
| 1:J:178:ARG:HD2 | 1:J:182:GLU:HG3 | 1.87 | 0.56 |
| 1:J:528:PHE:HA | 1:J:579:PHE:HD2 | 1.69 | 0.56 |
| 1:J:905:SER:HA | 1:J:908:LEU:HD12 | 1.87 | 0.56 |
| 1:A:224:PHE:CD2 | 1:A:347:LEU:HD21 | 2.40 | 0.56 |
| 1:A:291:VAL:HG11 | 1:A:322:TRP:NE1 | 2.20 | 0.56 |
| 1:A:362:LEU:HB3 | 1:A:365:PRO:HG3 | 1.87 | 0.56 |
| 1:A:605:ARG:HA | 1:A:608:LEU:HD12 | 1.86 | 0.56 |
| 1:A:734:PHE:O | 1:A:764:THR:HG21 | 2.04 | 0.56 |
| 1:A:832:LEU:HB3 | 1:A:860:LEU:CD1 | 2.36 | 0.56 |
| 1:A:898:SER:HA | 1:A:901:CYS:SG | 2.46 | 0.56 |
| 1:A:905:SER:HA | 1:A:908:LEU:HD12 | 1.87 | 0.56 |
| 1:B:148:PHE:O | 1:B:241:LEU:HD12 | 2.05 | 0.56 |
| 1:B:217:GLU:CG | 1:C:149:GLN:OE1 | 2.53 | 0.56 |
| 1:B:291:VAL:HG11 | 1:B:322:TRP:NE1 | 2.20 | 0.56 |
| 1:B:296:ARG:HG3 | 1:B:296:ARG:NH1 | 2.21 | 0.56 |
| 1:B:789:ASP:HA | 1:B:792:LEU:HG | 1.87 | 0.56 |
| 1:C:134:LYS:O | 1:C:136:TYR:N | 2.39 | 0.56 |
| 1:C:168:TYR:CD1 | 3:C:1101:AGS:N6 | 2.73 | 0.56 |
| 1:C:178:ARG:HD2 | 1:C:182:GLU:HG3 | 1.87 | 0.56 |
| 1:C:178:ARG:HG3 | 1:C:183:ARG:NH2 | 2.20 | 0.56 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:C:266:LEU:HD22 | 1:C:329:ASP:HB2 | 1.87 | 0.56 |
| 1:C:291:VAL:HG11 | 1:C:322:TRP:CE2 | 2.41 | 0.56 |
| 1:C:296:ARG:HG3 | 1:C:296:ARG:NH1 | 2.21 | 0.56 |
| 1:C:362:LEU:HB3 | 1:C:365:PRO:HG3 | 1.87 | 0.56 |
| 1:D:266:LEU:HD12 | 1:D:266:LEU:O | 2.05 | 0.56 |
| 1:D:291:VAL:HG11 | 1:D:322:TRP:NE1 | 2.20 | 0.56 |
| 1:D:296:ARG:HG3 | 1:D:296:ARG:NH1 | 2.21 | 0.56 |
| 1:D:568:PHE:O | 1:D:570:LYS:CG | 2.51 | 0.56 |
| 1:E:148:PHE:O | 1:E:241:LEU:HD12 | 2.05 | 0.56 |
| 1:E:591:TYR:HA | 1:E:594:LYS:HG2 | 1.86 | 0.56 |
| 1:E:777:LEU:HB2 | 1:E:805:LEU:HD23 | 1.87 | 0.56 |
| 1:E:799:LYS:O | 1:E:799:LYS:HD3 | 2.06 | 0.56 |
| 1:E:971:LEU:HD22 | 1:E:1000:LEU:HD12 | 1.85 | 0.56 |
| 1:F:765:LEU:HD13 | 1:F:770:CYS:SG | 2.46 | 0.56 |
| 1:F:777:LEU:HB2 | 1:F:805:LEU:HD23 | 1.87 | 0.56 |
| 1:G:178:ARG:HD2 | 1:G:182:GLU:HG3 | 1.87 | 0.56 |
| 1:G:315:ILE:HD11 | 1:G:333:SER:CB | 2.34 | 0.56 |
| 1:G:1016:SER:O | 1:G:1020:THR:HG23 | 2.04 | 0.56 |
| 1:H:134:LYS:O | 1:H:136:TYR:N | 2.38 | 0.56 |
| 1:H:176:GLU:HB3 | 1:H:367:HIS:CE1 | 2.40 | 0.56 |
| 1:H:178:ARG:HG3 | 1:H:183:ARG:NH2 | 2.19 | 0.56 |
| 1:H:362:LEU:HD12 | 1:H:365:PRO:CG | 2.34 | 0.56 |
| 1:H:619:LYS:CB | 2:R:261:ASP:CG | 2.73 | 0.56 |
| 1:H:965:LEU:HD11 | 1:H:998:CYS:SG | 2.45 | 0.56 |
| 1:H:972:ARG:HD2 | 1:H:1001:GLN:OE1 | 2.04 | 0.56 |
| 1:H:1016:SER:O | 1:H:1020:THR:HG23 | 2.04 | 0.56 |
| 1:I:168:TYR:CD1 | 3:I:1101:AGS:N6 | 2.73 | 0.56 |
| 1:I:362:LEU:HB3 | 1:I:365:PRO:HG3 | 1.87 | 0.56 |
| 1:J:168:TYR:CD1 | 3:J:1101:AGS:N6 | 2.73 | 0.56 |
| 1:J:224:PHE:CD2 | 1:J:347:LEU:HD21 | 2.40 | 0.56 |
| 1:J:624:GLN:O | 1:J:626:SER:N | 2.38 | 0.56 |
| 1:J:777:LEU:HB2 | 1:J:805:LEU:HD23 | 1.87 | 0.56 |
| 1:J:799:LYS:O | 1:J:799:LYS:HD3 | 2.06 | 0.56 |
| 1:A:168:TYR:CD1 | 3:A:1101:AGS:N6 | 2.73 | 0.56 |
| 1:A:379:LYS:HG3 | 1:A:396:PHE:CE1 | 2.40 | 0.56 |
| 1:A:930:LYS:HG3 | 1:A:931:LEU:N | 2.21 | 0.56 |
| 1:B:637:MET:HG2 | 1:B:642:PHE:HD2 | 1.70 | 0.56 |
| 1:B:876:CYS:HA | 1:B:907:VAL:HG21 | 1.88 | 0.56 |
| 1:C:362:LEU:HD12 | 1:C:365:PRO:CG | 2.34 | 0.56 |
| 1:C:777:LEU:HB2 | 1:C:805:LEU:HD23 | 1.87 | 0.56 |
| 1:C:816:ARG:O | 1:C:820:VAL:HG23 | 2.06 | 0.56 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:D:565:TYR:HE1 | 1:D:574:ILE:HG12 | 1.71 | 0.56 |
| 1:D:765:LEU:HD13 | 1:D:770:CYS:SG | 2.46 | 0.56 |
| 1:D:777:LEU:HB2 | 1:D:805:LEU:HD23 | 1.87 | 0.56 |
| 1:E:816:ARG:O | 1:E:820:VAL:HG23 | 2.06 | 0.56 |
| 1:F:230:ILE:HA | 1:F:412:PRO:HD2 | 1.86 | 0.56 |
| 1:F:799:LYS:O | 1:F:799:LYS:HD3 | 2.06 | 0.56 |
| 1:G:291:VAL:HG11 | 1:G:322:TRP:CE2 | 2.41 | 0.56 |
| 1:G:448:SER:HA | 1:G:451:LEU:HD23 | 1.86 | 0.56 |
| 1:H:204:LYS:CG | 1:H:205:MET:H | 2.18 | 0.56 |
| 1:H:591:TYR:HA | 1:H:594:LYS:HG2 | 1.86 | 0.56 |
| 1:I:220:HIS:O | 1:I:221:THR:OG1 | 2.21 | 0.56 |
| 1:I:224:PHE:CD2 | 1:I:347:LEU:HD21 | 2.40 | 0.56 |
| 1:I:876:CYS:HA | 1:I:907:VAL:HG21 | 1.88 | 0.56 |
| 1:J:832:LEU:HB3 | 1:J:860:LEU:CD1 | 2.36 | 0.56 |
| 1:A:149:GLN:OE1 | 1:J:217:GLU:HG2 | 2.06 | 0.56 |
| 1:A:777:LEU:HB2 | 1:A:805:LEU:HD23 | 1.87 | 0.56 |
| 1:B:217:GLU:HG2 | 1:C:149:GLN:OE1 | 2.05 | 0.56 |
| 1:B:799:LYS:O | 1:B:799:LYS:HD3 | 2.06 | 0.56 |
| 1:C:148:PHE:O | 1:C:241:LEU:HD12 | 2.05 | 0.56 |
| 1:C:266:LEU:HD12 | 1:C:266:LEU:O | 2.05 | 0.56 |
| 1:C:898:SER:HA | 1:C:901:CYS:SG | 2.46 | 0.56 |
| 1:D:217:GLU:HG2 | 1:E:149:GLN:OE1 | 2.06 | 0.56 |
| 1:D:224:PHE:CD2 | 1:D:347:LEU:HD21 | 2.40 | 0.56 |
| 1:E:224:PHE:CD2 | 1:E:347:LEU:HD21 | 2.40 | 0.56 |
| 1:F:362:LEU:HD12 | 1:F:365:PRO:CG | 2.34 | 0.56 |
| 1:G:148:PHE:O | 1:G:241:LEU:HD12 | 2.05 | 0.56 |
| 1:G:591:TYR:HA | 1:G:594:LYS:HG2 | 1.86 | 0.56 |
| 1:G:919:LEU:CD2 | 1:G:922:ASN:HB2 | 2.35 | 0.56 |
| 1:H:379:LYS:HG3 | 1:H:396:PHE:CE1 | 2.40 | 0.56 |
| 1:H:500:SER:HB2 | 1:H:503:LEU:O | 2.05 | 0.56 |
| 1:H:930:LYS:HG3 | 1:H:931:LEU:N | 2.21 | 0.56 |
| 1:H:983:ASP:O | 1:H:986:VAL:HG12 | 2.05 | 0.56 |
| 1:I:217:GLU:HG2 | 1:J:149:GLN:OE1 | 2.05 | 0.56 |
| 1:I:765:LEU:HD13 | 1:I:770:CYS:SG | 2.46 | 0.56 |
| 1:I:844:CYS:HA | 1:I:847:LEU:CD1 | 2.32 | 0.56 |
| 1:A:765:LEU:HD13 | 1:A:770:CYS:SG | 2.46 | 0.56 |
| 1:B:224:PHE:CD2 | 1:B:347:LEU:HD21 | 2.40 | 0.56 |
| 1:B:291:VAL:HG11 | 1:B:322:TRP:CE2 | 2.41 | 0.56 |
| 1:B:832:LEU:HB3 | 1:B:860:LEU:CD1 | 2.36 | 0.56 |
| 1:B:898:SER:HA | 1:B:901:CYS:SG | 2.46 | 0.56 |
| 1:C:217:GLU:HG2 | 1:D:149:GLN:OE1 | 2.05 | 0.56 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|-------------------|--------------------------|-------------------|
| 1:C:315:ILE:HD11 | 1:C:333:SER:CB | 2.34 | 0.56 |
| 1:C:567:LYS:HZ3 | 1:C:623:ILE:CG1 | 2.19 | 0.56 |
| 1:C:765:LEU:HD13 | 1:C:770:CYS:SG | 2.46 | 0.56 |
| 1:D:210:ASP:OD1 | 1:D:252:ARG:NH2 | 2.35 | 0.56 |
| 1:D:315:ILE:HD11 | 1:D:333:SER:CB | 2.34 | 0.56 |
| 1:D:338:LYS:HE3 | 1:D:344:ALA:O | 2.06 | 0.56 |
| 1:D:591:TYR:HA | 1:D:594:LYS:HG2 | 1.86 | 0.56 |
| 1:D:1016:SER:O | 1:D:1020:THR:HG23 | 2.04 | 0.56 |
| 1:E:266:LEU:HD12 | 1:E:266:LEU:O | 2.05 | 0.56 |
| 1:E:270:ARG:NH1 | 1:E:275:LEU:HD11 | 2.14 | 0.56 |
| 1:E:315:ILE:HD11 | 1:E:333:SER:CB | 2.34 | 0.56 |
| 1:E:1018:LEU:HD22 | 1:E:1030:VAL:HG11 | 1.85 | 0.56 |
| 1:F:210:ASP:OD1 | 1:F:252:ARG:NH2 | 2.35 | 0.56 |
| 1:F:252:ARG:HD3 | 1:F:253:PHE:CE2 | 2.41 | 0.56 |
| 1:F:609:LEU:HD13 | 1:F:642:PHE:CE1 | 2.38 | 0.56 |
| 1:F:944:GLN:HA | 1:F:971:LEU:HA | 1.88 | 0.56 |
| 1:G:176:GLU:HB3 | 1:G:367:HIS:CE1 | 2.40 | 0.56 |
| 1:G:204:LYS:CG | 1:G:205:MET:H | 2.18 | 0.56 |
| 1:G:799:LYS:O | 1:G:799:LYS:HD3 | 2.06 | 0.56 |
| 1:G:898:SER:HA | 1:G:901:CYS:SG | 2.46 | 0.56 |
| 1:H:291:VAL:HG11 | 1:H:322:TRP:CE2 | 2.41 | 0.56 |
| 1:I:148:PHE:O | 1:I:241:LEU:HD12 | 2.05 | 0.56 |
| 1:I:338:LYS:HE3 | 1:I:344:ALA:O | 2.06 | 0.56 |
| 1:I:930:LYS:HG3 | 1:I:931:LEU:N | 2.21 | 0.56 |
| 1:J:609:LEU:HD13 | 1:J:642:PHE:CE1 | 2.38 | 0.56 |
| 2:O:208:ILE:HD12 | 2:O:247:CYS:SG | 2.46 | 0.56 |
| 1:A:204:LYS:CG | 1:A:205:MET:H | 2.18 | 0.56 |
| 1:A:799:LYS:O | 1:A:799:LYS:HD3 | 2.06 | 0.56 |
| 1:A:816:ARG:O | 1:A:820:VAL:HG23 | 2.06 | 0.56 |
| 1:A:1016:SER:O | 1:A:1020:THR:HG23 | 2.04 | 0.56 |
| 1:B:379:LYS:HG3 | 1:B:396:PHE:CE1 | 2.40 | 0.56 |
| 1:B:765:LEU:HD13 | 1:B:770:CYS:SG | 2.46 | 0.56 |
| 1:C:224:PHE:CD2 | 1:C:347:LEU:HD21 | 2.40 | 0.56 |
| 1:C:734:PHE:HD1 | 1:C:737:LEU:HD12 | 1.69 | 0.56 |
| 1:C:864:GLU:N | 1:C:892:VAL:O | 2.35 | 0.56 |
| 1:D:471:SER:CB | 1:D:553:LEU:HD12 | 2.20 | 0.56 |
| 1:D:609:LEU:HD13 | 1:D:642:PHE:CE1 | 2.38 | 0.56 |
| 1:E:291:VAL:HG11 | 1:E:322:TRP:CE2 | 2.41 | 0.56 |
| 1:E:362:LEU:HB3 | 1:E:365:PRO:HG3 | 1.87 | 0.56 |
| 1:E:832:LEU:HB3 | 1:E:860:LEU:CD1 | 2.36 | 0.56 |
| 1:F:308:GLN:HE21 | 1:F:499:VAL:CG2 | 2.18 | 0.56 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:H:448:SER:HA | 1:H:451:LEU:HD23 | 1.86 | 0.56 |
| 1:H:655:ILE:HD12 | 1:H:656:ASN:N | 2.21 | 0.56 |
| 1:I:591:TYR:HA | 1:I:594:LYS:HG2 | 1.86 | 0.56 |
| 1:I:799:LYS:O | 1:I:799:LYS:HD3 | 2.06 | 0.56 |
| 1:J:637:MET:HG2 | 1:J:642:PHE:HD2 | 1.70 | 0.56 |
| 2:K:208:ILE:HD12 | 2:K:247:CYS:SG | 2.46 | 0.56 |
| 2:N:53:CYS:O | 2:N:57:GLY:N | 2.39 | 0.56 |
| 1:A:210:ASP:OD1 | 1:A:252:ARG:NH2 | 2.35 | 0.56 |
| 1:A:626:SER:HB2 | 1:A:629:GLU:OE1 | 2.06 | 0.56 |
| 1:B:266:LEU:HD12 | 1:B:266:LEU:O | 2.05 | 0.56 |
| 1:B:777:LEU:HB2 | 1:B:805:LEU:HD23 | 1.87 | 0.56 |
| 1:B:816:ARG:O | 1:B:820:VAL:HG23 | 2.06 | 0.56 |
| 1:B:930:LYS:HG3 | 1:B:931:LEU:N | 2.21 | 0.56 |
| 1:C:379:LYS:HG3 | 1:C:396:PHE:CE1 | 2.40 | 0.56 |
| 1:C:559:THR:HG22 | 1:C:607:GLU:OE2 | 2.06 | 0.56 |
| 1:D:898:SER:HA | 1:D:901:CYS:SG | 2.46 | 0.56 |
| 1:E:296:ARG:HG3 | 1:E:296:ARG:NH1 | 2.21 | 0.56 |
| 1:E:338:LYS:HE3 | 1:E:344:ALA:O | 2.06 | 0.56 |
| 1:E:500:SER:HB2 | 1:E:503:LEU:O | 2.05 | 0.56 |
| 1:E:507:LEU:HD12 | 1:E:507:LEU:O | 2.06 | 0.56 |
| 1:F:315:ILE:HD11 | 1:F:333:SER:CB | 2.34 | 0.56 |
| 1:G:270:ARG:NH1 | 1:G:275:LEU:HD11 | 2.14 | 0.56 |
| 1:H:224:PHE:CD2 | 1:H:347:LEU:HD21 | 2.40 | 0.56 |
| 1:H:338:LYS:HE3 | 1:H:344:ALA:O | 2.06 | 0.56 |
| 1:H:765:LEU:HD13 | 1:H:770:CYS:SG | 2.46 | 0.56 |
| 1:I:134:LYS:O | 1:I:136:TYR:N | 2.38 | 0.56 |
| 1:J:655:ILE:HD12 | 1:J:656:ASN:N | 2.21 | 0.56 |
| 1:A:149:GLN:OE1 | 1:J:217:GLU:CG | 2.54 | 0.56 |
| 1:A:651:PRO:HD3 | 1:A:675:ARG:HE | 1.70 | 0.56 |
| 1:A:852:SER:CB | 1:A:878:LYS:HD2 | 2.35 | 0.56 |
| 1:B:224:PHE:HD2 | 1:B:347:LEU:HD21 | 1.71 | 0.56 |
| 1:B:338:LYS:HE3 | 1:B:344:ALA:O | 2.06 | 0.56 |
| 1:C:204:LYS:CG | 1:C:205:MET:H | 2.18 | 0.56 |
| 1:C:252:ARG:HD3 | 1:C:253:PHE:CE2 | 2.41 | 0.56 |
| 1:C:649:TYR:O | 1:C:651:PRO:HD2 | 2.06 | 0.56 |
| 1:D:651:PRO:HD3 | 1:D:675:ARG:HE | 1.70 | 0.56 |
| 1:F:816:ARG:O | 1:F:820:VAL:HG23 | 2.06 | 0.56 |
| 1:F:898:SER:HA | 1:F:901:CYS:SG | 2.46 | 0.56 |
| 1:H:507:LEU:O | 1:H:507:LEU:HD12 | 2.06 | 0.56 |
| 1:I:605:ARG:NH1 | 1:I:639:GLU:OE2 | 2.39 | 0.56 |
| 1:I:965:LEU:HD11 | 1:I:998:CYS:SG | 2.45 | 0.56 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:J:626:SER:HB2 | 1:J:629:GLU:OE1 | 2.06 | 0.56 |
| 1:J:651:PRO:HD3 | 1:J:675:ARG:HE | 1.70 | 0.56 |
| 1:J:765:LEU:HD13 | 1:J:770:CYS:SG | 2.46 | 0.56 |
| 1:J:898:SER:HA | 1:J:901:CYS:SG | 2.46 | 0.56 |
| 2:M:53:CYS:O | 2:M:57:GLY:N | 2.39 | 0.56 |
| 1:A:944:GLN:HA | 1:A:971:LEU:HA | 1.88 | 0.56 |
| 1:B:651:PRO:HD3 | 1:B:675:ARG:HE | 1.70 | 0.56 |
| 1:B:944:GLN:HA | 1:B:971:LEU:HA | 1.88 | 0.56 |
| 1:B:983:ASP:HA | 1:B:986:VAL:HG12 | 1.88 | 0.56 |
| 1:C:217:GLU:CG | 1:D:149:GLN:OE1 | 2.53 | 0.56 |
| 1:C:507:LEU:HD12 | 1:C:507:LEU:O | 2.06 | 0.56 |
| 1:C:605:ARG:NH1 | 1:C:639:GLU:OE2 | 2.39 | 0.56 |
| 1:C:876:CYS:HA | 1:C:907:VAL:HG21 | 1.88 | 0.56 |
| 1:D:217:GLU:CG | 1:E:149:GLN:OE1 | 2.54 | 0.56 |
| 1:D:291:VAL:HG11 | 1:D:322:TRP:CE2 | 2.41 | 0.56 |
| 1:D:507:LEU:HD12 | 1:D:507:LEU:O | 2.06 | 0.56 |
| 1:D:553:LEU:HB3 | 1:D:554:PRO:HD2 | 1.88 | 0.56 |
| 1:D:558:VAL:CG2 | 1:D:607:GLU:HG2 | 2.37 | 0.56 |
| 1:E:944:GLN:HA | 1:E:971:LEU:HA | 1.88 | 0.56 |
| 1:F:217:GLU:HG2 | 1:G:149:GLN:OE1 | 2.06 | 0.56 |
| 1:F:224:PHE:CD2 | 1:F:347:LEU:HD21 | 2.40 | 0.56 |
| 1:F:251:ASP:O | 1:F:252:ARG:HB3 | 2.06 | 0.56 |
| 1:F:624:GLN:O | 1:F:626:SER:N | 2.38 | 0.56 |
| 1:F:637:MET:HE3 | 1:F:639:GLU:HB2 | 1.88 | 0.56 |
| 1:H:558:VAL:CG2 | 1:H:607:GLU:HG2 | 2.36 | 0.56 |
| 1:H:876:CYS:HA | 1:H:907:VAL:HG21 | 1.88 | 0.56 |
| 1:J:649:TYR:O | 1:J:651:PRO:HD2 | 2.06 | 0.56 |
| 1:J:816:ARG:O | 1:J:820:VAL:HG23 | 2.06 | 0.56 |
| 2:L:53:CYS:O | 2:L:57:GLY:N | 2.39 | 0.56 |
| 2:N:208:ILE:HD12 | 2:N:247:CYS:SG | 2.46 | 0.56 |
| 2:P:208:ILE:HD12 | 2:P:247:CYS:SG | 2.46 | 0.56 |
| 1:A:136:TYR:HH | 1:A:285:PRO:HB3 | 1.71 | 0.55 |
| 1:A:844:CYS:HA | 1:A:847:LEU:CD1 | 2.32 | 0.55 |
| 1:A:983:ASP:HA | 1:A:986:VAL:HG12 | 1.88 | 0.55 |
| 1:B:626:SER:HB2 | 1:B:629:GLU:OE1 | 2.06 | 0.55 |
| 1:C:591:TYR:HA | 1:C:594:LYS:HG2 | 1.86 | 0.55 |
| 1:C:655:ILE:HD12 | 1:C:656:ASN:N | 2.21 | 0.55 |
| 1:C:799:LYS:O | 1:C:799:LYS:HD3 | 2.06 | 0.55 |
| 1:D:649:TYR:O | 1:D:651:PRO:HD2 | 2.07 | 0.55 |
| 1:D:799:LYS:O | 1:D:799:LYS:HD3 | 2.06 | 0.55 |
| 1:D:908:LEU:HD23 | 1:D:914:LEU:CD1 | 2.37 | 0.55 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:E:605:ARG:NH1 | 1:E:639:GLU:OE2 | 2.39 | 0.55 |
| 1:E:649:TYR:O | 1:E:651:PRO:HD2 | 2.06 | 0.55 |
| 1:E:765:LEU:HD13 | 1:E:770:CYS:SG | 2.46 | 0.55 |
| 1:E:983:ASP:HA | 1:E:986:VAL:HG12 | 1.88 | 0.55 |
| 1:F:448:SER:HA | 1:F:451:LEU:HD23 | 1.86 | 0.55 |
| 1:F:655:ILE:HD12 | 1:F:656:ASN:N | 2.21 | 0.55 |
| 1:G:224:PHE:CD2 | 1:G:347:LEU:HD21 | 2.40 | 0.55 |
| 1:G:832:LEU:HB3 | 1:G:860:LEU:CD1 | 2.36 | 0.55 |
| 1:H:266:LEU:HD12 | 1:H:266:LEU:O | 2.05 | 0.55 |
| 1:H:799:LYS:O | 1:H:799:LYS:HD3 | 2.06 | 0.55 |
| 1:H:898:SER:HA | 1:H:901:CYS:SG | 2.46 | 0.55 |
| 1:I:224:PHE:HD2 | 1:I:347:LEU:HD21 | 1.71 | 0.55 |
| 1:I:626:SER:HB2 | 1:I:629:GLU:OE1 | 2.06 | 0.55 |
| 1:I:832:LEU:HB3 | 1:I:860:LEU:CD1 | 2.36 | 0.55 |
| 1:J:647:MET:CE | 1:J:669:CYS:HB3 | 2.36 | 0.55 |
| 1:J:876:CYS:HA | 1:J:907:VAL:HG21 | 1.88 | 0.55 |
| 1:J:944:GLN:HA | 1:J:971:LEU:HA | 1.88 | 0.55 |
| 2:L:208:ILE:HD12 | 2:L:247:CYS:SG | 2.46 | 0.55 |
| 2:O:53:CYS:O | 2:O:57:GLY:N | 2.39 | 0.55 |
| 1:A:224:PHE:HD2 | 1:A:347:LEU:HD21 | 1.71 | 0.55 |
| 1:A:251:ASP:O | 1:A:252:ARG:HB3 | 2.07 | 0.55 |
| 1:A:647:MET:CE | 1:A:669:CYS:HB3 | 2.36 | 0.55 |
| 1:A:876:CYS:HA | 1:A:907:VAL:HG21 | 1.88 | 0.55 |
| 1:B:204:LYS:CG | 1:B:205:MET:H | 2.18 | 0.55 |
| 1:B:475:ASP:CB | 1:B:553:LEU:CD2 | 2.72 | 0.55 |
| 1:B:965:LEU:HD11 | 1:B:998:CYS:SG | 2.45 | 0.55 |
| 1:C:210:ASP:OD1 | 1:C:252:ARG:NH2 | 2.35 | 0.55 |
| 1:C:485:GLU:OE1 | 1:C:485:GLU:N | 2.40 | 0.55 |
| 1:C:983:ASP:HA | 1:C:986:VAL:HG12 | 1.89 | 0.55 |
| 1:D:252:ARG:HD3 | 1:D:253:PHE:CE2 | 2.41 | 0.55 |
| 1:E:379:LYS:HG3 | 1:E:396:PHE:CE1 | 2.40 | 0.55 |
| 1:E:381:TYR:HD2 | 1:E:415:CYS:HG | 1.54 | 0.55 |
| 1:E:558:VAL:CG2 | 1:E:607:GLU:HG2 | 2.37 | 0.55 |
| 1:F:338:LYS:HE3 | 1:F:344:ALA:O | 2.06 | 0.55 |
| 1:F:647:MET:CE | 1:F:669:CYS:HB3 | 2.36 | 0.55 |
| 1:G:224:PHE:HD2 | 1:G:347:LEU:HD21 | 1.71 | 0.55 |
| 1:G:251:ASP:O | 1:G:252:ARG:HB3 | 2.06 | 0.55 |
| 1:G:558:VAL:CG2 | 1:G:607:GLU:HG2 | 2.36 | 0.55 |
| 1:G:765:LEU:HD13 | 1:G:770:CYS:SG | 2.46 | 0.55 |
| 1:H:605:ARG:NH1 | 1:H:639:GLU:OE2 | 2.39 | 0.55 |
| 1:H:637:MET:HG2 | 1:H:642:PHE:HD2 | 1.70 | 0.55 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:H:884:CYS:HB3 | 1:H:911:ASN:HD22 | 1.72 | 0.55 |
| 1:I:204:LYS:CG | 1:I:205:MET:H | 2.18 | 0.55 |
| 1:I:502:PHE:HA | 1:I:521:ILE:CD1 | 2.36 | 0.55 |
| 1:J:605:ARG:NH1 | 1:J:639:GLU:OE2 | 2.39 | 0.55 |
| 2:K:53:CYS:O | 2:K:57:GLY:N | 2.39 | 0.55 |
| 2:Q:53:CYS:O | 2:Q:57:GLY:N | 2.39 | 0.55 |
| 2:T:53:CYS:O | 2:T:57:GLY:N | 2.39 | 0.55 |
| 1:A:148:PHE:O | 1:A:241:LEU:HD12 | 2.05 | 0.55 |
| 1:A:528:PHE:CA | 1:A:579:PHE:HD2 | 2.20 | 0.55 |
| 1:A:605:ARG:NH1 | 1:A:639:GLU:OE2 | 2.39 | 0.55 |
| 1:A:624:GLN:CG | 1:A:625:PRO:CD | 2.84 | 0.55 |
| 1:A:649:TYR:O | 1:A:651:PRO:HD2 | 2.06 | 0.55 |
| 1:B:362:LEU:HB3 | 1:B:365:PRO:HG3 | 1.87 | 0.55 |
| 1:B:485:GLU:OE1 | 1:B:485:GLU:N | 2.40 | 0.55 |
| 1:B:507:LEU:HD12 | 1:B:507:LEU:O | 2.06 | 0.55 |
| 1:B:528:PHE:CA | 1:B:579:PHE:HD2 | 2.20 | 0.55 |
| 1:C:142:LYS:CA | 1:C:145:ARG:HH21 | 2.19 | 0.55 |
| 1:C:338:LYS:HE3 | 1:C:344:ALA:O | 2.06 | 0.55 |
| 1:C:553:LEU:HB3 | 1:C:554:PRO:HD2 | 1.89 | 0.55 |
| 1:D:379:LYS:HG3 | 1:D:396:PHE:CE1 | 2.40 | 0.55 |
| 1:D:647:MET:CE | 1:D:669:CYS:HB3 | 2.37 | 0.55 |
| 1:D:983:ASP:HA | 1:D:986:VAL:HG12 | 1.89 | 0.55 |
| 1:E:485:GLU:OE1 | 1:E:485:GLU:N | 2.40 | 0.55 |
| 1:E:553:LEU:HB3 | 1:E:554:PRO:HD2 | 1.88 | 0.55 |
| 1:E:609:LEU:HD13 | 1:E:642:PHE:CE1 | 2.38 | 0.55 |
| 1:E:647:MET:CE | 1:E:669:CYS:HB3 | 2.36 | 0.55 |
| 1:F:224:PHE:HD2 | 1:F:347:LEU:HD21 | 1.71 | 0.55 |
| 1:F:983:ASP:HA | 1:F:986:VAL:HG12 | 1.88 | 0.55 |
| 1:G:507:LEU:HD12 | 1:G:507:LEU:O | 2.06 | 0.55 |
| 1:H:148:PHE:O | 1:H:241:LEU:HD12 | 2.05 | 0.55 |
| 1:H:296:ARG:HG3 | 1:H:296:ARG:NH1 | 2.21 | 0.55 |
| 1:H:816:ARG:O | 1:H:820:VAL:HG23 | 2.06 | 0.55 |
| 1:I:266:LEU:O | 1:I:266:LEU:HD12 | 2.05 | 0.55 |
| 1:I:586:GLN:O | 1:I:589:THR:CG2 | 2.47 | 0.55 |
| 1:I:647:MET:CE | 1:I:669:CYS:HB3 | 2.37 | 0.55 |
| 1:J:251:ASP:O | 1:J:252:ARG:HB3 | 2.07 | 0.55 |
| 1:J:558:VAL:CG2 | 1:J:607:GLU:HG2 | 2.37 | 0.55 |
| 2:P:53:CYS:O | 2:P:57:GLY:N | 2.39 | 0.55 |
| 2:R:53:CYS:O | 2:R:57:GLY:N | 2.39 | 0.55 |
| 2:R:208:ILE:HD12 | 2:R:247:CYS:SG | 2.46 | 0.55 |
| 2:T:208:ILE:HD12 | 2:T:247:CYS:SG | 2.46 | 0.55 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:A:266:LEU:O | 1:A:266:LEU:HD12 | 2.05 | 0.55 |
| 1:A:558:VAL:CG2 | 1:A:607:GLU:HG2 | 2.36 | 0.55 |
| 1:C:353:VAL:HG21 | 1:C:499:VAL:HA | 1.88 | 0.55 |
| 1:C:832:LEU:HB3 | 1:C:860:LEU:CD1 | 2.36 | 0.55 |
| 1:D:204:LYS:CG | 1:D:205:MET:H | 2.18 | 0.55 |
| 1:D:485:GLU:N | 1:D:485:GLU:OE1 | 2.40 | 0.55 |
| 1:D:605:ARG:NH1 | 1:D:639:GLU:OE2 | 2.39 | 0.55 |
| 1:E:651:PRO:HD3 | 1:E:675:ARG:HE | 1.70 | 0.55 |
| 1:F:485:GLU:OE1 | 1:F:485:GLU:N | 2.40 | 0.55 |
| 1:F:884:CYS:HB3 | 1:F:911:ASN:HD22 | 1.72 | 0.55 |
| 1:G:266:LEU:HD12 | 1:G:266:LEU:O | 2.05 | 0.55 |
| 1:G:647:MET:CE | 1:G:669:CYS:HB3 | 2.36 | 0.55 |
| 1:G:816:ARG:O | 1:G:820:VAL:HG23 | 2.06 | 0.55 |
| 1:G:944:GLN:HA | 1:G:971:LEU:HA | 1.88 | 0.55 |
| 1:H:217:GLU:CG | 1:I:149:GLN:OE1 | 2.55 | 0.55 |
| 1:H:500:SER:HA | 1:H:503:LEU:O | 2.06 | 0.55 |
| 1:H:651:PRO:HD3 | 1:H:675:ARG:HE | 1.70 | 0.55 |
| 1:I:649:TYR:O | 1:I:651:PRO:HD2 | 2.06 | 0.55 |
| 1:I:816:ARG:O | 1:I:820:VAL:HG23 | 2.06 | 0.55 |
| 1:J:262:ARG:HB2 | 1:J:306:GLU:CD | 2.27 | 0.55 |
| 1:J:266:LEU:HD12 | 1:J:266:LEU:O | 2.05 | 0.55 |
| 1:J:291:VAL:HG11 | 1:J:322:TRP:CE2 | 2.41 | 0.55 |
| 1:J:338:LYS:HE3 | 1:J:344:ALA:O | 2.06 | 0.55 |
| 2:Q:208:ILE:HD12 | 2:Q:247:CYS:SG | 2.46 | 0.55 |
| 1:A:262:ARG:HB2 | 1:A:306:GLU:CD | 2.27 | 0.55 |
| 1:A:338:LYS:HE3 | 1:A:344:ALA:O | 2.06 | 0.55 |
| 1:A:485:GLU:OE1 | 1:A:485:GLU:N | 2.40 | 0.55 |
| 1:B:649:TYR:O | 1:B:651:PRO:HD2 | 2.06 | 0.55 |
| 1:C:224:PHE:HD2 | 1:C:347:LEU:HD21 | 1.71 | 0.55 |
| 1:C:534:TYR:HE2 | 1:C:561:LEU:HB2 | 1.72 | 0.55 |
| 1:C:637:MET:HG2 | 1:C:642:PHE:HD2 | 1.70 | 0.55 |
| 1:C:908:LEU:HD23 | 1:C:914:LEU:CD1 | 2.37 | 0.55 |
| 1:E:448:SER:HA | 1:E:451:LEU:HD23 | 1.86 | 0.55 |
| 1:E:898:SER:HA | 1:E:901:CYS:SG | 2.46 | 0.55 |
| 1:E:930:LYS:HG3 | 1:E:931:LEU:N | 2.21 | 0.55 |
| 1:F:217:GLU:CG | 1:G:149:GLN:OE1 | 2.54 | 0.55 |
| 1:F:647:MET:HE2 | 1:F:669:CYS:HB3 | 1.88 | 0.55 |
| 1:G:805:LEU:HB3 | 1:G:808:ASN:OD1 | 2.07 | 0.55 |
| 1:H:217:GLU:HG2 | 1:I:149:GLN:OE1 | 2.06 | 0.55 |
| 1:H:362:LEU:HB3 | 1:H:365:PRO:HG3 | 1.87 | 0.55 |
| 1:I:251:ASP:O | 1:I:252:ARG:HB3 | 2.07 | 0.55 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:I:507:LEU:HD12 | 1:I:507:LEU:O | 2.06 | 0.55 |
| 1:I:558:VAL:CG2 | 1:I:607:GLU:HG2 | 2.36 | 0.55 |
| 1:I:898:SER:HA | 1:I:901:CYS:SG | 2.46 | 0.55 |
| 1:I:944:GLN:HA | 1:I:971:LEU:HA | 1.88 | 0.55 |
| 1:J:224:PHE:HD2 | 1:J:347:LEU:HD21 | 1.71 | 0.55 |
| 1:J:226:GLY:O | 1:J:352:PRO:HD3 | 2.07 | 0.55 |
| 1:J:507:LEU:HD12 | 1:J:507:LEU:O | 2.06 | 0.55 |
| 1:J:884:CYS:HB3 | 1:J:911:ASN:HD22 | 1.72 | 0.55 |
| 1:J:983:ASP:HA | 1:J:986:VAL:HG12 | 1.89 | 0.55 |
| 1:A:252:ARG:HD3 | 1:A:253:PHE:CE2 | 2.41 | 0.55 |
| 1:A:507:LEU:HD12 | 1:A:507:LEU:O | 2.06 | 0.55 |
| 1:A:655:ILE:HD12 | 1:A:656:ASN:N | 2.21 | 0.55 |
| 1:B:558:VAL:CG2 | 1:B:607:GLU:HG2 | 2.37 | 0.55 |
| 1:B:605:ARG:NH1 | 1:B:639:GLU:OE2 | 2.39 | 0.55 |
| 1:C:251:ASP:O | 1:C:252:ARG:HB3 | 2.07 | 0.55 |
| 1:C:565:TYR:HB2 | 1:C:573:LEU:HB2 | 1.87 | 0.55 |
| 1:D:362:LEU:CD1 | 1:D:365:PRO:HG3 | 2.36 | 0.55 |
| 1:D:944:GLN:HA | 1:D:971:LEU:HA | 1.88 | 0.55 |
| 1:E:252:ARG:HD3 | 1:E:253:PHE:CE2 | 2.41 | 0.55 |
| 1:E:637:MET:HE3 | 1:E:639:GLU:HB2 | 1.88 | 0.55 |
| 1:F:507:LEU:HD12 | 1:F:507:LEU:O | 2.06 | 0.55 |
| 1:F:832:LEU:HB3 | 1:F:860:LEU:CD1 | 2.36 | 0.55 |
| 1:G:142:LYS:CA | 1:G:145:ARG:HH21 | 2.19 | 0.55 |
| 1:G:485:GLU:N | 1:G:485:GLU:OE1 | 2.40 | 0.55 |
| 1:H:626:SER:HB2 | 1:H:629:GLU:OE1 | 2.06 | 0.55 |
| 1:H:805:LEU:HB3 | 1:H:808:ASN:OD1 | 2.07 | 0.55 |
| 1:I:528:PHE:CA | 1:I:579:PHE:HD2 | 2.20 | 0.55 |
| 1:I:647:MET:HE2 | 1:I:669:CYS:HB3 | 1.87 | 0.55 |
| 1:J:528:PHE:CA | 1:J:579:PHE:HD2 | 2.20 | 0.55 |
| 1:A:362:LEU:CD1 | 1:A:365:PRO:HG3 | 2.36 | 0.55 |
| 1:B:251:ASP:O | 1:B:252:ARG:HB3 | 2.07 | 0.55 |
| 1:B:619:LYS:CB | 2:L:261:ASP:CG | 2.75 | 0.55 |
| 1:B:884:CYS:HB3 | 1:B:911:ASN:HD22 | 1.72 | 0.55 |
| 1:C:647:MET:CE | 1:C:669:CYS:HB3 | 2.36 | 0.55 |
| 1:C:805:LEU:HB3 | 1:C:808:ASN:OD1 | 2.07 | 0.55 |
| 1:D:148:PHE:O | 1:D:241:LEU:HD12 | 2.05 | 0.55 |
| 1:D:816:ARG:O | 1:D:820:VAL:HG23 | 2.06 | 0.55 |
| 1:D:852:SER:CB | 1:D:878:LYS:HD2 | 2.35 | 0.55 |
| 1:E:226:GLY:O | 1:E:352:PRO:HD3 | 2.07 | 0.55 |
| 1:E:251:ASP:O | 1:E:252:ARG:HB3 | 2.06 | 0.55 |
| 1:E:383:PHE:CD1 | 1:E:392:ALA:HB1 | 2.42 | 0.55 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:E:626:SER:HB2 | 1:E:629:GLU:OE1 | 2.06 | 0.55 |
| 1:E:655:ILE:HD12 | 1:E:656:ASN:N | 2.21 | 0.55 |
| 1:F:217:GLU:HG3 | 1:G:146:SER:CA | 2.36 | 0.55 |
| 1:G:852:SER:CB | 1:G:878:LYS:HD2 | 2.35 | 0.55 |
| 1:H:490:ARG:O | 1:H:490:ARG:HD3 | 2.07 | 0.55 |
| 1:I:262:ARG:HB2 | 1:I:306:GLU:CD | 2.27 | 0.55 |
| 1:I:296:ARG:HG3 | 1:I:296:ARG:NH1 | 2.21 | 0.55 |
| 1:I:490:ARG:O | 1:I:490:ARG:HD3 | 2.07 | 0.55 |
| 1:J:134:LYS:O | 1:J:136:TYR:N | 2.38 | 0.55 |
| 1:J:252:ARG:HD3 | 1:J:253:PHE:CE2 | 2.41 | 0.55 |
| 1:J:383:PHE:CD1 | 1:J:392:ALA:HB1 | 2.42 | 0.55 |
| 1:J:930:LYS:HG3 | 1:J:931:LEU:N | 2.21 | 0.55 |
| 1:C:944:GLN:HA | 1:C:971:LEU:HA | 1.88 | 0.55 |
| 1:D:507:LEU:HD12 | 1:E:157:ARG:HG2 | 1.89 | 0.55 |
| 1:D:805:LEU:HB3 | 1:D:808:ASN:OD1 | 2.07 | 0.55 |
| 1:D:1005:LEU:O | 1:D:1008:MET:HG3 | 2.07 | 0.55 |
| 1:E:204:LYS:CG | 1:E:205:MET:H | 2.18 | 0.55 |
| 1:E:362:LEU:CD1 | 1:E:365:PRO:HG3 | 2.36 | 0.55 |
| 1:E:784:HIS:O | 1:E:787:CYS:HB2 | 2.07 | 0.55 |
| 1:E:852:SER:CB | 1:E:878:LYS:HD2 | 2.35 | 0.55 |
| 1:F:291:VAL:HG11 | 1:F:322:TRP:CE2 | 2.41 | 0.55 |
| 1:F:362:LEU:HB3 | 1:F:365:PRO:HG3 | 1.87 | 0.55 |
| 1:F:605:ARG:NH1 | 1:F:639:GLU:OE2 | 2.39 | 0.55 |
| 1:F:649:TYR:O | 1:F:651:PRO:HD2 | 2.06 | 0.55 |
| 1:F:852:SER:CB | 1:F:878:LYS:HD2 | 2.35 | 0.55 |
| 1:G:914:LEU:O | 1:G:914:LEU:HD12 | 2.07 | 0.55 |
| 1:G:983:ASP:HA | 1:G:986:VAL:HG12 | 1.88 | 0.55 |
| 1:H:220:HIS:O | 1:H:221:THR:OG1 | 2.21 | 0.55 |
| 1:H:252:ARG:HD3 | 1:H:253:PHE:CE2 | 2.41 | 0.55 |
| 1:I:983:ASP:HA | 1:I:986:VAL:HG12 | 1.88 | 0.55 |
| 1:J:296:ARG:HG3 | 1:J:296:ARG:NH1 | 2.21 | 0.55 |
| 1:J:490:ARG:O | 1:J:490:ARG:HD3 | 2.07 | 0.55 |
| 1:J:1005:LEU:O | 1:J:1008:MET:HG3 | 2.07 | 0.55 |
| 1:A:383:PHE:CD1 | 1:A:392:ALA:HB1 | 2.42 | 0.55 |
| 1:A:784:HIS:O | 1:A:787:CYS:HB2 | 2.07 | 0.55 |
| 1:B:252:ARG:HD3 | 1:B:253:PHE:CE2 | 2.41 | 0.55 |
| 1:B:362:LEU:HD12 | 1:B:365:PRO:CG | 2.34 | 0.55 |
| 1:B:864:GLU:N | 1:B:892:VAL:O | 2.35 | 0.55 |
| 1:C:226:GLY:O | 1:C:352:PRO:HD3 | 2.07 | 0.55 |
| 1:C:626:SER:HB2 | 1:C:629:GLU:OE1 | 2.06 | 0.55 |
| 1:D:142:LYS:CA | 1:D:145:ARG:HH21 | 2.19 | 0.55 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:D:490:ARG:O | 1:D:490:ARG:HD3 | 2.07 | 0.55 |
| 1:D:503:LEU:CD2 | 1:D:520:PHE:CD1 | 2.90 | 0.55 |
| 1:E:217:GLU:HG2 | 1:F:149:GLN:OE1 | 2.06 | 0.55 |
| 1:F:383:PHE:CD1 | 1:F:392:ALA:HB1 | 2.42 | 0.55 |
| 1:F:558:VAL:CG2 | 1:F:607:GLU:HG2 | 2.37 | 0.55 |
| 1:F:626:SER:HB2 | 1:F:629:GLU:OE1 | 2.06 | 0.55 |
| 1:F:930:LYS:HG3 | 1:F:931:LEU:N | 2.21 | 0.55 |
| 1:G:252:ARG:HD3 | 1:G:253:PHE:CE2 | 2.41 | 0.55 |
| 1:G:338:LYS:HE3 | 1:G:344:ALA:O | 2.06 | 0.55 |
| 1:G:605:ARG:NH1 | 1:G:639:GLU:OE2 | 2.39 | 0.55 |
| 1:H:647:MET:CE | 1:H:669:CYS:HB3 | 2.36 | 0.55 |
| 1:H:983:ASP:HA | 1:H:986:VAL:HG12 | 1.88 | 0.55 |
| 1:I:1005:LEU:O | 1:I:1008:MET:HG3 | 2.07 | 0.55 |
| 1:J:632:TYR:CE1 | 1:J:661:MET:HG3 | 2.42 | 0.55 |
| 1:A:157:ARG:HG2 | 1:J:507:LEU:HD12 | 1.89 | 0.55 |
| 1:A:490:ARG:O | 1:A:490:ARG:HD3 | 2.07 | 0.55 |
| 1:B:226:GLY:O | 1:B:352:PRO:HD3 | 2.07 | 0.55 |
| 1:B:240:MET:HE2 | 1:B:258:TYR:HB2 | 1.88 | 0.55 |
| 1:B:383:PHE:CD1 | 1:B:392:ALA:HB1 | 2.42 | 0.55 |
| 1:B:992:VAL:HA | 1:B:995:GLN:HE21 | 1.72 | 0.55 |
| 1:C:173:LEU:HB2 | 1:C:203:ILE:CG2 | 2.37 | 0.55 |
| 1:C:528:PHE:CA | 1:C:579:PHE:HD2 | 2.20 | 0.55 |
| 1:D:342:PRO:HB2 | 1:E:281:PRO:HB3 | 1.89 | 0.55 |
| 1:D:383:PHE:CD1 | 1:D:392:ALA:HB1 | 2.42 | 0.55 |
| 1:E:876:CYS:HA | 1:E:907:VAL:HG21 | 1.88 | 0.55 |
| 1:E:914:LEU:HD12 | 1:E:914:LEU:O | 2.07 | 0.55 |
| 1:F:204:LYS:CG | 1:F:205:MET:H | 2.18 | 0.55 |
| 1:G:226:GLY:O | 1:G:352:PRO:HD3 | 2.07 | 0.55 |
| 1:G:362:LEU:HB3 | 1:G:365:PRO:HG3 | 1.87 | 0.55 |
| 1:G:490:ARG:O | 1:G:490:ARG:HD3 | 2.07 | 0.55 |
| 1:G:623:ILE:H | 1:G:623:ILE:CD1 | 2.03 | 0.55 |
| 1:G:844:CYS:HA | 1:G:847:LEU:CD1 | 2.31 | 0.55 |
| 1:G:908:LEU:HD23 | 1:G:914:LEU:CD1 | 2.37 | 0.55 |
| 1:H:224:PHE:HD2 | 1:H:347:LEU:HD21 | 1.71 | 0.55 |
| 1:H:226:GLY:O | 1:H:352:PRO:HD3 | 2.07 | 0.55 |
| 1:H:383:PHE:CD1 | 1:H:392:ALA:HB1 | 2.42 | 0.55 |
| 1:H:553:LEU:HB3 | 1:H:554:PRO:HD2 | 1.88 | 0.55 |
| 1:H:784:HIS:O | 1:H:787:CYS:HB2 | 2.07 | 0.55 |
| 1:I:507:LEU:HD12 | 1:J:157:ARG:HG2 | 1.89 | 0.55 |
| 1:J:784:HIS:O | 1:J:787:CYS:HB2 | 2.07 | 0.55 |
| 2:S:53:CYS:O | 2:S:57:GLY:N | 2.39 | 0.55 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:A:296:ARG:HG3 | 1:A:296:ARG:NH1 | 2.21 | 0.54 |
| 1:A:362:LEU:HD12 | 1:A:365:PRO:CG | 2.34 | 0.54 |
| 1:B:784:HIS:O | 1:B:787:CYS:HB2 | 2.07 | 0.54 |
| 1:B:805:LEU:HB3 | 1:B:808:ASN:OD1 | 2.07 | 0.54 |
| 1:C:262:ARG:HB2 | 1:C:306:GLU:CD | 2.27 | 0.54 |
| 1:C:490:ARG:O | 1:C:490:ARG:HD3 | 2.07 | 0.54 |
| 1:C:632:TYR:CE1 | 1:C:661:MET:HG3 | 2.42 | 0.54 |
| 1:D:884:CYS:HB3 | 1:D:911:ASN:HD22 | 1.72 | 0.54 |
| 1:E:217:GLU:HG3 | 1:F:146:SER:CA | 2.36 | 0.54 |
| 1:E:217:GLU:CG | 1:F:149:GLN:OE1 | 2.55 | 0.54 |
| 1:F:173:LEU:HB2 | 1:F:203:ILE:CG2 | 2.38 | 0.54 |
| 1:F:296:ARG:HG3 | 1:F:296:ARG:NH1 | 2.21 | 0.54 |
| 1:F:490:ARG:O | 1:F:490:ARG:HD3 | 2.07 | 0.54 |
| 1:G:1005:LEU:O | 1:G:1008:MET:HG3 | 2.07 | 0.54 |
| 1:H:251:ASP:O | 1:H:252:ARG:HB3 | 2.07 | 0.54 |
| 1:H:485:GLU:OE1 | 1:H:485:GLU:N | 2.40 | 0.54 |
| 1:I:485:GLU:OE1 | 1:I:485:GLU:N | 2.40 | 0.54 |
| 1:I:492:HIS:ND1 | 1:I:553:LEU:HD11 | 2.20 | 0.54 |
| 1:I:655:ILE:HD12 | 1:I:656:ASN:N | 2.21 | 0.54 |
| 1:J:294:PRO:HB3 | 1:J:341:LEU:HB3 | 1.89 | 0.54 |
| 2:M:208:ILE:HD12 | 2:M:247:CYS:SG | 2.46 | 0.54 |
| 2:S:208:ILE:HD12 | 2:S:247:CYS:SG | 2.46 | 0.54 |
| 1:A:226:GLY:O | 1:A:352:PRO:HD3 | 2.07 | 0.54 |
| 1:A:1005:LEU:O | 1:A:1008:MET:HG3 | 2.07 | 0.54 |
| 1:B:502:PHE:HA | 1:B:521:ILE:HG13 | 1.89 | 0.54 |
| 1:B:507:LEU:HD12 | 1:C:157:ARG:HG2 | 1.89 | 0.54 |
| 1:C:240:MET:HE2 | 1:C:258:TYR:HB2 | 1.87 | 0.54 |
| 1:C:914:LEU:HD12 | 1:C:914:LEU:O | 2.07 | 0.54 |
| 1:D:173:LEU:HB2 | 1:D:203:ILE:CG2 | 2.37 | 0.54 |
| 1:D:226:GLY:O | 1:D:352:PRO:HD3 | 2.07 | 0.54 |
| 1:D:262:ARG:HB2 | 1:D:306:GLU:CD | 2.27 | 0.54 |
| 1:D:294:PRO:HB3 | 1:D:341:LEU:HB3 | 1.89 | 0.54 |
| 1:D:632:TYR:CE1 | 1:D:661:MET:HG3 | 2.42 | 0.54 |
| 1:D:832:LEU:HB3 | 1:D:860:LEU:CD1 | 2.36 | 0.54 |
| 1:E:528:PHE:CA | 1:E:579:PHE:HD2 | 2.20 | 0.54 |
| 1:F:294:PRO:HB3 | 1:F:341:LEU:HB3 | 1.89 | 0.54 |
| 1:F:876:CYS:HA | 1:F:907:VAL:HG21 | 1.88 | 0.54 |
| 1:G:362:LEU:HD12 | 1:G:365:PRO:CG | 2.34 | 0.54 |
| 1:G:637:MET:HE3 | 1:G:639:GLU:HB2 | 1.89 | 0.54 |
| 1:G:655:ILE:HD12 | 1:G:656:ASN:N | 2.21 | 0.54 |
| 1:G:784:HIS:O | 1:G:787:CYS:HB2 | 2.07 | 0.54 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:H:262:ARG:HB2 | 1:H:306:GLU:CD | 2.27 | 0.54 |
| 1:H:832:LEU:HB3 | 1:H:860:LEU:CD1 | 2.36 | 0.54 |
| 1:I:609:LEU:HD21 | 1:I:645:ARG:HD2 | 1.90 | 0.54 |
| 1:I:805:LEU:HB3 | 1:I:808:ASN:OD1 | 2.07 | 0.54 |
| 1:J:362:LEU:CD1 | 1:J:365:PRO:HG3 | 2.36 | 0.54 |
| 1:J:485:GLU:N | 1:J:485:GLU:OE1 | 2.40 | 0.54 |
| 2:P:227:TYR:OH | 2:P:256:PRO:O | 2.21 | 0.54 |
| 1:A:220:HIS:O | 1:A:221:THR:OG1 | 2.21 | 0.54 |
| 1:A:884:CYS:HB3 | 1:A:911:ASN:HD22 | 1.72 | 0.54 |
| 1:B:262:ARG:HB2 | 1:B:306:GLU:CD | 2.27 | 0.54 |
| 1:B:553:LEU:HB3 | 1:B:554:PRO:HD2 | 1.88 | 0.54 |
| 1:B:647:MET:CE | 1:B:669:CYS:HB3 | 2.36 | 0.54 |
| 1:C:362:LEU:CD1 | 1:C:365:PRO:HG3 | 2.36 | 0.54 |
| 1:C:507:LEU:HD12 | 1:D:157:ARG:HG2 | 1.90 | 0.54 |
| 1:D:489:LEU:HD21 | 1:D:494:LEU:HB3 | 1.89 | 0.54 |
| 1:D:528:PHE:CA | 1:D:579:PHE:HD2 | 2.20 | 0.54 |
| 1:E:1005:LEU:O | 1:E:1008:MET:HG3 | 2.07 | 0.54 |
| 1:F:226:GLY:O | 1:F:352:PRO:HD3 | 2.07 | 0.54 |
| 1:F:553:LEU:HB3 | 1:F:554:PRO:HD2 | 1.88 | 0.54 |
| 1:F:920:ARG:HH12 | 2:P:121:ARG:HA | 1.72 | 0.54 |
| 1:G:173:LEU:HB2 | 1:G:203:ILE:CG2 | 2.38 | 0.54 |
| 1:G:262:ARG:HB2 | 1:G:306:GLU:CD | 2.27 | 0.54 |
| 1:G:528:PHE:CA | 1:G:579:PHE:HD2 | 2.20 | 0.54 |
| 1:G:626:SER:HB2 | 1:G:629:GLU:OE1 | 2.06 | 0.54 |
| 1:G:628:LEU:HD22 | 1:G:655:ILE:HD11 | 1.90 | 0.54 |
| 1:G:637:MET:HG2 | 1:G:642:PHE:HD2 | 1.70 | 0.54 |
| 1:G:930:LYS:HG3 | 1:G:931:LEU:N | 2.21 | 0.54 |
| 1:H:609:LEU:HD21 | 1:H:645:ARG:HD2 | 1.90 | 0.54 |
| 1:H:649:TYR:O | 1:H:651:PRO:HD2 | 2.07 | 0.54 |
| 1:H:908:LEU:HD23 | 1:H:914:LEU:CD1 | 2.37 | 0.54 |
| 1:I:142:LYS:CA | 1:I:145:ARG:HH21 | 2.19 | 0.54 |
| 1:I:226:GLY:O | 1:I:352:PRO:HD3 | 2.07 | 0.54 |
| 1:I:252:ARG:HD3 | 1:I:253:PHE:CE2 | 2.41 | 0.54 |
| 1:I:784:HIS:O | 1:I:787:CYS:HB2 | 2.07 | 0.54 |
| 1:A:294:PRO:HB3 | 1:A:341:LEU:HB3 | 1.89 | 0.54 |
| 1:A:805:LEU:HB3 | 1:A:808:ASN:OD1 | 2.07 | 0.54 |
| 1:C:305:ASP:N | 1:C:305:ASP:OD1 | 2.40 | 0.54 |
| 1:C:489:LEU:HD21 | 1:C:494:LEU:HB3 | 1.89 | 0.54 |
| 1:C:784:HIS:O | 1:C:787:CYS:HB2 | 2.07 | 0.54 |
| 1:D:333:SER:HG | 1:D:337:ARG:HH12 | 1.54 | 0.54 |
| 1:D:876:CYS:HA | 1:D:907:VAL:HG21 | 1.88 | 0.54 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:E:224:PHE:HD2 | 1:E:347:LEU:HD21 | 1.71 | 0.54 |
| 1:F:262:ARG:HB2 | 1:F:306:GLU:CD | 2.27 | 0.54 |
| 1:F:507:LEU:HD12 | 1:G:157:ARG:HG2 | 1.89 | 0.54 |
| 1:F:628:LEU:HD22 | 1:F:655:ILE:HD11 | 1.89 | 0.54 |
| 1:F:908:LEU:HD23 | 1:F:914:LEU:CD1 | 2.37 | 0.54 |
| 1:G:172:ARG:HD3 | 1:G:374:SER:HB3 | 1.89 | 0.54 |
| 1:G:383:PHE:CD1 | 1:G:392:ALA:HB1 | 2.42 | 0.54 |
| 1:G:876:CYS:HA | 1:G:907:VAL:HG21 | 1.88 | 0.54 |
| 1:H:628:LEU:HD22 | 1:H:655:ILE:HD11 | 1.90 | 0.54 |
| 1:H:864:GLU:N | 1:H:892:VAL:O | 2.35 | 0.54 |
| 1:H:944:GLN:HA | 1:H:971:LEU:HA | 1.88 | 0.54 |
| 1:I:294:PRO:HB3 | 1:I:341:LEU:HB3 | 1.89 | 0.54 |
| 1:I:992:VAL:HA | 1:I:995:GLN:HE21 | 1.72 | 0.54 |
| 1:J:489:LEU:HD21 | 1:J:494:LEU:HB3 | 1.89 | 0.54 |
| 1:J:609:LEU:HD21 | 1:J:645:ARG:HD2 | 1.90 | 0.54 |
| 1:A:557:ASP:HB2 | 1:A:560:VAL:HB | 1.88 | 0.54 |
| 1:A:632:TYR:CE1 | 1:A:661:MET:HG3 | 2.42 | 0.54 |
| 1:B:305:ASP:OD1 | 1:B:305:ASP:N | 2.41 | 0.54 |
| 1:B:624:GLN:CG | 1:B:625:PRO:CD | 2.83 | 0.54 |
| 1:B:1005:LEU:O | 1:B:1008:MET:HG3 | 2.07 | 0.54 |
| 1:C:930:LYS:HG3 | 1:C:931:LEU:N | 2.21 | 0.54 |
| 1:C:1005:LEU:O | 1:C:1008:MET:HG3 | 2.07 | 0.54 |
| 1:D:251:ASP:O | 1:D:252:ARG:HB3 | 2.06 | 0.54 |
| 1:D:467:TRP:HD1 | 1:D:536:LEU:HD23 | 1.73 | 0.54 |
| 1:D:637:MET:HE3 | 1:D:639:GLU:HB2 | 1.89 | 0.54 |
| 1:D:930:LYS:HG3 | 1:D:931:LEU:N | 2.21 | 0.54 |
| 1:E:624:GLN:N | 1:E:625:PRO:HD2 | 2.23 | 0.54 |
| 1:E:632:TYR:CE1 | 1:E:661:MET:HG3 | 2.42 | 0.54 |
| 1:E:805:LEU:HB3 | 1:E:808:ASN:OD1 | 2.07 | 0.54 |
| 1:F:142:LYS:CA | 1:F:145:ARG:HH21 | 2.19 | 0.54 |
| 1:F:805:LEU:HB3 | 1:F:808:ASN:OD1 | 2.07 | 0.54 |
| 1:G:502:PHE:HA | 1:G:521:ILE:CD1 | 2.37 | 0.54 |
| 1:G:553:LEU:HB3 | 1:G:554:PRO:HD2 | 1.88 | 0.54 |
| 1:G:884:CYS:HB3 | 1:G:911:ASN:HD22 | 1.72 | 0.54 |
| 1:H:872:VAL:CG1 | 1:H:900:CYS:HB2 | 2.38 | 0.54 |
| 1:I:553:LEU:HB3 | 1:I:554:PRO:HD2 | 1.88 | 0.54 |
| 1:I:914:LEU:HD12 | 1:I:914:LEU:O | 2.07 | 0.54 |
| 1:A:134:LYS:O | 1:A:136:TYR:N | 2.38 | 0.54 |
| 1:A:217:GLU:HG3 | 1:B:146:SER:CA | 2.37 | 0.54 |
| 1:A:467:TRP:HD1 | 1:A:536:LEU:HD23 | 1.73 | 0.54 |
| 1:A:864:GLU:N | 1:A:892:VAL:O | 2.35 | 0.54 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:A:914:LEU:HD12 | 1:A:914:LEU:O | 2.07 | 0.54 |
| 1:B:173:LEU:HB2 | 1:B:203:ILE:CG2 | 2.38 | 0.54 |
| 1:B:490:ARG:O | 1:B:490:ARG:HD3 | 2.07 | 0.54 |
| 1:B:852:SER:CB | 1:B:878:LYS:HD2 | 2.35 | 0.54 |
| 1:B:914:LEU:HD12 | 1:B:914:LEU:O | 2.07 | 0.54 |
| 1:C:383:PHE:CD1 | 1:C:392:ALA:HB1 | 2.42 | 0.54 |
| 1:C:844:CYS:HA | 1:C:847:LEU:CD1 | 2.32 | 0.54 |
| 1:E:173:LEU:HB2 | 1:E:203:ILE:CG2 | 2.38 | 0.54 |
| 1:F:172:ARG:HD3 | 1:F:374:SER:HB3 | 1.90 | 0.54 |
| 1:F:609:LEU:HD21 | 1:F:645:ARG:HD2 | 1.90 | 0.54 |
| 1:F:624:GLN:CB | 1:F:625:PRO:CD | 2.82 | 0.54 |
| 1:F:864:GLU:N | 1:F:892:VAL:O | 2.36 | 0.54 |
| 1:F:1005:LEU:O | 1:F:1008:MET:HG3 | 2.07 | 0.54 |
| 1:G:992:VAL:HA | 1:G:995:GLN:HE21 | 1.72 | 0.54 |
| 1:H:852:SER:CB | 1:H:878:LYS:HD2 | 2.35 | 0.54 |
| 1:H:992:VAL:HA | 1:H:995:GLN:HE21 | 1.72 | 0.54 |
| 1:I:172:ARG:HD3 | 1:I:374:SER:HB3 | 1.89 | 0.54 |
| 1:I:628:LEU:HD22 | 1:I:655:ILE:HD11 | 1.90 | 0.54 |
| 1:I:637:MET:HG2 | 1:I:642:PHE:HD2 | 1.70 | 0.54 |
| 1:I:872:VAL:CG1 | 1:I:900:CYS:HB2 | 2.38 | 0.54 |
| 1:I:908:LEU:HD23 | 1:I:914:LEU:CD1 | 2.37 | 0.54 |
| 1:J:992:VAL:HA | 1:J:995:GLN:HE21 | 1.72 | 0.54 |
| 1:A:370:ILE:O | 1:A:371:LEU:HD23 | 2.08 | 0.54 |
| 1:A:489:LEU:HD21 | 1:A:494:LEU:HB3 | 1.89 | 0.54 |
| 1:A:492:HIS:ND1 | 1:A:553:LEU:HD11 | 2.20 | 0.54 |
| 1:A:609:LEU:HD21 | 1:A:645:ARG:HD2 | 1.90 | 0.54 |
| 1:B:756:PRO:HG3 | 1:B:759:ARG:HH21 | 1.73 | 0.54 |
| 1:B:908:LEU:HD23 | 1:B:914:LEU:CD1 | 2.37 | 0.54 |
| 1:B:920:ARG:HH12 | 2:L:121:ARG:HA | 1.72 | 0.54 |
| 1:D:626:SER:HB2 | 1:D:629:GLU:OE1 | 2.06 | 0.54 |
| 1:D:756:PRO:HG3 | 1:D:759:ARG:HH21 | 1.73 | 0.54 |
| 1:D:784:HIS:O | 1:D:787:CYS:HB2 | 2.07 | 0.54 |
| 1:D:914:LEU:O | 1:D:914:LEU:HD12 | 2.07 | 0.54 |
| 1:D:985:GLY:O | 1:D:988:MET:HG2 | 2.08 | 0.54 |
| 1:E:262:ARG:HB2 | 1:E:306:GLU:CD | 2.27 | 0.54 |
| 1:G:609:LEU:HD21 | 1:G:645:ARG:HD2 | 1.90 | 0.54 |
| 1:G:872:VAL:CG1 | 1:G:900:CYS:HB2 | 2.38 | 0.54 |
| 1:H:370:ILE:O | 1:H:371:LEU:HD23 | 2.08 | 0.54 |
| 1:H:661:MET:O | 1:H:665:VAL:HG12 | 2.08 | 0.54 |
| 1:I:370:ILE:O | 1:I:371:LEU:HD23 | 2.08 | 0.54 |
| 1:I:864:GLU:N | 1:I:892:VAL:O | 2.35 | 0.54 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:J:305:ASP:OD1 | 1:J:305:ASP:N | 2.41 | 0.54 |
| 1:J:908:LEU:HD23 | 1:J:914:LEU:CD1 | 2.37 | 0.54 |
| 1:A:173:LEU:HB2 | 1:A:203:ILE:CG2 | 2.37 | 0.54 |
| 1:A:190:ILE:O | 1:A:407:THR:HG21 | 2.08 | 0.54 |
| 1:A:992:VAL:HA | 1:A:995:GLN:HE21 | 1.72 | 0.54 |
| 1:C:985:GLY:O | 1:C:988:MET:HG2 | 2.08 | 0.54 |
| 1:C:992:VAL:HA | 1:C:995:GLN:HE21 | 1.72 | 0.54 |
| 1:D:585:ASN:HA | 1:D:637:MET:HE3 | 1.89 | 0.54 |
| 1:E:490:ARG:O | 1:E:490:ARG:HD3 | 2.07 | 0.54 |
| 1:E:985:GLY:O | 1:E:988:MET:HG2 | 2.08 | 0.54 |
| 1:F:362:LEU:CD1 | 1:F:365:PRO:HG3 | 2.36 | 0.54 |
| 1:F:632:TYR:CE1 | 1:F:661:MET:HG3 | 2.42 | 0.54 |
| 1:G:489:LEU:HD21 | 1:G:494:LEU:HB3 | 1.89 | 0.54 |
| 1:G:649:TYR:O | 1:G:651:PRO:HD2 | 2.06 | 0.54 |
| 1:G:985:GLY:O | 1:G:988:MET:HG2 | 2.08 | 0.54 |
| 1:H:172:ARG:HD3 | 1:H:374:SER:HB3 | 1.89 | 0.54 |
| 1:H:173:LEU:HB2 | 1:H:203:ILE:CG2 | 2.37 | 0.54 |
| 1:H:657:LEU:HG | 1:H:662:ASP:CG | 2.29 | 0.54 |
| 1:I:383:PHE:CD1 | 1:I:392:ALA:HB1 | 2.42 | 0.54 |
| 1:J:756:PRO:HG3 | 1:J:759:ARG:HH21 | 1.73 | 0.54 |
| 1:J:872:VAL:CG1 | 1:J:900:CYS:HB2 | 2.38 | 0.54 |
| 1:A:353:VAL:HB | 1:A:500:SER:CB | 2.38 | 0.54 |
| 1:A:908:LEU:HD23 | 1:A:914:LEU:CD1 | 2.36 | 0.54 |
| 1:B:632:TYR:CE1 | 1:B:661:MET:HG3 | 2.42 | 0.54 |
| 1:B:661:MET:O | 1:B:665:VAL:HG12 | 2.08 | 0.54 |
| 1:D:753:LEU:HG | 1:D:757:GLY:HA3 | 1.90 | 0.54 |
| 1:E:234:ILE:HG21 | 3:E:1101:AGS:C5 | 2.38 | 0.54 |
| 1:F:624:GLN:N | 1:F:625:PRO:HD2 | 2.23 | 0.54 |
| 1:G:632:TYR:CE1 | 1:G:661:MET:HG3 | 2.42 | 0.54 |
| 1:H:136:TYR:OH | 1:H:280:CYS:SG | 2.41 | 0.54 |
| 1:I:985:GLY:O | 1:I:988:MET:HG2 | 2.08 | 0.54 |
| 1:J:173:LEU:HB2 | 1:J:203:ILE:CG2 | 2.38 | 0.54 |
| 1:J:553:LEU:HB3 | 1:J:554:PRO:HD2 | 1.88 | 0.54 |
| 1:J:805:LEU:HB3 | 1:J:808:ASN:OD1 | 2.07 | 0.54 |
| 1:A:661:MET:O | 1:A:665:VAL:HG12 | 2.08 | 0.54 |
| 1:B:172:ARG:HD3 | 1:B:374:SER:HB3 | 1.89 | 0.54 |
| 1:B:197:GLU:OE1 | 1:B:199:PRO:HD3 | 2.08 | 0.54 |
| 1:C:624:GLN:N | 1:C:625:PRO:HD2 | 2.22 | 0.54 |
| 1:C:661:MET:O | 1:C:665:VAL:HG12 | 2.08 | 0.54 |
| 1:C:884:CYS:HB3 | 1:C:911:ASN:HD22 | 1.72 | 0.54 |
| 1:D:234:ILE:HG21 | 3:D:1101:AGS:C5 | 2.38 | 0.54 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:E:661:MET:O | 1:E:665:VAL:HG12 | 2.08 | 0.54 |
| 1:E:756:PRO:HG3 | 1:E:759:ARG:HH21 | 1.73 | 0.54 |
| 1:F:467:TRP:HD1 | 1:F:536:LEU:HD23 | 1.73 | 0.54 |
| 1:F:657:LEU:HG | 1:F:662:ASP:CG | 2.28 | 0.54 |
| 1:F:784:HIS:O | 1:F:787:CYS:HB2 | 2.07 | 0.54 |
| 1:F:872:VAL:CG1 | 1:F:900:CYS:HB2 | 2.38 | 0.54 |
| 1:F:914:LEU:HD12 | 1:F:914:LEU:O | 2.07 | 0.54 |
| 1:F:992:VAL:HA | 1:F:995:GLN:HE21 | 1.72 | 0.54 |
| 1:G:240:MET:HE2 | 1:G:258:TYR:N | 2.23 | 0.54 |
| 1:G:240:MET:HE3 | 1:G:258:TYR:HB2 | 1.89 | 0.54 |
| 1:G:370:ILE:O | 1:G:371:LEU:HD23 | 2.08 | 0.54 |
| 1:G:478:TRP:CH2 | 1:G:564:ASN:ND2 | 2.76 | 0.54 |
| 1:H:478:TRP:CH2 | 1:H:564:ASN:ND2 | 2.76 | 0.54 |
| 1:H:632:TYR:CE1 | 1:H:661:MET:HG3 | 2.42 | 0.54 |
| 1:H:876:CYS:O | 1:H:880:LYS:HG3 | 2.08 | 0.54 |
| 1:H:1005:LEU:O | 1:H:1008:MET:HG3 | 2.07 | 0.54 |
| 1:I:173:LEU:HB2 | 1:I:203:ILE:CG2 | 2.37 | 0.54 |
| 1:J:661:MET:O | 1:J:665:VAL:HG12 | 2.08 | 0.54 |
| 2:P:168:PHE:O | 2:P:176:LYS:N | 2.39 | 0.54 |
| 1:A:872:VAL:CG1 | 1:A:900:CYS:HB2 | 2.38 | 0.53 |
| 1:B:294:PRO:HB3 | 1:B:341:LEU:HB3 | 1.89 | 0.53 |
| 1:B:467:TRP:HD1 | 1:B:536:LEU:HD23 | 1.73 | 0.53 |
| 1:B:876:CYS:O | 1:B:880:LYS:HG3 | 2.08 | 0.53 |
| 1:C:172:ARG:HD3 | 1:C:374:SER:HB3 | 1.89 | 0.53 |
| 1:C:467:TRP:HD1 | 1:C:536:LEU:HD23 | 1.73 | 0.53 |
| 1:C:651:PRO:HG3 | 1:C:675:ARG:NE | 2.23 | 0.53 |
| 1:D:478:TRP:CH2 | 1:D:564:ASN:ND2 | 2.76 | 0.53 |
| 1:E:609:LEU:HD21 | 1:E:645:ARG:HD2 | 1.90 | 0.53 |
| 1:E:657:LEU:HG | 1:E:662:ASP:CG | 2.28 | 0.53 |
| 1:E:753:LEU:HG | 1:E:757:GLY:HA3 | 1.90 | 0.53 |
| 1:F:489:LEU:HD21 | 1:F:494:LEU:HB3 | 1.89 | 0.53 |
| 1:G:507:LEU:HD12 | 1:H:157:ARG:HG2 | 1.90 | 0.53 |
| 1:H:294:PRO:HB3 | 1:H:341:LEU:HB3 | 1.89 | 0.53 |
| 1:H:471:SER:CB | 1:H:553:LEU:HD12 | 2.20 | 0.53 |
| 1:H:528:PHE:CA | 1:H:579:PHE:HD2 | 2.20 | 0.53 |
| 1:H:756:PRO:HG3 | 1:H:759:ARG:HH21 | 1.73 | 0.53 |
| 1:H:914:LEU:HD12 | 1:H:914:LEU:O | 2.07 | 0.53 |
| 1:I:184:GLU:OE1 | 1:I:185:GLN:N | 2.42 | 0.53 |
| 1:I:362:LEU:CD1 | 1:I:365:PRO:HG3 | 2.36 | 0.53 |
| 1:I:632:TYR:CE1 | 1:I:661:MET:HG3 | 2.42 | 0.53 |
| 1:I:884:CYS:HB3 | 1:I:911:ASN:HD22 | 1.72 | 0.53 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:J:864:GLU:N | 1:J:892:VAL:O | 2.36 | 0.53 |
| 2:L:227:TYR:OH | 2:L:256:PRO:O | 2.23 | 0.53 |
| 1:B:619:LYS:CB | 2:L:261:ASP:CB | 2.86 | 0.53 |
| 1:B:985:GLY:O | 1:B:988:MET:HG2 | 2.08 | 0.53 |
| 1:C:240:MET:HE2 | 1:C:258:TYR:N | 2.23 | 0.53 |
| 1:C:294:PRO:HB3 | 1:C:341:LEU:HB3 | 1.89 | 0.53 |
| 1:C:379:LYS:HG3 | 1:C:396:PHE:CZ | 2.43 | 0.53 |
| 1:C:848:ALA:HB1 | 1:C:878:LYS:HB2 | 1.91 | 0.53 |
| 1:C:919:LEU:HD21 | 1:C:924:LEU:HD21 | 1.90 | 0.53 |
| 1:E:172:ARG:HD3 | 1:E:374:SER:HB3 | 1.90 | 0.53 |
| 1:E:294:PRO:HB3 | 1:E:341:LEU:HB3 | 1.89 | 0.53 |
| 1:E:507:LEU:HD12 | 1:F:157:ARG:HG2 | 1.89 | 0.53 |
| 1:E:628:LEU:HD22 | 1:E:655:ILE:HD11 | 1.90 | 0.53 |
| 1:E:844:CYS:HA | 1:E:847:LEU:CD1 | 2.32 | 0.53 |
| 1:F:234:ILE:HG21 | 3:F:1101:AGS:C5 | 2.38 | 0.53 |
| 1:F:528:PHE:CA | 1:F:579:PHE:HD2 | 2.20 | 0.53 |
| 1:F:756:PRO:HG3 | 1:F:759:ARG:HH21 | 1.73 | 0.53 |
| 1:G:220:HIS:O | 1:G:221:THR:OG1 | 2.21 | 0.53 |
| 1:G:624:GLN:CB | 1:G:625:PRO:CD | 2.83 | 0.53 |
| 1:G:876:CYS:O | 1:G:880:LYS:HG3 | 2.08 | 0.53 |
| 1:H:379:LYS:HG3 | 1:H:396:PHE:CZ | 2.44 | 0.53 |
| 1:H:489:LEU:HD21 | 1:H:494:LEU:HB3 | 1.89 | 0.53 |
| 1:I:467:TRP:HD1 | 1:I:536:LEU:HD23 | 1.73 | 0.53 |
| 1:J:370:ILE:O | 1:J:371:LEU:HD23 | 2.08 | 0.53 |
| 1:J:657:LEU:HG | 1:J:662:ASP:CG | 2.29 | 0.53 |
| 1:B:134:LYS:O | 1:B:136:TYR:N | 2.38 | 0.53 |
| 1:B:306:GLU:HB2 | 1:B:307:LEU:HD12 | 1.90 | 0.53 |
| 1:B:937:LEU:HD21 | 1:B:964:LEU:HA | 1.90 | 0.53 |
| 1:D:184:GLU:OE1 | 1:D:185:GLN:N | 2.42 | 0.53 |
| 1:D:622:GLN:NE2 | 1:D:627:GLN:OE1 | 2.42 | 0.53 |
| 1:F:651:PRO:HG3 | 1:F:675:ARG:NE | 2.23 | 0.53 |
| 1:F:985:GLY:O | 1:F:988:MET:HG2 | 2.08 | 0.53 |
| 1:G:294:PRO:HB3 | 1:G:341:LEU:HB3 | 1.89 | 0.53 |
| 1:G:581:PHE:CE2 | 1:G:633:CYS:HB3 | 2.44 | 0.53 |
| 1:H:184:GLU:OE1 | 1:H:185:GLN:N | 2.42 | 0.53 |
| 1:I:197:GLU:OE1 | 1:I:199:PRO:HD3 | 2.08 | 0.53 |
| 1:J:500:SER:HA | 1:J:503:LEU:O | 2.09 | 0.53 |
| 1:J:848:ALA:HB1 | 1:J:878:LYS:HB2 | 1.91 | 0.53 |
| 1:A:848:ALA:HB1 | 1:A:878:LYS:HB2 | 1.91 | 0.53 |
| 1:A:876:CYS:O | 1:A:880:LYS:HG3 | 2.08 | 0.53 |
| 1:A:985:GLY:O | 1:A:988:MET:HG2 | 2.08 | 0.53 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:B:136:TYR:HH | 1:B:285:PRO:HB3 | 1.73 | 0.53 |
| 1:B:369:GLU:OE2 | 1:B:504:ARG:NH2 | 2.37 | 0.53 |
| 1:B:489:LEU:HD21 | 1:B:494:LEU:HB3 | 1.89 | 0.53 |
| 1:B:919:LEU:HD21 | 1:B:924:LEU:HD21 | 1.90 | 0.53 |
| 1:C:234:ILE:HG21 | 3:C:1101:AGS:C5 | 2.38 | 0.53 |
| 1:C:306:GLU:HB2 | 1:C:307:LEU:HD12 | 1.90 | 0.53 |
| 1:C:753:LEU:HG | 1:C:757:GLY:HA3 | 1.90 | 0.53 |
| 1:C:920:ARG:HH12 | 2:M:121:ARG:HA | 1.73 | 0.53 |
| 1:D:197:GLU:OE1 | 1:D:199:PRO:HD3 | 2.08 | 0.53 |
| 1:D:224:PHE:HD2 | 1:D:347:LEU:HD21 | 1.71 | 0.53 |
| 1:D:353:VAL:HG21 | 1:D:499:VAL:HA | 1.90 | 0.53 |
| 1:D:651:PRO:HG3 | 1:D:675:ARG:NE | 2.23 | 0.53 |
| 1:E:872:VAL:CG1 | 1:E:900:CYS:HB2 | 2.38 | 0.53 |
| 1:E:876:CYS:O | 1:E:880:LYS:HG3 | 2.08 | 0.53 |
| 1:E:992:VAL:HA | 1:E:995:GLN:HE21 | 1.72 | 0.53 |
| 1:F:379:LYS:HG3 | 1:F:396:PHE:CZ | 2.43 | 0.53 |
| 1:F:478:TRP:CH2 | 1:F:564:ASN:ND2 | 2.77 | 0.53 |
| 1:F:753:LEU:HG | 1:F:757:GLY:HA3 | 1.90 | 0.53 |
| 1:G:467:TRP:HD1 | 1:G:536:LEU:HD23 | 1.73 | 0.53 |
| 1:G:498:ASP:OD2 | 1:G:503:LEU:HD12 | 2.09 | 0.53 |
| 1:G:657:LEU:HG | 1:G:662:ASP:CG | 2.28 | 0.53 |
| 1:G:756:PRO:HG3 | 1:G:759:ARG:HH21 | 1.73 | 0.53 |
| 1:I:379:LYS:HG3 | 1:I:396:PHE:CZ | 2.44 | 0.53 |
| 1:I:478:TRP:CH2 | 1:I:564:ASN:ND2 | 2.77 | 0.53 |
| 1:I:661:MET:O | 1:I:665:VAL:HG12 | 2.08 | 0.53 |
| 1:I:848:ALA:HB1 | 1:I:878:LYS:HB2 | 1.91 | 0.53 |
| 1:J:172:ARG:HD3 | 1:J:374:SER:HB3 | 1.90 | 0.53 |
| 1:J:628:LEU:HD22 | 1:J:655:ILE:HD11 | 1.90 | 0.53 |
| 1:J:914:LEU:HD12 | 1:J:914:LEU:O | 2.07 | 0.53 |
| 1:A:197:GLU:OE1 | 1:A:199:PRO:HD3 | 2.08 | 0.53 |
| 1:A:320:THR:O | 1:A:320:THR:HG22 | 2.09 | 0.53 |
| 1:A:553:LEU:HB3 | 1:A:554:PRO:HD2 | 1.88 | 0.53 |
| 1:B:362:LEU:CD1 | 1:B:365:PRO:HG3 | 2.36 | 0.53 |
| 1:C:872:VAL:CG1 | 1:C:900:CYS:HB2 | 2.38 | 0.53 |
| 1:D:628:LEU:HD22 | 1:D:655:ILE:HD11 | 1.90 | 0.53 |
| 1:D:657:LEU:HG | 1:D:662:ASP:CG | 2.28 | 0.53 |
| 1:D:872:VAL:CG1 | 1:D:900:CYS:HB2 | 2.38 | 0.53 |
| 1:E:370:ILE:O | 1:E:371:LEU:HD23 | 2.08 | 0.53 |
| 1:E:467:TRP:HD1 | 1:E:536:LEU:HD23 | 1.73 | 0.53 |
| 1:E:936:LEU:HA | 1:E:941:CYS:SG | 2.49 | 0.53 |
| 1:F:876:CYS:O | 1:F:880:LYS:HG3 | 2.08 | 0.53 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:G:753:LEU:HG | 1:G:757:GLY:HA3 | 1.90 | 0.53 |
| 1:G:937:LEU:HD21 | 1:G:964:LEU:HA | 1.90 | 0.53 |
| 1:H:787:CYS:SG | 1:H:810:LEU:HD22 | 2.49 | 0.53 |
| 1:I:651:PRO:HG3 | 1:I:675:ARG:NE | 2.23 | 0.53 |
| 1:I:815:ILE:CG2 | 1:I:843:CYS:HB2 | 2.39 | 0.53 |
| 1:I:876:CYS:O | 1:I:880:LYS:HG3 | 2.08 | 0.53 |
| 1:J:184:GLU:OE1 | 1:J:185:GLN:N | 2.42 | 0.53 |
| 1:J:478:TRP:CH2 | 1:J:564:ASN:ND2 | 2.77 | 0.53 |
| 1:J:535:LEU:HD23 | 1:J:536:LEU:N | 2.24 | 0.53 |
| 1:J:836:SER:N | 1:J:864:GLU:HB2 | 2.24 | 0.53 |
| 1:J:937:LEU:CD2 | 1:J:964:LEU:HD12 | 2.39 | 0.53 |
| 1:J:985:GLY:O | 1:J:988:MET:HG2 | 2.08 | 0.53 |
| 1:A:499:VAL:HG22 | 1:A:499:VAL:O | 2.07 | 0.53 |
| 1:A:815:ILE:CG2 | 1:A:843:CYS:HB2 | 2.39 | 0.53 |
| 1:A:841:SER:HB3 | 1:A:867:LEU:O | 2.09 | 0.53 |
| 1:B:320:THR:HG22 | 1:B:320:THR:O | 2.09 | 0.53 |
| 1:B:379:LYS:HG3 | 1:B:396:PHE:CZ | 2.43 | 0.53 |
| 1:C:756:PRO:HG3 | 1:C:759:ARG:HH21 | 1.73 | 0.53 |
| 1:E:142:LYS:CA | 1:E:145:ARG:HH21 | 2.19 | 0.53 |
| 1:E:489:LEU:HD21 | 1:E:494:LEU:HB3 | 1.89 | 0.53 |
| 1:F:370:ILE:O | 1:F:371:LEU:HD23 | 2.08 | 0.53 |
| 1:F:535:LEU:HD23 | 1:F:536:LEU:N | 2.24 | 0.53 |
| 1:F:661:MET:O | 1:F:665:VAL:HG12 | 2.08 | 0.53 |
| 1:F:937:LEU:HD21 | 1:F:964:LEU:HA | 1.90 | 0.53 |
| 1:F:937:LEU:CD2 | 1:F:964:LEU:HD12 | 2.39 | 0.53 |
| 1:G:234:ILE:HG21 | 3:G:1101:AGS:C5 | 2.38 | 0.53 |
| 1:G:651:PRO:HG3 | 1:G:675:ARG:NE | 2.23 | 0.53 |
| 1:G:661:MET:O | 1:G:665:VAL:HG12 | 2.08 | 0.53 |
| 1:G:841:SER:HB3 | 1:G:867:LEU:O | 2.09 | 0.53 |
| 1:G:848:ALA:HB1 | 1:G:878:LYS:HB2 | 1.91 | 0.53 |
| 1:H:197:GLU:OE1 | 1:H:199:PRO:HD3 | 2.08 | 0.53 |
| 1:H:234:ILE:HG21 | 3:H:1101:AGS:C5 | 2.38 | 0.53 |
| 1:H:535:LEU:HD23 | 1:H:536:LEU:N | 2.24 | 0.53 |
| 1:H:937:LEU:CD2 | 1:H:964:LEU:HD12 | 2.39 | 0.53 |
| 1:I:756:PRO:HG3 | 1:I:759:ARG:HH21 | 1.73 | 0.53 |
| 2:Q:168:PHE:O | 2:Q:176:LYS:N | 2.39 | 0.53 |
| 1:A:306:GLU:HB2 | 1:A:307:LEU:HD12 | 1.90 | 0.53 |
| 1:A:920:ARG:NH1 | 2:K:121:ARG:HA | 2.24 | 0.53 |
| 1:A:937:LEU:HD21 | 1:A:964:LEU:HA | 1.90 | 0.53 |
| 1:B:308:GLN:HE21 | 1:B:499:VAL:HG22 | 1.70 | 0.53 |
| 1:B:451:LEU:O | 1:B:451:LEU:HG | 2.09 | 0.53 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:B:609:LEU:HD21 | 1:B:645:ARG:HD2 | 1.90 | 0.53 |
| 1:B:628:LEU:HD22 | 1:B:655:ILE:HD11 | 1.90 | 0.53 |
| 1:B:657:LEU:HG | 1:B:662:ASP:CG | 2.28 | 0.53 |
| 1:C:173:LEU:O | 1:C:203:ILE:HG22 | 2.09 | 0.53 |
| 1:C:628:LEU:HD22 | 1:C:655:ILE:HD11 | 1.89 | 0.53 |
| 1:D:306:GLU:HB2 | 1:D:307:LEU:HD12 | 1.90 | 0.53 |
| 1:D:581:PHE:CE2 | 1:D:633:CYS:HB3 | 2.44 | 0.53 |
| 1:D:609:LEU:HD21 | 1:D:645:ARG:HD2 | 1.90 | 0.53 |
| 1:D:848:ALA:HB1 | 1:D:878:LYS:HB2 | 1.91 | 0.53 |
| 1:D:992:VAL:HA | 1:D:995:GLN:HE21 | 1.72 | 0.53 |
| 1:E:197:GLU:OE1 | 1:E:199:PRO:HD3 | 2.08 | 0.53 |
| 1:E:908:LEU:HD23 | 1:E:914:LEU:CD1 | 2.36 | 0.53 |
| 1:F:320:THR:O | 1:F:320:THR:HG22 | 2.09 | 0.53 |
| 1:F:848:ALA:HB1 | 1:F:878:LYS:HB2 | 1.91 | 0.53 |
| 1:G:585:ASN:HA | 1:G:637:MET:HE3 | 1.89 | 0.53 |
| 1:G:787:CYS:SG | 1:G:810:LEU:HD22 | 2.49 | 0.53 |
| 1:G:936:LEU:HA | 1:G:941:CYS:SG | 2.49 | 0.53 |
| 1:H:240:MET:HE2 | 1:H:258:TYR:N | 2.24 | 0.53 |
| 1:I:787:CYS:SG | 1:I:810:LEU:HD22 | 2.49 | 0.53 |
| 1:I:919:LEU:HD21 | 1:I:924:LEU:HD21 | 1.90 | 0.53 |
| 1:J:197:GLU:OE1 | 1:J:199:PRO:HD3 | 2.08 | 0.53 |
| 2:T:226:LEU:HD23 | 2:T:226:LEU:C | 2.29 | 0.53 |
| 1:A:507:LEU:HD12 | 1:B:157:ARG:HG2 | 1.90 | 0.53 |
| 1:A:628:LEU:HD22 | 1:A:655:ILE:HD11 | 1.90 | 0.53 |
| 1:A:756:PRO:HG3 | 1:A:759:ARG:HH21 | 1.73 | 0.53 |
| 1:A:787:CYS:SG | 1:A:810:LEU:HD22 | 2.49 | 0.53 |
| 1:A:836:SER:N | 1:A:864:GLU:HB2 | 2.24 | 0.53 |
| 1:B:184:GLU:OE1 | 1:B:185:GLN:N | 2.42 | 0.53 |
| 1:B:841:SER:HB3 | 1:B:867:LEU:O | 2.09 | 0.53 |
| 1:B:848:ALA:HB1 | 1:B:878:LYS:HB2 | 1.91 | 0.53 |
| 1:B:880:LYS:O | 1:B:910:THR:HB | 2.09 | 0.53 |
| 1:B:936:LEU:HA | 1:B:941:CYS:SG | 2.49 | 0.53 |
| 1:C:609:LEU:HD21 | 1:C:645:ARG:HD2 | 1.90 | 0.53 |
| 1:C:876:CYS:O | 1:C:880:LYS:HG3 | 2.09 | 0.53 |
| 1:C:936:LEU:HA | 1:C:941:CYS:SG | 2.49 | 0.53 |
| 1:D:172:ARG:HD3 | 1:D:374:SER:HB3 | 1.89 | 0.53 |
| 1:D:447:LEU:O | 1:D:447:LEU:HD12 | 2.09 | 0.53 |
| 1:E:848:ALA:HB1 | 1:E:878:LYS:HB2 | 1.91 | 0.53 |
| 1:F:581:PHE:CE2 | 1:F:633:CYS:HB3 | 2.44 | 0.53 |
| 1:F:1001:GLN:HG3 | 1:F:1002:ASN:ND2 | 2.24 | 0.53 |
| 1:G:197:GLU:OE1 | 1:G:199:PRO:HD3 | 2.08 | 0.53 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:H:173:LEU:O | 1:H:203:ILE:HG22 | 2.09 | 0.53 |
| 1:H:217:GLU:HG3 | 1:I:146:SER:CA | 2.37 | 0.53 |
| 1:H:651:PRO:HG3 | 1:H:675:ARG:NE | 2.23 | 0.53 |
| 1:H:841:SER:HB3 | 1:H:867:LEU:O | 2.09 | 0.53 |
| 1:H:848:ALA:HB1 | 1:H:878:LYS:HB2 | 1.91 | 0.53 |
| 1:H:880:LYS:O | 1:H:910:THR:HB | 2.09 | 0.53 |
| 1:I:836:SER:N | 1:I:864:GLU:HB2 | 2.24 | 0.53 |
| 1:J:919:LEU:HD21 | 1:J:924:LEU:HD21 | 1.90 | 0.53 |
| 2:Q:226:LEU:C | 2:Q:226:LEU:HD23 | 2.30 | 0.53 |
| 1:A:142:LYS:CA | 1:A:145:ARG:HH21 | 2.19 | 0.53 |
| 1:A:151:ILE:HG22 | 1:A:162:VAL:O | 2.09 | 0.53 |
| 1:A:651:PRO:HG3 | 1:A:675:ARG:NE | 2.23 | 0.53 |
| 1:B:173:LEU:O | 1:B:203:ILE:HG22 | 2.09 | 0.53 |
| 1:B:370:ILE:O | 1:B:371:LEU:HD23 | 2.08 | 0.53 |
| 1:B:535:LEU:HD23 | 1:B:536:LEU:N | 2.24 | 0.53 |
| 1:B:872:VAL:CG1 | 1:B:900:CYS:HB2 | 2.38 | 0.53 |
| 1:C:320:THR:O | 1:C:320:THR:HG22 | 2.09 | 0.53 |
| 1:C:447:LEU:O | 1:C:447:LEU:HD12 | 2.09 | 0.53 |
| 1:C:490:ARG:NH2 | 1:C:495:GLN:HB3 | 2.24 | 0.53 |
| 1:C:951:CYS:HB3 | 1:C:953:LEU:CD2 | 2.38 | 0.53 |
| 1:D:305:ASP:OD1 | 1:D:305:ASP:N | 2.41 | 0.53 |
| 1:D:370:ILE:O | 1:D:371:LEU:HD23 | 2.08 | 0.53 |
| 1:D:490:ARG:NH2 | 1:D:495:GLN:HB3 | 2.24 | 0.53 |
| 1:D:841:SER:HB3 | 1:D:867:LEU:O | 2.09 | 0.53 |
| 1:E:379:LYS:HG3 | 1:E:396:PHE:CZ | 2.43 | 0.53 |
| 1:E:651:PRO:HG3 | 1:E:675:ARG:NE | 2.23 | 0.53 |
| 1:F:184:GLU:OE1 | 1:F:185:GLN:N | 2.42 | 0.53 |
| 1:F:581:PHE:HA | 1:F:584:VAL:HG22 | 1.91 | 0.53 |
| 1:F:936:LEU:HA | 1:F:941:CYS:SG | 2.49 | 0.53 |
| 1:G:607:GLU:OE1 | 1:G:610:LYS:HD3 | 2.09 | 0.53 |
| 1:G:1001:GLN:HG3 | 1:G:1002:ASN:ND2 | 2.24 | 0.53 |
| 1:H:320:THR:O | 1:H:320:THR:HG22 | 2.09 | 0.53 |
| 1:H:447:LEU:O | 1:H:447:LEU:HD12 | 2.09 | 0.53 |
| 1:H:467:TRP:HD1 | 1:H:536:LEU:HD23 | 1.73 | 0.53 |
| 1:I:320:THR:O | 1:I:320:THR:HG22 | 2.09 | 0.53 |
| 1:I:489:LEU:HD21 | 1:I:494:LEU:HB3 | 1.89 | 0.53 |
| 1:J:234:ILE:HG21 | 3:J:1101:AGS:C5 | 2.38 | 0.53 |
| 1:J:306:GLU:HB2 | 1:J:307:LEU:HD12 | 1.90 | 0.53 |
| 1:J:320:THR:HG22 | 1:J:320:THR:O | 2.09 | 0.53 |
| 1:J:624:GLN:N | 1:J:625:PRO:HD2 | 2.22 | 0.53 |
| 1:J:880:LYS:O | 1:J:910:THR:HB | 2.09 | 0.53 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 2:L:226:LEU:HD23 | 2:L:226:LEU:C | 2.29 | 0.53 |
| 2:N:226:LEU:C | 2:N:226:LEU:HD23 | 2.29 | 0.53 |
| 2:S:168:PHE:O | 2:S:176:LYS:N | 2.39 | 0.53 |
| 1:A:172:ARG:HD3 | 1:A:374:SER:HB3 | 1.89 | 0.53 |
| 1:B:299:PHE:CB | 1:B:346:LEU:HD12 | 2.39 | 0.53 |
| 1:B:651:PRO:HG3 | 1:B:675:ARG:NE | 2.23 | 0.53 |
| 1:B:937:LEU:CD2 | 1:B:964:LEU:HD12 | 2.39 | 0.53 |
| 1:C:184:GLU:OE1 | 1:C:185:GLN:N | 2.42 | 0.53 |
| 1:C:370:ILE:O | 1:C:371:LEU:HD23 | 2.08 | 0.53 |
| 1:C:451:LEU:HG | 1:C:451:LEU:O | 2.09 | 0.53 |
| 1:D:217:GLU:HG3 | 1:E:146:SER:CA | 2.37 | 0.53 |
| 1:D:320:THR:O | 1:D:320:THR:HG22 | 2.09 | 0.53 |
| 1:D:379:LYS:HG3 | 1:D:396:PHE:CZ | 2.43 | 0.53 |
| 1:D:880:LYS:O | 1:D:910:THR:HB | 2.09 | 0.53 |
| 1:D:919:LEU:HD21 | 1:D:924:LEU:HD21 | 1.90 | 0.53 |
| 1:D:937:LEU:CD2 | 1:D:964:LEU:HD12 | 2.39 | 0.53 |
| 1:E:184:GLU:OE1 | 1:E:185:GLN:N | 2.42 | 0.53 |
| 1:E:369:GLU:OE2 | 1:E:504:ARG:NH2 | 2.37 | 0.53 |
| 1:E:478:TRP:CH2 | 1:E:564:ASN:ND2 | 2.76 | 0.53 |
| 1:E:880:LYS:O | 1:E:910:THR:HB | 2.09 | 0.53 |
| 1:E:884:CYS:HB3 | 1:E:911:ASN:HD22 | 1.72 | 0.53 |
| 1:G:184:GLU:OE1 | 1:G:185:GLN:N | 2.42 | 0.53 |
| 1:G:379:LYS:HG3 | 1:G:396:PHE:CZ | 2.44 | 0.53 |
| 1:H:353:VAL:HG21 | 1:H:499:VAL:HA | 1.91 | 0.53 |
| 1:H:490:ARG:NH2 | 1:H:495:GLN:HB3 | 2.24 | 0.53 |
| 1:H:936:LEU:HA | 1:H:941:CYS:SG | 2.49 | 0.53 |
| 1:H:1001:GLN:HG3 | 1:H:1002:ASN:ND2 | 2.24 | 0.53 |
| 1:I:173:LEU:O | 1:I:203:ILE:HG22 | 2.09 | 0.53 |
| 1:I:490:ARG:NH2 | 1:I:495:GLN:HB3 | 2.24 | 0.53 |
| 1:I:535:LEU:HD23 | 1:I:536:LEU:N | 2.24 | 0.53 |
| 1:J:490:ARG:NH2 | 1:J:495:GLN:HB3 | 2.24 | 0.53 |
| 1:J:651:PRO:HG3 | 1:J:675:ARG:NE | 2.23 | 0.53 |
| 1:J:841:SER:HB3 | 1:J:867:LEU:O | 2.09 | 0.53 |
| 2:R:226:LEU:HD23 | 2:R:226:LEU:C | 2.30 | 0.53 |
| 1:A:379:LYS:HG3 | 1:A:396:PHE:CZ | 2.44 | 0.52 |
| 1:A:451:LEU:HG | 1:A:451:LEU:O | 2.09 | 0.52 |
| 1:B:151:ILE:HG22 | 1:B:162:VAL:O | 2.09 | 0.52 |
| 1:B:471:SER:CB | 1:B:553:LEU:HD12 | 2.20 | 0.52 |
| 1:B:787:CYS:SG | 1:B:810:LEU:HD22 | 2.49 | 0.52 |
| 1:C:151:ILE:HG22 | 1:C:162:VAL:O | 2.09 | 0.52 |
| 1:C:657:LEU:HG | 1:C:662:ASP:CG | 2.29 | 0.52 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:C:841:SER:HB3 | 1:C:867:LEU:O | 2.09 | 0.52 |
| 1:D:492:HIS:ND1 | 1:D:553:LEU:HD11 | 2.20 | 0.52 |
| 1:D:535:LEU:HD23 | 1:D:536:LEU:N | 2.24 | 0.52 |
| 1:D:936:LEU:HA | 1:D:941:CYS:SG | 2.49 | 0.52 |
| 1:E:151:ILE:HG22 | 1:E:162:VAL:O | 2.09 | 0.52 |
| 1:E:271:SER:HA | 1:E:326:GLU:CG | 2.39 | 0.52 |
| 1:E:447:LEU:O | 1:E:447:LEU:HD12 | 2.09 | 0.52 |
| 1:E:581:PHE:HA | 1:E:584:VAL:CG2 | 2.39 | 0.52 |
| 1:E:581:PHE:HA | 1:E:584:VAL:HG22 | 1.91 | 0.52 |
| 1:E:937:LEU:CD2 | 1:E:964:LEU:HD12 | 2.39 | 0.52 |
| 1:F:151:ILE:HG22 | 1:F:162:VAL:O | 2.09 | 0.52 |
| 1:F:299:PHE:CB | 1:F:346:LEU:HD12 | 2.39 | 0.52 |
| 1:F:500:SER:HA | 1:F:503:LEU:O | 2.09 | 0.52 |
| 1:F:622:GLN:NE2 | 1:F:627:GLN:OE1 | 2.42 | 0.52 |
| 1:F:815:ILE:CG2 | 1:F:843:CYS:HB2 | 2.39 | 0.52 |
| 1:F:841:SER:HB3 | 1:F:867:LEU:O | 2.09 | 0.52 |
| 1:G:305:ASP:OD1 | 1:G:305:ASP:N | 2.41 | 0.52 |
| 1:G:306:GLU:HB2 | 1:G:307:LEU:HD12 | 1.90 | 0.52 |
| 1:G:362:LEU:CD1 | 1:G:365:PRO:HG3 | 2.36 | 0.52 |
| 1:G:815:ILE:CG2 | 1:G:843:CYS:HB2 | 2.39 | 0.52 |
| 1:H:362:LEU:CD1 | 1:H:365:PRO:HG3 | 2.36 | 0.52 |
| 1:H:951:CYS:HB3 | 1:H:953:LEU:CD2 | 2.38 | 0.52 |
| 1:I:248:LEU:HG | 1:I:249:TYR:CD2 | 2.45 | 0.52 |
| 1:I:305:ASP:OD1 | 1:I:305:ASP:N | 2.41 | 0.52 |
| 1:I:657:LEU:HG | 1:I:662:ASP:CG | 2.28 | 0.52 |
| 1:J:151:ILE:HG22 | 1:J:162:VAL:O | 2.09 | 0.52 |
| 1:J:379:LYS:HG3 | 1:J:396:PHE:CZ | 2.44 | 0.52 |
| 1:J:623:ILE:H | 1:J:623:ILE:CD1 | 2.07 | 0.52 |
| 1:J:753:LEU:HG | 1:J:757:GLY:HA3 | 1.90 | 0.52 |
| 2:M:226:LEU:HD23 | 2:M:226:LEU:C | 2.29 | 0.52 |
| 2:O:226:LEU:HD23 | 2:O:226:LEU:C | 2.29 | 0.52 |
| 2:T:273:MET:SD | 2:T:273:MET:N | 2.82 | 0.52 |
| 1:A:271:SER:HA | 1:A:326:GLU:CG | 2.39 | 0.52 |
| 1:B:234:ILE:HG21 | 3:B:1101:AGS:C5 | 2.38 | 0.52 |
| 1:B:342:PRO:HB2 | 1:C:281:PRO:HB3 | 1.91 | 0.52 |
| 1:B:447:LEU:O | 1:B:447:LEU:HD12 | 2.09 | 0.52 |
| 1:B:753:LEU:HG | 1:B:757:GLY:HA3 | 1.90 | 0.52 |
| 1:B:1001:GLN:HG3 | 1:B:1002:ASN:ND2 | 2.24 | 0.52 |
| 1:C:197:GLU:OE1 | 1:C:199:PRO:HD3 | 2.08 | 0.52 |
| 1:C:535:LEU:HD23 | 1:C:536:LEU:N | 2.24 | 0.52 |
| 1:C:815:ILE:CG2 | 1:C:843:CYS:HB2 | 2.39 | 0.52 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:D:151:ILE:HG22 | 1:D:162:VAL:O | 2.09 | 0.52 |
| 1:D:369:GLU:OE2 | 1:D:504:ARG:NH2 | 2.37 | 0.52 |
| 1:D:381:TYR:HD2 | 1:D:415:CYS:HG | 1.54 | 0.52 |
| 1:D:581:PHE:HA | 1:D:584:VAL:HG22 | 1.91 | 0.52 |
| 1:E:248:LEU:HG | 1:E:249:TYR:CD2 | 2.45 | 0.52 |
| 1:E:320:THR:HG22 | 1:E:320:THR:O | 2.09 | 0.52 |
| 1:E:451:LEU:O | 1:E:451:LEU:HG | 2.09 | 0.52 |
| 1:E:937:LEU:HD21 | 1:E:964:LEU:HA | 1.90 | 0.52 |
| 1:E:992:VAL:HA | 1:E:995:GLN:NE2 | 2.25 | 0.52 |
| 1:F:271:SER:HA | 1:F:326:GLU:CG | 2.39 | 0.52 |
| 1:F:637:MET:HG2 | 1:F:642:PHE:HD2 | 1.70 | 0.52 |
| 1:G:248:LEU:HG | 1:G:249:TYR:CD2 | 2.44 | 0.52 |
| 1:G:593:GLU:CG | 1:G:599:LYS:HA | 2.40 | 0.52 |
| 1:H:306:GLU:HB2 | 1:H:307:LEU:HD12 | 1.90 | 0.52 |
| 1:H:581:PHE:HA | 1:H:584:VAL:CG2 | 2.39 | 0.52 |
| 1:H:753:LEU:HG | 1:H:757:GLY:HA3 | 1.90 | 0.52 |
| 1:H:937:LEU:HD21 | 1:H:964:LEU:HA | 1.90 | 0.52 |
| 1:I:623:ILE:HD13 | 1:I:625:PRO:HD2 | 1.90 | 0.52 |
| 1:I:862:VAL:HG23 | 1:I:867:LEU:HD11 | 1.92 | 0.52 |
| 1:I:1001:GLN:HG3 | 1:I:1002:ASN:ND2 | 2.24 | 0.52 |
| 1:J:271:SER:HA | 1:J:326:GLU:CG | 2.39 | 0.52 |
| 1:J:447:LEU:O | 1:J:447:LEU:HD12 | 2.09 | 0.52 |
| 1:J:581:PHE:HA | 1:J:584:VAL:CG2 | 2.39 | 0.52 |
| 1:J:787:CYS:SG | 1:J:810:LEU:HD22 | 2.49 | 0.52 |
| 1:A:305:ASP:OD1 | 1:A:305:ASP:N | 2.41 | 0.52 |
| 1:A:565:TYR:O | 1:A:565:TYR:CG | 2.61 | 0.52 |
| 1:B:581:PHE:HE1 | 1:B:608:LEU:CB | 2.22 | 0.52 |
| 1:C:880:LYS:O | 1:C:910:THR:HB | 2.09 | 0.52 |
| 1:C:937:LEU:HD21 | 1:C:964:LEU:HA | 1.90 | 0.52 |
| 1:D:271:SER:HA | 1:D:326:GLU:CG | 2.39 | 0.52 |
| 1:D:864:GLU:N | 1:D:892:VAL:O | 2.35 | 0.52 |
| 1:E:173:LEU:O | 1:E:203:ILE:HG22 | 2.09 | 0.52 |
| 1:E:176:GLU:OE2 | 1:E:178:ARG:N | 2.42 | 0.52 |
| 1:E:299:PHE:CB | 1:E:346:LEU:HD12 | 2.39 | 0.52 |
| 1:E:581:PHE:CE2 | 1:E:633:CYS:HB3 | 2.44 | 0.52 |
| 1:F:248:LEU:HG | 1:F:249:TYR:CD2 | 2.45 | 0.52 |
| 1:F:451:LEU:HG | 1:F:451:LEU:O | 2.09 | 0.52 |
| 1:F:490:ARG:NH2 | 1:F:495:GLN:HB3 | 2.24 | 0.52 |
| 1:F:581:PHE:HA | 1:F:584:VAL:CG2 | 2.39 | 0.52 |
| 1:F:880:LYS:O | 1:F:910:THR:HB | 2.09 | 0.52 |
| 1:G:151:ILE:HG22 | 1:G:162:VAL:O | 2.09 | 0.52 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:H:151:ILE:HG22 | 1:H:162:VAL:O | 2.09 | 0.52 |
| 1:H:581:PHE:CE2 | 1:H:633:CYS:HB3 | 2.44 | 0.52 |
| 1:H:593:GLU:CG | 1:H:599:LYS:HA | 2.40 | 0.52 |
| 1:H:607:GLU:OE1 | 1:H:610:LYS:HD3 | 2.09 | 0.52 |
| 1:H:985:GLY:O | 1:H:988:MET:HG2 | 2.08 | 0.52 |
| 1:I:234:ILE:HG21 | 3:I:1101:AGS:C5 | 2.38 | 0.52 |
| 1:I:271:SER:HA | 1:I:326:GLU:CG | 2.39 | 0.52 |
| 1:I:342:PRO:HB2 | 1:J:281:PRO:HB3 | 1.92 | 0.52 |
| 1:I:489:LEU:HD13 | 1:I:518:TYR:CE2 | 2.45 | 0.52 |
| 1:I:586:GLN:C | 1:I:589:THR:HG22 | 2.30 | 0.52 |
| 1:J:467:TRP:HD1 | 1:J:536:LEU:HD23 | 1.73 | 0.52 |
| 1:J:876:CYS:O | 1:J:880:LYS:HG3 | 2.08 | 0.52 |
| 2:K:226:LEU:HD23 | 2:K:226:LEU:C | 2.29 | 0.52 |
| 2:S:226:LEU:HD23 | 2:S:226:LEU:C | 2.30 | 0.52 |
| 1:A:248:LEU:HG | 1:A:249:TYR:CD2 | 2.45 | 0.52 |
| 1:A:281:PRO:HB3 | 1:J:342:PRO:HB2 | 1.92 | 0.52 |
| 1:A:299:PHE:CB | 1:A:346:LEU:HD12 | 2.39 | 0.52 |
| 1:A:919:LEU:HD21 | 1:A:924:LEU:HD21 | 1.90 | 0.52 |
| 1:B:136:TYR:OH | 1:B:285:PRO:HB3 | 2.10 | 0.52 |
| 1:B:381:TYR:HD2 | 1:B:415:CYS:HG | 1.57 | 0.52 |
| 1:B:581:PHE:HA | 1:B:584:VAL:CG2 | 2.39 | 0.52 |
| 1:B:815:ILE:CG2 | 1:B:843:CYS:HB2 | 2.39 | 0.52 |
| 1:B:836:SER:N | 1:B:864:GLU:HB2 | 2.24 | 0.52 |
| 1:C:369:GLU:OE2 | 1:C:504:ARG:NH2 | 2.37 | 0.52 |
| 1:C:581:PHE:HA | 1:C:584:VAL:CG2 | 2.39 | 0.52 |
| 1:D:248:LEU:HG | 1:D:249:TYR:CD2 | 2.44 | 0.52 |
| 1:D:607:GLU:OE1 | 1:D:610:LYS:HD3 | 2.09 | 0.52 |
| 1:D:876:CYS:O | 1:D:880:LYS:HG3 | 2.08 | 0.52 |
| 1:E:194:LYS:HG3 | 1:E:194:LYS:O | 2.10 | 0.52 |
| 1:E:489:LEU:HD13 | 1:E:518:TYR:CE2 | 2.45 | 0.52 |
| 1:E:490:ARG:NH2 | 1:E:495:GLN:HB3 | 2.24 | 0.52 |
| 1:E:787:CYS:SG | 1:E:810:LEU:HD22 | 2.49 | 0.52 |
| 1:F:173:LEU:O | 1:F:203:ILE:HG22 | 2.09 | 0.52 |
| 1:F:220:HIS:O | 1:F:221:THR:OG1 | 2.21 | 0.52 |
| 1:G:173:LEU:O | 1:G:203:ILE:HG22 | 2.09 | 0.52 |
| 1:G:296:ARG:HG3 | 1:G:296:ARG:NH1 | 2.21 | 0.52 |
| 1:G:489:LEU:HD13 | 1:G:518:TYR:CE2 | 2.45 | 0.52 |
| 1:G:535:LEU:HD23 | 1:G:536:LEU:N | 2.24 | 0.52 |
| 1:G:919:LEU:HD21 | 1:G:924:LEU:HD21 | 1.90 | 0.52 |
| 1:G:937:LEU:CD2 | 1:G:964:LEU:HD12 | 2.39 | 0.52 |
| 1:H:194:LYS:HG3 | 1:H:194:LYS:O | 2.10 | 0.52 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:H:342:PRO:HB2 | 1:I:281:PRO:HB3 | 1.92 | 0.52 |
| 1:I:581:PHE:HA | 1:I:584:VAL:HG22 | 1.91 | 0.52 |
| 1:I:593:GLU:CG | 1:I:599:LYS:HA | 2.40 | 0.52 |
| 1:I:848:ALA:HB1 | 1:I:878:LYS:HG3 | 1.91 | 0.52 |
| 1:I:943:LEU:HD21 | 1:I:945:VAL:O | 2.10 | 0.52 |
| 1:J:451:LEU:O | 1:J:451:LEU:HG | 2.09 | 0.52 |
| 2:S:273:MET:SD | 2:S:273:MET:N | 2.82 | 0.52 |
| 1:A:173:LEU:O | 1:A:203:ILE:HG22 | 2.09 | 0.52 |
| 1:A:184:GLU:OE1 | 1:A:185:GLN:N | 2.42 | 0.52 |
| 1:A:586:GLN:C | 1:A:589:THR:HG22 | 2.30 | 0.52 |
| 1:A:992:VAL:HA | 1:A:995:GLN:NE2 | 2.25 | 0.52 |
| 1:B:862:VAL:HG23 | 1:B:867:LEU:HD11 | 1.92 | 0.52 |
| 1:C:248:LEU:HG | 1:C:249:TYR:CD2 | 2.45 | 0.52 |
| 1:C:299:PHE:CB | 1:C:346:LEU:HD12 | 2.39 | 0.52 |
| 1:C:607:GLU:OE1 | 1:C:610:LYS:HD3 | 2.09 | 0.52 |
| 1:C:852:SER:CB | 1:C:878:LYS:HD2 | 2.35 | 0.52 |
| 1:C:943:LEU:HD21 | 1:C:945:VAL:O | 2.10 | 0.52 |
| 1:C:992:VAL:HA | 1:C:995:GLN:NE2 | 2.25 | 0.52 |
| 1:D:581:PHE:HE1 | 1:D:608:LEU:CB | 2.23 | 0.52 |
| 1:D:661:MET:O | 1:D:665:VAL:HG12 | 2.08 | 0.52 |
| 1:D:905:SER:OG | 1:D:935:GLY:HA3 | 2.10 | 0.52 |
| 1:F:306:GLU:HB2 | 1:F:307:LEU:HD12 | 1.90 | 0.52 |
| 1:F:489:LEU:HD13 | 1:F:518:TYR:CE2 | 2.45 | 0.52 |
| 1:F:492:HIS:ND1 | 1:F:553:LEU:HD11 | 2.20 | 0.52 |
| 1:F:593:GLU:CG | 1:F:599:LYS:HA | 2.40 | 0.52 |
| 1:F:607:GLU:OE1 | 1:F:610:LYS:HD3 | 2.09 | 0.52 |
| 1:F:787:CYS:SG | 1:F:810:LEU:HD22 | 2.49 | 0.52 |
| 1:F:919:LEU:HD21 | 1:F:924:LEU:HD21 | 1.90 | 0.52 |
| 1:G:271:SER:HA | 1:G:326:GLU:CG | 2.39 | 0.52 |
| 1:G:320:THR:HG22 | 1:G:320:THR:O | 2.09 | 0.52 |
| 1:G:905:SER:OG | 1:G:935:GLY:HA3 | 2.10 | 0.52 |
| 1:H:862:VAL:HG23 | 1:H:867:LEU:HD11 | 1.92 | 0.52 |
| 1:H:992:VAL:HA | 1:H:995:GLN:NE2 | 2.25 | 0.52 |
| 1:I:151:ILE:HG22 | 1:I:162:VAL:O | 2.09 | 0.52 |
| 1:I:306:GLU:HB2 | 1:I:307:LEU:HD12 | 1.90 | 0.52 |
| 1:I:500:SER:OG | 1:I:503:LEU:O | 2.28 | 0.52 |
| 1:I:552:LYS:CE | 1:I:552:LYS:N | 2.73 | 0.52 |
| 1:I:581:PHE:CE2 | 1:I:633:CYS:HB3 | 2.44 | 0.52 |
| 1:I:852:SER:CB | 1:I:878:LYS:HD2 | 2.35 | 0.52 |
| 1:J:248:LEU:HG | 1:J:249:TYR:CD2 | 2.45 | 0.52 |
| 1:A:447:LEU:O | 1:A:447:LEU:HD12 | 2.09 | 0.52 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:A:593:GLU:CG | 1:A:599:LYS:HA | 2.40 | 0.52 |
| 1:A:657:LEU:HG | 1:A:662:ASP:CG | 2.29 | 0.52 |
| 1:A:905:SER:OG | 1:A:935:GLY:HA3 | 2.10 | 0.52 |
| 1:A:936:LEU:HA | 1:A:941:CYS:SG | 2.49 | 0.52 |
| 1:B:593:GLU:CG | 1:B:599:LYS:HA | 2.40 | 0.52 |
| 1:B:623:ILE:HD13 | 1:B:625:PRO:HD2 | 1.91 | 0.52 |
| 1:B:943:LEU:HD21 | 1:B:945:VAL:O | 2.10 | 0.52 |
| 1:C:581:PHE:HA | 1:C:584:VAL:HG22 | 1.91 | 0.52 |
| 1:C:622:GLN:NE2 | 1:C:627:GLN:OE1 | 2.43 | 0.52 |
| 1:C:637:MET:HE3 | 1:C:639:GLU:HB2 | 1.92 | 0.52 |
| 1:C:787:CYS:SG | 1:C:810:LEU:HD22 | 2.49 | 0.52 |
| 1:D:217:GLU:CB | 1:E:149:GLN:OE1 | 2.57 | 0.52 |
| 1:D:786:CYS:O | 1:D:790:ILE:HG13 | 2.10 | 0.52 |
| 1:E:535:LEU:HD23 | 1:E:536:LEU:N | 2.24 | 0.52 |
| 1:E:607:GLU:OE1 | 1:E:610:LYS:HD3 | 2.09 | 0.52 |
| 1:F:197:GLU:OE1 | 1:F:199:PRO:HD3 | 2.08 | 0.52 |
| 1:F:240:MET:HE3 | 1:F:258:TYR:HB2 | 1.89 | 0.52 |
| 1:F:342:PRO:HB2 | 1:G:281:PRO:HB3 | 1.92 | 0.52 |
| 1:F:353:VAL:HG21 | 1:F:499:VAL:HA | 1.91 | 0.52 |
| 1:F:581:PHE:HE1 | 1:F:608:LEU:CB | 2.23 | 0.52 |
| 1:G:362:LEU:HD12 | 1:G:365:PRO:CB | 2.40 | 0.52 |
| 1:G:880:LYS:O | 1:G:910:THR:HB | 2.09 | 0.52 |
| 1:H:176:GLU:OE2 | 1:H:178:ARG:N | 2.42 | 0.52 |
| 1:H:451:LEU:O | 1:H:451:LEU:HG | 2.09 | 0.52 |
| 1:H:836:SER:N | 1:H:864:GLU:HB2 | 2.24 | 0.52 |
| 1:H:848:ALA:HB1 | 1:H:878:LYS:HG3 | 1.91 | 0.52 |
| 1:I:880:LYS:O | 1:I:910:THR:HB | 2.09 | 0.52 |
| 1:I:951:CYS:HB3 | 1:I:953:LEU:CD2 | 2.38 | 0.52 |
| 1:J:552:LYS:CE | 1:J:552:LYS:N | 2.73 | 0.52 |
| 1:J:593:GLU:CG | 1:J:599:LYS:HA | 2.40 | 0.52 |
| 1:J:607:GLU:OE1 | 1:J:610:LYS:HD3 | 2.09 | 0.52 |
| 2:N:273:MET:SD | 2:N:273:MET:N | 2.82 | 0.52 |
| 2:O:168:PHE:O | 2:O:176:LYS:N | 2.39 | 0.52 |
| 2:O:242:ASN:OD1 | 2:O:245:SER:OG | 2.21 | 0.52 |
| 1:A:234:ILE:HG21 | 3:A:1101:AGS:C5 | 2.38 | 0.52 |
| 1:A:535:LEU:HD23 | 1:A:536:LEU:N | 2.24 | 0.52 |
| 1:A:552:LYS:CE | 1:A:552:LYS:N | 2.73 | 0.52 |
| 1:A:607:GLU:OE1 | 1:A:610:LYS:HD3 | 2.09 | 0.52 |
| 1:A:862:VAL:HG23 | 1:A:867:LEU:HD11 | 1.92 | 0.52 |
| 1:A:1001:GLN:HG3 | 1:A:1002:ASN:ND2 | 2.24 | 0.52 |
| 1:C:271:SER:HA | 1:C:326:GLU:CG | 2.39 | 0.52 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:C:586:GLN:C | 1:C:589:THR:HG22 | 2.30 | 0.52 |
| 1:C:786:CYS:O | 1:C:790:ILE:HG13 | 2.10 | 0.52 |
| 1:C:937:LEU:CD2 | 1:C:964:LEU:HD12 | 2.39 | 0.52 |
| 1:D:451:LEU:HG | 1:D:451:LEU:O | 2.09 | 0.52 |
| 1:D:655:ILE:HD12 | 1:D:656:ASN:N | 2.21 | 0.52 |
| 1:E:306:GLU:HB2 | 1:E:307:LEU:HD12 | 1.90 | 0.52 |
| 1:E:586:GLN:C | 1:E:589:THR:HG22 | 2.30 | 0.52 |
| 1:F:848:ALA:HB1 | 1:F:878:LYS:HG3 | 1.91 | 0.52 |
| 1:G:299:PHE:CB | 1:G:346:LEU:HD12 | 2.39 | 0.52 |
| 1:G:342:PRO:HB2 | 1:H:281:PRO:HB3 | 1.92 | 0.52 |
| 1:G:490:ARG:NH2 | 1:G:495:GLN:HB3 | 2.24 | 0.52 |
| 1:G:581:PHE:HA | 1:G:584:VAL:HG22 | 1.91 | 0.52 |
| 1:G:848:ALA:HB1 | 1:G:878:LYS:HG3 | 1.91 | 0.52 |
| 1:G:1004:GLY:HA2 | 1:G:1031:VAL:HG13 | 1.92 | 0.52 |
| 1:H:136:TYR:OH | 1:H:285:PRO:HB3 | 2.10 | 0.52 |
| 1:H:271:SER:HA | 1:H:326:GLU:CG | 2.39 | 0.52 |
| 1:H:552:LYS:CE | 1:H:552:LYS:N | 2.73 | 0.52 |
| 1:H:815:ILE:CG2 | 1:H:843:CYS:HB2 | 2.39 | 0.52 |
| 1:H:919:LEU:HD21 | 1:H:924:LEU:HD21 | 1.90 | 0.52 |
| 1:I:753:LEU:HG | 1:I:757:GLY:HA3 | 1.90 | 0.52 |
| 1:I:841:SER:HB3 | 1:I:867:LEU:O | 2.09 | 0.52 |
| 1:I:905:SER:OG | 1:I:935:GLY:HA3 | 2.10 | 0.52 |
| 1:J:581:PHE:CE2 | 1:J:633:CYS:HB3 | 2.44 | 0.52 |
| 1:J:862:VAL:HG23 | 1:J:867:LEU:HD11 | 1.92 | 0.52 |
| 2:P:226:LEU:HD23 | 2:P:226:LEU:C | 2.29 | 0.52 |
| 1:A:136:TYR:OH | 1:A:285:PRO:HB3 | 2.10 | 0.52 |
| 1:B:217:GLU:CB | 1:C:149:GLN:OE1 | 2.58 | 0.52 |
| 1:B:581:PHE:CE2 | 1:B:633:CYS:HB3 | 2.44 | 0.52 |
| 1:B:655:ILE:HD12 | 1:B:656:ASN:N | 2.21 | 0.52 |
| 1:B:1018:LEU:HB3 | 1:B:1032:PHE:CE1 | 2.45 | 0.52 |
| 1:C:381:TYR:HD2 | 1:C:415:CYS:HG | 1.58 | 0.52 |
| 1:C:555:SER:C | 1:C:557:ASP:H | 2.12 | 0.52 |
| 1:D:489:LEU:HD13 | 1:D:518:TYR:CE2 | 2.45 | 0.52 |
| 1:D:581:PHE:HA | 1:D:584:VAL:CG2 | 2.39 | 0.52 |
| 1:D:1018:LEU:HB3 | 1:D:1032:PHE:CE1 | 2.45 | 0.52 |
| 1:E:786:CYS:O | 1:E:790:ILE:HG13 | 2.10 | 0.52 |
| 1:E:815:ILE:CG2 | 1:E:843:CYS:HB2 | 2.39 | 0.52 |
| 1:E:836:SER:N | 1:E:864:GLU:HB2 | 2.24 | 0.52 |
| 1:F:447:LEU:O | 1:F:447:LEU:HD12 | 2.09 | 0.52 |
| 1:F:585:ASN:HA | 1:F:637:MET:HE3 | 1.91 | 0.52 |
| 1:F:836:SER:N | 1:F:864:GLU:HB2 | 2.24 | 0.52 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:F:992:VAL:HA | 1:F:995:GLN:NE2 | 2.25 | 0.52 |
| 1:G:586:GLN:C | 1:G:589:THR:HG22 | 2.30 | 0.52 |
| 1:H:507:LEU:HD12 | 1:I:157:ARG:HG2 | 1.90 | 0.52 |
| 1:I:451:LEU:HG | 1:I:451:LEU:O | 2.09 | 0.52 |
| 1:I:581:PHE:HE1 | 1:I:608:LEU:CB | 2.23 | 0.52 |
| 1:I:992:VAL:HA | 1:I:995:GLN:NE2 | 2.25 | 0.52 |
| 1:J:173:LEU:O | 1:J:203:ILE:HG22 | 2.09 | 0.52 |
| 1:J:292:ARG:HH21 | 1:J:293:LYS:HE2 | 1.75 | 0.52 |
| 1:J:489:LEU:HD13 | 1:J:518:TYR:CE2 | 2.45 | 0.52 |
| 1:J:815:ILE:CG2 | 1:J:843:CYS:HB2 | 2.39 | 0.52 |
| 1:J:992:VAL:HA | 1:J:995:GLN:NE2 | 2.25 | 0.52 |
| 2:K:273:MET:SD | 2:K:273:MET:N | 2.82 | 0.52 |
| 2:M:273:MET:SD | 2:M:273:MET:N | 2.82 | 0.52 |
| 2:O:273:MET:SD | 2:O:273:MET:N | 2.82 | 0.52 |
| 1:B:905:SER:OG | 1:B:935:GLY:HA3 | 2.10 | 0.52 |
| 1:C:581:PHE:HE1 | 1:C:608:LEU:CB | 2.22 | 0.52 |
| 1:C:664:MET:N | 1:C:664:MET:SD | 2.83 | 0.52 |
| 1:C:862:VAL:HG23 | 1:C:867:LEU:HD11 | 1.92 | 0.52 |
| 1:C:1001:GLN:HG3 | 1:C:1002:ASN:ND2 | 2.24 | 0.52 |
| 1:D:815:ILE:CG2 | 1:D:843:CYS:HB2 | 2.39 | 0.52 |
| 1:D:937:LEU:HD21 | 1:D:964:LEU:HA | 1.90 | 0.52 |
| 1:D:943:LEU:HD21 | 1:D:945:VAL:O | 2.10 | 0.52 |
| 1:E:220:HIS:O | 1:E:221:THR:OG1 | 2.21 | 0.52 |
| 1:F:362:LEU:HD12 | 1:F:365:PRO:CB | 2.40 | 0.52 |
| 1:G:194:LYS:HG3 | 1:G:194:LYS:O | 2.10 | 0.52 |
| 1:G:500:SER:OG | 1:G:503:LEU:O | 2.28 | 0.52 |
| 1:G:992:VAL:HA | 1:G:995:GLN:NE2 | 2.25 | 0.52 |
| 1:H:581:PHE:HA | 1:H:584:VAL:HG22 | 1.91 | 0.52 |
| 1:H:1004:GLY:HA2 | 1:H:1031:VAL:HG13 | 1.92 | 0.52 |
| 1:I:581:PHE:HA | 1:I:584:VAL:CG2 | 2.39 | 0.52 |
| 1:I:937:LEU:CD2 | 1:I:964:LEU:HD12 | 2.39 | 0.52 |
| 1:J:848:ALA:HB1 | 1:J:878:LYS:HG3 | 1.91 | 0.52 |
| 1:J:943:LEU:HD21 | 1:J:945:VAL:O | 2.10 | 0.52 |
| 2:Q:273:MET:SD | 2:Q:273:MET:N | 2.82 | 0.52 |
| 1:A:489:LEU:HD13 | 1:A:518:TYR:CE2 | 2.45 | 0.52 |
| 1:A:581:PHE:HA | 1:A:584:VAL:CG2 | 2.39 | 0.52 |
| 1:A:1018:LEU:HB3 | 1:A:1032:PHE:CE1 | 2.45 | 0.52 |
| 1:B:248:LEU:HG | 1:B:249:TYR:CD2 | 2.44 | 0.52 |
| 1:B:607:GLU:OE1 | 1:B:610:LYS:HD3 | 2.09 | 0.52 |
| 1:C:217:GLU:CB | 1:D:149:GLN:OE1 | 2.58 | 0.52 |
| 1:C:489:LEU:HD13 | 1:C:518:TYR:CE2 | 2.45 | 0.52 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:C:593:GLU:CG | 1:C:599:LYS:HA | 2.40 | 0.52 |
| 1:C:905:SER:OG | 1:C:935:GLY:HA3 | 2.10 | 0.52 |
| 1:C:1018:LEU:HB3 | 1:C:1032:PHE:CE1 | 2.45 | 0.52 |
| 1:D:173:LEU:O | 1:D:203:ILE:HG22 | 2.09 | 0.52 |
| 1:D:787:CYS:SG | 1:D:810:LEU:HD22 | 2.49 | 0.52 |
| 1:E:581:PHE:HE1 | 1:E:608:LEU:CB | 2.23 | 0.52 |
| 1:E:905:SER:OG | 1:E:935:GLY:HA3 | 2.10 | 0.52 |
| 1:E:943:LEU:HD21 | 1:E:945:VAL:O | 2.10 | 0.52 |
| 1:F:943:LEU:HD21 | 1:F:945:VAL:O | 2.10 | 0.52 |
| 1:G:447:LEU:O | 1:G:447:LEU:HD12 | 2.09 | 0.52 |
| 1:H:142:LYS:CA | 1:H:145:ARG:HH21 | 2.19 | 0.52 |
| 1:H:263:GLU:OE2 | 1:H:264:VAL:HG23 | 2.10 | 0.52 |
| 1:H:362:LEU:HD12 | 1:H:365:PRO:CB | 2.40 | 0.52 |
| 1:H:489:LEU:HD13 | 1:H:518:TYR:CE2 | 2.45 | 0.52 |
| 1:H:943:LEU:HD21 | 1:H:945:VAL:O | 2.10 | 0.52 |
| 1:I:936:LEU:HA | 1:I:941:CYS:SG | 2.49 | 0.52 |
| 1:I:937:LEU:HD21 | 1:I:964:LEU:HA | 1.90 | 0.52 |
| 1:J:937:LEU:HD21 | 1:J:964:LEU:HA | 1.90 | 0.52 |
| 1:J:1018:LEU:HB3 | 1:J:1032:PHE:CE1 | 2.45 | 0.52 |
| 2:L:273:MET:SD | 2:L:273:MET:N | 2.82 | 0.52 |
| 2:Q:227:TYR:OH | 2:Q:256:PRO:O | 2.25 | 0.52 |
| 1:A:362:LEU:HD12 | 1:A:365:PRO:CB | 2.40 | 0.51 |
| 1:A:490:ARG:NH2 | 1:A:495:GLN:HB3 | 2.24 | 0.51 |
| 1:A:753:LEU:HG | 1:A:757:GLY:HA3 | 1.90 | 0.51 |
| 1:B:353:VAL:HG21 | 1:B:499:VAL:HA | 1.93 | 0.51 |
| 1:B:581:PHE:HA | 1:B:584:VAL:HG22 | 1.91 | 0.51 |
| 1:B:786:CYS:O | 1:B:790:ILE:HG13 | 2.10 | 0.51 |
| 1:C:915:THR:O | 1:C:944:GLN:N | 2.34 | 0.51 |
| 1:D:194:LYS:HG3 | 1:D:194:LYS:O | 2.10 | 0.51 |
| 1:D:299:PHE:CB | 1:D:346:LEU:HD12 | 2.39 | 0.51 |
| 1:E:622:GLN:NE2 | 1:E:627:GLN:OE1 | 2.43 | 0.51 |
| 1:E:919:LEU:HD21 | 1:E:924:LEU:HD21 | 1.90 | 0.51 |
| 1:F:136:TYR:OH | 1:F:285:PRO:HB3 | 2.10 | 0.51 |
| 1:F:194:LYS:O | 1:F:194:LYS:HG3 | 2.10 | 0.51 |
| 1:G:136:TYR:OH | 1:G:285:PRO:HB3 | 2.10 | 0.51 |
| 1:G:186:GLU:OE1 | 1:G:187:LEU:N | 2.44 | 0.51 |
| 1:G:292:ARG:HH21 | 1:G:293:LYS:HE2 | 1.75 | 0.51 |
| 1:H:248:LEU:HG | 1:H:249:TYR:CD2 | 2.45 | 0.51 |
| 1:H:905:SER:OG | 1:H:935:GLY:HA3 | 2.10 | 0.51 |
| 1:I:447:LEU:O | 1:I:447:LEU:HD12 | 2.09 | 0.51 |
| 1:I:500:SER:HA | 1:I:503:LEU:O | 2.11 | 0.51 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:I:1018:LEU:HB3 | 1:I:1032:PHE:CE1 | 2.45 | 0.51 |
| 1:J:263:GLU:OE2 | 1:J:264:VAL:HG23 | 2.10 | 0.51 |
| 1:J:581:PHE:HE1 | 1:J:608:LEU:CB | 2.23 | 0.51 |
| 1:J:622:GLN:NE2 | 1:J:627:GLN:OE1 | 2.43 | 0.51 |
| 1:J:936:LEU:HA | 1:J:941:CYS:SG | 2.49 | 0.51 |
| 2:N:168:PHE:O | 2:N:176:LYS:N | 2.39 | 0.51 |
| 2:R:273:MET:SD | 2:R:273:MET:N | 2.82 | 0.51 |
| 2:S:227:TYR:OH | 2:S:256:PRO:O | 2.25 | 0.51 |
| 1:A:937:LEU:CD2 | 1:A:964:LEU:HD12 | 2.39 | 0.51 |
| 1:B:628:LEU:HD13 | 1:B:655:ILE:CD1 | 2.41 | 0.51 |
| 1:C:438:THR:HG21 | 1:C:588:ARG:NH2 | 2.26 | 0.51 |
| 1:C:567:LYS:NZ | 1:C:623:ILE:CG1 | 2.72 | 0.51 |
| 1:D:593:GLU:CG | 1:D:599:LYS:HA | 2.40 | 0.51 |
| 1:D:664:MET:SD | 1:D:664:MET:N | 2.83 | 0.51 |
| 1:D:836:SER:N | 1:D:864:GLU:HB2 | 2.24 | 0.51 |
| 1:E:570:LYS:HA | 1:E:572:TYR:CE1 | 2.46 | 0.51 |
| 1:E:585:ASN:HA | 1:E:637:MET:HE3 | 1.91 | 0.51 |
| 1:E:841:SER:HB3 | 1:E:867:LEU:O | 2.09 | 0.51 |
| 1:E:1001:GLN:HG3 | 1:E:1002:ASN:ND2 | 2.24 | 0.51 |
| 1:E:1018:LEU:HB3 | 1:E:1032:PHE:CE1 | 2.45 | 0.51 |
| 1:F:786:CYS:O | 1:F:790:ILE:HG13 | 2.10 | 0.51 |
| 1:F:1004:GLY:HA2 | 1:F:1031:VAL:HG13 | 1.92 | 0.51 |
| 1:G:451:LEU:HG | 1:G:451:LEU:O | 2.09 | 0.51 |
| 1:G:862:VAL:HG23 | 1:G:867:LEU:HD11 | 1.92 | 0.51 |
| 1:I:194:LYS:HG3 | 1:I:194:LYS:O | 2.10 | 0.51 |
| 1:J:844:CYS:HA | 1:J:847:LEU:CD1 | 2.32 | 0.51 |
| 1:J:905:SER:OG | 1:J:935:GLY:HA3 | 2.10 | 0.51 |
| 1:J:1001:GLN:HG3 | 1:J:1002:ASN:ND2 | 2.24 | 0.51 |
| 2:P:273:MET:SD | 2:P:273:MET:N | 2.82 | 0.51 |
| 1:A:628:LEU:HD13 | 1:A:655:ILE:CD1 | 2.41 | 0.51 |
| 1:B:186:GLU:OE1 | 1:B:187:LEU:N | 2.44 | 0.51 |
| 1:B:292:ARG:HH21 | 1:B:293:LYS:HE2 | 1.75 | 0.51 |
| 1:B:490:ARG:NH2 | 1:B:495:GLN:HB3 | 2.24 | 0.51 |
| 1:B:552:LYS:CE | 1:B:552:LYS:N | 2.73 | 0.51 |
| 1:B:664:MET:N | 1:B:664:MET:SD | 2.83 | 0.51 |
| 1:B:894:SER:OG | 1:B:896:LEU:HD21 | 2.11 | 0.51 |
| 1:C:217:GLU:HG3 | 1:D:146:SER:CA | 2.37 | 0.51 |
| 1:C:848:ALA:HB1 | 1:C:878:LYS:HG3 | 1.91 | 0.51 |
| 1:D:136:TYR:OH | 1:D:285:PRO:HB3 | 2.10 | 0.51 |
| 1:D:186:GLU:OE1 | 1:D:187:LEU:N | 2.44 | 0.51 |
| 1:D:379:LYS:HG3 | 1:D:396:PHE:CD1 | 2.46 | 0.51 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:D:552:LYS:CE | 1:D:552:LYS:N | 2.73 | 0.51 |
| 1:D:862:VAL:HG23 | 1:D:867:LEU:HD11 | 1.92 | 0.51 |
| 1:E:136:TYR:OH | 1:E:285:PRO:HB3 | 2.10 | 0.51 |
| 1:F:263:GLU:OE2 | 1:F:264:VAL:HG23 | 2.10 | 0.51 |
| 1:F:570:LYS:HA | 1:F:572:TYR:CE1 | 2.46 | 0.51 |
| 1:F:862:VAL:HG23 | 1:F:867:LEU:HD11 | 1.92 | 0.51 |
| 1:G:500:SER:HA | 1:G:503:LEU:O | 2.10 | 0.51 |
| 1:G:552:LYS:CE | 1:G:552:LYS:N | 2.73 | 0.51 |
| 1:H:581:PHE:HE1 | 1:H:608:LEU:CB | 2.22 | 0.51 |
| 1:H:664:MET:HE1 | 1:H:729:PHE:HD1 | 1.75 | 0.51 |
| 1:I:362:LEU:HD12 | 1:I:365:PRO:CB | 2.40 | 0.51 |
| 1:I:894:SER:OG | 1:I:896:LEU:HD21 | 2.11 | 0.51 |
| 1:J:299:PHE:CB | 1:J:346:LEU:HD12 | 2.39 | 0.51 |
| 1:J:492:HIS:ND1 | 1:J:553:LEU:HD11 | 2.20 | 0.51 |
| 2:L:142:PHE:CE2 | 2:L:226:LEU:HD12 | 2.46 | 0.51 |
| 2:M:142:PHE:CE2 | 2:M:226:LEU:HD12 | 2.46 | 0.51 |
| 2:N:142:PHE:CE2 | 2:N:226:LEU:HD12 | 2.46 | 0.51 |
| 1:A:503:LEU:HD21 | 1:A:520:PHE:CE1 | 2.45 | 0.51 |
| 1:A:880:LYS:O | 1:A:910:THR:HB | 2.09 | 0.51 |
| 1:B:624:GLN:N | 1:B:625:PRO:HD2 | 2.23 | 0.51 |
| 1:C:552:LYS:CE | 1:C:552:LYS:N | 2.73 | 0.51 |
| 1:C:628:LEU:HD13 | 1:C:655:ILE:CD1 | 2.41 | 0.51 |
| 1:C:894:SER:OG | 1:C:896:LEU:HD21 | 2.11 | 0.51 |
| 1:D:570:LYS:HA | 1:D:572:TYR:CE1 | 2.46 | 0.51 |
| 1:D:1001:GLN:HG3 | 1:D:1002:ASN:ND2 | 2.24 | 0.51 |
| 1:E:342:PRO:HB2 | 1:F:281:PRO:HB3 | 1.93 | 0.51 |
| 1:E:362:LEU:HD12 | 1:E:365:PRO:CB | 2.40 | 0.51 |
| 1:E:593:GLU:CG | 1:E:599:LYS:HA | 2.40 | 0.51 |
| 1:E:848:ALA:HB1 | 1:E:878:LYS:HG3 | 1.91 | 0.51 |
| 1:G:393:ARG:CZ | 1:G:393:ARG:HB3 | 2.40 | 0.51 |
| 1:G:438:THR:HG21 | 1:G:588:ARG:NH2 | 2.26 | 0.51 |
| 1:G:581:PHE:HE1 | 1:G:608:LEU:CB | 2.23 | 0.51 |
| 1:G:836:SER:N | 1:G:864:GLU:HB2 | 2.24 | 0.51 |
| 1:H:498:ASP:OD2 | 1:H:503:LEU:HD12 | 2.10 | 0.51 |
| 1:H:623:ILE:HD13 | 1:H:625:PRO:HD2 | 1.91 | 0.51 |
| 1:H:965:LEU:HD11 | 1:H:993:LEU:HD23 | 1.93 | 0.51 |
| 1:H:1018:LEU:HB3 | 1:H:1032:PHE:CE1 | 2.45 | 0.51 |
| 1:I:136:TYR:OH | 1:I:285:PRO:HB3 | 2.10 | 0.51 |
| 1:I:607:GLU:OE1 | 1:I:610:LYS:HD3 | 2.09 | 0.51 |
| 1:I:832:LEU:HB3 | 1:I:860:LEU:HD12 | 1.93 | 0.51 |
| 1:J:581:PHE:HA | 1:J:584:VAL:HG22 | 1.91 | 0.51 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:J:894:SER:OG | 1:J:896:LEU:HD21 | 2.11 | 0.51 |
| 2:O:142:PHE:CE2 | 2:O:226:LEU:HD12 | 2.46 | 0.51 |
| 2:T:142:PHE:CE2 | 2:T:226:LEU:HD12 | 2.46 | 0.51 |
| 1:A:393:ARG:HB3 | 1:A:393:ARG:CZ | 2.40 | 0.51 |
| 1:A:581:PHE:HE1 | 1:A:608:LEU:CB | 2.23 | 0.51 |
| 1:A:581:PHE:HA | 1:A:584:VAL:HG22 | 1.91 | 0.51 |
| 1:A:786:CYS:O | 1:A:790:ILE:HG13 | 2.10 | 0.51 |
| 1:A:943:LEU:HD21 | 1:A:945:VAL:O | 2.10 | 0.51 |
| 1:B:271:SER:HA | 1:B:326:GLU:CG | 2.39 | 0.51 |
| 1:B:489:LEU:HD13 | 1:B:518:TYR:CE2 | 2.45 | 0.51 |
| 1:B:848:ALA:HB1 | 1:B:878:LYS:HG3 | 1.91 | 0.51 |
| 1:C:186:GLU:OE1 | 1:C:187:LEU:N | 2.44 | 0.51 |
| 1:C:342:PRO:HB2 | 1:D:281:PRO:HB3 | 1.93 | 0.51 |
| 1:D:848:ALA:HB1 | 1:D:878:LYS:HG3 | 1.91 | 0.51 |
| 1:D:951:CYS:HB3 | 1:D:953:LEU:CD2 | 2.38 | 0.51 |
| 1:E:552:LYS:CE | 1:E:552:LYS:N | 2.73 | 0.51 |
| 1:F:438:THR:HG21 | 1:F:588:ARG:NH2 | 2.26 | 0.51 |
| 1:F:664:MET:N | 1:F:664:MET:SD | 2.83 | 0.51 |
| 1:G:570:LYS:HA | 1:G:572:TYR:CE1 | 2.46 | 0.51 |
| 1:G:664:MET:N | 1:G:664:MET:SD | 2.83 | 0.51 |
| 1:G:965:LEU:HD11 | 1:G:993:LEU:HD23 | 1.93 | 0.51 |
| 1:H:186:GLU:OE1 | 1:H:187:LEU:N | 2.44 | 0.51 |
| 1:H:379:LYS:HG3 | 1:H:396:PHE:CD1 | 2.46 | 0.51 |
| 1:I:292:ARG:HH21 | 1:I:293:LYS:HE2 | 1.75 | 0.51 |
| 1:I:379:LYS:HG3 | 1:I:396:PHE:CD1 | 2.46 | 0.51 |
| 1:J:628:LEU:HD13 | 1:J:655:ILE:CD1 | 2.41 | 0.51 |
| 1:J:832:LEU:HB3 | 1:J:860:LEU:HD12 | 1.93 | 0.51 |
| 2:P:142:PHE:CE2 | 2:P:226:LEU:HD12 | 2.46 | 0.51 |
| 2:Q:142:PHE:CE2 | 2:Q:226:LEU:HD12 | 2.45 | 0.51 |
| 2:S:142:PHE:CE2 | 2:S:226:LEU:HD12 | 2.46 | 0.51 |
| 1:A:848:ALA:HB1 | 1:A:878:LYS:HG3 | 1.91 | 0.51 |
| 1:C:292:ARG:HH21 | 1:C:293:LYS:HE2 | 1.75 | 0.51 |
| 1:C:581:PHE:CE2 | 1:C:633:CYS:HB3 | 2.44 | 0.51 |
| 1:D:362:LEU:HD12 | 1:D:365:PRO:CB | 2.40 | 0.51 |
| 1:E:862:VAL:HG23 | 1:E:867:LEU:HD11 | 1.92 | 0.51 |
| 1:F:217:GLU:CB | 1:G:149:GLN:OE1 | 2.59 | 0.51 |
| 1:G:381:TYR:HD2 | 1:G:415:CYS:HG | 1.59 | 0.51 |
| 1:G:786:CYS:O | 1:G:790:ILE:HG13 | 2.10 | 0.51 |
| 1:H:221:THR:CG2 | 1:H:365:PRO:HB3 | 2.41 | 0.51 |
| 1:I:393:ARG:HB3 | 1:I:393:ARG:CZ | 2.40 | 0.51 |
| 1:I:664:MET:SD | 1:I:664:MET:N | 2.83 | 0.51 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:I:919:LEU:HD11 | 1:I:924:LEU:HD21 | 1.93 | 0.51 |
| 1:I:965:LEU:HD11 | 1:I:993:LEU:HD23 | 1.93 | 0.51 |
| 1:J:379:LYS:HG3 | 1:J:396:PHE:CD1 | 2.46 | 0.51 |
| 1:J:471:SER:CB | 1:J:553:LEU:HD12 | 2.20 | 0.51 |
| 1:A:176:GLU:OE2 | 1:A:178:ARG:N | 2.42 | 0.51 |
| 1:A:186:GLU:OE1 | 1:A:187:LEU:N | 2.44 | 0.51 |
| 1:A:292:ARG:HH21 | 1:A:293:LYS:HE2 | 1.75 | 0.51 |
| 1:A:342:PRO:HB2 | 1:B:281:PRO:HB3 | 1.93 | 0.51 |
| 1:A:832:LEU:HB3 | 1:A:860:LEU:HD12 | 1.93 | 0.51 |
| 1:A:894:SER:OG | 1:A:896:LEU:HD21 | 2.11 | 0.51 |
| 1:B:362:LEU:HD12 | 1:B:365:PRO:CB | 2.40 | 0.51 |
| 1:C:570:LYS:HA | 1:C:572:TYR:CE1 | 2.46 | 0.51 |
| 1:D:220:HIS:O | 1:D:221:THR:OG1 | 2.21 | 0.51 |
| 1:E:379:LYS:HG3 | 1:E:396:PHE:CD1 | 2.46 | 0.51 |
| 1:E:438:THR:HG21 | 1:E:588:ARG:NH2 | 2.26 | 0.51 |
| 1:E:901:CYS:SG | 1:E:924:LEU:HD22 | 2.51 | 0.51 |
| 1:F:872:VAL:HG21 | 1:F:896:LEU:CD1 | 2.41 | 0.51 |
| 1:G:221:THR:CG2 | 1:G:365:PRO:HB3 | 2.41 | 0.51 |
| 1:G:943:LEU:HD21 | 1:G:945:VAL:O | 2.10 | 0.51 |
| 1:H:299:PHE:CB | 1:H:346:LEU:HD12 | 2.39 | 0.51 |
| 1:H:393:ARG:HB3 | 1:H:393:ARG:CZ | 2.40 | 0.51 |
| 1:H:438:THR:HG21 | 1:H:588:ARG:NH2 | 2.26 | 0.51 |
| 1:H:872:VAL:HG21 | 1:H:896:LEU:HD22 | 1.93 | 0.51 |
| 1:H:919:LEU:HD11 | 1:H:924:LEU:HD21 | 1.93 | 0.51 |
| 1:I:217:GLU:CB | 1:J:149:GLN:OE1 | 2.58 | 0.51 |
| 1:I:221:THR:CG2 | 1:I:365:PRO:HB3 | 2.41 | 0.51 |
| 1:I:263:GLU:OE2 | 1:I:264:VAL:HG23 | 2.10 | 0.51 |
| 1:J:221:THR:CG2 | 1:J:365:PRO:HB3 | 2.41 | 0.51 |
| 1:J:362:LEU:HD12 | 1:J:365:PRO:CB | 2.40 | 0.51 |
| 1:J:664:MET:N | 1:J:664:MET:SD | 2.83 | 0.51 |
| 1:J:919:LEU:HD11 | 1:J:924:LEU:HD21 | 1.93 | 0.51 |
| 2:K:142:PHE:CE2 | 2:K:226:LEU:HD12 | 2.46 | 0.51 |
| 2:R:168:PHE:O | 2:R:176:LYS:N | 2.39 | 0.51 |
| 1:A:194:LYS:HG3 | 1:A:194:LYS:O | 2.10 | 0.51 |
| 1:A:263:GLU:OE2 | 1:A:264:VAL:HG23 | 2.10 | 0.51 |
| 1:A:581:PHE:CE2 | 1:A:633:CYS:HB3 | 2.44 | 0.51 |
| 1:A:872:VAL:HG21 | 1:A:896:LEU:CD1 | 2.41 | 0.51 |
| 1:B:194:LYS:HG3 | 1:B:194:LYS:O | 2.10 | 0.51 |
| 1:B:263:GLU:OE2 | 1:B:264:VAL:HG23 | 2.10 | 0.51 |
| 1:B:438:THR:HG21 | 1:B:588:ARG:NH2 | 2.26 | 0.51 |
| 1:B:492:HIS:ND1 | 1:B:553:LEU:HD11 | 2.20 | 0.51 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:B:992:VAL:HA | 1:B:995:GLN:NE2 | 2.25 | 0.51 |
| 1:C:136:TYR:OH | 1:C:285:PRO:HB3 | 2.10 | 0.51 |
| 1:C:836:SER:N | 1:C:864:GLU:HB2 | 2.24 | 0.51 |
| 1:E:186:GLU:OE1 | 1:E:187:LEU:N | 2.44 | 0.51 |
| 1:E:292:ARG:HH21 | 1:E:293:LYS:HE2 | 1.75 | 0.51 |
| 1:E:664:MET:N | 1:E:664:MET:SD | 2.83 | 0.51 |
| 1:E:680:SER:HA | 1:E:747:ASP:HB3 | 1.93 | 0.51 |
| 1:G:263:GLU:OE2 | 1:G:264:VAL:HG23 | 2.10 | 0.51 |
| 1:G:872:VAL:HG21 | 1:G:896:LEU:CD1 | 2.41 | 0.51 |
| 1:G:901:CYS:SG | 1:G:924:LEU:HD22 | 2.51 | 0.51 |
| 1:H:292:ARG:HH21 | 1:H:293:LYS:HE2 | 1.75 | 0.51 |
| 1:I:186:GLU:OE1 | 1:I:187:LEU:N | 2.44 | 0.51 |
| 1:I:872:VAL:HG21 | 1:I:896:LEU:HD22 | 1.93 | 0.51 |
| 1:I:901:CYS:SG | 1:I:924:LEU:HD22 | 2.51 | 0.51 |
| 1:J:362:LEU:CG | 1:J:365:PRO:HG3 | 2.41 | 0.51 |
| 1:J:393:ARG:CZ | 1:J:393:ARG:HB3 | 2.40 | 0.51 |
| 1:J:951:CYS:HB3 | 1:J:953:LEU:CD2 | 2.38 | 0.51 |
| 2:M:214:ASN:OD1 | 2:M:215:PHE:N | 2.44 | 0.51 |
| 1:A:240:MET:HE2 | 1:A:258:TYR:N | 2.25 | 0.51 |
| 1:A:379:LYS:HG3 | 1:A:396:PHE:CD1 | 2.46 | 0.51 |
| 1:A:961:LEU:HD23 | 1:A:974:LEU:HD21 | 1.93 | 0.51 |
| 1:B:360:HIS:O | 1:B:361:LEU:HD23 | 2.11 | 0.51 |
| 1:B:379:LYS:HG3 | 1:B:396:PHE:CD1 | 2.46 | 0.51 |
| 1:B:647:MET:HE1 | 1:B:669:CYS:HB3 | 1.92 | 0.51 |
| 1:C:194:LYS:O | 1:C:194:LYS:HG3 | 2.10 | 0.51 |
| 1:C:362:LEU:HD12 | 1:C:365:PRO:CB | 2.40 | 0.51 |
| 1:C:567:LYS:NZ | 1:C:623:ILE:CB | 2.74 | 0.51 |
| 1:D:263:GLU:OE2 | 1:D:264:VAL:HG23 | 2.10 | 0.51 |
| 1:D:393:ARG:HB3 | 1:D:393:ARG:CZ | 2.40 | 0.51 |
| 1:F:240:MET:HE2 | 1:F:258:TYR:N | 2.23 | 0.51 |
| 1:F:879:ALA:O | 1:F:911:ASN:HB2 | 2.11 | 0.51 |
| 1:F:905:SER:OG | 1:F:935:GLY:HA3 | 2.10 | 0.51 |
| 1:F:961:LEU:HD23 | 1:F:974:LEU:HD21 | 1.93 | 0.51 |
| 1:F:1018:LEU:HB3 | 1:F:1032:PHE:CE1 | 2.45 | 0.51 |
| 1:G:581:PHE:HA | 1:G:584:VAL:CG2 | 2.39 | 0.51 |
| 1:H:786:CYS:O | 1:H:790:ILE:HG13 | 2.10 | 0.51 |
| 1:H:832:LEU:HB3 | 1:H:860:LEU:HD12 | 1.93 | 0.51 |
| 1:I:362:LEU:CG | 1:I:365:PRO:HG3 | 2.41 | 0.51 |
| 1:J:136:TYR:OH | 1:J:285:PRO:HB3 | 2.10 | 0.51 |
| 1:J:786:CYS:O | 1:J:790:ILE:HG13 | 2.10 | 0.51 |
| 1:J:872:VAL:HG21 | 1:J:896:LEU:CD1 | 2.41 | 0.51 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 2:L:214:ASN:OD1 | 2:L:215:PHE:N | 2.43 | 0.51 |
| 1:A:221:THR:CG2 | 1:A:365:PRO:HB3 | 2.41 | 0.51 |
| 1:A:664:MET:HE1 | 1:A:729:PHE:HD1 | 1.76 | 0.51 |
| 1:A:1004:GLY:HA2 | 1:A:1031:VAL:HG13 | 1.92 | 0.51 |
| 1:B:570:LYS:HA | 1:B:572:TYR:CE1 | 2.46 | 0.51 |
| 1:B:961:LEU:HD23 | 1:B:974:LEU:HD21 | 1.93 | 0.51 |
| 1:C:393:ARG:HB3 | 1:C:393:ARG:CZ | 2.40 | 0.51 |
| 1:D:240:MET:HE2 | 1:D:258:TYR:N | 2.25 | 0.51 |
| 1:D:502:PHE:HA | 1:D:521:ILE:CG1 | 2.40 | 0.51 |
| 1:D:628:LEU:HD13 | 1:D:655:ILE:CD1 | 2.41 | 0.51 |
| 1:D:992:VAL:HA | 1:D:995:GLN:NE2 | 2.25 | 0.51 |
| 1:E:393:ARG:HB3 | 1:E:393:ARG:CZ | 2.40 | 0.51 |
| 1:E:879:ALA:O | 1:E:911:ASN:HB2 | 2.11 | 0.51 |
| 1:E:974:LEU:HD11 | 1:E:976:LEU:CD2 | 2.33 | 0.51 |
| 1:F:186:GLU:OE1 | 1:F:187:LEU:N | 2.44 | 0.51 |
| 1:F:393:ARG:HB3 | 1:F:393:ARG:CZ | 2.40 | 0.51 |
| 1:F:680:SER:HA | 1:F:747:ASP:HB3 | 1.93 | 0.51 |
| 1:F:965:LEU:HD11 | 1:F:993:LEU:HD23 | 1.93 | 0.51 |
| 1:G:379:LYS:HG3 | 1:G:396:PHE:CD1 | 2.46 | 0.51 |
| 1:G:879:ALA:O | 1:G:911:ASN:HB2 | 2.11 | 0.51 |
| 1:G:961:LEU:HD23 | 1:G:974:LEU:HD21 | 1.93 | 0.51 |
| 1:H:492:HIS:ND1 | 1:H:553:LEU:HD11 | 2.20 | 0.51 |
| 1:H:570:LYS:HA | 1:H:572:TYR:CE1 | 2.46 | 0.51 |
| 1:H:974:LEU:HD11 | 1:H:976:LEU:CD2 | 2.33 | 0.51 |
| 1:I:438:THR:HG21 | 1:I:588:ARG:NH2 | 2.26 | 0.51 |
| 1:I:628:LEU:HD13 | 1:I:655:ILE:CD1 | 2.41 | 0.51 |
| 1:I:664:MET:HE1 | 1:I:729:PHE:HD1 | 1.76 | 0.51 |
| 1:I:786:CYS:O | 1:I:790:ILE:HG13 | 2.10 | 0.51 |
| 1:I:923:THR:HG22 | 1:I:952:ASN:HB2 | 1.93 | 0.51 |
| 1:I:1004:GLY:HA2 | 1:I:1031:VAL:HG13 | 1.92 | 0.51 |
| 1:J:573:LEU:CD2 | 1:J:576:VAL:HG11 | 2.40 | 0.51 |
| 2:M:227:TYR:OH | 2:M:256:PRO:O | 2.25 | 0.51 |
| 1:A:362:LEU:CG | 1:A:365:PRO:HG3 | 2.41 | 0.50 |
| 1:A:565:TYR:CE2 | 1:A:625:PRO:CA | 2.94 | 0.50 |
| 1:B:257:PHE:CE2 | 1:B:276:ILE:HG12 | 2.47 | 0.50 |
| 1:B:832:LEU:HB3 | 1:B:860:LEU:HD12 | 1.93 | 0.50 |
| 1:C:257:PHE:CE2 | 1:C:276:ILE:HG12 | 2.47 | 0.50 |
| 1:C:315:ILE:HD12 | 1:C:330:ILE:CG1 | 2.41 | 0.50 |
| 1:C:360:HIS:O | 1:C:361:LEU:HD23 | 2.11 | 0.50 |
| 1:D:362:LEU:CG | 1:D:365:PRO:HG3 | 2.41 | 0.50 |
| 1:D:680:SER:HA | 1:D:747:ASP:HB3 | 1.93 | 0.50 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:D:872:VAL:HG21 | 1:D:896:LEU:CD1 | 2.41 | 0.50 |
| 1:E:263:GLU:OE2 | 1:E:264:VAL:HG23 | 2.10 | 0.50 |
| 1:F:315:ILE:HD12 | 1:F:330:ILE:CG1 | 2.41 | 0.50 |
| 1:F:552:LYS:CE | 1:F:552:LYS:N | 2.73 | 0.50 |
| 1:G:1018:LEU:HB3 | 1:G:1032:PHE:CE1 | 2.45 | 0.50 |
| 1:H:308:GLN:HE21 | 1:H:499:VAL:HG22 | 1.75 | 0.50 |
| 1:H:315:ILE:HD12 | 1:H:330:ILE:CG1 | 2.41 | 0.50 |
| 1:H:664:MET:N | 1:H:664:MET:SD | 2.83 | 0.50 |
| 1:H:923:THR:HG22 | 1:H:952:ASN:HB2 | 1.93 | 0.50 |
| 1:I:299:PHE:CB | 1:I:346:LEU:HD12 | 2.39 | 0.50 |
| 1:J:257:PHE:CE2 | 1:J:276:ILE:HG12 | 2.46 | 0.50 |
| 2:R:142:PHE:CE2 | 2:R:226:LEU:HD12 | 2.46 | 0.50 |
| 1:A:490:ARG:NE | 1:A:490:ARG:HA | 2.27 | 0.50 |
| 1:A:664:MET:SD | 1:A:664:MET:N | 2.83 | 0.50 |
| 1:B:315:ILE:HD12 | 1:B:330:ILE:CG1 | 2.41 | 0.50 |
| 1:B:393:ARG:HB3 | 1:B:393:ARG:CZ | 2.40 | 0.50 |
| 1:C:362:LEU:CG | 1:C:365:PRO:HG3 | 2.41 | 0.50 |
| 1:C:872:VAL:HG21 | 1:C:896:LEU:CD1 | 2.41 | 0.50 |
| 1:D:624:GLN:N | 1:D:625:PRO:HD2 | 2.22 | 0.50 |
| 1:E:221:THR:CG2 | 1:E:365:PRO:HB3 | 2.41 | 0.50 |
| 1:E:315:ILE:HD12 | 1:E:330:ILE:CG1 | 2.42 | 0.50 |
| 1:E:961:LEU:HD23 | 1:E:974:LEU:HD21 | 1.93 | 0.50 |
| 1:F:894:SER:OG | 1:F:896:LEU:HD21 | 2.11 | 0.50 |
| 1:G:217:GLU:CB | 1:H:149:GLN:OE1 | 2.58 | 0.50 |
| 1:G:490:ARG:NE | 1:G:490:ARG:HA | 2.27 | 0.50 |
| 1:H:624:GLN:N | 1:H:625:PRO:HD2 | 2.25 | 0.50 |
| 1:H:872:VAL:HG21 | 1:H:896:LEU:CD1 | 2.41 | 0.50 |
| 1:H:961:LEU:HD23 | 1:H:974:LEU:HD21 | 1.93 | 0.50 |
| 1:I:240:MET:HE2 | 1:I:258:TYR:N | 2.24 | 0.50 |
| 1:I:315:ILE:HD12 | 1:I:330:ILE:CG1 | 2.41 | 0.50 |
| 1:J:194:LYS:HG3 | 1:J:194:LYS:O | 2.10 | 0.50 |
| 1:J:961:LEU:HD23 | 1:J:974:LEU:HD21 | 1.93 | 0.50 |
| 1:J:965:LEU:HD11 | 1:J:993:LEU:HD23 | 1.93 | 0.50 |
| 1:A:360:HIS:O | 1:A:361:LEU:HD23 | 2.12 | 0.50 |
| 1:A:624:GLN:N | 1:A:625:PRO:HD2 | 2.22 | 0.50 |
| 1:A:919:LEU:HD11 | 1:A:924:LEU:HD21 | 1.93 | 0.50 |
| 1:B:1004:GLY:HA2 | 1:B:1031:VAL:HG13 | 1.92 | 0.50 |
| 1:C:901:CYS:SG | 1:C:924:LEU:HD22 | 2.51 | 0.50 |
| 1:D:176:GLU:OE2 | 1:D:178:ARG:N | 2.42 | 0.50 |
| 1:D:315:ILE:HD12 | 1:D:330:ILE:CG1 | 2.41 | 0.50 |
| 1:D:323:GLN:O | 1:D:323:GLN:HG2 | 2.12 | 0.50 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:D:360:HIS:O | 1:D:361:LEU:HD23 | 2.11 | 0.50 |
| 1:D:961:LEU:HD23 | 1:D:974:LEU:HD21 | 1.93 | 0.50 |
| 1:E:231:GLY:N | 3:E:1101:AGS:O2A | 2.45 | 0.50 |
| 1:E:362:LEU:CG | 1:E:365:PRO:HG3 | 2.41 | 0.50 |
| 1:E:490:ARG:HA | 1:E:490:ARG:NE | 2.27 | 0.50 |
| 1:E:751:ASN:O | 1:E:780:CYS:HA | 2.12 | 0.50 |
| 1:E:1004:GLY:HA2 | 1:E:1031:VAL:HG13 | 1.92 | 0.50 |
| 1:F:221:THR:CG2 | 1:F:365:PRO:HB3 | 2.41 | 0.50 |
| 1:G:176:GLU:OE2 | 1:G:178:ARG:N | 2.42 | 0.50 |
| 1:G:323:GLN:O | 1:G:323:GLN:HG2 | 2.12 | 0.50 |
| 1:H:362:LEU:CG | 1:H:365:PRO:HG3 | 2.41 | 0.50 |
| 1:H:894:SER:OG | 1:H:896:LEU:HD21 | 2.11 | 0.50 |
| 1:I:961:LEU:HD23 | 1:I:974:LEU:HD21 | 1.93 | 0.50 |
| 1:J:186:GLU:OE1 | 1:J:187:LEU:N | 2.44 | 0.50 |
| 1:J:317:PRO:HG3 | 1:J:327:ARG:NH1 | 2.27 | 0.50 |
| 2:K:214:ASN:OD1 | 2:K:215:PHE:N | 2.43 | 0.50 |
| 1:A:323:GLN:HG2 | 1:A:323:GLN:O | 2.12 | 0.50 |
| 1:A:570:LYS:HA | 1:A:572:TYR:CE1 | 2.46 | 0.50 |
| 1:A:619:LYS:CB | 2:K:261:ASP:OD2 | 2.60 | 0.50 |
| 1:A:734:PHE:CE2 | 1:A:761:LEU:HD11 | 2.47 | 0.50 |
| 1:A:923:THR:HG22 | 1:A:952:ASN:HB2 | 1.93 | 0.50 |
| 1:B:503:LEU:HD21 | 1:B:520:PHE:CD1 | 2.45 | 0.50 |
| 1:B:624:GLN:CG | 1:B:625:PRO:HD2 | 2.41 | 0.50 |
| 1:B:943:LEU:HD23 | 1:B:944:GLN:N | 2.27 | 0.50 |
| 1:B:965:LEU:HD11 | 1:B:993:LEU:HD23 | 1.93 | 0.50 |
| 1:C:263:GLU:OE2 | 1:C:264:VAL:HG23 | 2.10 | 0.50 |
| 1:C:379:LYS:HG3 | 1:C:396:PHE:CD1 | 2.46 | 0.50 |
| 1:D:239:MET:HE3 | 1:D:300:LEU:HD21 | 1.94 | 0.50 |
| 1:E:894:SER:OG | 1:E:896:LEU:HD21 | 2.11 | 0.50 |
| 1:F:292:ARG:HH21 | 1:F:293:LYS:HE2 | 1.75 | 0.50 |
| 1:F:734:PHE:CE2 | 1:F:761:LEU:HD11 | 2.47 | 0.50 |
| 1:F:926:ASP:OD2 | 1:F:954:THR:OG1 | 2.28 | 0.50 |
| 1:G:734:PHE:CE2 | 1:G:761:LEU:HD11 | 2.47 | 0.50 |
| 1:G:894:SER:OG | 1:G:896:LEU:HD21 | 2.11 | 0.50 |
| 1:G:919:LEU:HD11 | 1:G:924:LEU:HD21 | 1.93 | 0.50 |
| 1:G:943:LEU:HD23 | 1:G:944:GLN:N | 2.27 | 0.50 |
| 1:H:628:LEU:HD13 | 1:H:655:ILE:CD1 | 2.41 | 0.50 |
| 1:I:257:PHE:CE2 | 1:I:276:ILE:HG12 | 2.47 | 0.50 |
| 1:J:490:ARG:NE | 1:J:490:ARG:HA | 2.27 | 0.50 |
| 1:A:217:GLU:CB | 1:B:149:GLN:OE1 | 2.59 | 0.50 |
| 1:A:353:VAL:HB | 1:A:500:SER:HB3 | 1.93 | 0.50 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:B:221:THR:CG2 | 1:B:365:PRO:HB3 | 2.41 | 0.50 |
| 1:B:919:LEU:HD11 | 1:B:924:LEU:HD21 | 1.93 | 0.50 |
| 1:C:317:PRO:HG3 | 1:C:327:ARG:NH1 | 2.27 | 0.50 |
| 1:C:568:PHE:HB3 | 1:C:570:LYS:CD | 2.42 | 0.50 |
| 1:C:832:LEU:HB3 | 1:C:860:LEU:HD12 | 1.93 | 0.50 |
| 1:C:961:LEU:HD23 | 1:C:974:LEU:HD21 | 1.93 | 0.50 |
| 1:C:1004:GLY:HA2 | 1:C:1031:VAL:HG13 | 1.92 | 0.50 |
| 1:D:438:THR:HG21 | 1:D:588:ARG:NH2 | 2.26 | 0.50 |
| 1:D:490:ARG:NE | 1:D:490:ARG:HA | 2.27 | 0.50 |
| 1:D:647:MET:HE2 | 1:D:669:CYS:HB3 | 1.94 | 0.50 |
| 1:D:879:ALA:O | 1:D:911:ASN:HB2 | 2.11 | 0.50 |
| 1:D:923:THR:HG22 | 1:D:952:ASN:HB2 | 1.93 | 0.50 |
| 1:E:501:ALA:O | 1:E:521:ILE:CD1 | 2.40 | 0.50 |
| 1:E:628:LEU:HD13 | 1:E:655:ILE:CD1 | 2.41 | 0.50 |
| 1:F:305:ASP:N | 1:F:305:ASP:OD1 | 2.41 | 0.50 |
| 1:F:323:GLN:HG2 | 1:F:323:GLN:O | 2.12 | 0.50 |
| 1:F:751:ASN:O | 1:F:780:CYS:HA | 2.12 | 0.50 |
| 1:F:901:CYS:SG | 1:F:924:LEU:HD22 | 2.51 | 0.50 |
| 1:G:315:ILE:HD12 | 1:G:330:ILE:CG1 | 2.41 | 0.50 |
| 1:G:680:SER:HA | 1:G:747:ASP:HB3 | 1.93 | 0.50 |
| 1:G:872:VAL:HG21 | 1:G:896:LEU:HD22 | 1.93 | 0.50 |
| 1:H:879:ALA:O | 1:H:911:ASN:HB2 | 2.11 | 0.50 |
| 1:I:317:PRO:HG3 | 1:I:327:ARG:NH1 | 2.27 | 0.50 |
| 1:I:570:LYS:HA | 1:I:572:TYR:CE1 | 2.46 | 0.50 |
| 1:J:136:TYR:HH | 1:J:285:PRO:HB3 | 1.77 | 0.50 |
| 1:J:280:CYS:SG | 1:J:285:PRO:HB3 | 2.52 | 0.50 |
| 1:J:438:THR:HG21 | 1:J:588:ARG:NH2 | 2.26 | 0.50 |
| 1:J:498:ASP:OD2 | 1:J:503:LEU:HD12 | 2.11 | 0.50 |
| 2:N:214:ASN:OD1 | 2:N:215:PHE:N | 2.43 | 0.50 |
| 2:T:214:ASN:OD1 | 2:T:215:PHE:N | 2.43 | 0.50 |
| 1:A:146:SER:CA | 1:J:217:GLU:HG3 | 2.38 | 0.50 |
| 1:A:438:THR:HG21 | 1:A:588:ARG:NH2 | 2.26 | 0.50 |
| 1:B:280:CYS:SG | 1:B:285:PRO:HB3 | 2.52 | 0.50 |
| 1:B:362:LEU:CG | 1:B:365:PRO:HG3 | 2.41 | 0.50 |
| 1:B:757:GLY:O | 1:B:761:LEU:HD13 | 2.12 | 0.50 |
| 1:B:879:ALA:O | 1:B:911:ASN:HB2 | 2.11 | 0.50 |
| 1:C:558:VAL:HG11 | 1:C:604:ILE:HG22 | 1.93 | 0.50 |
| 1:C:647:MET:HE2 | 1:C:669:CYS:HB3 | 1.94 | 0.50 |
| 1:C:738:SER:HB3 | 1:C:764:THR:CG2 | 2.42 | 0.50 |
| 1:C:757:GLY:O | 1:C:761:LEU:HD13 | 2.12 | 0.50 |
| 1:C:872:VAL:HG21 | 1:C:896:LEU:HD22 | 1.93 | 0.50 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:D:292:ARG:HH21 | 1:D:293:LYS:HE2 | 1.75 | 0.50 |
| 1:D:734:PHE:HA | 1:D:737:LEU:HG | 1.94 | 0.50 |
| 1:D:751:ASN:O | 1:D:780:CYS:HA | 2.12 | 0.50 |
| 1:D:757:GLY:O | 1:D:761:LEU:HD13 | 2.12 | 0.50 |
| 1:D:872:VAL:HG21 | 1:D:896:LEU:HD22 | 1.93 | 0.50 |
| 1:E:317:PRO:HG3 | 1:E:327:ARG:NH1 | 2.27 | 0.50 |
| 1:E:734:PHE:CE2 | 1:E:761:LEU:HD11 | 2.47 | 0.50 |
| 1:E:943:LEU:HD23 | 1:E:944:GLN:N | 2.27 | 0.50 |
| 1:G:926:ASP:OD2 | 1:G:954:THR:OG1 | 2.28 | 0.50 |
| 1:H:680:SER:HA | 1:H:747:ASP:HB3 | 1.93 | 0.50 |
| 1:H:751:ASN:O | 1:H:780:CYS:HA | 2.12 | 0.50 |
| 1:I:573:LEU:CD2 | 1:I:576:VAL:HG11 | 2.40 | 0.50 |
| 1:J:240:MET:HE2 | 1:J:258:TYR:N | 2.26 | 0.50 |
| 1:J:586:GLN:C | 1:J:589:THR:HG22 | 2.30 | 0.50 |
| 1:J:879:ALA:O | 1:J:911:ASN:HB2 | 2.11 | 0.50 |
| 1:J:943:LEU:HD23 | 1:J:944:GLN:N | 2.27 | 0.50 |
| 1:J:1004:GLY:HA2 | 1:J:1031:VAL:HG13 | 1.92 | 0.50 |
| 2:K:227:TYR:OH | 2:K:256:PRO:O | 2.24 | 0.50 |
| 1:A:288:HIS:ND1 | 1:A:322:TRP:HH2 | 2.06 | 0.50 |
| 1:A:317:PRO:HG3 | 1:A:327:ARG:NH1 | 2.27 | 0.50 |
| 1:B:323:GLN:O | 1:B:323:GLN:HG2 | 2.12 | 0.50 |
| 1:B:923:THR:HG22 | 1:B:952:ASN:HB2 | 1.93 | 0.50 |
| 1:C:680:SER:HA | 1:C:747:ASP:HB3 | 1.93 | 0.50 |
| 1:D:221:THR:CG2 | 1:D:365:PRO:HB3 | 2.41 | 0.50 |
| 1:D:894:SER:OG | 1:D:896:LEU:HD21 | 2.11 | 0.50 |
| 1:D:1004:GLY:HA2 | 1:D:1031:VAL:HG13 | 1.92 | 0.50 |
| 1:E:965:LEU:HD11 | 1:E:993:LEU:HD23 | 1.93 | 0.50 |
| 1:F:379:LYS:HG3 | 1:F:396:PHE:CD1 | 2.46 | 0.50 |
| 1:F:628:LEU:HD13 | 1:F:655:ILE:CD1 | 2.41 | 0.50 |
| 1:G:239:MET:HE3 | 1:G:300:LEU:HD21 | 1.93 | 0.50 |
| 1:G:257:PHE:CE2 | 1:G:276:ILE:HG12 | 2.46 | 0.50 |
| 1:G:600:ILE:HG22 | 1:G:601:SER:N | 2.27 | 0.50 |
| 1:G:751:ASN:O | 1:G:780:CYS:HA | 2.12 | 0.50 |
| 1:H:901:CYS:SG | 1:H:924:LEU:HD22 | 2.51 | 0.50 |
| 1:H:915:THR:O | 1:H:944:GLN:N | 2.34 | 0.50 |
| 1:I:231:GLY:N | 3:I:1101:AGS:O2A | 2.45 | 0.50 |
| 1:J:315:ILE:HD12 | 1:J:330:ILE:CG1 | 2.41 | 0.50 |
| 1:J:734:PHE:CE2 | 1:J:761:LEU:HD11 | 2.47 | 0.50 |
| 2:O:214:ASN:OD1 | 2:O:215:PHE:N | 2.43 | 0.50 |
| 1:B:490:ARG:HA | 1:B:490:ARG:NE | 2.26 | 0.50 |
| 1:B:734:PHE:CE2 | 1:B:761:LEU:HD11 | 2.47 | 0.50 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:B:738:SER:HB3 | 1:B:764:THR:CG2 | 2.42 | 0.50 |
| 1:B:872:VAL:HG21 | 1:B:896:LEU:HD22 | 1.93 | 0.50 |
| 1:C:560:VAL:O | 1:C:564:ASN:HB2 | 2.11 | 0.50 |
| 1:C:728:SER:HA | 1:C:731:ARG:NH1 | 2.27 | 0.50 |
| 1:C:879:ALA:O | 1:C:911:ASN:HB2 | 2.11 | 0.50 |
| 1:C:943:LEU:HD23 | 1:C:944:GLN:N | 2.27 | 0.50 |
| 1:D:257:PHE:CE2 | 1:D:276:ILE:HG12 | 2.46 | 0.50 |
| 1:D:600:ILE:HG22 | 1:D:601:SER:N | 2.27 | 0.50 |
| 1:D:734:PHE:CE2 | 1:D:761:LEU:HD11 | 2.47 | 0.50 |
| 1:D:901:CYS:SG | 1:D:924:LEU:HD22 | 2.51 | 0.50 |
| 1:E:919:LEU:HD11 | 1:E:924:LEU:HD21 | 1.93 | 0.50 |
| 1:E:923:THR:HG22 | 1:E:952:ASN:HB2 | 1.93 | 0.50 |
| 1:E:1019:GLU:HA | 1:E:1022:GLN:OE1 | 2.12 | 0.50 |
| 1:F:362:LEU:CG | 1:F:365:PRO:HG3 | 2.41 | 0.50 |
| 1:F:1019:GLU:HA | 1:F:1022:GLN:OE1 | 2.12 | 0.50 |
| 1:G:624:GLN:O | 1:G:626:SER:N | 2.45 | 0.50 |
| 1:G:757:GLY:O | 1:G:761:LEU:HD13 | 2.12 | 0.50 |
| 1:G:832:LEU:HB3 | 1:G:860:LEU:HD12 | 1.93 | 0.50 |
| 1:G:1019:GLU:HA | 1:G:1022:GLN:OE1 | 2.12 | 0.50 |
| 1:H:280:CYS:SG | 1:H:285:PRO:HB3 | 2.52 | 0.50 |
| 1:H:317:PRO:HG3 | 1:H:327:ARG:NH1 | 2.27 | 0.50 |
| 1:H:734:PHE:CE2 | 1:H:761:LEU:HD11 | 2.47 | 0.50 |
| 1:H:734:PHE:HA | 1:H:737:LEU:HG | 1.94 | 0.50 |
| 1:I:490:ARG:NE | 1:I:490:ARG:HA | 2.27 | 0.50 |
| 1:I:757:GLY:O | 1:I:761:LEU:HD13 | 2.12 | 0.50 |
| 1:I:926:ASP:OD2 | 1:I:954:THR:OG1 | 2.28 | 0.50 |
| 1:I:943:LEU:HD23 | 1:I:944:GLN:N | 2.27 | 0.50 |
| 1:J:360:HIS:O | 1:J:361:LEU:HD23 | 2.11 | 0.50 |
| 1:J:901:CYS:SG | 1:J:924:LEU:HD22 | 2.51 | 0.50 |
| 2:P:100:SER:HA | 2:P:109:ILE:HD13 | 1.94 | 0.50 |
| 1:A:901:CYS:SG | 1:A:924:LEU:HD22 | 2.51 | 0.50 |
| 1:A:965:LEU:HD11 | 1:A:993:LEU:HD23 | 1.93 | 0.50 |
| 1:B:426:MET:CG | 1:B:432:LEU:HD11 | 2.39 | 0.50 |
| 1:B:901:CYS:SG | 1:B:924:LEU:HD22 | 2.51 | 0.50 |
| 1:C:231:GLY:N | 3:C:1101:AGS:O2A | 2.45 | 0.50 |
| 1:C:734:PHE:HA | 1:C:737:LEU:HG | 1.94 | 0.50 |
| 1:C:965:LEU:HD11 | 1:C:993:LEU:HD23 | 1.93 | 0.50 |
| 1:D:231:GLY:N | 3:D:1101:AGS:O2A | 2.45 | 0.50 |
| 1:D:738:SER:HB3 | 1:D:764:THR:CG2 | 2.42 | 0.50 |
| 1:E:664:MET:HE1 | 1:E:729:PHE:HD1 | 1.76 | 0.50 |
| 1:F:257:PHE:CE2 | 1:F:276:ILE:HG12 | 2.46 | 0.50 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:G:573:LEU:CD2 | 1:G:576:VAL:HG11 | 2.40 | 0.50 |
| 1:G:628:LEU:HD13 | 1:G:655:ILE:CD1 | 2.41 | 0.50 |
| 1:G:728:SER:HA | 1:G:731:ARG:NH1 | 2.27 | 0.50 |
| 1:H:292:ARG:HG2 | 1:H:292:ARG:O | 2.12 | 0.50 |
| 1:J:570:LYS:HA | 1:J:572:TYR:CE1 | 2.46 | 0.50 |
| 2:L:100:SER:HA | 2:L:109:ILE:HD13 | 1.94 | 0.50 |
| 2:O:100:SER:HA | 2:O:109:ILE:HD13 | 1.94 | 0.50 |
| 1:A:149:GLN:OE1 | 1:J:217:GLU:CB | 2.59 | 0.49 |
| 1:A:257:PHE:CE2 | 1:A:276:ILE:HG12 | 2.47 | 0.49 |
| 1:B:231:GLY:N | 3:B:1101:AGS:O2A | 2.45 | 0.49 |
| 1:C:751:ASN:O | 1:C:780:CYS:HA | 2.12 | 0.49 |
| 1:C:923:THR:HG22 | 1:C:952:ASN:HB2 | 1.93 | 0.49 |
| 1:D:503:LEU:HD21 | 1:D:520:PHE:CD1 | 2.46 | 0.49 |
| 1:D:943:LEU:HD23 | 1:D:944:GLN:N | 2.27 | 0.49 |
| 1:E:407:THR:O | 1:E:410:PHE:HD2 | 1.95 | 0.49 |
| 1:E:872:VAL:HG21 | 1:E:896:LEU:HD22 | 1.93 | 0.49 |
| 1:F:231:GLY:N | 3:F:1101:AGS:O2A | 2.45 | 0.49 |
| 1:F:490:ARG:NE | 1:F:490:ARG:HA | 2.27 | 0.49 |
| 1:F:919:LEU:HD11 | 1:F:924:LEU:HD21 | 1.93 | 0.49 |
| 1:G:362:LEU:CG | 1:G:365:PRO:HG3 | 2.41 | 0.49 |
| 1:G:734:PHE:HA | 1:G:737:LEU:HG | 1.94 | 0.49 |
| 1:H:323:GLN:O | 1:H:323:GLN:HG2 | 2.12 | 0.49 |
| 1:H:573:LEU:CD2 | 1:H:576:VAL:HG11 | 2.40 | 0.49 |
| 1:J:323:GLN:O | 1:J:323:GLN:HG2 | 2.12 | 0.49 |
| 1:J:353:VAL:HG11 | 1:J:499:VAL:CG2 | 2.37 | 0.49 |
| 1:J:872:VAL:HG21 | 1:J:896:LEU:HD22 | 1.93 | 0.49 |
| 2:N:227:TYR:OH | 2:N:256:PRO:O | 2.25 | 0.49 |
| 1:A:292:ARG:O | 1:A:292:ARG:HG2 | 2.12 | 0.49 |
| 1:A:600:ILE:HG22 | 1:A:601:SER:N | 2.27 | 0.49 |
| 1:B:737:LEU:O | 1:B:743:LEU:HD11 | 2.13 | 0.49 |
| 1:C:221:THR:CG2 | 1:C:365:PRO:HB3 | 2.41 | 0.49 |
| 1:C:292:ARG:O | 1:C:292:ARG:HG2 | 2.12 | 0.49 |
| 1:C:323:GLN:HG2 | 1:C:323:GLN:O | 2.12 | 0.49 |
| 1:C:490:ARG:NE | 1:C:490:ARG:HA | 2.27 | 0.49 |
| 1:C:562:LEU:HD23 | 1:C:611:TRP:CD2 | 2.47 | 0.49 |
| 1:C:919:LEU:HD11 | 1:C:924:LEU:HD21 | 1.93 | 0.49 |
| 1:D:280:CYS:SG | 1:D:285:PRO:HB3 | 2.52 | 0.49 |
| 1:E:239:MET:HE3 | 1:E:300:LEU:HD21 | 1.94 | 0.49 |
| 1:E:257:PHE:CE2 | 1:E:276:ILE:HG12 | 2.47 | 0.49 |
| 1:E:600:ILE:HG22 | 1:E:601:SER:N | 2.27 | 0.49 |
| 1:E:734:PHE:HA | 1:E:737:LEU:HG | 1.94 | 0.49 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:E:757:GLY:O | 1:E:761:LEU:HD13 | 2.12 | 0.49 |
| 1:F:360:HIS:O | 1:F:361:LEU:HD23 | 2.11 | 0.49 |
| 1:F:447:LEU:O | 1:F:451:LEU:CD2 | 2.61 | 0.49 |
| 1:F:737:LEU:O | 1:F:743:LEU:HD11 | 2.13 | 0.49 |
| 1:H:586:GLN:C | 1:H:589:THR:HG22 | 2.30 | 0.49 |
| 1:I:680:SER:HA | 1:I:747:ASP:HB3 | 1.93 | 0.49 |
| 1:I:872:VAL:HG21 | 1:I:896:LEU:CD1 | 2.41 | 0.49 |
| 1:I:879:ALA:O | 1:I:911:ASN:HB2 | 2.11 | 0.49 |
| 1:J:728:SER:HA | 1:J:731:ARG:NH1 | 2.27 | 0.49 |
| 1:J:757:GLY:O | 1:J:761:LEU:HD13 | 2.12 | 0.49 |
| 1:J:852:SER:CB | 1:J:878:LYS:HD2 | 2.35 | 0.49 |
| 2:K:100:SER:HA | 2:K:109:ILE:HD13 | 1.94 | 0.49 |
| 2:K:168:PHE:O | 2:K:176:LYS:N | 2.39 | 0.49 |
| 2:Q:100:SER:HA | 2:Q:109:ILE:HD13 | 1.94 | 0.49 |
| 1:A:315:ILE:HD12 | 1:A:330:ILE:CG1 | 2.42 | 0.49 |
| 1:A:757:GLY:O | 1:A:761:LEU:HD13 | 2.12 | 0.49 |
| 1:A:794:LEU:HD13 | 1:A:822:LEU:HD23 | 1.94 | 0.49 |
| 1:A:943:LEU:HD21 | 1:A:945:VAL:C | 2.33 | 0.49 |
| 1:B:317:PRO:HG3 | 1:B:327:ARG:NH1 | 2.27 | 0.49 |
| 1:B:600:ILE:HG22 | 1:B:601:SER:N | 2.27 | 0.49 |
