Full wwPDB EM Validation Report

Apr 11, 2022 – 09:25 pm BST

PDB ID	:	7PZC
EMDB ID	:	EMD-13686
Title	:	Cryo-EM structure of the NLRP3 decamer bound to the inhibitor CRID3
Authors	:	Hochheiser, I.V.; Pilsl, M.; Hagelueken, G.; Engel, C.; Geyer, M.
Deposited on	:	2021-10-12
Resolution	:	3.90 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 following versions of software and data (see references ⓘ) were used in the production of this report:

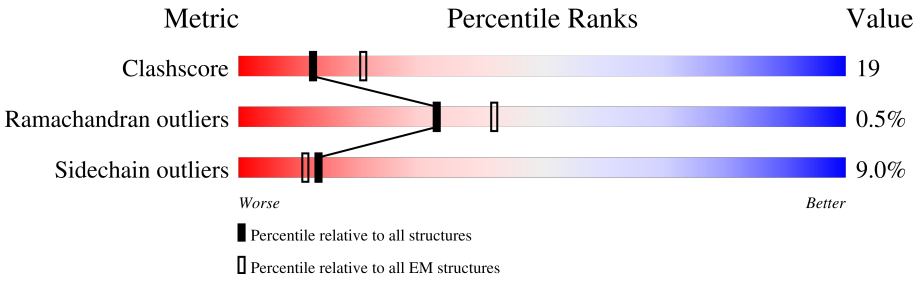
EMDB validation analysis	:	0.0.0.dev97
Mogul	:	1.8.4, CSD as541be (2020)
MolProbity	:	4.02b-467
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.27

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 3.90 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 <=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	1036	35% 55% 38%
1	B	1036	26% 47% 34% 15%
1	C	1036	29% 47% 34% 15%
1	D	1036	23% 48% 34% 15%
1	E	1036	37% 47% 34% 15%
1	F	1036	32% 47% 35% 15%
1	G	1036	29% 47% 34% 15%
1	H	1036	49% 56% 38%

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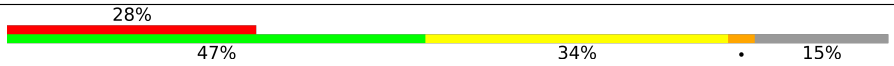
Mol	Chain	Length	Quality of chain
1	I	1036	
1	J	1036	

2 Entry composition (i)

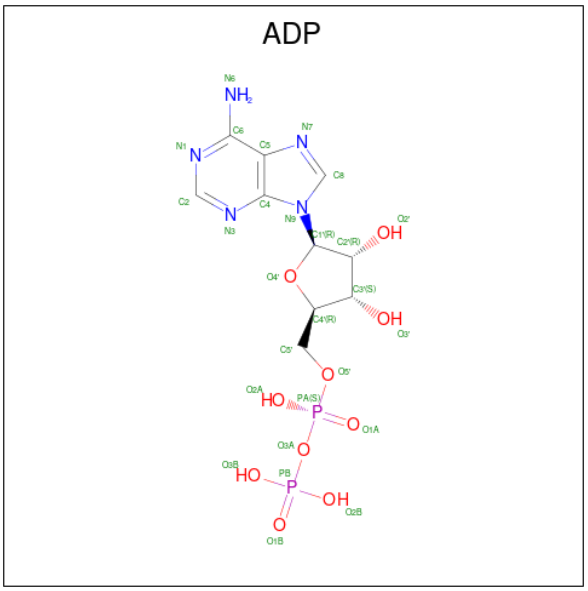
There are 3 unique types of molecules in this entry. The entry contains 72752 atoms, of which 0 are hydrogens and 0 are deuteriums.

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.

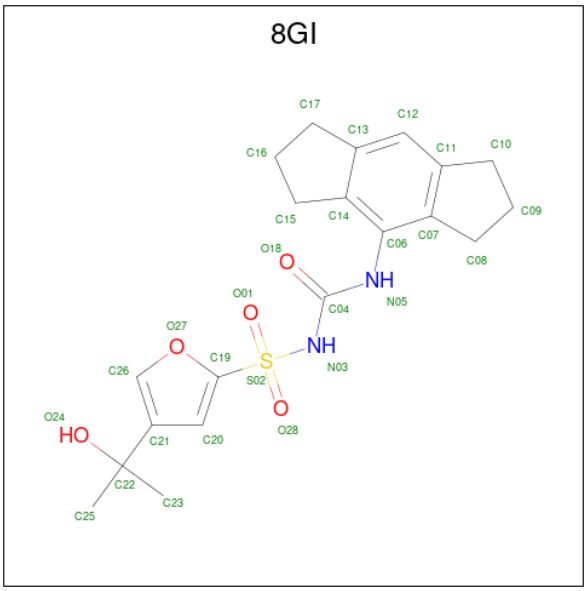
Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	1010	Total	C	N	O	S	0	0
			8065	5117	1377	1501	70		
1	B	880	Total	C	N	O	S	0	0
			7009	4450	1197	1302	60		
1	C	880	Total	C	N	O	S	0	0
			7009	4450	1197	1302	60		
1	D	880	Total	C	N	O	S	0	0
			7009	4450	1197	1302	60		
1	E	880	Total	C	N	O	S	0	0
			7009	4450	1197	1302	60		
1	F	880	Total	C	N	O	S	0	0
			7009	4450	1197	1302	60		
1	G	880	Total	C	N	O	S	0	0
			7009	4450	1197	1302	60		
1	H	1010	Total	C	N	O	S	0	0
			8065	5117	1377	1501	70		
1	I	880	Total	C	N	O	S	0	0
			7009	4450	1197	1302	60		
1	J	880	Total	C	N	O	S	0	0
			7009	4450	1197	1302	60		

- Molecule 2 is ADENOSINE-5'-DIPHOSPHATE (three-letter code: ADP) (formula: $C_{10}H_{15}N_5O_{10}P_2$).



Mol	Chain	Residues	Atoms					AltConf
2	A	1	Total	C	N	O	P	0
			27	10	5	10	2	
2	B	1	Total	C	N	O	P	0
			27	10	5	10	2	
2	C	1	Total	C	N	O	P	0
			27	10	5	10	2	
2	D	1	Total	C	N	O	P	0
			27	10	5	10	2	
2	E	1	Total	C	N	O	P	0
			27	10	5	10	2	
2	F	1	Total	C	N	O	P	0
			27	10	5	10	2	
2	G	1	Total	C	N	O	P	0
			27	10	5	10	2	
2	H	1	Total	C	N	O	P	0
			27	10	5	10	2	
2	I	1	Total	C	N	O	P	0
			27	10	5	10	2	
2	J	1	Total	C	N	O	P	0
			27	10	5	10	2	

- Molecule 3 is 1-(1,2,3,5,6,7-hexahydro-s-indacen-4-yl)-3-[4-(2-oxidanylpropan-2-yl)furan-2-yl]sulfonyl-urea (three-letter code: 8GI) (formula: $C_{20}H_{24}N_2O_5S$) (labeled as "Ligand of Interest" by depositor).



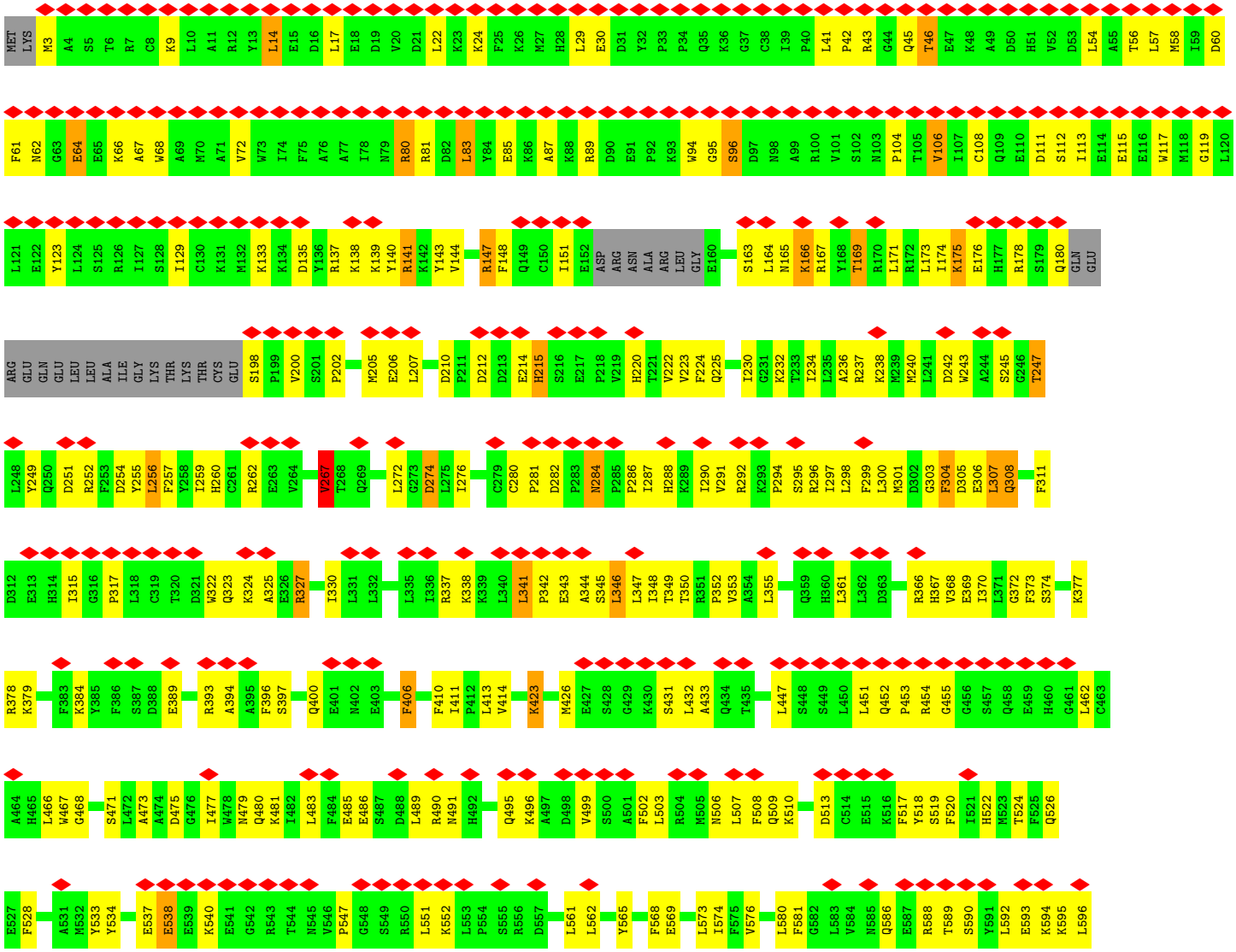
Mol	Chain	Residues	Atoms					AltConf
3	A	1	Total	C	N	O	S	0
			28	20	2	5	1	
3	B	1	Total	C	N	O	S	0
			28	20	2	5	1	
3	C	1	Total	C	N	O	S	0
			28	20	2	5	1	
3	D	1	Total	C	N	O	S	0
			28	20	2	5	1	
3	E	1	Total	C	N	O	S	0
			28	20	2	5	1	
3	F	1	Total	C	N	O	S	0
			28	20	2	5	1	
3	G	1	Total	C	N	O	S	0
			28	20	2	5	1	
3	H	1	Total	C	N	O	S	0
			28	20	2	5	1	
3	I	1	Total	C	N	O	S	0
			28	20	2	5	1	
3	J	1	Total	C	N	O	S	0
			28	20	2	5	1	