| 1:B:872:VAL:HG21 | 1:B:896:LEU:CD1 | 2.41 | 0.49 |
| 1:B:974:LEU:HD11 | 1:B:976:LEU:CD2 | 2.33 | 0.49 |
| 1:C:220:HIS:O | 1:C:221:THR:OG1 | 2.21 | 0.49 |
| 1:C:280:CYS:SG | 1:C:285:PRO:HB3 | 2.52 | 0.49 |
| 1:C:974:LEU:HD11 | 1:C:976:LEU:CD2 | 2.33 | 0.49 |
| 1:D:728:SER:HA | 1:D:731:ARG:NH1 | 2.27 | 0.49 |
| 1:D:1019:GLU:HA | 1:D:1022:GLN:OE1 | 2.12 | 0.49 |
| 1:E:217:GLU:CB | 1:F:149:GLN:OE1 | 2.60 | 0.49 |
| 1:E:280:CYS:SG | 1:E:285:PRO:HB3 | 2.52 | 0.49 |
| 1:F:728:SER:HA | 1:F:731:ARG:NH1 | 2.27 | 0.49 |
| 1:F:923:THR:HG22 | 1:F:952:ASN:HB2 | 1.93 | 0.49 |
| 1:F:943:LEU:HD23 | 1:F:944:GLN:N | 2.27 | 0.49 |
| 1:G:136:TYR:HH | 1:G:285:PRO:HB3 | 1.78 | 0.49 |
| 1:G:407:THR:O | 1:G:410:PHE:HD2 | 1.95 | 0.49 |
| 1:G:974:LEU:HD11 | 1:G:976:LEU:CD2 | 2.33 | 0.49 |
| 1:H:217:GLU:CB | 1:I:149:GLN:OE1 | 2.60 | 0.49 |
| 1:H:257:PHE:CE2 | 1:H:276:ILE:HG12 | 2.47 | 0.49 |
| 1:I:336:ILE:HD12 | 1:I:348:ILE:CD1 | 2.43 | 0.49 |
| 1:I:407:THR:O | 1:I:410:PHE:HD2 | 1.95 | 0.49 |
| 1:I:600:ILE:HG22 | 1:I:601:SER:N | 2.27 | 0.49 |
| 1:I:624:GLN:O | 1:I:626:SER:N | 2.44 | 0.49 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:A:585:ASN:HA | 1:A:637:MET:HE3 | 1.94 | 0.49 |
| 1:A:943:LEU:HD23 | 1:A:944:GLN:N | 2.27 | 0.49 |
| 1:B:191:GLY:HA2 | 1:B:522:HIS:CE1 | 2.48 | 0.49 |
| 1:C:336:ILE:HD12 | 1:C:348:ILE:CD1 | 2.43 | 0.49 |
| 1:C:407:THR:O | 1:C:410:PHE:HD2 | 1.95 | 0.49 |
| 1:C:600:ILE:HG22 | 1:C:601:SER:N | 2.27 | 0.49 |
| 1:D:919:LEU:HD11 | 1:D:924:LEU:HD21 | 1.93 | 0.49 |
| 1:E:240:MET:HE2 | 1:E:258:TYR:N | 2.25 | 0.49 |
| 1:F:757:GLY:O | 1:F:761:LEU:HD13 | 2.12 | 0.49 |
| 1:F:872:VAL:HG21 | 1:F:896:LEU:HD22 | 1.93 | 0.49 |
| 1:G:217:GLU:HG3 | 1:H:146:SER:CA | 2.38 | 0.49 |
| 1:G:231:GLY:N | 3:G:1101:AGS:O2A | 2.45 | 0.49 |
| 1:G:292:ARG:O | 1:G:292:ARG:HG2 | 2.12 | 0.49 |
| 1:G:923:THR:HG22 | 1:G:952:ASN:HB2 | 1.93 | 0.49 |
| 1:H:738:SER:HB3 | 1:H:764:THR:CG2 | 2.42 | 0.49 |
| 1:H:926:ASP:OD2 | 1:H:954:THR:OG1 | 2.28 | 0.49 |
| 1:I:323:GLN:HG2 | 1:I:323:GLN:O | 2.12 | 0.49 |
| 1:I:737:LEU:O | 1:I:743:LEU:HD11 | 2.12 | 0.49 |
| 1:J:191:GLY:HA2 | 1:J:522:HIS:CE1 | 2.48 | 0.49 |
| 1:J:231:GLY:N | 3:J:1101:AGS:O2A | 2.45 | 0.49 |
| 1:J:943:LEU:HD21 | 1:J:945:VAL:C | 2.33 | 0.49 |
| 2:L:168:PHE:O | 2:L:176:LYS:N | 2.39 | 0.49 |
| 2:T:168:PHE:O | 2:T:176:LYS:N | 2.39 | 0.49 |
| 1:A:951:CYS:HB3 | 1:A:953:LEU:CD2 | 2.38 | 0.49 |
| 1:B:175:LYS:HE2 | 1:B:366:ARG:HG3 | 1.94 | 0.49 |
| 1:B:336:ILE:HD12 | 1:B:348:ILE:CD1 | 2.43 | 0.49 |
| 1:B:637:MET:HE3 | 1:B:639:GLU:HB2 | 1.94 | 0.49 |
| 1:B:943:LEU:HD21 | 1:B:945:VAL:C | 2.33 | 0.49 |
| 1:C:734:PHE:CE2 | 1:C:761:LEU:HD11 | 2.47 | 0.49 |
| 1:D:447:LEU:O | 1:D:451:LEU:CD2 | 2.61 | 0.49 |
| 1:E:323:GLN:O | 1:E:323:GLN:HG2 | 2.12 | 0.49 |
| 1:E:471:SER:CB | 1:E:553:LEU:HD12 | 2.20 | 0.49 |
| 1:E:631:PHE:HB3 | 1:E:665:VAL:HG22 | 1.95 | 0.49 |
| 1:E:951:CYS:HB3 | 1:E:953:LEU:CD2 | 2.38 | 0.49 |
| 1:G:317:PRO:HG3 | 1:G:327:ARG:NH1 | 2.27 | 0.49 |
| 1:G:360:HIS:O | 1:G:361:LEU:HD23 | 2.12 | 0.49 |
| 1:H:240:MET:HE3 | 1:H:258:TYR:HB2 | 1.92 | 0.49 |
| 1:H:305:ASP:OD1 | 1:H:305:ASP:N | 2.41 | 0.49 |
| 1:H:407:THR:O | 1:H:410:PHE:HD2 | 1.95 | 0.49 |
| 1:I:217:GLU:HG3 | 1:J:146:SER:CA | 2.37 | 0.49 |
| 1:I:292:ARG:O | 1:I:292:ARG:HG2 | 2.12 | 0.49 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:I:360:HIS:O | 1:I:361:LEU:HD23 | 2.12 | 0.49 |
| 1:J:292:ARG:HG2 | 1:J:292:ARG:O | 2.12 | 0.49 |
| 1:J:407:THR:O | 1:J:410:PHE:HD2 | 1.95 | 0.49 |
| 1:J:794:LEU:HD13 | 1:J:822:LEU:HD23 | 1.94 | 0.49 |
| 1:J:971:LEU:HD23 | 1:J:972:ARG:N | 2.28 | 0.49 |
| 2:R:100:SER:HA | 2:R:109:ILE:HD13 | 1.94 | 0.49 |
| 1:A:231:GLY:N | 3:A:1101:AGS:O2A | 2.45 | 0.49 |
| 1:A:737:LEU:O | 1:A:743:LEU:HD11 | 2.13 | 0.49 |
| 1:A:872:VAL:HG21 | 1:A:896:LEU:HD22 | 1.93 | 0.49 |
| 1:B:447:LEU:O | 1:B:451:LEU:CD2 | 2.61 | 0.49 |
| 1:B:586:GLN:C | 1:B:589:THR:HG22 | 2.30 | 0.49 |
| 1:B:667:SER:OG | 1:B:736:VAL:HG11 | 2.13 | 0.49 |
| 1:B:728:SER:HA | 1:B:731:ARG:NH1 | 2.27 | 0.49 |
| 1:B:734:PHE:HA | 1:B:737:LEU:HG | 1.94 | 0.49 |
| 1:B:753:LEU:CD1 | 1:B:757:GLY:HA3 | 2.43 | 0.49 |
| 1:C:502:PHE:HA | 1:C:521:ILE:CG1 | 2.41 | 0.49 |
| 1:C:753:LEU:CD1 | 1:C:757:GLY:HA3 | 2.43 | 0.49 |
| 1:D:407:THR:O | 1:D:410:PHE:HD2 | 1.95 | 0.49 |
| 1:D:631:PHE:HB3 | 1:D:665:VAL:HG22 | 1.95 | 0.49 |
| 1:D:965:LEU:HD11 | 1:D:993:LEU:HD23 | 1.93 | 0.49 |
| 1:E:175:LYS:HE2 | 1:E:366:ARG:HG3 | 1.94 | 0.49 |
| 1:E:926:ASP:OD2 | 1:E:954:THR:OG1 | 2.28 | 0.49 |
| 1:F:292:ARG:O | 1:F:292:ARG:HG2 | 2.12 | 0.49 |
| 1:F:317:PRO:HG3 | 1:F:327:ARG:NH1 | 2.27 | 0.49 |
| 1:H:360:HIS:O | 1:H:361:LEU:HD23 | 2.12 | 0.49 |
| 1:H:728:SER:HA | 1:H:731:ARG:NH1 | 2.27 | 0.49 |
| 1:I:734:PHE:CE2 | 1:I:761:LEU:HD11 | 2.47 | 0.49 |
| 1:J:336:ILE:HD12 | 1:J:348:ILE:CD1 | 2.43 | 0.49 |
| 1:J:680:SER:HA | 1:J:747:ASP:HB3 | 1.93 | 0.49 |
| 1:J:923:THR:HG22 | 1:J:952:ASN:HB2 | 1.93 | 0.49 |
| 1:A:175:LYS:HE2 | 1:A:366:ARG:HG3 | 1.94 | 0.49 |
| 1:A:280:CYS:SG | 1:A:285:PRO:HB3 | 2.52 | 0.49 |
| 1:A:680:SER:HA | 1:A:747:ASP:HB3 | 1.93 | 0.49 |
| 1:B:407:THR:O | 1:B:410:PHE:HD2 | 1.95 | 0.49 |
| 1:B:470:CYS:SG | 1:B:533:TYR:CA | 3.01 | 0.49 |
| 1:B:626:SER:HB3 | 1:B:627:GLN:OE1 | 2.13 | 0.49 |
| 1:C:447:LEU:O | 1:C:451:LEU:CD2 | 2.60 | 0.49 |
| 1:C:470:CYS:SG | 1:C:533:TYR:CA | 3.01 | 0.49 |
| 1:D:753:LEU:CD1 | 1:D:757:GLY:HA3 | 2.43 | 0.49 |
| 1:E:175:LYS:O | 1:E:177:HIS:ND1 | 2.46 | 0.49 |
| 1:E:292:ARG:HG2 | 1:E:292:ARG:O | 2.12 | 0.49 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:E:360:HIS:O | 1:E:361:LEU:HD23 | 2.11 | 0.49 |
| 1:E:738:SER:HB3 | 1:E:764:THR:CG2 | 2.42 | 0.49 |
| 1:E:872:VAL:HG21 | 1:E:896:LEU:CD1 | 2.41 | 0.49 |
| 1:F:631:PHE:HB3 | 1:F:665:VAL:HG22 | 1.95 | 0.49 |
| 1:F:832:LEU:HB3 | 1:F:860:LEU:HD12 | 1.93 | 0.49 |
| 1:G:175:LYS:HE2 | 1:G:366:ARG:HG3 | 1.94 | 0.49 |
| 1:G:447:LEU:O | 1:G:451:LEU:CD2 | 2.60 | 0.49 |
| 1:G:631:PHE:HB3 | 1:G:665:VAL:HG22 | 1.95 | 0.49 |
| 1:G:737:LEU:O | 1:G:743:LEU:HD11 | 2.13 | 0.49 |
| 1:G:971:LEU:HD23 | 1:G:972:ARG:N | 2.28 | 0.49 |
| 1:H:336:ILE:HD12 | 1:H:348:ILE:CD1 | 2.43 | 0.49 |
| 1:H:600:ILE:HG22 | 1:H:601:SER:N | 2.27 | 0.49 |
| 1:H:753:LEU:CD1 | 1:H:757:GLY:HA3 | 2.43 | 0.49 |
| 1:H:943:LEU:HD23 | 1:H:944:GLN:N | 2.27 | 0.49 |
| 1:H:1019:GLU:HA | 1:H:1022:GLN:OE1 | 2.12 | 0.49 |
| 1:I:353:VAL:HG21 | 1:I:499:VAL:HA | 1.93 | 0.49 |
| 1:I:470:CYS:SG | 1:I:533:TYR:CA | 3.01 | 0.49 |
| 1:I:498:ASP:OD2 | 1:I:503:LEU:HD12 | 2.13 | 0.49 |
| 1:I:734:PHE:HA | 1:I:737:LEU:HG | 1.94 | 0.49 |
| 1:J:175:LYS:HE2 | 1:J:366:ARG:HG3 | 1.94 | 0.49 |
| 1:J:470:CYS:SG | 1:J:533:TYR:CA | 3.01 | 0.49 |
| 1:J:647:MET:HE1 | 1:J:669:CYS:HB3 | 1.94 | 0.49 |
| 1:J:926:ASP:OD2 | 1:J:954:THR:OG1 | 2.28 | 0.49 |
| 2:N:100:SER:HA | 2:N:109:ILE:HD13 | 1.94 | 0.49 |
| 1:A:470:CYS:SG | 1:A:533:TYR:CA | 3.01 | 0.49 |
| 1:A:631:PHE:HB3 | 1:A:665:VAL:HG22 | 1.95 | 0.49 |
| 1:A:738:SER:HB3 | 1:A:764:THR:CG2 | 2.42 | 0.49 |
| 1:A:794:LEU:HD13 | 1:A:822:LEU:CD2 | 2.43 | 0.49 |
| 1:B:680:SER:HA | 1:B:747:ASP:HB3 | 1.93 | 0.49 |
| 1:B:794:LEU:HD13 | 1:B:822:LEU:HD23 | 1.95 | 0.49 |
| 1:C:471:SER:HB2 | 1:C:553:LEU:HD13 | 1.90 | 0.49 |
| 1:C:737:LEU:O | 1:C:743:LEU:HD11 | 2.13 | 0.49 |
| 1:C:794:LEU:HD13 | 1:C:822:LEU:CD2 | 2.43 | 0.49 |
| 1:D:175:LYS:HE2 | 1:D:366:ARG:HG3 | 1.94 | 0.49 |
| 1:D:175:LYS:O | 1:D:177:HIS:ND1 | 2.46 | 0.49 |
| 1:D:316:GLY:N | 1:D:317:PRO:HD2 | 2.28 | 0.49 |
| 1:D:336:ILE:HD12 | 1:D:348:ILE:CD1 | 2.43 | 0.49 |
| 1:D:667:SER:OG | 1:D:736:VAL:HG11 | 2.13 | 0.49 |
| 1:D:794:LEU:HD13 | 1:D:822:LEU:CD2 | 2.43 | 0.49 |
| 1:D:832:LEU:HB3 | 1:D:860:LEU:HD12 | 1.93 | 0.49 |
| 1:E:316:GLY:N | 1:E:317:PRO:HD2 | 2.28 | 0.49 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:E:867:LEU:HD12 | 1:E:891:LEU:CD1 | 2.43 | 0.49 |
| 1:E:886:LEU:CD2 | 1:E:889:LEU:HD13 | 2.38 | 0.49 |
| 1:E:971:LEU:HD23 | 1:E:972:ARG:N | 2.28 | 0.49 |
| 1:F:136:TYR:HH | 1:F:285:PRO:HB3 | 1.78 | 0.49 |
| 1:F:175:LYS:O | 1:F:177:HIS:ND1 | 2.46 | 0.49 |
| 1:F:280:CYS:SG | 1:F:285:PRO:HB3 | 2.52 | 0.49 |
| 1:F:407:THR:O | 1:F:410:PHE:HD2 | 1.95 | 0.49 |
| 1:G:886:LEU:CD2 | 1:G:889:LEU:HD13 | 2.38 | 0.49 |
| 1:H:175:LYS:HE2 | 1:H:366:ARG:HG3 | 1.94 | 0.49 |
| 1:H:470:CYS:SG | 1:H:533:TYR:CA | 3.01 | 0.49 |
| 1:H:737:LEU:O | 1:H:743:LEU:HD11 | 2.13 | 0.49 |
| 1:I:626:SER:HB3 | 1:I:627:GLN:OE1 | 2.13 | 0.49 |
| 1:I:794:LEU:HD13 | 1:I:822:LEU:CD2 | 2.43 | 0.49 |
| 1:I:943:LEU:HD21 | 1:I:945:VAL:C | 2.33 | 0.49 |
| 1:J:142:LYS:CA | 1:J:145:ARG:HH21 | 2.19 | 0.49 |
| 1:J:600:ILE:HG22 | 1:J:601:SER:N | 2.27 | 0.49 |
| 1:J:794:LEU:HD13 | 1:J:822:LEU:CD2 | 2.43 | 0.49 |
| 1:A:624:GLN:CG | 1:A:625:PRO:HD2 | 2.42 | 0.49 |
| 1:A:628:LEU:HD22 | 1:A:655:ILE:CD1 | 2.43 | 0.49 |
| 1:A:734:PHE:HA | 1:A:737:LEU:HG | 1.94 | 0.49 |
| 1:A:753:LEU:CD1 | 1:A:757:GLY:HA3 | 2.43 | 0.49 |
| 1:B:628:LEU:HD22 | 1:B:655:ILE:CD1 | 2.43 | 0.49 |
| 1:B:794:LEU:HD13 | 1:B:822:LEU:CD2 | 2.43 | 0.49 |
| 1:B:1019:GLU:HA | 1:B:1022:GLN:OE1 | 2.12 | 0.49 |
| 1:C:481:LYS:HB3 | 1:C:484:PHE:HE1 | 1.78 | 0.49 |
| 1:C:606:LEU:H | 1:C:606:LEU:HD12 | 1.78 | 0.49 |
| 1:C:943:LEU:HD21 | 1:C:945:VAL:C | 2.33 | 0.49 |
| 1:C:1019:GLU:HA | 1:C:1022:GLN:OE1 | 2.12 | 0.49 |
| 1:D:490:ARG:HH21 | 1:D:495:GLN:CA | 2.25 | 0.49 |
| 1:D:626:SER:HB3 | 1:D:627:GLN:OE1 | 2.13 | 0.49 |
| 1:D:662:ASP:HA | 1:D:665:VAL:HG12 | 1.95 | 0.49 |
| 1:E:470:CYS:SG | 1:E:533:TYR:CA | 3.01 | 0.49 |
| 1:E:568:PHE:HD2 | 1:E:570:LYS:HD2 | 1.78 | 0.49 |
| 1:E:737:LEU:O | 1:E:743:LEU:HD11 | 2.13 | 0.49 |
| 1:E:823:LYS:NZ | 1:E:849:SER:OG | 2.27 | 0.49 |
| 1:F:191:GLY:HA2 | 1:F:522:HIS:CE1 | 2.48 | 0.49 |
| 1:F:475:ASP:OD1 | 1:F:476:GLY:N | 2.46 | 0.49 |
| 1:F:628:LEU:HD22 | 1:F:655:ILE:CD1 | 2.43 | 0.49 |
| 1:G:191:GLY:HA2 | 1:G:522:HIS:CE1 | 2.48 | 0.49 |
| 1:G:220:HIS:HB3 | 1:G:338:LYS:HZ1 | 1.78 | 0.49 |
| 1:H:447:LEU:O | 1:H:451:LEU:CD2 | 2.60 | 0.49 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:H:490:ARG:HA | 1:H:490:ARG:NE | 2.27 | 0.49 |
| 1:J:137:ARG:O | 1:J:141:ARG:HG3 | 2.13 | 0.49 |
| 1:J:176:GLU:OE2 | 1:J:178:ARG:N | 2.42 | 0.49 |
| 1:J:631:PHE:HB3 | 1:J:665:VAL:HG22 | 1.95 | 0.49 |
| 1:J:738:SER:HB3 | 1:J:764:THR:CG2 | 2.42 | 0.49 |
| 2:M:168:PHE:O | 2:M:176:LYS:N | 2.39 | 0.49 |
| 2:S:100:SER:HA | 2:S:109:ILE:HD13 | 1.94 | 0.49 |
| 2:T:100:SER:HA | 2:T:109:ILE:HD13 | 1.94 | 0.49 |
| 1:A:447:LEU:O | 1:A:451:LEU:CD2 | 2.60 | 0.49 |
| 1:A:751:ASN:O | 1:A:780:CYS:HA | 2.12 | 0.49 |
| 1:A:879:ALA:O | 1:A:911:ASN:HB2 | 2.11 | 0.49 |
| 1:B:137:ARG:O | 1:B:141:ARG:HG3 | 2.13 | 0.49 |
| 1:B:867:LEU:HD12 | 1:B:891:LEU:CD1 | 2.43 | 0.49 |
| 1:B:951:CYS:HB3 | 1:B:953:LEU:CD2 | 2.38 | 0.49 |
| 1:B:966:THR:HG23 | 1:B:992:VAL:HG11 | 1.95 | 0.49 |
| 1:C:492:HIS:ND1 | 1:C:553:LEU:HD11 | 2.20 | 0.49 |
| 1:C:626:SER:HB3 | 1:C:627:GLN:OE1 | 2.13 | 0.49 |
| 1:C:631:PHE:HB3 | 1:C:665:VAL:HG22 | 1.95 | 0.49 |
| 1:C:971:LEU:HD23 | 1:C:972:ARG:N | 2.28 | 0.49 |
| 1:D:470:CYS:SG | 1:D:533:TYR:CA | 3.01 | 0.49 |
| 1:D:481:LYS:HB3 | 1:D:484:PHE:HE1 | 1.78 | 0.49 |
| 1:E:362:LEU:HB3 | 1:E:365:PRO:CD | 2.43 | 0.49 |
| 1:E:475:ASP:OD1 | 1:E:476:GLY:N | 2.46 | 0.49 |
| 1:E:606:LEU:H | 1:E:606:LEU:HD12 | 1.78 | 0.49 |
| 1:E:628:LEU:HD22 | 1:E:655:ILE:CD1 | 2.43 | 0.49 |
| 1:E:667:SER:OG | 1:E:736:VAL:HG11 | 2.13 | 0.49 |
| 1:F:470:CYS:SG | 1:F:533:TYR:CA | 3.01 | 0.49 |
| 1:G:280:CYS:SG | 1:G:285:PRO:HB3 | 2.52 | 0.49 |
| 1:G:628:LEU:HD22 | 1:G:655:ILE:CD1 | 2.43 | 0.49 |
| 1:G:867:LEU:HD12 | 1:G:891:LEU:CD1 | 2.43 | 0.49 |
| 1:H:500:SER:CA | 1:H:503:LEU:O | 2.60 | 0.49 |
| 1:I:137:ARG:O | 1:I:141:ARG:HG3 | 2.13 | 0.49 |
| 1:I:316:GLY:N | 1:I:317:PRO:HD2 | 2.28 | 0.49 |
| 1:I:728:SER:HA | 1:I:731:ARG:NH1 | 2.27 | 0.49 |
| 1:J:568:PHE:HD2 | 1:J:570:LYS:HD2 | 1.78 | 0.49 |
| 2:M:100:SER:HA | 2:M:109:ILE:HD13 | 1.94 | 0.49 |
| 1:A:475:ASP:OD1 | 1:A:476:GLY:N | 2.46 | 0.48 |
| 1:B:751:ASN:O | 1:B:780:CYS:HA | 2.12 | 0.48 |
| 1:C:173:LEU:HB2 | 1:C:203:ILE:HG23 | 1.95 | 0.48 |
| 1:C:175:LYS:O | 1:C:177:HIS:ND1 | 2.46 | 0.48 |
| 1:C:316:GLY:N | 1:C:317:PRO:HD2 | 2.28 | 0.48 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:C:490:ARG:HH21 | 1:C:495:GLN:CA | 2.25 | 0.48 |
| 1:C:662:ASP:HA | 1:C:665:VAL:HG12 | 1.95 | 0.48 |
| 1:D:191:GLY:HA2 | 1:D:522:HIS:CE1 | 2.48 | 0.48 |
| 1:E:481:LYS:HB3 | 1:E:484:PHE:HE1 | 1.78 | 0.48 |
| 1:E:794:LEU:HD13 | 1:E:822:LEU:CD2 | 2.43 | 0.48 |
| 1:F:600:ILE:HG22 | 1:F:601:SER:N | 2.27 | 0.48 |
| 1:F:667:SER:OG | 1:F:736:VAL:HG11 | 2.13 | 0.48 |
| 1:F:908:LEU:HD13 | 1:F:936:LEU:CD1 | 2.43 | 0.48 |
| 1:G:475:ASP:OD1 | 1:G:476:GLY:N | 2.46 | 0.48 |
| 1:G:567:LYS:NZ | 1:G:623:ILE:HG22 | 2.28 | 0.48 |
| 1:H:191:GLY:HA2 | 1:H:522:HIS:CE1 | 2.48 | 0.48 |
| 1:H:231:GLY:N | 3:H:1101:AGS:O2A | 2.45 | 0.48 |
| 1:H:316:GLY:N | 1:H:317:PRO:HD2 | 2.28 | 0.48 |
| 1:H:626:SER:HB3 | 1:H:627:GLN:OE1 | 2.13 | 0.48 |
| 1:H:628:LEU:HD22 | 1:H:655:ILE:CD1 | 2.43 | 0.48 |
| 1:H:631:PHE:HB3 | 1:H:665:VAL:HG22 | 1.95 | 0.48 |
| 1:H:867:LEU:HD12 | 1:H:891:LEU:CD1 | 2.43 | 0.48 |
| 1:H:908:LEU:HD13 | 1:H:936:LEU:CD1 | 2.43 | 0.48 |
| 1:I:191:GLY:HA2 | 1:I:522:HIS:CE1 | 2.48 | 0.48 |
| 1:J:475:ASP:OD1 | 1:J:476:GLY:N | 2.46 | 0.48 |
| 1:J:585:ASN:HA | 1:J:637:MET:HE3 | 1.94 | 0.48 |
| 1:J:664:MET:HE1 | 1:J:729:PHE:HD1 | 1.79 | 0.48 |
| 1:A:408:MET:HG2 | 1:A:443:TYR:HE1 | 1.78 | 0.48 |
| 1:B:240:MET:HE2 | 1:B:258:TYR:N | 2.23 | 0.48 |
| 1:B:475:ASP:OD1 | 1:B:476:GLY:N | 2.46 | 0.48 |
| 1:C:175:LYS:HE2 | 1:C:366:ARG:HG3 | 1.94 | 0.48 |
| 1:C:628:LEU:HD22 | 1:C:655:ILE:CD1 | 2.43 | 0.48 |
| 1:C:794:LEU:HD13 | 1:C:822:LEU:HD23 | 1.94 | 0.48 |
| 1:C:966:THR:HG23 | 1:C:992:VAL:HG11 | 1.95 | 0.48 |
| 1:D:292:ARG:O | 1:D:292:ARG:HG2 | 2.12 | 0.48 |
| 1:D:317:PRO:HG3 | 1:D:327:ARG:NH1 | 2.27 | 0.48 |
| 1:D:426:MET:CG | 1:D:432:LEU:HD11 | 2.39 | 0.48 |
| 1:D:586:GLN:C | 1:D:589:THR:HG22 | 2.30 | 0.48 |
| 1:D:823:LYS:NZ | 1:D:849:SER:OG | 2.27 | 0.48 |
| 1:E:502:PHE:HA | 1:E:521:ILE:HD11 | 1.95 | 0.48 |
| 1:E:753:LEU:CD1 | 1:E:757:GLY:HA3 | 2.43 | 0.48 |
| 1:E:832:LEU:HB3 | 1:E:860:LEU:HD12 | 1.93 | 0.48 |
| 1:F:168:TYR:CD2 | 1:F:238:LYS:HE2 | 2.48 | 0.48 |
| 1:F:500:SER:CA | 1:F:503:LEU:O | 2.61 | 0.48 |
| 1:F:572:TYR:HD1 | 1:F:572:TYR:H | 1.61 | 0.48 |
| 1:F:586:GLN:C | 1:F:589:THR:HG22 | 2.30 | 0.48 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:G:168:TYR:CD2 | 1:G:238:LYS:HE2 | 2.48 | 0.48 |
| 1:G:175:LYS:O | 1:G:177:HIS:ND1 | 2.46 | 0.48 |
| 1:G:568:PHE:HD2 | 1:G:570:LYS:HD2 | 1.78 | 0.48 |
| 1:G:753:LEU:CD1 | 1:G:757:GLY:HA3 | 2.43 | 0.48 |
| 1:G:794:LEU:HD13 | 1:G:822:LEU:HD23 | 1.94 | 0.48 |
| 1:G:908:LEU:HD13 | 1:G:936:LEU:CD1 | 2.43 | 0.48 |
| 1:I:280:CYS:SG | 1:I:285:PRO:HB3 | 2.52 | 0.48 |
| 1:I:568:PHE:HD2 | 1:I:570:LYS:HD2 | 1.78 | 0.48 |
| 1:I:628:LEU:HD22 | 1:I:655:ILE:CD1 | 2.43 | 0.48 |
| 1:I:667:SER:OG | 1:I:736:VAL:HG11 | 2.13 | 0.48 |
| 1:I:748:LEU:HD23 | 1:I:780:CYS:HG | 1.77 | 0.48 |
| 1:I:971:LEU:HD23 | 1:I:972:ARG:N | 2.28 | 0.48 |
| 1:J:626:SER:HB3 | 1:J:627:GLN:OE1 | 2.13 | 0.48 |
| 1:J:667:SER:OG | 1:J:736:VAL:HG11 | 2.13 | 0.48 |
| 1:J:737:LEU:O | 1:J:743:LEU:HD11 | 2.13 | 0.48 |
| 1:J:751:ASN:O | 1:J:780:CYS:HA | 2.12 | 0.48 |
| 1:J:908:LEU:HD13 | 1:J:936:LEU:CD1 | 2.43 | 0.48 |
| 1:A:191:GLY:HA2 | 1:A:522:HIS:CE1 | 2.48 | 0.48 |
| 1:A:565:TYR:OH | 1:A:625:PRO:HA | 2.13 | 0.48 |
| 1:A:908:LEU:HD13 | 1:A:936:LEU:CD1 | 2.43 | 0.48 |
| 1:A:966:THR:HG23 | 1:A:992:VAL:HG11 | 1.95 | 0.48 |
| 1:B:292:ARG:HG2 | 1:B:292:ARG:O | 2.12 | 0.48 |
| 1:B:908:LEU:HD13 | 1:B:936:LEU:CD1 | 2.43 | 0.48 |
| 1:C:867:LEU:HD12 | 1:C:891:LEU:CD1 | 2.43 | 0.48 |
| 1:D:737:LEU:O | 1:D:743:LEU:HD11 | 2.12 | 0.48 |
| 1:D:844:CYS:SG | 1:D:867:LEU:HD22 | 2.54 | 0.48 |
| 1:E:447:LEU:O | 1:E:451:LEU:CD2 | 2.60 | 0.48 |
| 1:E:466:LEU:O | 1:E:466:LEU:HD23 | 2.14 | 0.48 |
| 1:E:490:ARG:HH21 | 1:E:495:GLN:CA | 2.25 | 0.48 |
| 1:E:662:ASP:HA | 1:E:665:VAL:HG12 | 1.95 | 0.48 |
| 1:F:492:HIS:HE1 | 1:F:553:LEU:CD2 | 2.25 | 0.48 |
| 1:F:794:LEU:CD2 | 1:F:800:LEU:HD23 | 2.43 | 0.48 |
| 1:F:794:LEU:HD13 | 1:F:822:LEU:HD23 | 1.94 | 0.48 |
| 1:F:794:LEU:HD13 | 1:F:822:LEU:CD2 | 2.43 | 0.48 |
| 1:F:867:LEU:HD12 | 1:F:891:LEU:CD1 | 2.43 | 0.48 |
| 1:F:943:LEU:HD21 | 1:F:945:VAL:C | 2.33 | 0.48 |
| 1:G:471:SER:CB | 1:G:553:LEU:HD12 | 2.20 | 0.48 |
| 1:G:572:TYR:HD1 | 1:G:572:TYR:H | 1.61 | 0.48 |
| 1:G:738:SER:HB3 | 1:G:764:THR:CG2 | 2.42 | 0.48 |
| 1:G:1009:TYR:CE2 | 2:Q:44:GLN:CB | 2.96 | 0.48 |
| 1:H:502:PHE:HA | 1:H:521:ILE:HD11 | 1.94 | 0.48 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:H:568:PHE:HD2 | 1:H:570:LYS:HD2 | 1.78 | 0.48 |
| 1:H:667:SER:OG | 1:H:736:VAL:HG11 | 2.13 | 0.48 |
| 1:H:971:LEU:HD23 | 1:H:972:ARG:N | 2.28 | 0.48 |
| 1:I:353:VAL:HG11 | 1:I:499:VAL:CG2 | 2.39 | 0.48 |
| 1:I:469:LEU:HD23 | 1:I:469:LEU:O | 2.14 | 0.48 |
| 1:I:507:LEU:HD11 | 1:J:157:ARG:HG2 | 1.95 | 0.48 |
| 1:I:572:TYR:H | 1:I:572:TYR:HD1 | 1.61 | 0.48 |
| 1:I:595:LYS:HD3 | 1:I:595:LYS:HA | 1.66 | 0.48 |
| 1:I:794:LEU:HD13 | 1:I:822:LEU:HD23 | 1.94 | 0.48 |
| 1:J:326:GLU:CG | 1:J:331:LEU:HD12 | 2.40 | 0.48 |
| 1:J:606:LEU:HD12 | 1:J:606:LEU:H | 1.78 | 0.48 |
| 1:J:794:LEU:CD2 | 1:J:800:LEU:HD23 | 2.43 | 0.48 |
| 1:A:137:ARG:O | 1:A:141:ARG:HG3 | 2.13 | 0.48 |
| 1:A:667:SER:OG | 1:A:736:VAL:HG11 | 2.13 | 0.48 |
| 1:B:175:LYS:O | 1:B:177:HIS:ND1 | 2.46 | 0.48 |
| 1:B:490:ARG:HH21 | 1:B:495:GLN:CA | 2.25 | 0.48 |
| 1:C:137:ARG:O | 1:C:141:ARG:HG3 | 2.13 | 0.48 |
| 1:D:794:LEU:HD13 | 1:D:822:LEU:HD23 | 1.94 | 0.48 |
| 1:D:870:SER:O | 1:D:874:ILE:HG13 | 2.14 | 0.48 |
| 1:D:908:LEU:HD13 | 1:D:936:LEU:CD1 | 2.43 | 0.48 |
| 1:D:971:LEU:HD23 | 1:D:972:ARG:N | 2.28 | 0.48 |
| 1:E:191:GLY:HA2 | 1:E:522:HIS:CE1 | 2.48 | 0.48 |
| 1:E:500:SER:HA | 1:E:503:LEU:O | 2.12 | 0.48 |
| 1:E:626:SER:HB3 | 1:E:627:GLN:OE1 | 2.13 | 0.48 |
| 1:E:756:PRO:CG | 1:E:759:ARG:HH21 | 2.27 | 0.48 |
| 1:F:568:PHE:HD2 | 1:F:570:LYS:HD2 | 1.78 | 0.48 |
| 1:G:606:LEU:HD12 | 1:G:606:LEU:H | 1.78 | 0.48 |
| 1:G:667:SER:OG | 1:G:736:VAL:HG11 | 2.13 | 0.48 |
| 1:G:756:PRO:CG | 1:G:759:ARG:HH21 | 2.27 | 0.48 |
| 1:G:943:LEU:HD21 | 1:G:945:VAL:C | 2.33 | 0.48 |
| 1:H:572:TYR:HD1 | 1:H:572:TYR:H | 1.61 | 0.48 |
| 1:H:756:PRO:CG | 1:H:759:ARG:HH21 | 2.27 | 0.48 |
| 1:H:757:GLY:O | 1:H:761:LEU:HD13 | 2.12 | 0.48 |
| 1:H:794:LEU:HD13 | 1:H:822:LEU:CD2 | 2.43 | 0.48 |
| 1:H:926:ASP:CG | 1:H:956:HIS:HB2 | 2.34 | 0.48 |
| 1:I:175:LYS:HE2 | 1:I:366:ARG:HG3 | 1.94 | 0.48 |
| 1:I:1019:GLU:HA | 1:I:1022:GLN:OE1 | 2.12 | 0.48 |
| 1:J:167:ARG:HB3 | 1:J:167:ARG:HH11 | 1.79 | 0.48 |
| 1:J:844:CYS:SG | 1:J:867:LEU:HD22 | 2.54 | 0.48 |
| 1:J:867:LEU:HD12 | 1:J:891:LEU:CD1 | 2.43 | 0.48 |
| 1:A:316:GLY:N | 1:A:317:PRO:HD2 | 2.28 | 0.48 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:A:336:ILE:HD12 | 1:A:348:ILE:CD1 | 2.43 | 0.48 |
| 1:A:369:GLU:OE2 | 1:A:504:ARG:NH2 | 2.37 | 0.48 |
| 1:A:626:SER:HB3 | 1:A:627:GLN:OE1 | 2.13 | 0.48 |
| 1:B:288:HIS:ND1 | 1:B:322:TRP:HH2 | 2.06 | 0.48 |
| 1:B:481:LYS:HB3 | 1:B:484:PHE:HE1 | 1.78 | 0.48 |
| 1:B:662:ASP:HA | 1:B:665:VAL:HG12 | 1.95 | 0.48 |
| 1:B:758:MET:HG2 | 1:B:782:LEU:HD22 | 1.95 | 0.48 |
| 1:B:794:LEU:CD2 | 1:B:800:LEU:HD23 | 2.43 | 0.48 |
| 1:C:176:GLU:OE2 | 1:C:178:ARG:N | 2.42 | 0.48 |
| 1:C:593:GLU:HG2 | 1:C:599:LYS:HA | 1.96 | 0.48 |
| 1:C:758:MET:HG2 | 1:C:782:LEU:HD22 | 1.96 | 0.48 |
| 1:C:844:CYS:SG | 1:C:867:LEU:HD22 | 2.54 | 0.48 |
| 1:D:466:LEU:O | 1:D:466:LEU:HD23 | 2.14 | 0.48 |
| 1:D:628:LEU:HD22 | 1:D:655:ILE:CD1 | 2.43 | 0.48 |
| 1:D:867:LEU:HD12 | 1:D:891:LEU:CD1 | 2.43 | 0.48 |
| 1:D:943:LEU:HD21 | 1:D:945:VAL:C | 2.33 | 0.48 |
| 1:E:168:TYR:CD2 | 1:E:238:LYS:HE2 | 2.48 | 0.48 |
| 1:E:728:SER:HA | 1:E:731:ARG:NH1 | 2.27 | 0.48 |
| 1:F:164:LEU:O | 1:F:168:TYR:HB3 | 2.14 | 0.48 |
| 1:F:316:GLY:N | 1:F:317:PRO:HD2 | 2.28 | 0.48 |
| 1:F:426:MET:CG | 1:F:432:LEU:HD11 | 2.39 | 0.48 |
| 1:F:466:LEU:HD23 | 1:F:466:LEU:O | 2.14 | 0.48 |
| 1:F:734:PHE:HA | 1:F:737:LEU:HG | 1.94 | 0.48 |
| 1:F:738:SER:HB3 | 1:F:764:THR:CG2 | 2.42 | 0.48 |
| 1:G:593:GLU:HG2 | 1:G:599:LYS:HA | 1.95 | 0.48 |
| 1:G:794:LEU:HD13 | 1:G:822:LEU:CD2 | 2.43 | 0.48 |
| 1:H:585:ASN:HA | 1:H:637:MET:HE1 | 1.95 | 0.48 |
| 1:H:593:GLU:HG2 | 1:H:599:LYS:HA | 1.96 | 0.48 |
| 1:I:475:ASP:OD1 | 1:I:476:GLY:N | 2.46 | 0.48 |
| 1:I:606:LEU:H | 1:I:606:LEU:HD12 | 1.78 | 0.48 |
| 1:I:751:ASN:O | 1:I:780:CYS:HA | 2.12 | 0.48 |
| 1:I:794:LEU:CD2 | 1:I:800:LEU:HD23 | 2.43 | 0.48 |
| 1:I:844:CYS:SG | 1:I:867:LEU:HD22 | 2.53 | 0.48 |
| 1:J:628:LEU:HD22 | 1:J:655:ILE:CD1 | 2.43 | 0.48 |
| 1:A:157:ARG:HG2 | 1:J:507:LEU:HD11 | 1.96 | 0.48 |
| 1:A:164:LEU:O | 1:A:168:TYR:HB3 | 2.14 | 0.48 |
| 1:A:466:LEU:HD23 | 1:A:466:LEU:O | 2.14 | 0.48 |
| 1:A:499:VAL:O | 1:A:499:VAL:HG13 | 2.14 | 0.48 |
| 1:A:844:CYS:SG | 1:A:867:LEU:HD22 | 2.54 | 0.48 |
| 1:B:164:LEU:O | 1:B:168:TYR:HB3 | 2.14 | 0.48 |
| 1:B:926:ASP:CG | 1:B:956:HIS:HB2 | 2.34 | 0.48 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:B:971:LEU:HD23 | 1:B:972:ARG:N | 2.28 | 0.48 |
| 1:C:191:GLY:HA2 | 1:C:522:HIS:CE1 | 2.48 | 0.48 |
| 1:D:475:ASP:OD1 | 1:D:476:GLY:N | 2.46 | 0.48 |
| 1:D:915:THR:O | 1:D:944:GLN:N | 2.34 | 0.48 |
| 1:E:647:MET:HE2 | 1:E:669:CYS:HB3 | 1.95 | 0.48 |
| 1:E:844:CYS:SG | 1:E:867:LEU:HD22 | 2.54 | 0.48 |
| 1:E:870:SER:O | 1:E:874:ILE:HG13 | 2.14 | 0.48 |
| 1:F:362:LEU:HB3 | 1:F:365:PRO:CD | 2.43 | 0.48 |
| 1:G:336:ILE:HD12 | 1:G:348:ILE:CD1 | 2.43 | 0.48 |
| 1:G:926:ASP:CG | 1:G:956:HIS:HB2 | 2.34 | 0.48 |
| 1:H:974:LEU:CD2 | 1:H:976:LEU:HD11 | 2.44 | 0.48 |
| 1:I:167:ARG:HB3 | 1:I:167:ARG:HH11 | 1.79 | 0.48 |
| 1:I:738:SER:HB3 | 1:I:764:THR:CG2 | 2.42 | 0.48 |
| 1:I:753:LEU:CD1 | 1:I:757:GLY:HA3 | 2.43 | 0.48 |
| 1:J:164:LEU:O | 1:J:168:TYR:HB3 | 2.14 | 0.48 |
| 1:J:734:PHE:HA | 1:J:737:LEU:HG | 1.94 | 0.48 |
| 1:A:534:TYR:CE2 | 1:A:561:LEU:HD13 | 2.49 | 0.48 |
| 1:A:560:VAL:HA | 1:A:563:GLU:HB2 | 1.95 | 0.48 |
| 1:A:867:LEU:HD12 | 1:A:891:LEU:CD1 | 2.43 | 0.48 |
| 1:A:870:SER:O | 1:A:874:ILE:HG13 | 2.14 | 0.48 |
| 1:A:971:LEU:HD23 | 1:A:972:ARG:N | 2.28 | 0.48 |
| 1:B:631:PHE:HB3 | 1:B:665:VAL:HG22 | 1.95 | 0.48 |
| 1:C:667:SER:OG | 1:C:736:VAL:HG11 | 2.13 | 0.48 |
| 1:C:912:GLN:HE22 | 1:C:942:LYS:HE2 | 1.78 | 0.48 |
| 1:D:164:LEU:O | 1:D:168:TYR:HB3 | 2.14 | 0.48 |
| 1:D:173:LEU:HB2 | 1:D:203:ILE:HG23 | 1.95 | 0.48 |
| 1:D:234:ILE:HG13 | 3:D:1101:AGS:C8 | 2.44 | 0.48 |
| 1:D:593:GLU:HG2 | 1:D:599:LYS:HA | 1.96 | 0.48 |
| 1:D:758:MET:HG2 | 1:D:782:LEU:HD22 | 1.95 | 0.48 |
| 1:E:336:ILE:HD12 | 1:E:348:ILE:CD1 | 2.43 | 0.48 |
| 1:E:567:LYS:NZ | 1:E:623:ILE:HG22 | 2.29 | 0.48 |
| 1:E:572:TYR:HD1 | 1:E:572:TYR:H | 1.61 | 0.48 |
| 1:E:593:GLU:HG2 | 1:E:599:LYS:HA | 1.96 | 0.48 |
| 1:E:908:LEU:HD13 | 1:E:936:LEU:CD1 | 2.43 | 0.48 |
| 1:F:175:LYS:HE2 | 1:F:366:ARG:HG3 | 1.94 | 0.48 |
| 1:F:502:PHE:HA | 1:F:521:ILE:HD11 | 1.96 | 0.48 |
| 1:F:662:ASP:HA | 1:F:665:VAL:HG12 | 1.95 | 0.48 |
| 1:G:137:ARG:O | 1:G:141:ARG:HG3 | 2.13 | 0.48 |
| 1:G:626:SER:HB3 | 1:G:627:GLN:OE1 | 2.13 | 0.48 |
| 1:G:912:GLN:HE22 | 1:G:942:LYS:HE2 | 1.78 | 0.48 |
| 1:H:168:TYR:CD2 | 1:H:238:LYS:HE2 | 2.48 | 0.48 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:H:943:LEU:HD21 | 1:H:945:VAL:C | 2.33 | 0.48 |
| 1:I:175:LYS:O | 1:I:177:HIS:ND1 | 2.46 | 0.48 |
| 1:I:926:ASP:CG | 1:I:956:HIS:HB2 | 2.34 | 0.48 |
| 1:J:593:GLU:HG2 | 1:J:599:LYS:HA | 1.95 | 0.48 |
| 1:J:753:LEU:CD1 | 1:J:757:GLY:HA3 | 2.43 | 0.48 |
| 1:J:756:PRO:CG | 1:J:759:ARG:HH21 | 2.27 | 0.48 |
| 1:J:926:ASP:CG | 1:J:956:HIS:HB2 | 2.34 | 0.48 |
| 1:A:362:LEU:HB3 | 1:A:365:PRO:CD | 2.43 | 0.48 |
| 1:A:593:GLU:HG2 | 1:A:599:LYS:HA | 1.95 | 0.48 |
| 1:A:728:SER:HA | 1:A:731:ARG:NH1 | 2.27 | 0.48 |
| 1:A:926:ASP:CG | 1:A:956:HIS:HB2 | 2.34 | 0.48 |
| 1:B:142:LYS:CA | 1:B:145:ARG:HH21 | 2.19 | 0.48 |
| 1:B:316:GLY:N | 1:B:317:PRO:HD2 | 2.28 | 0.48 |
| 1:B:387:SER:OG | 1:B:388:ASP:N | 2.47 | 0.48 |
| 1:B:466:LEU:O | 1:B:466:LEU:HD23 | 2.14 | 0.48 |
| 1:C:462:LEU:HG | 1:C:465:HIS:CE1 | 2.49 | 0.48 |
| 1:C:466:LEU:HD23 | 1:C:466:LEU:O | 2.14 | 0.48 |
| 1:C:469:LEU:O | 1:C:469:LEU:HD23 | 2.14 | 0.48 |
| 1:C:475:ASP:OD1 | 1:C:476:GLY:N | 2.46 | 0.48 |
| 1:C:908:LEU:HD13 | 1:C:936:LEU:CD1 | 2.43 | 0.48 |
| 1:E:234:ILE:HG13 | 3:E:1101:AGS:C8 | 2.44 | 0.48 |
| 1:F:481:LYS:HB3 | 1:F:484:PHE:HE1 | 1.78 | 0.48 |
| 1:F:567:LYS:NZ | 1:F:623:ILE:HG22 | 2.29 | 0.48 |
| 1:F:593:GLU:HG2 | 1:F:599:LYS:HA | 1.96 | 0.48 |
| 1:F:626:SER:HB3 | 1:F:627:GLN:OE1 | 2.13 | 0.48 |
| 1:F:972:ARG:HB3 | 1:F:1001:GLN:OE1 | 2.14 | 0.48 |
| 1:G:470:CYS:SG | 1:G:533:TYR:CA | 3.01 | 0.48 |
| 1:G:481:LYS:HB3 | 1:G:484:PHE:HE1 | 1.79 | 0.48 |
| 1:H:475:ASP:OD1 | 1:H:476:GLY:N | 2.46 | 0.48 |
| 1:H:912:GLN:HE22 | 1:H:942:LYS:HE2 | 1.78 | 0.48 |
| 1:I:164:LEU:O | 1:I:168:TYR:HB3 | 2.14 | 0.48 |
| 1:I:362:LEU:HB3 | 1:I:365:PRO:CD | 2.43 | 0.48 |
| 1:I:447:LEU:O | 1:I:451:LEU:CD2 | 2.60 | 0.48 |
| 1:I:466:LEU:HD23 | 1:I:466:LEU:O | 2.14 | 0.48 |
| 1:I:585:ASN:HA | 1:I:637:MET:HE1 | 1.95 | 0.48 |
| 1:I:631:PHE:HB3 | 1:I:665:VAL:HG22 | 1.95 | 0.48 |
| 1:I:867:LEU:HD12 | 1:I:891:LEU:CD1 | 2.43 | 0.48 |
| 1:I:974:LEU:HD11 | 1:I:976:LEU:CD2 | 2.33 | 0.48 |
| 1:J:316:GLY:N | 1:J:317:PRO:HD2 | 2.28 | 0.48 |
| 1:J:466:LEU:O | 1:J:466:LEU:HD23 | 2.14 | 0.48 |
| 1:J:572:TYR:HD1 | 1:J:572:TYR:H | 1.61 | 0.48 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:J:966:THR:HG23 | 1:J:992:VAL:HG11 | 1.95 | 0.48 |
| 1:J:1019:GLU:HA | 1:J:1022:GLN:OE1 | 2.12 | 0.48 |
| 1:A:490:ARG:HH21 | 1:A:495:GLN:CA | 2.25 | 0.48 |
| 1:A:794:LEU:CD2 | 1:A:800:LEU:HD23 | 2.43 | 0.48 |
| 1:A:974:LEU:HD11 | 1:A:976:LEU:CD2 | 2.33 | 0.48 |
| 1:B:362:LEU:HB3 | 1:B:365:PRO:CD | 2.43 | 0.48 |
| 1:B:973:LYS:HE2 | 1:B:1002:ASN:HD22 | 1.79 | 0.48 |
| 1:C:377:LYS:HD3 | 1:C:377:LYS:HA | 1.51 | 0.48 |
| 1:C:870:SER:O | 1:C:874:ILE:HG13 | 2.14 | 0.48 |
| 1:C:926:ASP:CG | 1:C:956:HIS:HB2 | 2.34 | 0.48 |
| 1:D:387:SER:OG | 1:D:388:ASP:N | 2.47 | 0.48 |
| 1:D:966:THR:HG23 | 1:D:992:VAL:HG11 | 1.95 | 0.48 |
| 1:E:469:LEU:O | 1:E:469:LEU:HD23 | 2.14 | 0.48 |
| 1:E:864:GLU:N | 1:E:892:VAL:O | 2.35 | 0.48 |
| 1:E:974:LEU:CD2 | 1:E:976:LEU:HD11 | 2.44 | 0.48 |
| 1:F:137:ARG:O | 1:F:141:ARG:HG3 | 2.13 | 0.48 |
| 1:F:220:HIS:HB3 | 1:F:338:LYS:HZ1 | 1.79 | 0.48 |
| 1:G:387:SER:OG | 1:G:388:ASP:N | 2.47 | 0.48 |
| 1:G:471:SER:HG | 1:G:553:LEU:HD11 | 1.79 | 0.48 |
| 1:H:137:ARG:O | 1:H:141:ARG:HG3 | 2.13 | 0.48 |
| 1:H:466:LEU:O | 1:H:466:LEU:HD23 | 2.14 | 0.48 |
| 1:H:567:LYS:HA | 1:H:567:LYS:HD2 | 1.58 | 0.48 |
| 1:H:794:LEU:HD13 | 1:H:822:LEU:HD23 | 1.94 | 0.48 |
| 1:I:239:MET:HE3 | 1:I:300:LEU:HD21 | 1.96 | 0.48 |
| 1:I:974:LEU:CD2 | 1:I:976:LEU:HD11 | 2.44 | 0.48 |
| 1:J:353:VAL:HG21 | 1:J:499:VAL:HA | 1.94 | 0.48 |
| 1:J:362:LEU:HB3 | 1:J:365:PRO:CD | 2.43 | 0.48 |
| 1:A:481:LYS:HB3 | 1:A:484:PHE:HE1 | 1.78 | 0.48 |
| 1:B:264:VAL:HG12 | 1:B:264:VAL:O | 2.14 | 0.48 |
| 1:B:462:LEU:HG | 1:B:465:HIS:CE1 | 2.49 | 0.48 |
| 1:B:870:SER:O | 1:B:874:ILE:HG13 | 2.14 | 0.48 |
| 1:C:221:THR:HG21 | 1:C:362:LEU:HD13 | 1.96 | 0.48 |
| 1:C:756:PRO:CG | 1:C:759:ARG:HH21 | 2.26 | 0.48 |
| 1:D:974:LEU:CD2 | 1:D:976:LEU:HD11 | 2.44 | 0.48 |
| 1:E:943:LEU:HD21 | 1:E:945:VAL:C | 2.33 | 0.48 |
| 1:E:974:LEU:HD21 | 1:E:976:LEU:HD11 | 1.96 | 0.48 |
| 1:F:490:ARG:HH21 | 1:F:495:GLN:CA | 2.25 | 0.48 |
| 1:F:756:PRO:CG | 1:F:759:ARG:HH21 | 2.27 | 0.48 |
| 1:F:886:LEU:CD2 | 1:F:889:LEU:HD13 | 2.38 | 0.48 |
| 1:F:915:THR:O | 1:F:944:GLN:N | 2.34 | 0.48 |
| 1:F:926:ASP:CG | 1:F:956:HIS:HB2 | 2.34 | 0.48 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:G:466:LEU:O | 1:G:466:LEU:HD23 | 2.14 | 0.48 |
| 1:G:844:CYS:SG | 1:G:867:LEU:HD22 | 2.54 | 0.48 |
| 1:H:164:LEU:O | 1:H:168:TYR:HB3 | 2.14 | 0.48 |
| 1:H:175:LYS:O | 1:H:177:HIS:ND1 | 2.46 | 0.48 |
| 1:H:469:LEU:O | 1:H:469:LEU:HD23 | 2.14 | 0.48 |
| 1:J:235:LEU:HD23 | 1:J:235:LEU:O | 2.14 | 0.48 |
| 1:J:239:MET:HE3 | 1:J:300:LEU:HD21 | 1.94 | 0.48 |
| 1:J:264:VAL:O | 1:J:264:VAL:HG12 | 2.14 | 0.48 |
| 1:J:439:THR:O | 1:J:439:THR:HG22 | 2.14 | 0.48 |
| 1:J:469:LEU:O | 1:J:469:LEU:HD23 | 2.14 | 0.48 |
| 1:J:585:ASN:HA | 1:J:637:MET:HE1 | 1.95 | 0.48 |
| 1:J:870:SER:O | 1:J:874:ILE:HG13 | 2.14 | 0.48 |
| 1:A:175:LYS:O | 1:A:177:HIS:ND1 | 2.46 | 0.47 |
| 1:A:235:LEU:HD23 | 1:A:235:LEU:O | 2.14 | 0.47 |
| 1:A:270:ARG:O | 1:A:331:LEU:HD13 | 2.14 | 0.47 |
| 1:A:446:PHE:O | 1:A:450:LEU:HG | 2.14 | 0.47 |
| 1:A:606:LEU:H | 1:A:606:LEU:HD12 | 1.78 | 0.47 |
| 1:A:758:MET:HG2 | 1:A:782:LEU:HD22 | 1.95 | 0.47 |
| 1:A:912:GLN:HE22 | 1:A:942:LYS:HE2 | 1.78 | 0.47 |
| 1:B:173:LEU:HB2 | 1:B:203:ILE:HG23 | 1.95 | 0.47 |
| 1:B:217:GLU:HG3 | 1:C:146:SER:CA | 2.38 | 0.47 |
| 1:B:235:LEU:HD23 | 1:B:235:LEU:O | 2.14 | 0.47 |
| 1:B:446:PHE:O | 1:B:450:LEU:HG | 2.14 | 0.47 |
| 1:B:469:LEU:O | 1:B:469:LEU:HD23 | 2.14 | 0.47 |
| 1:C:974:LEU:CD2 | 1:C:976:LEU:HD11 | 2.44 | 0.47 |
| 1:D:221:THR:HG21 | 1:D:362:LEU:HD13 | 1.96 | 0.47 |
| 1:D:462:LEU:HG | 1:D:465:HIS:CE1 | 2.49 | 0.47 |
| 1:D:606:LEU:HD12 | 1:D:606:LEU:H | 1.78 | 0.47 |
| 1:D:974:LEU:HD21 | 1:D:976:LEU:HD11 | 1.96 | 0.47 |
| 1:E:137:ARG:O | 1:E:141:ARG:HG3 | 2.13 | 0.47 |
| 1:E:492:HIS:HE1 | 1:E:553:LEU:CD2 | 2.25 | 0.47 |
| 1:E:794:LEU:CD2 | 1:E:800:LEU:HD23 | 2.43 | 0.47 |
| 1:F:270:ARG:O | 1:F:331:LEU:HD13 | 2.14 | 0.47 |
| 1:F:469:LEU:O | 1:F:469:LEU:HD23 | 2.14 | 0.47 |
| 1:F:753:LEU:CD1 | 1:F:757:GLY:HA3 | 2.43 | 0.47 |
| 1:F:971:LEU:HD23 | 1:F:972:ARG:N | 2.28 | 0.47 |
| 1:G:235:LEU:HD23 | 1:G:235:LEU:O | 2.14 | 0.47 |
| 1:G:413:LEU:HD23 | 1:G:446:PHE:HE1 | 1.79 | 0.47 |
| 1:G:993:LEU:HD11 | 1:G:1003:LEU:CD1 | 2.44 | 0.47 |
| 1:H:624:GLN:CB | 1:H:625:PRO:CD | 2.79 | 0.47 |
| 1:H:758:MET:HG2 | 1:H:782:LEU:HD22 | 1.95 | 0.47 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:I:235:LEU:HD23 | 1:I:235:LEU:O | 2.14 | 0.47 |
| 1:I:756:PRO:CG | 1:I:759:ARG:HH21 | 2.27 | 0.47 |
| 1:J:175:LYS:O | 1:J:177:HIS:ND1 | 2.46 | 0.47 |
| 1:J:387:SER:OG | 1:J:388:ASP:N | 2.47 | 0.47 |
| 1:J:567:LYS:NZ | 1:J:623:ILE:HG22 | 2.29 | 0.47 |
| 1:J:974:LEU:HD21 | 1:J:976:LEU:HD11 | 1.96 | 0.47 |
| 2:S:214:ASN:OD1 | 2:S:215:PHE:N | 2.43 | 0.47 |
| 2:T:138:VAL:HG23 | 2:T:229:MET:HG2 | 1.96 | 0.47 |
| 1:A:168:TYR:CD2 | 1:A:238:LYS:HE2 | 2.48 | 0.47 |
| 1:A:381:TYR:HD2 | 1:A:415:CYS:HG | 1.61 | 0.47 |
| 1:A:413:LEU:HD23 | 1:A:446:PHE:HE1 | 1.79 | 0.47 |
| 1:A:507:LEU:HD11 | 1:B:157:ARG:HG2 | 1.95 | 0.47 |
| 1:A:662:ASP:HA | 1:A:665:VAL:HG12 | 1.95 | 0.47 |
| 1:B:221:THR:HG21 | 1:B:362:LEU:HD13 | 1.96 | 0.47 |
| 1:B:413:LEU:HD23 | 1:B:446:PHE:HE1 | 1.79 | 0.47 |
| 1:B:606:LEU:H | 1:B:606:LEU:HD12 | 1.78 | 0.47 |
| 1:C:164:LEU:O | 1:C:168:TYR:HB3 | 2.14 | 0.47 |
| 1:C:270:ARG:O | 1:C:331:LEU:HD13 | 2.14 | 0.47 |
| 1:C:387:SER:OG | 1:C:388:ASP:N | 2.47 | 0.47 |
| 1:C:974:LEU:HD21 | 1:C:976:LEU:HD11 | 1.96 | 0.47 |
| 1:D:912:GLN:HE22 | 1:D:942:LYS:HE2 | 1.78 | 0.47 |
| 1:E:387:SER:OG | 1:E:388:ASP:N | 2.47 | 0.47 |
| 1:E:794:LEU:HD13 | 1:E:822:LEU:HD23 | 1.94 | 0.47 |
| 1:F:387:SER:OG | 1:F:388:ASP:N | 2.47 | 0.47 |
| 1:F:413:LEU:HD23 | 1:F:446:PHE:HE1 | 1.79 | 0.47 |
| 1:F:534:TYR:CE2 | 1:F:561:LEU:HD22 | 2.49 | 0.47 |
| 1:F:844:CYS:SG | 1:F:867:LEU:HD22 | 2.54 | 0.47 |
| 1:G:164:LEU:O | 1:G:168:TYR:HB3 | 2.14 | 0.47 |
| 1:G:230:ILE:HD11 | 1:G:371:LEU:O | 2.15 | 0.47 |
| 1:G:624:GLN:N | 1:G:625:PRO:HD2 | 2.24 | 0.47 |
| 1:G:974:LEU:CD2 | 1:G:976:LEU:HD11 | 2.44 | 0.47 |
| 1:I:270:ARG:O | 1:I:331:LEU:HD13 | 2.14 | 0.47 |
| 1:I:439:THR:HG22 | 1:I:439:THR:O | 2.14 | 0.47 |
| 1:I:908:LEU:HD13 | 1:I:936:LEU:CD1 | 2.43 | 0.47 |
| 1:I:966:THR:HG23 | 1:I:992:VAL:HG11 | 1.95 | 0.47 |
| 1:J:168:TYR:CD2 | 1:J:238:LYS:HE2 | 2.49 | 0.47 |
| 1:J:270:ARG:O | 1:J:331:LEU:HD13 | 2.15 | 0.47 |
| 1:J:447:LEU:O | 1:J:451:LEU:CD2 | 2.61 | 0.47 |
| 1:J:912:GLN:HE22 | 1:J:942:LYS:HE2 | 1.78 | 0.47 |
| 2:O:227:TYR:OH | 2:O:256:PRO:O | 2.25 | 0.47 |
| 2:P:214:ASN:OD1 | 2:P:215:PHE:N | 2.43 | 0.47 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:A:974:LEU:HD21 | 1:A:976:LEU:HD11 | 1.96 | 0.47 |
| 1:B:234:ILE:HG13 | 3:B:1101:AGS:C8 | 2.44 | 0.47 |
| 1:B:593:GLU:HG2 | 1:B:599:LYS:HA | 1.96 | 0.47 |
| 1:B:756:PRO:CG | 1:B:759:ARG:HH21 | 2.27 | 0.47 |
| 1:B:912:GLN:HE22 | 1:B:942:LYS:HE2 | 1.78 | 0.47 |
| 1:B:974:LEU:CD2 | 1:B:976:LEU:HD11 | 2.44 | 0.47 |
| 1:C:234:ILE:HG13 | 3:C:1101:AGS:C8 | 2.44 | 0.47 |
| 1:C:413:LEU:HD23 | 1:C:446:PHE:HE1 | 1.79 | 0.47 |
| 1:C:794:LEU:CD2 | 1:C:800:LEU:HD23 | 2.43 | 0.47 |
| 1:C:993:LEU:HD11 | 1:C:1003:LEU:CD1 | 2.44 | 0.47 |
| 1:D:623:ILE:HD13 | 1:D:625:PRO:HD2 | 1.96 | 0.47 |
| 1:E:972:ARG:HB3 | 1:E:1001:GLN:OE1 | 2.14 | 0.47 |
| 1:F:234:ILE:HG13 | 3:F:1101:AGS:C8 | 2.44 | 0.47 |
| 1:F:974:LEU:CD2 | 1:F:976:LEU:HD11 | 2.44 | 0.47 |
| 1:G:316:GLY:N | 1:G:317:PRO:HD2 | 2.28 | 0.47 |
| 1:G:758:MET:HG2 | 1:G:782:LEU:HD22 | 1.95 | 0.47 |
| 1:H:234:ILE:HG13 | 3:H:1101:AGS:C8 | 2.44 | 0.47 |
| 1:H:413:LEU:HD23 | 1:H:446:PHE:HE1 | 1.79 | 0.47 |
| 1:H:462:LEU:HG | 1:H:465:HIS:CE1 | 2.49 | 0.47 |
| 1:H:844:CYS:SG | 1:H:867:LEU:HD22 | 2.54 | 0.47 |
| 1:I:567:LYS:NZ | 1:I:623:ILE:HG22 | 2.30 | 0.47 |
| 1:I:585:ASN:HA | 1:I:637:MET:HE3 | 1.94 | 0.47 |
| 1:J:230:ILE:HD11 | 1:J:371:LEU:O | 2.15 | 0.47 |
| 1:A:610:LYS:HG3 | 1:A:611:TRP:N | 2.30 | 0.47 |
| 1:A:973:LYS:HE2 | 1:A:1002:ASN:HD22 | 1.79 | 0.47 |
| 1:B:220:HIS:O | 1:B:221:THR:OG1 | 2.21 | 0.47 |
| 1:B:650:PHE:O | 1:B:653:ILE:HG13 | 2.15 | 0.47 |
| 1:B:844:CYS:SG | 1:B:867:LEU:HD22 | 2.54 | 0.47 |
| 1:B:993:LEU:HD11 | 1:B:1003:LEU:CD1 | 2.44 | 0.47 |
| 1:C:264:VAL:O | 1:C:264:VAL:HG12 | 2.14 | 0.47 |
| 1:C:779:ARG:CZ | 1:C:779:ARG:HB2 | 2.45 | 0.47 |
| 1:D:168:TYR:CD2 | 1:D:238:LYS:HE2 | 2.49 | 0.47 |
| 1:D:572:TYR:H | 1:D:572:TYR:HD1 | 1.61 | 0.47 |
| 1:E:305:ASP:OD1 | 1:E:305:ASP:N | 2.41 | 0.47 |
| 1:E:462:LEU:HG | 1:E:465:HIS:CE1 | 2.49 | 0.47 |
| 1:E:926:ASP:CG | 1:E:956:HIS:HB2 | 2.34 | 0.47 |
| 1:E:993:LEU:HD11 | 1:E:1003:LEU:CD1 | 2.45 | 0.47 |
| 1:F:507:LEU:HD11 | 1:G:157:ARG:HG2 | 1.95 | 0.47 |
| 1:F:984:LEU:HG | 1:F:985:GLY:N | 2.30 | 0.47 |
| 1:G:446:PHE:O | 1:G:450:LEU:HG | 2.14 | 0.47 |
| 1:G:984:LEU:HG | 1:G:985:GLY:N | 2.30 | 0.47 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:H:235:LEU:O | 1:H:235:LEU:HD23 | 2.14 | 0.47 |
| 1:H:606:LEU:H | 1:H:606:LEU:HD12 | 1.78 | 0.47 |
| 1:I:234:ILE:HG13 | 3:I:1101:AGS:C8 | 2.44 | 0.47 |
| 1:I:471:SER:HB2 | 1:I:553:LEU:HD13 | 1.90 | 0.47 |
| 1:I:593:GLU:HG2 | 1:I:599:LYS:HA | 1.96 | 0.47 |
| 1:I:650:PHE:O | 1:I:653:ILE:HG13 | 2.15 | 0.47 |
| 1:I:870:SER:O | 1:I:874:ILE:HG13 | 2.14 | 0.47 |
| 1:I:993:LEU:HD11 | 1:I:1003:LEU:CD1 | 2.44 | 0.47 |
| 2:K:138:VAL:HG23 | 2:K:229:MET:HG2 | 1.96 | 0.47 |
| 2:M:138:VAL:HG23 | 2:M:229:MET:HG2 | 1.96 | 0.47 |
| 2:S:138:VAL:HG23 | 2:S:229:MET:HG2 | 1.96 | 0.47 |
| 1:A:267:VAL:HG23 | 1:A:268:THR:HG22 | 1.97 | 0.47 |
| 1:A:562:LEU:CD2 | 1:A:611:TRP:NE1 | 2.77 | 0.47 |
| 1:A:572:TYR:H | 1:A:572:TYR:HD1 | 1.61 | 0.47 |
| 1:A:972:ARG:HB3 | 1:A:1001:GLN:OE1 | 2.14 | 0.47 |
| 1:B:204:LYS:CG | 1:B:205:MET:N | 2.78 | 0.47 |
| 1:B:974:LEU:HD21 | 1:B:976:LEU:HD11 | 1.96 | 0.47 |
| 1:C:446:PHE:O | 1:C:450:LEU:HG | 2.14 | 0.47 |
| 1:C:973:LYS:HB2 | 1:C:973:LYS:HE3 | 1.58 | 0.47 |
| 1:D:993:LEU:HD11 | 1:D:1003:LEU:CD1 | 2.44 | 0.47 |
| 1:E:538:GLU:HB2 | 1:E:556:ARG:HH12 | 1.80 | 0.47 |
| 1:E:758:MET:HG2 | 1:E:782:LEU:HD22 | 1.96 | 0.47 |
| 1:E:966:THR:HG23 | 1:E:992:VAL:HG11 | 1.95 | 0.47 |
| 1:F:176:GLU:OE2 | 1:F:178:ARG:N | 2.42 | 0.47 |
| 1:F:230:ILE:HD11 | 1:F:371:LEU:O | 2.15 | 0.47 |
| 1:F:336:ILE:HD12 | 1:F:348:ILE:CD1 | 2.43 | 0.47 |
| 1:F:951:CYS:HB3 | 1:F:953:LEU:CD2 | 2.38 | 0.47 |
| 1:G:234:ILE:HG13 | 3:G:1101:AGS:C8 | 2.44 | 0.47 |
| 1:G:573:LEU:O | 1:G:576:VAL:HG12 | 2.15 | 0.47 |
| 1:G:662:ASP:HA | 1:G:665:VAL:HG12 | 1.95 | 0.47 |
| 1:G:779:ARG:HB2 | 1:G:779:ARG:CZ | 2.45 | 0.47 |
| 1:H:426:MET:CG | 1:H:432:LEU:HD11 | 2.39 | 0.47 |
| 1:I:758:MET:HG2 | 1:I:782:LEU:HD22 | 1.96 | 0.47 |
| 1:I:984:LEU:HG | 1:I:985:GLY:N | 2.30 | 0.47 |
| 1:J:173:LEU:HB2 | 1:J:203:ILE:HG23 | 1.96 | 0.47 |
| 1:J:261:CYS:HB3 | 1:J:307:LEU:HD11 | 1.97 | 0.47 |
| 1:J:974:LEU:CD2 | 1:J:976:LEU:HD11 | 2.44 | 0.47 |
| 2:P:138:VAL:HG23 | 2:P:229:MET:HG2 | 1.96 | 0.47 |
| 1:A:169:THR:HB | 1:A:373:PHE:CE1 | 2.50 | 0.47 |
| 1:A:221:THR:HG21 | 1:A:362:LEU:HD13 | 1.96 | 0.47 |
| 1:A:234:ILE:HG13 | 3:A:1101:AGS:C8 | 2.44 | 0.47 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:A:239:MET:HE3 | 1:A:300:LEU:HD21 | 1.97 | 0.47 |
| 1:A:261:CYS:HB3 | 1:A:307:LEU:HD11 | 1.97 | 0.47 |
| 1:A:822:LEU:HA | 1:A:827:CYS:SG | 2.55 | 0.47 |
| 1:A:984:LEU:HG | 1:A:985:GLY:N | 2.30 | 0.47 |
| 1:B:169:THR:HB | 1:B:373:PHE:CE1 | 2.50 | 0.47 |
| 1:B:270:ARG:O | 1:B:331:LEU:HD13 | 2.14 | 0.47 |
| 1:C:972:ARG:HB3 | 1:C:1001:GLN:OE1 | 2.14 | 0.47 |
| 1:D:137:ARG:O | 1:D:141:ARG:HG3 | 2.13 | 0.47 |
| 1:D:567:LYS:HB3 | 1:D:568:PHE:H | 1.42 | 0.47 |
| 1:E:270:ARG:O | 1:E:331:LEU:HD13 | 2.14 | 0.47 |
| 1:F:235:LEU:O | 1:F:235:LEU:HD23 | 2.14 | 0.47 |
| 1:F:573:LEU:O | 1:F:576:VAL:HG12 | 2.15 | 0.47 |
| 1:F:606:LEU:H | 1:F:606:LEU:HD12 | 1.78 | 0.47 |
| 1:F:848:ALA:HB1 | 1:F:878:LYS:CG | 2.45 | 0.47 |
| 1:F:870:SER:O | 1:F:874:ILE:HG13 | 2.14 | 0.47 |
| 1:G:267:VAL:HG23 | 1:G:268:THR:HG22 | 1.97 | 0.47 |
| 1:G:492:HIS:ND1 | 1:G:553:LEU:HD11 | 2.20 | 0.47 |
| 1:G:507:LEU:HD11 | 1:H:157:ARG:HG2 | 1.96 | 0.47 |
| 1:G:534:TYR:CE2 | 1:G:561:LEU:HD22 | 2.49 | 0.47 |
| 1:G:822:LEU:HA | 1:G:827:CYS:SG | 2.55 | 0.47 |
| 1:H:230:ILE:HD11 | 1:H:371:LEU:O | 2.15 | 0.47 |
| 1:H:439:THR:O | 1:H:439:THR:HG22 | 2.14 | 0.47 |
| 1:H:573:LEU:O | 1:H:576:VAL:HG12 | 2.15 | 0.47 |
| 1:H:600:ILE:HG22 | 1:H:601:SER:H | 1.80 | 0.47 |
| 1:H:779:ARG:CZ | 1:H:779:ARG:HB2 | 2.45 | 0.47 |
| 1:I:387:SER:OG | 1:I:388:ASP:N | 2.47 | 0.47 |
| 1:I:481:LYS:HB3 | 1:I:484:PHE:HE1 | 1.78 | 0.47 |
| 1:I:974:LEU:HD21 | 1:I:976:LEU:HD11 | 1.97 | 0.47 |
| 1:J:234:ILE:HG13 | 3:J:1101:AGS:C8 | 2.44 | 0.47 |
| 1:J:446:PHE:O | 1:J:450:LEU:HG | 2.14 | 0.47 |
| 1:J:610:LYS:HG3 | 1:J:611:TRP:N | 2.30 | 0.47 |
| 1:J:624:GLN:CB | 1:J:625:PRO:CD | 2.82 | 0.47 |
| 1:J:662:ASP:HA | 1:J:665:VAL:HG12 | 1.95 | 0.47 |
| 1:A:173:LEU:HB2 | 1:A:203:ILE:HG23 | 1.95 | 0.47 |
| 1:A:650:PHE:O | 1:A:653:ILE:HG13 | 2.15 | 0.47 |
| 1:A:756:PRO:CG | 1:A:759:ARG:HH21 | 2.27 | 0.47 |
| 1:A:880:LYS:HG3 | 1:A:907:VAL:HG22 | 1.97 | 0.47 |
| 1:A:974:LEU:CD2 | 1:A:976:LEU:HD11 | 2.44 | 0.47 |
| 1:A:993:LEU:HD11 | 1:A:1003:LEU:CD1 | 2.45 | 0.47 |
| 1:A:1019:GLU:HA | 1:A:1022:GLN:OE1 | 2.12 | 0.47 |
| 1:B:261:CYS:HB3 | 1:B:307:LEU:HD11 | 1.97 | 0.47 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:B:267:VAL:HG23 | 1:B:268:THR:HG22 | 1.97 | 0.47 |
| 1:B:388:ASP:OD1 | 1:B:391:GLN:HG2 | 2.15 | 0.47 |
| 1:B:534:TYR:CE2 | 1:B:561:LEU:HD22 | 2.49 | 0.47 |
| 1:B:779:ARG:CZ | 1:B:779:ARG:HB2 | 2.45 | 0.47 |
| 1:B:972:ARG:HB3 | 1:B:1001:GLN:OE1 | 2.14 | 0.47 |
| 1:B:984:LEU:HG | 1:B:985:GLY:N | 2.30 | 0.47 |
| 1:C:149:GLN:HA | 1:C:241:LEU:HD12 | 1.96 | 0.47 |
| 1:C:194:LYS:HA | 1:C:194:LYS:HD2 | 1.79 | 0.47 |
| 1:C:230:ILE:HD11 | 1:C:371:LEU:O | 2.15 | 0.47 |
| 1:C:362:LEU:HB3 | 1:C:365:PRO:CD | 2.43 | 0.47 |
| 1:C:388:ASP:OD1 | 1:C:391:GLN:HG2 | 2.15 | 0.47 |
| 1:C:788:PHE:CE1 | 1:C:792:LEU:HD21 | 2.50 | 0.47 |
| 1:C:926:ASP:OD2 | 1:C:954:THR:OG1 | 2.29 | 0.47 |
| 1:D:173:LEU:HD12 | 1:D:205:MET:CE | 2.45 | 0.47 |
| 1:D:235:LEU:HD23 | 1:D:235:LEU:O | 2.14 | 0.47 |
| 1:D:270:ARG:O | 1:D:331:LEU:HD13 | 2.14 | 0.47 |
| 1:D:413:LEU:HD23 | 1:D:446:PHE:HE1 | 1.79 | 0.47 |
| 1:D:469:LEU:HD23 | 1:D:469:LEU:O | 2.14 | 0.47 |
| 1:D:573:LEU:O | 1:D:576:VAL:HG12 | 2.15 | 0.47 |
| 1:D:650:PHE:O | 1:D:653:ILE:HG13 | 2.15 | 0.47 |
| 1:D:779:ARG:HB2 | 1:D:779:ARG:CZ | 2.45 | 0.47 |
| 1:D:788:PHE:CE1 | 1:D:792:LEU:HD21 | 2.50 | 0.47 |
| 1:D:926:ASP:CG | 1:D:956:HIS:HB2 | 2.34 | 0.47 |
| 1:E:221:THR:HG21 | 1:E:362:LEU:HD13 | 1.96 | 0.47 |
| 1:E:230:ILE:HD11 | 1:E:371:LEU:O | 2.15 | 0.47 |
| 1:E:266:LEU:O | 1:E:266:LEU:CD1 | 2.63 | 0.47 |
| 1:E:288:HIS:ND1 | 1:E:322:TRP:HH2 | 2.06 | 0.47 |
| 1:E:413:LEU:HD23 | 1:E:446:PHE:HE1 | 1.79 | 0.47 |
| 1:E:822:LEU:HA | 1:E:827:CYS:SG | 2.55 | 0.47 |
| 1:E:984:LEU:HG | 1:E:985:GLY:N | 2.30 | 0.47 |
| 1:F:173:LEU:HB2 | 1:F:203:ILE:HG23 | 1.96 | 0.47 |
| 1:F:446:PHE:O | 1:F:450:LEU:HG | 2.14 | 0.47 |
| 1:F:451:LEU:HD12 | 1:F:462:LEU:HD21 | 1.97 | 0.47 |
| 1:F:779:ARG:CZ | 1:F:779:ARG:HB2 | 2.45 | 0.47 |
| 1:F:823:LYS:NZ | 1:F:849:SER:OG | 2.27 | 0.47 |
| 1:F:912:GLN:HE22 | 1:F:942:LYS:HE2 | 1.78 | 0.47 |
| 1:F:974:LEU:HD21 | 1:F:976:LEU:HD11 | 1.96 | 0.47 |
| 1:G:173:LEU:HB2 | 1:G:203:ILE:HG23 | 1.95 | 0.47 |
| 1:G:439:THR:O | 1:G:439:THR:HG22 | 2.14 | 0.47 |
| 1:G:794:LEU:CD2 | 1:G:800:LEU:HD23 | 2.43 | 0.47 |
| 1:G:966:THR:HG23 | 1:G:992:VAL:HG11 | 1.95 | 0.47 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:H:169:THR:HB | 1:H:373:PHE:CE1 | 2.50 | 0.47 |
| 1:H:270:ARG:O | 1:H:331:LEU:HD13 | 2.14 | 0.47 |
| 1:H:451:LEU:HD12 | 1:H:462:LEU:HD21 | 1.97 | 0.47 |
| 1:H:534:TYR:CE2 | 1:H:561:LEU:HD22 | 2.49 | 0.47 |
| 1:H:585:ASN:HA | 1:H:637:MET:HE3 | 1.94 | 0.47 |
| 1:H:794:LEU:CD2 | 1:H:800:LEU:HD23 | 2.43 | 0.47 |
| 1:H:870:SER:O | 1:H:874:ILE:HG13 | 2.14 | 0.47 |
| 1:H:966:THR:HG23 | 1:H:992:VAL:HG11 | 1.95 | 0.47 |
| 1:I:168:TYR:CD2 | 1:I:238:LYS:HE2 | 2.49 | 0.47 |
| 1:I:173:LEU:HB2 | 1:I:203:ILE:HG23 | 1.95 | 0.47 |
| 1:I:822:LEU:HA | 1:I:827:CYS:SG | 2.55 | 0.47 |
| 1:I:880:LYS:HG3 | 1:I:907:VAL:HG22 | 1.97 | 0.47 |
| 1:J:167:ARG:HB3 | 1:J:167:ARG:CZ | 2.45 | 0.47 |
| 1:J:490:ARG:HH21 | 1:J:495:GLN:CA | 2.25 | 0.47 |
| 1:J:534:TYR:CE2 | 1:J:561:LEU:HD22 | 2.49 | 0.47 |
| 1:J:822:LEU:HA | 1:J:827:CYS:SG | 2.55 | 0.47 |
| 1:J:880:LYS:HG3 | 1:J:907:VAL:HG22 | 1.97 | 0.47 |
| 1:J:972:ARG:HB3 | 1:J:1001:GLN:OE1 | 2.14 | 0.47 |
| 2:L:138:VAL:HG23 | 2:L:229:MET:HG2 | 1.96 | 0.47 |
| 2:N:138:VAL:HG23 | 2:N:229:MET:HG2 | 1.96 | 0.47 |
| 2:Q:138:VAL:HG23 | 2:Q:229:MET:HG2 | 1.96 | 0.47 |
| 2:R:138:VAL:HG23 | 2:R:229:MET:HG2 | 1.96 | 0.47 |
| 1:A:167:ARG:HB3 | 1:A:167:ARG:CZ | 2.45 | 0.47 |
| 1:A:230:ILE:HD11 | 1:A:371:LEU:O | 2.15 | 0.47 |
| 1:A:326:GLU:CG | 1:A:331:LEU:HD12 | 2.40 | 0.47 |
| 1:A:413:LEU:HD12 | 1:A:413:LEU:O | 2.15 | 0.47 |
| 1:A:462:LEU:HG | 1:A:465:HIS:CE1 | 2.49 | 0.47 |
| 1:A:562:LEU:HD11 | 1:A:611:TRP:CE3 | 2.50 | 0.47 |
| 1:A:585:ASN:HA | 1:A:637:MET:HE1 | 1.95 | 0.47 |
| 1:A:662:ASP:HA | 1:A:665:VAL:CG1 | 2.45 | 0.47 |
| 1:A:788:PHE:CE1 | 1:A:792:LEU:HD21 | 2.50 | 0.47 |
| 1:A:915:THR:O | 1:A:944:GLN:N | 2.34 | 0.47 |
| 1:A:926:ASP:OD2 | 1:A:954:THR:OG1 | 2.28 | 0.47 |
| 1:B:880:LYS:HG3 | 1:B:907:VAL:HG22 | 1.97 | 0.47 |
| 1:B:926:ASP:OD2 | 1:B:954:THR:OG1 | 2.28 | 0.47 |
| 1:C:169:THR:HB | 1:C:373:PHE:CE1 | 2.50 | 0.47 |
| 1:C:534:TYR:CE2 | 1:C:561:LEU:HB2 | 2.50 | 0.47 |
| 1:D:209:PHE:CE2 | 1:D:298:LEU:HD11 | 2.50 | 0.47 |
| 1:D:266:LEU:O | 1:D:266:LEU:CD1 | 2.63 | 0.47 |
| 1:D:351:ARG:NH1 | 1:D:499:VAL:HG13 | 2.30 | 0.47 |
| 1:D:756:PRO:CG | 1:D:759:ARG:HH21 | 2.27 | 0.47 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:D:822:LEU:HA | 1:D:827:CYS:SG | 2.55 | 0.47 |
| 1:E:173:LEU:HD12 | 1:E:205:MET:CE | 2.45 | 0.47 |
| 1:E:388:ASP:OD1 | 1:E:391:GLN:HG2 | 2.15 | 0.47 |
| 1:E:413:LEU:HD12 | 1:E:413:LEU:O | 2.15 | 0.47 |
| 1:E:573:LEU:O | 1:E:576:VAL:HG12 | 2.15 | 0.47 |
| 1:F:267:VAL:HG23 | 1:F:268:THR:HG22 | 1.97 | 0.47 |
| 1:F:788:PHE:CE1 | 1:F:792:LEU:HD21 | 2.50 | 0.47 |
| 1:F:822:LEU:HA | 1:F:827:CYS:SG | 2.55 | 0.47 |
| 1:F:993:LEU:HD11 | 1:F:1003:LEU:CD1 | 2.44 | 0.47 |
| 1:G:149:GLN:HA | 1:G:241:LEU:HD12 | 1.96 | 0.47 |
| 1:G:266:LEU:O | 1:G:266:LEU:CD1 | 2.63 | 0.47 |
| 1:G:848:ALA:HB1 | 1:G:878:LYS:CG | 2.45 | 0.47 |
| 1:H:173:LEU:HB2 | 1:H:203:ILE:HG23 | 1.95 | 0.47 |
| 1:H:822:LEU:HA | 1:H:827:CYS:SG | 2.55 | 0.47 |
| 1:H:974:LEU:HD21 | 1:H:976:LEU:HD11 | 1.96 | 0.47 |
| 1:I:377:LYS:HD3 | 1:I:377:LYS:HA | 1.51 | 0.47 |
| 1:I:462:LEU:HG | 1:I:465:HIS:CE1 | 2.49 | 0.47 |
| 1:I:573:LEU:O | 1:I:576:VAL:HG12 | 2.15 | 0.47 |
| 1:I:662:ASP:HA | 1:I:665:VAL:HG12 | 1.95 | 0.47 |
| 1:I:779:ARG:HB2 | 1:I:779:ARG:CZ | 2.45 | 0.47 |
| 1:J:388:ASP:OD1 | 1:J:391:GLN:HG2 | 2.15 | 0.47 |
| 1:J:426:MET:CG | 1:J:432:LEU:HD11 | 2.39 | 0.47 |
| 1:J:779:ARG:CZ | 1:J:779:ARG:HB2 | 2.45 | 0.47 |
| 1:J:886:LEU:CD2 | 1:J:889:LEU:HD13 | 2.38 | 0.47 |
| 2:O:138:VAL:HG23 | 2:O:229:MET:HG2 | 1.96 | 0.47 |
| 1:A:469:LEU:HD23 | 1:A:469:LEU:O | 2.14 | 0.47 |
| 1:A:779:ARG:HB2 | 1:A:779:ARG:CZ | 2.45 | 0.47 |
| 1:B:230:ILE:HD11 | 1:B:371:LEU:O | 2.15 | 0.47 |
| 1:B:872:VAL:HG11 | 1:B:900:CYS:HB2 | 1.97 | 0.47 |
| 1:C:173:LEU:HD12 | 1:C:205:MET:CE | 2.45 | 0.47 |
| 1:C:235:LEU:O | 1:C:235:LEU:HD23 | 2.14 | 0.47 |
| 1:C:610:LYS:HG3 | 1:C:611:TRP:N | 2.30 | 0.47 |
| 1:C:623:ILE:HD13 | 1:C:625:PRO:HD2 | 1.96 | 0.47 |
| 1:C:880:LYS:HG3 | 1:C:907:VAL:HG22 | 1.97 | 0.47 |
| 1:C:984:LEU:HG | 1:C:985:GLY:N | 2.30 | 0.47 |
| 1:C:990:CYS:HA | 1:C:1021:LEU:HD22 | 1.97 | 0.47 |
| 1:D:230:ILE:HD11 | 1:D:371:LEU:O | 2.15 | 0.47 |
| 1:D:439:THR:O | 1:D:439:THR:HG22 | 2.14 | 0.47 |
| 1:E:164:LEU:O | 1:E:168:TYR:HB3 | 2.14 | 0.47 |
| 1:E:209:PHE:CE2 | 1:E:298:LEU:HD11 | 2.50 | 0.47 |
| 1:E:235:LEU:O | 1:E:235:LEU:HD23 | 2.14 | 0.47 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:E:264:VAL:O | 1:E:264:VAL:HG12 | 2.14 | 0.47 |
| 1:E:492:HIS:ND1 | 1:E:553:LEU:HD11 | 2.20 | 0.47 |
| 1:E:600:ILE:HG22 | 1:E:601:SER:H | 1.80 | 0.47 |
| 1:E:650:PHE:O | 1:E:653:ILE:HG13 | 2.15 | 0.47 |
| 1:E:848:ALA:HB1 | 1:E:878:LYS:CG | 2.45 | 0.47 |
| 1:F:758:MET:HG2 | 1:F:782:LEU:HD22 | 1.96 | 0.47 |
| 1:F:966:THR:HG23 | 1:F:992:VAL:HG11 | 1.95 | 0.47 |
| 1:F:974:LEU:HG | 1:F:976:LEU:HD11 | 1.97 | 0.47 |
| 1:G:140:TYR:CE1 | 1:G:144:VAL:HG21 | 2.50 | 0.47 |
| 1:G:353:VAL:HG21 | 1:G:499:VAL:HA | 1.96 | 0.47 |
| 1:G:451:LEU:HD12 | 1:G:462:LEU:HD21 | 1.97 | 0.47 |
| 1:G:462:LEU:HG | 1:G:465:HIS:CE1 | 2.49 | 0.47 |
| 1:G:469:LEU:HD23 | 1:G:469:LEU:O | 2.14 | 0.47 |
| 1:G:788:PHE:CE1 | 1:G:792:LEU:HD21 | 2.50 | 0.47 |
| 1:G:870:SER:O | 1:G:874:ILE:HG13 | 2.14 | 0.47 |
| 1:H:149:GLN:HA | 1:H:241:LEU:HD12 | 1.96 | 0.47 |
| 1:H:267:VAL:HG23 | 1:H:268:THR:HG22 | 1.97 | 0.47 |
| 1:H:880:LYS:HG3 | 1:H:907:VAL:HG22 | 1.97 | 0.47 |
| 1:H:984:LEU:HG | 1:H:985:GLY:N | 2.30 | 0.47 |
| 1:I:167:ARG:HB3 | 1:I:167:ARG:CZ | 2.45 | 0.47 |
| 1:I:264:VAL:O | 1:I:264:VAL:HG12 | 2.14 | 0.47 |
| 1:I:451:LEU:HD12 | 1:I:462:LEU:HD21 | 1.97 | 0.47 |
| 1:I:872:VAL:HG11 | 1:I:900:CYS:HB2 | 1.97 | 0.47 |
| 1:J:267:VAL:HG23 | 1:J:268:THR:HG22 | 1.97 | 0.47 |
| 1:A:317:PRO:O | 1:A:318:LEU:HD23 | 2.15 | 0.47 |
| 1:A:502:PHE:HA | 1:A:521:ILE:CG1 | 2.44 | 0.47 |
| 1:A:619:LYS:CB | 2:K:261:ASP:CA | 2.91 | 0.47 |
| 1:A:647:MET:HE2 | 1:A:669:CYS:HB3 | 1.96 | 0.47 |
| 1:B:168:TYR:CD2 | 1:B:238:LYS:HE2 | 2.48 | 0.47 |
| 1:B:822:LEU:HA | 1:B:827:CYS:SG | 2.55 | 0.47 |
| 1:B:990:CYS:HA | 1:B:1021:LEU:HD22 | 1.97 | 0.47 |
| 1:C:140:TYR:CE1 | 1:C:144:VAL:HG21 | 2.50 | 0.47 |
| 1:C:168:TYR:CD2 | 1:C:238:LYS:HE2 | 2.49 | 0.47 |
| 1:C:623:ILE:H | 1:C:623:ILE:CD1 | 2.09 | 0.47 |
| 1:D:167:ARG:HB3 | 1:D:167:ARG:CZ | 2.45 | 0.47 |
| 1:D:502:PHE:CD1 | 1:D:525:PHE:CE1 | 3.03 | 0.47 |
| 1:D:565:TYR:CE1 | 1:D:574:ILE:HG12 | 2.50 | 0.47 |
| 1:D:886:LEU:CD2 | 1:D:889:LEU:HD13 | 2.38 | 0.47 |
| 1:D:926:ASP:OD2 | 1:D:954:THR:OG1 | 2.28 | 0.47 |
| 1:E:234:ILE:HB | 3:E:1101:AGS:N7 | 2.30 | 0.47 |
| 1:E:489:LEU:HD13 | 1:E:518:TYR:CD2 | 2.50 | 0.47 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:E:647:MET:HA | 1:E:650:PHE:HD2 | 1.80 | 0.47 |
| 1:E:748:LEU:HD23 | 1:E:780:CYS:HG | 1.79 | 0.47 |
| 1:E:912:GLN:HE22 | 1:E:942:LYS:HE2 | 1.78 | 0.47 |
| 1:F:565:TYR:CD2 | 1:F:565:TYR:C | 2.85 | 0.47 |
| 1:F:647:MET:HA | 1:F:650:PHE:HD2 | 1.80 | 0.47 |
| 1:G:234:ILE:HB | 3:G:1101:AGS:N7 | 2.30 | 0.47 |
| 1:G:362:LEU:HB3 | 1:G:365:PRO:CD | 2.43 | 0.47 |
| 1:G:490:ARG:HH21 | 1:G:495:GLN:CA | 2.25 | 0.47 |
| 1:G:974:LEU:HG | 1:G:976:LEU:HD11 | 1.97 | 0.47 |
| 1:H:239:MET:HE3 | 1:H:300:LEU:HD21 | 1.97 | 0.47 |
| 1:H:387:SER:OG | 1:H:388:ASP:N | 2.47 | 0.47 |
| 1:H:610:LYS:HG3 | 1:H:611:TRP:N | 2.30 | 0.47 |
| 1:H:662:ASP:HA | 1:H:665:VAL:HG12 | 1.95 | 0.47 |
| 1:H:993:LEU:HD11 | 1:H:1003:LEU:CD1 | 2.44 | 0.47 |
| 1:I:624:GLN:N | 1:I:625:PRO:HD2 | 2.27 | 0.47 |
| 1:I:662:ASP:HA | 1:I:665:VAL:CG1 | 2.45 | 0.47 |
| 1:J:317:PRO:O | 1:J:318:LEU:HD23 | 2.15 | 0.47 |
| 1:J:451:LEU:HD12 | 1:J:462:LEU:HD21 | 1.97 | 0.47 |
| 1:J:788:PHE:CE1 | 1:J:792:LEU:HD21 | 2.50 | 0.47 |
| 1:A:387:SER:OG | 1:A:388:ASP:N | 2.47 | 0.46 |
| 1:B:140:TYR:CE1 | 1:B:144:VAL:HG21 | 2.50 | 0.46 |
| 1:B:209:PHE:CE2 | 1:B:298:LEU:HD11 | 2.50 | 0.46 |
| 1:B:413:LEU:HD12 | 1:B:413:LEU:O | 2.15 | 0.46 |
| 1:C:351:ARG:NH1 | 1:C:499:VAL:HG13 | 2.30 | 0.46 |
| 1:C:489:LEU:HD13 | 1:C:518:TYR:CD2 | 2.50 | 0.46 |
| 1:C:572:TYR:HD1 | 1:C:572:TYR:H | 1.61 | 0.46 |
| 1:D:169:THR:HB | 1:D:373:PHE:CE1 | 2.50 | 0.46 |
| 1:D:489:LEU:HD13 | 1:D:518:TYR:CD2 | 2.51 | 0.46 |
| 1:D:610:LYS:HG3 | 1:D:611:TRP:N | 2.30 | 0.46 |
| 1:D:880:LYS:HG3 | 1:D:907:VAL:HG22 | 1.97 | 0.46 |
| 1:E:169:THR:HB | 1:E:373:PHE:CE1 | 2.50 | 0.46 |
| 1:E:506:ASN:O | 1:E:506:ASN:OD1 | 2.34 | 0.46 |
| 1:E:534:TYR:CE2 | 1:E:561:LEU:HD22 | 2.49 | 0.46 |
| 1:E:880:LYS:HG3 | 1:E:907:VAL:HG22 | 1.97 | 0.46 |
| 1:F:234:ILE:HB | 3:F:1101:AGS:N7 | 2.30 | 0.46 |
| 1:F:413:LEU:HD12 | 1:F:413:LEU:O | 2.15 | 0.46 |
| 1:F:462:LEU:HG | 1:F:465:HIS:CE1 | 2.49 | 0.46 |
| 1:G:567:LYS:HA | 1:G:567:LYS:HD2 | 1.50 | 0.46 |
| 1:G:650:PHE:O | 1:G:653:ILE:HG13 | 2.15 | 0.46 |
| 1:G:662:ASP:HA | 1:G:665:VAL:CG1 | 2.45 | 0.46 |
| 1:G:880:LYS:HG3 | 1:G:907:VAL:HG22 | 1.97 | 0.46 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:G:974:LEU:HD21 | 1:G:976:LEU:HD11 | 1.96 | 0.46 |
| 1:H:140:TYR:CE1 | 1:H:144:VAL:HG21 | 2.50 | 0.46 |
| 1:H:167:ARG:HB3 | 1:H:167:ARG:CZ | 2.45 | 0.46 |
| 1:H:288:HIS:ND1 | 1:H:322:TRP:HH2 | 2.06 | 0.46 |
| 1:H:446:PHE:O | 1:H:450:LEU:HG | 2.14 | 0.46 |
| 1:H:662:ASP:HA | 1:H:665:VAL:CG1 | 2.45 | 0.46 |
| 1:H:788:PHE:CE1 | 1:H:792:LEU:HD21 | 2.50 | 0.46 |
| 1:H:848:ALA:HB1 | 1:H:878:LYS:CG | 2.45 | 0.46 |
| 1:H:972:ARG:HB3 | 1:H:1001:GLN:OE1 | 2.14 | 0.46 |
| 1:I:261:CYS:HB3 | 1:I:307:LEU:HD11 | 1.97 | 0.46 |
| 1:I:492:HIS:HE1 | 1:I:553:LEU:CD2 | 2.25 | 0.46 |
| 1:I:600:ILE:HG22 | 1:I:601:SER:H | 1.80 | 0.46 |
| 1:I:788:PHE:CE1 | 1:I:792:LEU:HD21 | 2.50 | 0.46 |
| 1:J:266:LEU:O | 1:J:266:LEU:CD1 | 2.63 | 0.46 |
| 1:J:567:LYS:HD2 | 1:J:567:LYS:HA | 1.59 | 0.46 |
| 1:J:758:MET:HG2 | 1:J:782:LEU:HD22 | 1.95 | 0.46 |
| 1:J:993:LEU:HD11 | 1:J:1003:LEU:CD1 | 2.45 | 0.46 |
| 1:A:264:VAL:O | 1:A:264:VAL:HG12 | 2.14 | 0.46 |
| 1:B:662:ASP:HA | 1:B:665:VAL:CG1 | 2.45 | 0.46 |
| 1:B:974:LEU:HG | 1:B:976:LEU:HD11 | 1.97 | 0.46 |
| 1:C:204:LYS:CG | 1:C:205:MET:N | 2.77 | 0.46 |
| 1:C:209:PHE:CE2 | 1:C:298:LEU:HD11 | 2.50 | 0.46 |
| 1:C:650:PHE:O | 1:C:653:ILE:HG13 | 2.15 | 0.46 |
| 1:C:823:LYS:NZ | 1:C:849:SER:OG | 2.27 | 0.46 |
| 1:D:140:TYR:CE1 | 1:D:144:VAL:HG21 | 2.50 | 0.46 |
| 1:D:149:GLN:HA | 1:D:241:LEU:HD12 | 1.96 | 0.46 |
| 1:D:413:LEU:HD12 | 1:D:413:LEU:O | 2.15 | 0.46 |
| 1:D:494:LEU:HD13 | 1:D:494:LEU:HA | 1.80 | 0.46 |
| 1:E:173:LEU:HB2 | 1:E:203:ILE:HG23 | 1.95 | 0.46 |
| 1:F:149:GLN:HA | 1:F:241:LEU:HD12 | 1.97 | 0.46 |
| 1:F:676:VAL:HG13 | 1:F:743:LEU:HD23 | 1.97 | 0.46 |
| 1:F:824:HIS:CE1 | 1:F:826:LEU:HG | 2.51 | 0.46 |
| 1:G:506:ASN:O | 1:G:506:ASN:OD1 | 2.34 | 0.46 |
| 1:G:824:HIS:CE1 | 1:G:826:LEU:HG | 2.51 | 0.46 |
| 1:H:362:LEU:HB3 | 1:H:365:PRO:CD | 2.43 | 0.46 |
| 1:H:481:LYS:HB3 | 1:H:484:PHE:HE1 | 1.78 | 0.46 |
| 1:H:492:HIS:HE1 | 1:H:553:LEU:CD2 | 2.25 | 0.46 |
| 1:H:506:ASN:OD1 | 1:H:506:ASN:O | 2.33 | 0.46 |
| 1:I:149:GLN:HA | 1:I:241:LEU:HD12 | 1.97 | 0.46 |
| 1:I:446:PHE:O | 1:I:450:LEU:HG | 2.14 | 0.46 |
| 1:J:413:LEU:HD23 | 1:J:446:PHE:HE1 | 1.79 | 0.46 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:J:662:ASP:HA | 1:J:665:VAL:CG1 | 2.45 | 0.46 |
| 2:M:135:GLU:HA | 2:M:138:VAL:HG12 | 1.97 | 0.46 |
| 2:R:214:ASN:OD1 | 2:R:215:PHE:N | 2.43 | 0.46 |
| 1:A:140:TYR:CE1 | 1:A:144:VAL:HG21 | 2.50 | 0.46 |
| 1:A:217:GLU:CG | 1:B:146:SER:HA | 2.42 | 0.46 |
| 1:A:426:MET:CG | 1:A:432:LEU:HD11 | 2.39 | 0.46 |
| 1:A:538:GLU:HB2 | 1:A:556:ARG:HH12 | 1.80 | 0.46 |
| 1:A:974:LEU:HG | 1:A:976:LEU:HD11 | 1.97 | 0.46 |
| 1:B:149:GLN:HA | 1:B:241:LEU:HD12 | 1.96 | 0.46 |
| 1:B:439:THR:O | 1:B:439:THR:HG22 | 2.14 | 0.46 |
| 1:B:572:TYR:HD1 | 1:B:572:TYR:H | 1.61 | 0.46 |
| 1:B:848:ALA:HB1 | 1:B:878:LYS:CG | 2.45 | 0.46 |
| 1:C:261:CYS:HB3 | 1:C:307:LEU:HD11 | 1.97 | 0.46 |
| 1:C:471:SER:CB | 1:C:553:LEU:HD12 | 2.20 | 0.46 |
| 1:D:234:ILE:HB | 3:D:1101:AGS:N7 | 2.30 | 0.46 |
| 1:D:446:PHE:O | 1:D:450:LEU:HG | 2.14 | 0.46 |
| 1:D:989:PHE:O | 1:D:993:LEU:HG | 2.16 | 0.46 |
| 1:E:167:ARG:HB3 | 1:E:167:ARG:CZ | 2.45 | 0.46 |
| 1:E:194:LYS:HA | 1:E:194:LYS:HD2 | 1.79 | 0.46 |
| 1:E:500:SER:CA | 1:E:503:LEU:O | 2.63 | 0.46 |
| 1:E:779:ARG:CZ | 1:E:779:ARG:HB2 | 2.45 | 0.46 |
| 1:E:974:LEU:HG | 1:E:976:LEU:HD11 | 1.97 | 0.46 |
| 1:F:140:TYR:CE1 | 1:F:144:VAL:HG21 | 2.50 | 0.46 |
| 1:F:477:ILE:N | 1:F:526:GLN:HE22 | 2.14 | 0.46 |
| 1:F:506:ASN:OD1 | 1:F:506:ASN:O | 2.34 | 0.46 |
| 1:F:600:ILE:HG22 | 1:F:601:SER:H | 1.80 | 0.46 |
| 1:G:426:MET:CG | 1:G:432:LEU:HD11 | 2.39 | 0.46 |
| 1:G:647:MET:HA | 1:G:650:PHE:HD2 | 1.80 | 0.46 |
| 1:G:647:MET:HE1 | 1:G:669:CYS:HB3 | 1.96 | 0.46 |
| 1:G:972:ARG:HB3 | 1:G:1001:GLN:OE1 | 2.14 | 0.46 |
| 1:H:221:THR:HG21 | 1:H:362:LEU:HD13 | 1.96 | 0.46 |
| 1:H:489:LEU:HD13 | 1:H:518:TYR:CD2 | 2.50 | 0.46 |
| 1:H:650:PHE:O | 1:H:653:ILE:HG13 | 2.15 | 0.46 |
| 1:I:205:MET:HB2 | 1:I:205:MET:HE2 | 1.86 | 0.46 |
| 1:I:824:HIS:CE1 | 1:I:826:LEU:HG | 2.51 | 0.46 |
| 1:I:972:ARG:HB3 | 1:I:1001:GLN:OE1 | 2.14 | 0.46 |
| 1:J:294:PRO:HB3 | 1:J:341:LEU:HD23 | 1.98 | 0.46 |
| 1:J:481:LYS:HB3 | 1:J:484:PHE:HE1 | 1.78 | 0.46 |
| 1:J:489:LEU:HD23 | 1:J:494:LEU:HB3 | 1.98 | 0.46 |
| 1:J:984:LEU:HG | 1:J:985:GLY:N | 2.30 | 0.46 |
| 2:P:135:GLU:HA | 2:P:138:VAL:HG12 | 1.97 | 0.46 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:A:353:VAL:HG21 | 1:A:499:VAL:HA | 1.97 | 0.46 |
| 1:A:489:LEU:HD13 | 1:A:518:TYR:CD2 | 2.51 | 0.46 |
| 1:A:489:LEU:HD23 | 1:A:494:LEU:HB3 | 1.98 | 0.46 |
| 1:A:990:CYS:HA | 1:A:1021:LEU:HD22 | 1.97 | 0.46 |
| 1:B:173:LEU:HD12 | 1:B:205:MET:CE | 2.45 | 0.46 |
| 1:B:176:GLU:OE2 | 1:B:178:ARG:N | 2.42 | 0.46 |
| 1:B:234:ILE:CG2 | 3:B:1101:AGS:N7 | 2.79 | 0.46 |
| 1:B:252:ARG:CD | 1:B:253:PHE:CZ | 2.99 | 0.46 |
| 1:B:266:LEU:O | 1:B:266:LEU:CD1 | 2.63 | 0.46 |
| 1:B:477:ILE:N | 1:B:526:GLN:HE22 | 2.14 | 0.46 |
| 1:B:507:LEU:HD11 | 1:C:157:ARG:HG2 | 1.95 | 0.46 |
| 1:C:252:ARG:CD | 1:C:253:PHE:CZ | 2.99 | 0.46 |
| 1:C:267:VAL:HG23 | 1:C:268:THR:HG22 | 1.97 | 0.46 |
| 1:C:477:ILE:N | 1:C:526:GLN:HE22 | 2.14 | 0.46 |
| 1:C:824:HIS:CE1 | 1:C:826:LEU:HG | 2.51 | 0.46 |
| 1:C:848:ALA:HB1 | 1:C:878:LYS:CG | 2.45 | 0.46 |
| 1:D:252:ARG:CD | 1:D:253:PHE:CZ | 2.99 | 0.46 |
| 1:D:264:VAL:O | 1:D:264:VAL:HG12 | 2.14 | 0.46 |
| 1:D:317:PRO:O | 1:D:318:LEU:HD23 | 2.15 | 0.46 |
| 1:D:848:ALA:HB1 | 1:D:878:LYS:CG | 2.45 | 0.46 |
| 1:D:972:ARG:HB3 | 1:D:1001:GLN:OE1 | 2.14 | 0.46 |
| 1:D:990:CYS:HA | 1:D:1021:LEU:HD22 | 1.97 | 0.46 |
| 1:E:788:PHE:CE1 | 1:E:792:LEU:HD21 | 2.50 | 0.46 |
| 1:F:264:VAL:O | 1:F:264:VAL:HG12 | 2.14 | 0.46 |
| 1:F:266:LEU:O | 1:F:266:LEU:CD1 | 2.63 | 0.46 |
| 1:F:388:ASP:OD1 | 1:F:391:GLN:HG2 | 2.15 | 0.46 |
| 1:F:880:LYS:HG3 | 1:F:907:VAL:HG22 | 1.97 | 0.46 |
| 1:G:169:THR:HB | 1:G:373:PHE:CE1 | 2.50 | 0.46 |
| 1:G:610:LYS:HG3 | 1:G:611:TRP:N | 2.30 | 0.46 |
| 1:I:169:THR:HB | 1:I:373:PHE:CE1 | 2.50 | 0.46 |
| 1:I:266:LEU:O | 1:I:266:LEU:CD1 | 2.63 | 0.46 |
| 1:I:294:PRO:HB3 | 1:I:341:LEU:HD23 | 1.98 | 0.46 |
| 1:I:413:LEU:HD23 | 1:I:446:PHE:HE1 | 1.79 | 0.46 |
| 1:I:534:TYR:CE2 | 1:I:561:LEU:HD22 | 2.49 | 0.46 |
| 1:J:221:THR:HG21 | 1:J:362:LEU:HD13 | 1.96 | 0.46 |
| 1:J:413:LEU:O | 1:J:413:LEU:HD12 | 2.15 | 0.46 |
| 1:J:489:LEU:HD13 | 1:J:518:TYR:CD2 | 2.50 | 0.46 |
| 1:A:209:PHE:CE2 | 1:A:298:LEU:HD11 | 2.50 | 0.46 |
| 1:A:234:ILE:CG2 | 3:A:1101:AGS:N7 | 2.79 | 0.46 |
| 1:A:234:ILE:HB | 3:A:1101:AGS:N7 | 2.30 | 0.46 |
| 1:A:252:ARG:CD | 1:A:253:PHE:CZ | 2.99 | 0.46 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:A:351:ARG:HB3 | 1:A:500:SER:OG | 2.15 | 0.46 |
| 1:A:600:ILE:HG22 | 1:A:601:SER:H | 1.80 | 0.46 |
| 1:A:647:MET:HA | 1:A:650:PHE:HD2 | 1.80 | 0.46 |
| 1:A:872:VAL:HG11 | 1:A:900:CYS:HB2 | 1.97 | 0.46 |
| 1:A:893:ASN:HA | 1:A:921:GLY:HA3 | 1.98 | 0.46 |
| 1:B:167:ARG:HB3 | 1:B:167:ARG:CZ | 2.45 | 0.46 |
| 1:B:610:LYS:HG3 | 1:B:611:TRP:N | 2.30 | 0.46 |
| 1:B:647:MET:HA | 1:B:650:PHE:HD2 | 1.80 | 0.46 |
| 1:B:664:MET:HE1 | 1:B:729:PHE:HD1 | 1.81 | 0.46 |
| 1:B:676:VAL:HG13 | 1:B:743:LEU:HD23 | 1.97 | 0.46 |
| 1:B:893:ASN:HA | 1:B:921:GLY:HA3 | 1.98 | 0.46 |
| 1:C:266:LEU:O | 1:C:266:LEU:CD1 | 2.63 | 0.46 |
| 1:C:317:PRO:O | 1:C:318:LEU:HD23 | 2.15 | 0.46 |
| 1:C:600:ILE:HG22 | 1:C:601:SER:H | 1.80 | 0.46 |
| 1:C:647:MET:HA | 1:C:650:PHE:HD2 | 1.80 | 0.46 |
| 1:C:822:LEU:HA | 1:C:827:CYS:SG | 2.55 | 0.46 |
| 1:C:872:VAL:HG11 | 1:C:900:CYS:HB2 | 1.97 | 0.46 |
| 1:D:470:CYS:SG | 1:D:532:MET:HG2 | 2.56 | 0.46 |
| 1:D:534:TYR:CE2 | 1:D:561:LEU:HD22 | 2.49 | 0.46 |
| 1:D:794:LEU:CD2 | 1:D:800:LEU:HD23 | 2.43 | 0.46 |
| 1:D:984:LEU:HG | 1:D:985:GLY:N | 2.30 | 0.46 |
| 1:E:252:ARG:CD | 1:E:253:PHE:CZ | 2.99 | 0.46 |
| 1:E:438:THR:HG21 | 1:E:588:ARG:HH22 | 1.81 | 0.46 |
| 1:E:451:LEU:HD12 | 1:E:462:LEU:HD21 | 1.97 | 0.46 |
| 1:E:470:CYS:SG | 1:E:532:MET:HG2 | 2.56 | 0.46 |
| 1:E:585:ASN:HA | 1:E:637:MET:HE1 | 1.98 | 0.46 |
| 1:E:872:VAL:HG11 | 1:E:900:CYS:HB2 | 1.97 | 0.46 |
| 1:F:169:THR:HB | 1:F:373:PHE:CE1 | 2.50 | 0.46 |
| 1:F:173:LEU:HD12 | 1:F:205:MET:CE | 2.45 | 0.46 |
| 1:F:564:ASN:O | 1:F:570:LYS:HB2 | 2.16 | 0.46 |
| 1:F:650:PHE:O | 1:F:653:ILE:HG13 | 2.15 | 0.46 |
| 1:F:989:PHE:O | 1:F:993:LEU:HG | 2.16 | 0.46 |
| 1:G:167:ARG:HB3 | 1:G:167:ARG:CZ | 2.45 | 0.46 |
| 1:G:477:ILE:N | 1:G:526:GLN:HE22 | 2.14 | 0.46 |
| 1:G:989:PHE:O | 1:G:993:LEU:HG | 2.16 | 0.46 |
| 1:H:413:LEU:HD12 | 1:H:413:LEU:O | 2.15 | 0.46 |
| 1:H:758:MET:HE3 | 1:H:758:MET:HA | 1.98 | 0.46 |
| 1:H:872:VAL:HG11 | 1:H:900:CYS:HB2 | 1.97 | 0.46 |
| 1:H:990:CYS:HA | 1:H:1021:LEU:HD22 | 1.97 | 0.46 |
| 1:I:209:PHE:CE2 | 1:I:298:LEU:HD11 | 2.50 | 0.46 |
| 1:I:388:ASP:OD1 | 1:I:391:GLN:HG2 | 2.15 | 0.46 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:I:490:ARG:HH21 | 1:I:495:GLN:CA | 2.25 | 0.46 |
| 1:J:169:THR:HB | 1:J:373:PHE:CE1 | 2.50 | 0.46 |
| 1:A:388:ASP:OD1 | 1:A:391:GLN:HG2 | 2.15 | 0.46 |
| 1:A:438:THR:HG21 | 1:A:588:ARG:HH22 | 1.81 | 0.46 |
| 1:A:676:VAL:HG13 | 1:A:743:LEU:HD23 | 1.97 | 0.46 |
| 1:B:272:LEU:HB3 | 1:B:322:TRP:HB2 | 1.97 | 0.46 |
| 1:B:489:LEU:HD23 | 1:B:494:LEU:HB3 | 1.98 | 0.46 |
| 1:B:758:MET:HE3 | 1:B:758:MET:HA | 1.96 | 0.46 |
| 1:B:788:PHE:CE1 | 1:B:792:LEU:HD21 | 2.50 | 0.46 |
| 1:C:167:ARG:HB3 | 1:C:167:ARG:CZ | 2.45 | 0.46 |
| 1:C:662:ASP:HA | 1:C:665:VAL:CG1 | 2.45 | 0.46 |
| 1:D:451:LEU:HD12 | 1:D:462:LEU:HD21 | 1.97 | 0.46 |
| 1:D:503:LEU:HD21 | 1:D:520:PHE:HE1 | 1.77 | 0.46 |
| 1:D:506:ASN:OD1 | 1:D:506:ASN:O | 2.34 | 0.46 |
| 1:D:538:GLU:HB2 | 1:D:556:ARG:HH12 | 1.81 | 0.46 |
| 1:D:567:LYS:NZ | 1:D:623:ILE:HG22 | 2.29 | 0.46 |
| 1:F:662:ASP:HA | 1:F:665:VAL:CG1 | 2.45 | 0.46 |
| 1:G:270:ARG:O | 1:G:331:LEU:HD13 | 2.14 | 0.46 |
| 1:G:388:ASP:OD1 | 1:G:391:GLN:HG2 | 2.15 | 0.46 |
| 1:G:489:LEU:HD13 | 1:G:518:TYR:CD2 | 2.50 | 0.46 |
| 1:G:758:MET:HE3 | 1:G:758:MET:HA | 1.98 | 0.46 |
| 1:H:264:VAL:O | 1:H:264:VAL:HG12 | 2.14 | 0.46 |
| 1:H:369:GLU:OE2 | 1:H:504:ARG:NH2 | 2.37 | 0.46 |
| 1:H:477:ILE:N | 1:H:526:GLN:HE22 | 2.14 | 0.46 |
| 1:H:824:HIS:CE1 | 1:H:826:LEU:HG | 2.51 | 0.46 |
| 1:H:893:ASN:HA | 1:H:921:GLY:HA3 | 1.98 | 0.46 |
| 1:H:989:PHE:O | 1:H:993:LEU:HG | 2.16 | 0.46 |
| 1:I:145:ARG:HE | 1:I:145:ARG:HB3 | 1.61 | 0.46 |
| 1:I:221:THR:HG21 | 1:I:362:LEU:HD13 | 1.96 | 0.46 |
| 1:I:426:MET:CG | 1:I:432:LEU:HD11 | 2.39 | 0.46 |
| 1:I:610:LYS:HG3 | 1:I:611:TRP:N | 2.30 | 0.46 |
| 1:I:912:GLN:HE22 | 1:I:942:LYS:HE2 | 1.78 | 0.46 |
| 1:I:990:CYS:HA | 1:I:1021:LEU:HD22 | 1.97 | 0.46 |
| 1:J:149:GLN:HA | 1:J:241:LEU:HD12 | 1.97 | 0.46 |
| 1:J:173:LEU:HD12 | 1:J:205:MET:CE | 2.45 | 0.46 |
| 1:J:209:PHE:CE2 | 1:J:298:LEU:HD11 | 2.50 | 0.46 |
| 1:J:432:LEU:HD22 | 1:J:435:THR:HG21 | 1.98 | 0.46 |
| 1:J:929:ILE:HD11 | 1:J:953:LEU:HD13 | 1.98 | 0.46 |
| 1:J:974:LEU:HG | 1:J:976:LEU:HD11 | 1.97 | 0.46 |
| 2:L:135:GLU:HA | 2:L:138:VAL:HG12 | 1.97 | 0.46 |
| 2:O:135:GLU:HA | 2:O:138:VAL:HG12 | 1.97 | 0.46 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 2:Q:214:ASN:OD1 | 2:Q:215:PHE:N | 2.43 | 0.46 |
| 1:A:272:LEU:HB3 | 1:A:322:TRP:HB2 | 1.97 | 0.46 |
| 1:A:406:PHE:CG | 1:A:406:PHE:O | 2.67 | 0.46 |
| 1:A:451:LEU:HD12 | 1:A:462:LEU:HD21 | 1.97 | 0.46 |
| 1:A:477:ILE:N | 1:A:526:GLN:HE22 | 2.14 | 0.46 |
| 1:B:470:CYS:SG | 1:B:532:MET:HG2 | 2.56 | 0.46 |
| 1:B:471:SER:HB2 | 1:B:553:LEU:HD13 | 1.90 | 0.46 |
| 1:B:573:LEU:O | 1:B:576:VAL:HG12 | 2.15 | 0.46 |
| 1:B:824:HIS:CE1 | 1:B:826:LEU:HG | 2.51 | 0.46 |
| 1:B:989:PHE:O | 1:B:993:LEU:HG | 2.16 | 0.46 |
| 1:C:239:MET:HE3 | 1:C:300:LEU:HD21 | 1.97 | 0.46 |
| 1:C:439:THR:HG22 | 1:C:439:THR:O | 2.15 | 0.46 |
| 1:C:650:PHE:HB3 | 1:C:653:ILE:CD1 | 2.41 | 0.46 |
| 1:C:923:THR:HA | 1:C:951:CYS:O | 2.16 | 0.46 |
| 1:E:477:ILE:N | 1:E:526:GLN:HE22 | 2.14 | 0.46 |
| 1:E:610:LYS:HG3 | 1:E:611:TRP:N | 2.30 | 0.46 |
| 1:E:619:LYS:CB | 2:O:261:ASP:OD2 | 2.63 | 0.46 |
| 1:E:676:VAL:HG13 | 1:E:743:LEU:HD23 | 1.97 | 0.46 |
| 1:F:252:ARG:CD | 1:F:253:PHE:CZ | 2.99 | 0.46 |
| 1:F:294:PRO:HB3 | 1:F:341:LEU:HD23 | 1.98 | 0.46 |
| 1:F:929:ILE:HD11 | 1:F:953:LEU:HD13 | 1.98 | 0.46 |
| 1:G:173:LEU:HD12 | 1:G:205:MET:CE | 2.45 | 0.46 |
| 1:G:929:ILE:HD11 | 1:G:953:LEU:HD13 | 1.98 | 0.46 |
| 1:H:209:PHE:CE2 | 1:H:298:LEU:HD11 | 2.50 | 0.46 |
| 1:H:388:ASP:OD1 | 1:H:391:GLN:HG2 | 2.15 | 0.46 |
| 1:H:432:LEU:HD22 | 1:H:435:THR:HG21 | 1.98 | 0.46 |
| 1:H:494:LEU:HD13 | 1:H:494:LEU:HA | 1.80 | 0.46 |
| 1:I:140:TYR:CE1 | 1:I:144:VAL:HG21 | 2.50 | 0.46 |
| 1:I:173:LEU:HD12 | 1:I:205:MET:CE | 2.45 | 0.46 |
| 1:I:230:ILE:HD11 | 1:I:371:LEU:O | 2.15 | 0.46 |
| 1:I:369:GLU:OE2 | 1:I:504:ARG:NH2 | 2.37 | 0.46 |
| 1:I:373:PHE:HE2 | 1:I:412:PRO:HA | 1.81 | 0.46 |
| 1:I:489:LEU:HD23 | 1:I:494:LEU:HB3 | 1.98 | 0.46 |
| 1:J:151:ILE:HG23 | 1:J:151:ILE:O | 2.16 | 0.46 |
| 1:J:234:ILE:HB | 3:J:1101:AGS:N7 | 2.30 | 0.46 |
| 1:J:272:LEU:HB3 | 1:J:322:TRP:HB2 | 1.97 | 0.46 |
| 1:J:462:LEU:HG | 1:J:465:HIS:CE1 | 2.49 | 0.46 |
| 1:J:500:SER:CA | 1:J:503:LEU:O | 2.62 | 0.46 |
| 1:J:676:VAL:HG13 | 1:J:743:LEU:HD23 | 1.97 | 0.46 |
| 2:S:135:GLU:HA | 2:S:138:VAL:HG12 | 1.97 | 0.46 |
| 2:T:227:TYR:OH | 2:T:256:PRO:O | 2.25 | 0.46 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:A:439:THR:HG22 | 1:A:439:THR:O | 2.14 | 0.46 |
| 1:A:989:PHE:O | 1:A:993:LEU:HG | 2.16 | 0.46 |
| 1:B:651:PRO:HA | 1:B:676:VAL:HA | 1.98 | 0.46 |
| 1:C:151:ILE:HG23 | 1:C:151:ILE:O | 2.16 | 0.46 |
| 1:C:573:LEU:CD2 | 1:C:576:VAL:HG11 | 2.40 | 0.46 |
| 1:D:388:ASP:OD1 | 1:D:391:GLN:HG2 | 2.15 | 0.46 |
| 1:D:573:LEU:CD2 | 1:D:576:VAL:HG11 | 2.40 | 0.46 |
| 1:D:651:PRO:HA | 1:D:676:VAL:HA | 1.98 | 0.46 |
| 1:E:261:CYS:HB3 | 1:E:307:LEU:HD11 | 1.97 | 0.46 |
| 1:E:267:VAL:HG23 | 1:E:268:THR:HG22 | 1.97 | 0.46 |
| 1:E:446:PHE:O | 1:E:450:LEU:HG | 2.14 | 0.46 |
| 1:E:651:PRO:HA | 1:E:676:VAL:HA | 1.98 | 0.46 |
| 1:E:758:MET:HE3 | 1:E:758:MET:HA | 1.97 | 0.46 |
| 1:F:209:PHE:CE2 | 1:F:298:LEU:HD11 | 2.50 | 0.46 |
| 1:F:373:PHE:HE2 | 1:F:412:PRO:HA | 1.81 | 0.46 |
| 1:F:470:CYS:SG | 1:F:532:MET:HG2 | 2.56 | 0.46 |
| 1:F:489:LEU:HD13 | 1:F:518:TYR:CD2 | 2.50 | 0.46 |
| 1:F:567:LYS:HD2 | 1:F:567:LYS:HA | 1.52 | 0.46 |
| 1:F:758:MET:HE3 | 1:F:758:MET:HA | 1.98 | 0.46 |
| 1:F:990:CYS:HA | 1:F:1021:LEU:HD22 | 1.97 | 0.46 |
| 1:G:413:LEU:O | 1:G:413:LEU:HD12 | 2.15 | 0.46 |
| 1:G:492:HIS:HE1 | 1:G:553:LEU:CD2 | 2.25 | 0.46 |
| 1:G:564:ASN:O | 1:G:570:LYS:HB2 | 2.16 | 0.46 |
| 1:G:600:ILE:HG22 | 1:G:601:SER:H | 1.80 | 0.46 |
| 1:G:893:ASN:HA | 1:G:921:GLY:HA3 | 1.98 | 0.46 |
| 1:H:234:ILE:CG2 | 3:H:1101:AGS:N7 | 2.79 | 0.46 |
| 1:H:253:PHE:HB3 | 1:H:297:ILE:N | 2.31 | 0.46 |
| 1:H:438:THR:HG21 | 1:H:588:ARG:HH22 | 1.81 | 0.46 |
| 1:H:471:SER:HB2 | 1:H:553:LEU:HD13 | 1.90 | 0.46 |
| 1:H:815:ILE:HG21 | 1:H:847:LEU:HD21 | 1.98 | 0.46 |
| 1:I:432:LEU:HD22 | 1:I:435:THR:HG21 | 1.98 | 0.46 |
| 1:I:538:GLU:HB2 | 1:I:556:ARG:HH12 | 1.81 | 0.46 |
| 1:I:848:ALA:HB1 | 1:I:878:LYS:CG | 2.45 | 0.46 |
| 1:J:140:TYR:CE1 | 1:J:144:VAL:HG21 | 2.50 | 0.46 |
| 1:J:650:PHE:O | 1:J:653:ILE:HG13 | 2.15 | 0.46 |
| 1:J:872:VAL:HG11 | 1:J:900:CYS:HB2 | 1.97 | 0.46 |
| 1:A:147:ARG:O | 1:A:147:ARG:HG3 | 2.16 | 0.46 |
| 1:A:173:LEU:HD12 | 1:A:205:MET:CE | 2.45 | 0.46 |
| 1:A:266:LEU:O | 1:A:266:LEU:CD1 | 2.63 | 0.46 |
| 1:A:651:PRO:HA | 1:A:676:VAL:HA | 1.98 | 0.46 |
| 1:A:848:ALA:HB1 | 1:A:878:LYS:CG | 2.45 | 0.46 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:B:234:ILE:HB | 3:B:1101:AGS:N7 | 2.30 | 0.46 |
| 1:C:451:LEU:HD12 | 1:C:462:LEU:HD21 | 1.97 | 0.46 |
| 1:C:470:CYS:SG | 1:C:532:MET:HG2 | 2.56 | 0.46 |
| 1:C:489:LEU:HD23 | 1:C:494:LEU:HB3 | 1.98 | 0.46 |
| 1:C:502:PHE:CD1 | 1:C:525:PHE:CE1 | 3.04 | 0.46 |
| 1:C:974:LEU:HG | 1:C:976:LEU:HD11 | 1.97 | 0.46 |
| 1:D:923:THR:HA | 1:D:951:CYS:O | 2.16 | 0.46 |
| 1:D:974:LEU:HG | 1:D:976:LEU:HD11 | 1.97 | 0.46 |
| 1:E:489:LEU:HD23 | 1:E:494:LEU:HB3 | 1.98 | 0.46 |
| 1:E:568:PHE:O | 1:E:570:LYS:HG2 | 2.16 | 0.46 |
| 1:E:824:HIS:CE1 | 1:E:826:LEU:HG | 2.51 | 0.46 |
| 1:F:217:GLU:CG | 1:G:146:SER:HA | 2.42 | 0.46 |
| 1:F:568:PHE:O | 1:F:570:LYS:HG2 | 2.16 | 0.46 |
| 1:F:610:LYS:HG3 | 1:F:611:TRP:N | 2.30 | 0.46 |
| 1:G:221:THR:HG21 | 1:G:362:LEU:HD13 | 1.96 | 0.46 |
| 1:G:270:ARG:HD2 | 1:G:275:LEU:CD1 | 2.35 | 0.46 |
| 1:G:317:PRO:O | 1:G:318:LEU:HD23 | 2.15 | 0.46 |
| 1:G:362:LEU:HD12 | 1:G:365:PRO:HB3 | 1.98 | 0.46 |
| 1:G:470:CYS:SG | 1:G:532:MET:HG2 | 2.56 | 0.46 |
| 1:G:872:VAL:HG11 | 1:G:900:CYS:HB2 | 1.97 | 0.46 |
| 1:G:973:LYS:HE2 | 1:G:1002:ASN:HD22 | 1.79 | 0.46 |
| 1:H:151:ILE:O | 1:H:151:ILE:HG23 | 2.16 | 0.46 |
| 1:H:173:LEU:HD12 | 1:H:205:MET:HE1 | 1.98 | 0.46 |
| 1:H:234:ILE:HB | 3:H:1101:AGS:N7 | 2.30 | 0.46 |
| 1:H:567:LYS:NZ | 1:H:623:ILE:HG22 | 2.30 | 0.46 |
| 1:H:929:ILE:HD11 | 1:H:953:LEU:HD13 | 1.98 | 0.46 |
| 1:H:974:LEU:HG | 1:H:976:LEU:HD11 | 1.97 | 0.46 |
| 1:I:176:GLU:OE2 | 1:I:178:ARG:N | 2.42 | 0.46 |
| 1:I:509:GLN:CB | 1:I:514:CYS:HB3 | 2.45 | 0.46 |
| 1:I:929:ILE:HD11 | 1:I:953:LEU:HD13 | 1.98 | 0.46 |
| 1:J:186:GLU:HG2 | 1:J:190:ILE:HD12 | 1.98 | 0.46 |
| 1:J:470:CYS:SG | 1:J:532:MET:HG2 | 2.56 | 0.46 |
| 1:J:492:HIS:HE1 | 1:J:553:LEU:CD2 | 2.25 | 0.46 |
| 1:J:573:LEU:O | 1:J:576:VAL:HG12 | 2.15 | 0.46 |
| 1:A:194:LYS:HA | 1:A:194:LYS:HD2 | 1.79 | 0.46 |
| 1:A:253:PHE:HB3 | 1:A:297:ILE:N | 2.31 | 0.46 |
| 1:A:573:LEU:O | 1:A:576:VAL:HG12 | 2.15 | 0.46 |
| 1:A:929:ILE:HD11 | 1:A:953:LEU:HD13 | 1.98 | 0.46 |
| 1:B:147:ARG:HG3 | 1:B:147:ARG:O | 2.16 | 0.46 |
| 1:B:317:PRO:O | 1:B:318:LEU:HD23 | 2.15 | 0.46 |
| 1:B:333:SER:HG | 1:B:337:ARG:HH12 | 1.59 | 0.46 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:B:378:ARG:NH1 | 1:B:406:PHE:O | 2.49 | 0.46 |
| 1:B:451:LEU:HD12 | 1:B:462:LEU:HD21 | 1.97 | 0.46 |
| 1:B:601:SER:HB2 | 1:B:603:GLN:NE2 | 2.31 | 0.46 |
| 1:B:880:LYS:HG3 | 1:B:907:VAL:CG2 | 2.46 | 0.46 |
| 1:C:253:PHE:HB3 | 1:C:297:ILE:N | 2.31 | 0.46 |
| 1:C:378:ARG:NH1 | 1:C:406:PHE:O | 2.49 | 0.46 |
| 1:C:413:LEU:HD12 | 1:C:413:LEU:O | 2.15 | 0.46 |
| 1:C:506:ASN:OD1 | 1:C:506:ASN:O | 2.34 | 0.46 |
| 1:C:651:PRO:HA | 1:C:676:VAL:HA | 1.98 | 0.46 |
| 1:C:676:VAL:HG13 | 1:C:743:LEU:HD23 | 1.97 | 0.46 |
| 1:D:267:VAL:HG23 | 1:D:268:THR:HG22 | 1.97 | 0.46 |
| 1:D:489:LEU:HD23 | 1:D:494:LEU:HB3 | 1.98 | 0.46 |
| 1:D:974:LEU:HD11 | 1:D:976:LEU:CD2 | 2.33 | 0.46 |
| 1:E:149:GLN:HA | 1:E:241:LEU:HD12 | 1.96 | 0.46 |
| 1:E:317:PRO:O | 1:E:318:LEU:HD23 | 2.15 | 0.46 |
| 1:E:439:THR:O | 1:E:439:THR:HG22 | 2.14 | 0.46 |
| 1:F:167:ARG:HB3 | 1:F:167:ARG:CZ | 2.45 | 0.46 |
| 1:F:186:GLU:HG2 | 1:F:190:ILE:HD12 | 1.98 | 0.46 |
| 1:F:221:THR:HG21 | 1:F:362:LEU:HD13 | 1.96 | 0.46 |
| 1:F:261:CYS:HB3 | 1:F:307:LEU:HD11 | 1.97 | 0.46 |
| 1:F:438:THR:HG21 | 1:F:588:ARG:HH22 | 1.81 | 0.46 |
| 1:F:880:LYS:HG3 | 1:F:907:VAL:CG2 | 2.46 | 0.46 |
| 1:G:151:ILE:HG23 | 1:G:151:ILE:O | 2.16 | 0.46 |
| 1:G:253:PHE:HB3 | 1:G:297:ILE:N | 2.31 | 0.46 |
| 1:G:261:CYS:HB3 | 1:G:307:LEU:HD11 | 1.97 | 0.46 |
| 1:G:676:VAL:HG13 | 1:G:743:LEU:HD23 | 1.97 | 0.46 |
| 1:G:880:LYS:HG3 | 1:G:907:VAL:CG2 | 2.46 | 0.46 |
| 1:G:990:CYS:HA | 1:G:1021:LEU:HD22 | 1.97 | 0.46 |
| 1:H:266:LEU:O | 1:H:266:LEU:CD1 | 2.63 | 0.46 |
| 1:H:362:LEU:HD12 | 1:H:365:PRO:HB3 | 1.98 | 0.46 |
| 1:H:507:LEU:HD11 | 1:I:157:ARG:HG2 | 1.97 | 0.46 |
| 1:H:880:LYS:HG3 | 1:H:907:VAL:CG2 | 2.46 | 0.46 |
| 1:I:317:PRO:O | 1:I:318:LEU:HD23 | 2.15 | 0.46 |
| 1:I:413:LEU:HD12 | 1:I:413:LEU:O | 2.15 | 0.46 |
| 1:I:489:LEU:HD13 | 1:I:518:TYR:CD2 | 2.50 | 0.46 |
| 1:I:676:VAL:HG13 | 1:I:743:LEU:HD23 | 1.97 | 0.46 |
| 1:I:923:THR:HA | 1:I:951:CYS:O | 2.16 | 0.46 |
| 1:I:989:PHE:O | 1:I:993:LEU:HG | 2.16 | 0.46 |
| 1:J:564:ASN:O | 1:J:570:LYS:HB2 | 2.16 | 0.46 |
| 1:J:647:MET:HA | 1:J:650:PHE:HD2 | 1.80 | 0.46 |
| 1:J:848:ALA:HB1 | 1:J:878:LYS:CG | 2.45 | 0.46 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:J:973:LYS:HE2 | 1:J:1002:ASN:HD22 | 1.79 | 0.46 |
| 2:K:135:GLU:HA | 2:K:138:VAL:HG12 | 1.97 | 0.46 |
| 1:A:234:ILE:CB | 3:A:1101:AGS:N7 | 2.79 | 0.45 |
| 1:A:294:PRO:HB3 | 1:A:341:LEU:HD23 | 1.98 | 0.45 |
| 1:A:432:LEU:HD22 | 1:A:435:THR:HG21 | 1.98 | 0.45 |
| 1:A:880:LYS:HG3 | 1:A:907:VAL:CG2 | 2.46 | 0.45 |
| 1:B:364:HIS:CG | 1:C:150:CYS:SG | 3.10 | 0.45 |
| 1:B:815:ILE:HG21 | 1:B:847:LEU:HD21 | 1.98 | 0.45 |
| 1:B:923:THR:HA | 1:B:951:CYS:O | 2.16 | 0.45 |
| 1:C:373:PHE:HE2 | 1:C:412:PRO:HA | 1.81 | 0.45 |
| 1:C:893:ASN:HA | 1:C:921:GLY:HA3 | 1.98 | 0.45 |
| 1:D:151:ILE:HG23 | 1:D:151:ILE:O | 2.16 | 0.45 |
| 1:D:824:HIS:CE1 | 1:D:826:LEU:HG | 2.51 | 0.45 |
| 1:E:140:TYR:CE1 | 1:E:144:VAL:HG21 | 2.50 | 0.45 |
| 1:E:294:PRO:HB3 | 1:E:341:LEU:HD23 | 1.98 | 0.45 |
| 1:E:362:LEU:CB | 1:E:365:PRO:HG3 | 2.46 | 0.45 |
| 1:E:507:LEU:HD11 | 1:F:157:ARG:HG2 | 1.96 | 0.45 |
| 1:E:564:ASN:O | 1:E:570:LYS:HB2 | 2.16 | 0.45 |
| 1:E:619:LYS:CB | 2:O:261:ASP:CB | 2.94 | 0.45 |
| 1:E:660:ARG:O | 1:E:664:MET:HG2 | 2.16 | 0.45 |
| 1:E:929:ILE:HD11 | 1:E:953:LEU:HD13 | 1.98 | 0.45 |
| 1:E:990:CYS:HA | 1:E:1021:LEU:HD22 | 1.97 | 0.45 |
| 1:F:147:ARG:HG3 | 1:F:147:ARG:O | 2.16 | 0.45 |
| 1:G:272:LEU:HB3 | 1:G:322:TRP:HB2 | 1.97 | 0.45 |
| 1:G:432:LEU:HD22 | 1:G:435:THR:HG21 | 1.98 | 0.45 |
| 1:H:317:PRO:O | 1:H:318:LEU:HD23 | 2.15 | 0.45 |
| 1:H:973:LYS:HE3 | 1:H:973:LYS:HB2 | 1.58 | 0.45 |
| 1:I:186:GLU:HG2 | 1:I:190:ILE:HD12 | 1.99 | 0.45 |
| 1:I:438:THR:HG21 | 1:I:588:ARG:HH22 | 1.81 | 0.45 |
| 1:I:506:ASN:OD1 | 1:I:506:ASN:O | 2.34 | 0.45 |
| 1:I:660:ARG:O | 1:I:664:MET:HG2 | 2.16 | 0.45 |
| 1:J:234:ILE:CB | 3:J:1101:AGS:N7 | 2.79 | 0.45 |
| 1:J:253:PHE:HB3 | 1:J:297:ILE:N | 2.31 | 0.45 |
| 1:J:600:ILE:HG22 | 1:J:601:SER:H | 1.80 | 0.45 |
| 1:J:824:HIS:CE1 | 1:J:826:LEU:HG | 2.51 | 0.45 |
| 1:J:989:PHE:O | 1:J:993:LEU:HG | 2.16 | 0.45 |
| 1:J:990:CYS:HA | 1:J:1021:LEU:HD22 | 1.97 | 0.45 |
| 1:A:186:GLU:HG2 | 1:A:190:ILE:HD12 | 1.98 | 0.45 |
| 1:A:373:PHE:HE2 | 1:A:412:PRO:HA | 1.81 | 0.45 |
| 1:A:824:HIS:CE1 | 1:A:826:LEU:HG | 2.51 | 0.45 |
| 1:B:489:LEU:HD13 | 1:B:518:TYR:CD2 | 2.50 | 0.45 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:B:592:LEU:O | 1:B:596:LEU:HG | 2.17 | 0.45 |
| 1:B:600:ILE:HG22 | 1:B:601:SER:H | 1.80 | 0.45 |
| 1:C:573:LEU:O | 1:C:576:VAL:HG12 | 2.15 | 0.45 |
| 1:D:261:CYS:HB3 | 1:D:307:LEU:HD11 | 1.97 | 0.45 |
| 1:D:477:ILE:N | 1:D:526:GLN:HE22 | 2.14 | 0.45 |
| 1:D:647:MET:HA | 1:D:650:PHE:HD2 | 1.80 | 0.45 |
| 1:D:662:ASP:HA | 1:D:665:VAL:CG1 | 2.45 | 0.45 |
| 1:E:147:ARG:HG3 | 1:E:147:ARG:O | 2.16 | 0.45 |
| 1:E:186:GLU:HG2 | 1:E:190:ILE:HD12 | 1.98 | 0.45 |
| 1:E:220:HIS:HB3 | 1:E:338:LYS:HZ1 | 1.81 | 0.45 |
| 1:F:234:ILE:CB | 3:F:1101:AGS:N7 | 2.80 | 0.45 |
| 1:F:317:PRO:O | 1:F:318:LEU:HD23 | 2.15 | 0.45 |
| 1:F:489:LEU:HD23 | 1:F:494:LEU:HB3 | 1.98 | 0.45 |
| 1:F:973:LYS:HE2 | 1:F:1002:ASN:HD22 | 1.79 | 0.45 |
| 1:G:186:GLU:HG2 | 1:G:190:ILE:HD12 | 1.98 | 0.45 |
| 1:G:568:PHE:O | 1:G:570:LYS:HG2 | 2.16 | 0.45 |
| 1:H:272:LEU:HB3 | 1:H:322:TRP:HB2 | 1.97 | 0.45 |
| 1:H:294:PRO:HB3 | 1:H:341:LEU:HD23 | 1.98 | 0.45 |
| 1:H:490:ARG:HH21 | 1:H:495:GLN:CA | 2.25 | 0.45 |
| 1:H:886:LEU:CD2 | 1:H:889:LEU:HD13 | 2.38 | 0.45 |
| 1:H:973:LYS:HE2 | 1:H:1002:ASN:HD22 | 1.79 | 0.45 |
| 1:I:267:VAL:HG23 | 1:I:268:THR:HG22 | 1.97 | 0.45 |
| 1:I:362:LEU:HD12 | 1:I:365:PRO:HB3 | 1.98 | 0.45 |
| 1:I:815:ILE:HG21 | 1:I:847:LEU:HD21 | 1.98 | 0.45 |
| 1:I:893:ASN:HA | 1:I:921:GLY:HA3 | 1.98 | 0.45 |
| 1:J:234:ILE:CG2 | 3:J:1101:AGS:N7 | 2.79 | 0.45 |
| 1:J:660:ARG:O | 1:J:664:MET:HG2 | 2.16 | 0.45 |
| 1:J:923:THR:HA | 1:J:951:CYS:O | 2.16 | 0.45 |
| 2:O:132:LEU:HD11 | 2:O:262:HIS:CD2 | 2.52 | 0.45 |
| 2:P:132:LEU:HD11 | 2:P:262:HIS:CD2 | 2.52 | 0.45 |
| 1:A:151:ILE:HG23 | 1:A:151:ILE:O | 2.16 | 0.45 |
| 1:A:509:GLN:CB | 1:A:514:CYS:HB3 | 2.45 | 0.45 |
| 1:A:592:LEU:O | 1:A:596:LEU:HG | 2.17 | 0.45 |
| 1:B:234:ILE:CB | 3:B:1101:AGS:N7 | 2.79 | 0.45 |
| 1:B:438:THR:HG21 | 1:B:588:ARG:HH22 | 1.81 | 0.45 |
| 1:B:929:ILE:HD11 | 1:B:953:LEU:HD13 | 1.98 | 0.45 |
| 1:C:234:ILE:HB | 3:C:1101:AGS:N7 | 2.30 | 0.45 |
| 1:C:362:LEU:HD12 | 1:C:365:PRO:HB3 | 1.98 | 0.45 |
| 1:C:507:LEU:HD11 | 1:D:157:ARG:HG2 | 1.95 | 0.45 |
| 1:C:989:PHE:O | 1:C:993:LEU:HG | 2.16 | 0.45 |
| 1:D:362:LEU:HD12 | 1:D:365:PRO:HB3 | 1.98 | 0.45 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:D:650:PHE:HB3 | 1:D:653:ILE:CD1 | 2.41 | 0.45 |
| 1:E:234:ILE:CG2 | 3:E:1101:AGS:N7 | 2.79 | 0.45 |
| 1:E:923:THR:HA | 1:E:951:CYS:O | 2.16 | 0.45 |
| 1:E:989:PHE:O | 1:E:993:LEU:HG | 2.16 | 0.45 |
| 1:F:253:PHE:HB3 | 1:F:297:ILE:N | 2.31 | 0.45 |
| 1:F:308:GLN:HE21 | 1:F:499:VAL:HG22 | 1.68 | 0.45 |
| 1:F:439:THR:HG22 | 1:F:439:THR:O | 2.15 | 0.45 |
| 1:G:264:VAL:O | 1:G:264:VAL:HG12 | 2.14 | 0.45 |
| 1:G:294:PRO:HB3 | 1:G:341:LEU:HD23 | 1.98 | 0.45 |
| 1:H:186:GLU:HG2 | 1:H:190:ILE:HD12 | 1.98 | 0.45 |
| 1:I:253:PHE:HB3 | 1:I:297:ILE:N | 2.31 | 0.45 |
| 1:I:477:ILE:N | 1:I:526:GLN:HE22 | 2.14 | 0.45 |
| 1:J:438:THR:HG21 | 1:J:588:ARG:HH22 | 1.81 | 0.45 |
| 1:J:506:ASN:O | 1:J:506:ASN:OD1 | 2.33 | 0.45 |
| 1:J:614:VAL:HA | 1:J:617:LYS:HG3 | 1.98 | 0.45 |
| 2:M:93:ASN:ND2 | 2:M:144:GLN:OE1 | 2.50 | 0.45 |
| 1:A:470:CYS:SG | 1:A:532:MET:HG2 | 2.56 | 0.45 |
| 1:A:506:ASN:OD1 | 1:A:506:ASN:O | 2.34 | 0.45 |
| 1:A:614:VAL:HA | 1:A:617:LYS:HG3 | 1.98 | 0.45 |
| 1:B:432:LEU:HD22 | 1:B:435:THR:HG21 | 1.97 | 0.45 |
| 1:B:538:GLU:HB2 | 1:B:556:ARG:HH12 | 1.80 | 0.45 |
| 1:C:288:HIS:ND1 | 1:C:322:TRP:HH2 | 2.06 | 0.45 |
| 1:D:272:LEU:HB3 | 1:D:322:TRP:HB2 | 1.97 | 0.45 |
| 1:D:362:LEU:HB3 | 1:D:365:PRO:CD | 2.43 | 0.45 |
| 1:D:592:LEU:O | 1:D:596:LEU:HG | 2.17 | 0.45 |
| 1:D:893:ASN:HA | 1:D:921:GLY:HA3 | 1.98 | 0.45 |
| 1:D:929:ILE:HD11 | 1:D:953:LEU:HD13 | 1.98 | 0.45 |
| 1:E:272:LEU:HB3 | 1:E:322:TRP:HB2 | 1.97 | 0.45 |
| 1:E:592:LEU:O | 1:E:596:LEU:HG | 2.17 | 0.45 |
| 1:E:662:ASP:HA | 1:E:665:VAL:CG1 | 2.45 | 0.45 |
| 1:E:991:GLU:O | 1:E:994:LYS:HG2 | 2.17 | 0.45 |
| 1:F:231:GLY:HA2 | 3:F:1101:AGS:O2A | 2.17 | 0.45 |
| 1:F:234:ILE:CG2 | 3:F:1101:AGS:N7 | 2.79 | 0.45 |
| 1:F:362:LEU:CB | 1:F:365:PRO:HG3 | 2.46 | 0.45 |
| 1:F:651:PRO:HA | 1:F:676:VAL:HA | 1.98 | 0.45 |
| 1:G:815:ILE:HG21 | 1:G:847:LEU:HD21 | 1.98 | 0.45 |
| 1:H:173:LEU:HD12 | 1:H:205:MET:CE | 2.45 | 0.45 |
| 1:H:564:ASN:O | 1:H:570:LYS:HB2 | 2.16 | 0.45 |
| 1:H:937:LEU:HG | 1:H:964:LEU:CD1 | 2.47 | 0.45 |
| 1:I:234:ILE:CB | 3:I:1101:AGS:N7 | 2.79 | 0.45 |
| 1:I:240:MET:HE3 | 1:I:258:TYR:HB2 | 1.97 | 0.45 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:I:470:CYS:SG | 1:I:532:MET:HG2 | 2.56 | 0.45 |
| 1:I:601:SER:HB2 | 1:I:603:GLN:NE2 | 2.31 | 0.45 |
| 1:I:880:LYS:HG3 | 1:I:907:VAL:CG2 | 2.46 | 0.45 |
| 1:I:991:GLU:O | 1:I:994:LYS:HG2 | 2.17 | 0.45 |
| 1:J:362:LEU:HD12 | 1:J:365:PRO:HB3 | 1.98 | 0.45 |
| 1:J:504:ARG:HG3 | 1:J:504:ARG:O | 2.17 | 0.45 |
| 2:T:135:GLU:HA | 2:T:138:VAL:HG12 | 1.97 | 0.45 |
| 1:A:149:GLN:HA | 1:A:241:LEU:HD12 | 1.97 | 0.45 |
| 1:A:169:THR:HG22 | 1:A:377:LYS:HD2 | 1.99 | 0.45 |
| 1:A:362:LEU:HD12 | 1:A:365:PRO:HB3 | 1.98 | 0.45 |
| 1:A:815:ILE:HG21 | 1:A:847:LEU:HD21 | 1.98 | 0.45 |
| 1:B:565:TYR:O | 1:B:624:GLN:OE1 | 2.35 | 0.45 |
| 1:B:568:PHE:O | 1:B:568:PHE:CD2 | 2.70 | 0.45 |
| 1:C:815:ILE:HG21 | 1:C:847:LEU:HD21 | 1.98 | 0.45 |
| 1:C:880:LYS:HG3 | 1:C:907:VAL:CG2 | 2.46 | 0.45 |
| 1:D:231:GLY:HA2 | 3:D:1101:AGS:O2A | 2.17 | 0.45 |
| 1:D:564:ASN:O | 1:D:570:LYS:HB2 | 2.16 | 0.45 |
| 1:E:167:ARG:HB3 | 1:E:167:ARG:HH11 | 1.79 | 0.45 |
| 1:E:231:GLY:HA2 | 3:E:1101:AGS:O2A | 2.17 | 0.45 |
| 1:E:373:PHE:HE2 | 1:E:412:PRO:HA | 1.81 | 0.45 |
| 1:F:151:ILE:HG23 | 1:F:151:ILE:O | 2.16 | 0.45 |
| 1:F:504:ARG:HG3 | 1:F:504:ARG:O | 2.17 | 0.45 |
| 1:F:585:ASN:HA | 1:F:637:MET:HE1 | 1.98 | 0.45 |
| 1:G:209:PHE:CE2 | 1:G:298:LEU:HD11 | 2.50 | 0.45 |
| 1:G:504:ARG:O | 1:G:504:ARG:HG3 | 2.17 | 0.45 |
| 1:G:951:CYS:HB3 | 1:G:953:LEU:CD2 | 2.38 | 0.45 |
| 1:H:261:CYS:HB3 | 1:H:307:LEU:HD11 | 1.97 | 0.45 |
| 1:H:647:MET:HA | 1:H:650:PHE:HD2 | 1.80 | 0.45 |
| 1:H:660:ARG:O | 1:H:664:MET:HG2 | 2.16 | 0.45 |
| 1:H:991:GLU:O | 1:H:994:LYS:HG2 | 2.17 | 0.45 |
| 1:I:568:PHE:O | 1:I:570:LYS:HG2 | 2.16 | 0.45 |
| 1:J:477:ILE:N | 1:J:526:GLN:HE22 | 2.14 | 0.45 |
| 1:J:502:PHE:HA | 1:J:521:ILE:HD11 | 1.98 | 0.45 |
| 2:N:132:LEU:HD11 | 2:N:262:HIS:CD2 | 2.52 | 0.45 |
| 2:N:135:GLU:HA | 2:N:138:VAL:HG12 | 1.97 | 0.45 |
| 2:O:93:ASN:ND2 | 2:O:144:GLN:OE1 | 2.50 | 0.45 |
| 2:Q:132:LEU:HD11 | 2:Q:262:HIS:CD2 | 2.52 | 0.45 |
| 2:R:135:GLU:HA | 2:R:138:VAL:HG12 | 1.97 | 0.45 |
| 2:S:93:ASN:ND2 | 2:S:144:GLN:OE1 | 2.50 | 0.45 |
| 1:A:504:ARG:HG3 | 1:A:504:ARG:O | 2.17 | 0.45 |
| 1:A:886:LEU:CD2 | 1:A:889:LEU:HD13 | 2.38 | 0.45 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:B:253:PHE:HB3 | 1:B:297:ILE:N | 2.31 | 0.45 |
| 1:B:506:ASN:O | 1:B:506:ASN:OD1 | 2.33 | 0.45 |
| 1:B:614:VAL:HA | 1:B:617:LYS:HG3 | 1.98 | 0.45 |
| 1:C:929:ILE:HD11 | 1:C:953:LEU:HD13 | 1.98 | 0.45 |
| 1:D:186:GLU:HG2 | 1:D:190:ILE:HD12 | 1.98 | 0.45 |
| 1:D:294:PRO:HB3 | 1:D:341:LEU:HD23 | 1.98 | 0.45 |
| 1:D:373:PHE:HE2 | 1:D:412:PRO:HA | 1.81 | 0.45 |
| 1:D:660:ARG:O | 1:D:664:MET:HG2 | 2.16 | 0.45 |
| 1:D:973:LYS:HE2 | 1:D:1002:ASN:HD22 | 1.79 | 0.45 |
| 1:D:991:GLU:O | 1:D:994:LYS:HG2 | 2.17 | 0.45 |
| 1:E:432:LEU:HD22 | 1:E:435:THR:HG21 | 1.98 | 0.45 |
| 1:E:496:LYS:O | 1:E:498:ASP:N | 2.49 | 0.45 |
| 1:E:893:ASN:HA | 1:E:921:GLY:HA3 | 1.98 | 0.45 |
| 1:E:973:LYS:HE2 | 1:E:1002:ASN:HD22 | 1.79 | 0.45 |
| 1:F:362:LEU:HD12 | 1:F:365:PRO:HB3 | 1.98 | 0.45 |
| 1:F:923:THR:HA | 1:F:951:CYS:O | 2.16 | 0.45 |
| 1:G:234:ILE:CG2 | 3:G:1101:AGS:N7 | 2.79 | 0.45 |
| 1:G:252:ARG:CD | 1:G:253:PHE:CZ | 2.99 | 0.45 |
| 1:G:373:PHE:HE2 | 1:G:412:PRO:HA | 1.81 | 0.45 |
| 1:G:538:GLU:HB2 | 1:G:556:ARG:HH12 | 1.81 | 0.45 |
| 1:G:937:LEU:HG | 1:G:964:LEU:CD1 | 2.47 | 0.45 |
| 1:H:136:TYR:HH | 1:H:285:PRO:HB3 | 1.81 | 0.45 |
| 1:H:362:LEU:CB | 1:H:365:PRO:HG3 | 2.47 | 0.45 |
| 1:J:162:VAL:HG11 | 1:J:167:ARG:HG3 | 1.99 | 0.45 |
| 1:J:169:THR:HG22 | 1:J:377:LYS:HD2 | 1.99 | 0.45 |
| 1:J:564:ASN:HB3 | 1:J:570:LYS:HD3 | 1.99 | 0.45 |
| 1:J:893:ASN:HA | 1:J:921:GLY:HA3 | 1.98 | 0.45 |
| 1:A:147:ARG:HE | 1:A:147:ARG:HB2 | 1.64 | 0.45 |
| 1:B:446:PHE:CE2 | 1:B:525:PHE:HE2 | 2.35 | 0.45 |
| 1:C:220:HIS:HB3 | 1:C:338:LYS:HZ1 | 1.82 | 0.45 |
| 1:C:272:LEU:HB3 | 1:C:322:TRP:HB2 | 1.97 | 0.45 |
| 1:C:919:LEU:CD2 | 1:C:924:LEU:HD11 | 2.45 | 0.45 |
| 1:D:234:ILE:CB | 3:D:1101:AGS:N7 | 2.79 | 0.45 |
| 1:D:234:ILE:CG2 | 3:D:1101:AGS:N7 | 2.79 | 0.45 |
| 1:D:362:LEU:CB | 1:D:365:PRO:HG3 | 2.46 | 0.45 |
| 1:D:502:PHE:O | 1:D:520:PHE:HA | 2.16 | 0.45 |
| 1:D:564:ASN:HB3 | 1:D:570:LYS:HD3 | 1.99 | 0.45 |
| 1:E:573:LEU:CD2 | 1:E:576:VAL:HG11 | 2.40 | 0.45 |
| 1:E:619:LYS:CB | 2:O:261:ASP:CG | 2.85 | 0.45 |
| 1:F:272:LEU:HB3 | 1:F:322:TRP:HB2 | 1.97 | 0.45 |
| 1:F:614:VAL:HA | 1:F:617:LYS:HG3 | 1.98 | 0.45 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:G:147:ARG:HG3 | 1:G:147:ARG:O | 2.16 | 0.45 |
| 1:G:234:ILE:CB | 3:G:1101:AGS:N7 | 2.79 | 0.45 |
| 1:G:601:SER:HB2 | 1:G:603:GLN:NE2 | 2.31 | 0.45 |
| 1:G:614:VAL:HA | 1:G:617:LYS:HG3 | 1.98 | 0.45 |
| 1:H:252:ARG:CD | 1:H:253:PHE:CZ | 2.99 | 0.45 |
| 1:H:446:PHE:CE2 | 1:H:525:PHE:HE2 | 2.35 | 0.45 |
| 1:H:470:CYS:SG | 1:H:532:MET:HG2 | 2.56 | 0.45 |
| 1:H:509:GLN:CB | 1:H:514:CYS:HB3 | 2.44 | 0.45 |
| 1:H:538:GLU:HB2 | 1:H:556:ARG:HH12 | 1.81 | 0.45 |
| 1:H:923:THR:HA | 1:H:951:CYS:O | 2.16 | 0.45 |
| 1:I:272:LEU:HB3 | 1:I:322:TRP:HB2 | 1.97 | 0.45 |
| 1:I:351:ARG:NH1 | 1:I:499:VAL:HG13 | 2.32 | 0.45 |
| 1:I:379:LYS:HG3 | 1:I:396:PHE:CE2 | 2.52 | 0.45 |
| 1:I:504:ARG:HG3 | 1:I:504:ARG:O | 2.17 | 0.45 |
| 1:I:564:ASN:O | 1:I:570:LYS:HB2 | 2.16 | 0.45 |
| 1:J:190:ILE:CA | 1:J:194:LYS:HB2 | 2.45 | 0.45 |
| 1:J:651:PRO:HA | 1:J:676:VAL:HA | 1.98 | 0.45 |
| 2:Q:135:GLU:HA | 2:Q:138:VAL:HG12 | 1.97 | 0.45 |
| 1:A:379:LYS:HG3 | 1:A:396:PHE:CE2 | 2.52 | 0.45 |
| 1:A:991:GLU:O | 1:A:994:LYS:HG2 | 2.17 | 0.45 |
| 1:B:151:ILE:HG23 | 1:B:151:ILE:O | 2.16 | 0.45 |
| 1:B:573:LEU:CD2 | 1:B:576:VAL:HG11 | 2.40 | 0.45 |
| 1:C:172:ARG:C | 1:C:173:LEU:HD23 | 2.38 | 0.45 |
| 1:C:568:PHE:HB3 | 1:C:570:LYS:HD2 | 1.99 | 0.45 |
| 1:D:172:ARG:C | 1:D:173:LEU:HD23 | 2.37 | 0.45 |
| 1:D:438:THR:HG21 | 1:D:588:ARG:HH22 | 1.81 | 0.45 |
| 1:D:504:ARG:O | 1:D:504:ARG:HG3 | 2.17 | 0.45 |
| 1:D:568:PHE:CD2 | 1:D:570:LYS:HE3 | 2.52 | 0.45 |
| 1:D:600:ILE:HG22 | 1:D:601:SER:H | 1.80 | 0.45 |
| 1:D:880:LYS:HG3 | 1:D:907:VAL:CG2 | 2.46 | 0.45 |
| 1:E:234:ILE:CB | 3:E:1101:AGS:N7 | 2.79 | 0.45 |
| 1:E:915:THR:O | 1:E:944:GLN:N | 2.34 | 0.45 |
| 1:F:143:TYR:CE1 | 1:F:281:PRO:HG2 | 2.52 | 0.45 |
| 1:F:239:MET:HE3 | 1:F:300:LEU:HD21 | 1.97 | 0.45 |
| 1:F:432:LEU:HD22 | 1:F:435:THR:HG21 | 1.98 | 0.45 |
| 1:F:937:LEU:HG | 1:F:964:LEU:CD1 | 2.47 | 0.45 |
| 1:G:231:GLY:HA2 | 3:G:1101:AGS:O2A | 2.17 | 0.45 |
| 1:G:369:GLU:OE2 | 1:G:504:ARG:NH2 | 2.37 | 0.45 |
| 1:G:810:LEU:HD11 | 1:G:834:LEU:HD22 | 1.99 | 0.45 |
| 1:H:147:ARG:HG3 | 1:H:147:ARG:O | 2.16 | 0.45 |
| 1:H:562:LEU:HD21 | 1:H:611:TRP:CG | 2.52 | 0.45 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:I:362:LEU:CB | 1:I:365:PRO:HG3 | 2.46 | 0.45 |
| 1:I:564:ASN:HB3 | 1:I:570:LYS:HD3 | 1.99 | 0.45 |
| 1:I:614:VAL:HA | 1:I:617:LYS:HG3 | 1.98 | 0.45 |
| 1:I:937:LEU:HG | 1:I:964:LEU:CD1 | 2.47 | 0.45 |
| 1:I:974:LEU:HG | 1:I:976:LEU:HD11 | 1.97 | 0.45 |
| 1:J:147:ARG:HG3 | 1:J:147:ARG:O | 2.16 | 0.45 |
| 1:J:240:MET:HE2 | 1:J:258:TYR:CB | 2.44 | 0.45 |
| 1:J:255:TYR:HB3 | 1:J:257:PHE:CE1 | 2.52 | 0.45 |
| 1:J:538:GLU:HB2 | 1:J:556:ARG:HH12 | 1.81 | 0.45 |
| 1:J:595:LYS:HD3 | 1:J:595:LYS:HA | 1.66 | 0.45 |
| 2:Q:93:ASN:ND2 | 2:Q:144:GLN:OE1 | 2.50 | 0.45 |
| 2:R:36:ILE:O | 2:R:36:ILE:HG22 | 2.17 | 0.45 |
| 2:R:132:LEU:HD11 | 2:R:262:HIS:CD2 | 2.52 | 0.45 |
| 1:A:150:CYS:SG | 1:J:364:HIS:CG | 3.10 | 0.45 |
| 1:A:333:SER:HG | 1:A:337:ARG:HH12 | 1.62 | 0.45 |
| 1:A:359:GLN:OE1 | 1:A:359:GLN:HA | 2.17 | 0.45 |
| 1:A:568:PHE:O | 1:A:568:PHE:CG | 2.70 | 0.45 |
| 1:A:601:SER:HB2 | 1:A:603:GLN:NE2 | 2.31 | 0.45 |
| 1:A:660:ARG:O | 1:A:664:MET:HG2 | 2.16 | 0.45 |
| 1:B:186:GLU:HG2 | 1:B:190:ILE:HD12 | 1.98 | 0.45 |
| 1:C:220:HIS:HB3 | 1:C:338:LYS:NZ | 2.32 | 0.45 |
| 1:C:234:ILE:CB | 3:C:1101:AGS:N7 | 2.79 | 0.45 |
| 1:C:614:VAL:HA | 1:C:617:LYS:HG3 | 1.98 | 0.45 |
| 1:D:147:ARG:O | 1:D:147:ARG:HG3 | 2.16 | 0.45 |
| 1:D:220:HIS:HB3 | 1:D:338:LYS:NZ | 2.32 | 0.45 |
| 1:D:405:LEU:HD23 | 1:D:405:LEU:HA | 1.81 | 0.45 |
| 1:D:507:LEU:HD11 | 1:E:157:ARG:HG2 | 1.96 | 0.45 |
| 1:D:872:VAL:HG11 | 1:D:900:CYS:HB2 | 1.97 | 0.45 |
| 1:D:919:LEU:CD2 | 1:D:924:LEU:HD11 | 2.45 | 0.45 |
| 1:E:151:ILE:O | 1:E:151:ILE:HG23 | 2.16 | 0.45 |
| 1:E:253:PHE:HB3 | 1:E:297:ILE:N | 2.31 | 0.45 |
| 1:E:446:PHE:CE2 | 1:E:525:PHE:HE2 | 2.35 | 0.45 |
| 1:E:564:ASN:HB3 | 1:E:570:LYS:HD3 | 1.99 | 0.45 |
| 1:F:192:LYS:NZ | 1:F:192:LYS:HB3 | 2.32 | 0.45 |
| 1:F:359:GLN:OE1 | 1:F:359:GLN:HA | 2.17 | 0.45 |
| 1:F:815:ILE:HG21 | 1:F:847:LEU:HD21 | 1.98 | 0.45 |
| 1:G:143:TYR:CE1 | 1:G:281:PRO:HG2 | 2.52 | 0.45 |
| 1:G:220:HIS:HB3 | 1:G:338:LYS:NZ | 2.32 | 0.45 |
| 1:G:664:MET:HE1 | 1:G:729:PHE:HD1 | 1.82 | 0.45 |
| 1:G:832:LEU:HD21 | 1:G:834:LEU:HD11 | 1.99 | 0.45 |
| 1:H:373:PHE:HE2 | 1:H:412:PRO:HA | 1.81 | 0.45 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:H:568:PHE:O | 1:H:570:LYS:HG2 | 2.16 | 0.45 |
| 1:H:832:LEU:HD21 | 1:H:834:LEU:HD11 | 1.99 | 0.45 |
| 1:I:359:GLN:OE1 | 1:I:359:GLN:HA | 2.17 | 0.45 |
| 1:I:471:SER:CB | 1:I:553:LEU:HD12 | 2.20 | 0.45 |
| 1:I:562:LEU:HD21 | 1:I:611:TRP:CG | 2.52 | 0.45 |
| 1:J:405:LEU:HD23 | 1:J:405:LEU:HA | 1.81 | 0.45 |
| 1:J:592:LEU:O | 1:J:596:LEU:HG | 2.17 | 0.45 |
| 1:J:880:LYS:HG3 | 1:J:907:VAL:CG2 | 2.46 | 0.45 |
| 2:Q:36:ILE:O | 2:Q:36:ILE:HG22 | 2.17 | 0.45 |
| 1:A:651:PRO:CD | 1:A:675:ARG:HE | 2.30 | 0.45 |
| 3:A:1101:AGS:H8 | 3:A:1101:AGS:O5' | 2.17 | 0.45 |
| 1:B:379:LYS:HG3 | 1:B:396:PHE:CE2 | 2.52 | 0.45 |
| 1:B:504:ARG:HG3 | 1:B:504:ARG:O | 2.17 | 0.45 |
| 1:B:660:ARG:O | 1:B:664:MET:HG2 | 2.16 | 0.45 |
| 1:B:862:VAL:O | 1:B:865:ASN:ND2 | 2.50 | 0.45 |
| 3:B:1101:AGS:H8 | 3:B:1101:AGS:O5' | 2.17 | 0.45 |
| 1:C:147:ARG:HG3 | 1:C:147:ARG:O | 2.16 | 0.45 |
| 1:C:359:GLN:HA | 1:C:359:GLN:OE1 | 2.17 | 0.45 |
| 1:C:624:GLN:CB | 1:C:625:PRO:CD | 2.78 | 0.45 |
| 1:C:660:ARG:O | 1:C:664:MET:HG2 | 2.16 | 0.45 |
| 1:C:664:MET:HE1 | 1:C:729:PHE:HD1 | 1.82 | 0.45 |
| 1:D:167:ARG:HB3 | 1:D:167:ARG:HH11 | 1.79 | 0.45 |
| 1:D:364:HIS:CG | 1:E:150:CYS:SG | 3.10 | 0.45 |
| 1:D:601:SER:HB2 | 1:D:603:GLN:NE2 | 2.31 | 0.45 |
| 1:E:192:LYS:NZ | 1:E:192:LYS:HB3 | 2.32 | 0.45 |
| 1:E:614:VAL:HA | 1:E:617:LYS:HG3 | 1.98 | 0.45 |
| 1:E:650:PHE:HB3 | 1:E:653:ILE:CD1 | 2.41 | 0.45 |
| 1:E:810:LEU:HD11 | 1:E:834:LEU:HD22 | 1.99 | 0.45 |
| 1:E:880:LYS:HG3 | 1:E:907:VAL:CG2 | 2.46 | 0.45 |
| 1:E:937:LEU:HG | 1:E:964:LEU:CD1 | 2.47 | 0.45 |
| 1:F:167:ARG:HB3 | 1:F:167:ARG:HH11 | 1.79 | 0.45 |
| 1:F:832:LEU:HD21 | 1:F:834:LEU:HD11 | 1.99 | 0.45 |
| 1:F:893:ASN:HA | 1:F:921:GLY:HA3 | 1.98 | 0.45 |
| 1:G:377:LYS:HA | 1:G:377:LYS:HD3 | 1.51 | 0.45 |
| 1:G:489:LEU:HD23 | 1:G:494:LEU:HB3 | 1.98 | 0.45 |
| 1:G:573:LEU:CA | 1:G:576:VAL:HG12 | 2.48 | 0.45 |
| 1:G:651:PRO:HA | 1:G:676:VAL:HA | 1.98 | 0.45 |
| 1:G:823:LYS:NZ | 1:G:849:SER:OG | 2.27 | 0.45 |
| 1:G:991:GLU:O | 1:G:994:LYS:HG2 | 2.17 | 0.45 |
| 1:H:651:PRO:CD | 1:H:675:ARG:HE | 2.30 | 0.45 |
| 1:H:651:PRO:HA | 1:H:676:VAL:HA | 1.98 | 0.45 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:H:676:VAL:HG13 | 1:H:743:LEU:HD23 | 1.97 | 0.45 |
| 1:H:727:SER:O | 1:H:731:ARG:HG3 | 2.17 | 0.45 |
| 1:H:919:LEU:CD2 | 1:H:924:LEU:HD11 | 2.45 | 0.45 |
| 1:I:364:HIS:CG | 1:J:150:CYS:SG | 3.10 | 0.45 |
| 1:I:565:TYR:CD2 | 1:I:565:TYR:C | 2.88 | 0.45 |
| 1:J:351:ARG:NH1 | 1:J:499:VAL:HG13 | 2.32 | 0.45 |
| 1:J:373:PHE:HE2 | 1:J:412:PRO:HA | 1.81 | 0.45 |
| 1:J:509:GLN:CB | 1:J:514:CYS:HB3 | 2.45 | 0.45 |
| 1:J:832:LEU:HD21 | 1:J:834:LEU:HD11 | 1.99 | 0.45 |
| 1:J:991:GLU:O | 1:J:994:LYS:HG2 | 2.17 | 0.45 |
| 2:K:36:ILE:O | 2:K:36:ILE:HG22 | 2.17 | 0.45 |
| 2:M:132:LEU:HD11 | 2:M:262:HIS:CD2 | 2.51 | 0.45 |
| 2:M:242:ASN:OD1 | 2:M:245:SER:OG | 2.21 | 0.45 |
| 2:N:93:ASN:ND2 | 2:N:144:GLN:OE1 | 2.50 | 0.45 |
| 1:A:255:TYR:HB3 | 1:A:257:PHE:CE1 | 2.52 | 0.44 |
| 1:A:446:PHE:CE2 | 1:A:525:PHE:HE2 | 2.35 | 0.44 |
| 1:A:1011:ASN:O | 1:A:1015:LYS:HG2 | 2.18 | 0.44 |
| 1:B:326:GLU:O | 1:B:327:ARG:HB2 | 2.18 | 0.44 |
| 1:B:373:PHE:HE2 | 1:B:412:PRO:HA | 1.81 | 0.44 |
| 1:B:1004:GLY:HA2 | 1:B:1031:VAL:HG12 | 1.99 | 0.44 |
| 1:C:651:PRO:CD | 1:C:675:ARG:HE | 2.30 | 0.44 |
| 1:C:973:LYS:HE2 | 1:C:1002:ASN:HD22 | 1.79 | 0.44 |
| 1:D:192:LYS:HB3 | 1:D:192:LYS:NZ | 2.32 | 0.44 |
| 1:E:145:ARG:HE | 1:E:145:ARG:HB3 | 1.61 | 0.44 |
| 1:E:172:ARG:C | 1:E:173:LEU:HD23 | 2.38 | 0.44 |
| 1:E:505:MET:O | 1:E:505:MET:CG | 2.64 | 0.44 |
| 1:E:651:PRO:CD | 1:E:675:ARG:HE | 2.30 | 0.44 |
| 1:F:175:LYS:HE2 | 1:F:366:ARG:CD | 2.47 | 0.44 |
| 1:F:364:HIS:CG | 1:G:150:CYS:SG | 3.11 | 0.44 |
| 1:F:498:ASP:OD2 | 1:F:503:LEU:HD12 | 2.17 | 0.44 |
| 1:F:664:MET:HE1 | 1:F:729:PHE:HD1 | 1.82 | 0.44 |
| 1:G:205:MET:HB2 | 1:G:205:MET:HE2 | 1.85 | 0.44 |
| 1:G:362:LEU:CB | 1:G:365:PRO:HG3 | 2.46 | 0.44 |
| 1:G:446:PHE:CE2 | 1:G:525:PHE:HE2 | 2.35 | 0.44 |
| 1:G:505:MET:O | 1:G:505:MET:CG | 2.64 | 0.44 |
| 1:G:562:LEU:HD21 | 1:G:611:TRP:CG | 2.52 | 0.44 |
| 1:G:565:TYR:CD2 | 1:G:565:TYR:C | 2.89 | 0.44 |
| 1:G:647:MET:HE2 | 1:G:669:CYS:HB3 | 1.98 | 0.44 |
| 1:G:660:ARG:O | 1:G:664:MET:HG2 | 2.16 | 0.44 |
| 1:G:923:THR:HA | 1:G:951:CYS:O | 2.16 | 0.44 |
| 1:H:172:ARG:C | 1:H:173:LEU:HD23 | 2.38 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:H:220:HIS:HB3 | 1:H:338:LYS:NZ | 2.32 | 0.44 |
| 1:H:234:ILE:CB | 3:H:1101:AGS:N7 | 2.79 | 0.44 |
| 1:H:573:LEU:CA | 1:H:576:VAL:HG12 | 2.48 | 0.44 |
| 1:H:1011:ASN:O | 1:H:1015:LYS:HG2 | 2.17 | 0.44 |
| 1:I:147:ARG:HG3 | 1:I:147:ARG:O | 2.16 | 0.44 |
| 1:I:151:ILE:HG23 | 1:I:151:ILE:O | 2.16 | 0.44 |
| 1:I:162:VAL:HG11 | 1:I:167:ARG:HG3 | 1.99 | 0.44 |
| 1:I:234:ILE:HB | 3:I:1101:AGS:N7 | 2.30 | 0.44 |
| 1:I:255:TYR:HB3 | 1:I:257:PHE:CE1 | 2.53 | 0.44 |
| 1:I:446:PHE:CE2 | 1:I:525:PHE:HE2 | 2.35 | 0.44 |
| 1:I:647:MET:HA | 1:I:650:PHE:HD2 | 1.80 | 0.44 |
| 1:I:832:LEU:HD21 | 1:I:834:LEU:HD11 | 1.99 | 0.44 |
| 1:I:915:THR:O | 1:I:944:GLN:N | 2.34 | 0.44 |
| 1:J:215:HIS:O | 1:J:215:HIS:CG | 2.70 | 0.44 |
| 3:J:1101:AGS:H8 | 3:J:1101:AGS:O5' | 2.17 | 0.44 |
| 2:K:93:ASN:ND2 | 2:K:144:GLN:OE1 | 2.50 | 0.44 |
| 1:A:173:LEU:HD12 | 1:A:205:MET:HE1 | 2.00 | 0.44 |
| 1:A:190:ILE:CA | 1:A:194:LYS:HB2 | 2.45 | 0.44 |
| 1:A:758:MET:HE3 | 1:A:758:MET:HA | 1.97 | 0.44 |
| 1:A:832:LEU:HD21 | 1:A:834:LEU:HD11 | 1.99 | 0.44 |
| 1:B:143:TYR:CE1 | 1:B:281:PRO:HG2 | 2.52 | 0.44 |
| 1:B:172:ARG:C | 1:B:173:LEU:HD23 | 2.38 | 0.44 |
| 1:B:810:LEU:HD11 | 1:B:834:LEU:HD22 | 1.99 | 0.44 |
| 1:B:1011:ASN:O | 1:B:1015:LYS:HG2 | 2.18 | 0.44 |
| 1:C:231:GLY:HA2 | 3:C:1101:AGS:O2A | 2.17 | 0.44 |
| 1:C:432:LEU:HD22 | 1:C:435:THR:HG21 | 1.98 | 0.44 |
| 1:C:438:THR:HG21 | 1:C:588:ARG:HH22 | 1.81 | 0.44 |
| 1:C:956:HIS:O | 1:C:959:TRP:NE1 | 2.51 | 0.44 |
| 1:C:991:GLU:O | 1:C:994:LYS:HG2 | 2.17 | 0.44 |
| 1:D:253:PHE:HB3 | 1:D:297:ILE:N | 2.31 | 0.44 |
| 1:D:503:LEU:CD2 | 1:D:520:PHE:CE1 | 2.98 | 0.44 |
| 1:D:503:LEU:HD23 | 1:D:520:PHE:CD1 | 2.53 | 0.44 |
| 1:D:505:MET:O | 1:D:505:MET:CG | 2.64 | 0.44 |
| 1:D:676:VAL:HG13 | 1:D:743:LEU:HD23 | 1.97 | 0.44 |
| 1:D:862:VAL:O | 1:D:865:ASN:ND2 | 2.51 | 0.44 |
| 1:D:973:LYS:HB2 | 1:D:973:LYS:HE3 | 1.58 | 0.44 |
| 1:E:504:ARG:HG3 | 1:E:504:ARG:O | 2.17 | 0.44 |
| 1:E:647:MET:HE1 | 1:E:669:CYS:HB3 | 1.99 | 0.44 |
| 1:F:573:LEU:CA | 1:F:576:VAL:HG12 | 2.47 | 0.44 |
| 1:F:991:GLU:O | 1:F:994:LYS:HG2 | 2.17 | 0.44 |
| 1:G:169:THR:HG22 | 1:G:377:LYS:HD2 | 1.99 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:G:175:LYS:HE2 | 1:G:366:ARG:CD | 2.47 | 0.44 |
| 1:G:192:LYS:HB3 | 1:G:192:LYS:NZ | 2.32 | 0.44 |
| 1:G:204:LYS:CG | 1:G:205:MET:N | 2.77 | 0.44 |
| 1:G:727:SER:O | 1:G:731:ARG:HG3 | 2.17 | 0.44 |
| 1:H:956:HIS:O | 1:H:959:TRP:NE1 | 2.51 | 0.44 |
| 1:I:172:ARG:C | 1:I:173:LEU:HD23 | 2.38 | 0.44 |
| 1:I:215:HIS:O | 1:I:215:HIS:CG | 2.70 | 0.44 |
| 1:I:592:LEU:O | 1:I:596:LEU:HG | 2.17 | 0.44 |
| 1:I:862:VAL:O | 1:I:865:ASN:ND2 | 2.50 | 0.44 |
| 1:I:973:LYS:HE2 | 1:I:1002:ASN:HD22 | 1.79 | 0.44 |
| 1:J:168:TYR:CE2 | 1:J:238:LYS:HG2 | 2.53 | 0.44 |
| 1:J:326:GLU:O | 1:J:327:ARG:HB2 | 2.18 | 0.44 |
| 1:J:562:LEU:HD21 | 1:J:611:TRP:CG | 2.52 | 0.44 |
| 1:J:862:VAL:O | 1:J:865:ASN:ND2 | 2.50 | 0.44 |
| 2:T:36:ILE:O | 2:T:36:ILE:HG22 | 2.17 | 0.44 |
| 1:A:220:HIS:HB3 | 1:A:338:LYS:NZ | 2.32 | 0.44 |
| 1:B:362:LEU:CB | 1:B:365:PRO:HG3 | 2.47 | 0.44 |
| 1:B:472:LEU:O | 1:B:475:ASP:OD1 | 2.36 | 0.44 |
| 1:C:186:GLU:HG2 | 1:C:190:ILE:HD12 | 1.98 | 0.44 |
| 1:C:294:PRO:HB3 | 1:C:341:LEU:HD23 | 1.98 | 0.44 |
| 1:C:446:PHE:CE2 | 1:C:525:PHE:HE2 | 2.35 | 0.44 |
| 1:C:503:LEU:CD2 | 1:C:520:PHE:CD1 | 3.01 | 0.44 |
| 1:C:568:PHE:CD2 | 1:C:568:PHE:O | 2.70 | 0.44 |
| 1:C:886:LEU:CD2 | 1:C:889:LEU:HD13 | 2.38 | 0.44 |
| 1:C:1004:GLY:HA2 | 1:C:1031:VAL:HG12 | 1.99 | 0.44 |
| 1:D:220:HIS:HB3 | 1:D:338:LYS:HZ1 | 1.82 | 0.44 |
| 1:D:240:MET:HE3 | 1:D:258:TYR:HB2 | 2.00 | 0.44 |
| 1:D:255:TYR:HB3 | 1:D:257:PHE:CE1 | 2.52 | 0.44 |
| 1:D:446:PHE:CE2 | 1:D:525:PHE:HE2 | 2.35 | 0.44 |
| 1:D:472:LEU:O | 1:D:475:ASP:OD1 | 2.36 | 0.44 |
| 1:D:730:CYS:HB3 | 1:D:734:PHE:CE2 | 2.53 | 0.44 |
| 1:E:359:GLN:OE1 | 1:E:359:GLN:HA | 2.17 | 0.44 |
| 1:E:362:LEU:HD12 | 1:E:365:PRO:HB3 | 1.98 | 0.44 |
| 1:E:379:LYS:HG3 | 1:E:396:PHE:CE2 | 2.52 | 0.44 |
| 1:E:919:LEU:HD21 | 1:E:922:ASN:HB2 | 1.99 | 0.44 |
| 1:F:172:ARG:C | 1:F:173:LEU:HD23 | 2.38 | 0.44 |
| 1:F:220:HIS:HB3 | 1:F:338:LYS:NZ | 2.32 | 0.44 |
| 1:F:651:PRO:CD | 1:F:675:ARG:HE | 2.30 | 0.44 |
| 1:F:872:VAL:HG11 | 1:F:900:CYS:HB2 | 1.97 | 0.44 |
| 1:F:956:HIS:O | 1:F:959:TRP:NE1 | 2.51 | 0.44 |
| 1:G:172:ARG:C | 1:G:173:LEU:HD23 | 2.38 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:G:351:ARG:NH1 | 1:G:499:VAL:HG13 | 2.32 | 0.44 |
| 1:G:438:THR:HG21 | 1:G:588:ARG:HH22 | 1.81 | 0.44 |
| 1:H:169:THR:HG22 | 1:H:377:LYS:HD2 | 1.99 | 0.44 |
| 1:H:359:GLN:HA | 1:H:359:GLN:OE1 | 2.17 | 0.44 |
| 1:H:505:MET:O | 1:H:505:MET:CG | 2.64 | 0.44 |
| 1:H:564:ASN:HB3 | 1:H:570:LYS:HD3 | 1.99 | 0.44 |
| 1:I:651:PRO:HA | 1:I:676:VAL:HA | 1.98 | 0.44 |
| 1:I:919:LEU:CD2 | 1:I:924:LEU:HD11 | 2.45 | 0.44 |
| 1:J:220:HIS:HB3 | 1:J:338:LYS:NZ | 2.32 | 0.44 |
| 1:J:359:GLN:OE1 | 1:J:359:GLN:HA | 2.17 | 0.44 |
| 1:J:369:GLU:OE2 | 1:J:504:ARG:NH2 | 2.37 | 0.44 |
| 1:J:502:PHE:CA | 1:J:521:ILE:HG13 | 2.40 | 0.44 |
| 1:J:898:SER:CB | 1:J:927:LYS:HG3 | 2.48 | 0.44 |
| 1:J:937:LEU:HG | 1:J:964:LEU:CD1 | 2.47 | 0.44 |
| 2:Q:33:ASN:ND2 | 2:Q:55:LEU:HB3 | 2.31 | 0.44 |
| 2:Q:242:ASN:OD1 | 2:Q:245:SER:OG | 2.21 | 0.44 |
| 2:S:132:LEU:HD11 | 2:S:262:HIS:CD2 | 2.51 | 0.44 |
| 1:A:215:HIS:O | 1:A:215:HIS:CG | 2.70 | 0.44 |
| 1:A:647:MET:HE1 | 1:A:669:CYS:HB3 | 1.98 | 0.44 |
| 1:A:898:SER:CB | 1:A:927:LYS:HG3 | 2.48 | 0.44 |
| 1:A:1004:GLY:HA2 | 1:A:1031:VAL:HG12 | 1.99 | 0.44 |
| 1:B:169:THR:HG22 | 1:B:377:LYS:HD2 | 1.99 | 0.44 |
| 1:B:362:LEU:HD12 | 1:B:365:PRO:HB3 | 1.98 | 0.44 |
| 1:B:832:LEU:HD21 | 1:B:834:LEU:HD11 | 1.99 | 0.44 |
| 1:C:168:TYR:CE2 | 1:C:238:LYS:HG2 | 2.53 | 0.44 |
| 1:C:266:LEU:HB2 | 1:C:329:ASP:CB | 2.47 | 0.44 |
| 1:C:727:SER:O | 1:C:731:ARG:HG3 | 2.17 | 0.44 |
| 1:D:162:VAL:HG11 | 1:D:167:ARG:HG3 | 1.99 | 0.44 |
| 1:D:614:VAL:HA | 1:D:617:LYS:HG3 | 1.98 | 0.44 |
| 1:D:815:ILE:HG21 | 1:D:847:LEU:HD21 | 1.98 | 0.44 |
| 1:E:162:VAL:HG11 | 1:E:167:ARG:HG3 | 1.99 | 0.44 |
| 1:E:255:TYR:HB3 | 1:E:257:PHE:CE1 | 2.52 | 0.44 |
| 1:E:472:LEU:O | 1:E:475:ASP:OD1 | 2.36 | 0.44 |
| 1:E:832:LEU:HD21 | 1:E:834:LEU:HD11 | 1.99 | 0.44 |
| 1:F:660:ARG:O | 1:F:664:MET:HG2 | 2.16 | 0.44 |
| 1:G:471:SER:HB2 | 1:G:553:LEU:HD13 | 1.90 | 0.44 |
| 1:G:568:PHE:CD2 | 1:G:570:LYS:HD2 | 2.53 | 0.44 |
| 1:G:730:CYS:HB3 | 1:G:734:PHE:CE2 | 2.53 | 0.44 |
| 1:G:920:ARG:NH1 | 2:Q:121:ARG:HA | 2.30 | 0.44 |
| 1:H:140:TYR:HE2 | 1:H:279:CYS:O | 2.01 | 0.44 |
| 1:H:215:HIS:O | 1:H:215:HIS:CG | 2.70 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:H:255:TYR:HB3 | 1:H:257:PHE:CE1 | 2.53 | 0.44 |
| 1:H:379:LYS:HG3 | 1:H:396:PHE:CE2 | 2.52 | 0.44 |
| 1:H:592:LEU:O | 1:H:596:LEU:HG | 2.17 | 0.44 |
| 1:H:862:VAL:O | 1:H:865:ASN:ND2 | 2.51 | 0.44 |
| 1:I:234:ILE:CG2 | 3:I:1101:AGS:N7 | 2.79 | 0.44 |
| 1:I:619:LYS:CB | 2:S:261:ASP:HB2 | 2.46 | 0.44 |
| 1:I:727:SER:O | 1:I:731:ARG:HG3 | 2.17 | 0.44 |
| 1:I:758:MET:HE3 | 1:I:758:MET:HA | 1.99 | 0.44 |
| 1:I:898:SER:CB | 1:I:927:LYS:HG3 | 2.48 | 0.44 |
| 1:J:140:TYR:HE2 | 1:J:279:CYS:O | 2.01 | 0.44 |
| 1:J:143:TYR:CE1 | 1:J:281:PRO:HG2 | 2.52 | 0.44 |
| 1:J:362:LEU:CB | 1:J:365:PRO:HG3 | 2.46 | 0.44 |
| 1:J:730:CYS:HB3 | 1:J:734:PHE:CE2 | 2.53 | 0.44 |
| 1:J:815:ILE:HG21 | 1:J:847:LEU:HD21 | 1.98 | 0.44 |
| 2:P:93:ASN:ND2 | 2:P:144:GLN:OE1 | 2.50 | 0.44 |
| 2:T:93:ASN:ND2 | 2:T:144:GLN:OE1 | 2.50 | 0.44 |
| 1:A:162:VAL:HG11 | 1:A:167:ARG:HG3 | 1.99 | 0.44 |
| 1:A:168:TYR:CE2 | 1:A:238:LYS:HG2 | 2.53 | 0.44 |
| 1:A:730:CYS:HB3 | 1:A:734:PHE:CE2 | 2.53 | 0.44 |
| 1:A:810:LEU:HD11 | 1:A:834:LEU:HD22 | 1.99 | 0.44 |
| 1:B:168:TYR:CE2 | 1:B:238:LYS:HG2 | 2.53 | 0.44 |
| 1:B:294:PRO:HB3 | 1:B:341:LEU:HD23 | 1.98 | 0.44 |
| 1:C:215:HIS:O | 1:C:215:HIS:CG | 2.70 | 0.44 |
| 1:C:538:GLU:HB2 | 1:C:556:ARG:HH12 | 1.82 | 0.44 |
| 1:C:592:LEU:O | 1:C:596:LEU:HG | 2.16 | 0.44 |
| 1:C:671:GLU:OE1 | 1:C:672:ASN:ND2 | 2.51 | 0.44 |
| 1:C:862:VAL:O | 1:C:865:ASN:ND2 | 2.50 | 0.44 |
| 3:C:1101:AGS:H8 | 3:C:1101:AGS:O5' | 2.18 | 0.44 |
| 1:D:432:LEU:HD22 | 1:D:435:THR:HG21 | 1.98 | 0.44 |
| 1:D:568:PHE:O | 1:D:568:PHE:CD2 | 2.70 | 0.44 |
| 1:E:169:THR:HG22 | 1:E:377:LYS:HD2 | 1.99 | 0.44 |
| 1:E:175:LYS:HE2 | 1:E:366:ARG:CD | 2.47 | 0.44 |
| 1:E:573:LEU:CA | 1:E:576:VAL:HG12 | 2.48 | 0.44 |
| 1:E:730:CYS:HB3 | 1:E:734:PHE:CE2 | 2.53 | 0.44 |
| 1:E:815:ILE:HG21 | 1:E:847:LEU:HD21 | 1.98 | 0.44 |
| 1:E:956:HIS:O | 1:E:959:TRP:NE1 | 2.51 | 0.44 |
| 1:F:379:LYS:HG3 | 1:F:396:PHE:CE2 | 2.52 | 0.44 |
| 1:F:446:PHE:CE2 | 1:F:525:PHE:HE2 | 2.35 | 0.44 |
| 1:F:472:LEU:O | 1:F:475:ASP:OD1 | 2.36 | 0.44 |
| 1:F:505:MET:O | 1:F:505:MET:CG | 2.64 | 0.44 |
| 1:F:564:ASN:HB3 | 1:F:570:LYS:HD3 | 1.99 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:G:509:GLN:CB | 1:G:514:CYS:HB3 | 2.45 | 0.44 |
| 1:G:671:GLU:OE1 | 1:G:672:ASN:ND2 | 2.51 | 0.44 |
| 1:G:919:LEU:HD21 | 1:G:922:ASN:HB2 | 1.99 | 0.44 |
| 1:H:305:ASP:CB | 1:H:499:VAL:CG1 | 2.75 | 0.44 |
| 1:H:730:CYS:HB3 | 1:H:734:PHE:CE2 | 2.53 | 0.44 |
| 1:H:919:LEU:HD21 | 1:H:922:ASN:HB2 | 1.99 | 0.44 |
| 1:H:1004:GLY:HA2 | 1:H:1031:VAL:HG12 | 1.99 | 0.44 |
| 1:I:168:TYR:CE2 | 1:I:238:LYS:HG2 | 2.53 | 0.44 |
| 1:I:220:HIS:HB3 | 1:I:338:LYS:NZ | 2.32 | 0.44 |
| 1:I:288:HIS:ND1 | 1:I:322:TRP:HH2 | 2.06 | 0.44 |
| 1:I:920:ARG:NH1 | 2:S:121:ARG:HA | 2.30 | 0.44 |
| 1:I:956:HIS:O | 1:I:959:TRP:NE1 | 2.51 | 0.44 |
| 1:I:1011:ASN:O | 1:I:1015:LYS:HG2 | 2.18 | 0.44 |
| 3:I:1101:AGS:H8 | 3:I:1101:AGS:O5' | 2.17 | 0.44 |
| 1:J:414:VAL:O | 1:J:414:VAL:CG1 | 2.66 | 0.44 |
| 1:J:568:PHE:CD2 | 1:J:570:LYS:HD2 | 2.53 | 0.44 |
| 1:J:1011:ASN:O | 1:J:1015:LYS:HG2 | 2.18 | 0.44 |
| 2:L:93:ASN:ND2 | 2:L:144:GLN:OE1 | 2.50 | 0.44 |
| 1:A:923:THR:HA | 1:A:951:CYS:O | 2.16 | 0.44 |
| 1:B:140:TYR:HE2 | 1:B:279:CYS:O | 2.01 | 0.44 |
| 1:B:266:LEU:HB2 | 1:B:329:ASP:CB | 2.47 | 0.44 |
| 1:B:671:GLU:OE1 | 1:B:672:ASN:ND2 | 2.51 | 0.44 |
| 1:C:192:LYS:NZ | 1:C:192:LYS:HB3 | 2.32 | 0.44 |
| 1:C:234:ILE:CG2 | 3:C:1101:AGS:N7 | 2.79 | 0.44 |
| 1:C:347:LEU:C | 1:C:347:LEU:HD23 | 2.38 | 0.44 |
| 1:C:505:MET:O | 1:C:505:MET:CG | 2.64 | 0.44 |
| 1:C:832:LEU:HD21 | 1:C:834:LEU:HD11 | 1.99 | 0.44 |
| 1:C:996:GLN:HG3 | 1:C:996:GLN:O | 2.18 | 0.44 |
| 1:C:1011:ASN:O | 1:C:1015:LYS:HG2 | 2.18 | 0.44 |
| 1:D:168:TYR:CE2 | 1:D:238:LYS:HG2 | 2.53 | 0.44 |
| 1:D:347:LEU:HD23 | 1:D:347:LEU:C | 2.38 | 0.44 |
| 1:D:568:PHE:O | 1:D:568:PHE:CG | 2.70 | 0.44 |
| 1:D:832:LEU:HD21 | 1:D:834:LEU:HD11 | 1.99 | 0.44 |
| 1:D:937:LEU:HG | 1:D:964:LEU:CD1 | 2.47 | 0.44 |
| 1:E:147:ARG:HE | 1:E:147:ARG:HB2 | 1.64 | 0.44 |
| 1:E:220:HIS:HB3 | 1:E:338:LYS:NZ | 2.32 | 0.44 |
| 1:E:862:VAL:O | 1:E:865:ASN:ND2 | 2.51 | 0.44 |
| 1:F:414:VAL:O | 1:F:414:VAL:CG1 | 2.66 | 0.44 |
| 1:F:592:LEU:O | 1:F:596:LEU:HG | 2.16 | 0.44 |
| 1:F:996:GLN:O | 1:F:996:GLN:HG3 | 2.18 | 0.44 |
| 1:F:1011:ASN:O | 1:F:1015:LYS:HG2 | 2.17 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:G:359:GLN:OE1 | 1:G:359:GLN:HA | 2.17 | 0.44 |
| 1:G:585:ASN:HA | 1:G:637:MET:HE1 | 2.00 | 0.44 |
| 1:G:862:VAL:O | 1:G:865:ASN:ND2 | 2.51 | 0.44 |
| 1:H:614:VAL:HA | 1:H:617:LYS:HG3 | 1.98 | 0.44 |
| 1:I:414:VAL:O | 1:I:414:VAL:CG1 | 2.66 | 0.44 |
| 1:I:505:MET:O | 1:I:505:MET:CG | 2.64 | 0.44 |
| 1:I:567:LYS:HB3 | 1:I:568:PHE:H | 1.42 | 0.44 |
| 1:I:886:LEU:CD2 | 1:I:889:LEU:HD13 | 2.38 | 0.44 |
| 1:I:919:LEU:HD22 | 1:I:924:LEU:CD1 | 2.45 | 0.44 |
| 1:J:172:ARG:C | 1:J:173:LEU:HD23 | 2.38 | 0.44 |
| 1:J:353:VAL:HB | 1:J:500:SER:OG | 2.18 | 0.44 |
| 1:J:379:LYS:HG3 | 1:J:396:PHE:CE2 | 2.52 | 0.44 |
| 1:J:727:SER:O | 1:J:731:ARG:HG3 | 2.17 | 0.44 |
| 2:L:36:ILE:O | 2:L:36:ILE:HG22 | 2.17 | 0.44 |
| 1:A:143:TYR:CE1 | 1:A:281:PRO:HG2 | 2.52 | 0.44 |
| 1:A:172:ARG:C | 1:A:173:LEU:HD23 | 2.37 | 0.44 |
| 1:A:472:LEU:O | 1:A:475:ASP:OD1 | 2.36 | 0.44 |
| 1:A:956:HIS:O | 1:A:959:TRP:NE1 | 2.51 | 0.44 |
| 1:B:190:ILE:CA | 1:B:194:LYS:HB2 | 2.45 | 0.44 |
| 1:B:220:HIS:HB3 | 1:B:338:LYS:NZ | 2.32 | 0.44 |
| 1:B:377:LYS:HD3 | 1:B:377:LYS:HA | 1.51 | 0.44 |
| 1:B:562:LEU:HD21 | 1:B:611:TRP:CD2 | 2.53 | 0.44 |
| 1:B:901:CYS:HA | 1:B:932:LEU:HD21 | 2.00 | 0.44 |
| 1:C:162:VAL:HG11 | 1:C:167:ARG:HG3 | 1.99 | 0.44 |
| 1:C:315:ILE:HD12 | 1:C:330:ILE:HG12 | 2.00 | 0.44 |
| 1:C:472:LEU:O | 1:C:475:ASP:OD1 | 2.36 | 0.44 |
| 1:C:504:ARG:HG3 | 1:C:504:ARG:O | 2.17 | 0.44 |
| 1:C:601:SER:HB2 | 1:C:603:GLN:NE2 | 2.31 | 0.44 |
| 1:C:802:GLU:OE2 | 1:C:831:LYS:NZ | 2.45 | 0.44 |
| 1:D:215:HIS:O | 1:D:215:HIS:CG | 2.70 | 0.44 |
| 1:D:266:LEU:HB2 | 1:D:329:ASP:CB | 2.47 | 0.44 |
| 1:D:315:ILE:HD12 | 1:D:330:ILE:HG12 | 2.00 | 0.44 |
| 1:D:359:GLN:OE1 | 1:D:359:GLN:HA | 2.17 | 0.44 |
| 1:D:562:LEU:HD21 | 1:D:611:TRP:CG | 2.52 | 0.44 |
| 1:D:573:LEU:CA | 1:D:576:VAL:HG12 | 2.48 | 0.44 |
| 1:D:758:MET:HE3 | 1:D:758:MET:HA | 1.98 | 0.44 |
| 1:D:901:CYS:HA | 1:D:932:LEU:HD21 | 2.00 | 0.44 |
| 1:E:568:PHE:CD2 | 1:E:570:LYS:HD2 | 2.53 | 0.44 |
| 3:E:1101:AGS:H8 | 3:E:1101:AGS:O5' | 2.17 | 0.44 |
| 1:F:215:HIS:O | 1:F:215:HIS:CG | 2.70 | 0.44 |
| 1:F:337:ARG:NH2 | 1:F:361:LEU:HD22 | 2.33 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:F:562:LEU:HD21 | 1:F:611:TRP:CG | 2.52 | 0.44 |
| 1:F:589:THR:HG23 | 1:F:590:SER:N | 2.33 | 0.44 |
| 1:F:650:PHE:HB3 | 1:F:653:ILE:CD1 | 2.41 | 0.44 |
| 1:F:730:CYS:HB3 | 1:F:734:PHE:CE2 | 2.53 | 0.44 |
| 1:F:815:ILE:HD11 | 1:F:839:LEU:HD11 | 2.00 | 0.44 |
| 1:F:919:LEU:HD21 | 1:F:922:ASN:HB2 | 1.99 | 0.44 |
| 1:G:255:TYR:HB3 | 1:G:257:PHE:CE1 | 2.52 | 0.44 |
| 1:G:802:GLU:OE2 | 1:G:831:LYS:NZ | 2.45 | 0.44 |
| 1:G:996:GLN:HG3 | 1:G:996:GLN:O | 2.18 | 0.44 |
| 3:G:1101:AGS:O5' | 3:G:1101:AGS:H8 | 2.17 | 0.44 |
| 1:H:175:LYS:HE2 | 1:H:366:ARG:CD | 2.47 | 0.44 |
| 1:H:192:LYS:NZ | 1:H:192:LYS:HB3 | 2.32 | 0.44 |
| 1:H:504:ARG:HG3 | 1:H:504:ARG:O | 2.17 | 0.44 |
| 1:I:169:THR:HG22 | 1:I:377:LYS:HD2 | 1.99 | 0.44 |
| 1:I:315:ILE:HD12 | 1:I:330:ILE:HG12 | 2.00 | 0.44 |
| 1:I:798:GLN:HG2 | 1:I:828:ASN:ND2 | 2.33 | 0.44 |
| 1:I:996:GLN:HG3 | 1:I:996:GLN:O | 2.18 | 0.44 |
| 1:J:347:LEU:HD23 | 1:J:347:LEU:C | 2.38 | 0.44 |
| 1:J:568:PHE:O | 1:J:570:LYS:HG2 | 2.16 | 0.44 |
| 2:T:132:LEU:HD11 | 2:T:262:HIS:CD2 | 2.52 | 0.44 |
| 1:A:492:HIS:HE1 | 1:A:553:LEU:CD2 | 2.25 | 0.44 |
| 1:A:727:SER:O | 1:A:731:ARG:HG3 | 2.17 | 0.44 |
| 1:A:862:VAL:O | 1:A:865:ASN:ND2 | 2.50 | 0.44 |
| 1:A:901:CYS:HA | 1:A:932:LEU:HD21 | 2.00 | 0.44 |
| 1:A:996:GLN:HG3 | 1:A:996:GLN:O | 2.18 | 0.44 |
| 1:B:220:HIS:HB3 | 1:B:338:LYS:HZ1 | 1.83 | 0.44 |
| 1:B:231:GLY:HA2 | 3:B:1101:AGS:O2A | 2.17 | 0.44 |
| 1:B:886:LEU:CD2 | 1:B:889:LEU:HD13 | 2.38 | 0.44 |
| 1:C:255:TYR:HB3 | 1:C:257:PHE:CE1 | 2.52 | 0.44 |
| 1:C:595:LYS:HD3 | 1:C:595:LYS:HA | 1.66 | 0.44 |
| 1:C:730:CYS:HB3 | 1:C:734:PHE:CE2 | 2.53 | 0.44 |
| 1:D:169:THR:HG22 | 1:D:377:LYS:HD2 | 1.99 | 0.44 |
| 1:D:326:GLU:O | 1:D:327:ARG:HB2 | 2.18 | 0.44 |
| 1:D:337:ARG:NH2 | 1:D:361:LEU:HD22 | 2.33 | 0.44 |
| 1:D:727:SER:O | 1:D:731:ARG:HG3 | 2.17 | 0.44 |
| 1:E:135:ASP:O | 1:E:138:LYS:HB2 | 2.18 | 0.44 |
| 1:E:377:LYS:HD3 | 1:E:377:LYS:HA | 1.51 | 0.44 |
| 1:E:589:THR:HG23 | 1:E:590:SER:N | 2.33 | 0.44 |
| 1:E:671:GLU:OE1 | 1:E:672:ASN:ND2 | 2.51 | 0.44 |
| 1:E:727:SER:O | 1:E:731:ARG:HG3 | 2.17 | 0.44 |
| 1:F:140:TYR:HE2 | 1:F:279:CYS:O | 2.01 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:F:169:THR:HG22 | 1:F:377:LYS:HD2 | 1.99 | 0.44 |
| 1:F:568:PHE:CD2 | 1:F:570:LYS:HD2 | 2.53 | 0.44 |
| 1:G:307:LEU:HD12 | 1:G:307:LEU:N | 2.33 | 0.44 |
| 1:G:592:LEU:O | 1:G:596:LEU:HG | 2.16 | 0.44 |
| 1:G:798:GLN:HG2 | 1:G:828:ASN:ND2 | 2.33 | 0.44 |
| 1:G:956:HIS:O | 1:G:959:TRP:NE1 | 2.51 | 0.44 |
| 1:H:364:HIS:CG | 1:I:150:CYS:SG | 3.10 | 0.44 |
| 1:H:568:PHE:CD2 | 1:H:570:LYS:HD2 | 2.53 | 0.44 |
| 1:H:810:LEU:HD11 | 1:H:834:LEU:HD22 | 1.99 | 0.44 |
| 1:I:147:ARG:HE | 1:I:147:ARG:HB2 | 1.65 | 0.44 |
| 1:I:252:ARG:CD | 1:I:253:PHE:CZ | 2.99 | 0.44 |
| 1:I:568:PHE:CD2 | 1:I:570:LYS:HD2 | 2.53 | 0.44 |
| 1:I:651:PRO:CG | 1:I:675:ARG:HE | 2.31 | 0.44 |
| 1:I:651:PRO:CD | 1:I:675:ARG:HE | 2.31 | 0.44 |
| 1:I:671:GLU:OE1 | 1:I:672:ASN:ND2 | 2.51 | 0.44 |
| 1:I:1004:GLY:HA2 | 1:I:1031:VAL:HG12 | 1.99 | 0.44 |
| 1:J:252:ARG:CD | 1:J:253:PHE:CZ | 2.99 | 0.44 |
| 1:J:901:CYS:HA | 1:J:932:LEU:HD21 | 2.00 | 0.44 |
| 2:K:132:LEU:HD11 | 2:K:262:HIS:CD2 | 2.52 | 0.44 |
| 2:L:132:LEU:HD11 | 2:L:262:HIS:CD2 | 2.52 | 0.44 |
| 2:T:295:MET:CE | 2:T:295:MET:HA | 2.48 | 0.44 |
| 1:A:240:MET:HE3 | 1:A:258:TYR:HB2 | 2.00 | 0.44 |
| 1:A:347:LEU:HD23 | 1:A:347:LEU:C | 2.38 | 0.44 |
| 1:A:671:GLU:OE1 | 1:A:672:ASN:ND2 | 2.51 | 0.44 |
| 1:B:337:ARG:NH2 | 1:B:361:LEU:HD22 | 2.33 | 0.44 |
| 1:B:727:SER:O | 1:B:731:ARG:HG3 | 2.17 | 0.44 |
| 1:B:815:ILE:HD11 | 1:B:839:LEU:HD11 | 2.00 | 0.44 |
| 1:B:956:HIS:O | 1:B:959:TRP:NE1 | 2.51 | 0.44 |
| 1:C:337:ARG:NH2 | 1:C:361:LEU:HD22 | 2.33 | 0.44 |
| 1:C:573:LEU:CA | 1:C:576:VAL:HG12 | 2.48 | 0.44 |
| 1:C:815:ILE:HD11 | 1:C:839:LEU:HD11 | 2.00 | 0.44 |
| 1:C:901:CYS:HA | 1:C:932:LEU:HD21 | 2.00 | 0.44 |
| 1:D:589:THR:HG23 | 1:D:590:SER:N | 2.33 | 0.44 |
| 1:D:956:HIS:O | 1:D:959:TRP:NE1 | 2.51 | 0.44 |
| 1:D:1004:GLY:HA2 | 1:D:1031:VAL:HG12 | 1.99 | 0.44 |
| 1:E:347:LEU:HD23 | 1:E:347:LEU:C | 2.38 | 0.44 |
| 1:E:562:LEU:HD21 | 1:E:611:TRP:CG | 2.52 | 0.44 |
| 1:E:601:SER:HB2 | 1:E:603:GLN:NE2 | 2.31 | 0.44 |
| 1:F:190:ILE:CA | 1:F:194:LYS:HB2 | 2.45 | 0.44 |
| 1:G:135:ASP:O | 1:G:138:LYS:HB2 | 2.18 | 0.44 |
| 1:G:162:VAL:HG11 | 1:G:167:ARG:HG3 | 1.99 | 0.44 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:G:589:THR:HG23 | 1:G:590:SER:N | 2.33 | 0.44 |
| 1:G:898:SER:CB | 1:G:927:LYS:HG3 | 2.48 | 0.44 |
| 1:H:168:TYR:CE2 | 1:H:238:LYS:HG2 | 2.53 | 0.44 |
| 1:H:231:GLY:HA2 | 3:H:1101:AGS:O2A | 2.17 | 0.44 |
| 1:H:326:GLU:O | 1:H:327:ARG:HB2 | 2.18 | 0.44 |
| 1:H:391:GLN:CA | 1:H:426:MET:HE1 | 2.31 | 0.44 |
| 1:I:307:LEU:HD12 | 1:I:307:LEU:N | 2.33 | 0.44 |
| 1:I:558:VAL:HG21 | 1:I:607:GLU:HG2 | 2.00 | 0.44 |
| 1:I:730:CYS:HB3 | 1:I:734:PHE:CE2 | 2.53 | 0.44 |
| 1:J:205:MET:HB2 | 1:J:205:MET:HE2 | 1.85 | 0.44 |
| 1:J:362:LEU:HB3 | 1:J:365:PRO:CG | 2.48 | 0.44 |
| 1:J:446:PHE:CE2 | 1:J:525:PHE:HE2 | 2.35 | 0.44 |
| 1:J:472:LEU:O | 1:J:475:ASP:OD1 | 2.36 | 0.44 |
| 1:J:956:HIS:O | 1:J:959:TRP:NE1 | 2.51 | 0.44 |
| 2:R:295:MET:HA | 2:R:295:MET:CE | 2.48 | 0.44 |
| 1:A:558:VAL:HG21 | 1:A:607:GLU:HG2 | 2.00 | 0.43 |
| 1:A:793:VAL:O | 1:A:797:ASN:ND2 | 2.37 | 0.43 |
| 1:B:991:GLU:O | 1:B:994:LYS:HG2 | 2.17 | 0.43 |
| 1:C:158:LEU:HD12 | 1:C:158:LEU:HA | 1.85 | 0.43 |
| 1:C:362:LEU:CB | 1:C:365:PRO:HG3 | 2.47 | 0.43 |
| 1:C:379:LYS:HG3 | 1:C:396:PHE:CE2 | 2.52 | 0.43 |
| 1:C:568:PHE:O | 1:C:568:PHE:CG | 2.70 | 0.43 |
| 1:C:647:MET:HE1 | 1:C:669:CYS:HB3 | 2.00 | 0.43 |
| 1:D:651:PRO:CG | 1:D:675:ARG:HE | 2.31 | 0.43 |
| 1:D:798:GLN:HG2 | 1:D:828:ASN:ND2 | 2.33 | 0.43 |
| 1:D:996:GLN:HG3 | 1:D:996:GLN:O | 2.18 | 0.43 |
| 1:E:168:TYR:CE2 | 1:E:238:LYS:HG2 | 2.53 | 0.43 |
| 1:E:651:PRO:CG | 1:E:675:ARG:HE | 2.31 | 0.43 |
| 1:F:391:GLN:CA | 1:F:426:MET:HE1 | 2.32 | 0.43 |
| 1:F:919:LEU:CD2 | 1:F:924:LEU:HD11 | 2.45 | 0.43 |
| 1:G:564:ASN:HB3 | 1:G:570:LYS:HD3 | 1.99 | 0.43 |
| 1:G:651:PRO:CG | 1:G:675:ARG:HE | 2.31 | 0.43 |
| 1:H:307:LEU:HD12 | 1:H:307:LEU:N | 2.33 | 0.43 |
| 1:H:315:ILE:HD12 | 1:H:330:ILE:HG12 | 2.00 | 0.43 |
| 1:H:337:ARG:NH2 | 1:H:361:LEU:HD22 | 2.33 | 0.43 |
| 1:H:671:GLU:OE1 | 1:H:672:ASN:ND2 | 2.51 | 0.43 |
| 1:I:204:LYS:CG | 1:I:205:MET:N | 2.78 | 0.43 |
| 1:I:220:HIS:HB3 | 1:I:338:LYS:HZ1 | 1.83 | 0.43 |
| 1:I:337:ARG:NH2 | 1:I:361:LEU:HD22 | 2.33 | 0.43 |
| 1:I:347:LEU:HD23 | 1:I:347:LEU:C | 2.38 | 0.43 |
| 1:I:556:ARG:H | 1:I:556:ARG:HG2 | 1.63 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:J:307:LEU:HD12 | 1:J:307:LEU:N | 2.33 | 0.43 |
| 1:J:798:GLN:HG2 | 1:J:828:ASN:ND2 | 2.33 | 0.43 |
| 2:O:295:MET:HA | 2:O:295:MET:CE | 2.48 | 0.43 |
| 2:R:93:ASN:ND2 | 2:R:144:GLN:OE1 | 2.50 | 0.43 |
| 2:R:242:ASN:OD1 | 2:R:245:SER:OG | 2.21 | 0.43 |
| 2:S:36:ILE:O | 2:S:36:ILE:HG22 | 2.17 | 0.43 |
| 1:A:192:LYS:NZ | 1:A:192:LYS:HB3 | 2.32 | 0.43 |
| 1:A:231:GLY:HA2 | 3:A:1101:AGS:O2A | 2.17 | 0.43 |
| 1:A:266:LEU:HB2 | 1:A:329:ASP:CB | 2.47 | 0.43 |
| 1:A:362:LEU:CB | 1:A:365:PRO:HG3 | 2.47 | 0.43 |
| 1:B:135:ASP:O | 1:B:138:LYS:HB2 | 2.18 | 0.43 |
| 1:B:215:HIS:O | 1:B:215:HIS:CG | 2.70 | 0.43 |
| 1:B:255:TYR:HB3 | 1:B:257:PHE:CE1 | 2.52 | 0.43 |
| 1:B:362:LEU:HB3 | 1:B:365:PRO:CG | 2.48 | 0.43 |
| 1:B:558:VAL:HG21 | 1:B:607:GLU:HG2 | 2.00 | 0.43 |
| 1:B:798:GLN:HG2 | 1:B:828:ASN:ND2 | 2.33 | 0.43 |
| 1:C:135:ASP:O | 1:C:138:LYS:HB2 | 2.18 | 0.43 |
| 1:C:426:MET:CG | 1:C:432:LEU:HD11 | 2.39 | 0.43 |
| 1:C:898:SER:CB | 1:C:927:LYS:HG3 | 2.48 | 0.43 |
| 1:D:379:LYS:HG3 | 1:D:396:PHE:CE2 | 2.52 | 0.43 |
| 1:D:651:PRO:CD | 1:D:675:ARG:HE | 2.30 | 0.43 |
| 1:D:1011:ASN:O | 1:D:1015:LYS:HG2 | 2.18 | 0.43 |
| 1:E:901:CYS:HA | 1:E:932:LEU:HD21 | 2.00 | 0.43 |
| 1:F:255:TYR:HB3 | 1:F:257:PHE:CE1 | 2.52 | 0.43 |
| 1:F:326:GLU:O | 1:F:327:ARG:HB2 | 2.17 | 0.43 |
| 1:F:538:GLU:HB2 | 1:F:556:ARG:HH12 | 1.82 | 0.43 |
| 1:F:671:GLU:OE1 | 1:F:672:ASN:ND2 | 2.51 | 0.43 |
| 1:F:727:SER:O | 1:F:731:ARG:HG3 | 2.17 | 0.43 |
| 1:F:858:THR:O | 1:F:886:LEU:HD12 | 2.19 | 0.43 |
| 1:G:215:HIS:O | 1:G:215:HIS:CG | 2.70 | 0.43 |
| 1:G:256:LEU:H | 1:G:256:LEU:HD12 | 1.84 | 0.43 |
| 1:G:379:LYS:HG3 | 1:G:396:PHE:CE2 | 2.52 | 0.43 |
| 1:G:414:VAL:O | 1:G:414:VAL:CG1 | 2.66 | 0.43 |
| 1:H:145:ARG:HE | 1:H:145:ARG:HB3 | 1.61 | 0.43 |
| 1:H:347:LEU:C | 1:H:347:LEU:HD23 | 2.38 | 0.43 |
| 1:H:630:LEU:HD13 | 1:H:630:LEU:HA | 1.90 | 0.43 |
| 1:H:798:GLN:HG2 | 1:H:828:ASN:ND2 | 2.33 | 0.43 |
| 1:I:135:ASP:O | 1:I:138:LYS:HB2 | 2.18 | 0.43 |
| 1:I:143:TYR:CE1 | 1:I:281:PRO:HG2 | 2.52 | 0.43 |
| 1:I:779:ARG:HB2 | 1:I:779:ARG:NH1 | 2.33 | 0.43 |
| 1:I:810:LEU:HD11 | 1:I:834:LEU:HD22 | 1.99 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:J:204:LYS:CG | 1:J:205:MET:N | 2.77 | 0.43 |
| 1:J:231:GLY:HA2 | 3:J:1101:AGS:O2A | 2.17 | 0.43 |
| 1:J:256:LEU:H | 1:J:256:LEU:HD12 | 1.84 | 0.43 |
| 1:J:915:THR:O | 1:J:944:GLN:N | 2.34 | 0.43 |
| 1:J:1004:GLY:HA2 | 1:J:1031:VAL:HG12 | 1.99 | 0.43 |
| 2:P:295:MET:HA | 2:P:295:MET:CE | 2.48 | 0.43 |
| 1:A:364:HIS:CG | 1:B:150:CYS:SG | 3.11 | 0.43 |
| 1:A:408:MET:HG2 | 1:A:443:TYR:CE1 | 2.53 | 0.43 |
| 1:A:937:LEU:HG | 1:A:964:LEU:CD1 | 2.47 | 0.43 |
| 1:B:307:LEU:HD12 | 1:B:307:LEU:N | 2.33 | 0.43 |
| 1:B:347:LEU:HD23 | 1:B:347:LEU:C | 2.38 | 0.43 |
| 1:B:359:GLN:OE1 | 1:B:359:GLN:HA | 2.17 | 0.43 |
| 1:B:509:GLN:CB | 1:B:514:CYS:HB3 | 2.45 | 0.43 |
| 1:B:573:LEU:CA | 1:B:576:VAL:HG12 | 2.48 | 0.43 |
| 1:B:730:CYS:HB3 | 1:B:734:PHE:CE2 | 2.53 | 0.43 |
| 1:B:858:THR:O | 1:B:886:LEU:HD12 | 2.19 | 0.43 |
| 1:C:167:ARG:HB3 | 1:C:167:ARG:HH11 | 1.79 | 0.43 |
| 1:C:858:THR:O | 1:C:886:LEU:HD12 | 2.19 | 0.43 |
| 1:D:135:ASP:O | 1:D:138:LYS:HB2 | 2.18 | 0.43 |
| 1:D:175:LYS:HE2 | 1:D:366:ARG:CD | 2.47 | 0.43 |
| 1:D:671:GLU:OE1 | 1:D:672:ASN:ND2 | 2.51 | 0.43 |
| 3:D:1101:AGS:O5' | 3:D:1101:AGS:H8 | 2.17 | 0.43 |
| 1:E:315:ILE:HD12 | 1:E:330:ILE:HG12 | 2.00 | 0.43 |
| 1:E:414:VAL:O | 1:E:414:VAL:CG1 | 2.66 | 0.43 |
| 1:F:162:VAL:HG11 | 1:F:167:ARG:HG3 | 1.99 | 0.43 |
| 1:F:256:LEU:HD12 | 1:F:256:LEU:H | 1.84 | 0.43 |
| 1:F:347:LEU:HD23 | 1:F:347:LEU:C | 2.38 | 0.43 |
| 1:F:377:LYS:HA | 1:F:377:LYS:HD3 | 1.51 | 0.43 |
| 1:F:512:VAL:HG21 | 1:G:445:PHE:CB | 2.37 | 0.43 |
| 1:F:562:LEU:HD21 | 1:F:611:TRP:CD2 | 2.53 | 0.43 |
| 1:F:862:VAL:O | 1:F:865:ASN:ND2 | 2.51 | 0.43 |
| 1:G:234:ILE:HD13 | 1:G:234:ILE:HA | 1.80 | 0.43 |
| 1:G:472:LEU:O | 1:G:475:ASP:OD1 | 2.36 | 0.43 |
| 1:G:650:PHE:HB3 | 1:G:653:ILE:CD1 | 2.41 | 0.43 |
| 1:G:815:ILE:HD11 | 1:G:839:LEU:HD11 | 2.00 | 0.43 |
| 1:H:256:LEU:H | 1:H:256:LEU:HD12 | 1.84 | 0.43 |
| 1:H:779:ARG:HB2 | 1:H:779:ARG:NH1 | 2.33 | 0.43 |
| 1:I:175:LYS:HE2 | 1:I:366:ARG:CG | 2.49 | 0.43 |
| 1:I:471:SER:HG | 1:I:553:LEU:HD11 | 1.83 | 0.43 |
| 1:I:472:LEU:O | 1:I:475:ASP:OD1 | 2.36 | 0.43 |
| 1:I:775:LEU:CG | 1:I:777:LEU:HD11 | 2.34 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:I:933:CYS:HB3 | 1:I:964:LEU:CD1 | 2.48 | 0.43 |
| 1:J:220:HIS:HB3 | 1:J:338:LYS:HZ1 | 1.82 | 0.43 |
| 2:P:36:ILE:O | 2:P:36:ILE:HG22 | 2.17 | 0.43 |
| 2:S:295:MET:HA | 2:S:295:MET:CE | 2.48 | 0.43 |
| 1:A:135:ASP:O | 1:A:138:LYS:HB2 | 2.18 | 0.43 |
| 1:A:651:PRO:CG | 1:A:675:ARG:HE | 2.31 | 0.43 |
| 1:B:162:VAL:HG11 | 1:B:167:ARG:HG3 | 1.99 | 0.43 |
| 1:B:192:LYS:NZ | 1:B:192:LYS:HB3 | 2.32 | 0.43 |
| 1:B:503:LEU:CD2 | 1:B:520:PHE:CE1 | 2.93 | 0.43 |
| 1:B:568:PHE:O | 1:B:570:LYS:HG3 | 2.15 | 0.43 |
| 1:B:651:PRO:CG | 1:B:675:ARG:HE | 2.31 | 0.43 |
| 1:C:217:GLU:CG | 1:D:146:SER:HA | 2.43 | 0.43 |
| 1:C:326:GLU:O | 1:C:327:ARG:HB2 | 2.18 | 0.43 |
| 1:C:364:HIS:CG | 1:D:150:CYS:SG | 3.10 | 0.43 |
| 1:C:509:GLN:CB | 1:C:514:CYS:HB3 | 2.45 | 0.43 |
| 1:C:589:THR:HG23 | 1:C:590:SER:N | 2.33 | 0.43 |
| 1:C:758:MET:HE3 | 1:C:761:LEU:CB | 2.49 | 0.43 |
| 1:C:919:LEU:HD21 | 1:C:922:ASN:HB2 | 1.99 | 0.43 |
| 1:C:929:ILE:HD11 | 1:C:953:LEU:CD1 | 2.49 | 0.43 |
| 1:D:143:TYR:CE1 | 1:D:281:PRO:HG2 | 2.52 | 0.43 |
| 1:D:558:VAL:HG21 | 1:D:607:GLU:HG2 | 2.00 | 0.43 |
| 1:D:630:LEU:HD13 | 1:D:630:LEU:HA | 1.90 | 0.43 |
| 1:D:647:MET:HE1 | 1:D:669:CYS:HB3 | 2.00 | 0.43 |
| 1:E:256:LEU:H | 1:E:256:LEU:HD12 | 1.84 | 0.43 |
| 1:E:562:LEU:HD21 | 1:E:611:TRP:CD2 | 2.53 | 0.43 |
| 1:E:798:GLN:HG2 | 1:E:828:ASN:ND2 | 2.33 | 0.43 |
| 1:E:815:ILE:HD11 | 1:E:839:LEU:HD11 | 2.00 | 0.43 |
| 1:E:919:LEU:CD2 | 1:E:924:LEU:HD11 | 2.45 | 0.43 |
| 1:E:929:ILE:HD11 | 1:E:953:LEU:CD1 | 2.49 | 0.43 |
| 1:F:234:ILE:HD13 | 1:F:234:ILE:HA | 1.80 | 0.43 |
| 1:F:798:GLN:HG2 | 1:F:828:ASN:ND2 | 2.33 | 0.43 |
| 1:F:929:ILE:HD11 | 1:F:953:LEU:CD1 | 2.49 | 0.43 |
| 1:F:1004:GLY:HA2 | 1:F:1031:VAL:HG12 | 1.99 | 0.43 |
| 1:G:858:THR:O | 1:G:886:LEU:HD12 | 2.19 | 0.43 |
| 1:H:175:LYS:HE2 | 1:H:366:ARG:CG | 2.49 | 0.43 |
| 1:H:414:VAL:O | 1:H:414:VAL:CG1 | 2.66 | 0.43 |
| 1:H:472:LEU:O | 1:H:475:ASP:OD1 | 2.36 | 0.43 |
| 1:H:651:PRO:CG | 1:H:675:ARG:HE | 2.31 | 0.43 |
| 1:H:898:SER:CB | 1:H:927:LYS:HG3 | 2.48 | 0.43 |
| 3:H:1101:AGS:H8 | 3:H:1101:AGS:O5' | 2.17 | 0.43 |
| 1:J:175:LYS:HE2 | 1:J:366:ARG:CG | 2.49 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:J:315:ILE:HD12 | 1:J:330:ILE:HG12 | 2.00 | 0.43 |
| 1:J:333:SER:HG | 1:J:337:ARG:HH12 | 1.62 | 0.43 |
| 1:J:858:THR:O | 1:J:886:LEU:HD12 | 2.19 | 0.43 |
| 1:J:929:ILE:HD11 | 1:J:953:LEU:CD1 | 2.49 | 0.43 |
| 2:N:36:ILE:O | 2:N:36:ILE:HG22 | 2.17 | 0.43 |
| 1:A:234:ILE:HD13 | 1:A:234:ILE:HA | 1.80 | 0.43 |
| 1:A:573:LEU:CD2 | 1:A:576:VAL:HG11 | 2.40 | 0.43 |
| 1:A:933:CYS:HB3 | 1:A:964:LEU:CD1 | 2.49 | 0.43 |
| 1:B:898:SER:CB | 1:B:927:LYS:HG3 | 2.48 | 0.43 |
| 1:B:933:CYS:HB3 | 1:B:964:LEU:CD1 | 2.49 | 0.43 |
| 1:C:169:THR:HG22 | 1:C:377:LYS:HD2 | 1.99 | 0.43 |
| 1:C:175:LYS:HE2 | 1:C:366:ARG:CD | 2.47 | 0.43 |
| 1:C:810:LEU:HD11 | 1:C:834:LEU:HD22 | 1.99 | 0.43 |
| 1:D:643:VAL:O | 1:D:647:MET:HG2 | 2.19 | 0.43 |
| 1:E:364:HIS:CG | 1:F:150:CYS:SG | 3.11 | 0.43 |
| 1:E:477:ILE:HD12 | 1:E:477:ILE:HA | 1.85 | 0.43 |
| 1:E:898:SER:CB | 1:E:927:LYS:HG3 | 2.48 | 0.43 |
| 1:E:1011:ASN:O | 1:E:1015:LYS:HG2 | 2.18 | 0.43 |
| 1:F:266:LEU:HB2 | 1:F:329:ASP:CB | 2.47 | 0.43 |
| 1:F:651:PRO:CG | 1:F:675:ARG:HE | 2.31 | 0.43 |
| 1:F:810:LEU:HD11 | 1:F:834:LEU:HD22 | 1.99 | 0.43 |
| 1:G:347:LEU:HD23 | 1:G:347:LEU:C | 2.38 | 0.43 |
| 1:G:502:PHE:CA | 1:G:521:ILE:HG13 | 2.43 | 0.43 |
| 1:G:1004:GLY:HA2 | 1:G:1031:VAL:HG12 | 1.99 | 0.43 |
| 1:H:217:GLU:CG | 1:I:146:SER:HA | 2.43 | 0.43 |
| 1:H:362:LEU:HB3 | 1:H:365:PRO:CG | 2.48 | 0.43 |
| 1:H:858:THR:O | 1:H:886:LEU:HD12 | 2.19 | 0.43 |
| 1:I:173:LEU:HD12 | 1:I:205:MET:HE1 | 2.00 | 0.43 |
| 1:J:337:ARG:NH2 | 1:J:361:LEU:HD22 | 2.33 | 0.43 |
| 1:J:919:LEU:HD22 | 1:J:924:LEU:CD1 | 2.46 | 0.43 |
| 1:J:919:LEU:HD21 | 1:J:922:ASN:HB2 | 1.99 | 0.43 |
| 1:J:974:LEU:HD11 | 1:J:976:LEU:CD2 | 2.33 | 0.43 |
| 2:K:295:MET:HA | 2:K:295:MET:CE | 2.48 | 0.43 |
| 2:L:295:MET:CE | 2:L:295:MET:HA | 2.48 | 0.43 |
| 2:M:34:PHE:HB3 | 2:M:51:ALA:HB1 | 2.00 | 0.43 |
| 2:P:132:LEU:HD23 | 2:P:132:LEU:H | 1.84 | 0.43 |
| 2:S:34:PHE:HB3 | 2:S:51:ALA:HB1 | 2.00 | 0.43 |
| 2:T:132:LEU:HD23 | 2:T:132:LEU:H | 1.84 | 0.43 |
| 1:A:326:GLU:O | 1:A:327:ARG:HB2 | 2.18 | 0.43 |
| 1:A:414:VAL:O | 1:A:414:VAL:CG1 | 2.66 | 0.43 |
| 1:A:489:LEU:HD23 | 1:A:489:LEU:O | 2.19 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:A:568:PHE:O | 1:A:568:PHE:CD2 | 2.70 | 0.43 |
| 1:A:601:SER:CB | 1:A:603:GLN:HE22 | 2.31 | 0.43 |
| 1:A:779:ARG:HB2 | 1:A:779:ARG:NH1 | 2.33 | 0.43 |
| 1:A:798:GLN:HG2 | 1:A:828:ASN:ND2 | 2.33 | 0.43 |
| 1:A:815:ILE:HD11 | 1:A:839:LEU:HD11 | 2.00 | 0.43 |
| 1:A:919:LEU:HD21 | 1:A:922:ASN:HB2 | 1.99 | 0.43 |
| 1:A:929:ILE:HD11 | 1:A:953:LEU:CD1 | 2.49 | 0.43 |
| 1:B:315:ILE:HD12 | 1:B:330:ILE:HG12 | 2.00 | 0.43 |
| 1:B:492:HIS:CE1 | 1:B:553:LEU:CG | 3.02 | 0.43 |
| 1:B:929:ILE:HD11 | 1:B:953:LEU:CD1 | 2.49 | 0.43 |
| 1:C:798:GLN:HG2 | 1:C:828:ASN:ND2 | 2.33 | 0.43 |
| 1:D:919:LEU:HD21 | 1:D:922:ASN:HB2 | 1.99 | 0.43 |
| 1:E:215:HIS:O | 1:E:215:HIS:CG | 2.70 | 0.43 |
| 1:E:266:LEU:HB2 | 1:E:329:ASP:CB | 2.47 | 0.43 |
| 1:E:326:GLU:O | 1:E:327:ARG:HB2 | 2.18 | 0.43 |
| 1:F:573:LEU:CD2 | 1:F:576:VAL:HG11 | 2.40 | 0.43 |
| 1:F:601:SER:HB2 | 1:F:603:GLN:NE2 | 2.31 | 0.43 |
| 1:F:898:SER:CB | 1:F:927:LYS:HG3 | 2.48 | 0.43 |
| 1:F:901:CYS:HA | 1:F:932:LEU:HD21 | 2.00 | 0.43 |
| 1:G:167:ARG:HB3 | 1:G:167:ARG:HH11 | 1.79 | 0.43 |
| 1:G:168:TYR:CE2 | 1:G:238:LYS:HG2 | 2.53 | 0.43 |
| 1:G:326:GLU:O | 1:G:327:ARG:HB2 | 2.18 | 0.43 |
| 1:G:364:HIS:CG | 1:H:150:CYS:SG | 3.10 | 0.43 |
| 1:G:562:LEU:HD21 | 1:G:611:TRP:CD2 | 2.53 | 0.43 |
| 1:G:901:CYS:HA | 1:G:932:LEU:HD21 | 2.00 | 0.43 |
| 1:H:162:VAL:HG11 | 1:H:167:ARG:HG3 | 1.99 | 0.43 |
| 1:H:331:LEU:HD23 | 1:H:331:LEU:C | 2.39 | 0.43 |
| 1:H:565:TYR:HE1 | 1:H:574:ILE:HG12 | 1.83 | 0.43 |
| 1:H:601:SER:CB | 1:H:603:GLN:HE22 | 2.31 | 0.43 |
| 1:H:650:PHE:HB3 | 1:H:653:ILE:CD1 | 2.41 | 0.43 |
| 1:I:153:ASP:OD1 | 1:I:167:ARG:NH2 | 2.51 | 0.43 |
| 1:I:326:GLU:O | 1:I:327:ARG:HB2 | 2.18 | 0.43 |
| 1:I:917:LEU:HG | 1:I:943:LEU:CD1 | 2.49 | 0.43 |
| 1:I:919:LEU:HD21 | 1:I:922:ASN:HB2 | 1.99 | 0.43 |
| 1:J:135:ASP:O | 1:J:138:LYS:HB2 | 2.18 | 0.43 |
| 2:K:132:LEU:HD23 | 2:K:132:LEU:H | 1.84 | 0.43 |
| 2:N:34:PHE:HB3 | 2:N:51:ALA:HB1 | 2.00 | 0.43 |
| 2:O:34:PHE:HB3 | 2:O:51:ALA:HB1 | 2.00 | 0.43 |
| 1:A:146:SER:HA | 1:J:217:GLU:CG | 2.43 | 0.43 |
| 1:B:175:LYS:HE2 | 1:B:366:ARG:CG | 2.49 | 0.43 |
| 1:B:239:MET:HE3 | 1:B:300:LEU:HD21 | 1.98 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:B:601:SER:CB | 1:B:603:GLN:HE22 | 2.31 | 0.43 |
| 1:B:973:LYS:HB2 | 1:B:973:LYS:HE3 | 1.58 | 0.43 |
| 1:C:143:TYR:CE1 | 1:C:281:PRO:HG2 | 2.52 | 0.43 |
| 1:C:307:LEU:HD12 | 1:C:307:LEU:N | 2.33 | 0.43 |
| 1:C:414:VAL:O | 1:C:414:VAL:CG1 | 2.66 | 0.43 |
| 1:C:917:LEU:HG | 1:C:943:LEU:CD1 | 2.49 | 0.43 |
| 1:C:937:LEU:HG | 1:C:964:LEU:CD1 | 2.47 | 0.43 |
| 1:D:203:ILE:HG12 | 1:D:204:LYS:O | 2.19 | 0.43 |
| 1:E:405:LEU:HD11 | 1:E:442:VAL:HG21 | 2.01 | 0.43 |
| 1:E:823:LYS:HE2 | 1:E:850:VAL:HG23 | 2.01 | 0.43 |
| 1:E:996:GLN:HG3 | 1:E:996:GLN:O | 2.18 | 0.43 |
| 1:F:168:TYR:CE2 | 1:F:238:LYS:HG2 | 2.53 | 0.43 |
| 1:F:288:HIS:ND1 | 1:F:322:TRP:HH2 | 2.06 | 0.43 |
| 1:F:405:LEU:HD11 | 1:F:442:VAL:HG21 | 2.01 | 0.43 |
| 1:G:428:SER:O | 1:G:428:SER:OG | 2.36 | 0.43 |
| 1:G:1011:ASN:O | 1:G:1015:LYS:HG2 | 2.18 | 0.43 |
| 1:H:135:ASP:O | 1:H:138:LYS:HB2 | 2.18 | 0.43 |
| 1:H:143:TYR:CE1 | 1:H:281:PRO:HG2 | 2.52 | 0.43 |
| 1:H:901:CYS:HA | 1:H:932:LEU:HD21 | 2.00 | 0.43 |
| 1:I:175:LYS:HE2 | 1:I:366:ARG:CD | 2.47 | 0.43 |
| 1:I:192:LYS:NZ | 1:I:192:LYS:HB3 | 2.32 | 0.43 |
| 1:I:622:GLN:NE2 | 1:I:627:GLN:CD | 2.72 | 0.43 |
| 1:J:492:HIS:CE1 | 1:J:553:LEU:CG | 3.02 | 0.43 |
| 1:J:505:MET:O | 1:J:505:MET:CG | 2.64 | 0.43 |
| 1:J:558:VAL:HG21 | 1:J:607:GLU:HG2 | 2.00 | 0.43 |
| 2:Q:295:MET:HA | 2:Q:295:MET:CE | 2.48 | 0.43 |
| 1:A:240:MET:HE2 | 1:A:258:TYR:CB | 2.47 | 0.43 |
| 1:A:337:ARG:NH2 | 1:A:361:LEU:HD22 | 2.33 | 0.43 |
| 1:B:175:LYS:HE2 | 1:B:366:ARG:CD | 2.47 | 0.43 |
| 1:B:241:LEU:C | 1:B:241:LEU:HD23 | 2.39 | 0.43 |
| 1:B:505:MET:O | 1:B:505:MET:CG | 2.64 | 0.43 |
| 1:B:643:VAL:O | 1:B:647:MET:HG2 | 2.19 | 0.43 |
| 1:B:651:PRO:CD | 1:B:675:ARG:HE | 2.30 | 0.43 |
| 1:B:823:LYS:NZ | 1:B:849:SER:OG | 2.27 | 0.43 |
| 1:C:140:TYR:HE2 | 1:C:279:CYS:O | 2.01 | 0.43 |
| 1:C:651:PRO:CG | 1:C:675:ARG:HE | 2.31 | 0.43 |
| 1:C:823:LYS:HE2 | 1:C:850:VAL:HG23 | 2.01 | 0.43 |
| 1:D:217:GLU:CG | 1:E:146:SER:HA | 2.42 | 0.43 |
| 1:D:823:LYS:HE2 | 1:D:850:VAL:HG23 | 2.01 | 0.43 |
| 1:E:140:TYR:HE2 | 1:E:279:CYS:O | 2.01 | 0.43 |
| 1:E:326:GLU:CG | 1:E:331:LEU:HD12 | 2.41 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:E:858:THR:O | 1:E:886:LEU:HD12 | 2.19 | 0.43 |
| 1:F:315:ILE:HD12 | 1:F:330:ILE:HG12 | 2.00 | 0.43 |
| 1:F:509:GLN:CB | 1:F:514:CYS:HB3 | 2.45 | 0.43 |
| 1:F:643:VAL:O | 1:F:647:MET:HG2 | 2.19 | 0.43 |
| 1:F:779:ARG:HB2 | 1:F:779:ARG:NH1 | 2.33 | 0.43 |
| 1:G:266:LEU:HB2 | 1:G:329:ASP:CB | 2.47 | 0.43 |
| 1:G:489:LEU:HD23 | 1:G:489:LEU:O | 2.19 | 0.43 |
| 1:G:929:ILE:HD11 | 1:G:953:LEU:CD1 | 2.49 | 0.43 |
| 1:H:589:THR:HG23 | 1:H:590:SER:N | 2.33 | 0.43 |
| 1:I:231:GLY:HA2 | 3:I:1101:AGS:O2A | 2.17 | 0.43 |
| 1:J:241:LEU:C | 1:J:241:LEU:HD23 | 2.39 | 0.43 |
| 1:J:406:PHE:O | 1:J:409:CYS:HB2 | 2.19 | 0.43 |
| 1:J:589:THR:HG23 | 1:J:590:SER:N | 2.33 | 0.43 |
| 1:J:671:GLU:OE1 | 1:J:672:ASN:ND2 | 2.51 | 0.43 |
| 1:J:933:CYS:HB3 | 1:J:964:LEU:CD1 | 2.48 | 0.43 |
| 1:J:937:LEU:CG | 1:J:964:LEU:HD12 | 2.49 | 0.43 |
| 2:L:132:LEU:HD23 | 2:L:132:LEU:H | 1.84 | 0.43 |
| 2:M:36:ILE:O | 2:M:36:ILE:HG22 | 2.17 | 0.43 |
| 2:M:295:MET:HA | 2:M:295:MET:CE | 2.48 | 0.43 |
| 2:N:295:MET:HA | 2:N:295:MET:CE | 2.48 | 0.43 |
| 2:S:132:LEU:HD23 | 2:S:132:LEU:H | 1.84 | 0.43 |
| 1:A:378:ARG:NH1 | 1:A:406:PHE:O | 2.51 | 0.43 |
| 1:A:858:THR:O | 1:A:886:LEU:HD12 | 2.19 | 0.43 |
| 1:B:203:ILE:HG12 | 1:B:204:LYS:O | 2.19 | 0.43 |
| 1:B:256:LEU:H | 1:B:256:LEU:HD12 | 1.84 | 0.43 |
| 1:B:414:VAL:O | 1:B:414:VAL:CG1 | 2.66 | 0.43 |
| 1:B:889:LEU:HB3 | 1:B:917:LEU:HD22 | 2.01 | 0.43 |
| 1:C:208:LEU:HD21 | 1:C:222:VAL:HG11 | 2.01 | 0.43 |
| 1:C:270:ARG:HD2 | 1:C:275:LEU:CD1 | 2.35 | 0.43 |
| 1:C:758:MET:HE3 | 1:C:758:MET:HA | 2.00 | 0.43 |
| 1:D:140:TYR:HE2 | 1:D:279:CYS:O | 2.01 | 0.43 |
| 1:D:270:ARG:HD2 | 1:D:275:LEU:CD1 | 2.35 | 0.43 |
| 1:D:288:HIS:CE1 | 1:D:322:TRP:CZ2 | 3.06 | 0.43 |
| 1:D:405:LEU:HD11 | 1:D:442:VAL:HG21 | 2.01 | 0.43 |
| 1:D:810:LEU:HD11 | 1:D:834:LEU:HD22 | 1.99 | 0.43 |
| 1:D:898:SER:CB | 1:D:927:LYS:HG3 | 2.48 | 0.43 |
| 1:D:929:ILE:HD11 | 1:D:953:LEU:CD1 | 2.49 | 0.43 |
| 1:E:217:GLU:CG | 1:F:146:SER:HA | 2.42 | 0.43 |
| 1:E:391:GLN:CA | 1:E:426:MET:HE1 | 2.31 | 0.43 |
| 1:E:933:CYS:HB3 | 1:E:964:LEU:CD1 | 2.48 | 0.43 |
| 1:F:307:LEU:HD12 | 1:F:307:LEU:N | 2.33 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|------------------|--------------------------|-------------------|
| 1:G:502:PHE:HA | 1:G:521:ILE:HD11 | 2.01 | 0.43 |
| 1:G:558:VAL:HG21 | 1:G:607:GLU:HG2 | 2.00 | 0.43 |
| 1:G:1031:VAL:HG13 | 1:G:1031:VAL:O | 2.19 | 0.43 |
| 1:H:385:TYR:CD2 | 1:H:419:CYS:HB3 | 2.54 | 0.43 |
| 1:H:489:LEU:O | 1:H:489:LEU:HD23 | 2.19 | 0.43 |
| 1:I:140:TYR:HE2 | 1:I:279:CYS:O | 2.01 | 0.43 |
| 1:J:147:ARG:HE | 1:J:147:ARG:HB2 | 1.65 | 0.43 |
| 1:J:203:ILE:HG12 | 1:J:204:LYS:O | 2.19 | 0.43 |
| 1:J:377:LYS:HD3 | 1:J:377:LYS:HA | 1.51 | 0.43 |
| 1:J:489:LEU:HD23 | 1:J:489:LEU:O | 2.19 | 0.43 |
| 1:J:651:PRO:CG | 1:J:675:ARG:HE | 2.31 | 0.43 |
| 1:J:779:ARG:HB2 | 1:J:779:ARG:NH1 | 2.33 | 0.43 |
| 1:J:1031:VAL:HG13 | 1:J:1031:VAL:O | 2.19 | 0.43 |
| 2:Q:132:LEU:HD23 | 2:Q:132:LEU:H | 1.84 | 0.43 |
| 2:R:34:PHE:HB3 | 2:R:51:ALA:HB1 | 2.00 | 0.43 |
| 1:A:140:TYR:HE2 | 1:A:279:CYS:O | 2.01 | 0.43 |
| 1:A:241:LEU:HD23 | 1:A:241:LEU:C | 2.39 | 0.43 |
| 1:A:573:LEU:CA | 1:A:576:VAL:HG12 | 2.48 | 0.43 |
| 1:A:616:ALA:HB1 | 1:A:649:TYR:HB2 | 2.01 | 0.43 |
| 1:B:208:LEU:HD21 | 1:B:222:VAL:HG11 | 2.01 | 0.43 |
| 1:B:489:LEU:HD23 | 1:B:489:LEU:O | 2.19 | 0.43 |
| 1:B:562:LEU:HD21 | 1:B:611:TRP:CG | 2.52 | 0.43 |
| 1:B:823:LYS:HE2 | 1:B:850:VAL:HG23 | 2.01 | 0.43 |
| 1:B:937:LEU:HG | 1:B:964:LEU:CD1 | 2.47 | 0.43 |
| 1:C:489:LEU:HD23 | 1:C:489:LEU:O | 2.19 | 0.43 |
| 1:C:876:CYS:HB3 | 1:C:907:VAL:HG23 | 2.01 | 0.43 |
| 1:D:178:ARG:HG3 | 1:D:183:ARG:HH21 | 1.84 | 0.43 |
| 1:D:360:HIS:C | 1:D:361:LEU:HD23 | 2.40 | 0.43 |
| 1:D:362:LEU:HB3 | 1:D:365:PRO:CG | 2.48 | 0.43 |
| 1:D:562:LEU:HD21 | 1:D:611:TRP:CD2 | 2.53 | 0.43 |
| 1:D:829:LEU:CD2 | 1:D:832:LEU:HD13 | 2.49 | 0.43 |
| 1:E:143:TYR:CE1 | 1:E:281:PRO:HG2 | 2.52 | 0.43 |
| 1:E:234:ILE:HD13 | 1:E:234:ILE:HA | 1.80 | 0.43 |
| 1:E:307:LEU:HD12 | 1:E:307:LEU:N | 2.33 | 0.43 |
| 1:E:937:LEU:CG | 1:E:964:LEU:HD12 | 2.49 | 0.43 |
| 1:F:385:TYR:CD2 | 1:F:419:CYS:HB3 | 2.54 | 0.43 |
| 1:F:492:HIS:CE1 | 1:F:553:LEU:CG | 3.02 | 0.43 |
| 1:G:315:ILE:HD12 | 1:G:330:ILE:HG12 | 2.00 | 0.43 |
| 1:G:326:GLU:CG | 1:G:331:LEU:HD12 | 2.40 | 0.43 |
| 1:G:336:ILE:HD13 | 1:G:336:ILE:HA | 1.81 | 0.43 |
| 1:G:492:HIS:CE1 | 1:G:553:LEU:CG | 3.02 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:G:595:LYS:HA | 1:G:595:LYS:HD3 | 1.66 | 0.43 |
| 1:G:601:SER:CB | 1:G:603:GLN:HE22 | 2.31 | 0.43 |
| 1:G:919:LEU:CD2 | 1:G:924:LEU:HD11 | 2.45 | 0.43 |
| 1:H:153:ASP:OD1 | 1:H:167:ARG:NH2 | 2.51 | 0.43 |
| 1:H:562:LEU:HD21 | 1:H:611:TRP:CD2 | 2.53 | 0.43 |
| 1:H:889:LEU:HB3 | 1:H:917:LEU:HD22 | 2.01 | 0.43 |
| 1:H:919:LEU:HD22 | 1:H:924:LEU:CD1 | 2.46 | 0.43 |
| 1:H:933:CYS:HB3 | 1:H:964:LEU:CD1 | 2.49 | 0.43 |
| 1:H:996:GLN:HG3 | 1:H:996:GLN:O | 2.18 | 0.43 |
| 1:I:241:LEU:HD23 | 1:I:241:LEU:C | 2.39 | 0.43 |
| 1:I:256:LEU:H | 1:I:256:LEU:HD12 | 1.84 | 0.43 |
| 1:I:901:CYS:HA | 1:I:932:LEU:HD21 | 2.00 | 0.43 |
| 1:I:929:ILE:HD11 | 1:I:953:LEU:CD1 | 2.49 | 0.43 |
| 2:O:36:ILE:HG22 | 2:O:36:ILE:O | 2.17 | 0.43 |
| 1:A:175:LYS:HE2 | 1:A:366:ARG:CD | 2.47 | 0.42 |
| 1:A:208:LEU:HD21 | 1:A:222:VAL:HG11 | 2.01 | 0.42 |
| 1:A:256:LEU:H | 1:A:256:LEU:HD12 | 1.83 | 0.42 |
| 1:A:307:LEU:HD12 | 1:A:307:LEU:N | 2.33 | 0.42 |
| 1:A:385:TYR:CD2 | 1:A:419:CYS:HB3 | 2.54 | 0.42 |
| 1:A:502:PHE:CD1 | 1:A:525:PHE:CE1 | 3.07 | 0.42 |
| 1:A:583:LEU:HD11 | 1:A:592:LEU:CD2 | 2.49 | 0.42 |
| 1:A:589:THR:HG23 | 1:A:590:SER:N | 2.33 | 0.42 |
| 1:A:889:LEU:HB3 | 1:A:917:LEU:HD22 | 2.01 | 0.42 |
| 1:B:331:LEU:C | 1:B:331:LEU:HD23 | 2.39 | 0.42 |
| 1:B:583:LEU:HD11 | 1:B:592:LEU:CD2 | 2.49 | 0.42 |
| 1:B:624:GLN:CG | 1:B:625:PRO:HD3 | 2.45 | 0.42 |
| 1:C:151:ILE:HD12 | 1:C:234:ILE:CD1 | 2.49 | 0.42 |
| 1:C:175:LYS:HE2 | 1:C:366:ARG:CG | 2.49 | 0.42 |
| 1:C:241:LEU:HD23 | 1:C:241:LEU:C | 2.39 | 0.42 |
| 1:C:779:ARG:HB2 | 1:C:779:ARG:NH1 | 2.33 | 0.42 |
| 1:C:1019:GLU:HG3 | 1:C:1032:PHE:HZ | 1.85 | 0.42 |
| 1:D:937:LEU:CG | 1:D:964:LEU:HD12 | 2.49 | 0.42 |
| 1:E:175:LYS:HE2 | 1:E:366:ARG:CG | 2.49 | 0.42 |
| 1:E:405:LEU:HD23 | 1:E:405:LEU:HA | 1.81 | 0.42 |
| 1:E:607:GLU:O | 1:E:610:LYS:HG2 | 2.19 | 0.42 |
| 1:E:643:VAL:O | 1:E:647:MET:HG2 | 2.19 | 0.42 |
| 1:F:203:ILE:HG12 | 1:F:204:LYS:O | 2.19 | 0.42 |
| 1:F:331:LEU:HD23 | 1:F:331:LEU:C | 2.39 | 0.42 |
| 1:F:558:VAL:HG21 | 1:F:607:GLU:HG2 | 2.00 | 0.42 |
| 1:F:937:LEU:CG | 1:F:964:LEU:HD12 | 2.49 | 0.42 |
| 1:F:974:LEU:HD11 | 1:F:976:LEU:CD2 | 2.33 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:G:385:TYR:CD2 | 1:G:419:CYS:HB3 | 2.54 | 0.42 |
| 1:G:406:PHE:O | 1:G:409:CYS:HB2 | 2.19 | 0.42 |
| 1:G:787:CYS:HA | 1:G:790:ILE:HD12 | 2.01 | 0.42 |
| 1:G:889:LEU:HB3 | 1:G:917:LEU:HD22 | 2.01 | 0.42 |
| 1:G:961:LEU:HB2 | 1:G:989:PHE:CZ | 2.54 | 0.42 |
| 1:I:583:LEU:HD11 | 1:I:592:LEU:CD2 | 2.49 | 0.42 |
| 1:I:632:TYR:CE1 | 1:I:665:VAL:HG11 | 2.54 | 0.42 |
| 1:I:937:LEU:CG | 1:I:964:LEU:HD12 | 2.49 | 0.42 |
| 1:J:175:LYS:HE2 | 1:J:366:ARG:CD | 2.47 | 0.42 |
| 1:J:178:ARG:HG3 | 1:J:183:ARG:HH21 | 1.84 | 0.42 |
| 1:J:192:LYS:NZ | 1:J:192:LYS:HB3 | 2.32 | 0.42 |
| 1:J:266:LEU:HB2 | 1:J:329:ASP:CB | 2.47 | 0.42 |
| 1:J:583:LEU:HD11 | 1:J:592:LEU:CD2 | 2.49 | 0.42 |
| 1:J:601:SER:CB | 1:J:603:GLN:HE22 | 2.31 | 0.42 |
| 1:J:632:TYR:CE1 | 1:J:665:VAL:HG11 | 2.54 | 0.42 |
| 2:O:206:GLU:OE1 | 2:O:282:ARG:NH2 | 2.52 | 0.42 |
| 1:A:153:ASP:OD1 | 1:A:167:ARG:NH2 | 2.51 | 0.42 |
| 1:A:607:GLU:O | 1:A:610:LYS:HG2 | 2.19 | 0.42 |
| 1:A:632:TYR:CE1 | 1:A:665:VAL:HG11 | 2.54 | 0.42 |
| 1:A:919:LEU:HD22 | 1:A:924:LEU:CD1 | 2.45 | 0.42 |
| 1:A:937:LEU:CG | 1:A:964:LEU:HD12 | 2.49 | 0.42 |
| 1:B:607:GLU:O | 1:B:610:LYS:HG2 | 2.19 | 0.42 |
| 1:B:632:TYR:CE1 | 1:B:665:VAL:HG11 | 2.54 | 0.42 |
| 1:B:802:GLU:OE2 | 1:B:831:LYS:NZ | 2.45 | 0.42 |
| 1:C:966:THR:HG23 | 1:C:992:VAL:CG1 | 2.49 | 0.42 |
| 1:D:145:ARG:HE | 1:D:145:ARG:HB3 | 1.61 | 0.42 |
| 1:D:208:LEU:HD21 | 1:D:222:VAL:HG11 | 2.01 | 0.42 |
| 1:D:256:LEU:H | 1:D:256:LEU:HD12 | 1.84 | 0.42 |
| 1:D:414:VAL:O | 1:D:414:VAL:CG1 | 2.66 | 0.42 |
| 1:D:664:MET:HE1 | 1:D:729:PHE:HD1 | 1.83 | 0.42 |
| 1:D:779:ARG:HB2 | 1:D:779:ARG:NH1 | 2.33 | 0.42 |
| 1:D:966:THR:HG23 | 1:D:992:VAL:CG1 | 2.50 | 0.42 |
| 1:E:151:ILE:HD12 | 1:E:234:ILE:CD1 | 2.49 | 0.42 |
| 1:E:275:LEU:HD12 | 1:E:275:LEU:HA | 1.91 | 0.42 |
| 1:E:337:ARG:NH2 | 1:E:361:LEU:HD22 | 2.33 | 0.42 |
| 1:E:385:TYR:CD2 | 1:E:419:CYS:HB3 | 2.54 | 0.42 |
| 1:E:509:GLN:CB | 1:E:514:CYS:HB3 | 2.45 | 0.42 |
| 1:E:558:VAL:HG21 | 1:E:607:GLU:HG2 | 2.00 | 0.42 |
| 1:E:966:THR:HG23 | 1:E:992:VAL:CG1 | 2.49 | 0.42 |
| 1:F:135:ASP:O | 1:F:138:LYS:HB2 | 2.18 | 0.42 |
| 1:F:151:ILE:HD12 | 1:F:234:ILE:CD1 | 2.49 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|------------------|--------------------------|-------------------|
| 1:F:369:GLU:OE2 | 1:F:504:ARG:NH2 | 2.37 | 0.42 |
| 1:F:489:LEU:HD23 | 1:F:489:LEU:O | 2.19 | 0.42 |
| 1:F:607:GLU:O | 1:F:610:LYS:HG2 | 2.19 | 0.42 |
| 1:F:896:LEU:HB3 | 1:F:900:CYS:SG | 2.59 | 0.42 |
| 3:F:1101:AGS:H8 | 3:F:1101:AGS:O5' | 2.17 | 0.42 |
| 1:G:175:LYS:HE2 | 1:G:366:ARG:CG | 2.49 | 0.42 |
| 1:G:293:LYS:N | 1:G:294:PRO:HD3 | 2.35 | 0.42 |
| 1:G:337:ARG:NH2 | 1:G:361:LEU:HD22 | 2.33 | 0.42 |
| 1:G:915:THR:O | 1:G:944:GLN:N | 2.34 | 0.42 |
| 1:G:933:CYS:HB3 | 1:G:964:LEU:CD1 | 2.48 | 0.42 |
| 1:H:266:LEU:HB2 | 1:H:329:ASP:CB | 2.47 | 0.42 |
| 1:H:406:PHE:O | 1:H:409:CYS:HB2 | 2.19 | 0.42 |
| 1:H:558:VAL:HG21 | 1:H:607:GLU:HG2 | 2.00 | 0.42 |
| 1:H:1019:GLU:HG3 | 1:H:1032:PHE:HZ | 1.84 | 0.42 |
| 1:H:1031:VAL:HG13 | 1:H:1031:VAL:O | 2.19 | 0.42 |
| 1:I:502:PHE:HA | 1:I:521:ILE:HD11 | 2.00 | 0.42 |
| 1:I:823:LYS:HE2 | 1:I:850:VAL:HG23 | 2.01 | 0.42 |
| 1:I:1031:VAL:HG13 | 1:I:1031:VAL:O | 2.19 | 0.42 |
| 1:J:270:ARG:HD2 | 1:J:275:LEU:CD1 | 2.35 | 0.42 |
| 1:J:331:LEU:C | 1:J:331:LEU:HD23 | 2.39 | 0.42 |
| 1:J:562:LEU:HD21 | 1:J:611:TRP:CD2 | 2.53 | 0.42 |
| 1:J:966:THR:HG23 | 1:J:992:VAL:CG1 | 2.50 | 0.42 |
| 1:A:175:LYS:HE2 | 1:A:366:ARG:CG | 2.49 | 0.42 |
| 1:A:203:ILE:HG12 | 1:A:204:LYS:O | 2.19 | 0.42 |
| 1:A:331:LEU:HD23 | 1:A:331:LEU:C | 2.39 | 0.42 |
| 1:A:961:LEU:HB2 | 1:A:989:PHE:CZ | 2.54 | 0.42 |
| 1:A:1031:VAL:HG13 | 1:A:1031:VAL:O | 2.19 | 0.42 |
| 1:B:270:ARG:HD2 | 1:B:275:LEU:CD1 | 2.35 | 0.42 |
| 1:B:385:TYR:CD2 | 1:B:419:CYS:HB3 | 2.54 | 0.42 |
| 1:B:565:TYR:HE1 | 1:B:574:ILE:HG12 | 1.84 | 0.42 |
| 1:B:616:ALA:HB1 | 1:B:649:TYR:HB2 | 2.01 | 0.42 |
| 1:B:779:ARG:HB2 | 1:B:779:ARG:NH1 | 2.33 | 0.42 |
| 1:B:829:LEU:CD2 | 1:B:832:LEU:HD13 | 2.49 | 0.42 |
| 1:B:996:GLN:HG3 | 1:B:996:GLN:O | 2.18 | 0.42 |
| 1:C:190:ILE:CA | 1:C:194:LYS:HB2 | 2.45 | 0.42 |
| 1:C:643:VAL:O | 1:C:647:MET:HG2 | 2.19 | 0.42 |
| 1:C:961:LEU:HB2 | 1:C:989:PHE:CZ | 2.55 | 0.42 |
| 1:D:190:ILE:HG22 | 1:D:522:HIS:HE2 | 1.85 | 0.42 |
| 1:D:489:LEU:HD23 | 1:D:489:LEU:O | 2.19 | 0.42 |
| 1:D:568:PHE:CE2 | 1:D:570:LYS:HE3 | 2.54 | 0.42 |
| 1:D:815:ILE:HD11 | 1:D:839:LEU:HD11 | 2.00 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:D:858:THR:O | 1:D:886:LEU:HD12 | 2.19 | 0.42 |
| 1:E:203:ILE:HG12 | 1:E:204:LYS:O | 2.19 | 0.42 |
| 1:E:426:MET:CG | 1:E:432:LEU:HD11 | 2.39 | 0.42 |
| 1:E:471:SER:O | 1:E:553:LEU:HD13 | 2.19 | 0.42 |
| 1:E:829:LEU:CD2 | 1:E:832:LEU:HD13 | 2.49 | 0.42 |
| 1:E:1004:GLY:HA2 | 1:E:1031:VAL:HG12 | 1.99 | 0.42 |
| 1:F:362:LEU:HB3 | 1:F:365:PRO:CG | 2.48 | 0.42 |
| 1:F:471:SER:O | 1:F:553:LEU:HD13 | 2.20 | 0.42 |
| 1:F:624:GLN:H | 1:F:625:PRO:CD | 2.31 | 0.42 |
| 1:G:140:TYR:HE2 | 1:G:279:CYS:O | 2.01 | 0.42 |
| 1:G:151:ILE:HD12 | 1:G:234:ILE:CD1 | 2.49 | 0.42 |
| 1:G:496:LYS:O | 1:G:498:ASP:N | 2.53 | 0.42 |
| 1:G:607:GLU:O | 1:G:610:LYS:HG2 | 2.19 | 0.42 |
| 1:G:651:PRO:CD | 1:G:675:ARG:HE | 2.30 | 0.42 |
| 1:G:758:MET:HE3 | 1:G:761:LEU:CB | 2.49 | 0.42 |
| 1:G:779:ARG:HB2 | 1:G:779:ARG:NH1 | 2.33 | 0.42 |
| 1:H:241:LEU:HD23 | 1:H:241:LEU:C | 2.39 | 0.42 |
| 1:H:528:PHE:CZ | 1:H:532:MET:HE3 | 2.55 | 0.42 |
| 1:H:565:TYR:O | 1:H:565:TYR:CG | 2.71 | 0.42 |
| 1:H:583:LEU:HD11 | 1:H:592:LEU:CD2 | 2.49 | 0.42 |
| 1:H:632:TYR:CE1 | 1:H:665:VAL:HG11 | 2.54 | 0.42 |
| 1:H:758:MET:HE3 | 1:H:761:LEU:CB | 2.49 | 0.42 |
| 1:I:406:PHE:O | 1:I:409:CYS:HB2 | 2.19 | 0.42 |
| 1:J:293:LYS:N | 1:J:294:PRO:HD3 | 2.34 | 0.42 |
| 1:J:616:ALA:HB1 | 1:J:649:TYR:HB2 | 2.01 | 0.42 |
| 1:J:961:LEU:HB2 | 1:J:989:PHE:CZ | 2.55 | 0.42 |
| 2:M:132:LEU:HD23 | 2:M:132:LEU:H | 1.84 | 0.42 |
| 1:A:315:ILE:HD12 | 1:A:330:ILE:HG12 | 2.00 | 0.42 |
| 1:A:810:LEU:HB2 | 1:A:839:LEU:HD21 | 2.01 | 0.42 |
| 1:B:151:ILE:HD12 | 1:B:234:ILE:CD1 | 2.49 | 0.42 |
| 1:B:502:PHE:HA | 1:B:521:ILE:CG1 | 2.50 | 0.42 |
| 1:C:405:LEU:HD11 | 1:C:442:VAL:HG21 | 2.01 | 0.42 |
| 1:C:583:LEU:HD11 | 1:C:592:LEU:CD2 | 2.49 | 0.42 |
| 1:C:937:LEU:CG | 1:C:964:LEU:HD12 | 2.49 | 0.42 |
| 1:D:151:ILE:HD12 | 1:D:234:ILE:CD1 | 2.49 | 0.42 |
| 1:D:175:LYS:HE2 | 1:D:366:ARG:CG | 2.49 | 0.42 |
| 1:D:241:LEU:HD23 | 1:D:241:LEU:C | 2.39 | 0.42 |
| 1:D:307:LEU:HD12 | 1:D:307:LEU:N | 2.33 | 0.42 |
| 1:D:403:GLU:HA | 1:D:403:GLU:OE1 | 2.20 | 0.42 |
| 1:D:585:ASN:HA | 1:D:637:MET:HE1 | 2.00 | 0.42 |
| 1:D:607:GLU:O | 1:D:610:LYS:HG2 | 2.19 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:D:961:LEU:HB2 | 1:D:989:PHE:CZ | 2.55 | 0.42 |
| 1:E:810:LEU:HB2 | 1:E:839:LEU:HD21 | 2.01 | 0.42 |
| 1:E:1019:GLU:HG3 | 1:E:1032:PHE:HZ | 1.84 | 0.42 |
| 1:F:823:LYS:HE2 | 1:F:850:VAL:HG23 | 2.01 | 0.42 |
| 1:F:917:LEU:HG | 1:F:943:LEU:CD1 | 2.49 | 0.42 |
| 1:F:933:CYS:HB3 | 1:F:964:LEU:CD1 | 2.48 | 0.42 |
| 1:F:961:LEU:HB2 | 1:F:989:PHE:CZ | 2.55 | 0.42 |
| 1:F:1019:GLU:HG3 | 1:F:1032:PHE:HZ | 1.85 | 0.42 |
| 1:G:362:LEU:HB3 | 1:G:365:PRO:CG | 2.48 | 0.42 |
| 1:G:405:LEU:HD11 | 1:G:442:VAL:HG21 | 2.01 | 0.42 |
| 1:G:643:VAL:O | 1:G:647:MET:HG2 | 2.19 | 0.42 |
| 1:G:937:LEU:CG | 1:G:964:LEU:HD12 | 2.49 | 0.42 |
| 1:G:1019:GLU:HG3 | 1:G:1032:PHE:HZ | 1.85 | 0.42 |
| 1:H:270:ARG:HD2 | 1:H:275:LEU:CD1 | 2.35 | 0.42 |
| 1:H:333:SER:HG | 1:H:337:ARG:HH12 | 1.57 | 0.42 |
| 1:H:601:SER:HB2 | 1:H:603:GLN:NE2 | 2.31 | 0.42 |
| 1:H:607:GLU:O | 1:H:610:LYS:HG2 | 2.19 | 0.42 |
| 1:H:787:CYS:HA | 1:H:790:ILE:HD12 | 2.01 | 0.42 |
| 1:H:815:ILE:HD11 | 1:H:839:LEU:HD11 | 2.00 | 0.42 |
| 1:H:823:LYS:HE2 | 1:H:850:VAL:HG23 | 2.01 | 0.42 |
| 1:H:896:LEU:HB3 | 1:H:900:CYS:SG | 2.59 | 0.42 |
| 1:H:929:ILE:HD11 | 1:H:953:LEU:CD1 | 2.49 | 0.42 |
| 1:H:937:LEU:CG | 1:H:964:LEU:HD12 | 2.49 | 0.42 |
| 1:I:403:GLU:HA | 1:I:403:GLU:OE1 | 2.20 | 0.42 |
| 1:I:589:THR:HG23 | 1:I:590:SER:N | 2.33 | 0.42 |
| 1:I:787:CYS:HA | 1:I:790:ILE:HD12 | 2.01 | 0.42 |
| 1:J:810:LEU:HD11 | 1:J:834:LEU:HD22 | 1.99 | 0.42 |
| 1:J:917:LEU:HG | 1:J:943:LEU:CD1 | 2.49 | 0.42 |
| 2:N:206:GLU:OE1 | 2:N:282:ARG:NH2 | 2.53 | 0.42 |
| 2:Q:34:PHE:HB3 | 2:Q:51:ALA:HB1 | 2.00 | 0.42 |
| 1:A:502:PHE:HA | 1:A:521:ILE:CD1 | 2.50 | 0.42 |
| 1:A:1033:GLU:OE2 | 2:K:237:TYR:HE1 | 2.03 | 0.42 |
| 1:B:173:LEU:HD12 | 1:B:205:MET:HE1 | 2.01 | 0.42 |
| 1:B:810:LEU:HB2 | 1:B:839:LEU:HD21 | 2.01 | 0.42 |
| 1:B:919:LEU:HD21 | 1:B:922:ASN:HB2 | 1.99 | 0.42 |
| 1:B:961:LEU:HB2 | 1:B:989:PHE:CZ | 2.55 | 0.42 |
| 1:C:889:LEU:HB3 | 1:C:917:LEU:HD22 | 2.01 | 0.42 |
| 1:D:758:MET:HE3 | 1:D:761:LEU:CB | 2.49 | 0.42 |
| 1:E:190:ILE:HG22 | 1:E:522:HIS:HE2 | 1.85 | 0.42 |
| 1:E:360:HIS:C | 1:E:361:LEU:HD23 | 2.40 | 0.42 |
| 1:E:632:TYR:CE1 | 1:E:665:VAL:HG11 | 2.54 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:F:360:HIS:C | 1:F:361:LEU:HD23 | 2.40 | 0.42 |
| 1:F:471:SER:HB2 | 1:F:553:LEU:HD13 | 1.90 | 0.42 |
| 1:F:632:TYR:CE1 | 1:F:665:VAL:HG11 | 2.54 | 0.42 |
| 1:F:810:LEU:HB2 | 1:F:839:LEU:HD21 | 2.01 | 0.42 |
| 1:G:241:LEU:C | 1:G:241:LEU:HD23 | 2.39 | 0.42 |
| 1:G:331:LEU:C | 1:G:331:LEU:HD23 | 2.39 | 0.42 |
| 1:G:446:PHE:HE1 | 1:G:450:LEU:HD21 | 1.85 | 0.42 |
| 1:G:471:SER:O | 1:G:553:LEU:HD13 | 2.19 | 0.42 |
| 1:G:632:TYR:CE1 | 1:G:665:VAL:HG11 | 2.54 | 0.42 |
| 1:H:151:ILE:HD12 | 1:H:234:ILE:CD1 | 2.49 | 0.42 |
| 1:H:793:VAL:O | 1:H:797:ASN:ND2 | 2.37 | 0.42 |
| 1:H:823:LYS:NZ | 1:H:849:SER:OG | 2.27 | 0.42 |
| 1:I:151:ILE:HD12 | 1:I:234:ILE:CD1 | 2.49 | 0.42 |
| 1:I:293:LYS:N | 1:I:294:PRO:HD3 | 2.35 | 0.42 |
| 1:I:391:GLN:CA | 1:I:426:MET:HE1 | 2.31 | 0.42 |
| 1:I:758:MET:HE3 | 1:I:761:LEU:CB | 2.49 | 0.42 |
| 1:I:848:ALA:HB1 | 1:I:878:LYS:CB | 2.50 | 0.42 |
| 1:I:889:LEU:HB3 | 1:I:917:LEU:HD22 | 2.01 | 0.42 |
| 1:J:208:LEU:HD21 | 1:J:222:VAL:HG11 | 2.01 | 0.42 |
| 1:J:385:TYR:CD2 | 1:J:419:CYS:HB3 | 2.54 | 0.42 |
| 1:J:405:LEU:HD11 | 1:J:442:VAL:HG21 | 2.01 | 0.42 |
| 1:J:446:PHE:HE1 | 1:J:450:LEU:HD21 | 1.85 | 0.42 |
| 1:J:565:TYR:HH | 1:J:625:PRO:HA | 1.83 | 0.42 |
| 2:K:284:ASP:OD1 | 2:K:285:VAL:N | 2.52 | 0.42 |
| 2:O:132:LEU:H | 2:O:132:LEU:HD23 | 1.84 | 0.42 |
| 1:A:966:THR:HG23 | 1:A:992:VAL:CG1 | 2.50 | 0.42 |
| 1:B:360:HIS:C | 1:B:361:LEU:HD23 | 2.40 | 0.42 |
| 1:B:937:LEU:CG | 1:B:964:LEU:HD12 | 2.49 | 0.42 |
| 1:C:178:ARG:HG3 | 1:C:183:ARG:HH21 | 1.84 | 0.42 |
| 1:C:513:ASP:N | 1:C:513:ASP:OD1 | 2.53 | 0.42 |
| 1:C:933:CYS:HB3 | 1:C:964:LEU:CD1 | 2.49 | 0.42 |
| 1:D:331:LEU:HD23 | 1:D:331:LEU:C | 2.39 | 0.42 |
| 1:D:492:HIS:CE1 | 1:D:553:LEU:CG | 3.02 | 0.42 |
| 1:E:331:LEU:HD23 | 1:E:331:LEU:C | 2.39 | 0.42 |
| 1:E:787:CYS:HA | 1:E:790:ILE:HD12 | 2.01 | 0.42 |
| 1:E:896:LEU:HB3 | 1:E:900:CYS:SG | 2.59 | 0.42 |
| 1:E:973:LYS:HB2 | 1:E:973:LYS:HE3 | 1.58 | 0.42 |
| 1:F:190:ILE:HG22 | 1:F:522:HIS:HE2 | 1.85 | 0.42 |
| 1:F:293:LYS:N | 1:F:294:PRO:HD3 | 2.34 | 0.42 |
| 1:F:787:CYS:HA | 1:F:790:ILE:HD12 | 2.01 | 0.42 |
| 1:G:203:ILE:HG12 | 1:G:204:LYS:O | 2.19 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:G:937:LEU:HD22 | 1:G:967:SER:HB2 | 2.02 | 0.42 |
| 1:H:643:VAL:O | 1:H:647:MET:HG2 | 2.19 | 0.42 |
| 1:H:848:ALA:HB1 | 1:H:878:LYS:CB | 2.50 | 0.42 |
| 1:I:203:ILE:HG12 | 1:I:204:LYS:O | 2.19 | 0.42 |
| 1:I:446:PHE:HE1 | 1:I:450:LEU:HD21 | 1.85 | 0.42 |
| 1:I:528:PHE:CZ | 1:I:532:MET:HE3 | 2.55 | 0.42 |
| 1:I:562:LEU:HD21 | 1:I:611:TRP:CD2 | 2.53 | 0.42 |
| 1:I:896:LEU:HB3 | 1:I:900:CYS:SG | 2.59 | 0.42 |
| 1:J:815:ILE:HD11 | 1:J:839:LEU:HD11 | 2.00 | 0.42 |
| 1:A:190:ILE:HG22 | 1:A:522:HIS:HE2 | 1.85 | 0.42 |
| 1:A:270:ARG:HD2 | 1:A:275:LEU:CD1 | 2.35 | 0.42 |
| 1:A:823:LYS:HE2 | 1:A:850:VAL:HG23 | 2.01 | 0.42 |
| 1:B:147:ARG:HE | 1:B:147:ARG:HB2 | 1.65 | 0.42 |
| 1:B:446:PHE:HE1 | 1:B:450:LEU:HD21 | 1.85 | 0.42 |
| 1:B:647:MET:HE2 | 1:B:669:CYS:O | 2.19 | 0.42 |
| 1:B:966:THR:HG23 | 1:B:992:VAL:CG1 | 2.49 | 0.42 |
| 1:C:288:HIS:CE1 | 1:C:322:TRP:CZ2 | 3.06 | 0.42 |
| 1:C:331:LEU:HD23 | 1:C:331:LEU:C | 2.39 | 0.42 |
| 1:C:379:LYS:HG3 | 1:C:396:PHE:CG | 2.55 | 0.42 |
| 1:C:403:GLU:OE1 | 1:C:403:GLU:HA | 2.20 | 0.42 |
| 1:C:405:LEU:HA | 1:C:405:LEU:HD23 | 1.81 | 0.42 |
| 1:C:616:ALA:HB1 | 1:C:649:TYR:HB2 | 2.01 | 0.42 |
| 1:C:732:GLY:HA2 | 1:C:735:SER:OG | 2.20 | 0.42 |
| 1:C:829:LEU:CD2 | 1:C:832:LEU:HD13 | 2.49 | 0.42 |
| 1:E:173:LEU:HD12 | 1:E:205:MET:HE1 | 2.00 | 0.42 |
| 1:E:191:GLY:CA | 1:E:522:HIS:CE1 | 3.03 | 0.42 |
| 1:E:208:LEU:HD21 | 1:E:222:VAL:HG11 | 2.01 | 0.42 |
| 1:E:362:LEU:HB3 | 1:E:365:PRO:CG | 2.48 | 0.42 |
| 1:E:446:PHE:HE1 | 1:E:450:LEU:HD21 | 1.85 | 0.42 |
| 1:E:499:VAL:HG13 | 1:E:499:VAL:O | 2.20 | 0.42 |
| 1:E:779:ARG:HB2 | 1:E:779:ARG:NH1 | 2.33 | 0.42 |
| 1:E:832:LEU:HD23 | 1:E:860:LEU:CD1 | 2.50 | 0.42 |
| 1:F:191:GLY:CA | 1:F:522:HIS:CE1 | 3.03 | 0.42 |
| 1:F:326:GLU:CG | 1:F:331:LEU:HD12 | 2.40 | 0.42 |
| 1:F:406:PHE:O | 1:F:409:CYS:HB2 | 2.19 | 0.42 |
| 1:F:937:LEU:HD22 | 1:F:967:SER:HB2 | 2.02 | 0.42 |
| 1:G:513:ASP:OD1 | 1:G:513:ASP:N | 2.53 | 0.42 |
| 1:G:966:THR:HG23 | 1:G:992:VAL:CG1 | 2.49 | 0.42 |
| 1:H:203:ILE:HG12 | 1:H:204:LYS:O | 2.19 | 0.42 |
| 1:H:360:HIS:C | 1:H:361:LEU:HD23 | 2.40 | 0.42 |
| 1:H:961:LEU:HB2 | 1:H:989:PHE:CZ | 2.55 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:H:966:THR:HG23 | 1:H:992:VAL:CG1 | 2.50 | 0.42 |
| 1:J:190:ILE:HG22 | 1:J:522:HIS:HE2 | 1.85 | 0.42 |
| 1:J:565:TYR:HE1 | 1:J:574:ILE:HG12 | 1.84 | 0.42 |
| 1:J:647:MET:HE2 | 1:J:669:CYS:O | 2.20 | 0.42 |
| 1:J:832:LEU:HD23 | 1:J:860:LEU:CD1 | 2.50 | 0.42 |
| 1:J:848:ALA:HB1 | 1:J:878:LYS:CB | 2.50 | 0.42 |
| 1:J:996:GLN:HG3 | 1:J:996:GLN:O | 2.18 | 0.42 |
| 1:J:1019:GLU:HG3 | 1:J:1032:PHE:HZ | 1.85 | 0.42 |
| 2:N:132:LEU:HD23 | 2:N:132:LEU:H | 1.84 | 0.42 |
| 2:P:34:PHE:HB3 | 2:P:51:ALA:HB1 | 2.00 | 0.42 |
| 2:P:284:ASP:OD1 | 2:P:285:VAL:N | 2.52 | 0.42 |
| 1:A:437:LYS:HD3 | 1:A:437:LYS:HA | 1.74 | 0.42 |
| 1:A:471:SER:HB2 | 1:A:553:LEU:HD13 | 1.90 | 0.42 |
| 1:A:607:GLU:HA | 1:A:610:LYS:HG2 | 2.02 | 0.42 |
| 1:A:832:LEU:HD23 | 1:A:860:LEU:CD1 | 2.50 | 0.42 |
| 1:B:503:LEU:HD21 | 1:B:520:PHE:HE1 | 1.74 | 0.42 |
| 1:B:528:PHE:CZ | 1:B:532:MET:HE3 | 2.54 | 0.42 |
| 1:C:191:GLY:CA | 1:C:522:HIS:CE1 | 3.03 | 0.42 |
| 1:C:360:HIS:C | 1:C:361:LEU:HD23 | 2.40 | 0.42 |
| 1:C:385:TYR:CD2 | 1:C:419:CYS:HB3 | 2.54 | 0.42 |
| 1:C:632:TYR:CE1 | 1:C:665:VAL:HG11 | 2.54 | 0.42 |
| 1:D:471:SER:O | 1:D:553:LEU:HD13 | 2.20 | 0.42 |
| 1:D:510:LYS:HB2 | 1:D:510:LYS:HE2 | 1.87 | 0.42 |
| 1:D:848:ALA:HB1 | 1:D:878:LYS:CB | 2.50 | 0.42 |
| 1:D:876:CYS:HB3 | 1:D:907:VAL:HG23 | 2.01 | 0.42 |
| 1:D:933:CYS:HB3 | 1:D:964:LEU:CD1 | 2.48 | 0.42 |
| 1:E:241:LEU:HD23 | 1:E:241:LEU:C | 2.39 | 0.42 |
| 1:E:513:ASP:OD1 | 1:E:513:ASP:N | 2.53 | 0.42 |
| 1:E:567:LYS:HD2 | 1:E:567:LYS:HA | 1.55 | 0.42 |
| 1:F:175:LYS:HE2 | 1:F:366:ARG:CG | 2.49 | 0.42 |
| 1:F:379:LYS:HG3 | 1:F:396:PHE:CG | 2.55 | 0.42 |
| 1:F:829:LEU:CD2 | 1:F:832:LEU:HD13 | 2.49 | 0.42 |
| 1:G:403:GLU:OE1 | 1:G:403:GLU:HA | 2.20 | 0.42 |
| 1:G:528:PHE:CZ | 1:G:532:MET:HE3 | 2.55 | 0.42 |
| 1:G:583:LEU:HD11 | 1:G:592:LEU:CD2 | 2.49 | 0.42 |
| 1:G:829:LEU:CD2 | 1:G:832:LEU:HD13 | 2.49 | 0.42 |
| 1:G:973:LYS:HE3 | 1:G:973:LYS:HB2 | 1.58 | 0.42 |
| 1:H:293:LYS:N | 1:H:294:PRO:HD3 | 2.34 | 0.42 |
| 1:H:565:TYR:HH | 1:H:625:PRO:HA | 1.84 | 0.42 |
| 1:H:829:LEU:CD2 | 1:H:832:LEU:HD13 | 2.49 | 0.42 |
| 1:I:326:GLU:CG | 1:I:331:LEU:HD12 | 2.40 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:I:331:LEU:HD23 | 1:I:331:LEU:C | 2.39 | 0.42 |
| 1:I:360:HIS:C | 1:I:361:LEU:HD23 | 2.40 | 0.42 |
| 1:I:362:LEU:HB3 | 1:I:365:PRO:CG | 2.48 | 0.42 |
| 1:I:385:TYR:CD2 | 1:I:419:CYS:HB3 | 2.54 | 0.42 |
| 1:I:616:ALA:HB1 | 1:I:649:TYR:HB2 | 2.01 | 0.42 |
| 1:I:858:THR:O | 1:I:886:LEU:HD12 | 2.19 | 0.42 |
| 1:I:966:THR:HG23 | 1:I:992:VAL:CG1 | 2.50 | 0.42 |
| 1:J:153:ASP:OD1 | 1:J:167:ARG:NH2 | 2.51 | 0.42 |
| 1:J:573:LEU:CA | 1:J:576:VAL:HG12 | 2.48 | 0.42 |
| 1:J:643:VAL:O | 1:J:647:MET:HG2 | 2.19 | 0.42 |
| 1:J:647:MET:HE2 | 1:J:669:CYS:HB3 | 2.01 | 0.42 |
| 1:J:758:MET:HE3 | 1:J:761:LEU:CB | 2.48 | 0.42 |
| 1:J:932:LEU:O | 1:J:936:LEU:HD12 | 2.20 | 0.42 |
| 2:K:206:GLU:OE1 | 2:K:282:ARG:NH2 | 2.52 | 0.42 |
| 2:L:34:PHE:HB3 | 2:L:51:ALA:HB1 | 2.00 | 0.42 |
| 2:L:118:ASP:O | 2:L:122:MET:HE3 | 2.20 | 0.42 |
| 2:N:284:ASP:OD1 | 2:N:285:VAL:N | 2.52 | 0.42 |
| 2:T:118:ASP:O | 2:T:122:MET:HE3 | 2.20 | 0.42 |
| 1:A:151:ILE:HD12 | 1:A:234:ILE:CD1 | 2.49 | 0.42 |
| 1:A:243:TRP:CG | 1:A:256:LEU:HD13 | 2.55 | 0.42 |
| 1:A:643:VAL:O | 1:A:647:MET:HG2 | 2.19 | 0.42 |
| 1:A:896:LEU:HB3 | 1:A:900:CYS:SG | 2.59 | 0.42 |
| 1:B:379:LYS:HG3 | 1:B:396:PHE:CG | 2.55 | 0.42 |
| 1:B:405:LEU:HD11 | 1:B:442:VAL:HG21 | 2.01 | 0.42 |
| 1:B:589:THR:HG23 | 1:B:590:SER:N | 2.33 | 0.42 |
| 1:B:607:GLU:HA | 1:B:610:LYS:HG2 | 2.02 | 0.42 |
| 1:B:758:MET:HE3 | 1:B:761:LEU:CB | 2.50 | 0.42 |
| 1:B:876:CYS:HB3 | 1:B:907:VAL:HG23 | 2.01 | 0.42 |
| 1:B:896:LEU:HB3 | 1:B:900:CYS:SG | 2.59 | 0.42 |
| 1:B:1019:GLU:HG3 | 1:B:1032:PHE:HZ | 1.85 | 0.42 |
| 1:C:446:PHE:HE1 | 1:C:450:LEU:HD21 | 1.85 | 0.42 |
| 1:C:624:GLN:O | 1:C:626:SER:N | 2.49 | 0.42 |
| 1:C:848:ALA:HB1 | 1:C:878:LYS:CB | 2.50 | 0.42 |
| 1:C:896:LEU:HB3 | 1:C:900:CYS:SG | 2.59 | 0.42 |
| 1:D:632:TYR:CE1 | 1:D:665:VAL:HG11 | 2.54 | 0.42 |
| 1:D:732:GLY:HA2 | 1:D:735:SER:OG | 2.20 | 0.42 |
| 1:D:815:ILE:CG1 | 1:D:839:LEU:HD13 | 2.46 | 0.42 |
| 1:D:896:LEU:HB3 | 1:D:900:CYS:SG | 2.59 | 0.42 |
| 1:E:178:ARG:HG3 | 1:E:183:ARG:HH21 | 1.84 | 0.42 |
| 1:E:406:PHE:O | 1:E:409:CYS:HB2 | 2.19 | 0.42 |
| 1:E:601:SER:CB | 1:E:603:GLN:HE22 | 2.31 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:F:403:GLU:OE1 | 1:F:403:GLU:HA | 2.20 | 0.42 |
| 1:F:462:LEU:HD23 | 1:F:462:LEU:C | 2.41 | 0.42 |
| 1:F:889:LEU:HB3 | 1:F:917:LEU:HD22 | 2.01 | 0.42 |
| 1:G:153:ASP:OD1 | 1:G:167:ARG:NH2 | 2.51 | 0.42 |
| 1:H:288:HIS:CE1 | 1:H:322:TRP:CZ2 | 3.06 | 0.42 |
| 1:H:535:LEU:HD23 | 1:H:535:LEU:C | 2.40 | 0.42 |
| 1:H:937:LEU:HD22 | 1:H:967:SER:HB2 | 2.02 | 0.42 |
| 1:I:379:LYS:HG3 | 1:I:396:PHE:CG | 2.55 | 0.42 |
| 1:I:462:LEU:HD23 | 1:I:462:LEU:C | 2.40 | 0.42 |
| 1:I:513:ASP:OD1 | 1:I:513:ASP:N | 2.53 | 0.42 |
| 1:I:535:LEU:HD23 | 1:I:535:LEU:C | 2.40 | 0.42 |
| 1:I:607:GLU:O | 1:I:610:LYS:HG2 | 2.19 | 0.42 |
| 1:J:151:ILE:HD12 | 1:J:234:ILE:CD1 | 2.49 | 0.42 |
| 1:J:462:LEU:HD23 | 1:J:462:LEU:C | 2.40 | 0.42 |
| 1:J:607:GLU:HA | 1:J:610:LYS:HG2 | 2.02 | 0.42 |
| 1:J:651:PRO:CD | 1:J:675:ARG:HE | 2.30 | 0.42 |
| 1:J:823:LYS:HE2 | 1:J:850:VAL:HG23 | 2.01 | 0.42 |
| 1:A:492:HIS:CE1 | 1:A:553:LEU:CG | 3.02 | 0.42 |
| 1:A:609:LEU:CD2 | 1:A:645:ARG:HD2 | 2.50 | 0.42 |
| 1:A:1019:GLU:HG3 | 1:A:1032:PHE:HZ | 1.85 | 0.42 |
| 1:B:195:THR:O | 1:B:195:THR:HG22 | 2.20 | 0.42 |
| 1:B:535:LEU:HD23 | 1:B:535:LEU:C | 2.40 | 0.42 |
| 1:C:190:ILE:HG22 | 1:C:522:HIS:HE2 | 1.85 | 0.42 |
| 1:C:195:THR:O | 1:C:195:THR:HG22 | 2.20 | 0.42 |
| 1:C:256:LEU:HD12 | 1:C:256:LEU:H | 1.84 | 0.42 |
| 1:D:136:TYR:HH | 1:D:285:PRO:HB3 | 1.85 | 0.42 |
| 1:D:191:GLY:CA | 1:D:522:HIS:CE1 | 3.03 | 0.42 |
| 1:D:233:THR:HG23 | 1:D:302:ASP:OD2 | 2.20 | 0.42 |
| 1:D:492:HIS:HE1 | 1:D:553:LEU:CD2 | 2.25 | 0.42 |
| 1:D:583:LEU:HD11 | 1:D:592:LEU:CD2 | 2.49 | 0.42 |
| 1:D:601:SER:CB | 1:D:603:GLN:HE22 | 2.31 | 0.42 |
| 1:D:810:LEU:HB2 | 1:D:839:LEU:HD21 | 2.01 | 0.42 |
| 1:E:462:LEU:HD23 | 1:E:462:LEU:C | 2.40 | 0.42 |
| 1:E:489:LEU:HD23 | 1:E:489:LEU:O | 2.19 | 0.42 |
| 1:F:153:ASP:OD1 | 1:F:167:ARG:NH2 | 2.51 | 0.42 |
| 1:F:386:PHE:CE2 | 1:F:395:ALA:HB1 | 2.55 | 0.42 |
| 1:F:595:LYS:HA | 1:F:595:LYS:HD3 | 1.66 | 0.42 |
| 1:G:190:ILE:HG22 | 1:G:522:HIS:HE2 | 1.85 | 0.42 |
| 1:G:360:HIS:C | 1:G:361:LEU:HD23 | 2.40 | 0.42 |
| 1:G:500:SER:CA | 1:G:503:LEU:O | 2.67 | 0.42 |
| 1:G:565:TYR:HE1 | 1:G:574:ILE:HG12 | 1.85 | 0.42 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|------------------|--------------------------|-------------------|
| 1:G:832:LEU:HD23 | 1:G:860:LEU:CD1 | 2.50 | 0.42 |
| 1:G:848:ALA:HB1 | 1:G:878:LYS:CB | 2.50 | 0.42 |
| 1:H:405:LEU:HD11 | 1:H:442:VAL:HG21 | 2.01 | 0.42 |
| 1:H:492:HIS:CE1 | 1:H:553:LEU:CG | 3.02 | 0.42 |
| 1:I:266:LEU:HB2 | 1:I:329:ASP:CB | 2.47 | 0.42 |
| 1:I:477:ILE:HD12 | 1:I:477:ILE:HA | 1.85 | 0.42 |
| 1:I:643:VAL:O | 1:I:647:MET:HG2 | 2.19 | 0.42 |
| 1:I:961:LEU:HB2 | 1:I:989:PHE:CZ | 2.55 | 0.42 |
| 1:J:233:THR:HG23 | 1:J:302:ASP:OD2 | 2.20 | 0.42 |
| 1:J:243:TRP:CG | 1:J:256:LEU:HD13 | 2.55 | 0.42 |
| 1:J:732:GLY:HA2 | 1:J:735:SER:OG | 2.20 | 0.42 |
| 1:J:810:LEU:HB2 | 1:J:839:LEU:HD21 | 2.01 | 0.42 |
| 2:P:206:GLU:OE1 | 2:P:282:ARG:NH2 | 2.53 | 0.42 |
| 2:S:206:GLU:OE1 | 2:S:282:ARG:NH2 | 2.53 | 0.42 |
| 1:A:233:THR:HG23 | 1:A:302:ASP:OD2 | 2.20 | 0.41 |
| 1:A:360:HIS:C | 1:A:361:LEU:HD23 | 2.40 | 0.41 |
| 1:A:377:LYS:HD3 | 1:A:377:LYS:HA | 1.51 | 0.41 |
| 1:A:898:SER:O | 1:A:901:CYS:HB2 | 2.20 | 0.41 |
| 1:B:243:TRP:CG | 1:B:256:LEU:HD13 | 2.55 | 0.41 |
| 1:B:471:SER:O | 1:B:553:LEU:HD13 | 2.19 | 0.41 |
| 1:B:732:GLY:HA2 | 1:B:735:SER:OG | 2.20 | 0.41 |
| 1:B:919:LEU:CD2 | 1:B:924:LEU:HD11 | 2.45 | 0.41 |
| 1:C:445:PHE:HA | 1:C:448:SER:OG | 2.20 | 0.41 |
| 1:C:478:TRP:O | 1:C:480:GLN:NE2 | 2.53 | 0.41 |
| 1:C:832:LEU:HD23 | 1:C:860:LEU:CD1 | 2.50 | 0.41 |
| 1:C:1031:VAL:HG13 | 1:C:1031:VAL:O | 2.19 | 0.41 |
| 1:D:379:LYS:HG3 | 1:D:396:PHE:CG | 2.55 | 0.41 |
| 1:D:385:TYR:CD2 | 1:D:419:CYS:HB3 | 2.54 | 0.41 |
| 1:D:406:PHE:O | 1:D:409:CYS:HB2 | 2.19 | 0.41 |
| 1:D:552:LYS:N | 1:D:552:LYS:HE3 | 2.35 | 0.41 |
| 1:D:1031:VAL:HG13 | 1:D:1031:VAL:O | 2.19 | 0.41 |
| 1:E:164:LEU:HD23 | 1:E:164:LEU:HA | 1.91 | 0.41 |
| 1:E:233:THR:HG23 | 1:E:302:ASP:OD2 | 2.20 | 0.41 |
| 1:E:469:LEU:CD1 | 1:E:498:ASP:OD2 | 2.58 | 0.41 |
| 1:E:583:LEU:HD11 | 1:E:592:LEU:CD2 | 2.49 | 0.41 |
| 1:E:961:LEU:HB2 | 1:E:989:PHE:CZ | 2.55 | 0.41 |
| 1:F:481:LYS:HB3 | 1:F:484:PHE:CE1 | 2.55 | 0.41 |
| 1:F:496:LYS:O | 1:F:498:ASP:N | 2.53 | 0.41 |
| 1:F:583:LEU:HD11 | 1:F:592:LEU:CD2 | 2.49 | 0.41 |
| 1:G:217:GLU:CG | 1:H:146:SER:HA | 2.43 | 0.41 |
| 1:G:379:LYS:HG3 | 1:G:396:PHE:CG | 2.55 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:G:383:PHE:CD1 | 1:G:383:PHE:N | 2.88 | 0.41 |
| 1:G:386:PHE:CE2 | 1:G:395:ALA:HB1 | 2.55 | 0.41 |
| 1:G:896:LEU:HB3 | 1:G:900:CYS:SG | 2.59 | 0.41 |
| 1:H:471:SER:O | 1:H:553:LEU:HD13 | 2.20 | 0.41 |
| 1:H:552:LYS:N | 1:H:552:LYS:HE3 | 2.35 | 0.41 |
| 1:H:607:GLU:HA | 1:H:610:LYS:HG2 | 2.02 | 0.41 |
| 1:H:932:LEU:O | 1:H:936:LEU:HD12 | 2.20 | 0.41 |
| 1:I:489:LEU:HD23 | 1:I:489:LEU:O | 2.19 | 0.41 |
| 1:I:607:GLU:HA | 1:I:610:LYS:HG2 | 2.02 | 0.41 |
| 1:I:732:GLY:HA2 | 1:I:735:SER:OG | 2.20 | 0.41 |
| 1:I:815:ILE:HD11 | 1:I:839:LEU:HD11 | 2.00 | 0.41 |
| 1:I:829:LEU:CD2 | 1:I:832:LEU:HD13 | 2.49 | 0.41 |
| 1:I:1019:GLU:HG3 | 1:I:1032:PHE:HZ | 1.85 | 0.41 |
| 1:J:379:LYS:HG3 | 1:J:396:PHE:CG | 2.55 | 0.41 |
| 1:J:471:SER:O | 1:J:553:LEU:HD13 | 2.19 | 0.41 |
| 1:J:478:TRP:O | 1:J:480:GLN:NE2 | 2.53 | 0.41 |
| 1:J:513:ASP:N | 1:J:513:ASP:OD1 | 2.53 | 0.41 |
| 1:J:601:SER:HB2 | 1:J:603:GLN:NE2 | 2.31 | 0.41 |
| 1:J:609:LEU:CD2 | 1:J:645:ARG:HD2 | 2.50 | 0.41 |
| 1:J:656:ASN:C | 1:J:657:LEU:HD12 | 2.41 | 0.41 |
| 2:K:34:PHE:HB3 | 2:K:51:ALA:HB1 | 2.01 | 0.41 |
| 2:M:206:GLU:OE1 | 2:M:282:ARG:NH2 | 2.53 | 0.41 |
| 2:N:262:HIS:ND1 | 2:N:262:HIS:O | 2.53 | 0.41 |
| 2:O:262:HIS:ND1 | 2:O:262:HIS:O | 2.53 | 0.41 |
| 2:Q:206:GLU:OE1 | 2:Q:282:ARG:NH2 | 2.53 | 0.41 |
| 2:R:206:GLU:OE1 | 2:R:282:ARG:NH2 | 2.53 | 0.41 |
| 2:T:34:PHE:HB3 | 2:T:51:ALA:HB1 | 2.00 | 0.41 |
| 2:T:262:HIS:ND1 | 2:T:262:HIS:O | 2.53 | 0.41 |
| 1:A:535:LEU:HD23 | 1:A:535:LEU:C | 2.40 | 0.41 |
| 1:A:758:MET:HE3 | 1:A:761:LEU:CB | 2.50 | 0.41 |
| 1:A:932:LEU:O | 1:A:936:LEU:HD12 | 2.20 | 0.41 |
| 1:B:153:ASP:OD1 | 1:B:167:ARG:NH2 | 2.51 | 0.41 |
| 1:B:898:SER:O | 1:B:901:CYS:HB2 | 2.20 | 0.41 |
| 1:C:203:ILE:HG12 | 1:C:204:LYS:O | 2.19 | 0.41 |
| 1:C:293:LYS:N | 1:C:294:PRO:HD3 | 2.34 | 0.41 |
| 1:C:462:LEU:HD23 | 1:C:462:LEU:C | 2.40 | 0.41 |
| 1:C:552:LYS:N | 1:C:552:LYS:HE3 | 2.35 | 0.41 |
| 1:D:234:ILE:HA | 1:D:234:ILE:HD13 | 1.80 | 0.41 |
| 1:D:446:PHE:HE1 | 1:D:450:LEU:HD21 | 1.85 | 0.41 |
| 1:D:469:LEU:HD21 | 1:D:520:PHE:CZ | 2.56 | 0.41 |
| 1:D:509:GLN:CB | 1:D:514:CYS:HB3 | 2.45 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|------------------|--------------------------|-------------------|
| 1:E:379:LYS:HG3 | 1:E:396:PHE:CG | 2.55 | 0.41 |
| 1:E:386:PHE:CE2 | 1:E:395:ALA:HB1 | 2.55 | 0.41 |
| 1:E:478:TRP:O | 1:E:480:GLN:NE2 | 2.53 | 0.41 |
| 1:E:481:LYS:HB3 | 1:E:484:PHE:CE1 | 2.55 | 0.41 |
| 1:E:937:LEU:HD22 | 1:E:967:SER:HB2 | 2.02 | 0.41 |
| 1:F:418:VAL:HG23 | 1:F:442:VAL:CG1 | 2.50 | 0.41 |
| 1:F:832:LEU:HD23 | 1:F:860:LEU:CD1 | 2.50 | 0.41 |
| 1:F:966:THR:HG23 | 1:F:992:VAL:CG1 | 2.50 | 0.41 |
| 1:G:481:LYS:HB3 | 1:G:484:PHE:CE1 | 2.55 | 0.41 |
| 1:G:732:GLY:HA2 | 1:G:735:SER:OG | 2.20 | 0.41 |
| 1:G:810:LEU:HB2 | 1:G:839:LEU:HD21 | 2.01 | 0.41 |
| 1:G:823:LYS:HE2 | 1:G:850:VAL:HG23 | 2.01 | 0.41 |
| 1:G:932:LEU:O | 1:G:936:LEU:HD12 | 2.20 | 0.41 |
| 1:H:512:VAL:HG21 | 1:I:445:PHE:CB | 2.39 | 0.41 |
| 1:I:208:LEU:HD21 | 1:I:222:VAL:HG11 | 2.01 | 0.41 |
| 1:I:418:VAL:HG23 | 1:I:442:VAL:CG1 | 2.50 | 0.41 |
| 1:I:492:HIS:CE1 | 1:I:553:LEU:CG | 3.02 | 0.41 |
| 1:I:609:LEU:CD2 | 1:I:645:ARG:HD2 | 2.50 | 0.41 |
| 1:I:630:LEU:HD13 | 1:I:630:LEU:HA | 1.90 | 0.41 |
| 1:I:656:ASN:C | 1:I:657:LEU:HD12 | 2.41 | 0.41 |
| 1:J:288:HIS:ND1 | 1:J:322:TRP:HH2 | 2.06 | 0.41 |
| 1:J:552:LYS:N | 1:J:552:LYS:HE3 | 2.35 | 0.41 |
| 1:J:607:GLU:O | 1:J:610:LYS:HG2 | 2.19 | 0.41 |
| 1:J:889:LEU:HB3 | 1:J:917:LEU:HD22 | 2.01 | 0.41 |
| 1:J:896:LEU:HB3 | 1:J:900:CYS:SG | 2.59 | 0.41 |
| 2:L:206:GLU:OE1 | 2:L:282:ARG:NH2 | 2.53 | 0.41 |
| 1:A:178:ARG:HG3 | 1:A:183:ARG:HH21 | 1.84 | 0.41 |
| 1:A:445:PHE:HA | 1:A:448:SER:OG | 2.20 | 0.41 |
| 1:A:505:MET:O | 1:A:505:MET:CG | 2.64 | 0.41 |
| 1:A:829:LEU:CD2 | 1:A:832:LEU:HD13 | 2.49 | 0.41 |
| 1:B:191:GLY:CA | 1:B:522:HIS:CE1 | 3.03 | 0.41 |
| 1:B:647:MET:HE2 | 1:B:669:CYS:HB3 | 2.02 | 0.41 |
| 1:B:793:VAL:O | 1:B:797:ASN:ND2 | 2.37 | 0.41 |
| 1:B:930:LYS:HZ1 | 1:B:931:LEU:HG | 1.85 | 0.41 |
| 1:B:1031:VAL:HG13 | 1:B:1031:VAL:O | 2.19 | 0.41 |
| 1:C:243:TRP:CG | 1:C:256:LEU:HD13 | 2.55 | 0.41 |
| 1:C:471:SER:O | 1:C:553:LEU:HD13 | 2.19 | 0.41 |
| 1:C:492:HIS:CE1 | 1:C:553:LEU:CG | 3.02 | 0.41 |
| 1:C:535:LEU:HD23 | 1:C:535:LEU:C | 2.40 | 0.41 |
| 1:C:607:GLU:HA | 1:C:610:LYS:HG2 | 2.02 | 0.41 |
| 1:C:656:ASN:C | 1:C:657:LEU:HD12 | 2.41 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|------------------|--------------------------|-------------------|
| 1:D:178:ARG:HD3 | 1:D:178:ARG:HA | 1.93 | 0.41 |
| 1:E:383:PHE:CD1 | 1:E:383:PHE:N | 2.88 | 0.41 |
| 1:E:657:LEU:CD2 | 1:E:663:HIS:HA | 2.50 | 0.41 |
| 1:E:848:ALA:HB1 | 1:E:878:LYS:CB | 2.50 | 0.41 |
| 1:E:898:SER:O | 1:E:901:CYS:HB2 | 2.20 | 0.41 |
| 1:F:154:ARG:HB2 | 1:F:416:TRP:CH2 | 2.55 | 0.41 |
| 1:F:241:LEU:HD23 | 1:F:241:LEU:C | 2.39 | 0.41 |
| 1:F:478:TRP:O | 1:F:480:GLN:NE2 | 2.53 | 0.41 |
| 1:F:552:LYS:NZ | 1:F:552:LYS:N | 2.60 | 0.41 |
| 1:F:567:LYS:HB3 | 1:F:568:PHE:H | 1.42 | 0.41 |
| 1:F:732:GLY:HA2 | 1:F:735:SER:OG | 2.20 | 0.41 |
| 1:F:1031:VAL:HG13 | 1:F:1031:VAL:O | 2.19 | 0.41 |
| 1:G:191:GLY:CA | 1:G:522:HIS:CE1 | 3.03 | 0.41 |
| 1:G:758:MET:CG | 1:G:782:LEU:HD22 | 2.51 | 0.41 |
| 1:H:191:GLY:CA | 1:H:522:HIS:CE1 | 3.03 | 0.41 |
| 1:H:445:PHE:HA | 1:H:448:SER:OG | 2.20 | 0.41 |
| 1:I:405:LEU:HA | 1:I:405:LEU:HD23 | 1.81 | 0.41 |
| 1:I:500:SER:CA | 1:I:503:LEU:O | 2.68 | 0.41 |
| 1:I:657:LEU:CD2 | 1:I:663:HIS:HA | 2.50 | 0.41 |
| 1:I:932:LEU:O | 1:I:936:LEU:HD12 | 2.20 | 0.41 |
| 1:J:418:VAL:HG23 | 1:J:442:VAL:CG1 | 2.50 | 0.41 |
| 1:J:445:PHE:HA | 1:J:448:SER:OG | 2.20 | 0.41 |
| 1:J:496:LYS:O | 1:J:498:ASP:N | 2.53 | 0.41 |
| 1:J:552:LYS:NZ | 1:J:552:LYS:N | 2.60 | 0.41 |
| 1:J:803:LEU:HD21 | 1:J:805:LEU:HD11 | 2.03 | 0.41 |
| 1:J:829:LEU:CD2 | 1:J:832:LEU:HD13 | 2.49 | 0.41 |
| 2:K:262:HIS:ND1 | 2:K:262:HIS:O | 2.53 | 0.41 |
| 2:L:262:HIS:ND1 | 2:L:262:HIS:O | 2.53 | 0.41 |
| 2:N:118:ASP:O | 2:N:122:MET:HE3 | 2.21 | 0.41 |
| 2:R:291:VAL:O | 2:R:295:MET:HG2 | 2.21 | 0.41 |
| 1:A:803:LEU:HD21 | 1:A:805:LEU:HD11 | 2.03 | 0.41 |
| 1:A:973:LYS:HE3 | 1:A:973:LYS:HB2 | 1.58 | 0.41 |
| 1:B:164:LEU:HD23 | 1:B:164:LEU:HA | 1.90 | 0.41 |
| 1:B:462:LEU:HD23 | 1:B:462:LEU:C | 2.41 | 0.41 |
| 1:B:609:LEU:CD2 | 1:B:645:ARG:HD2 | 2.50 | 0.41 |
| 1:B:656:ASN:C | 1:B:657:LEU:HD12 | 2.41 | 0.41 |
| 1:B:919:LEU:HD22 | 1:B:924:LEU:CD1 | 2.46 | 0.41 |
| 1:C:249:TYR:HB3 | 1:C:253:PHE:CE1 | 2.56 | 0.41 |
| 1:C:408:MET:HE1 | 1:C:525:PHE:HD2 | 1.85 | 0.41 |
| 1:C:469:LEU:HD21 | 1:C:520:PHE:CZ | 2.56 | 0.41 |
| 1:C:607:GLU:O | 1:C:610:LYS:HG2 | 2.19 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:C:810:LEU:HB2 | 1:C:839:LEU:HD21 | 2.01 | 0.41 |
| 1:C:937:LEU:HD22 | 1:C:967:SER:HB2 | 2.02 | 0.41 |
| 1:D:204:LYS:CG | 1:D:205:MET:N | 2.77 | 0.41 |
| 1:D:383:PHE:CD1 | 1:D:383:PHE:N | 2.89 | 0.41 |
| 1:D:656:ASN:C | 1:D:657:LEU:HD12 | 2.41 | 0.41 |
| 1:E:240:MET:HE3 | 1:E:258:TYR:HB2 | 2.01 | 0.41 |
| 1:E:270:ARG:HD2 | 1:E:275:LEU:CD1 | 2.35 | 0.41 |
| 1:E:637:MET:CE | 1:E:639:GLU:HB2 | 2.51 | 0.41 |
| 1:E:656:ASN:C | 1:E:657:LEU:HD12 | 2.41 | 0.41 |
| 1:E:995:GLN:H | 1:E:995:GLN:HG3 | 1.66 | 0.41 |
| 1:F:208:LEU:HD21 | 1:F:222:VAL:HG11 | 2.01 | 0.41 |
| 1:F:657:LEU:CD2 | 1:F:663:HIS:HA | 2.50 | 0.41 |
| 1:G:418:VAL:HG23 | 1:G:442:VAL:HG13 | 2.03 | 0.41 |
| 1:G:462:LEU:HD23 | 1:G:462:LEU:C | 2.40 | 0.41 |
| 1:G:535:LEU:HD23 | 1:G:535:LEU:C | 2.40 | 0.41 |
| 1:G:607:GLU:HA | 1:G:610:LYS:HG2 | 2.02 | 0.41 |
| 1:H:168:TYR:HD1 | 3:H:1101:AGS:N6 | 2.18 | 0.41 |
| 1:H:195:THR:HG22 | 1:H:195:THR:O | 2.20 | 0.41 |
| 1:H:386:PHE:CE2 | 1:H:395:ALA:HB1 | 2.55 | 0.41 |
| 1:H:403:GLU:OE1 | 1:H:403:GLU:HA | 2.20 | 0.41 |
| 1:H:428:SER:O | 1:H:428:SER:OG | 2.36 | 0.41 |
| 1:H:656:ASN:C | 1:H:657:LEU:HD12 | 2.41 | 0.41 |
| 1:I:191:GLY:CA | 1:I:522:HIS:CE1 | 3.03 | 0.41 |
| 1:I:233:THR:HG23 | 1:I:302:ASP:OD2 | 2.20 | 0.41 |
| 1:I:386:PHE:CE2 | 1:I:395:ALA:HB1 | 2.55 | 0.41 |
| 1:I:666:SER:O | 1:I:670:ILE:HG12 | 2.21 | 0.41 |
| 1:I:973:LYS:HB2 | 1:I:973:LYS:HE3 | 1.58 | 0.41 |
| 1:J:403:GLU:OE1 | 1:J:403:GLU:HA | 2.20 | 0.41 |
| 1:J:623:ILE:HD13 | 1:J:625:PRO:HD2 | 2.01 | 0.41 |
| 1:J:787:CYS:HA | 1:J:790:ILE:HD12 | 2.01 | 0.41 |
| 1:J:898:SER:O | 1:J:901:CYS:HB2 | 2.20 | 0.41 |
| 2:M:262:HIS:ND1 | 2:M:262:HIS:O | 2.53 | 0.41 |
| 2:Q:262:HIS:O | 2:Q:262:HIS:ND1 | 2.53 | 0.41 |
| 2:R:118:ASP:O | 2:R:122:MET:HE3 | 2.20 | 0.41 |
| 2:R:132:LEU:HD23 | 2:R:132:LEU:H | 1.84 | 0.41 |
| 2:R:262:HIS:ND1 | 2:R:262:HIS:O | 2.53 | 0.41 |
| 2:S:291:VAL:O | 2:S:295:MET:HG2 | 2.21 | 0.41 |
| 1:A:293:LYS:N | 1:A:294:PRO:HD3 | 2.34 | 0.41 |
| 1:A:362:LEU:HB3 | 1:A:365:PRO:CG | 2.48 | 0.41 |
| 1:A:446:PHE:HE1 | 1:A:450:LEU:HD21 | 1.85 | 0.41 |
| 1:A:462:LEU:C | 1:A:462:LEU:HD23 | 2.40 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:A:471:SER:O | 1:A:553:LEU:HD13 | 2.19 | 0.41 |
| 1:A:528:PHE:CZ | 1:A:532:MET:HE3 | 2.55 | 0.41 |
| 1:A:565:TYR:HE1 | 1:A:574:ILE:HG12 | 1.85 | 0.41 |
| 1:A:656:ASN:C | 1:A:657:LEU:HD12 | 2.41 | 0.41 |
| 1:A:861:TYR:OH | 1:A:888:LYS:HB2 | 2.21 | 0.41 |
| 1:A:937:LEU:HD22 | 1:A:967:SER:HB2 | 2.02 | 0.41 |
| 1:B:178:ARG:HG3 | 1:B:183:ARG:HH21 | 1.84 | 0.41 |
| 1:B:293:LYS:N | 1:B:294:PRO:HD3 | 2.35 | 0.41 |
| 1:B:478:TRP:O | 1:B:480:GLN:NE2 | 2.53 | 0.41 |
| 1:B:562:LEU:C | 1:B:564:ASN:H | 2.22 | 0.41 |
| 1:B:848:ALA:HB1 | 1:B:878:LYS:CB | 2.50 | 0.41 |
| 1:B:932:LEU:O | 1:B:936:LEU:HD12 | 2.20 | 0.41 |
| 1:C:601:SER:CB | 1:C:603:GLN:HE22 | 2.31 | 0.41 |
| 1:C:609:LEU:CD2 | 1:C:645:ARG:HD2 | 2.50 | 0.41 |
| 1:C:630:LEU:HD13 | 1:C:630:LEU:HA | 1.90 | 0.41 |
| 1:C:657:LEU:HD23 | 1:C:663:HIS:CD2 | 2.56 | 0.41 |
| 1:C:861:TYR:OH | 1:C:888:LYS:HB2 | 2.21 | 0.41 |
| 1:D:158:LEU:HD12 | 1:D:158:LEU:HA | 1.84 | 0.41 |
| 1:D:261:CYS:HB3 | 1:D:307:LEU:CD1 | 2.51 | 0.41 |
| 1:D:293:LYS:N | 1:D:294:PRO:HD3 | 2.35 | 0.41 |
| 1:D:462:LEU:C | 1:D:462:LEU:HD23 | 2.40 | 0.41 |
| 1:D:657:LEU:CD2 | 1:D:663:HIS:HA | 2.50 | 0.41 |
| 1:D:787:CYS:HA | 1:D:790:ILE:HD12 | 2.01 | 0.41 |
| 1:D:889:LEU:HB3 | 1:D:917:LEU:HD22 | 2.01 | 0.41 |
| 1:D:1019:GLU:HG3 | 1:D:1032:PHE:HZ | 1.85 | 0.41 |
| 1:E:195:THR:O | 1:E:195:THR:HG22 | 2.20 | 0.41 |
| 1:E:261:CYS:HB3 | 1:E:307:LEU:CD1 | 2.51 | 0.41 |
| 1:E:293:LYS:N | 1:E:294:PRO:HD3 | 2.35 | 0.41 |
| 1:E:445:PHE:HA | 1:E:448:SER:OG | 2.20 | 0.41 |
| 1:F:178:ARG:HD3 | 1:F:178:ARG:HA | 1.93 | 0.41 |
| 1:F:233:THR:HG23 | 1:F:302:ASP:OD2 | 2.20 | 0.41 |
| 1:F:445:PHE:HA | 1:F:448:SER:OG | 2.20 | 0.41 |
| 1:F:758:MET:CG | 1:F:782:LEU:HD22 | 2.51 | 0.41 |
| 1:F:932:LEU:O | 1:F:936:LEU:HD12 | 2.20 | 0.41 |
| 1:G:208:LEU:HD21 | 1:G:222:VAL:HG11 | 2.01 | 0.41 |
| 1:G:418:VAL:HG23 | 1:G:442:VAL:CG1 | 2.50 | 0.41 |
| 1:G:552:LYS:NZ | 1:G:552:LYS:N | 2.60 | 0.41 |
| 1:G:876:CYS:HB3 | 1:G:907:VAL:HG23 | 2.01 | 0.41 |
| 1:H:190:ILE:HG22 | 1:H:522:HIS:HE2 | 1.85 | 0.41 |
| 1:H:208:LEU:HD21 | 1:H:222:VAL:HG11 | 2.01 | 0.41 |
| 1:H:502:PHE:CA | 1:H:521:ILE:HG13 | 2.46 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|------------------|--------------------------|-------------------|
| 1:H:616:ALA:HB1 | 1:H:649:TYR:HB2 | 2.01 | 0.41 |
| 1:H:758:MET:CG | 1:H:782:LEU:HD22 | 2.51 | 0.41 |
| 1:H:810:LEU:HB2 | 1:H:839:LEU:HD21 | 2.01 | 0.41 |
| 1:H:876:CYS:HB3 | 1:H:907:VAL:HG23 | 2.01 | 0.41 |
| 1:I:471:SER:O | 1:I:553:LEU:HD13 | 2.20 | 0.41 |
| 1:I:478:TRP:O | 1:I:480:GLN:NE2 | 2.53 | 0.41 |
| 1:I:937:LEU:HD22 | 1:I:967:SER:HB2 | 2.02 | 0.41 |
| 1:J:178:ARG:HD3 | 1:J:178:ARG:HA | 1.92 | 0.41 |
| 1:J:386:PHE:CE2 | 1:J:395:ALA:HB1 | 2.55 | 0.41 |
| 1:J:565:TYR:O | 1:J:565:TYR:CG | 2.73 | 0.41 |
| 1:J:657:LEU:CD2 | 1:J:663:HIS:HA | 2.50 | 0.41 |
| 2:M:288:VAL:HA | 2:M:291:VAL:HG12 | 2.03 | 0.41 |
| 2:N:288:VAL:HA | 2:N:291:VAL:HG12 | 2.03 | 0.41 |
| 2:N:291:VAL:O | 2:N:295:MET:HG2 | 2.21 | 0.41 |
| 2:P:291:VAL:O | 2:P:295:MET:HG2 | 2.21 | 0.41 |
| 1:A:154:ARG:HB2 | 1:A:416:TRP:CH2 | 2.56 | 0.41 |
| 1:A:403:GLU:OE1 | 1:A:403:GLU:HA | 2.20 | 0.41 |
| 1:A:513:ASP:N | 1:A:513:ASP:OD1 | 2.53 | 0.41 |
| 1:A:787:CYS:HA | 1:A:790:ILE:HD12 | 2.01 | 0.41 |
| 1:A:848:ALA:HB1 | 1:A:878:LYS:CB | 2.50 | 0.41 |
| 1:B:167:ARG:HB3 | 1:B:167:ARG:HH11 | 1.79 | 0.41 |
| 1:C:528:PHE:CZ | 1:C:532:MET:HE3 | 2.56 | 0.41 |
| 1:C:932:LEU:O | 1:C:936:LEU:HD12 | 2.20 | 0.41 |
| 1:D:154:ARG:HB2 | 1:D:416:TRP:CH2 | 2.55 | 0.41 |
| 1:D:386:PHE:CE2 | 1:D:395:ALA:HB1 | 2.55 | 0.41 |
| 1:D:418:VAL:HG23 | 1:D:442:VAL:HG13 | 2.03 | 0.41 |
| 1:D:481:LYS:HB3 | 1:D:484:PHE:CE1 | 2.55 | 0.41 |
| 1:D:528:PHE:CZ | 1:D:532:MET:HE3 | 2.56 | 0.41 |
| 1:E:240:MET:HE2 | 1:E:258:TYR:CB | 2.46 | 0.41 |
| 1:E:492:HIS:CE1 | 1:E:553:LEU:CG | 3.02 | 0.41 |
| 1:E:1031:VAL:HG13 | 1:E:1031:VAL:O | 2.19 | 0.41 |
| 1:F:383:PHE:CD1 | 1:F:383:PHE:N | 2.88 | 0.41 |
| 1:F:502:PHE:CD2 | 1:F:502:PHE:N | 2.89 | 0.41 |
| 1:F:528:PHE:CZ | 1:F:532:MET:HE3 | 2.56 | 0.41 |
| 1:F:656:ASN:C | 1:F:657:LEU:HD12 | 2.41 | 0.41 |
| 1:F:657:LEU:HD23 | 1:F:663:HIS:CD2 | 2.56 | 0.41 |
| 1:G:145:ARG:HE | 1:G:145:ARG:HB3 | 1.61 | 0.41 |
| 1:G:195:THR:HG22 | 1:G:195:THR:O | 2.20 | 0.41 |
| 1:G:233:THR:HG23 | 1:G:302:ASP:OD2 | 2.20 | 0.41 |
| 1:G:297:ILE:CG2 | 1:G:298:LEU:N | 2.84 | 0.41 |
| 1:G:405:LEU:HA | 1:G:405:LEU:HD23 | 1.81 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:G:478:TRP:O | 1:G:480:GLN:NE2 | 2.53 | 0.41 |
| 1:H:446:PHE:HE1 | 1:H:450:LEU:HD21 | 1.85 | 0.41 |
| 1:H:462:LEU:HD23 | 1:H:462:LEU:C | 2.40 | 0.41 |
| 1:H:815:ILE:CG1 | 1:H:839:LEU:HD13 | 2.46 | 0.41 |
| 1:I:154:ARG:HB2 | 1:I:416:TRP:CH2 | 2.55 | 0.41 |
| 1:I:243:TRP:CG | 1:I:256:LEU:HD13 | 2.55 | 0.41 |
| 1:I:445:PHE:HA | 1:I:448:SER:OG | 2.20 | 0.41 |
| 1:I:601:SER:CB | 1:I:603:GLN:HE22 | 2.31 | 0.41 |
| 1:I:803:LEU:HD21 | 1:I:805:LEU:HD11 | 2.03 | 0.41 |
| 1:J:154:ARG:HB2 | 1:J:416:TRP:CH2 | 2.56 | 0.41 |
| 1:J:249:TYR:HB3 | 1:J:253:PHE:CE1 | 2.55 | 0.41 |
| 1:J:261:CYS:HB3 | 1:J:307:LEU:CD1 | 2.50 | 0.41 |
| 1:J:861:TYR:OH | 1:J:888:LYS:HB2 | 2.21 | 0.41 |
| 1:J:876:CYS:HB3 | 1:J:907:VAL:HG23 | 2.01 | 0.41 |
| 2:K:118:ASP:O | 2:K:122:MET:HE3 | 2.20 | 0.41 |
| 2:K:291:VAL:O | 2:K:295:MET:HG2 | 2.21 | 0.41 |
| 2:P:118:ASP:O | 2:P:122:MET:HE3 | 2.21 | 0.41 |
| 2:Q:291:VAL:O | 2:Q:295:MET:HG2 | 2.21 | 0.41 |
| 2:T:206:GLU:OE1 | 2:T:282:ARG:NH2 | 2.53 | 0.41 |
| 1:A:191:GLY:CA | 1:A:522:HIS:CE1 | 3.03 | 0.41 |
| 1:A:195:THR:HG22 | 1:A:195:THR:O | 2.20 | 0.41 |
| 1:A:379:LYS:HE2 | 1:A:379:LYS:HB3 | 1.94 | 0.41 |
| 1:A:628:LEU:HD13 | 1:A:655:ILE:HD13 | 2.03 | 0.41 |
| 1:A:673:CYS:SG | 1:A:676:VAL:HB | 2.61 | 0.41 |
| 1:A:823:LYS:NZ | 1:A:849:SER:OG | 2.27 | 0.41 |
| 1:A:917:LEU:HG | 1:A:943:LEU:CD1 | 2.49 | 0.41 |
| 1:A:983:ASP:CB | 1:A:1014:THR:HG21 | 2.51 | 0.41 |
| 1:B:190:ILE:HG22 | 1:B:522:HIS:HE2 | 1.85 | 0.41 |
| 1:B:217:GLU:CG | 1:C:146:SER:HA | 2.44 | 0.41 |
| 1:B:249:TYR:HB3 | 1:B:253:PHE:CE1 | 2.55 | 0.41 |
| 1:B:288:HIS:HD1 | 1:B:322:TRP:HZ2 | 1.69 | 0.41 |
| 1:B:336:ILE:HD13 | 1:B:336:ILE:HA | 1.81 | 0.41 |
| 1:B:445:PHE:HA | 1:B:448:SER:OG | 2.20 | 0.41 |
| 1:B:513:ASP:N | 1:B:513:ASP:OD1 | 2.53 | 0.41 |
| 1:B:787:CYS:HA | 1:B:790:ILE:HD12 | 2.01 | 0.41 |
| 1:B:861:TYR:OH | 1:B:888:LYS:HB2 | 2.21 | 0.41 |
| 1:C:169:THR:HB | 1:C:373:PHE:HE1 | 1.86 | 0.41 |
| 1:C:383:PHE:CD1 | 1:C:383:PHE:N | 2.88 | 0.41 |
| 1:C:418:VAL:HG23 | 1:C:442:VAL:HG13 | 2.03 | 0.41 |
| 1:D:169:THR:HB | 1:D:373:PHE:HE1 | 1.86 | 0.41 |
| 1:D:535:LEU:HD23 | 1:D:535:LEU:C | 2.40 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:D:609:LEU:CD2 | 1:D:645:ARG:HD2 | 2.50 | 0.41 |
| 1:E:469:LEU:HD21 | 1:E:520:PHE:CZ | 2.56 | 0.41 |
| 1:E:607:GLU:HA | 1:E:610:LYS:HG2 | 2.02 | 0.41 |
| 1:E:758:MET:HE3 | 1:E:761:LEU:CB | 2.50 | 0.41 |
| 1:E:872:VAL:HG21 | 1:E:896:LEU:CD2 | 2.51 | 0.41 |
| 1:E:889:LEU:HB3 | 1:E:917:LEU:HD22 | 2.01 | 0.41 |
| 1:F:607:GLU:HA | 1:F:610:LYS:HG2 | 2.02 | 0.41 |
| 1:F:898:SER:O | 1:F:901:CYS:HB2 | 2.20 | 0.41 |
| 1:F:983:ASP:CB | 1:F:1014:THR:HG21 | 2.51 | 0.41 |
| 1:G:190:ILE:CA | 1:G:194:LYS:HB2 | 2.45 | 0.41 |
| 1:G:249:TYR:HB3 | 1:G:253:PHE:CE1 | 2.55 | 0.41 |
| 1:G:666:SER:O | 1:G:670:ILE:HG12 | 2.21 | 0.41 |
| 1:G:775:LEU:CG | 1:G:777:LEU:HD11 | 2.34 | 0.41 |
| 1:H:204:LYS:CG | 1:H:205:MET:N | 2.77 | 0.41 |
| 1:H:379:LYS:HG3 | 1:H:396:PHE:CG | 2.55 | 0.41 |
| 1:H:478:TRP:O | 1:H:480:GLN:NE2 | 2.53 | 0.41 |
| 1:H:732:GLY:HA2 | 1:H:735:SER:OG | 2.20 | 0.41 |
| 1:H:802:GLU:OE2 | 1:H:831:LYS:NZ | 2.45 | 0.41 |
| 1:H:832:LEU:HD23 | 1:H:860:LEU:CD1 | 2.50 | 0.41 |
| 1:I:190:ILE:HG22 | 1:I:522:HIS:HE2 | 1.85 | 0.41 |
| 1:I:195:THR:HG22 | 1:I:195:THR:O | 2.20 | 0.41 |
| 1:I:261:CYS:HB3 | 1:I:307:LEU:CD1 | 2.51 | 0.41 |
| 1:I:405:LEU:HD11 | 1:I:442:VAL:HG21 | 2.01 | 0.41 |
| 1:I:512:VAL:HG21 | 1:J:445:PHE:CB | 2.37 | 0.41 |
| 1:I:876:CYS:HB3 | 1:I:907:VAL:HG23 | 2.01 | 0.41 |
| 1:I:898:SER:O | 1:I:901:CYS:HB2 | 2.20 | 0.41 |
| 1:J:360:HIS:C | 1:J:361:LEU:HD23 | 2.40 | 0.41 |
| 1:J:379:LYS:HE2 | 1:J:379:LYS:HB3 | 1.94 | 0.41 |
| 1:J:528:PHE:CZ | 1:J:532:MET:HE3 | 2.55 | 0.41 |
| 1:J:657:LEU:HD23 | 1:J:663:HIS:CD2 | 2.56 | 0.41 |
| 1:J:937:LEU:HD22 | 1:J:967:SER:HB2 | 2.02 | 0.41 |
| 2:L:291:VAL:O | 2:L:295:MET:HG2 | 2.21 | 0.41 |
| 2:P:242:ASN:CG | 2:P:245:SER:HG | 2.18 | 0.41 |
| 2:R:227:TYR:OH | 2:R:256:PRO:O | 2.30 | 0.41 |
| 2:S:33:ASN:ND2 | 2:S:55:LEU:HB3 | 2.31 | 0.41 |
| 1:A:351:ARG:NH1 | 1:A:499:VAL:HG13 | 2.35 | 0.41 |
| 1:A:657:LEU:HD23 | 1:A:663:HIS:CD2 | 2.56 | 0.41 |
| 1:A:666:SER:O | 1:A:670:ILE:HG12 | 2.21 | 0.41 |
| 1:B:169:THR:HB | 1:B:373:PHE:HE1 | 1.86 | 0.41 |
| 1:B:403:GLU:OE1 | 1:B:403:GLU:HA | 2.20 | 0.41 |
| 1:B:534:TYR:CD2 | 1:B:561:LEU:HD22 | 2.56 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:B:637:MET:CE | 1:B:639:GLU:HB2 | 2.51 | 0.41 |
| 1:B:803:LEU:HD21 | 1:B:805:LEU:HD11 | 2.03 | 0.41 |
| 1:B:915:THR:O | 1:B:944:GLN:N | 2.34 | 0.41 |
| 1:B:937:LEU:HD22 | 1:B:967:SER:HB2 | 2.02 | 0.41 |
| 1:C:261:CYS:HB3 | 1:C:307:LEU:CD1 | 2.51 | 0.41 |
| 1:C:637:MET:CE | 1:C:639:GLU:HB2 | 2.51 | 0.41 |
| 1:C:666:SER:O | 1:C:670:ILE:HG12 | 2.21 | 0.41 |
| 1:C:793:VAL:O | 1:C:797:ASN:ND2 | 2.37 | 0.41 |
| 1:C:824:HIS:HE1 | 1:C:826:LEU:HG | 1.86 | 0.41 |
| 1:C:898:SER:O | 1:C:901:CYS:HB2 | 2.20 | 0.41 |
| 1:D:607:GLU:HA | 1:D:610:LYS:HG2 | 2.02 | 0.41 |
| 1:D:673:CYS:SG | 1:D:676:VAL:HB | 2.61 | 0.41 |
| 1:D:832:LEU:HD23 | 1:D:860:LEU:CD1 | 2.50 | 0.41 |
| 1:D:872:VAL:HG21 | 1:D:896:LEU:CD2 | 2.51 | 0.41 |
| 1:D:898:SER:O | 1:D:901:CYS:HB2 | 2.20 | 0.41 |
| 1:D:917:LEU:HG | 1:D:943:LEU:CD1 | 2.49 | 0.41 |
| 1:D:932:LEU:O | 1:D:936:LEU:HD12 | 2.20 | 0.41 |
| 1:E:154:ARG:HB2 | 1:E:416:TRP:CH2 | 2.56 | 0.41 |
| 1:E:297:ILE:CG2 | 1:E:298:LEU:N | 2.84 | 0.41 |
| 1:E:418:VAL:HG23 | 1:E:442:VAL:CG1 | 2.50 | 0.41 |
| 1:E:535:LEU:HD23 | 1:E:535:LEU:C | 2.40 | 0.41 |
| 1:E:595:LYS:HD3 | 1:E:595:LYS:HA | 1.66 | 0.41 |
| 1:E:609:LEU:CD2 | 1:E:645:ARG:HD2 | 2.50 | 0.41 |
| 1:E:932:LEU:O | 1:E:936:LEU:HD12 | 2.20 | 0.41 |
| 1:E:983:ASP:CB | 1:E:1014:THR:HG21 | 2.51 | 0.41 |
| 1:F:249:TYR:HB3 | 1:F:253:PHE:CE1 | 2.55 | 0.41 |
| 1:F:261:CYS:HB3 | 1:F:307:LEU:CD1 | 2.51 | 0.41 |
| 1:F:405:LEU:HD23 | 1:F:405:LEU:HA | 1.81 | 0.41 |
| 1:F:418:VAL:HG23 | 1:F:442:VAL:HG13 | 2.03 | 0.41 |
| 1:F:535:LEU:HD23 | 1:F:535:LEU:C | 2.40 | 0.41 |
| 1:F:876:CYS:HB3 | 1:F:907:VAL:HG23 | 2.01 | 0.41 |
| 1:G:494:LEU:HD13 | 1:G:494:LEU:HA | 1.80 | 0.41 |
| 1:G:637:MET:CE | 1:G:639:GLU:HB2 | 2.51 | 0.41 |
| 1:G:656:ASN:C | 1:G:657:LEU:HD12 | 2.41 | 0.41 |
| 1:G:657:LEU:CD2 | 1:G:663:HIS:HA | 2.50 | 0.41 |
| 1:H:154:ARG:HB2 | 1:H:416:TRP:CH2 | 2.55 | 0.41 |
| 1:H:167:ARG:HB3 | 1:H:167:ARG:HH11 | 1.79 | 0.41 |
| 1:H:298:LEU:HD12 | 1:H:345:SER:HB2 | 2.02 | 0.41 |
| 1:H:377:LYS:HD3 | 1:H:377:LYS:HA | 1.51 | 0.41 |
| 1:H:431:SER:O | 1:H:434:GLN:HG3 | 2.21 | 0.41 |
| 1:H:477:ILE:O | 1:H:572:TYR:HE2 | 2.04 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:H:513:ASP:N | 1:H:513:ASP:OD1 | 2.53 | 0.41 |
| 1:H:647:MET:HE2 | 1:H:669:CYS:CB | 2.48 | 0.41 |
| 1:H:657:LEU:CD2 | 1:H:663:HIS:HA | 2.50 | 0.41 |
| 1:I:496:LYS:O | 1:I:498:ASP:N | 2.53 | 0.41 |
| 1:I:509:GLN:HA | 1:I:514:CYS:CA | 2.50 | 0.41 |
| 1:I:552:LYS:N | 1:I:552:LYS:HE3 | 2.35 | 0.41 |
| 1:I:573:LEU:CA | 1:I:576:VAL:HG12 | 2.48 | 0.41 |
| 1:I:758:MET:CG | 1:I:782:LEU:HD22 | 2.51 | 0.41 |
| 1:I:810:LEU:HB2 | 1:I:839:LEU:HD21 | 2.01 | 0.41 |
| 1:J:193:THR:HA | 1:J:407:THR:HG21 | 2.03 | 0.41 |
| 1:J:194:LYS:HA | 1:J:194:LYS:HD2 | 1.79 | 0.41 |
| 1:J:195:THR:O | 1:J:195:THR:HG22 | 2.20 | 0.41 |
| 1:J:631:PHE:HA | 1:J:669:CYS:SG | 2.61 | 0.41 |
| 1:J:758:MET:HE3 | 1:J:758:MET:HA | 2.02 | 0.41 |
| 1:J:983:ASP:CB | 1:J:1014:THR:HG21 | 2.51 | 0.41 |
| 2:T:291:VAL:O | 2:T:295:MET:HG2 | 2.21 | 0.41 |
| 1:A:173:LEU:HD22 | 1:A:370:ILE:CG1 | 2.51 | 0.41 |
| 1:A:204:LYS:CG | 1:A:205:MET:N | 2.77 | 0.41 |
| 1:A:249:TYR:HB3 | 1:A:253:PHE:CE1 | 2.55 | 0.41 |
| 1:A:297:ILE:CG2 | 1:A:298:LEU:N | 2.84 | 0.41 |
| 1:A:379:LYS:HG3 | 1:A:396:PHE:CG | 2.55 | 0.41 |
| 1:A:386:PHE:CE2 | 1:A:395:ALA:HB1 | 2.55 | 0.41 |
| 1:A:418:VAL:HG23 | 1:A:442:VAL:CG1 | 2.50 | 0.41 |
| 1:A:469:LEU:HD21 | 1:A:520:PHE:CZ | 2.56 | 0.41 |
| 1:A:477:ILE:O | 1:A:572:TYR:HE2 | 2.04 | 0.41 |
| 1:A:496:LYS:O | 1:A:498:ASP:N | 2.54 | 0.41 |
| 1:A:509:GLN:HA | 1:A:514:CYS:CA | 2.50 | 0.41 |
| 1:A:565:TYR:CE1 | 1:A:574:ILE:HG12 | 2.56 | 0.41 |
| 1:A:637:MET:CE | 1:A:639:GLU:HB2 | 2.51 | 0.41 |
| 1:A:657:LEU:CD2 | 1:A:663:HIS:HA | 2.50 | 0.41 |
| 1:A:872:VAL:HG21 | 1:A:896:LEU:CD2 | 2.51 | 0.41 |
| 1:A:876:CYS:HB3 | 1:A:907:VAL:HG23 | 2.01 | 0.41 |
| 1:A:941:CYS:O | 1:A:942:LYS:HD3 | 2.21 | 0.41 |
| 1:B:154:ARG:HB2 | 1:B:416:TRP:CH2 | 2.56 | 0.41 |
| 1:B:173:LEU:HD22 | 1:B:370:ILE:CG1 | 2.51 | 0.41 |
| 1:B:288:HIS:CE1 | 1:B:322:TRP:CZ2 | 3.06 | 0.41 |
| 1:B:469:LEU:HD21 | 1:B:520:PHE:CZ | 2.56 | 0.41 |
| 1:B:651:PRO:HG3 | 1:B:675:ARG:HE | 1.86 | 0.41 |
| 1:B:775:LEU:CG | 1:B:777:LEU:HD11 | 2.34 | 0.41 |
| 1:B:802:GLU:C | 1:B:829:LEU:HD11 | 2.42 | 0.41 |
| 1:B:983:ASP:CB | 1:B:1014:THR:HG21 | 2.51 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:C:233:THR:HG23 | 1:C:302:ASP:OD2 | 2.20 | 0.41 |
| 1:C:362:LEU:HB3 | 1:C:365:PRO:CG | 2.48 | 0.41 |
| 1:C:386:PHE:CE2 | 1:C:395:ALA:HB1 | 2.55 | 0.41 |
| 1:C:448:SER:HA | 1:C:451:LEU:HD21 | 2.03 | 0.41 |
| 1:C:631:PHE:HA | 1:C:669:CYS:SG | 2.61 | 0.41 |
| 1:C:651:PRO:HG3 | 1:C:675:ARG:HE | 1.86 | 0.41 |
| 1:C:787:CYS:HA | 1:C:790:ILE:HD12 | 2.01 | 0.41 |
| 1:D:138:LYS:CA | 1:D:138:LYS:HE3 | 2.51 | 0.41 |
| 1:D:240:MET:HE2 | 1:D:258:TYR:CB | 2.47 | 0.41 |
| 1:D:275:LEU:HD12 | 1:D:275:LEU:HA | 1.91 | 0.41 |
| 1:D:418:VAL:HG23 | 1:D:442:VAL:CG1 | 2.50 | 0.41 |
| 1:D:478:TRP:O | 1:D:480:GLN:NE2 | 2.53 | 0.41 |
| 1:D:512:VAL:HG21 | 1:E:445:PHE:CB | 2.38 | 0.41 |
| 1:D:556:ARG:H | 1:D:556:ARG:HG2 | 1.63 | 0.41 |
| 1:D:616:ALA:HB1 | 1:D:649:TYR:HB2 | 2.01 | 0.41 |
| 1:D:666:SER:O | 1:D:670:ILE:HG12 | 2.21 | 0.41 |
| 1:D:793:VAL:O | 1:D:797:ASN:ND2 | 2.37 | 0.41 |
| 1:D:800:LEU:HG | 1:D:829:LEU:HD13 | 2.03 | 0.41 |
| 1:D:937:LEU:HD22 | 1:D:967:SER:HB2 | 2.02 | 0.41 |
| 1:D:983:ASP:CB | 1:D:1014:THR:HG21 | 2.51 | 0.41 |
| 1:E:169:THR:HB | 1:E:373:PHE:HE1 | 1.86 | 0.41 |
| 1:E:243:TRP:CG | 1:E:256:LEU:HD13 | 2.55 | 0.41 |
| 1:E:657:LEU:HD23 | 1:E:663:HIS:CD2 | 2.56 | 0.41 |
| 1:E:666:SER:O | 1:E:670:ILE:HG12 | 2.21 | 0.41 |
| 1:E:673:CYS:SG | 1:E:676:VAL:HB | 2.61 | 0.41 |
| 1:E:732:GLY:HA2 | 1:E:735:SER:OG | 2.20 | 0.41 |
| 1:E:758:MET:CG | 1:E:782:LEU:HD22 | 2.51 | 0.41 |
| 1:E:803:LEU:HD21 | 1:E:805:LEU:HD11 | 2.03 | 0.41 |
| 1:E:876:CYS:HB3 | 1:E:907:VAL:HG23 | 2.01 | 0.41 |
| 1:F:195:THR:HG22 | 1:F:195:THR:O | 2.20 | 0.41 |
| 1:F:243:TRP:CG | 1:F:256:LEU:HD13 | 2.55 | 0.41 |
| 1:F:297:ILE:CG2 | 1:F:298:LEU:N | 2.84 | 0.41 |
| 1:F:298:LEU:HD12 | 1:F:345:SER:HB2 | 2.02 | 0.41 |
| 1:F:431:SER:O | 1:F:434:GLN:HG3 | 2.21 | 0.41 |
| 1:F:446:PHE:HE1 | 1:F:450:LEU:HD21 | 1.85 | 0.41 |
| 1:F:601:SER:CB | 1:F:603:GLN:HE22 | 2.31 | 0.41 |
| 1:F:631:PHE:HA | 1:F:669:CYS:SG | 2.61 | 0.41 |
| 1:F:673:CYS:SG | 1:F:676:VAL:HB | 2.61 | 0.41 |
| 1:F:803:LEU:HD21 | 1:F:805:LEU:HD11 | 2.03 | 0.41 |
| 1:F:848:ALA:HB1 | 1:F:878:LYS:CB | 2.50 | 0.41 |
| 1:F:872:VAL:HG21 | 1:F:896:LEU:CD2 | 2.51 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:G:193:THR:HA | 1:G:407:THR:HG21 | 2.03 | 0.41 |
| 1:G:261:CYS:HB3 | 1:G:307:LEU:CD1 | 2.51 | 0.41 |
| 1:G:298:LEU:HD12 | 1:G:345:SER:HB2 | 2.02 | 0.41 |
| 1:G:315:ILE:H | 1:G:315:ILE:HG12 | 1.71 | 0.41 |
| 1:G:445:PHE:HA | 1:G:448:SER:OG | 2.20 | 0.41 |
| 1:G:469:LEU:HD21 | 1:G:520:PHE:CZ | 2.56 | 0.41 |
| 1:G:477:ILE:O | 1:G:572:TYR:HE2 | 2.04 | 0.41 |
| 1:G:552:LYS:N | 1:G:552:LYS:HE3 | 2.35 | 0.41 |
| 1:G:631:PHE:HA | 1:G:669:CYS:SG | 2.61 | 0.41 |
| 1:G:802:GLU:C | 1:G:829:LEU:HD11 | 2.42 | 0.41 |
| 1:G:896:LEU:N | 1:G:896:LEU:HD23 | 2.36 | 0.41 |
| 1:G:898:SER:O | 1:G:901:CYS:HB2 | 2.20 | 0.41 |
| 1:G:983:ASP:CB | 1:G:1014:THR:HG21 | 2.51 | 0.41 |
| 1:H:233:THR:HG23 | 1:H:302:ASP:OD2 | 2.20 | 0.41 |
| 1:H:418:VAL:HG23 | 1:H:442:VAL:CG1 | 2.50 | 0.41 |
| 1:H:631:PHE:HA | 1:H:669:CYS:SG | 2.61 | 0.41 |
| 1:H:803:LEU:HD21 | 1:H:805:LEU:HD11 | 2.03 | 0.41 |
| 1:I:224:PHE:HB2 | 1:I:349:THR:HG22 | 2.03 | 0.41 |
| 1:I:637:MET:CE | 1:I:639:GLU:HB2 | 2.51 | 0.41 |
| 1:I:832:LEU:HD23 | 1:I:860:LEU:CD1 | 2.50 | 0.41 |
| 1:I:861:TYR:OH | 1:I:888:LYS:HB2 | 2.21 | 0.41 |
| 1:J:138:LYS:CA | 1:J:138:LYS:HE3 | 2.51 | 0.41 |
| 1:J:469:LEU:HD21 | 1:J:520:PHE:CZ | 2.56 | 0.41 |
| 1:J:477:ILE:O | 1:J:572:TYR:HE2 | 2.04 | 0.41 |
| 1:J:535:LEU:HD23 | 1:J:535:LEU:C | 2.40 | 0.41 |
| 1:J:567:LYS:HB3 | 1:J:568:PHE:H | 1.42 | 0.41 |
| 1:J:628:LEU:HD13 | 1:J:655:ILE:HD13 | 2.03 | 0.41 |
| 1:J:673:CYS:SG | 1:J:676:VAL:HB | 2.61 | 0.41 |
| 1:J:758:MET:CG | 1:J:782:LEU:HD22 | 2.51 | 0.41 |
| 1:J:824:HIS:HE1 | 1:J:826:LEU:HG | 1.86 | 0.41 |
| 1:J:872:VAL:HG21 | 1:J:896:LEU:CD2 | 2.51 | 0.41 |
| 1:J:896:LEU:N | 1:J:896:LEU:HD23 | 2.36 | 0.41 |
| 1:J:919:LEU:CD2 | 1:J:924:LEU:HD11 | 2.45 | 0.41 |
| 1:J:941:CYS:O | 1:J:942:LYS:HD3 | 2.21 | 0.41 |
| 2:M:291:VAL:O | 2:M:295:MET:HG2 | 2.20 | 0.41 |
| 2:O:118:ASP:O | 2:O:122:MET:HE2 | 2.20 | 0.41 |
| 2:O:288:VAL:HA | 2:O:291:VAL:HG12 | 2.03 | 0.41 |
| 2:S:262:HIS:ND1 | 2:S:262:HIS:O | 2.53 | 0.41 |
| 1:A:261:CYS:HB3 | 1:A:307:LEU:CD1 | 2.51 | 0.41 |
| 1:A:298:LEU:HD12 | 1:A:345:SER:HB2 | 2.02 | 0.41 |
| 1:A:497:ALA:O | 1:A:499:VAL:N | 2.54 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:A:732:GLY:HA2 | 1:A:735:SER:OG | 2.20 | 0.41 |
| 1:A:775:LEU:CG | 1:A:777:LEU:HD11 | 2.34 | 0.41 |
| 1:B:193:THR:HA | 1:B:407:THR:HG21 | 2.03 | 0.41 |
| 1:B:297:ILE:CG2 | 1:B:298:LEU:N | 2.84 | 0.41 |
| 1:B:477:ILE:O | 1:B:572:TYR:HE2 | 2.04 | 0.41 |
| 1:B:628:LEU:HD13 | 1:B:655:ILE:HD13 | 2.03 | 0.41 |
| 1:B:815:ILE:CG1 | 1:B:839:LEU:HD13 | 2.46 | 0.41 |
| 1:B:872:VAL:HG21 | 1:B:896:LEU:CD2 | 2.51 | 0.41 |
| 1:C:138:LYS:CA | 1:C:138:LYS:HE3 | 2.51 | 0.41 |
| 1:C:239:MET:HE2 | 1:C:300:LEU:HD21 | 2.02 | 0.41 |
| 1:C:477:ILE:O | 1:C:572:TYR:HE2 | 2.04 | 0.41 |
| 1:C:673:CYS:SG | 1:C:676:VAL:HB | 2.61 | 0.41 |
| 1:C:872:VAL:HG21 | 1:C:896:LEU:CD2 | 2.51 | 0.41 |
| 1:D:257:PHE:CE2 | 1:D:276:ILE:HG23 | 2.56 | 0.41 |
| 1:D:428:SER:O | 1:D:428:SER:OG | 2.36 | 0.41 |
| 1:D:477:ILE:O | 1:D:572:TYR:HE2 | 2.04 | 0.41 |
| 1:D:534:TYR:CD2 | 1:D:561:LEU:HD22 | 2.56 | 0.41 |
| 1:D:651:PRO:HG3 | 1:D:675:ARG:HE | 1.86 | 0.41 |
| 1:D:657:LEU:HD23 | 1:D:663:HIS:CD2 | 2.56 | 0.41 |
| 1:E:153:ASP:OD1 | 1:E:167:ARG:NH2 | 2.51 | 0.41 |
| 1:E:257:PHE:CE2 | 1:E:276:ILE:HG23 | 2.56 | 0.41 |
| 1:E:528:PHE:CZ | 1:E:532:MET:HE3 | 2.56 | 0.41 |
| 1:E:552:LYS:NZ | 1:E:552:LYS:N | 2.60 | 0.41 |
| 1:F:251:ASP:O | 1:F:252:ARG:CB | 2.69 | 0.41 |
| 1:F:534:TYR:CD2 | 1:F:561:LEU:HD22 | 2.56 | 0.41 |
| 1:F:802:GLU:OE2 | 1:F:831:LYS:NZ | 2.45 | 0.41 |
| 1:F:804:ASP:OD1 | 1:F:806:SER:OG | 2.39 | 0.41 |
| 1:H:178:ARG:HG3 | 1:H:183:ARG:HH21 | 1.84 | 0.41 |
| 1:H:224:PHE:HB2 | 1:H:349:THR:HG22 | 2.03 | 0.41 |
| 1:H:249:TYR:HB3 | 1:H:253:PHE:CE1 | 2.55 | 0.41 |
| 1:H:383:PHE:CD1 | 1:H:383:PHE:N | 2.88 | 0.41 |
| 1:H:418:VAL:HG23 | 1:H:442:VAL:HG13 | 2.03 | 0.41 |
| 1:H:469:LEU:HD21 | 1:H:520:PHE:CZ | 2.56 | 0.41 |
| 1:H:537:GLU:OE2 | 1:H:601:SER:HB3 | 2.22 | 0.41 |
| 1:H:568:PHE:O | 1:H:568:PHE:CG | 2.74 | 0.41 |
| 1:H:628:LEU:HD13 | 1:H:655:ILE:HD11 | 2.03 | 0.41 |
| 1:H:896:LEU:N | 1:H:896:LEU:HD23 | 2.36 | 0.41 |
| 1:I:138:LYS:CA | 1:I:138:LYS:HE3 | 2.51 | 0.41 |
| 1:I:477:ILE:O | 1:I:572:TYR:HE2 | 2.04 | 0.41 |
| 1:I:631:PHE:HA | 1:I:669:CYS:SG | 2.61 | 0.41 |
| 1:I:983:ASP:CB | 1:I:1014:THR:HG21 | 2.51 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:J:191:GLY:CA | 1:J:522:HIS:CE1 | 3.03 | 0.41 |
| 2:O:291:VAL:O | 2:O:295:MET:HG2 | 2.21 | 0.41 |
| 2:P:288:VAL:HA | 2:P:291:VAL:HG12 | 2.03 | 0.41 |
| 2:S:118:ASP:O | 2:S:122:MET:HE3 | 2.21 | 0.41 |
| 1:A:138:LYS:CA | 1:A:138:LYS:HE3 | 2.51 | 0.40 |
| 1:A:919:LEU:HD21 | 1:A:924:LEU:CD2 | 2.52 | 0.40 |
| 1:B:194:LYS:HA | 1:B:194:LYS:HD2 | 1.79 | 0.40 |
| 1:B:414:VAL:O | 1:B:414:VAL:HG12 | 2.22 | 0.40 |
| 1:B:418:VAL:HG23 | 1:B:442:VAL:HG13 | 2.03 | 0.40 |
| 1:B:631:PHE:HA | 1:B:669:CYS:SG | 2.61 | 0.40 |
| 1:B:776:TRP:HD1 | 1:B:804:ASP:HB3 | 1.87 | 0.40 |
| 1:C:556:ARG:O | 1:C:558:VAL:N | 2.54 | 0.40 |
| 1:C:800:LEU:HG | 1:C:829:LEU:HD13 | 2.03 | 0.40 |
| 1:D:249:TYR:HB3 | 1:D:253:PHE:CE1 | 2.55 | 0.40 |
| 1:D:297:ILE:CG2 | 1:D:298:LEU:N | 2.84 | 0.40 |
| 1:D:431:SER:O | 1:D:434:GLN:HG3 | 2.21 | 0.40 |
| 1:D:445:PHE:HA | 1:D:448:SER:OG | 2.20 | 0.40 |
| 1:D:509:GLN:H | 1:D:509:GLN:HG3 | 1.79 | 0.40 |
| 1:D:802:GLU:C | 1:D:829:LEU:HD11 | 2.42 | 0.40 |
| 1:D:829:LEU:HD21 | 1:D:832:LEU:HD13 | 2.03 | 0.40 |
| 1:E:249:TYR:HB3 | 1:E:253:PHE:CE1 | 2.55 | 0.40 |
| 1:E:251:ASP:O | 1:E:252:ARG:CB | 2.69 | 0.40 |
| 1:E:288:HIS:HD1 | 1:E:322:TRP:HZ2 | 1.69 | 0.40 |
| 1:E:431:SER:O | 1:E:434:GLN:HG3 | 2.21 | 0.40 |
| 1:E:534:TYR:CD2 | 1:E:561:LEU:HD22 | 2.56 | 0.40 |
| 1:E:568:PHE:O | 1:E:568:PHE:CG | 2.74 | 0.40 |
| 1:E:616:ALA:HB1 | 1:E:649:TYR:HB2 | 2.01 | 0.40 |
| 1:E:631:PHE:HA | 1:E:669:CYS:SG | 2.61 | 0.40 |
| 1:E:651:PRO:HG3 | 1:E:675:ARG:HE | 1.86 | 0.40 |
| 1:F:193:THR:HA | 1:F:407:THR:HG21 | 2.03 | 0.40 |
| 1:F:257:PHE:CE2 | 1:F:276:ILE:HG23 | 2.56 | 0.40 |
| 1:F:469:LEU:HD21 | 1:F:520:PHE:CZ | 2.56 | 0.40 |
| 1:F:614:VAL:O | 1:F:617:LYS:HG3 | 2.21 | 0.40 |
| 1:F:628:LEU:HD13 | 1:F:655:ILE:HD11 | 2.03 | 0.40 |
| 1:F:666:SER:O | 1:F:670:ILE:HG12 | 2.21 | 0.40 |
| 1:F:758:MET:HE3 | 1:F:761:LEU:CB | 2.49 | 0.40 |
| 1:G:251:ASP:O | 1:G:252:ARG:CB | 2.69 | 0.40 |
| 1:G:613:GLU:HG2 | 1:G:649:TYR:CZ | 2.56 | 0.40 |
| 1:G:628:LEU:HD13 | 1:G:655:ILE:HD11 | 2.03 | 0.40 |
| 1:G:647:MET:HE2 | 1:G:669:CYS:O | 2.21 | 0.40 |
| 1:G:673:CYS:SG | 1:G:676:VAL:HB | 2.61 | 0.40 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:H:898:SER:O | 1:H:901:CYS:HB2 | 2.20 | 0.40 |
| 1:I:298:LEU:HD12 | 1:I:345:SER:HB2 | 2.02 | 0.40 |
| 1:I:614:VAL:O | 1:I:617:LYS:HG3 | 2.22 | 0.40 |
| 1:I:867:LEU:HD12 | 1:I:891:LEU:HD13 | 2.03 | 0.40 |
| 1:I:872:VAL:HG21 | 1:I:896:LEU:CD2 | 2.51 | 0.40 |
| 1:I:930:LYS:HZ1 | 1:I:931:LEU:HG | 1.86 | 0.40 |
| 1:J:298:LEU:HD12 | 1:J:345:SER:HB2 | 2.02 | 0.40 |
| 1:J:481:LYS:HB3 | 1:J:484:PHE:CE1 | 2.55 | 0.40 |
| 1:J:534:TYR:CD2 | 1:J:561:LEU:HD22 | 2.56 | 0.40 |
| 1:J:568:PHE:O | 1:J:568:PHE:CG | 2.74 | 0.40 |
| 1:J:867:LEU:HD12 | 1:J:891:LEU:HD13 | 2.03 | 0.40 |
| 2:Q:118:ASP:O | 2:Q:122:MET:HE3 | 2.20 | 0.40 |
| 1:A:169:THR:HB | 1:A:373:PHE:HE1 | 1.86 | 0.40 |
| 1:A:315:ILE:H | 1:A:315:ILE:HG12 | 1.72 | 0.40 |
| 1:A:478:TRP:O | 1:A:480:GLN:NE2 | 2.53 | 0.40 |
| 1:A:614:VAL:O | 1:A:617:LYS:HG3 | 2.21 | 0.40 |
| 1:A:758:MET:CG | 1:A:782:LEU:HD22 | 2.51 | 0.40 |
| 1:A:802:GLU:OE2 | 1:A:831:LYS:NZ | 2.45 | 0.40 |
| 1:B:192:LYS:HE2 | 1:B:192:LYS:HA | 2.03 | 0.40 |
| 1:B:233:THR:HG23 | 1:B:302:ASP:OD2 | 2.20 | 0.40 |
| 1:B:239:MET:HE2 | 1:B:300:LEU:HD21 | 2.02 | 0.40 |
| 1:B:552:LYS:N | 1:B:552:LYS:HE3 | 2.35 | 0.40 |
| 1:B:628:LEU:HD13 | 1:B:655:ILE:HD11 | 2.03 | 0.40 |
| 1:B:666:SER:O | 1:B:670:ILE:HG12 | 2.21 | 0.40 |
| 1:B:832:LEU:HD23 | 1:B:860:LEU:CD1 | 2.50 | 0.40 |
| 1:B:941:CYS:O | 1:B:942:LYS:HD3 | 2.21 | 0.40 |
| 1:C:481:LYS:HB3 | 1:C:484:PHE:CE1 | 2.55 | 0.40 |
| 1:C:592:LEU:CD1 | 1:C:596:LEU:HD11 | 2.49 | 0.40 |
| 1:C:628:LEU:HD13 | 1:C:655:ILE:HD11 | 2.03 | 0.40 |
| 1:C:657:LEU:CD2 | 1:C:663:HIS:HA | 2.50 | 0.40 |
| 1:C:829:LEU:HD21 | 1:C:832:LEU:HD13 | 2.03 | 0.40 |
| 1:D:195:THR:HG22 | 1:D:195:THR:O | 2.20 | 0.40 |
| 1:D:298:LEU:HD12 | 1:D:345:SER:HB2 | 2.02 | 0.40 |
| 1:D:631:PHE:HE1 | 1:D:650:PHE:CE1 | 2.40 | 0.40 |
| 1:D:758:MET:CG | 1:D:782:LEU:HD22 | 2.51 | 0.40 |
| 1:E:477:ILE:O | 1:E:572:TYR:HE2 | 2.04 | 0.40 |
| 1:E:800:LEU:HG | 1:E:829:LEU:HD13 | 2.04 | 0.40 |
| 1:E:824:HIS:HE1 | 1:E:826:LEU:HG | 1.86 | 0.40 |
| 1:E:861:TYR:OH | 1:E:888:LYS:HB2 | 2.21 | 0.40 |
| 1:E:896:LEU:N | 1:E:896:LEU:HD23 | 2.36 | 0.40 |
| 1:F:414:VAL:O | 1:F:414:VAL:HG12 | 2.22 | 0.40 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|-------------------|--------------------------|-------------------|
| 1:F:565:TYR:O | 1:F:565:TYR:CG | 2.70 | 0.40 |
| 1:F:609:LEU:CD2 | 1:F:645:ARG:HD2 | 2.50 | 0.40 |
| 1:F:973:LYS:HB2 | 1:F:973:LYS:HE3 | 1.58 | 0.40 |
| 1:G:154:ARG:HB2 | 1:G:416:TRP:CH2 | 2.55 | 0.40 |
| 1:G:243:TRP:CG | 1:G:256:LEU:HD13 | 2.55 | 0.40 |
| 1:G:657:LEU:HD23 | 1:G:663:HIS:CD2 | 2.56 | 0.40 |
| 1:G:872:VAL:HG21 | 1:G:896:LEU:CD2 | 2.51 | 0.40 |
| 1:G:917:LEU:HG | 1:G:943:LEU:CD1 | 2.49 | 0.40 |
| 1:G:941:CYS:O | 1:G:942:LYS:HD3 | 2.21 | 0.40 |
| 1:H:411:ILE:HB | 1:H:414:VAL:HB | 2.04 | 0.40 |
| 1:H:510:LYS:HB2 | 1:H:510:LYS:HE2 | 1.87 | 0.40 |
| 1:H:666:SER:O | 1:H:670:ILE:HG12 | 2.21 | 0.40 |
| 1:H:775:LEU:CG | 1:H:777:LEU:HD11 | 2.34 | 0.40 |
| 1:H:941:CYS:O | 1:H:942:LYS:HD3 | 2.21 | 0.40 |
| 1:I:249:TYR:HB3 | 1:I:253:PHE:CE1 | 2.55 | 0.40 |
| 1:I:297:ILE:CG2 | 1:I:298:LEU:N | 2.84 | 0.40 |
| 1:I:510:LYS:HB2 | 1:I:510:LYS:HE2 | 1.87 | 0.40 |
| 1:I:619:LYS:CB | 2:S:261:ASP:HB3 | 2.48 | 0.40 |
| 1:J:297:ILE:CG2 | 1:J:298:LEU:N | 2.84 | 0.40 |
| 1:J:613:GLU:HG2 | 1:J:649:TYR:CZ | 2.56 | 0.40 |
| 1:J:628:LEU:HD13 | 1:J:655:ILE:HD11 | 2.03 | 0.40 |
| 1:J:832:LEU:HD23 | 1:J:860:LEU:HD11 | 2.04 | 0.40 |
| 2:L:288:VAL:HA | 2:L:291:VAL:HG12 | 2.03 | 0.40 |
| 2:P:262:HIS:O | 2:P:262:HIS:ND1 | 2.53 | 0.40 |
| 1:A:192:LYS:HE2 | 1:A:192:LYS:HA | 2.04 | 0.40 |
| 1:A:418:VAL:HG23 | 1:A:442:VAL:HG13 | 2.03 | 0.40 |
| 1:A:511:GLU:OE1 | 1:A:511:GLU:HA | 2.22 | 0.40 |
| 1:A:537:GLU:OE2 | 1:A:601:SER:HB3 | 2.22 | 0.40 |
| 1:A:552:LYS:N | 1:A:552:LYS:HE3 | 2.35 | 0.40 |
| 1:A:617:LYS:O | 1:A:617:LYS:HE3 | 2.22 | 0.40 |
| 1:A:896:LEU:N | 1:A:896:LEU:HD23 | 2.36 | 0.40 |
| 1:B:261:CYS:HB3 | 1:B:307:LEU:CD1 | 2.51 | 0.40 |
| 1:B:386:PHE:CE2 | 1:B:395:ALA:HB1 | 2.55 | 0.40 |
| 1:B:565:TYR:CE1 | 1:B:574:ILE:HG12 | 2.57 | 0.40 |
| 1:B:617:LYS:HE3 | 1:B:617:LYS:O | 2.22 | 0.40 |
| 1:B:673:CYS:SG | 1:B:676:VAL:HB | 2.61 | 0.40 |
| 1:C:253:PHE:CZ | 1:C:298:LEU:HD13 | 2.57 | 0.40 |
| 1:C:298:LEU:HD12 | 1:C:345:SER:HB2 | 2.02 | 0.40 |
| 1:C:431:SER:O | 1:C:434:GLN:HG3 | 2.21 | 0.40 |
| 1:C:617:LYS:HE3 | 1:C:617:LYS:O | 2.22 | 0.40 |
| 1:C:983:ASP:CB | 1:C:1014:THR:HG21 | 2.51 | 0.40 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:D:243:TRP:CG | 1:D:256:LEU:HD13 | 2.55 | 0.40 |
| 1:D:251:ASP:O | 1:D:252:ARG:CB | 2.69 | 0.40 |
| 1:D:411:ILE:HB | 1:D:414:VAL:HB | 2.03 | 0.40 |
| 1:D:537:GLU:OE2 | 1:D:601:SER:HB3 | 2.22 | 0.40 |
| 1:D:631:PHE:HA | 1:D:669:CYS:SG | 2.61 | 0.40 |
| 1:E:194:LYS:O | 1:E:194:LYS:CG | 2.69 | 0.40 |
| 1:E:403:GLU:OE1 | 1:E:403:GLU:HA | 2.20 | 0.40 |
| 1:E:793:VAL:O | 1:E:797:ASN:ND2 | 2.37 | 0.40 |
| 1:F:192:LYS:HE2 | 1:F:192:LYS:HA | 2.04 | 0.40 |
| 1:F:194:LYS:O | 1:F:194:LYS:CG | 2.69 | 0.40 |
| 1:F:477:ILE:O | 1:F:572:TYR:HE2 | 2.04 | 0.40 |
| 1:F:776:TRP:HD1 | 1:F:804:ASP:HB3 | 1.87 | 0.40 |
| 1:F:802:GLU:C | 1:F:829:LEU:HD11 | 2.42 | 0.40 |
| 1:G:288:HIS:CE1 | 1:G:322:TRP:CZ2 | 3.06 | 0.40 |
| 1:G:477:ILE:HD12 | 1:G:477:ILE:HA | 1.85 | 0.40 |
| 1:G:829:LEU:HD21 | 1:G:832:LEU:HD13 | 2.03 | 0.40 |
| 1:H:193:THR:HA | 1:H:407:THR:HG21 | 2.03 | 0.40 |
| 1:H:194:LYS:O | 1:H:194:LYS:CG | 2.69 | 0.40 |
| 1:H:261:CYS:HB3 | 1:H:307:LEU:CD1 | 2.51 | 0.40 |
| 1:H:421:GLY:O | 1:H:425:GLN:OE1 | 2.40 | 0.40 |
| 1:H:502:PHE:CD2 | 1:H:502:PHE:N | 2.88 | 0.40 |
| 1:I:194:LYS:O | 1:I:194:LYS:CG | 2.69 | 0.40 |
| 1:I:481:LYS:HB3 | 1:I:484:PHE:CE1 | 2.55 | 0.40 |
| 1:I:613:GLU:HG2 | 1:I:649:TYR:CZ | 2.56 | 0.40 |
| 1:I:657:LEU:HD23 | 1:I:663:HIS:CD2 | 2.56 | 0.40 |
| 1:I:832:LEU:HD23 | 1:I:860:LEU:HD11 | 2.04 | 0.40 |
| 1:J:224:PHE:HB2 | 1:J:349:THR:HG22 | 2.03 | 0.40 |
| 1:J:257:PHE:CE2 | 1:J:276:ILE:HG23 | 2.56 | 0.40 |
| 1:J:431:SER:O | 1:J:434:GLN:HG3 | 2.21 | 0.40 |
| 1:J:617:LYS:HE3 | 1:J:617:LYS:O | 2.22 | 0.40 |
| 1:A:446:PHE:CE1 | 1:A:450:LEU:HD21 | 2.57 | 0.40 |
| 1:A:567:LYS:HZ3 | 1:A:567:LYS:HG2 | 1.59 | 0.40 |
| 1:B:253:PHE:CZ | 1:B:298:LEU:HD13 | 2.57 | 0.40 |
| 1:B:411:ILE:HB | 1:B:414:VAL:HB | 2.04 | 0.40 |
| 1:B:418:VAL:HG23 | 1:B:442:VAL:CG1 | 2.50 | 0.40 |
| 1:B:511:GLU:OE1 | 1:B:511:GLU:HA | 2.22 | 0.40 |
| 1:B:614:VAL:O | 1:B:617:LYS:HG3 | 2.21 | 0.40 |
| 1:B:824:HIS:HE1 | 1:B:826:LEU:HG | 1.86 | 0.40 |
| 1:B:896:LEU:N | 1:B:896:LEU:HD23 | 2.36 | 0.40 |
| 1:B:919:LEU:HD21 | 1:B:924:LEU:CD2 | 2.52 | 0.40 |
| 1:C:251:ASP:O | 1:C:252:ARG:CB | 2.69 | 0.40 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:C:257:PHE:CE2 | 1:C:276:ILE:HG23 | 2.56 | 0.40 |
| 1:C:411:ILE:HB | 1:C:414:VAL:HB | 2.04 | 0.40 |
| 1:C:446:PHE:CE1 | 1:C:450:LEU:HD21 | 2.57 | 0.40 |
| 1:C:502:PHE:O | 1:C:520:PHE:HA | 2.20 | 0.40 |
| 1:C:537:GLU:OE2 | 1:C:601:SER:HB3 | 2.21 | 0.40 |
| 1:C:758:MET:CG | 1:C:782:LEU:HD22 | 2.51 | 0.40 |
| 1:D:194:LYS:O | 1:D:194:LYS:CG | 2.69 | 0.40 |
| 1:D:288:HIS:ND1 | 1:D:322:TRP:HH2 | 2.06 | 0.40 |
| 1:D:628:LEU:HD13 | 1:D:655:ILE:HD11 | 2.03 | 0.40 |
| 1:D:803:LEU:HD21 | 1:D:805:LEU:HD11 | 2.03 | 0.40 |
| 1:E:138:LYS:CA | 1:E:138:LYS:HE3 | 2.51 | 0.40 |
| 1:E:168:TYR:HD1 | 3:E:1101:AGS:N6 | 2.18 | 0.40 |
| 1:E:537:GLU:OE2 | 1:E:601:SER:HB3 | 2.22 | 0.40 |
| 1:E:948:LEU:O | 1:E:951:CYS:HB2 | 2.22 | 0.40 |
| 1:F:173:LEU:HD22 | 1:F:370:ILE:CG1 | 2.51 | 0.40 |
| 1:F:552:LYS:N | 1:F:552:LYS:HE3 | 2.35 | 0.40 |
| 1:F:556:ARG:H | 1:F:556:ARG:HG2 | 1.63 | 0.40 |
| 1:G:192:LYS:HA | 1:G:192:LYS:HE2 | 2.03 | 0.40 |
| 1:G:194:LYS:O | 1:G:194:LYS:CG | 2.69 | 0.40 |
| 1:G:411:ILE:HB | 1:G:414:VAL:HB | 2.04 | 0.40 |
| 1:G:431:SER:O | 1:G:434:GLN:HG3 | 2.21 | 0.40 |
| 1:G:614:VAL:O | 1:G:617:LYS:HG3 | 2.22 | 0.40 |
| 1:G:616:ALA:HB1 | 1:G:649:TYR:HB2 | 2.01 | 0.40 |
| 1:H:158:LEU:HA | 1:H:158:LEU:HD12 | 1.84 | 0.40 |
| 1:H:195:THR:HG23 | 1:H:375:GLU:OE2 | 2.22 | 0.40 |
| 1:H:251:ASP:O | 1:H:252:ARG:CB | 2.69 | 0.40 |
| 1:H:336:ILE:CD1 | 1:H:348:ILE:HD11 | 2.50 | 0.40 |
| 1:H:613:GLU:HG2 | 1:H:649:TYR:CZ | 2.56 | 0.40 |
| 1:H:861:TYR:OH | 1:H:888:LYS:HB2 | 2.21 | 0.40 |
| 1:I:469:LEU:HD21 | 1:I:520:PHE:CZ | 2.56 | 0.40 |
| 1:I:534:TYR:CD2 | 1:I:561:LEU:HD22 | 2.56 | 0.40 |
| 1:I:568:PHE:O | 1:I:568:PHE:CG | 2.74 | 0.40 |
| 1:I:673:CYS:SG | 1:I:676:VAL:HB | 2.61 | 0.40 |
| 1:I:896:LEU:CB | 1:I:922:ASN:ND2 | 2.85 | 0.40 |
| 1:I:948:LEU:O | 1:I:951:CYS:HB2 | 2.22 | 0.40 |
| 1:J:192:LYS:HE2 | 1:J:192:LYS:HA | 2.03 | 0.40 |
| 1:J:194:LYS:O | 1:J:194:LYS:CG | 2.69 | 0.40 |
| 1:J:275:LEU:HD12 | 1:J:275:LEU:HA | 1.91 | 0.40 |
| 1:J:288:HIS:CE1 | 1:J:322:TRP:CZ2 | 3.06 | 0.40 |
| 1:J:509:GLN:HA | 1:J:514:CYS:CA | 2.50 | 0.40 |
| 1:J:509:GLN:H | 1:J:509:GLN:HG3 | 1.79 | 0.40 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:J:802:GLU:C | 1:J:829:LEU:HD11 | 2.42 | 0.40 |
| 2:M:118:ASP:O | 2:M:122:MET:HE3 | 2.21 | 0.40 |
| 2:P:109:ILE:CG2 | 2:P:111:LEU:HD21 | 2.52 | 0.40 |
| 2:Q:288:VAL:HA | 2:Q:291:VAL:HG12 | 2.03 | 0.40 |
| 2:T:242:ASN:OD1 | 2:T:245:SER:OG | 2.21 | 0.40 |
| 1:A:220:HIS:HB3 | 1:A:338:LYS:HZ1 | 1.86 | 0.40 |
| 1:A:288:HIS:HD1 | 1:A:322:TRP:HZ2 | 1.69 | 0.40 |
| 1:A:411:ILE:HB | 1:A:414:VAL:HB | 2.03 | 0.40 |
| 1:A:595:LYS:HA | 1:A:595:LYS:HD3 | 1.66 | 0.40 |
| 1:A:651:PRO:HG3 | 1:A:675:ARG:HE | 1.86 | 0.40 |
| 1:A:776:TRP:HD1 | 1:A:804:ASP:HB3 | 1.86 | 0.40 |
| 1:B:251:ASP:O | 1:B:252:ARG:CB | 2.69 | 0.40 |
| 1:B:509:GLN:HA | 1:B:514:CYS:CA | 2.50 | 0.40 |
| 1:B:758:MET:CG | 1:B:782:LEU:HD22 | 2.51 | 0.40 |
| 1:B:937:LEU:HG | 1:B:964:LEU:HD12 | 2.04 | 0.40 |
| 1:C:414:VAL:O | 1:C:414:VAL:HG12 | 2.22 | 0.40 |
| 1:C:896:LEU:N | 1:C:896:LEU:HD23 | 2.36 | 0.40 |
| 1:C:919:LEU:HD22 | 1:C:924:LEU:CD1 | 2.45 | 0.40 |
| 1:C:948:LEU:O | 1:C:951:CYS:HB2 | 2.22 | 0.40 |
| 1:D:224:PHE:HB2 | 1:D:349:THR:HG22 | 2.03 | 0.40 |
| 1:D:326:GLU:CG | 1:D:331:LEU:HD12 | 2.41 | 0.40 |
| 1:D:446:PHE:CE1 | 1:D:450:LEU:HD21 | 2.57 | 0.40 |
| 1:D:471:SER:HG | 1:D:553:LEU:HD11 | 1.86 | 0.40 |
| 1:D:614:VAL:O | 1:D:617:LYS:HG3 | 2.22 | 0.40 |
| 1:D:624:GLN:CB | 1:D:625:PRO:CD | 2.81 | 0.40 |
| 1:D:824:HIS:HE1 | 1:D:826:LEU:HG | 1.86 | 0.40 |
| 1:E:192:LYS:HE2 | 1:E:192:LYS:HA | 2.04 | 0.40 |
| 1:E:298:LEU:HD12 | 1:E:345:SER:HB2 | 2.02 | 0.40 |
| 1:E:414:VAL:O | 1:E:414:VAL:HG12 | 2.22 | 0.40 |
| 1:E:418:VAL:HG23 | 1:E:442:VAL:HG13 | 2.03 | 0.40 |
| 1:E:614:VAL:O | 1:E:617:LYS:HG3 | 2.21 | 0.40 |
| 1:E:628:LEU:HD13 | 1:E:655:ILE:HD11 | 2.03 | 0.40 |
| 1:F:195:THR:HG23 | 1:F:375:GLU:OE2 | 2.22 | 0.40 |
| 1:F:568:PHE:O | 1:F:568:PHE:CG | 2.74 | 0.40 |
| 1:F:651:PRO:HG3 | 1:F:675:ARG:HE | 1.86 | 0.40 |
| 1:F:824:HIS:HE1 | 1:F:826:LEU:HG | 1.86 | 0.40 |
| 1:G:421:GLY:O | 1:G:425:GLN:OE1 | 2.40 | 0.40 |
| 1:G:776:TRP:HD1 | 1:G:804:ASP:HB3 | 1.87 | 0.40 |
| 1:H:489:LEU:HD23 | 1:H:494:LEU:HB3 | 1.98 | 0.40 |
| 1:I:379:LYS:HE2 | 1:I:379:LYS:HB3 | 1.94 | 0.40 |
| 1:I:628:LEU:HD13 | 1:I:655:ILE:HD13 | 2.03 | 0.40 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 1:I:776:TRP:HD1 | 1:I:804:ASP:HB3 | 1.87 | 0.40 |
| 1:I:941:CYS:O | 1:I:942:LYS:HD3 | 2.21 | 0.40 |
| 1:J:195:THR:HG23 | 1:J:375:GLU:OE2 | 2.22 | 0.40 |
| 1:J:418:VAL:HG23 | 1:J:442:VAL:HG13 | 2.03 | 0.40 |
| 1:J:737:LEU:O | 1:J:740:SER:HB3 | 2.22 | 0.40 |
| 1:J:948:LEU:O | 1:J:951:CYS:HB2 | 2.22 | 0.40 |
| 2:R:288:VAL:HA | 2:R:291:VAL:HG12 | 2.03 | 0.40 |
| 2:S:284:ASP:OD1 | 2:S:285:VAL:N | 2.52 | 0.40 |
| 2:T:288:VAL:HA | 2:T:291:VAL:HG12 | 2.03 | 0.40 |