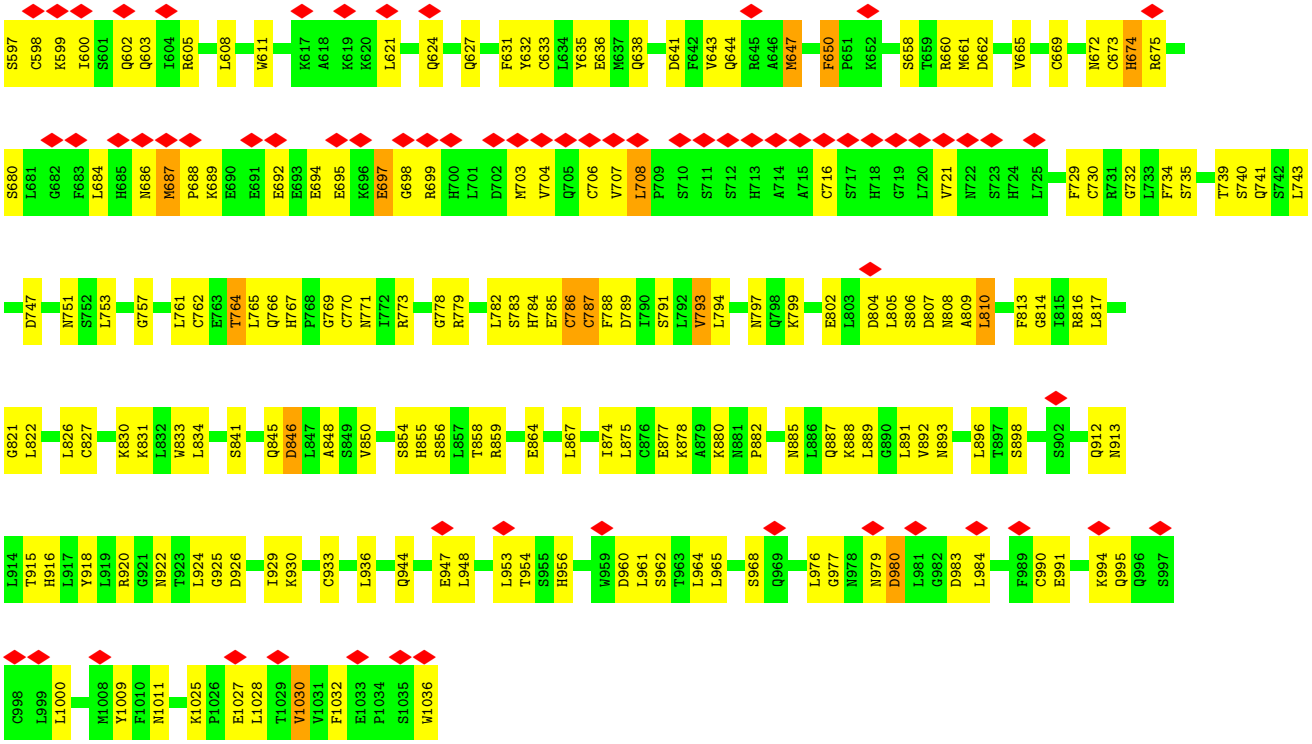
3 Residue-property plots (i)

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

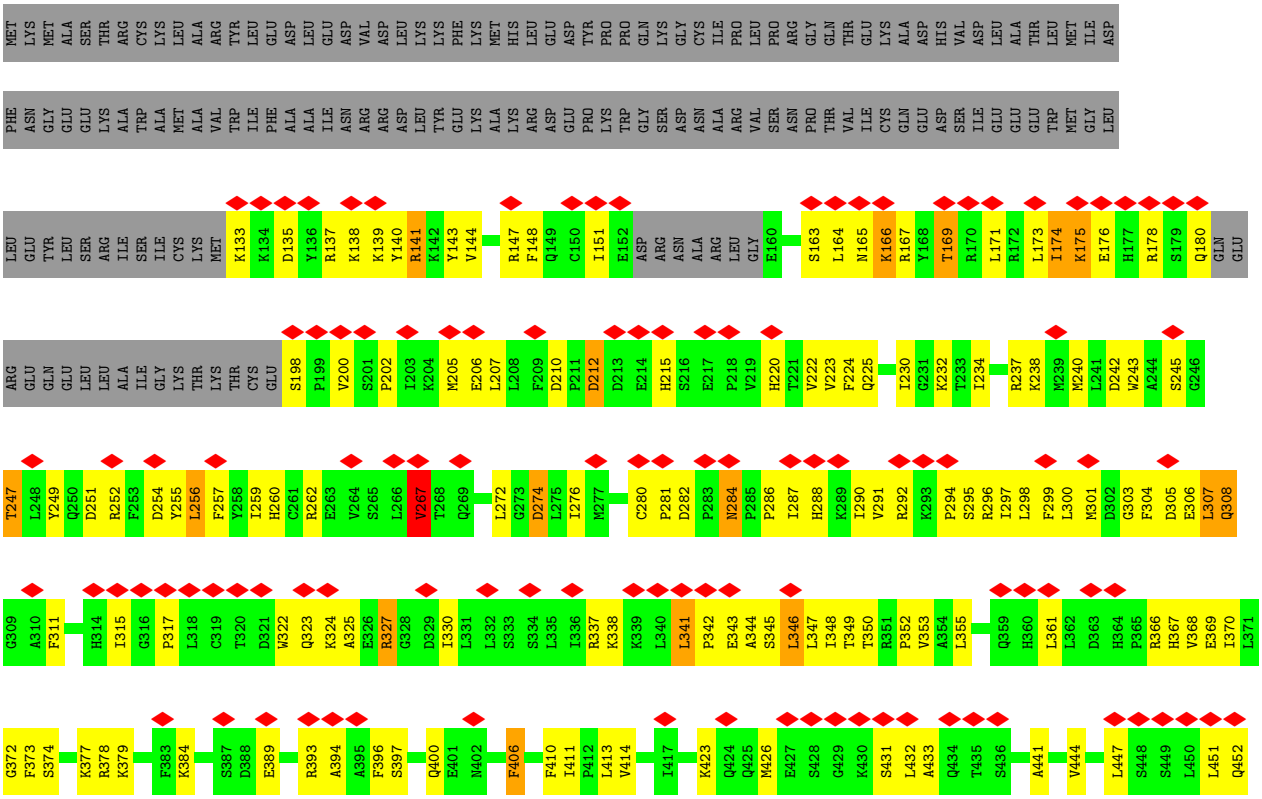
Chain A:

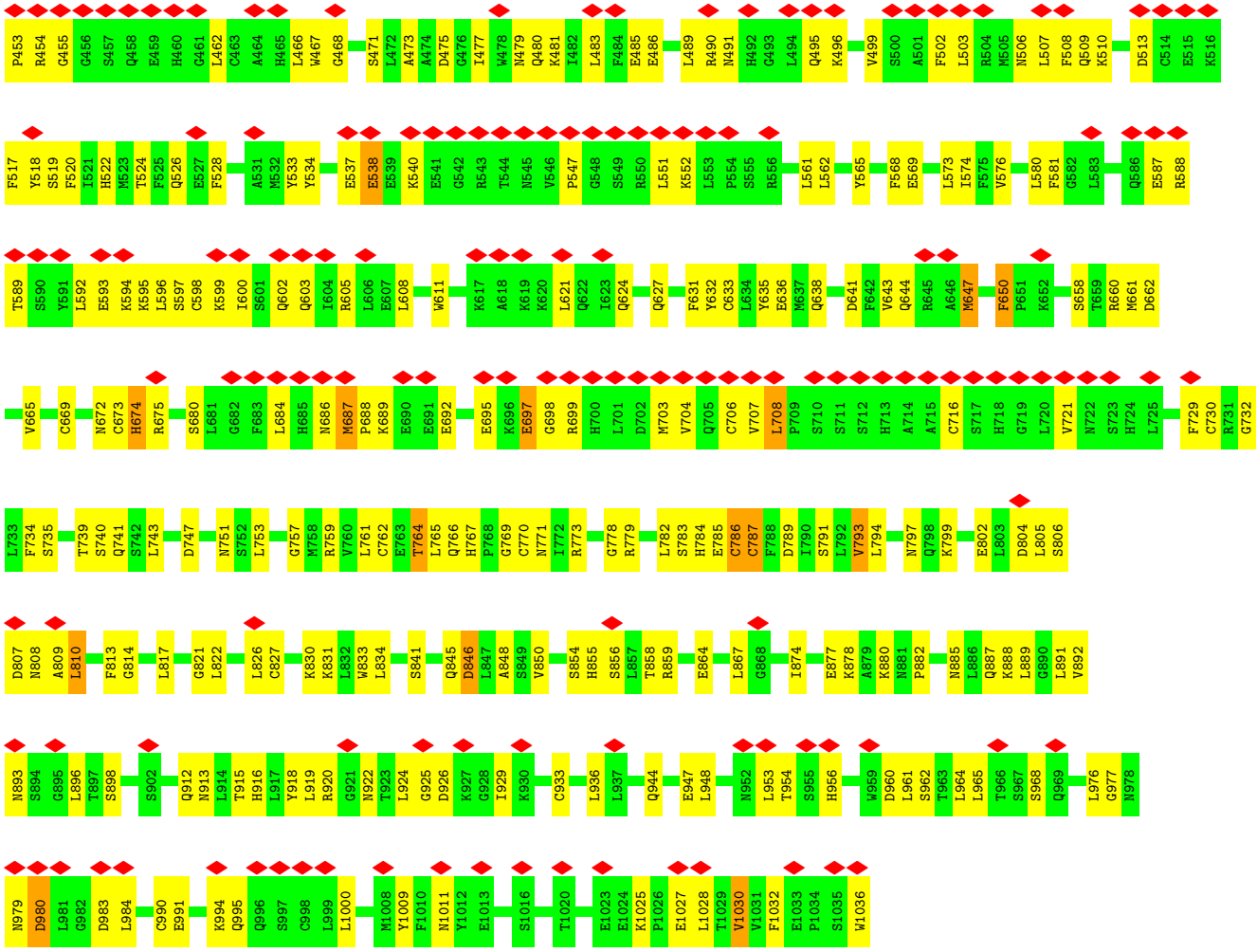




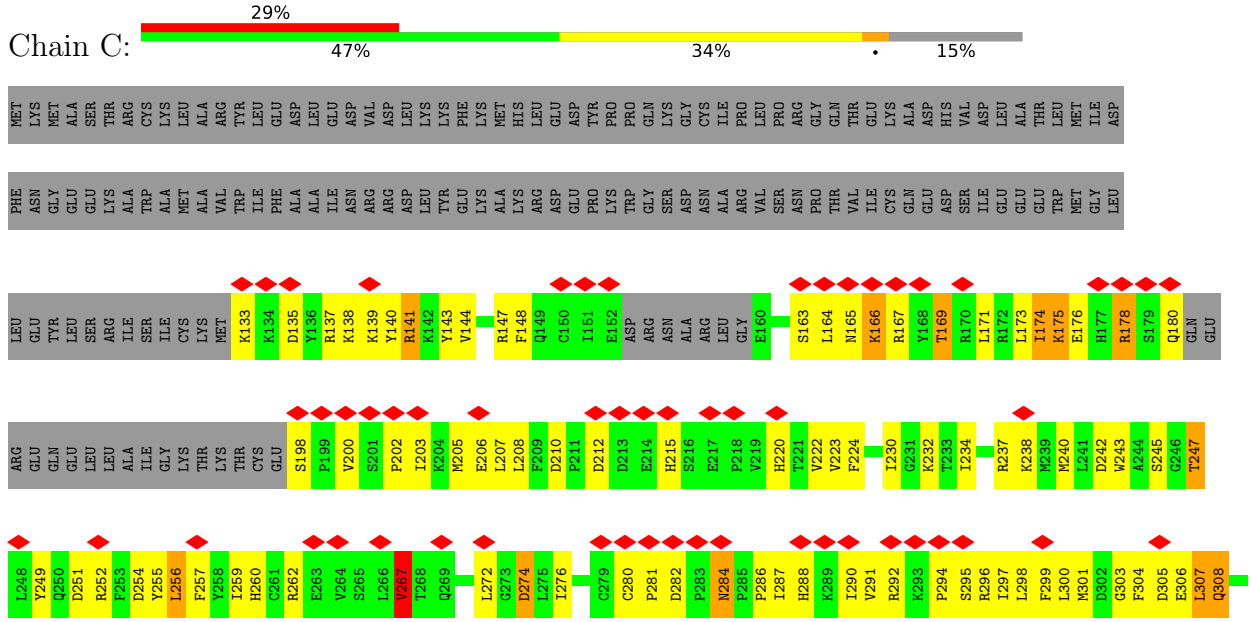
• Molecule 1: NACHT, LRR and PYD domains-containing protein 3

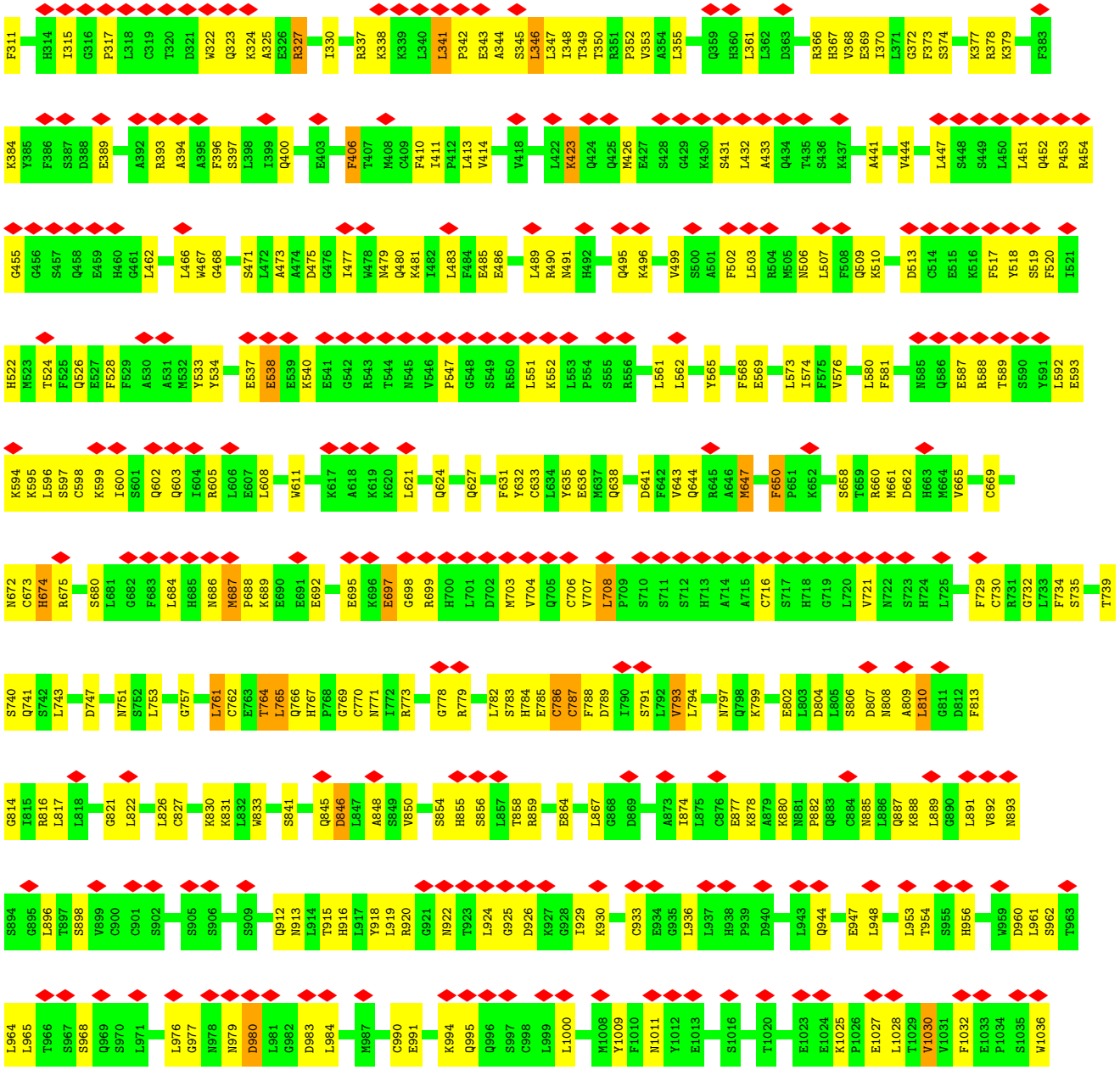
Chain B:





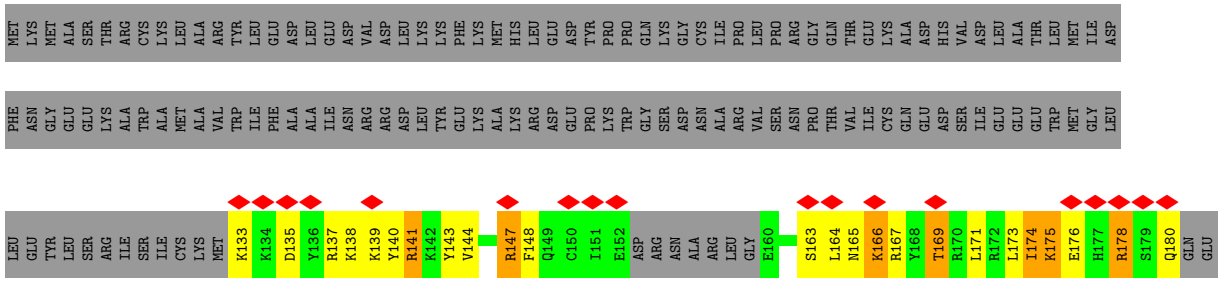
• Molecule 1: NACHT, LRR and PYD domains-containing protein 3