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 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 EM 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 | 844/902 (94%) | 767 (91%) | 67 (8%) | 10 (1%) | 13 | 41 |
| 1 | B | 844/902 (94%) | 764 (90%) | 70 (8%) | 10 (1%) | 13 | 41 |
| 1 | C | 844/902 (94%) | 762 (90%) | 73 (9%) | 9 (1%) | 14 | 44 |
| 1 | D | 844/902 (94%) | 764 (90%) | 69 (8%) | 11 (1%) | 12 | 39 |
| 1 | E | 844/902 (94%) | 765 (91%) | 68 (8%) | 11 (1%) | 12 | 39 |
| 1 | F | 844/902 (94%) | 765 (91%) | 68 (8%) | 11 (1%) | 12 | 39 |
| 1 | G | 844/902 (94%) | 766 (91%) | 67 (8%) | 11 (1%) | 12 | 39 |
| 1 | H | 844/902 (94%) | 765 (91%) | 69 (8%) | 10 (1%) | 13 | 41 |
| 1 | I | 844/902 (94%) | 765 (91%) | 68 (8%) | 11 (1%) | 12 | 39 |
| 1 | J | 844/902 (94%) | 765 (91%) | 68 (8%) | 11 (1%) | 12 | 39 |
| 2 | K | 257/278 (92%) | 248 (96%) | 8 (3%) | 1 (0%) | 34 | 67 |
| 2 | L | 257/278 (92%) | 247 (96%) | 9 (4%) | 1 (0%) | 34 | 67 |
| 2 | M | 257/278 (92%) | 248 (96%) | 8 (3%) | 1 (0%) | 34 | 67 |

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| Mol | Chain | Analysed | Favoured | Allowed | Outliers | Percentiles | |
|-----|-------|-------------------|-------------|----------|----------|-------------|----|
| 2 | N | 257/278 (92%) | 248 (96%) | 8 (3%) | 1 (0%) | 34 | 67 |
| 2 | O | 257/278 (92%) | 248 (96%) | 8 (3%) | 1 (0%) | 34 | 67 |
| 2 | P | 257/278 (92%) | 248 (96%) | 8 (3%) | 1 (0%) | 34 | 67 |
| 2 | Q | 257/278 (92%) | 248 (96%) | 8 (3%) | 1 (0%) | 34 | 67 |
| 2 | R | 257/278 (92%) | 246 (96%) | 10 (4%) | 1 (0%) | 34 | 67 |
| 2 | S | 257/278 (92%) | 248 (96%) | 8 (3%) | 1 (0%) | 34 | 67 |
| 2 | T | 257/278 (92%) | 248 (96%) | 8 (3%) | 1 (0%) | 34 | 67 |
| All | All | 11010/11800 (93%) | 10125 (92%) | 770 (7%) | 115 (1%) | 20 | 46 |

All (115) Ramachandran outliers are listed below:

| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 1 | A | 355 | LEU |
| 1 | A | 497 | ALA |
| 1 | A | 622 | GLN |
| 1 | B | 355 | LEU |
| 1 | B | 622 | GLN |
| 1 | C | 355 | LEU |
| 1 | C | 622 | GLN |
| 1 | D | 355 | LEU |
| 1 | D | 622 | GLN |
| 1 | E | 355 | LEU |
| 1 | E | 497 | ALA |
| 1 | E | 567 | LYS |
| 1 | E | 622 | GLN |
| 1 | F | 355 | LEU |
| 1 | F | 497 | ALA |
| 1 | F | 567 | LYS |
| 1 | F | 622 | GLN |
| 1 | G | 355 | LEU |
| 1 | G | 497 | ALA |
| 1 | G | 622 | GLN |
| 1 | H | 355 | LEU |
| 1 | H | 567 | LYS |
| 1 | H | 622 | GLN |
| 1 | I | 355 | LEU |
| 1 | I | 497 | ALA |
| 1 | I | 567 | LYS |
| 1 | I | 622 | GLN |
| 1 | J | 355 | LEU |

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| Mol | Chain | Res | Type |
|------------|--------------|------------|-------------|
| 1 | J | 497 | ALA |
| 1 | J | 567 | LYS |
| 1 | J | 622 | GLN |
| 2 | K | 86 | LEU |
| 2 | L | 86 | LEU |
| 2 | M | 86 | LEU |
| 2 | N | 86 | LEU |
| 2 | O | 86 | LEU |
| 2 | P | 86 | LEU |
| 2 | Q | 86 | LEU |
| 2 | R | 86 | LEU |
| 2 | S | 86 | LEU |
| 2 | T | 86 | LEU |
| 1 | A | 498 | ASP |
| 1 | A | 556 | ARG |
| 1 | B | 497 | ALA |
| 1 | B | 556 | ARG |
| 1 | B | 568 | PHE |
| 1 | C | 497 | ALA |
| 1 | D | 497 | ALA |
| 1 | D | 556 | ARG |
| 1 | D | 567 | LYS |
| 1 | E | 498 | ASP |
| 1 | E | 556 | ARG |
| 1 | F | 498 | ASP |
| 1 | F | 556 | ARG |
| 1 | G | 498 | ASP |
| 1 | G | 556 | ARG |
| 1 | G | 567 | LYS |
| 1 | H | 497 | ALA |
| 1 | H | 556 | ARG |
| 1 | I | 498 | ASP |
| 1 | I | 556 | ARG |
| 1 | J | 498 | ASP |
| 1 | J | 556 | ARG |
| 1 | A | 624 | GLN |
| 1 | B | 624 | GLN |
| 1 | C | 557 | ASP |
| 1 | C | 624 | GLN |
| 1 | D | 624 | GLN |
| 1 | E | 624 | GLN |
| 1 | F | 624 | GLN |

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| Mol | Chain | Res | Type |
|------------|--------------|------------|-------------|
| 1 | G | 624 | GLN |
| 1 | H | 624 | GLN |
| 1 | I | 624 | GLN |
| 1 | J | 624 | GLN |
| 1 | A | 213 | ASP |
| 1 | B | 213 | ASP |
| 1 | C | 213 | ASP |
| 1 | D | 213 | ASP |
| 1 | E | 213 | ASP |
| 1 | F | 213 | ASP |
| 1 | G | 213 | ASP |
| 1 | H | 213 | ASP |
| 1 | I | 213 | ASP |
| 1 | J | 213 | ASP |
| 1 | A | 134 | LYS |
| 1 | B | 134 | LYS |
| 1 | C | 134 | LYS |
| 1 | D | 134 | LYS |
| 1 | E | 134 | LYS |
| 1 | F | 134 | LYS |
| 1 | G | 134 | LYS |
| 1 | H | 134 | LYS |
| 1 | I | 134 | LYS |
| 1 | J | 134 | LYS |
| 1 | A | 493 | GLY |
| 1 | D | 493 | GLY |
| 1 | F | 493 | GLY |
| 1 | B | 493 | GLY |
| 1 | C | 493 | GLY |
| 1 | D | 625 | PRO |
| 1 | E | 493 | GLY |
| 1 | G | 493 | GLY |
| 1 | H | 493 | GLY |
| 1 | I | 493 | GLY |
| 1 | J | 493 | GLY |
| 1 | A | 651 | PRO |
| 1 | B | 651 | PRO |
| 1 | C | 651 | PRO |
| 1 | D | 651 | PRO |
| 1 | E | 651 | PRO |
| 1 | F | 651 | PRO |
| 1 | G | 651 | PRO |

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| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 1 | H | 651 | PRO |
| 1 | I | 651 | PRO |
| 1 | J | 651 | PRO |

5.3.2 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 EM 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 | 759/815 (93%) | 724 (95%) | 35 (5%) | 27 | 57 |
| 1 | B | 759/815 (93%) | 724 (95%) | 35 (5%) | 27 | 57 |
| 1 | C | 759/815 (93%) | 723 (95%) | 36 (5%) | 26 | 57 |
| 1 | D | 759/815 (93%) | 726 (96%) | 33 (4%) | 29 | 59 |
| 1 | E | 759/815 (93%) | 727 (96%) | 32 (4%) | 30 | 59 |
| 1 | F | 759/815 (93%) | 727 (96%) | 32 (4%) | 30 | 59 |
| 1 | G | 759/815 (93%) | 726 (96%) | 33 (4%) | 29 | 59 |
| 1 | H | 759/815 (93%) | 726 (96%) | 33 (4%) | 29 | 59 |
| 1 | I | 759/815 (93%) | 727 (96%) | 32 (4%) | 30 | 59 |
| 1 | J | 759/815 (93%) | 726 (96%) | 33 (4%) | 29 | 59 |
| 2 | K | 150/245 (61%) | 144 (96%) | 6 (4%) | 31 | 60 |
| 2 | L | 150/245 (61%) | 144 (96%) | 6 (4%) | 31 | 60 |
| 2 | M | 150/245 (61%) | 144 (96%) | 6 (4%) | 31 | 60 |
| 2 | N | 150/245 (61%) | 144 (96%) | 6 (4%) | 31 | 60 |
| 2 | O | 150/245 (61%) | 143 (95%) | 7 (5%) | 26 | 57 |
| 2 | P | 150/245 (61%) | 144 (96%) | 6 (4%) | 31 | 60 |
| 2 | Q | 150/245 (61%) | 144 (96%) | 6 (4%) | 31 | 60 |
| 2 | R | 150/245 (61%) | 144 (96%) | 6 (4%) | 31 | 60 |
| 2 | S | 150/245 (61%) | 144 (96%) | 6 (4%) | 31 | 60 |
| 2 | T | 150/245 (61%) | 144 (96%) | 6 (4%) | 31 | 60 |
| All | All | 9090/10600 (86%) | 8695 (96%) | 395 (4%) | 33 | 59 |

All (395) residues with a non-rotameric sidechain are listed below:

| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 1 | A | 134 | LYS |
| 1 | A | 135 | ASP |
| 1 | A | 166 | LYS |
| 1 | A | 201 | SER |
| 1 | A | 214 | GLU |
| 1 | A | 215 | HIS |
| 1 | A | 253 | PHE |
| 1 | A | 262 | ARG |
| 1 | A | 308 | GLN |
| 1 | A | 314 | HIS |
| 1 | A | 405 | LEU |
| 1 | A | 436 | SER |
| 1 | A | 465 | HIS |
| 1 | A | 472 | LEU |
| 1 | A | 494 | LEU |
| 1 | A | 495 | GLN |
| 1 | A | 502 | PHE |
| 1 | A | 504 | ARG |
| 1 | A | 525 | PHE |
| 1 | A | 551 | LEU |
| 1 | A | 552 | LYS |
| 1 | A | 556 | ARG |
| 1 | A | 560 | VAL |
| 1 | A | 562 | LEU |
| 1 | A | 563 | GLU |
| 1 | A | 567 | LYS |
| 1 | A | 617 | LYS |
| 1 | A | 623 | ILE |
| 1 | A | 624 | GLN |
| 1 | A | 635 | TYR |
| 1 | A | 652 | LYS |
| 1 | A | 748 | LEU |
| 1 | A | 755 | ASP |
| 1 | A | 758 | MET |
| 1 | A | 797 | ASN |
| 1 | B | 134 | LYS |
| 1 | B | 135 | ASP |
| 1 | B | 166 | LYS |
| 1 | B | 201 | SER |
| 1 | B | 214 | GLU |
| 1 | B | 215 | HIS |
| 1 | B | 253 | PHE |

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| Mol | Chain | Res | Type |
|------------|--------------|------------|-------------|
| 1 | B | 262 | ARG |
| 1 | B | 308 | GLN |
| 1 | B | 314 | HIS |
| 1 | B | 337 | ARG |
| 1 | B | 436 | SER |
| 1 | B | 465 | HIS |
| 1 | B | 472 | LEU |
| 1 | B | 494 | LEU |
| 1 | B | 495 | GLN |
| 1 | B | 498 | ASP |
| 1 | B | 502 | PHE |
| 1 | B | 504 | ARG |
| 1 | B | 525 | PHE |
| 1 | B | 551 | LEU |
| 1 | B | 552 | LYS |
| 1 | B | 556 | ARG |
| 1 | B | 564 | ASN |
| 1 | B | 565 | TYR |
| 1 | B | 567 | LYS |
| 1 | B | 617 | LYS |
| 1 | B | 623 | ILE |
| 1 | B | 624 | GLN |
| 1 | B | 635 | TYR |
| 1 | B | 652 | LYS |
| 1 | B | 748 | LEU |
| 1 | B | 755 | ASP |
| 1 | B | 758 | MET |
| 1 | B | 797 | ASN |
| 1 | C | 134 | LYS |
| 1 | C | 135 | ASP |
| 1 | C | 166 | LYS |
| 1 | C | 201 | SER |
| 1 | C | 214 | GLU |
| 1 | C | 215 | HIS |
| 1 | C | 253 | PHE |
| 1 | C | 262 | ARG |
| 1 | C | 308 | GLN |
| 1 | C | 314 | HIS |
| 1 | C | 337 | ARG |
| 1 | C | 436 | SER |
| 1 | C | 465 | HIS |
| 1 | C | 472 | LEU |

Continued on next page...

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| Mol | Chain | Res | Type |
|------------|--------------|------------|-------------|
| 1 | C | 494 | LEU |
| 1 | C | 495 | GLN |
| 1 | C | 498 | ASP |
| 1 | C | 502 | PHE |
| 1 | C | 504 | ARG |
| 1 | C | 525 | PHE |
| 1 | C | 551 | LEU |
| 1 | C | 552 | LYS |
| 1 | C | 556 | ARG |
| 1 | C | 558 | VAL |
| 1 | C | 562 | LEU |
| 1 | C | 563 | GLU |
| 1 | C | 564 | ASN |
| 1 | C | 565 | TYR |
| 1 | C | 617 | LYS |
| 1 | C | 623 | ILE |
| 1 | C | 635 | TYR |
| 1 | C | 652 | LYS |
| 1 | C | 748 | LEU |
| 1 | C | 755 | ASP |
| 1 | C | 758 | MET |
| 1 | C | 797 | ASN |
| 1 | D | 134 | LYS |
| 1 | D | 135 | ASP |
| 1 | D | 166 | LYS |
| 1 | D | 201 | SER |
| 1 | D | 214 | GLU |
| 1 | D | 215 | HIS |
| 1 | D | 253 | PHE |
| 1 | D | 262 | ARG |
| 1 | D | 308 | GLN |
| 1 | D | 314 | HIS |
| 1 | D | 337 | ARG |
| 1 | D | 436 | SER |
| 1 | D | 465 | HIS |
| 1 | D | 472 | LEU |
| 1 | D | 494 | LEU |
| 1 | D | 495 | GLN |
| 1 | D | 498 | ASP |
| 1 | D | 502 | PHE |
| 1 | D | 504 | ARG |
| 1 | D | 525 | PHE |

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| Mol | Chain | Res | Type |
|------------|--------------|------------|-------------|
| 1 | D | 551 | LEU |
| 1 | D | 552 | LYS |
| 1 | D | 556 | ARG |
| 1 | D | 565 | TYR |
| 1 | D | 567 | LYS |
| 1 | D | 617 | LYS |
| 1 | D | 623 | ILE |
| 1 | D | 635 | TYR |
| 1 | D | 652 | LYS |
| 1 | D | 748 | LEU |
| 1 | D | 755 | ASP |
| 1 | D | 758 | MET |
| 1 | D | 797 | ASN |
| 1 | E | 134 | LYS |
| 1 | E | 135 | ASP |
| 1 | E | 166 | LYS |
| 1 | E | 201 | SER |
| 1 | E | 214 | GLU |
| 1 | E | 215 | HIS |
| 1 | E | 253 | PHE |
| 1 | E | 262 | ARG |
| 1 | E | 308 | GLN |
| 1 | E | 314 | HIS |
| 1 | E | 337 | ARG |
| 1 | E | 436 | SER |
| 1 | E | 465 | HIS |
| 1 | E | 472 | LEU |
| 1 | E | 494 | LEU |
| 1 | E | 495 | GLN |
| 1 | E | 502 | PHE |
| 1 | E | 504 | ARG |
| 1 | E | 525 | PHE |
| 1 | E | 551 | LEU |
| 1 | E | 552 | LYS |
| 1 | E | 556 | ARG |
| 1 | E | 565 | TYR |
| 1 | E | 567 | LYS |
| 1 | E | 617 | LYS |
| 1 | E | 623 | ILE |
| 1 | E | 635 | TYR |
| 1 | E | 652 | LYS |
| 1 | E | 748 | LEU |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type |
|------------|--------------|------------|-------------|
| 1 | E | 755 | ASP |
| 1 | E | 758 | MET |
| 1 | E | 797 | ASN |
| 1 | F | 134 | LYS |
| 1 | F | 135 | ASP |
| 1 | F | 166 | LYS |
| 1 | F | 201 | SER |
| 1 | F | 214 | GLU |
| 1 | F | 215 | HIS |
| 1 | F | 253 | PHE |
| 1 | F | 262 | ARG |
| 1 | F | 308 | GLN |
| 1 | F | 314 | HIS |
| 1 | F | 337 | ARG |
| 1 | F | 436 | SER |
| 1 | F | 465 | HIS |
| 1 | F | 472 | LEU |
| 1 | F | 494 | LEU |
| 1 | F | 495 | GLN |
| 1 | F | 502 | PHE |
| 1 | F | 504 | ARG |
| 1 | F | 525 | PHE |
| 1 | F | 551 | LEU |
| 1 | F | 552 | LYS |
| 1 | F | 556 | ARG |
| 1 | F | 565 | TYR |
| 1 | F | 567 | LYS |
| 1 | F | 617 | LYS |
| 1 | F | 623 | ILE |
| 1 | F | 635 | TYR |
| 1 | F | 652 | LYS |
| 1 | F | 748 | LEU |
| 1 | F | 755 | ASP |
| 1 | F | 758 | MET |
| 1 | F | 797 | ASN |
| 1 | G | 134 | LYS |
| 1 | G | 135 | ASP |
| 1 | G | 166 | LYS |
| 1 | G | 201 | SER |
| 1 | G | 214 | GLU |
| 1 | G | 215 | HIS |
| 1 | G | 253 | PHE |

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Continued from previous page...

| Mol | Chain | Res | Type |
|------------|--------------|------------|-------------|
| 1 | G | 262 | ARG |
| 1 | G | 308 | GLN |
| 1 | G | 314 | HIS |
| 1 | G | 337 | ARG |
| 1 | G | 436 | SER |
| 1 | G | 465 | HIS |
| 1 | G | 472 | LEU |
| 1 | G | 494 | LEU |
| 1 | G | 495 | GLN |
| 1 | G | 498 | ASP |
| 1 | G | 502 | PHE |
| 1 | G | 504 | ARG |
| 1 | G | 525 | PHE |
| 1 | G | 551 | LEU |
| 1 | G | 552 | LYS |
| 1 | G | 556 | ARG |
| 1 | G | 565 | TYR |
| 1 | G | 567 | LYS |
| 1 | G | 617 | LYS |
| 1 | G | 623 | ILE |
| 1 | G | 635 | TYR |
| 1 | G | 652 | LYS |
| 1 | G | 748 | LEU |
| 1 | G | 755 | ASP |
| 1 | G | 758 | MET |
| 1 | G | 797 | ASN |
| 1 | H | 134 | LYS |
| 1 | H | 135 | ASP |
| 1 | H | 166 | LYS |
| 1 | H | 201 | SER |
| 1 | H | 214 | GLU |
| 1 | H | 215 | HIS |
| 1 | H | 253 | PHE |
| 1 | H | 262 | ARG |
| 1 | H | 308 | GLN |
| 1 | H | 314 | HIS |
| 1 | H | 337 | ARG |
| 1 | H | 436 | SER |
| 1 | H | 465 | HIS |
| 1 | H | 472 | LEU |
| 1 | H | 494 | LEU |
| 1 | H | 495 | GLN |

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Continued from previous page...

| Mol | Chain | Res | Type |
|------------|--------------|------------|-------------|
| 1 | H | 498 | ASP |
| 1 | H | 502 | PHE |
| 1 | H | 504 | ARG |
| 1 | H | 525 | PHE |
| 1 | H | 551 | LEU |
| 1 | H | 552 | LYS |
| 1 | H | 556 | ARG |
| 1 | H | 565 | TYR |
| 1 | H | 567 | LYS |
| 1 | H | 617 | LYS |
| 1 | H | 623 | ILE |
| 1 | H | 635 | TYR |
| 1 | H | 652 | LYS |
| 1 | H | 748 | LEU |
| 1 | H | 755 | ASP |
| 1 | H | 758 | MET |
| 1 | H | 797 | ASN |
| 1 | I | 134 | LYS |
| 1 | I | 135 | ASP |
| 1 | I | 166 | LYS |
| 1 | I | 201 | SER |
| 1 | I | 214 | GLU |
| 1 | I | 215 | HIS |
| 1 | I | 253 | PHE |
| 1 | I | 262 | ARG |
| 1 | I | 308 | GLN |
| 1 | I | 314 | HIS |
| 1 | I | 337 | ARG |
| 1 | I | 436 | SER |
| 1 | I | 465 | HIS |
| 1 | I | 472 | LEU |
| 1 | I | 494 | LEU |
| 1 | I | 495 | GLN |
| 1 | I | 502 | PHE |
| 1 | I | 504 | ARG |
| 1 | I | 525 | PHE |
| 1 | I | 551 | LEU |
| 1 | I | 552 | LYS |
| 1 | I | 556 | ARG |
| 1 | I | 565 | TYR |
| 1 | I | 567 | LYS |
| 1 | I | 617 | LYS |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type |
|------------|--------------|------------|-------------|
| 1 | I | 623 | ILE |
| 1 | I | 635 | TYR |
| 1 | I | 652 | LYS |
| 1 | I | 748 | LEU |
| 1 | I | 755 | ASP |
| 1 | I | 758 | MET |
| 1 | I | 797 | ASN |
| 1 | J | 134 | LYS |
| 1 | J | 135 | ASP |
| 1 | J | 166 | LYS |
| 1 | J | 201 | SER |
| 1 | J | 214 | GLU |
| 1 | J | 215 | HIS |
| 1 | J | 253 | PHE |
| 1 | J | 262 | ARG |
| 1 | J | 308 | GLN |
| 1 | J | 314 | HIS |
| 1 | J | 337 | ARG |
| 1 | J | 436 | SER |
| 1 | J | 465 | HIS |
| 1 | J | 472 | LEU |
| 1 | J | 494 | LEU |
| 1 | J | 495 | GLN |
| 1 | J | 498 | ASP |
| 1 | J | 502 | PHE |
| 1 | J | 504 | ARG |
| 1 | J | 525 | PHE |
| 1 | J | 551 | LEU |
| 1 | J | 552 | LYS |
| 1 | J | 556 | ARG |
| 1 | J | 565 | TYR |
| 1 | J | 567 | LYS |
| 1 | J | 617 | LYS |
| 1 | J | 623 | ILE |
| 1 | J | 635 | TYR |
| 1 | J | 652 | LYS |
| 1 | J | 748 | LEU |
| 1 | J | 755 | ASP |
| 1 | J | 758 | MET |
| 1 | J | 797 | ASN |
| 2 | K | 126 | PHE |
| 2 | K | 262 | HIS |

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Continued from previous page...

| Mol | Chain | Res | Type |
|------------|--------------|------------|-------------|
| 2 | K | 278 | ASP |
| 2 | K | 282 | ARG |
| 2 | K | 287 | TYR |
| 2 | K | 293 | LYS |
| 2 | L | 126 | PHE |
| 2 | L | 262 | HIS |
| 2 | L | 278 | ASP |
| 2 | L | 282 | ARG |
| 2 | L | 287 | TYR |
| 2 | L | 293 | LYS |
| 2 | M | 126 | PHE |
| 2 | M | 262 | HIS |
| 2 | M | 278 | ASP |
| 2 | M | 282 | ARG |
| 2 | M | 287 | TYR |
| 2 | M | 293 | LYS |
| 2 | N | 126 | PHE |
| 2 | N | 262 | HIS |
| 2 | N | 278 | ASP |
| 2 | N | 282 | ARG |
| 2 | N | 287 | TYR |
| 2 | N | 293 | LYS |
| 2 | O | 33 | ASN |
| 2 | O | 126 | PHE |
| 2 | O | 262 | HIS |
| 2 | O | 278 | ASP |
| 2 | O | 282 | ARG |
| 2 | O | 287 | TYR |
| 2 | O | 293 | LYS |
| 2 | P | 126 | PHE |
| 2 | P | 262 | HIS |
| 2 | P | 278 | ASP |
| 2 | P | 282 | ARG |
| 2 | P | 287 | TYR |
| 2 | P | 293 | LYS |
| 2 | Q | 126 | PHE |
| 2 | Q | 262 | HIS |
| 2 | Q | 278 | ASP |
| 2 | Q | 282 | ARG |
| 2 | Q | 287 | TYR |
| 2 | Q | 293 | LYS |
| 2 | R | 126 | PHE |

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| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 2 | R | 262 | HIS |
| 2 | R | 278 | ASP |
| 2 | R | 282 | ARG |
| 2 | R | 287 | TYR |
| 2 | R | 293 | LYS |
| 2 | S | 126 | PHE |
| 2 | S | 262 | HIS |
| 2 | S | 278 | ASP |
| 2 | S | 282 | ARG |
| 2 | S | 287 | TYR |
| 2 | S | 293 | LYS |
| 2 | T | 126 | PHE |
| 2 | T | 262 | HIS |
| 2 | T | 278 | ASP |
| 2 | T | 282 | ARG |
| 2 | T | 287 | TYR |
| 2 | T | 293 | LYS |

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (116) such sidechains are listed below:

| Mol | Chain | Res | Type |
|-----|-------|------|------|
| 1 | A | 367 | HIS |
| 1 | A | 391 | GLN |
| 1 | A | 465 | HIS |
| 1 | A | 479 | ASN |
| 1 | A | 480 | GLN |
| 1 | A | 672 | ASN |
| 1 | A | 995 | GLN |
| 1 | A | 1002 | ASN |
| 1 | B | 308 | GLN |
| 1 | B | 367 | HIS |
| 1 | B | 391 | GLN |
| 1 | B | 465 | HIS |
| 1 | B | 479 | ASN |
| 1 | B | 480 | GLN |
| 1 | B | 564 | ASN |
| 1 | B | 624 | GLN |
| 1 | B | 672 | ASN |
| 1 | B | 995 | GLN |
| 1 | B | 1002 | ASN |
| 1 | C | 367 | HIS |
| 1 | C | 391 | GLN |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type |
|------------|--------------|------------|-------------|
| 1 | C | 465 | HIS |
| 1 | C | 479 | ASN |
| 1 | C | 480 | GLN |
| 1 | C | 564 | ASN |
| 1 | C | 672 | ASN |
| 1 | C | 995 | GLN |
| 1 | C | 1002 | ASN |
| 1 | D | 367 | HIS |
| 1 | D | 391 | GLN |
| 1 | D | 465 | HIS |
| 1 | D | 479 | ASN |
| 1 | D | 480 | GLN |
| 1 | D | 624 | GLN |
| 1 | D | 672 | ASN |
| 1 | D | 995 | GLN |
| 1 | D | 1002 | ASN |
| 1 | E | 367 | HIS |
| 1 | E | 391 | GLN |
| 1 | E | 465 | HIS |
| 1 | E | 479 | ASN |
| 1 | E | 480 | GLN |
| 1 | E | 624 | GLN |
| 1 | E | 672 | ASN |
| 1 | E | 995 | GLN |
| 1 | E | 1002 | ASN |
| 1 | F | 308 | GLN |
| 1 | F | 367 | HIS |
| 1 | F | 391 | GLN |
| 1 | F | 465 | HIS |
| 1 | F | 479 | ASN |
| 1 | F | 480 | GLN |
| 1 | F | 624 | GLN |
| 1 | F | 672 | ASN |
| 1 | F | 995 | GLN |
| 1 | F | 1002 | ASN |
| 1 | G | 367 | HIS |
| 1 | G | 391 | GLN |
| 1 | G | 465 | HIS |
| 1 | G | 479 | ASN |
| 1 | G | 480 | GLN |
| 1 | G | 622 | GLN |
| 1 | G | 624 | GLN |

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Continued from previous page...

| Mol | Chain | Res | Type |
|------------|--------------|------------|-------------|
| 1 | G | 672 | ASN |
| 1 | G | 995 | GLN |
| 1 | G | 1002 | ASN |
| 1 | H | 308 | GLN |
| 1 | H | 367 | HIS |
| 1 | H | 391 | GLN |
| 1 | H | 465 | HIS |
| 1 | H | 479 | ASN |
| 1 | H | 480 | GLN |
| 1 | H | 622 | GLN |
| 1 | H | 624 | GLN |
| 1 | H | 672 | ASN |
| 1 | H | 995 | GLN |
| 1 | H | 1002 | ASN |
| 1 | I | 367 | HIS |
| 1 | I | 391 | GLN |
| 1 | I | 465 | HIS |
| 1 | I | 479 | ASN |
| 1 | I | 480 | GLN |
| 1 | I | 622 | GLN |
| 1 | I | 624 | GLN |
| 1 | I | 672 | ASN |
| 1 | I | 995 | GLN |
| 1 | I | 1002 | ASN |
| 1 | J | 367 | HIS |
| 1 | J | 391 | GLN |
| 1 | J | 465 | HIS |
| 1 | J | 479 | ASN |
| 1 | J | 480 | GLN |
| 1 | J | 624 | GLN |
| 1 | J | 672 | ASN |
| 1 | J | 995 | GLN |
| 1 | J | 1002 | ASN |
| 2 | K | 91 | HIS |
| 2 | K | 93 | ASN |
| 2 | L | 91 | HIS |
| 2 | L | 93 | ASN |
| 2 | M | 91 | HIS |
| 2 | M | 93 | ASN |
| 2 | N | 91 | HIS |
| 2 | N | 93 | ASN |
| 2 | O | 91 | HIS |

Continued on next page...

Continued from previous page...

| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 2 | O | 93 | ASN |
| 2 | P | 91 | HIS |
| 2 | P | 93 | ASN |
| 2 | Q | 91 | HIS |
| 2 | Q | 93 | ASN |
| 2 | R | 91 | HIS |
| 2 | R | 93 | ASN |
| 2 | S | 91 | HIS |
| 2 | S | 93 | ASN |
| 2 | T | 91 | HIS |
| 2 | T | 93 | ASN |

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 20 ligands modelled in this entry, 10 are monoatomic - leaving 10 for Mogul analysis.

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

| Mol | Type | Chain | Res | Link | Bond lengths | | | Bond angles | | |
|-----|------|-------|------|------|--------------|------|----------|-------------|------|----------|
| | | | | | Counts | RMSZ | # Z > 2 | Counts | RMSZ | # Z > 2 |
| 3 | AGS | I | 1101 | 4 | 26,33,33 | 1.77 | 2 (7%) | 26,52,52 | 1.67 | 4 (15%) |
| 3 | AGS | J | 1101 | 4 | 26,33,33 | 1.76 | 2 (7%) | 26,52,52 | 1.67 | 4 (15%) |

| Mol | Type | Chain | Res | Link | Bond lengths | | | Bond angles | | |
|-----|------|-------|------|------|--------------|------|----------|-------------|------|----------|
| | | | | | Counts | RMSZ | # Z > 2 | Counts | RMSZ | # Z > 2 |
| 3 | AGS | B | 1101 | 4 | 26,33,33 | 1.76 | 2 (7%) | 26,52,52 | 1.67 | 4 (15%) |
| 3 | AGS | D | 1101 | 4 | 26,33,33 | 1.76 | 2 (7%) | 26,52,52 | 1.67 | 4 (15%) |
| 3 | AGS | G | 1101 | 4 | 26,33,33 | 1.76 | 2 (7%) | 26,52,52 | 1.67 | 4 (15%) |
| 3 | AGS | C | 1101 | 4 | 26,33,33 | 1.77 | 2 (7%) | 26,52,52 | 1.67 | 4 (15%) |
| 3 | AGS | H | 1101 | 4 | 26,33,33 | 1.76 | 2 (7%) | 26,52,52 | 1.67 | 4 (15%) |
| 3 | AGS | A | 1101 | 4 | 26,33,33 | 1.76 | 2 (7%) | 26,52,52 | 1.67 | 4 (15%) |
| 3 | AGS | E | 1101 | 4 | 26,33,33 | 1.77 | 2 (7%) | 26,52,52 | 1.67 | 4 (15%) |
| 3 | AGS | F | 1101 | 4 | 26,33,33 | 1.76 | 2 (7%) | 26,52,52 | 1.67 | 4 (15%) |

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

| Mol | Type | Chain | Res | Link | Chirals | Torsions | Rings |
|-----|------|-------|------|------|---------|------------|---------|
| 3 | AGS | I | 1101 | 4 | - | 2/17/38/38 | 0/3/3/3 |
| 3 | AGS | J | 1101 | 4 | - | 2/17/38/38 | 0/3/3/3 |
| 3 | AGS | B | 1101 | 4 | - | 2/17/38/38 | 0/3/3/3 |
| 3 | AGS | D | 1101 | 4 | - | 2/17/38/38 | 0/3/3/3 |
| 3 | AGS | G | 1101 | 4 | - | 2/17/38/38 | 0/3/3/3 |
| 3 | AGS | C | 1101 | 4 | - | 2/17/38/38 | 0/3/3/3 |
| 3 | AGS | H | 1101 | 4 | - | 2/17/38/38 | 0/3/3/3 |
| 3 | AGS | A | 1101 | 4 | - | 2/17/38/38 | 0/3/3/3 |
| 3 | AGS | E | 1101 | 4 | - | 2/17/38/38 | 0/3/3/3 |
| 3 | AGS | F | 1101 | 4 | - | 2/17/38/38 | 0/3/3/3 |

All (20) bond length outliers are listed below:

| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|------|------|--------|------|-------------|----------|
| 3 | I | 1101 | AGS | PG-S1G | 7.36 | 2.06 | 1.90 |
| 3 | A | 1101 | AGS | PG-S1G | 7.35 | 2.06 | 1.90 |
| 3 | E | 1101 | AGS | PG-S1G | 7.35 | 2.06 | 1.90 |
| 3 | C | 1101 | AGS | PG-S1G | 7.35 | 2.06 | 1.90 |
| 3 | G | 1101 | AGS | PG-S1G | 7.34 | 2.06 | 1.90 |
| 3 | F | 1101 | AGS | PG-S1G | 7.33 | 2.06 | 1.90 |
| 3 | H | 1101 | AGS | PG-S1G | 7.33 | 2.06 | 1.90 |
| 3 | J | 1101 | AGS | PG-S1G | 7.30 | 2.06 | 1.90 |
| 3 | D | 1101 | AGS | PG-S1G | 7.30 | 2.06 | 1.90 |

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| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|------|------|--------|-------|-------------|----------|
| 3 | B | 1101 | AGS | PG-S1G | 7.29 | 2.06 | 1.90 |
| 3 | E | 1101 | AGS | PG-O3G | -2.23 | 1.47 | 1.54 |
| 3 | A | 1101 | AGS | PG-O3G | -2.22 | 1.47 | 1.54 |
| 3 | J | 1101 | AGS | PG-O3G | -2.22 | 1.47 | 1.54 |
| 3 | I | 1101 | AGS | PG-O3G | -2.22 | 1.47 | 1.54 |
| 3 | H | 1101 | AGS | PG-O3G | -2.21 | 1.47 | 1.54 |
| 3 | B | 1101 | AGS | PG-O3G | -2.20 | 1.47 | 1.54 |
| 3 | G | 1101 | AGS | PG-O3G | -2.20 | 1.47 | 1.54 |
| 3 | C | 1101 | AGS | PG-O3G | -2.19 | 1.47 | 1.54 |
| 3 | D | 1101 | AGS | PG-O3G | -2.18 | 1.47 | 1.54 |
| 3 | F | 1101 | AGS | PG-O3G | -2.18 | 1.47 | 1.54 |

All (40) bond angle outliers are listed below:

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|------|------|-------------|-------|-------------|----------|
| 3 | I | 1101 | AGS | PA-O3A-PB | -5.68 | 113.34 | 132.83 |
| 3 | G | 1101 | AGS | PA-O3A-PB | -5.68 | 113.35 | 132.83 |
| 3 | B | 1101 | AGS | PA-O3A-PB | -5.67 | 113.36 | 132.83 |
| 3 | C | 1101 | AGS | PA-O3A-PB | -5.67 | 113.36 | 132.83 |
| 3 | E | 1101 | AGS | PA-O3A-PB | -5.67 | 113.37 | 132.83 |
| 3 | J | 1101 | AGS | PA-O3A-PB | -5.67 | 113.37 | 132.83 |
| 3 | A | 1101 | AGS | PA-O3A-PB | -5.67 | 113.37 | 132.83 |
| 3 | F | 1101 | AGS | PA-O3A-PB | -5.67 | 113.37 | 132.83 |
| 3 | D | 1101 | AGS | PA-O3A-PB | -5.66 | 113.39 | 132.83 |
| 3 | H | 1101 | AGS | PA-O3A-PB | -5.66 | 113.41 | 132.83 |
| 3 | E | 1101 | AGS | N3-C2-N1 | -3.11 | 123.82 | 128.68 |
| 3 | H | 1101 | AGS | N3-C2-N1 | -3.07 | 123.88 | 128.68 |
| 3 | I | 1101 | AGS | N3-C2-N1 | -3.07 | 123.88 | 128.68 |
| 3 | G | 1101 | AGS | N3-C2-N1 | -3.07 | 123.89 | 128.68 |
| 3 | C | 1101 | AGS | N3-C2-N1 | -3.06 | 123.89 | 128.68 |
| 3 | J | 1101 | AGS | N3-C2-N1 | -3.06 | 123.89 | 128.68 |
| 3 | D | 1101 | AGS | N3-C2-N1 | -3.06 | 123.89 | 128.68 |
| 3 | F | 1101 | AGS | N3-C2-N1 | -3.06 | 123.90 | 128.68 |
| 3 | B | 1101 | AGS | N3-C2-N1 | -3.05 | 123.91 | 128.68 |
| 3 | A | 1101 | AGS | N3-C2-N1 | -3.03 | 123.94 | 128.68 |
| 3 | B | 1101 | AGS | C3'-C2'-C1' | 2.72 | 105.08 | 100.98 |
| 3 | D | 1101 | AGS | C4-C5-N7 | -2.72 | 106.57 | 109.40 |
| 3 | G | 1101 | AGS | C4-C5-N7 | -2.71 | 106.58 | 109.40 |
| 3 | A | 1101 | AGS | C3'-C2'-C1' | 2.71 | 105.06 | 100.98 |
| 3 | F | 1101 | AGS | C3'-C2'-C1' | 2.71 | 105.06 | 100.98 |
| 3 | C | 1101 | AGS | C3'-C2'-C1' | 2.70 | 105.05 | 100.98 |
| 3 | H | 1101 | AGS | C3'-C2'-C1' | 2.70 | 105.05 | 100.98 |

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| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|------|------|-------------|-------|-------------|----------|
| 3 | J | 1101 | AGS | C3'-C2'-C1' | 2.70 | 105.04 | 100.98 |
| 3 | G | 1101 | AGS | C3'-C2'-C1' | 2.70 | 105.04 | 100.98 |
| 3 | I | 1101 | AGS | C3'-C2'-C1' | 2.69 | 105.03 | 100.98 |
| 3 | I | 1101 | AGS | C4-C5-N7 | -2.69 | 106.59 | 109.40 |
| 3 | E | 1101 | AGS | C3'-C2'-C1' | 2.69 | 105.03 | 100.98 |
| 3 | B | 1101 | AGS | C4-C5-N7 | -2.69 | 106.60 | 109.40 |
| 3 | H | 1101 | AGS | C4-C5-N7 | -2.68 | 106.60 | 109.40 |
| 3 | J | 1101 | AGS | C4-C5-N7 | -2.68 | 106.60 | 109.40 |
| 3 | F | 1101 | AGS | C4-C5-N7 | -2.68 | 106.61 | 109.40 |
| 3 | E | 1101 | AGS | C4-C5-N7 | -2.67 | 106.61 | 109.40 |
| 3 | D | 1101 | AGS | C3'-C2'-C1' | 2.67 | 104.99 | 100.98 |
| 3 | A | 1101 | AGS | C4-C5-N7 | -2.66 | 106.62 | 109.40 |
| 3 | C | 1101 | AGS | C4-C5-N7 | -2.65 | 106.64 | 109.40 |

There are no chirality outliers.

All (20) torsion outliers are listed below:

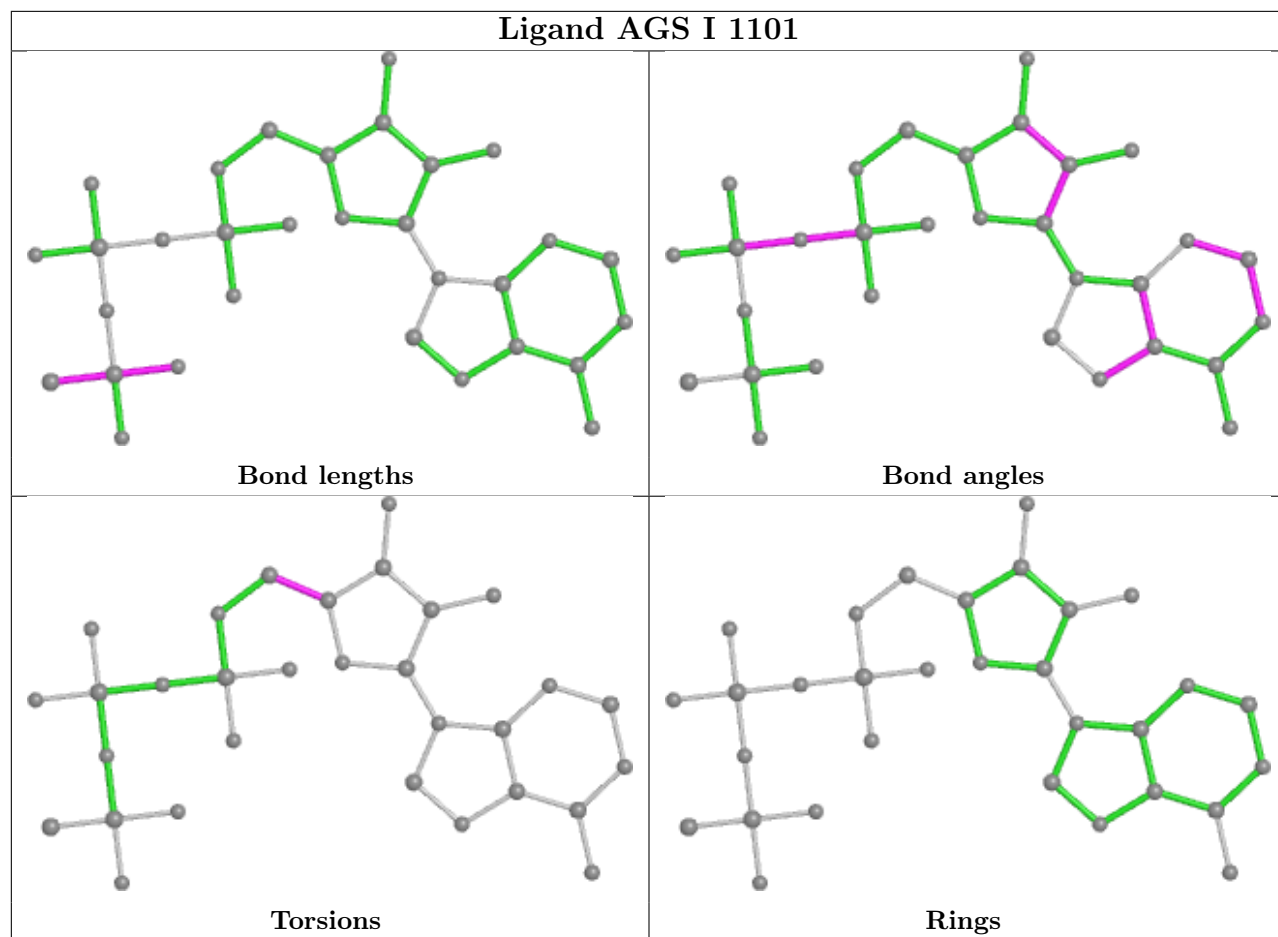
| Mol | Chain | Res | Type | Atoms |
|-----|-------|------|------|-----------------|
| 3 | A | 1101 | AGS | O4'-C4'-C5'-O5' |
| 3 | B | 1101 | AGS | O4'-C4'-C5'-O5' |
| 3 | C | 1101 | AGS | O4'-C4'-C5'-O5' |
| 3 | D | 1101 | AGS | O4'-C4'-C5'-O5' |
| 3 | E | 1101 | AGS | O4'-C4'-C5'-O5' |
| 3 | F | 1101 | AGS | O4'-C4'-C5'-O5' |
| 3 | G | 1101 | AGS | O4'-C4'-C5'-O5' |
| 3 | H | 1101 | AGS | O4'-C4'-C5'-O5' |
| 3 | I | 1101 | AGS | O4'-C4'-C5'-O5' |
| 3 | J | 1101 | AGS | O4'-C4'-C5'-O5' |
| 3 | A | 1101 | AGS | C3'-C4'-C5'-O5' |
| 3 | B | 1101 | AGS | C3'-C4'-C5'-O5' |
| 3 | C | 1101 | AGS | C3'-C4'-C5'-O5' |
| 3 | D | 1101 | AGS | C3'-C4'-C5'-O5' |
| 3 | E | 1101 | AGS | C3'-C4'-C5'-O5' |
| 3 | F | 1101 | AGS | C3'-C4'-C5'-O5' |
| 3 | G | 1101 | AGS | C3'-C4'-C5'-O5' |
| 3 | H | 1101 | AGS | C3'-C4'-C5'-O5' |
| 3 | I | 1101 | AGS | C3'-C4'-C5'-O5' |
| 3 | J | 1101 | AGS | C3'-C4'-C5'-O5' |

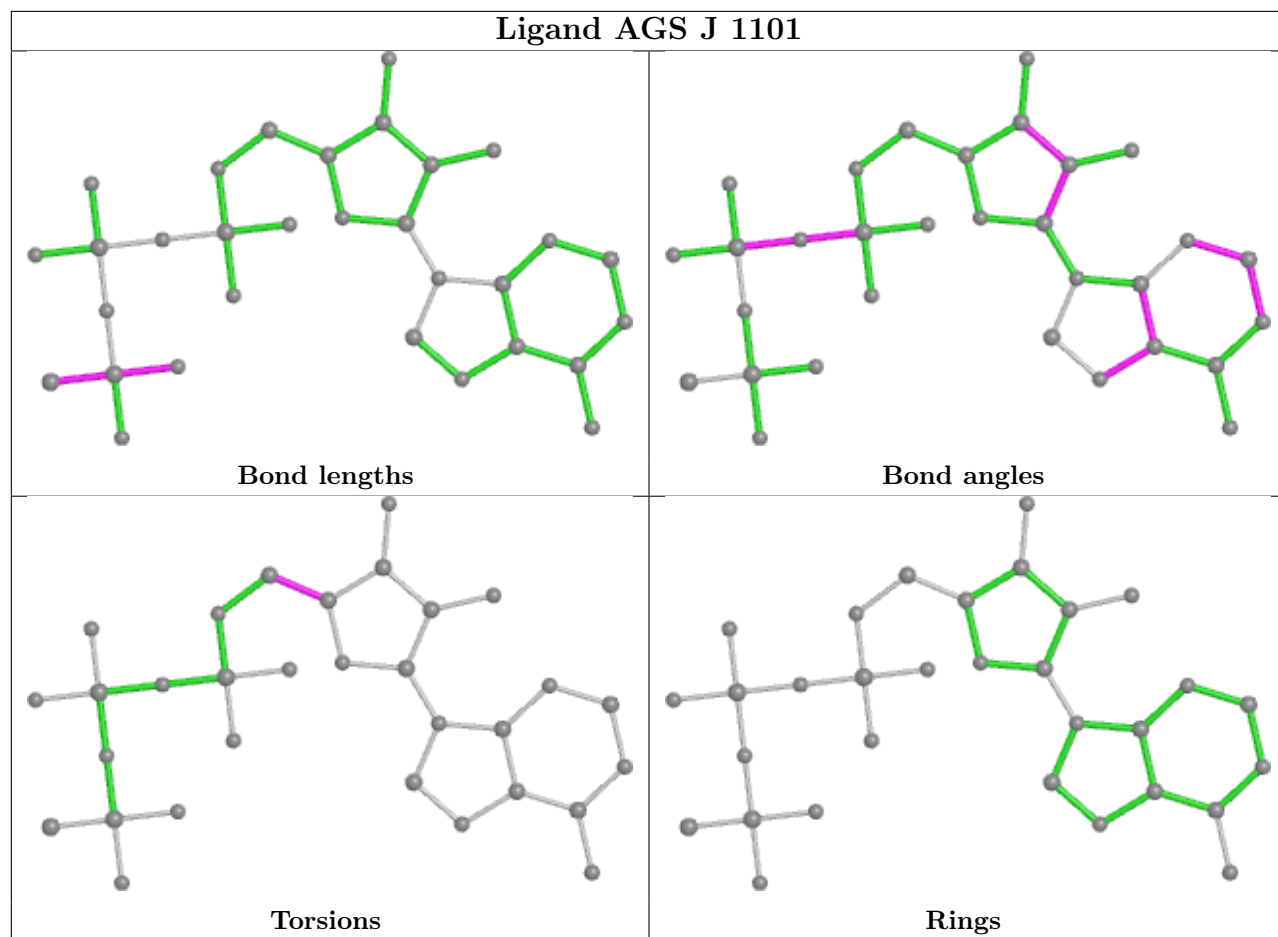
There are no ring outliers.

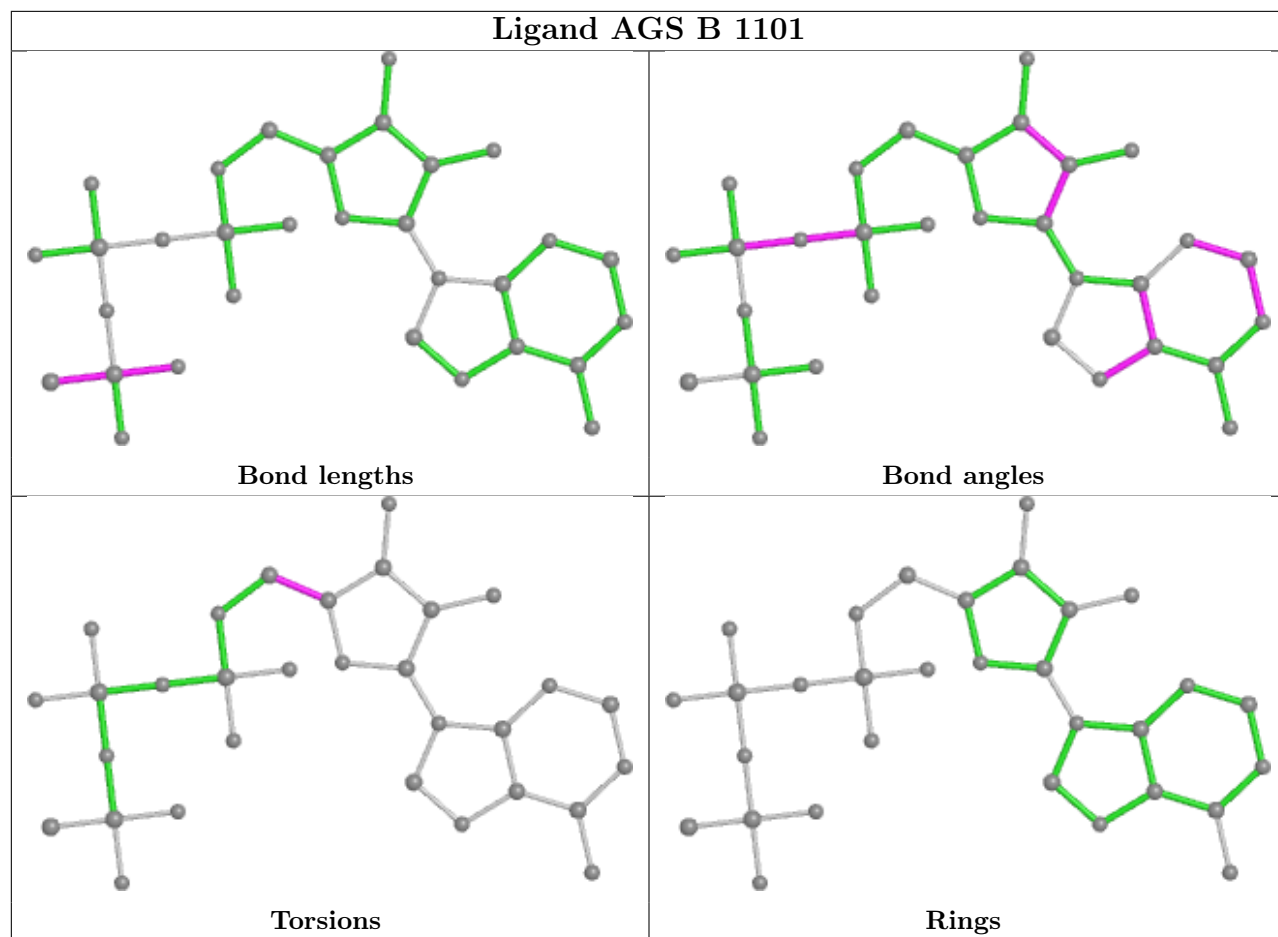
10 monomers are involved in 122 short contacts:

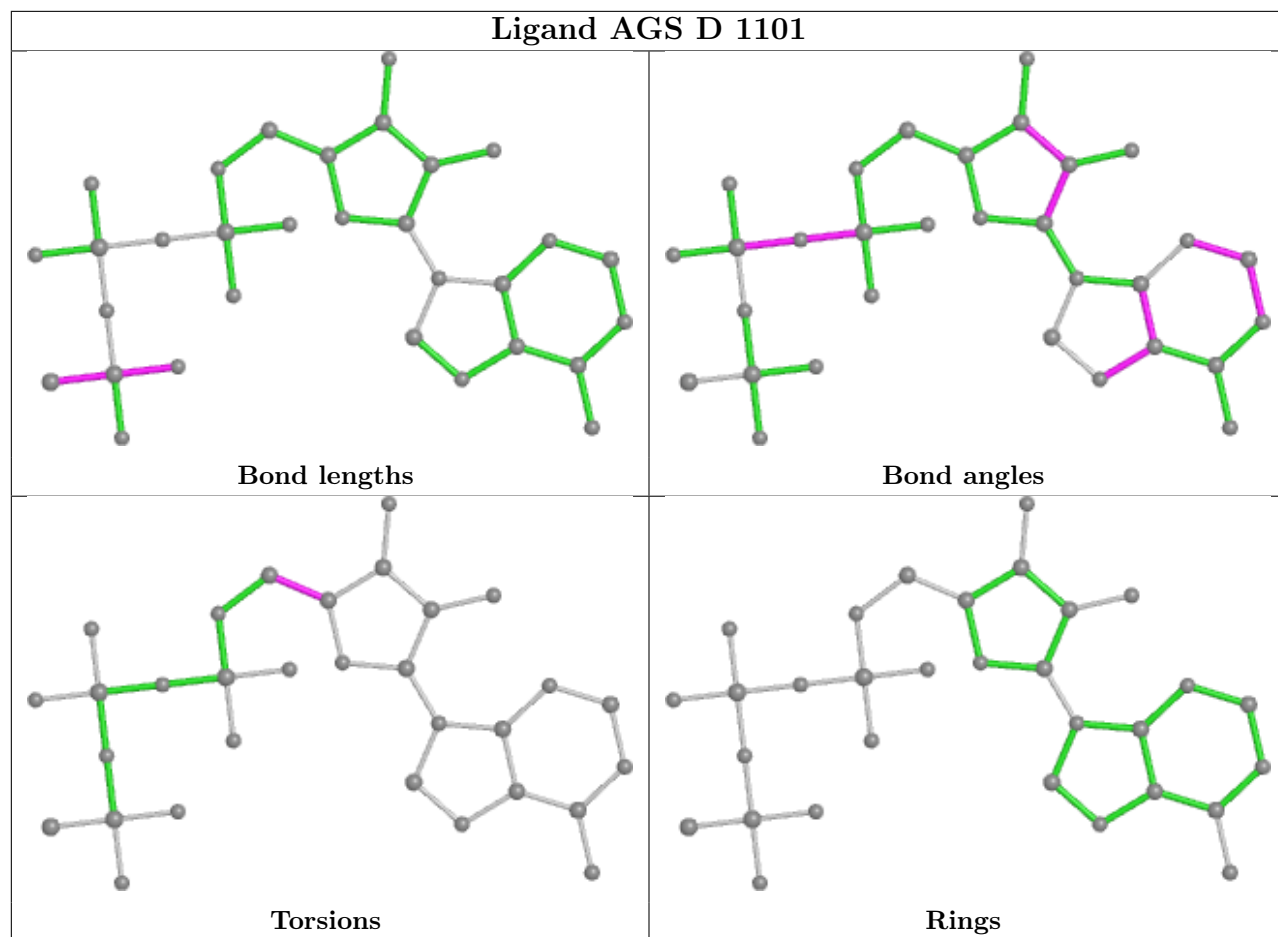
| Mol | Chain | Res | Type | Clashes | Symm-Clashes |
|-----|-------|------|------|---------|--------------|
| 3 | I | 1101 | AGS | 12 | 0 |
| 3 | J | 1101 | AGS | 12 | 0 |
| 3 | B | 1101 | AGS | 12 | 0 |
| 3 | D | 1101 | AGS | 12 | 0 |
| 3 | G | 1101 | AGS | 12 | 0 |
| 3 | C | 1101 | AGS | 12 | 0 |
| 3 | H | 1101 | AGS | 13 | 0 |
| 3 | A | 1101 | AGS | 12 | 0 |
| 3 | E | 1101 | AGS | 13 | 0 |
| 3 | F | 1101 | AGS | 12 | 0 |

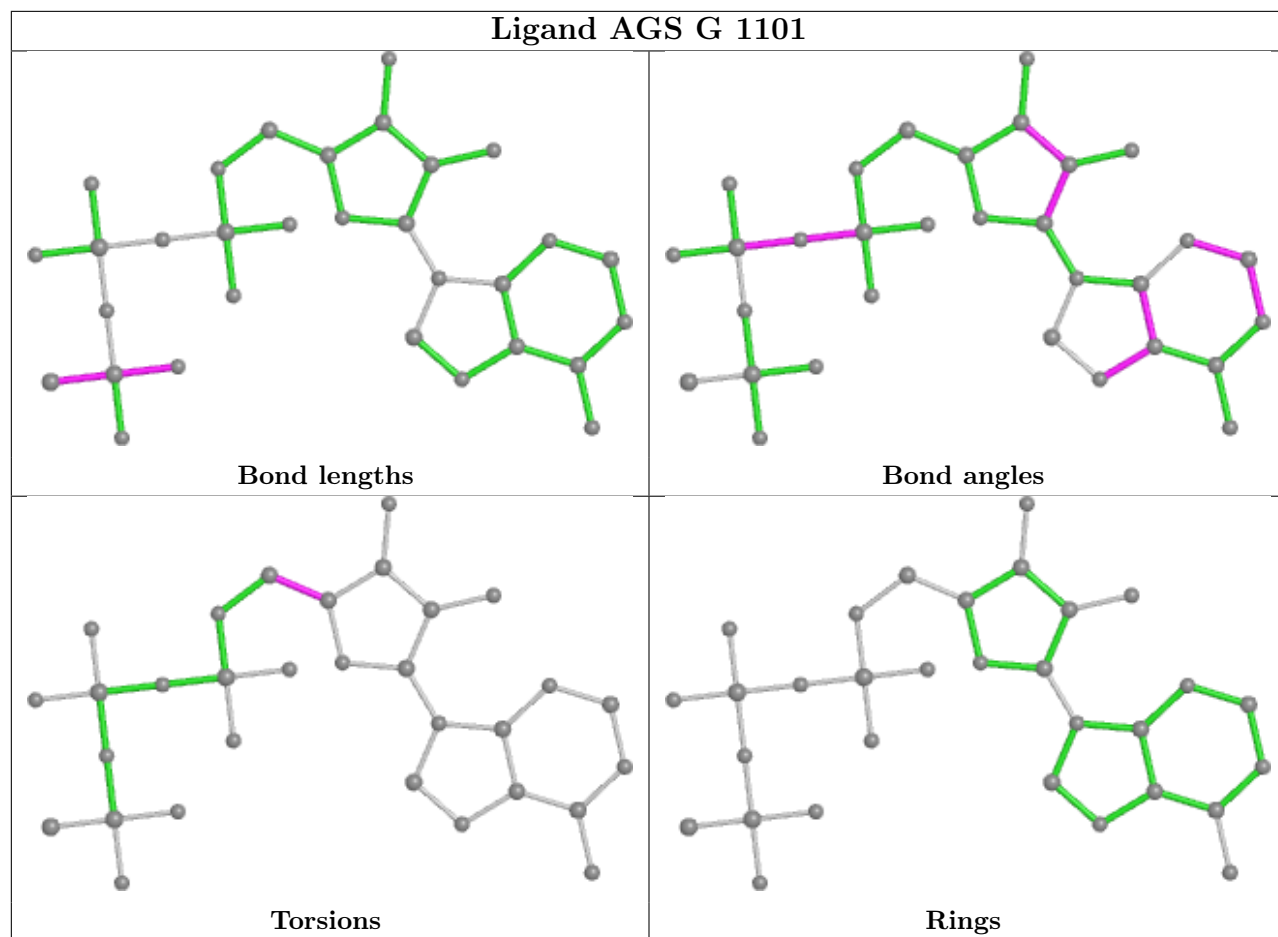
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

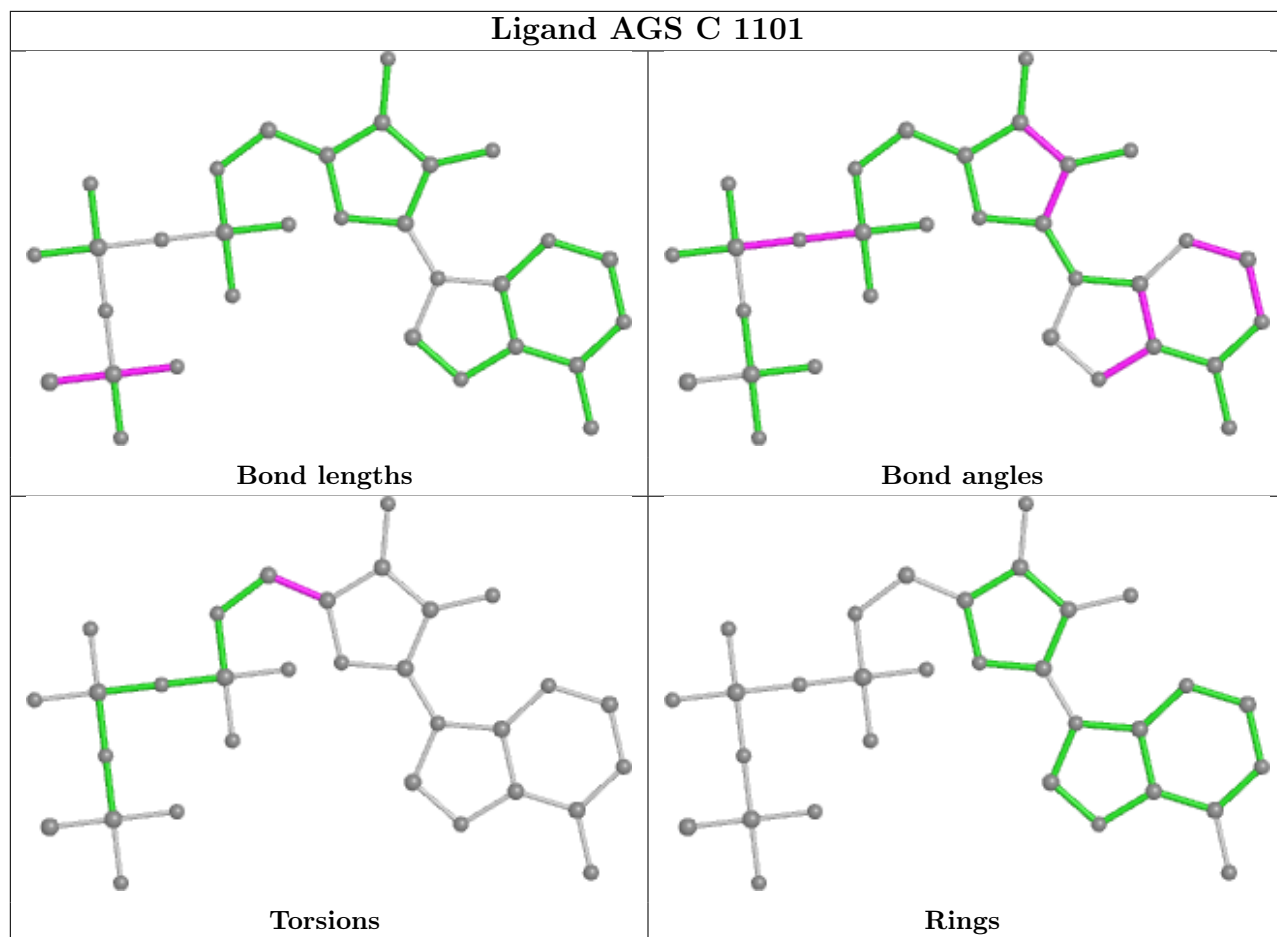


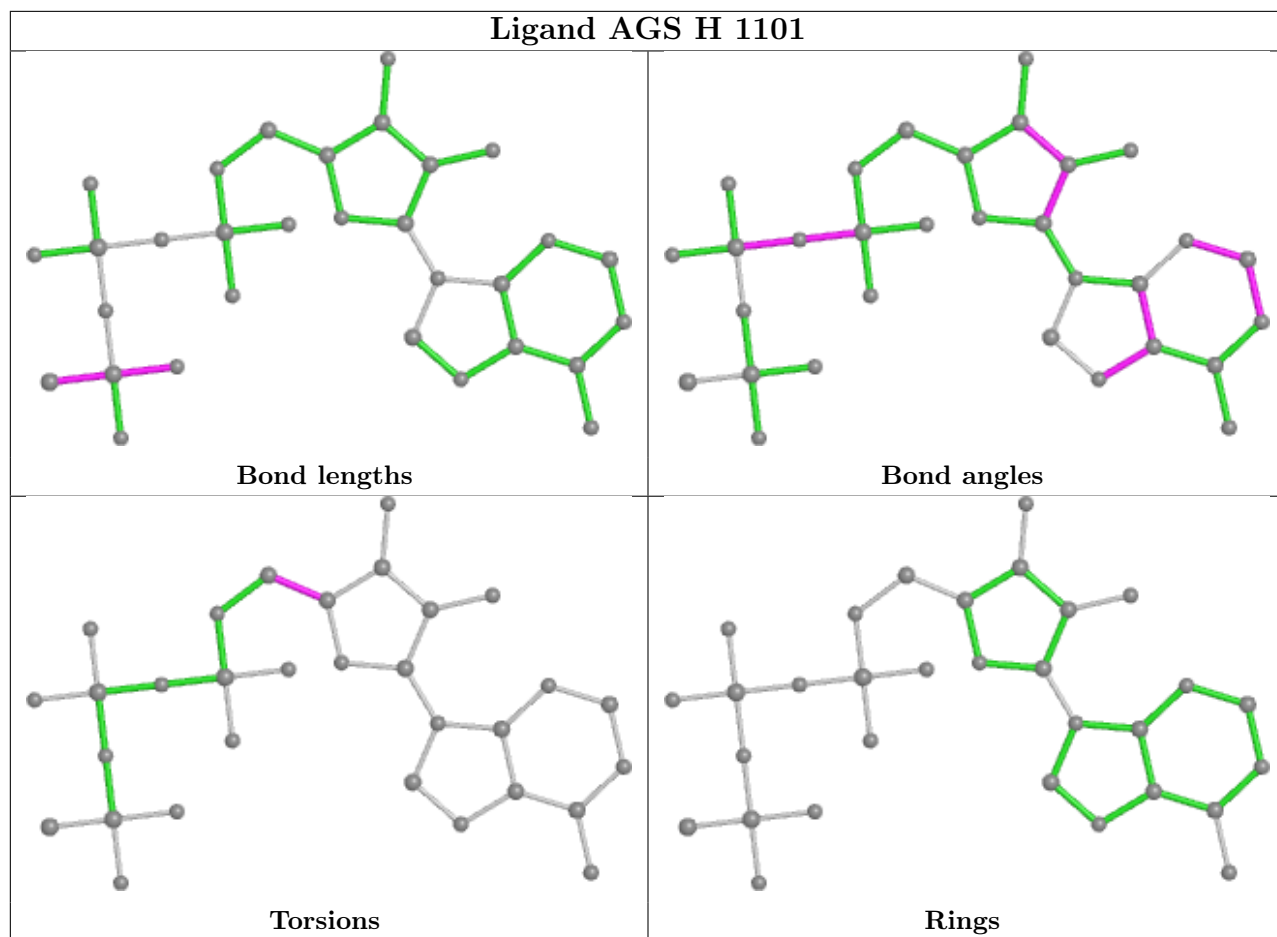


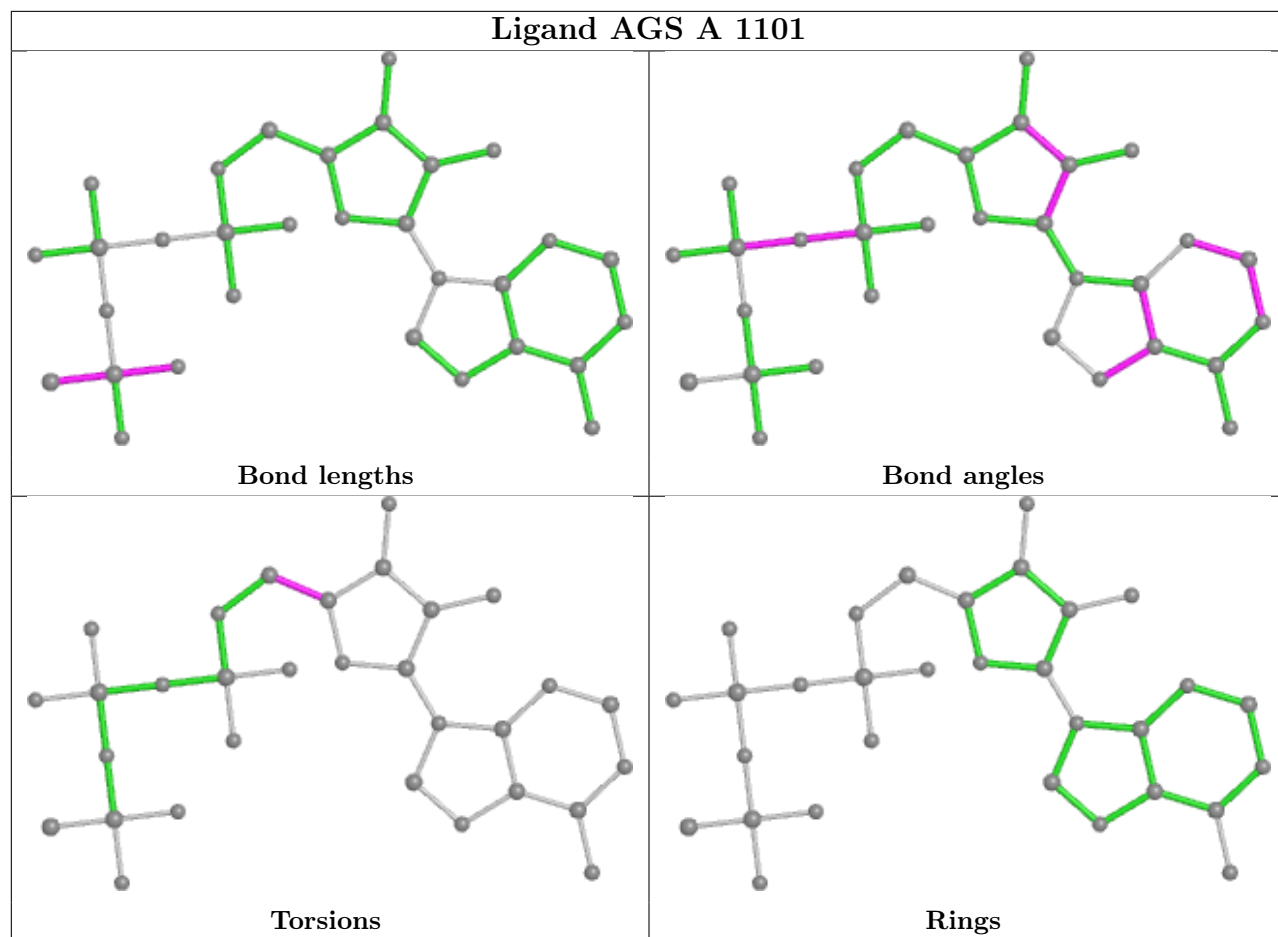


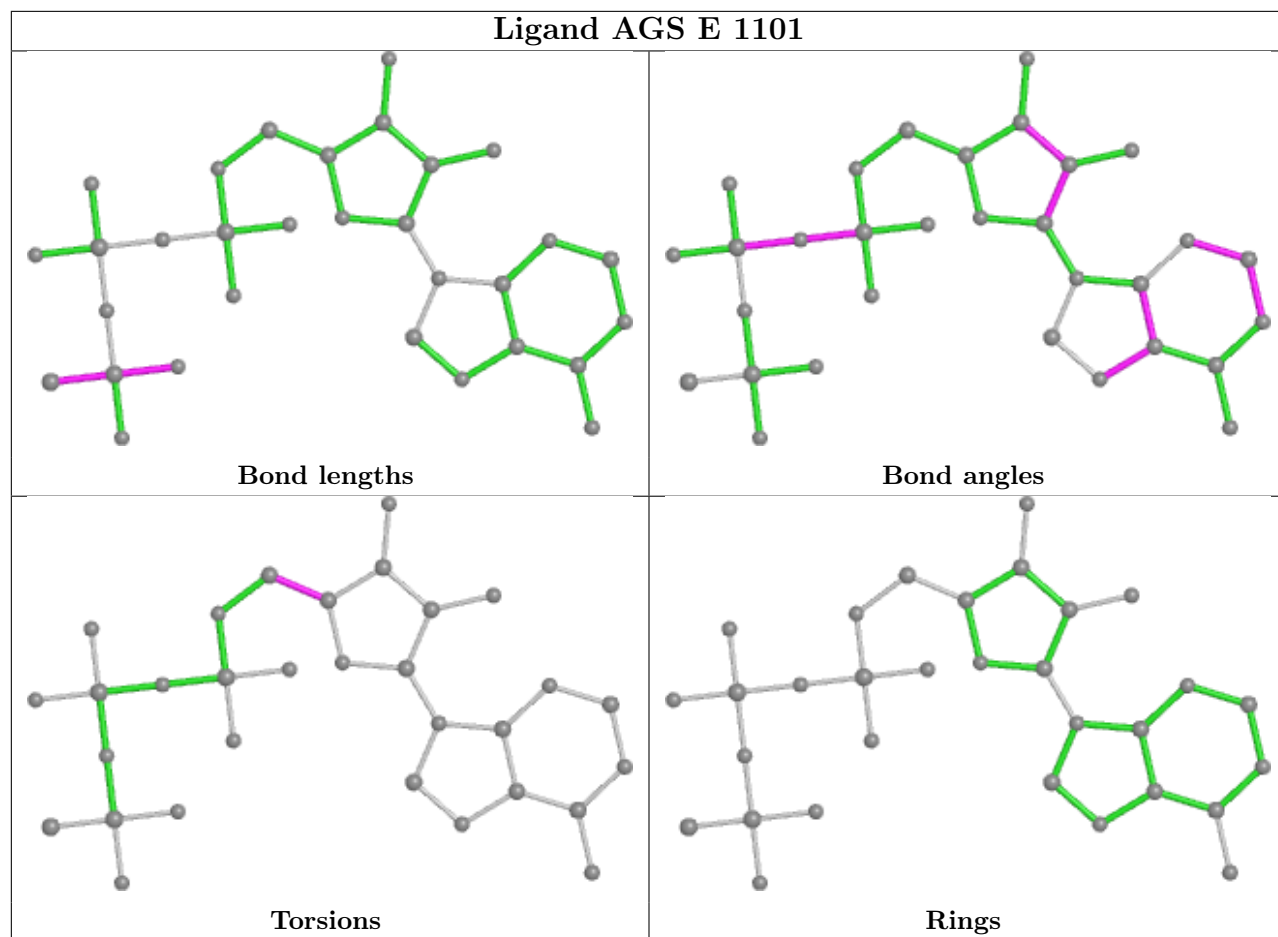


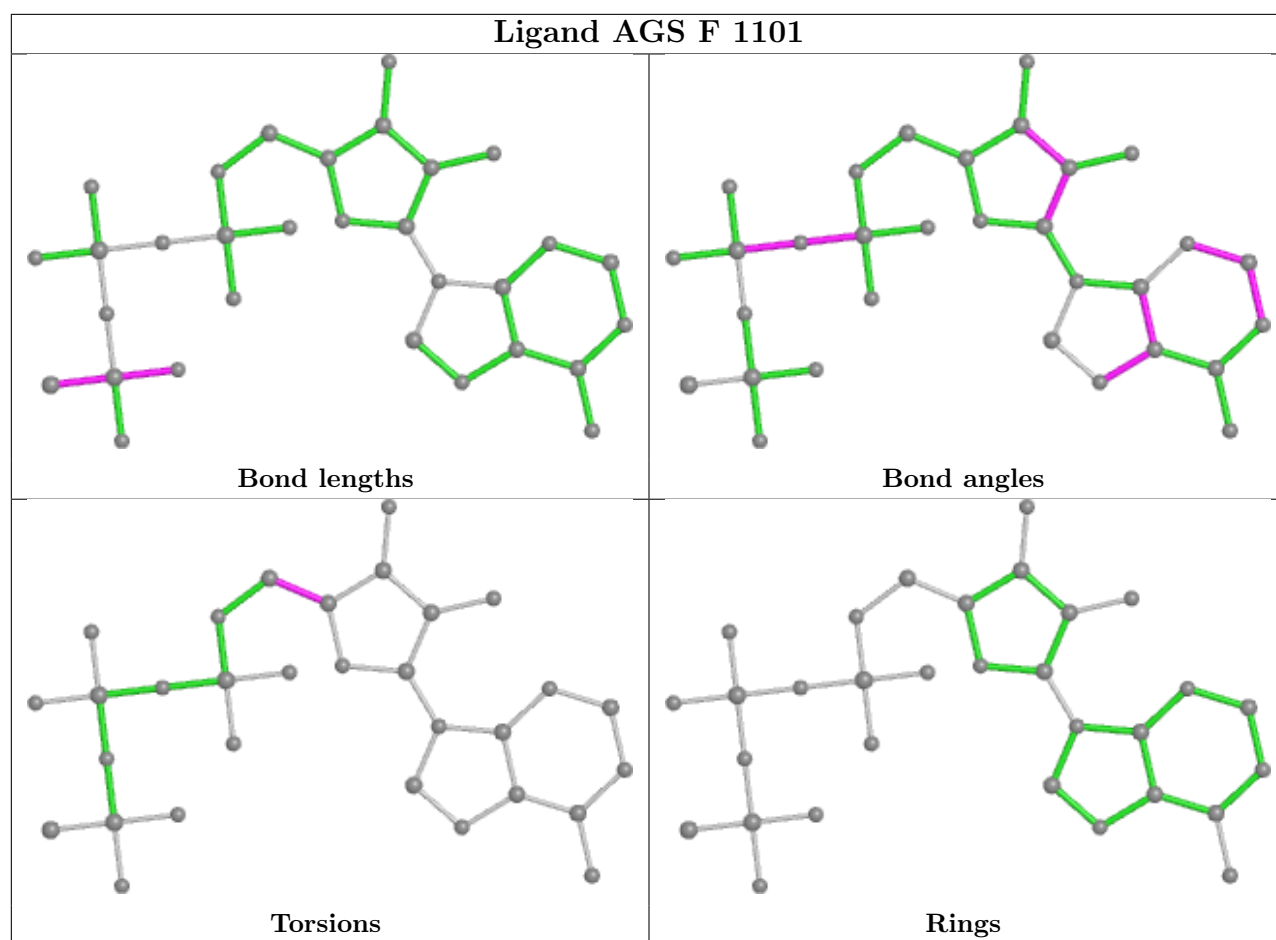












5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

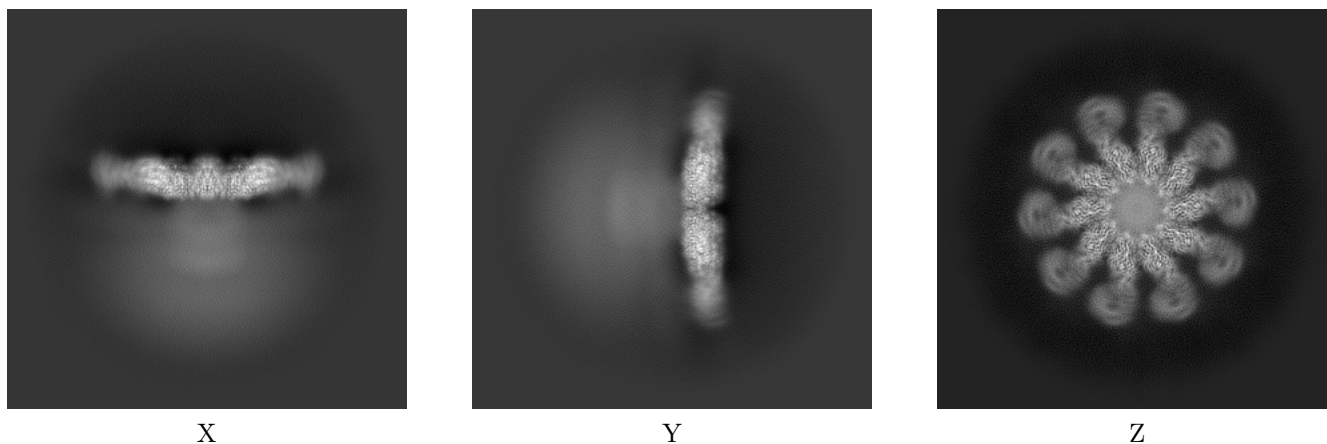
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-28175. These allow visual inspection of the internal detail of the map and identification of artifacts.

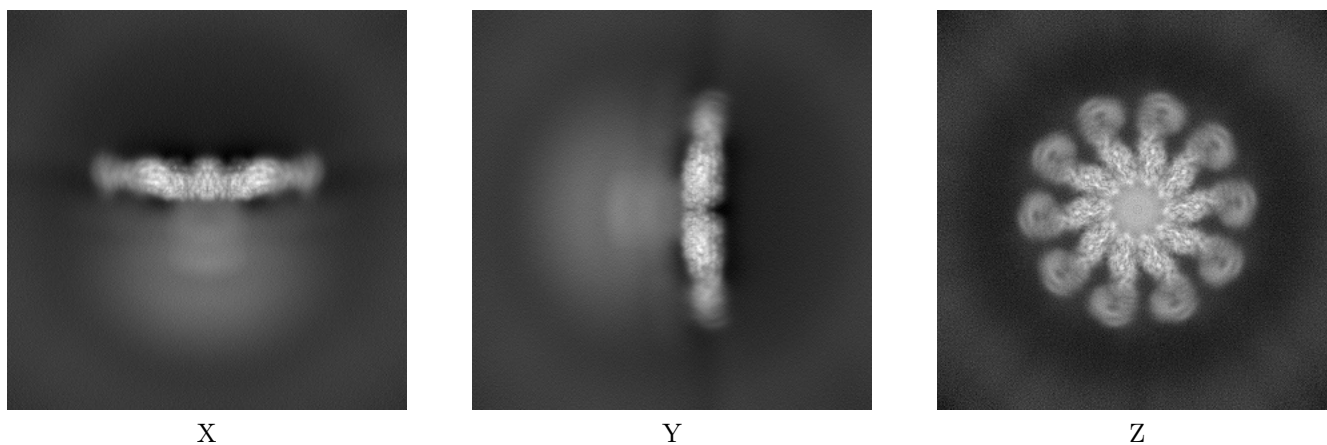
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections [i](#)

6.1.1 Primary map



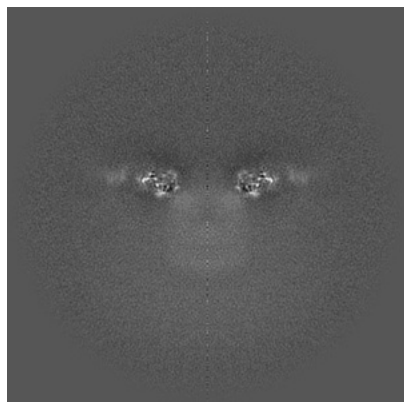
6.1.2 Raw map



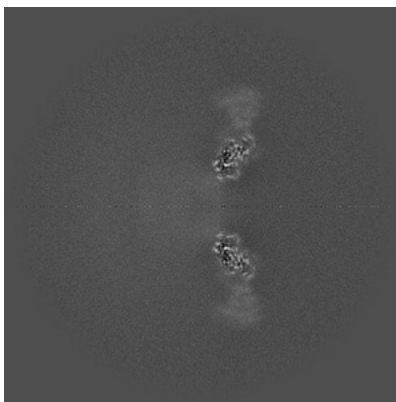
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

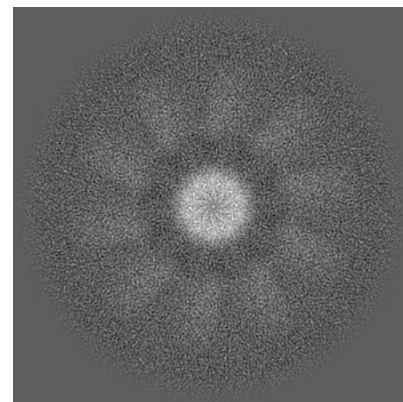
6.2.1 Primary map



X Index: 256

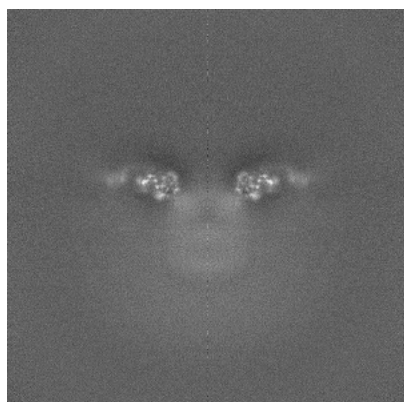


Y Index: 256

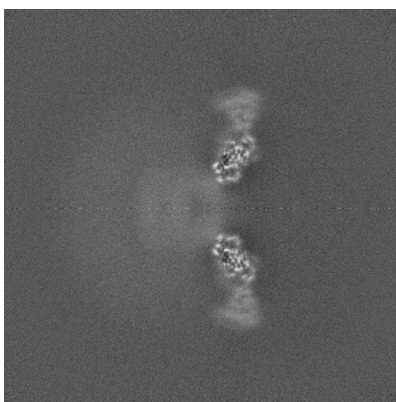


Z Index: 256

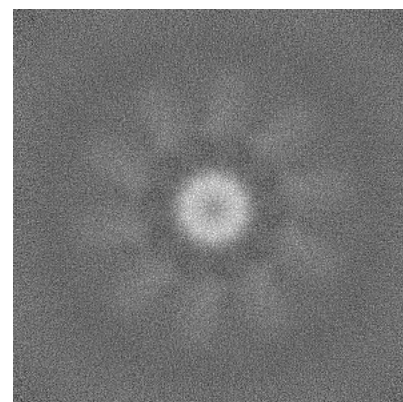
6.2.2 Raw map



X Index: 256



Y Index: 256



Z Index: 256

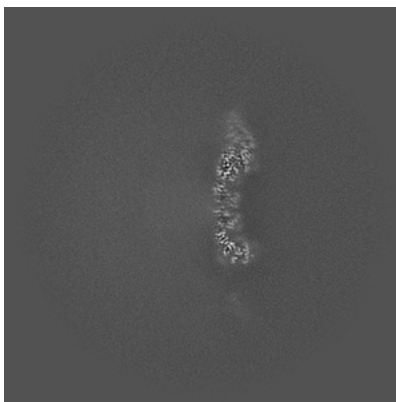
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

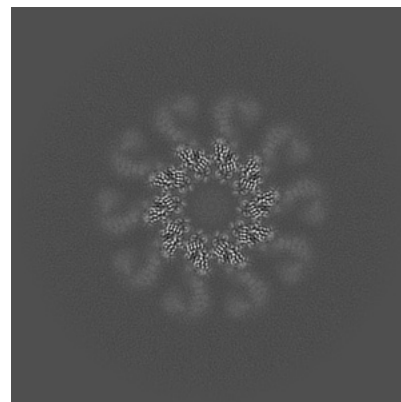
6.3.1 Primary map



X Index: 269



Y Index: 215

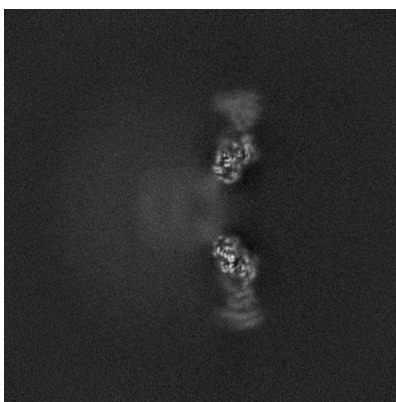


Z Index: 284

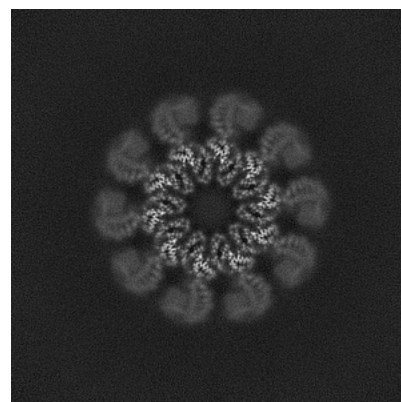
6.3.2 Raw map



X Index: 269



Y Index: 252

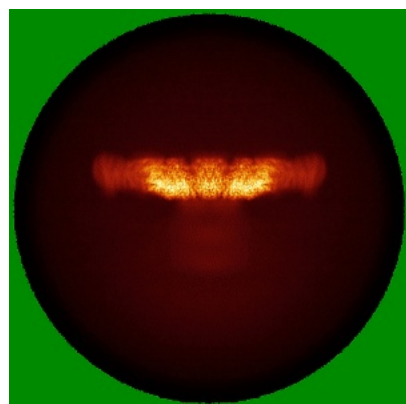


Z Index: 290

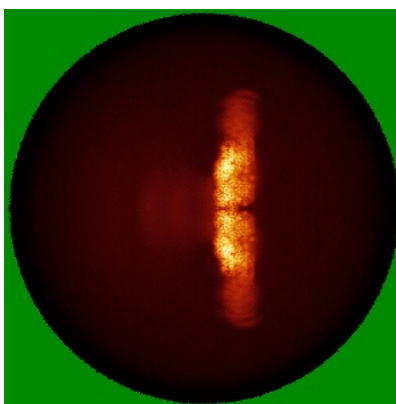
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) [i](#)

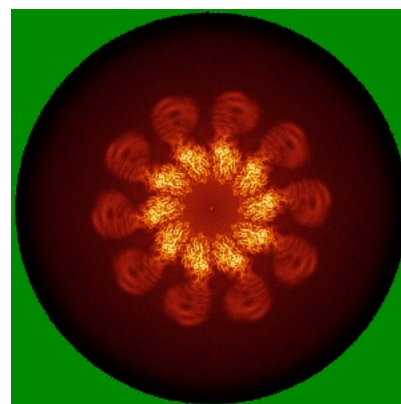
6.4.1 Primary map



X

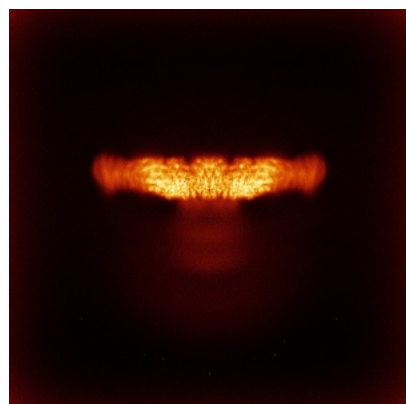


Y

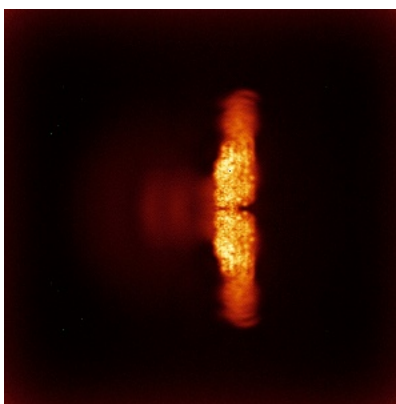


Z

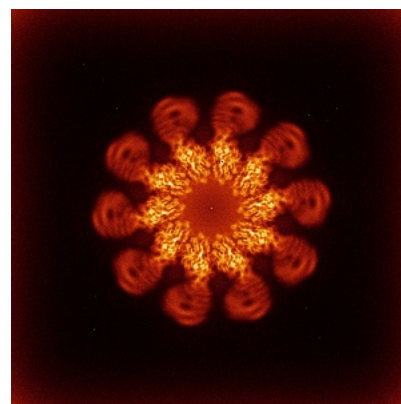
6.4.2 Raw map



X



Y

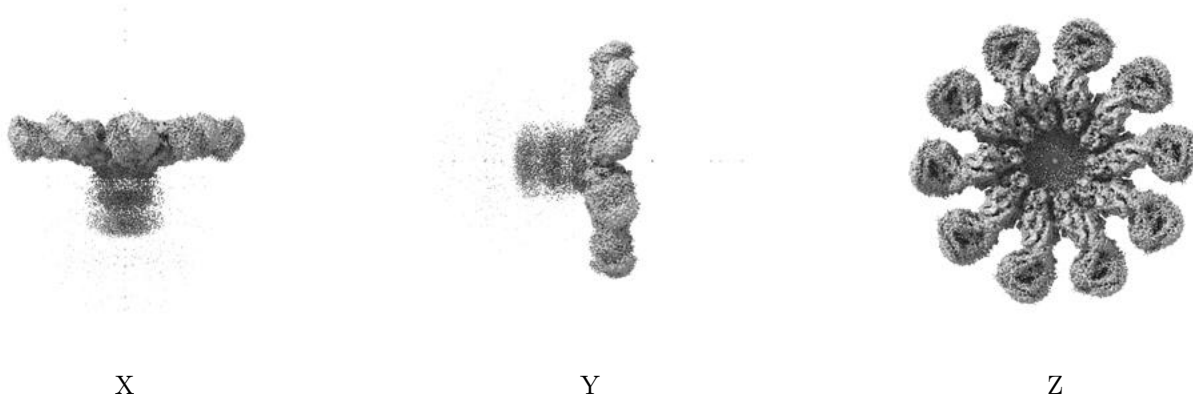


Z

The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

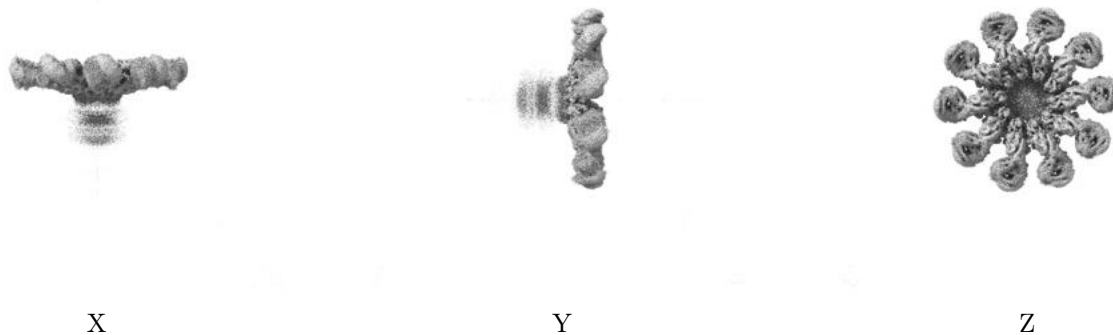
6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.2. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

6.5.2 Raw map



These images show the 3D surface of the raw map. The raw map's contour level was selected so that its surface encloses the same volume as the primary map does at its recommended contour level.

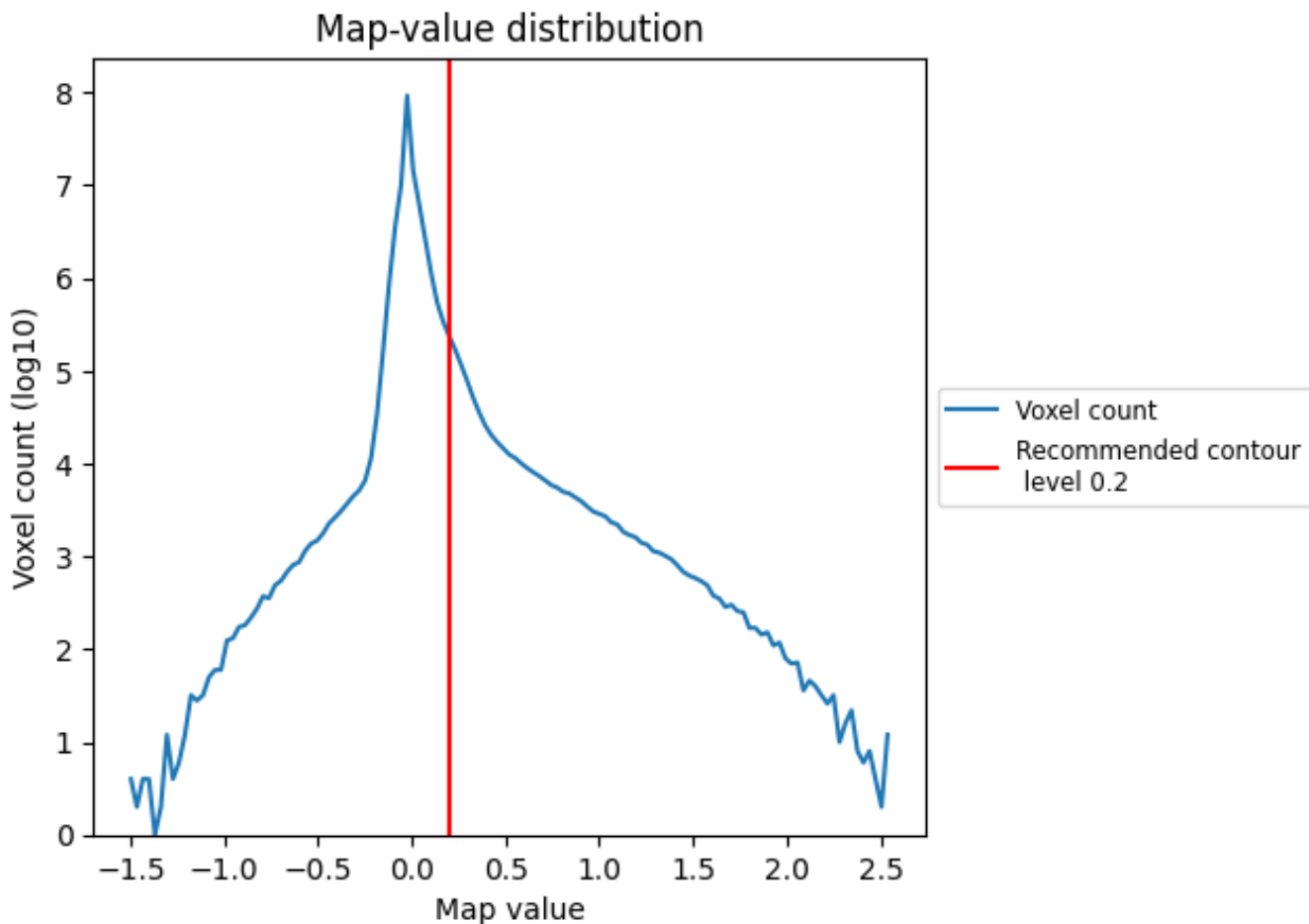
6.6 Mask visualisation [i](#)

This section was not generated. No masks/segmentation were deposited.

7 Map analysis [i](#)

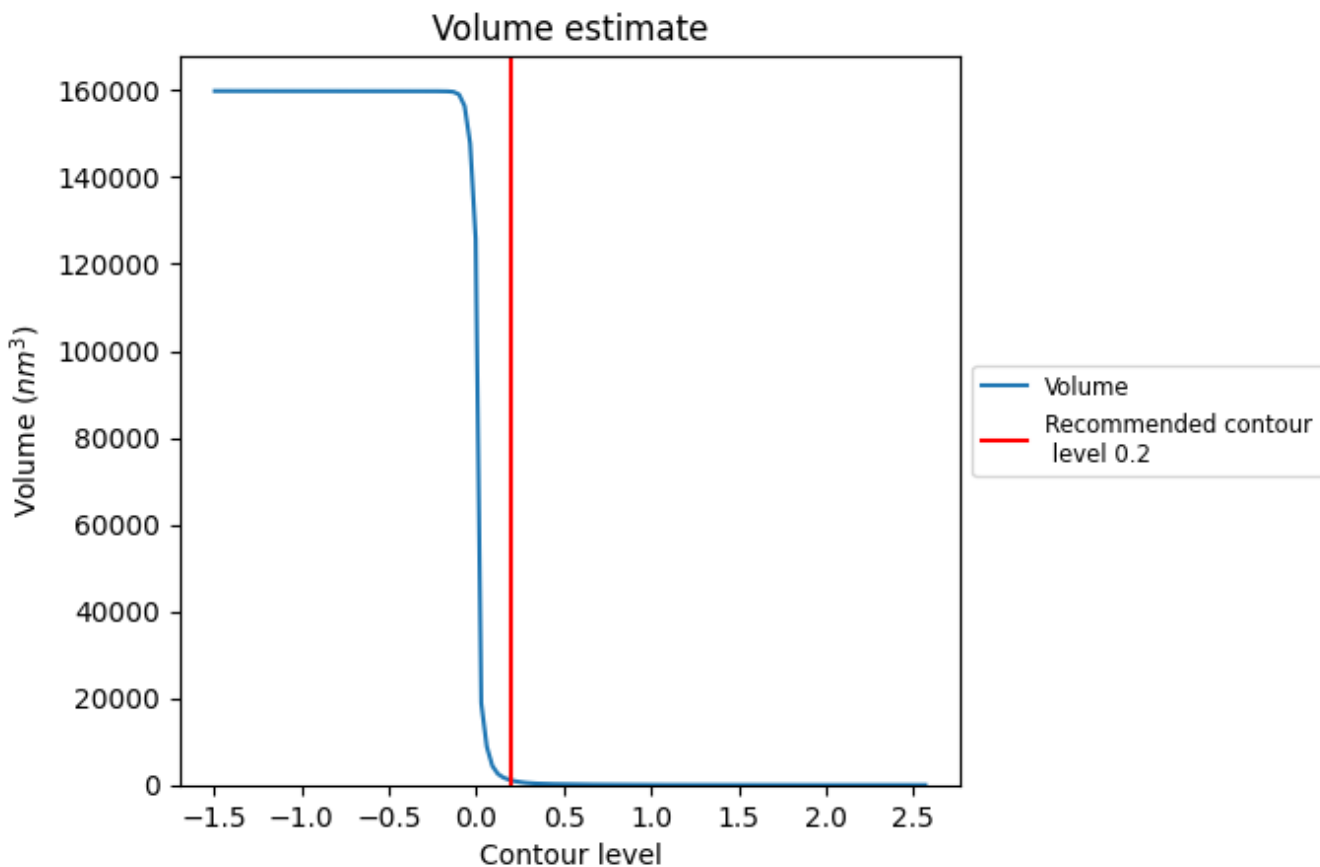
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

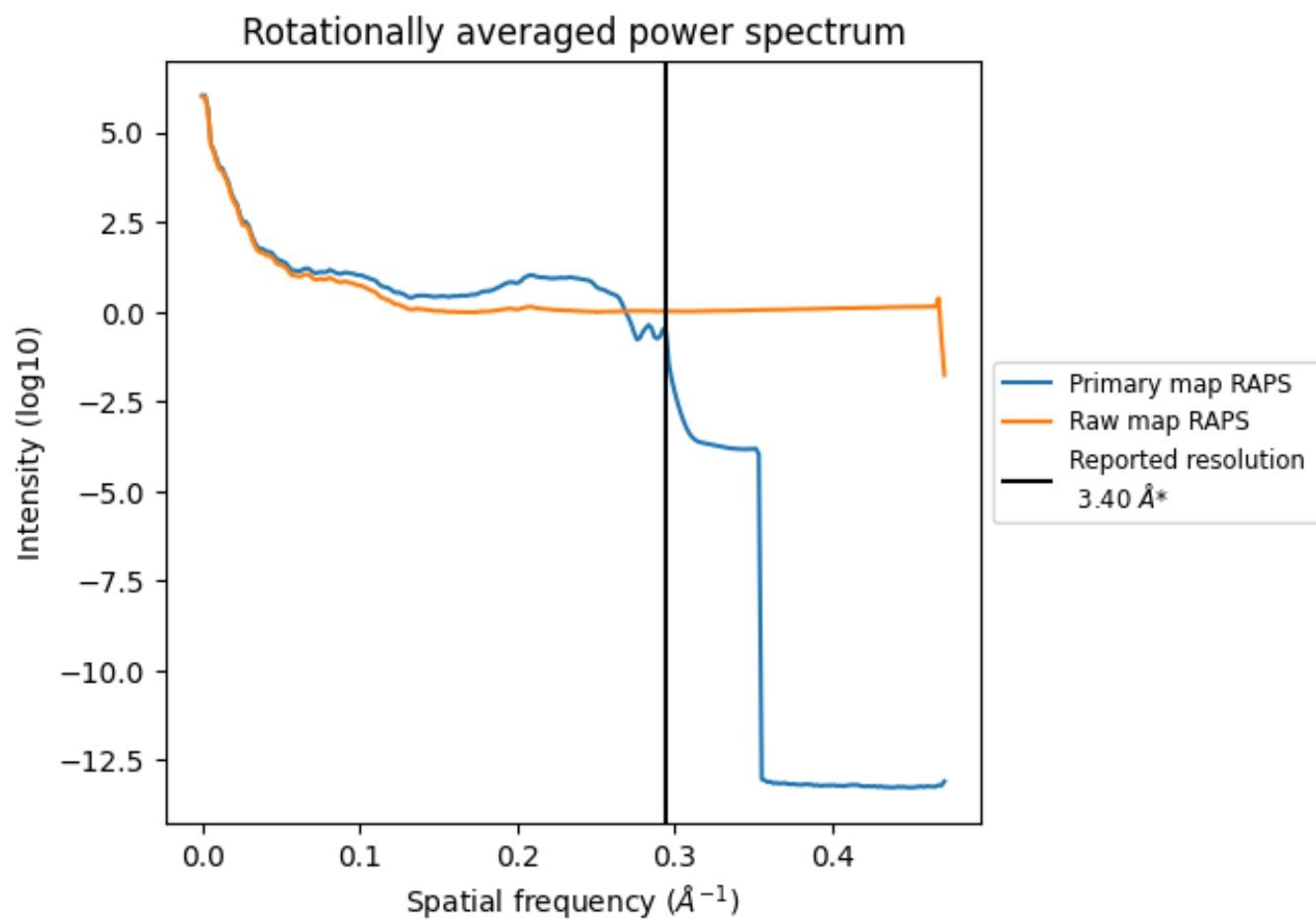
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 1083 nm^3 ; this corresponds to an approximate mass of 978 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum [i](#)

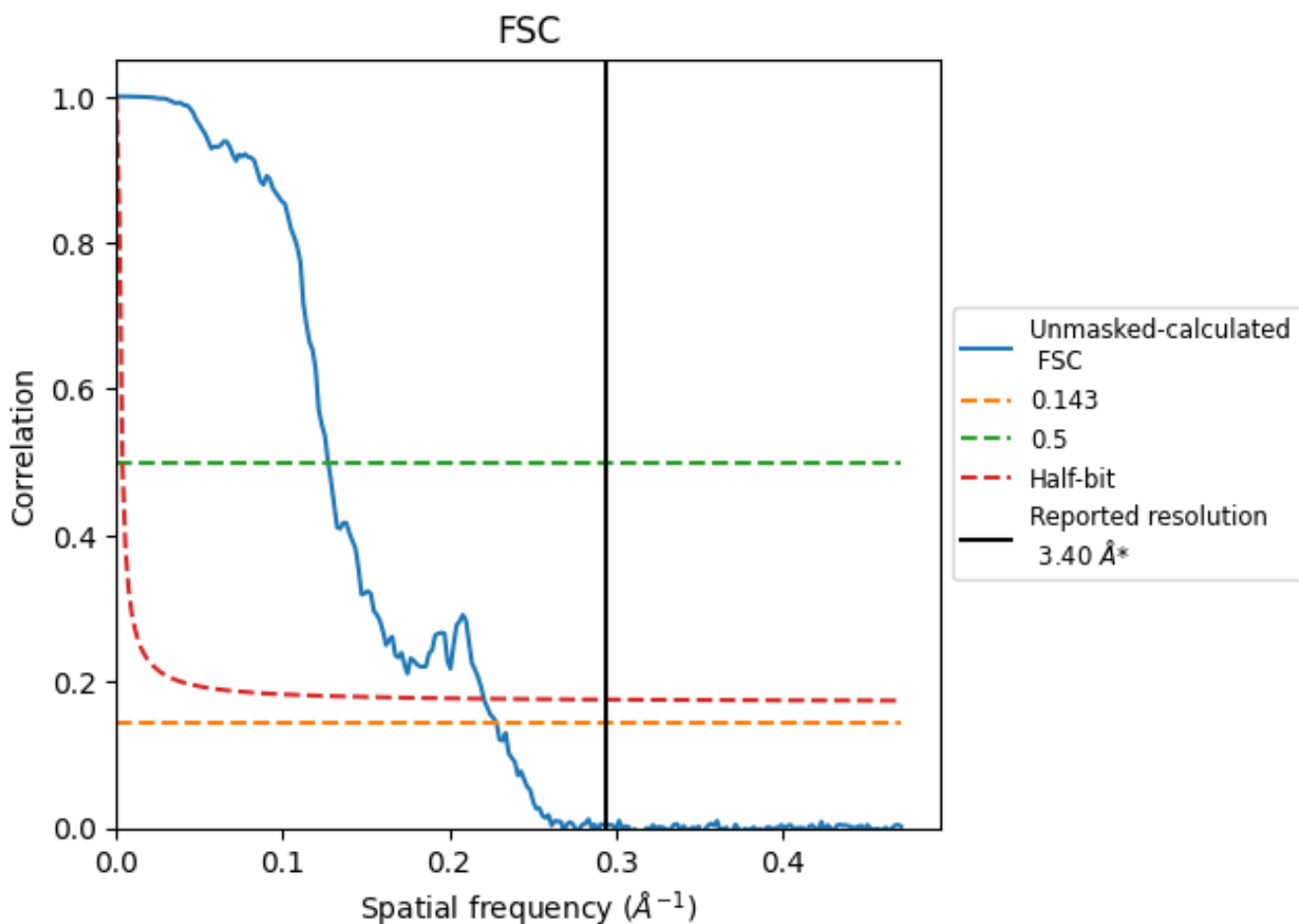


*Reported resolution corresponds to spatial frequency of 0.294 Å⁻¹

8 Fourier-Shell correlation [i](#)

Fourier-Shell Correlation (FSC) is the most commonly used method to estimate the resolution of single-particle and subtomogram-averaged maps. The shape of the curve depends on the imposed symmetry, mask and whether or not the two 3D reconstructions used were processed from a common reference. The reported resolution is shown as a black line. A curve is displayed for the half-bit criterion in addition to lines showing the 0.143 gold standard cut-off and 0.5 cut-off.

8.1 FSC [i](#)



*Reported resolution corresponds to spatial frequency of 0.294 Å⁻¹

8.2 Resolution estimates [i](#)

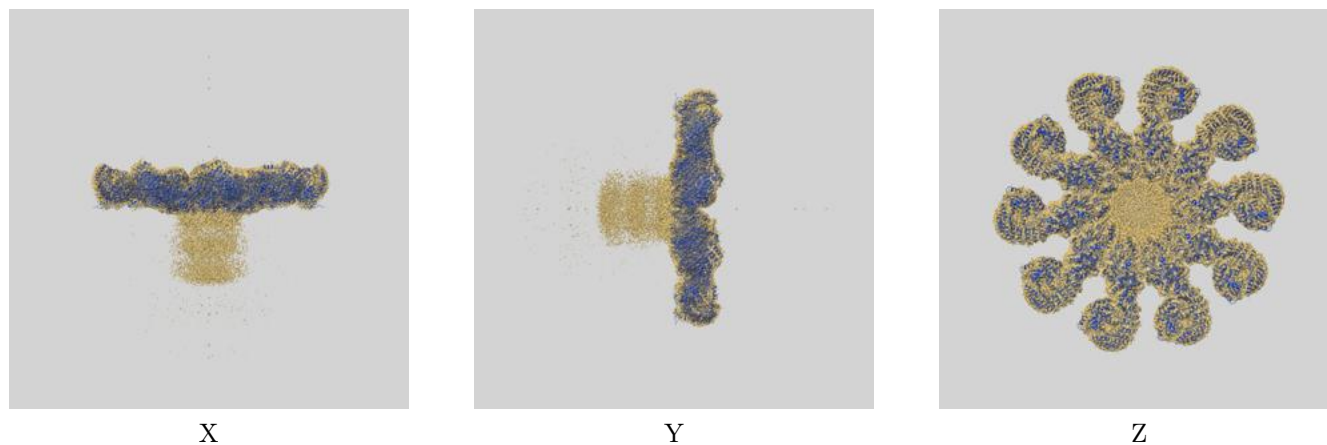
| Resolution estimate (Å) | Estimation criterion (FSC cut-off) | | |
|---------------------------|------------------------------------|------|----------|
| | 0.143 | 0.5 | Half-bit |
| Reported by author | 3.40 | - | - |
| Author-provided FSC curve | - | - | - |
| Unmasked-calculated* | 4.38 | 7.86 | 4.53 |

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps. The value from deposited half-maps intersecting FSC 0.143 CUT-OFF 4.38 differs from the reported value 3.4 by more than 10 %

9 Map-model fit [i](#)

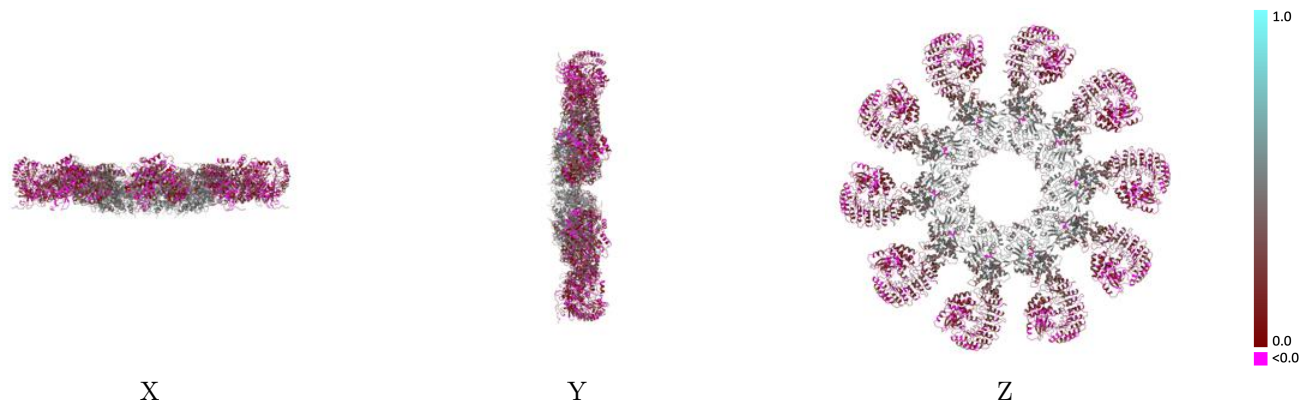
This section contains information regarding the fit between EMDB map EMD-28175 and PDB model 8EJ4. Per-residue inclusion information can be found in section 3 on page 7.

9.1 Map-model overlay [i](#)



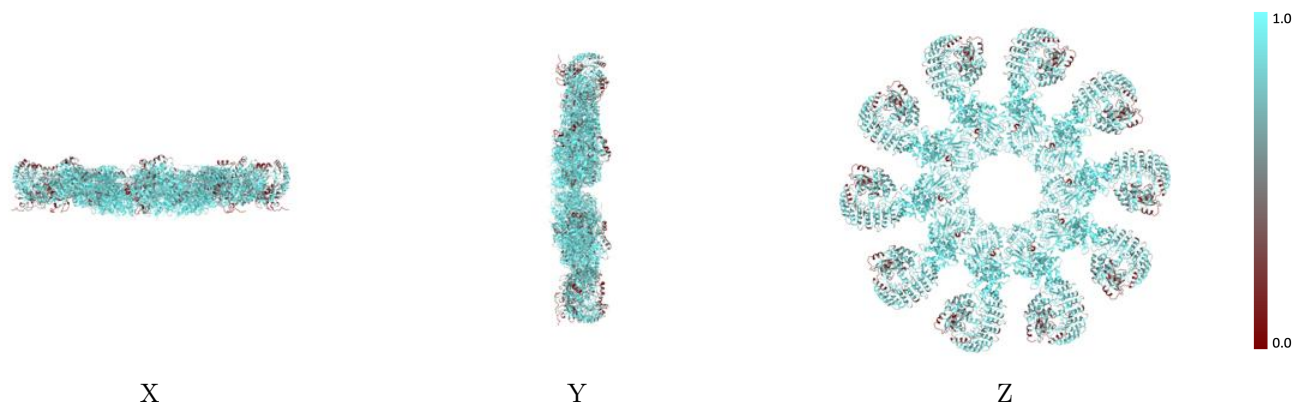
The images above show the 3D surface view of the map at the recommended contour level 0.2 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

9.2 Q-score mapped to coordinate model [\(i\)](#)



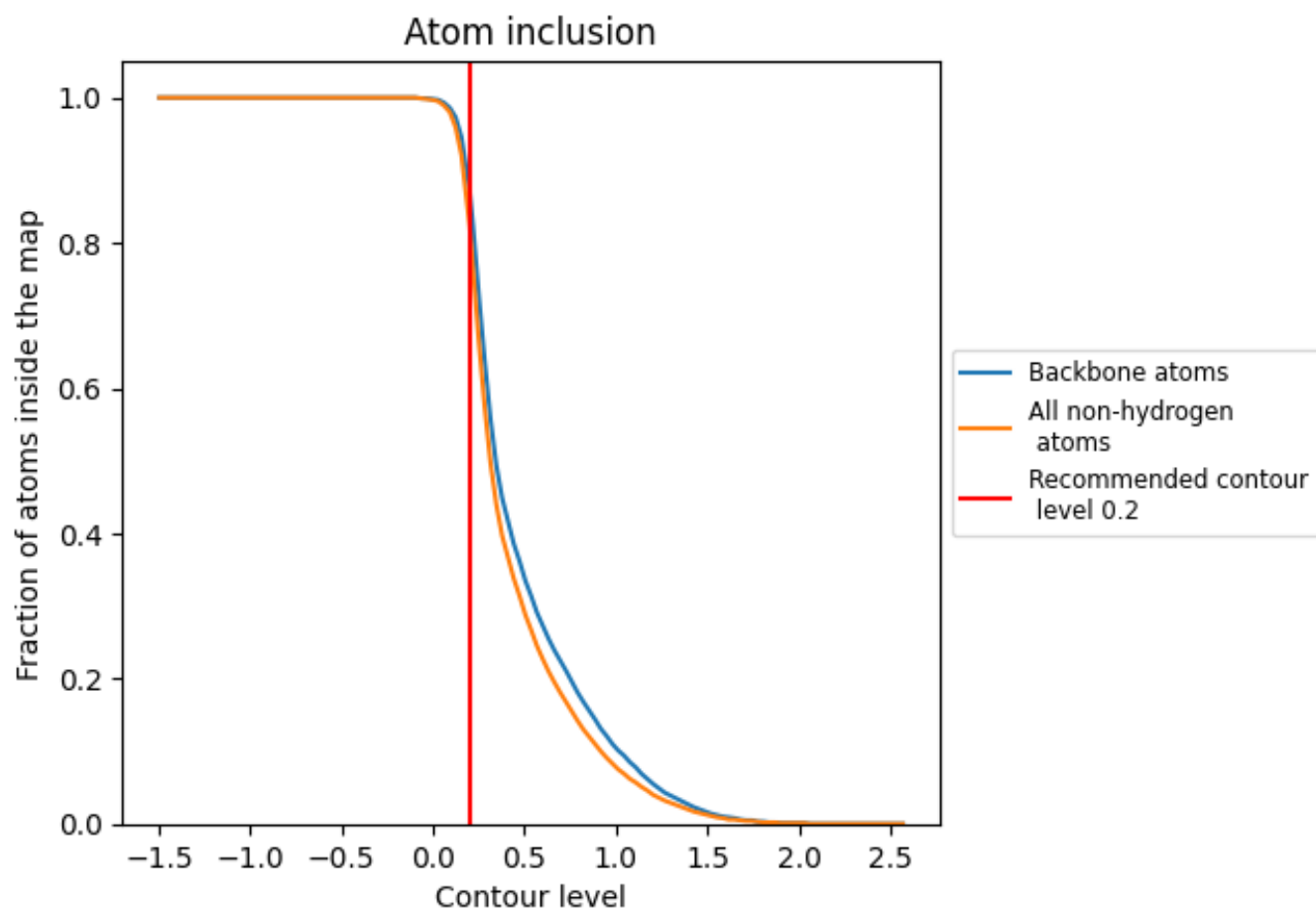
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

9.3 Atom inclusion mapped to coordinate model [\(i\)](#)



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.2).











































9.4 Atom inclusion [i](#)



At the recommended contour level, 87% of all backbone atoms, 82% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary

The table lists the average atom inclusion at the recommended contour level (0.2) and Q-score for the entire model and for each chain.

| Chain | Atom inclusion | Q-score |
|-------|--|--|
| All |  0.8230 |  0.2850 |
| A |  0.8610 |  0.3390 |
| B |  0.8610 |  0.3370 |
| C |  0.8590 |  0.3370 |
| D |  0.8610 |  0.3360 |
| E |  0.8590 |  0.3360 |
| F |  0.8610 |  0.3370 |
| G |  0.8620 |  0.3370 |
| H |  0.8590 |  0.3360 |
| I |  0.8610 |  0.3360 |
| J |  0.8590 |  0.3370 |
| K |  0.5840 |  0.0900 |
| L |  0.5850 |  0.0970 |
| M |  0.5820 |  0.0920 |
| N |  0.5810 |  0.0880 |
| O |  0.5940 |  0.1100 |
| P |  0.5630 |  0.0790 |
| Q |  0.5620 |  0.0790 |
| R |  0.5670 |  0.0830 |
| S |  0.5580 |  0.0730 |
| T |  0.5900 |  0.1190 |