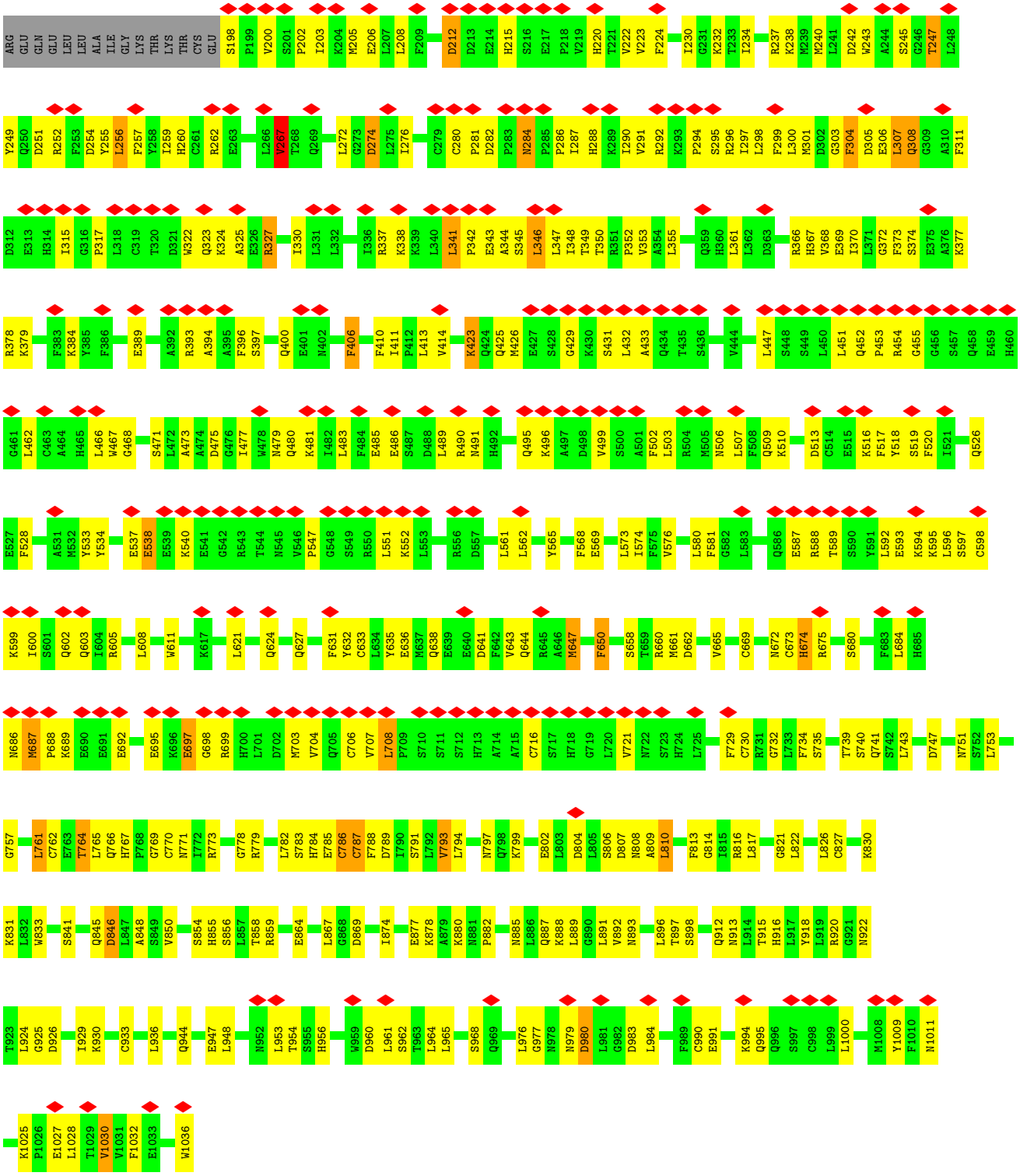




• Molecule 1: NACHT, LRR and PYD domains-containing protein 3

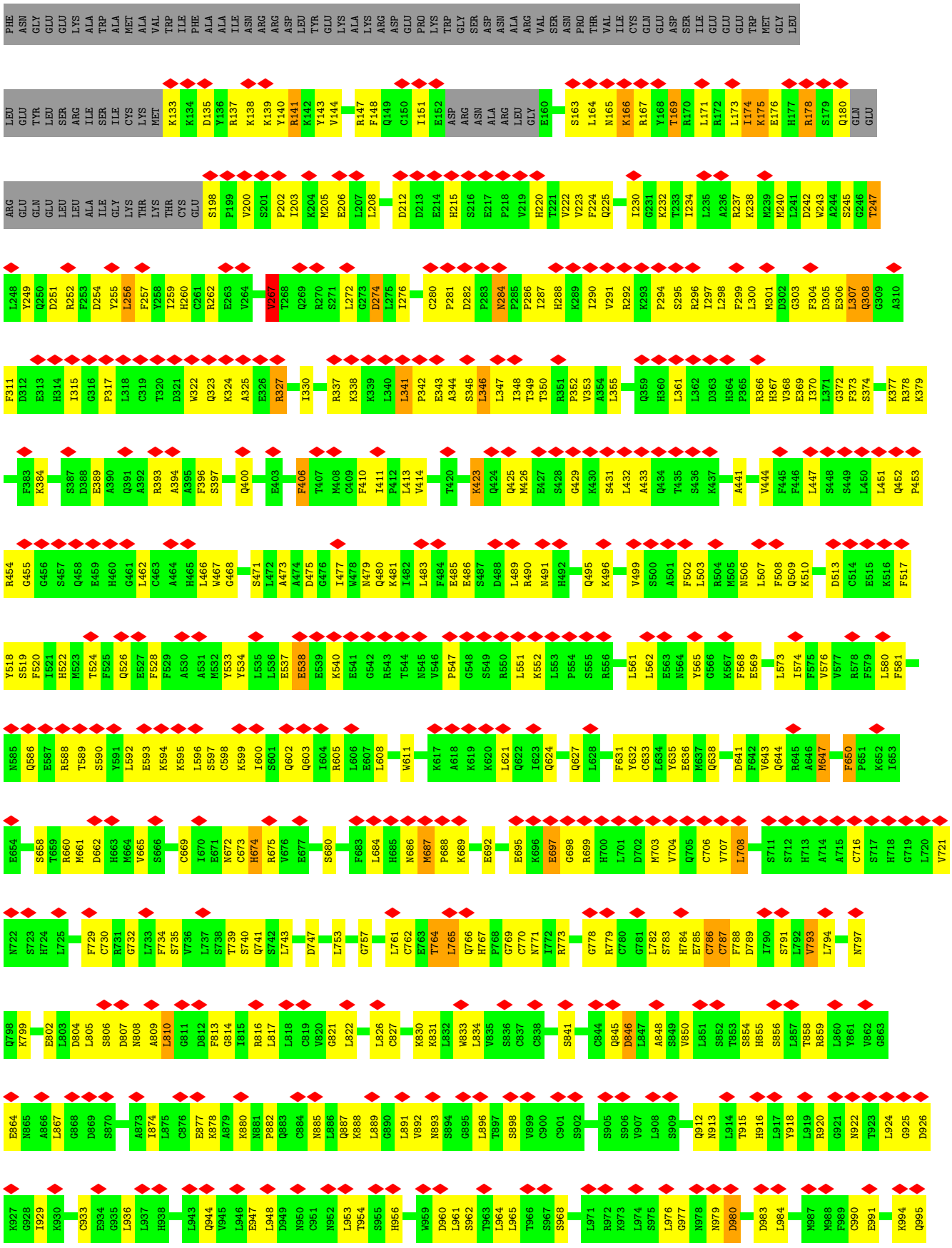
Chain D:

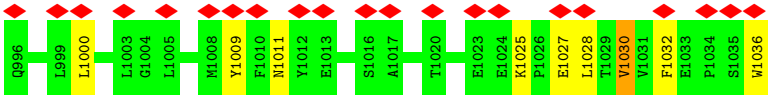




• Molecule 1: NACHT, LRR and PYD domains-containing protein 3

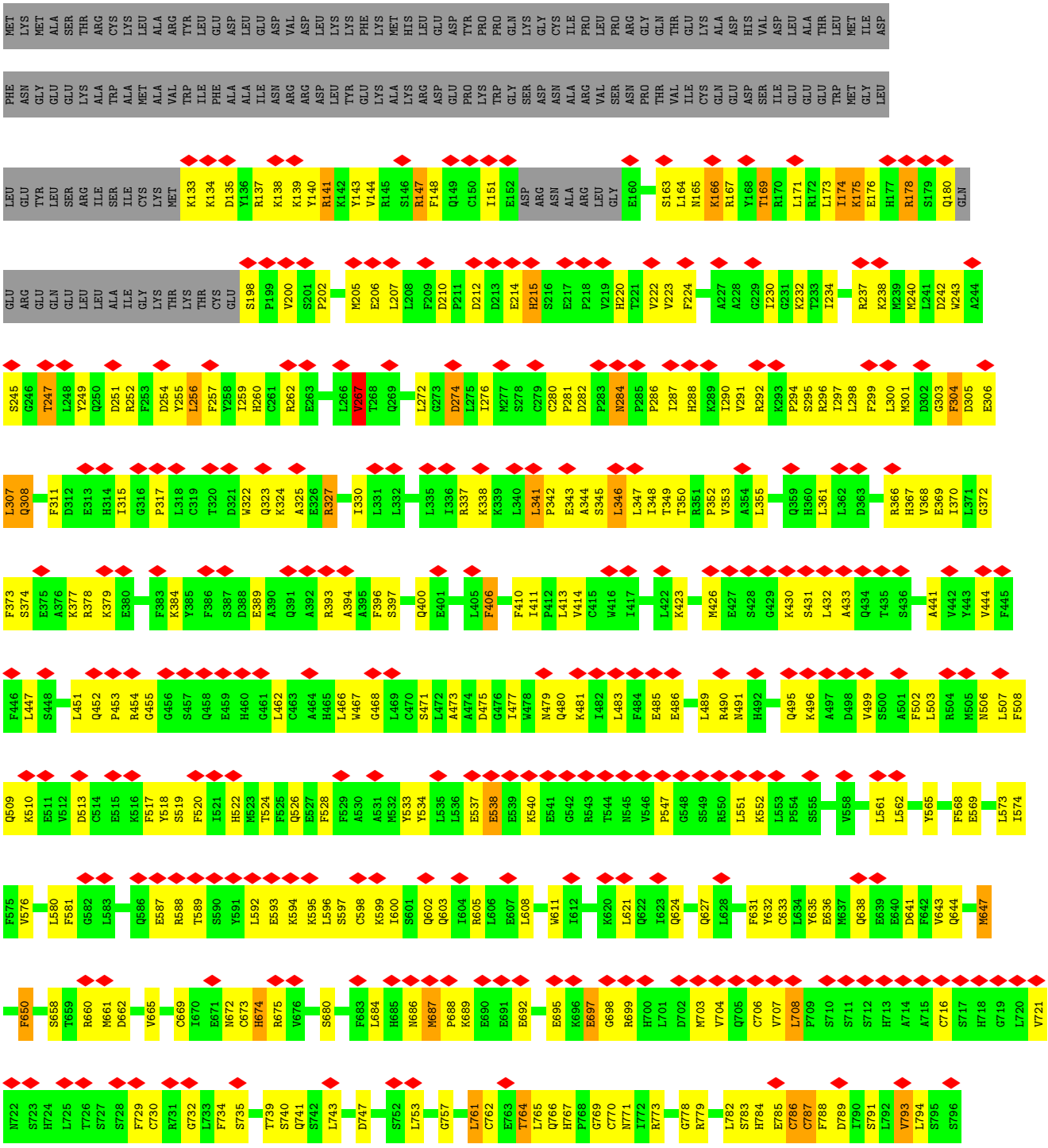
Chain E:

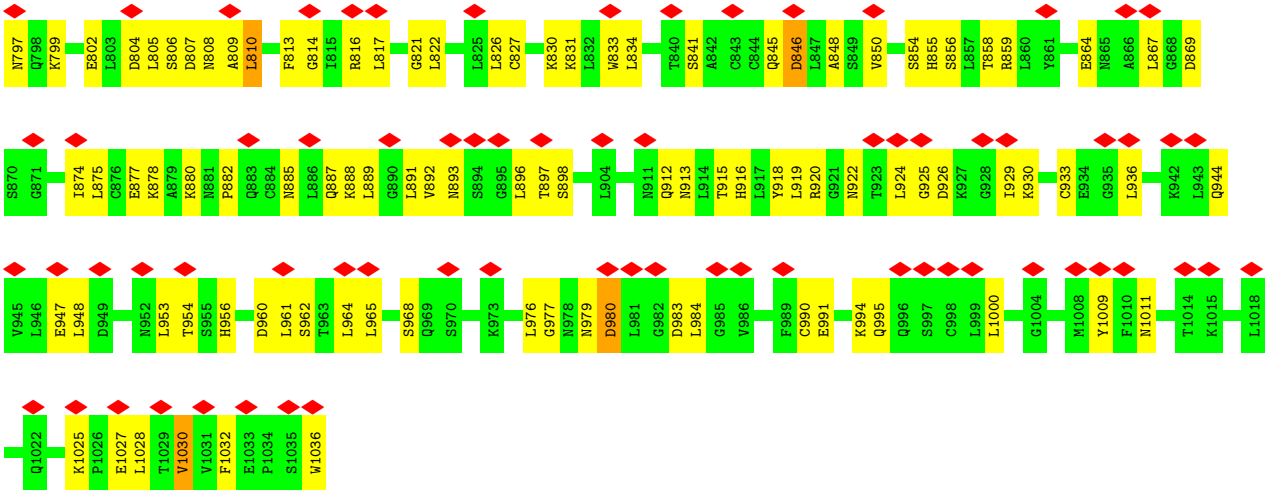

PHE ASN GLY GLU GLU LYS ALA TRP ALA MET ALA VAL TRP ILE PHE ALA ALA ILE ASN ARG ARG ASP LEU TYR GLU LYS ALA LYS ARG ASP GLU PRO LYS TRP GLY SER ASP ASN ALA ARG VAL SER ASN PRO THR VAL ILE CYS GLN GLU ASP SER ILE GLU GLU GLU TRP MET GLY LEU
LEU GLU TYR LEU SER ARG ILE SER ILE CYS LYS MET K133 K134 D135 Y136 R137 K138 K139 Y140 R141 K142 Y143 V144 R147 F148 Q149 C150 I151 E152 ASP ARG ASN ALA ARG LEU GLY E160 S163 L164 N165 K166 R167 Y168 T169 R170 L171 R172 L173 I174 K175 E176 H177 R178 S179 Q180 GLN GLU
ARG GLU GLN GLU LEU LEU ALA ILE GLY LYS THR LYS THR CYS GLU S198 P199 V200 S201 P202 I203 K204 M205 E206 L207 L208 D212 D213 E214 H215 S216 E217 P218 V219 H220 T221 V222 V223 F224 Q225 I230 G231 K232 T233 I234 L235 A236 R237 K238 M239 M240 I241 D242 W243 A244 S245 G246 T247
L248 Y249 Q250 D251 R252 F253 D254 Y255 L256 F257 Y258 I259 H260 C261 R262 E263 V264 V267 T268 Q269 R270 S271 L272 G273 D274 L275 I276 C280 P281 D282 P283 N284 P285 P286 I287 H288 K289 I290 V291 R292 K293 P294 S295 R296 I297 L298 F299 L300 M301 D302 G303 F304 D305 E306 L307 Q308 G309 A310
F311 D312 E313 H314 I315 G316 P317 L318 C319 T320 D321 W322 Q323 K324 A325 E326 R327 I330 R337 K338 K339 L340 L341 P342 E343 A344 S345 L346 L347 I348 T349 T350 R351 P352 V353 A354 L355 Q359 H360 L361 L362 D363 H364 P365 R366 H367 V368 E369 I370 L371 G372 F373 S374 K377 R378 K379
F383 K384 S387 D388 E389 A390 Q391 A392 R393 A394 A395 F396 S397 Q400 E403 F406 T407 M408 C409 F410 I411 P412 L413 V414 T420 K423 Q424 Q425 M426 E427 S428 G429 K430 S431 L432 A433 Q434 T435 S436 K437 A441 V444 F445 F446 L447 S448 S449 L450 L451 Q452 P453
R454 G455 G456 S457 Q458 E459 H460 G461 L462 C463 A464 H465 L466 W467 G468 S471 L472 A473 A474 D475 G476 I477 W478 N479 Q480 K481 T482 L483 F484 E485 E486 S487 D488 L489 R490 N491 H492 Q495 K496 V499 S500 A501 F502 L503 R504 M505 N506 L507 F508 Q509 K510 D513 C514 E515 K516 F517
Y518 S519 F520 I521 H522 M523 T524 F525 Q526 E527 F528 F529 A530 A531 M532 Y533 Y534 L535 L536 E537 E538 E539 K540 E541 G542 R543 T544 N545 V546 P547 G548 S549 R550 L551 K552 L553 P554 S555 R556 L561 L562 E563 N564 Y565 G566 K567 F568 E569 L573 I574 F575 V576 V577 R578 F579 L580 F581
N585 Q586 E587 R588 T589 S590 Y591 L592 E593 K594 K595 L596 S597 C598 K599 I600 S601 Q602 Q603 I604 R605 L606 E607 L608 W611 K617 A618 K619 K620 L621 Q622 I623 Q624 Q627 L628 F631 Y632 C633 L634 Y635 E636 M637 Q638 D641 F642 V643 Q644 R645 A646 M647 F650 P651 K652 I653
E654 S658 T659 R660 M661 D662 H663 M664 V665 S666 C669 I670 E671 N672 C673 H674 R675 V676 E677 S680 F683 L684 H685 N686 M687 P688 K689 E692 E695 K696 E697 G698 R699 H700 L701 D702 M703 V704 Q705 C706 V707 L708 S711 S712 H713 A714 A715 C716 S717 H718 G719 L720 V721
N722 S723 H724 L725 F729 C730 R731 G732 L733 F734 S735 V736 L737 S738 T739 S740 Q741 S742 L743 D747 L753 G757 L761 C762 E763 T764 L765 Q766 H767 F768 G769 C770 N771 I772 R773 G778 R779 C780 G781 L782 S783 H784 E785 C786 C787 F788 D789 T790 S791 L792 V793 L794 N797
Q798 K799 E802 L803 D804 L805 S806 D807 N808 A809 L810 G811 D812 F813 G814 I815 R816 L817 L818 C819 V820 G821 L822 L826 C827 K830 K831 L832 W833 L834 V835 S836 C837 C838 S841 C844 Q845 D846 L847 A848 S849 V850 L851 S852 T853 S854 H855 S856 L857 T858 R859 L860 Y861 V862 G863
E864 N865 A866 L867 G868 D869 S870 A873 I874 L875 C876 E877 K878 A879 K880 N881 P882 Q883 C884 N885 L886 Q887 K888 L889 G890 L891 V892 N893 S894 G895 L896 T897 S898 V899 C900 C901 S902 S905 S906 V907 L908 S909 Q912 N913 L914 T915 H916 L917 Y918 L919 R920 G921 N922 T923 L924 G925 D926
K927 G928 I929 K930 C933 E934 G935 L936 L937 H938 L943 Q944 V945 L946 E947 L948 D949 N950 C951 N952 L953 T954 S955 H956 W959 D960 L961 S962 T963 L964 L965 T966 S967 S968 L971 R972 K973 L974 S975 L976 G977 N978 N979 D980 D983 L984 M987 M988 F989 C990 E991 K994 Q995



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

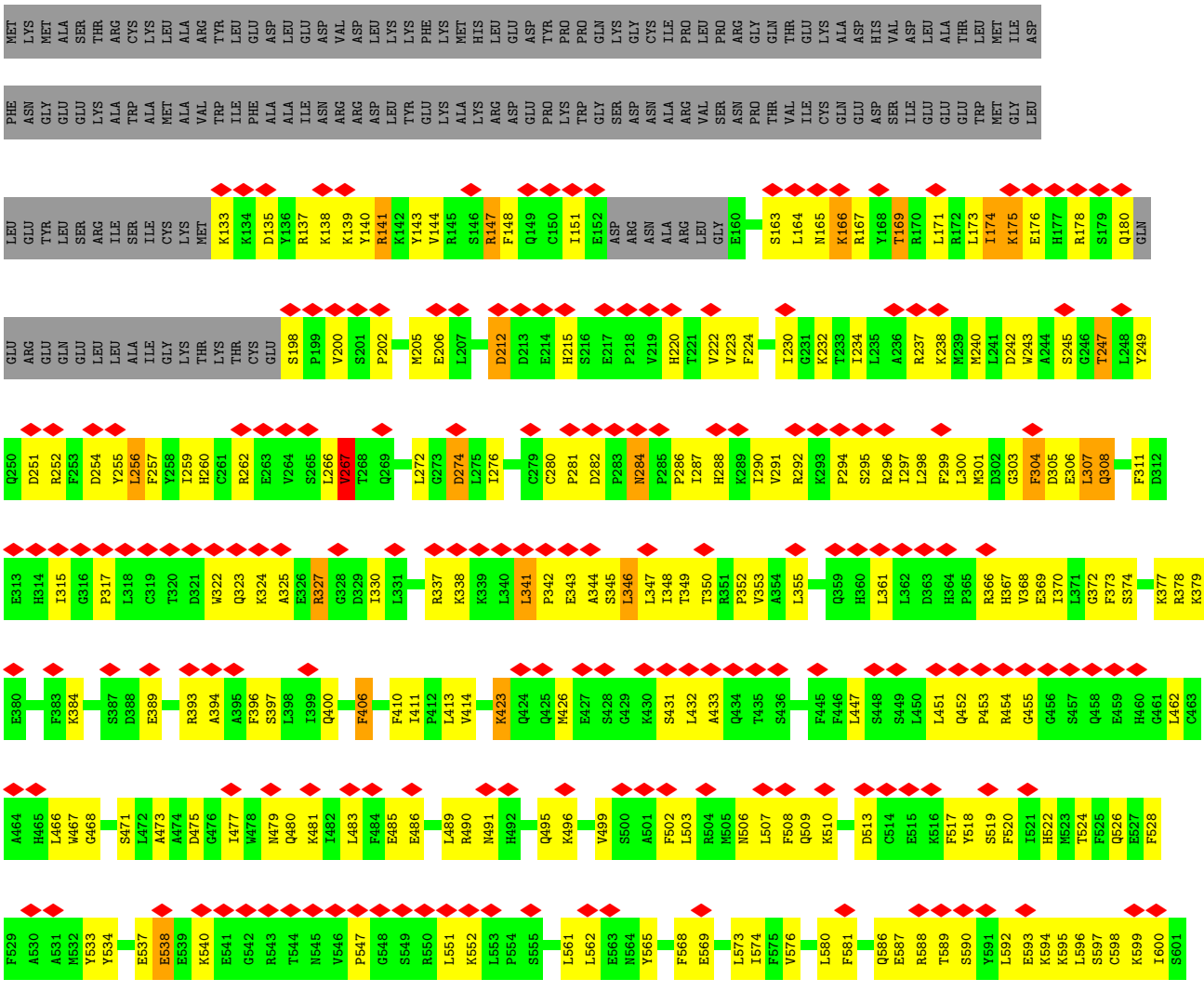
Chain F:

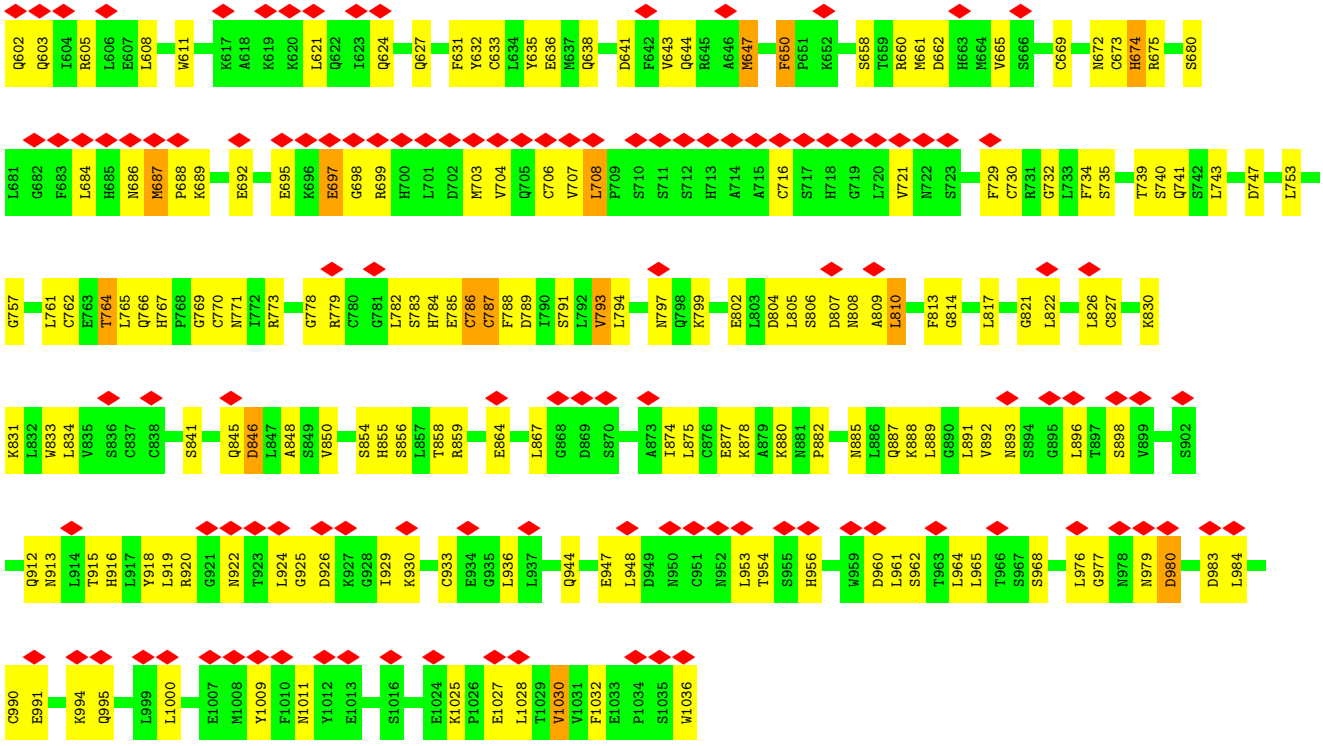




• Molecule 1: NACHT, LRR and PYD domains-containing protein 3

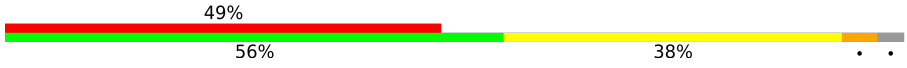
Chain G:

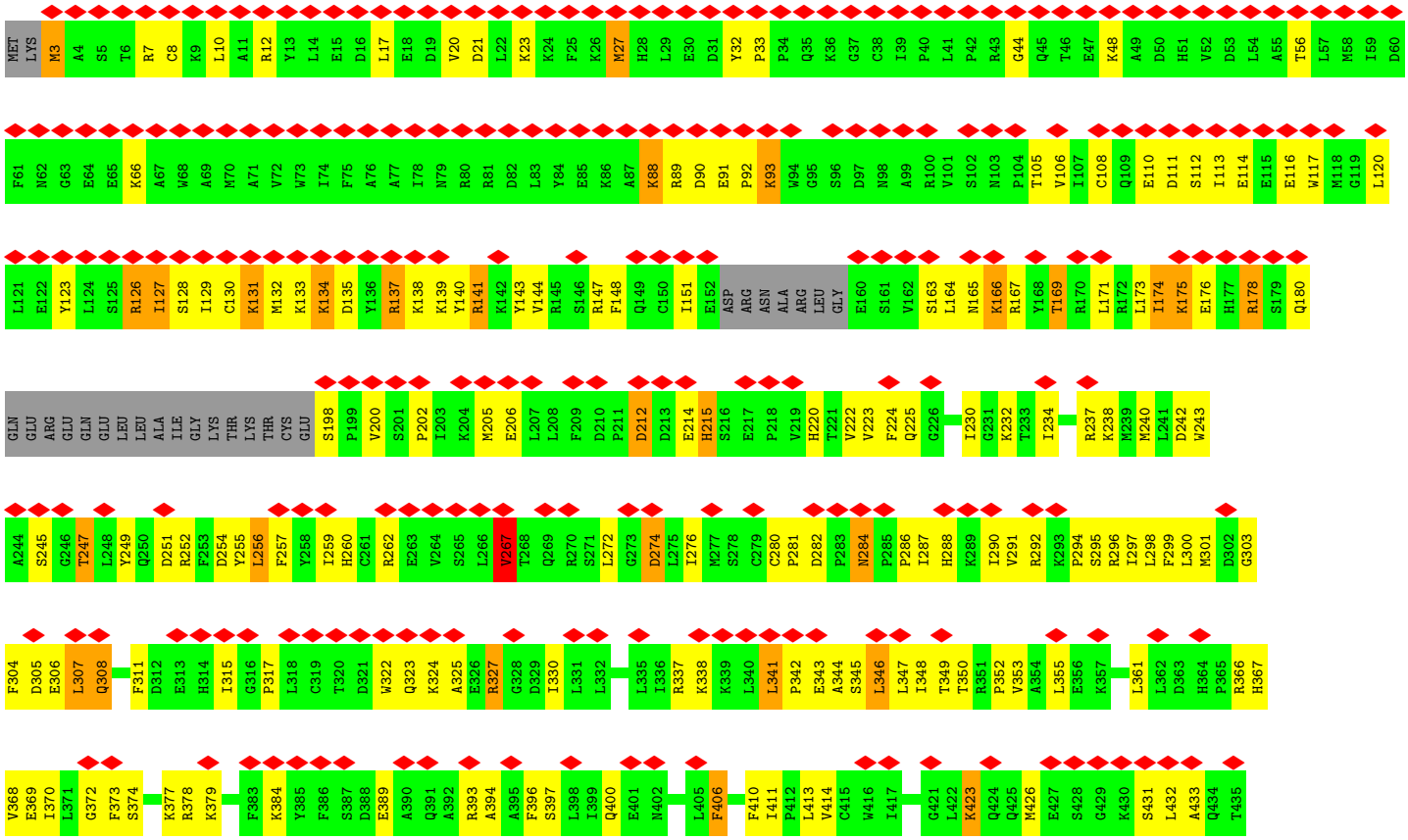


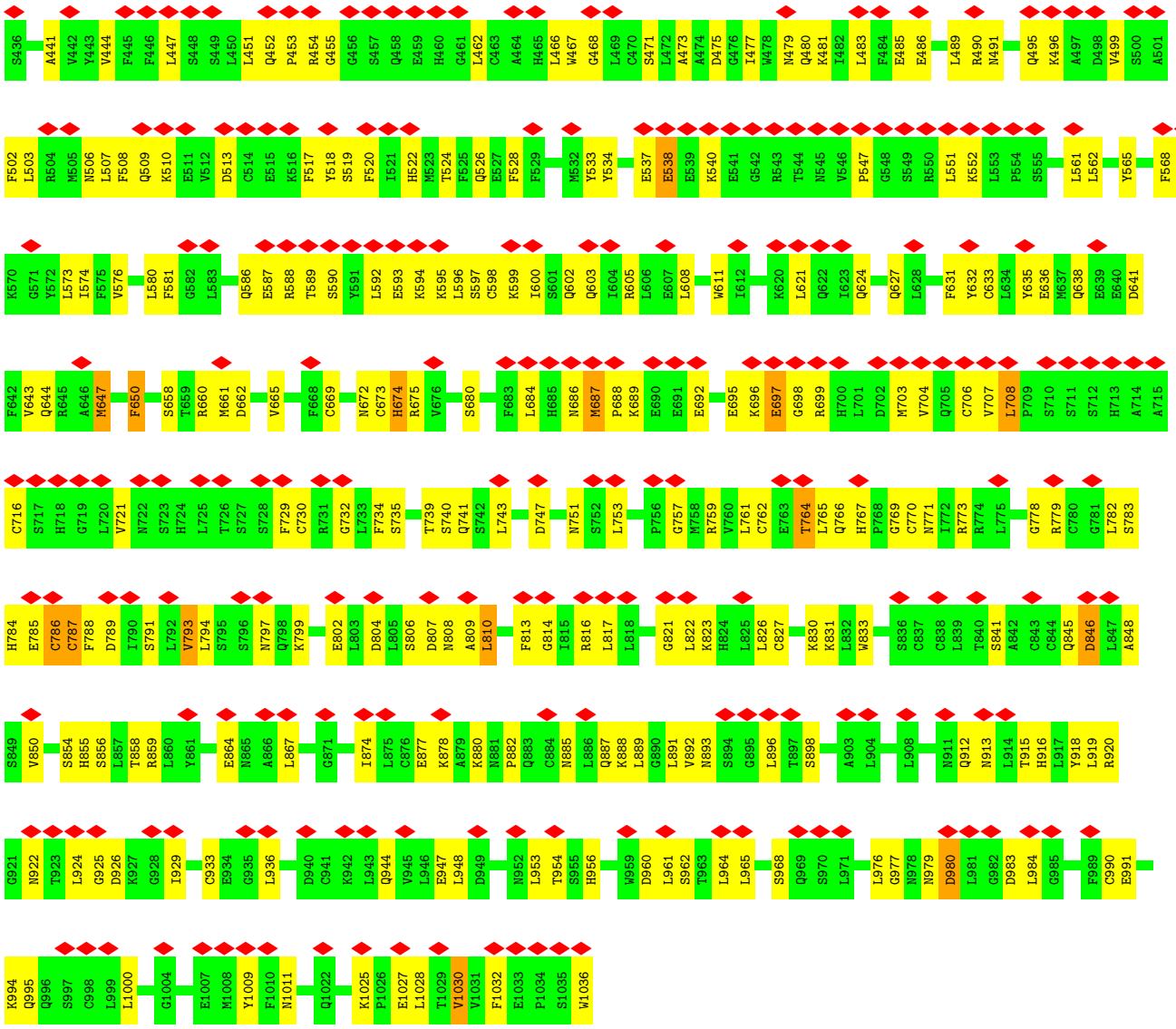


• Molecule 1: NACHT, LRR and PYD domains-containing protein 3

Chain H:

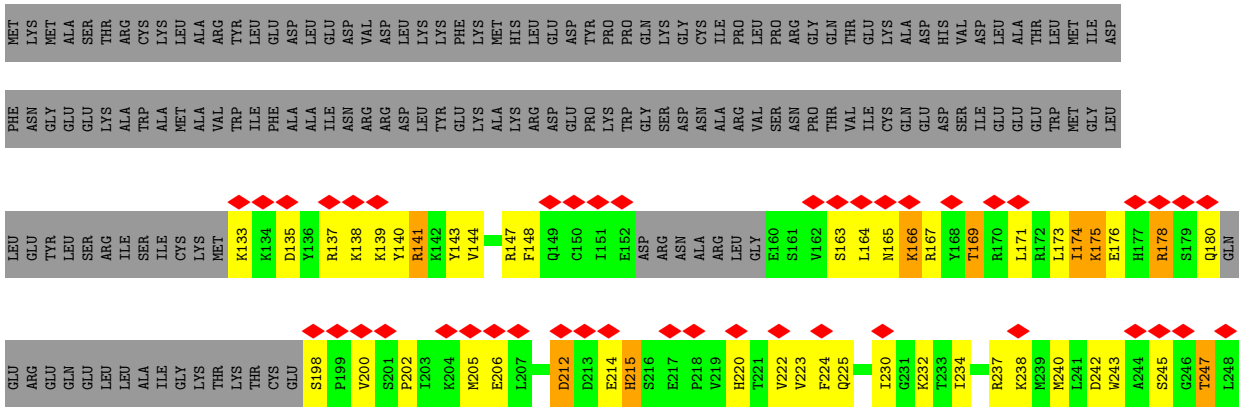


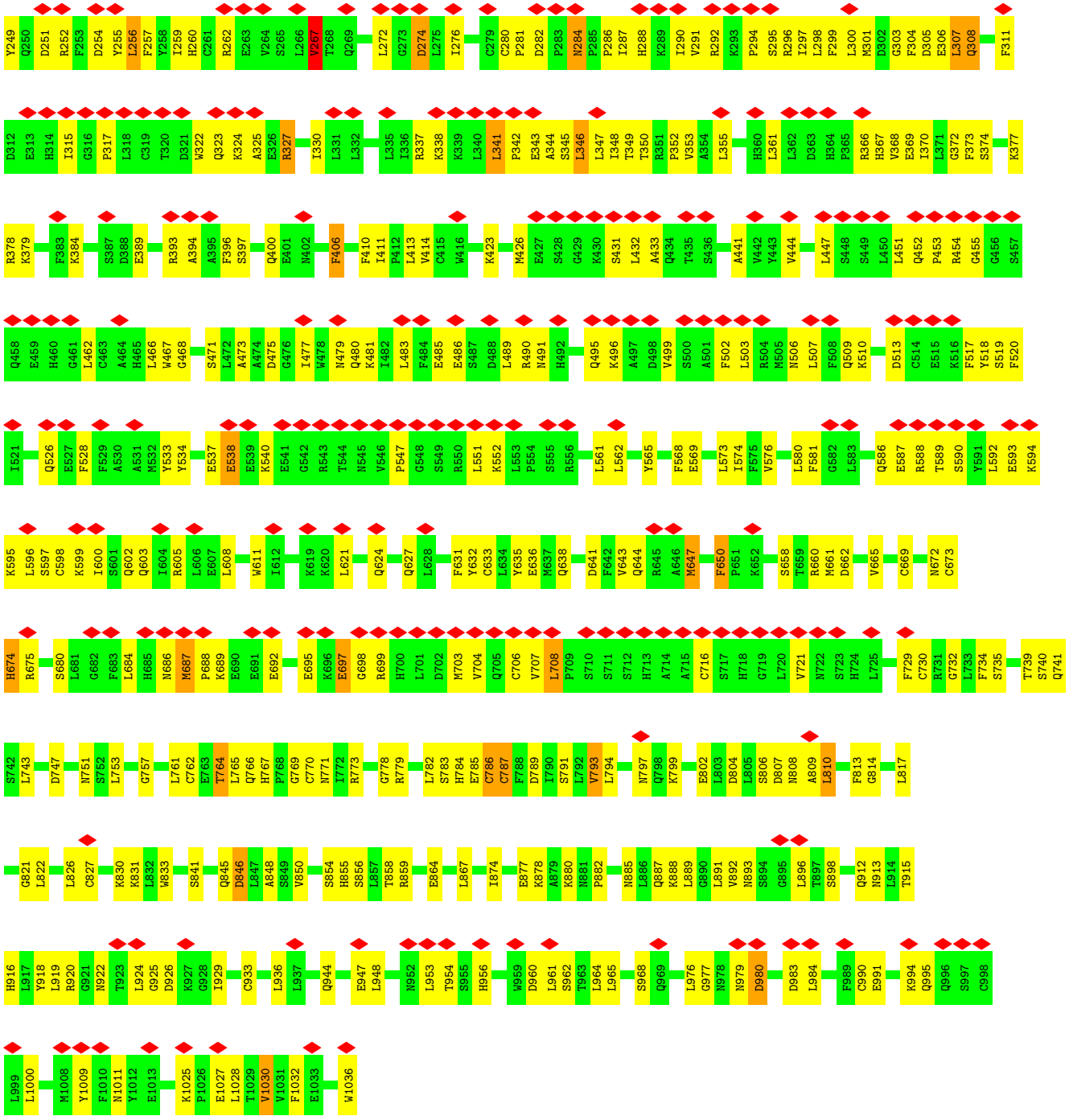




• Molecule 1: NACHT, LRR and PYD domains-containing protein 3

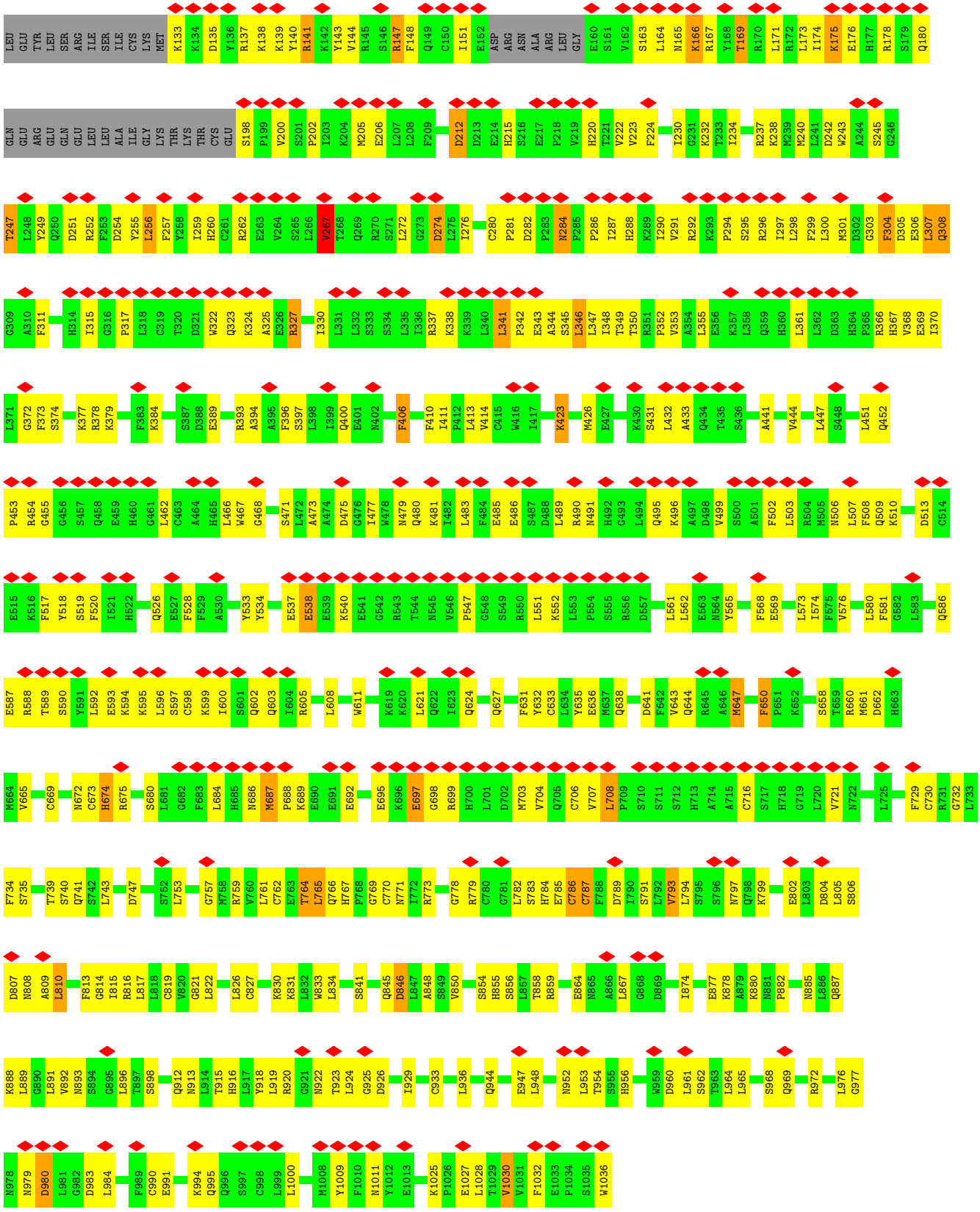
Chain I:





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

Chain J:


LEU GLU TYR LEU SER ARG ILE SER ILE CYS LYS MET K133 K134 D135 Y136 R137 K138 K139 Y140 R141 K142 Y143 V144 R145 S146 R147 F148 Q149 C150 I151 E152 ASP ARG ASN ALA ARG LEU GLY E160 S161 V162 S163 L164 N165 K166 R167 Y168 T169 R170 L171 R172 L173 I174 K175 E176 H177 R178 S179 Q180
GLN GLU ARG GLU GLN GLU LEU LEU ALA ILE GLY LYS THR LYS THR CYS GLU S198 P199 V200 S201 P202 I203 K204 M205 E206 L207 L208 F209 D212 D213 E214 H215 S216 E217 P218 V219 H220 T221 V222 V223 F224 I230 G231 K232 T233 I234 R237 K238 M239 M240 L241 D242 W243 A244 S245 G246
T247 L248 Y249 Q250 D251 R252 F253 D254 Y255 L256 F257 Y258 I259 H260 C261 R262 E263 V264 S265 L266 V267 T268 Q269 R270 S271 L272 G273 D274 L275 I276 C280 P281 D282 P283 N284 P285 P286 I287 H288 K289 I290 V291 R292 K293 P294 S295 R296 I297 L298 P299 L300 M301 D302 G303 F304 D305 E306 L307 Q308
G309 A310 F311 H314 I315 G316 P317 L318 C319 T320 D321 W322 Q323 K324 A325 E326 R327 I330 L331 L332 S333 S334 L335 I336 R337 K338 K339 L340 L341 P342 E343 A344 S345 L346 L347 I348 T349 T350 R351 P352 V353 A354 L355 E356 K357 L358 Q359 H360 L361 L362 D363 H364 P365 R366 H367 V368 E369 I370
L371 G372 F373 S374 K377 R378 K379 F383 K384 S387 D388 E389 R393 A394 A395 F396 S397 L398 I399 Q400 E401 N402 F406 F410 I411 P412 L413 V414 C415 W416 I417 K423 M426 E427 K430 S431 L432 A433 Q434 T435 S436 A441 V444 L447 S448 L451 Q452
P453 R454 G455 G456 S457 Q458 E459 H460 G461 L462 C463 A464 H465 L466 W467 G468 S471 L472 A473 A474 D475 G476 I477 W478 N479 Q480 K481 I482 L483 F484 E485 E486 S487 D488 L489 R490 N491 H492 G493 L494 Q495 K496 A497 D498 V499 S500 A501 F502 L503 R504 M505 N506 L507 F508 Q509 K510 D513 C514
E515 K516 F517 Y518 S519 F520 I521 H522 Q526 E527 F528 F529 A530 Y533 Y534 E537 E538 E539 K540 E541 G542 R543 T544 N545 V546 P547 G548 S549 R550 L551 K552 L553 P554 S555 R556 D557 L561 L562 E563 N564 Y565 F568 E569 L573 I574 F575 V576 L580 F581 G582 L583 Q586
E587 R588 T589 S590 Y591 L592 E593 K594 K595 L596 S597 C598 K599 I600 S601 Q602 Q603 I604 R605 L608 W611 K619 K620 L621 Q622 I623 Q624 Q627 F631 Y632 C633 L634 Y635 E636 M637 Q638 D641 F642 V643 Q644 R645 A646 M647 F650 P651 K652 S658 T659 R660 M661 D662 H663
M664 V665 C669 N672 C673 H674 R675 S680 L681 G682 F683 L684 H685 N686 M687 P688 K689 E690 E691 E692 E695 K696 E697 G698 R699 H700 L701 D702 M703 V704 Q705 C706 V707 L708 P709 S710 S711 S712 H713 A714 A715 C716 S717 H718 G719 L720 V721 N722 L725 F729 C730 R731 G732 L733
F734 S735 T739 S740 Q741 S742 L743 D747 S752 L753 G757 M758 R759 V760 L761 C762 E763 T764 L765 Q766 H767 P768 G769 C770 N771 I772 R773 G778 R779 C780 G781 L782 S783 H784 E785 C786 C787 F788 D789 I790 S791 L792 V793 L794 S795 S796 N797 Q798 K799 E802 L803 D804 L805 S806
D807 N808 A809 L810 F813 G814 I815 R816 L817 L818 C819 V820 G821 L822 L826 C827 K830 K831 L832 W833 L834 S841 Q845 D846 L847 A848 S849 V850 S854 H855 S856 L857 T858 R859 E864 N865 A866 L867 G868 D869 I874 E877 K878 A879 K880 N881 P882 N885 L886 Q887
K888 L889 G890 L891 V892 N893 S894 G895 L896 T897 S898 Q912 N913 L914 T915 H916 L917 Y918 L919 R920 G921 N922 T923 L924 G925 D926 I929 C933 L936 Q944 E947 L948 N952 L953 T954 S955 H956 W959 D960 L961 S962 T963 L964 L965 S968 Q969 R972 L976 G977
N978 N979 D980 L981 G982 D983 L984 F989 C990 E991 K994 Q995 Q996 S997 C998 L999 L1000 M1008 Y1009 F1010 N1011 Y1012 E1013 K1025 P1026 E1027 L1028 T1029 V1030 Y1031 F1032 E1033 P1034 S1035 W1036

4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, D5	Depositor
Number of particles used	161351	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	45	Depositor
Minimum defocus (nm)	750	Depositor
Maximum defocus (nm)	1500	Depositor
Magnification	Not provided	
Image detector	GATAN K3 BIOQUANTUM (6k x 4k)	Depositor
Maximum map value	0.046	Depositor
Minimum map value	-0.021	Depositor
Average map value	0.000	Depositor
Map value standard deviation	0.002	Depositor
Recommended contour level	0.00515	Depositor
Map size (Å)	309.59998, 309.59998, 309.59998	wwPDB
Map dimensions	240, 240, 240	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.2899998, 1.2899998, 1.2899998	Depositor

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: 8GI, ADP

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	0.40	0/8223	0.56	1/11088 (0.0%)
1	B	0.35	0/7144	0.55	1/9632 (0.0%)
1	C	0.35	0/7144	0.55	1/9632 (0.0%)
1	D	0.35	0/7144	0.55	1/9632 (0.0%)
1	E	0.35	0/7144	0.55	1/9632 (0.0%)
1	F	0.35	0/7144	0.55	1/9632 (0.0%)
1	G	0.35	0/7144	0.55	1/9632 (0.0%)
1	H	0.50	1/8223 (0.0%)	0.61	1/11088 (0.0%)
1	I	0.35	0/7144	0.55	1/9632 (0.0%)
1	J	0.35	0/7144	0.55	1/9632 (0.0%)
All	All	0.38	1/73598 (0.0%)	0.56	10/99232 (0.0%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand.A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	0	1
1	B	0	1
1	C	0	1
1	D	0	1
1	E	0	1
1	F	0	1
1	G	0	1
1	H	0	1
1	I	0	1
1	J	0	1
All	All	0	10

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	H	27	MET	CB-CG	5.81	1.70	1.51

All (10) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	I	165	ASN	CB-CA-C	5.37	121.14	110.40
1	F	165	ASN	CB-CA-C	5.37	121.13	110.40
1	E	165	ASN	CB-CA-C	5.36	121.13	110.40
1	G	165	ASN	CB-CA-C	5.36	121.12	110.40
1	H	165	ASN	CB-CA-C	5.36	121.12	110.40
1	B	165	ASN	CB-CA-C	5.36	121.11	110.40
1	D	165	ASN	CB-CA-C	5.35	121.10	110.40
1	A	165	ASN	CB-CA-C	5.35	121.10	110.40
1	C	165	ASN	CB-CA-C	5.34	121.08	110.40
1	J	165	ASN	CB-CA-C	5.33	121.06	110.40

There are no chirality outliers.

All (10) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	809	ALA	Mainchain
1	B	809	ALA	Mainchain
1	C	809	ALA	Mainchain
1	D	809	ALA	Mainchain
1	E	809	ALA	Mainchain
1	F	809	ALA	Mainchain
1	G	809	ALA	Mainchain
1	H	809	ALA	Mainchain
1	I	809	ALA	Mainchain
1	J	809	ALA	Mainchain

5.2 Too-close contacts (i)

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in 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	8065	0	8081	314	0
1	B	7009	0	7038	281	0
1	C	7009	0	7038	286	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	D	7009	0	7038	307	0
1	E	7009	0	7038	285	0
1	F	7009	0	7038	289	0
1	G	7009	0	7038	285	0
1	H	8065	0	8081	343	0
1	I	7009	0	7038	273	0
1	J	7009	0	7038	284	0
2	A	27	0	12	2	0
2	B	27	0	12	2	0
2	C	27	0	12	2	0
2	D	27	0	12	2	0
2	E	27	0	12	2	0
2	F	27	0	12	2	0
2	G	27	0	12	2	0
2	H	27	0	12	2	0
2	I	27	0	12	2	0
2	J	27	0	12	2	0
3	A	28	0	0	0	0
3	B	28	0	0	0	0
3	C	28	0	0	0	0
3	D	28	0	0	0	0
3	E	28	0	0	0	0
3	F	28	0	0	0	0
3	G	28	0	0	0	0
3	H	28	0	0	0	0
3	I	28	0	0	0	0
3	J	28	0	0	0	0
All	All	72752	0	72586	2779	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 19.

All (2779) 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:D:133:LYS:HZ1	1:H:3:MET:CG	1.10	1.62
1:D:133:LYS:CE	1:H:3:MET:HG3	1.42	1.49
1:D:133:LYS:NZ	1:H:3:MET:HG3	1.15	1.47
1:D:133:LYS:NZ	1:H:3:MET:CG	1.82	1.13
1:D:133:LYS:NZ	1:H:3:MET:CB	2.11	1.12
1:D:133:LYS:CE	1:H:3:MET:HE3	1.82	1.09

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1036:TRP:HB2	1:F:699:ARG:HG2	1.36	1.06
1:E:699:ARG:HG2	1:F:1036:TRP:HB2	1.36	1.05
1:G:699:ARG:HG2	1:H:1036:TRP:HB2	1.36	1.05
1:D:133:LYS:HZ1	1:H:3:MET:CB	1.68	1.05
1:D:133:LYS:HE2	1:H:3:MET:HG3	1.41	1.03
1:G:1036:TRP:HB2	1:H:699:ARG:HG2	1.37	1.02
1:C:699:ARG:HG2	1:D:1036:TRP:HB2	1.42	1.00
1:C:1036:TRP:HB2	1:D:699:ARG:HG2	1.42	1.00
1:D:133:LYS:CE	1:H:3:MET:CG	2.32	1.00
1:D:133:LYS:HE3	1:H:3:MET:CE	1.93	0.99
1:A:1036:TRP:HB2	1:B:699:ARG:HG2	1.45	0.98
1:A:699:ARG:HG2	1:B:1036:TRP:HB2	1.45	0.98
1:D:133:LYS:HE3	1:H:3:MET:HE3	1.02	0.98
1:I:699:ARG:HG2	1:J:1036:TRP:HB2	1.45	0.96
1:I:1036:TRP:HB2	1:J:699:ARG:HG2	1.45	0.96
1:H:126:ARG:HG2	1:H:129:ILE:HB	1.52	0.92
1:D:133:LYS:HZ2	1:H:3:MET:HB2	1.34	0.92
1:G:984:LEU:HB2	1:H:621:LEU:HD23	1.52	0.90
1:D:133:LYS:HZ2	1:H:3:MET:CB	1.85	0.89
1:E:621:LEU:HD23	1:F:984:LEU:HB2	1.55	0.89
1:B:794:LEU:HB3	1:B:826:LEU:HD11	1.57	0.87
1:H:794:LEU:HB3	1:H:826:LEU:HD11	1.56	0.87
1:G:794:LEU:HB3	1:G:826:LEU:HD11	1.56	0.87
1:E:794:LEU:HB3	1:E:826:LEU:HD11	1.57	0.86
1:D:794:LEU:HB3	1:D:826:LEU:HD11	1.57	0.86
1:A:794:LEU:HB3	1:A:826:LEU:HD11	1.57	0.86
1:I:794:LEU:HB3	1:I:826:LEU:HD11	1.57	0.86
1:E:1036:TRP:HB2	1:F:699:ARG:CG	2.05	0.85
1:E:984:LEU:HB2	1:F:621:LEU:HD23	1.56	0.85
1:J:794:LEU:HB3	1:J:826:LEU:HD11	1.57	0.85
1:C:794:LEU:HB3	1:C:826:LEU:HD11	1.57	0.85
1:G:699:ARG:CG	1:H:1036:TRP:HB2	2.06	0.84
1:E:699:ARG:CG	1:F:1036:TRP:HB2	2.05	0.84
1:G:621:LEU:HD23	1:H:984:LEU:HB2	1.59	0.84
1:F:794:LEU:HB3	1:F:826:LEU:HD11	1.56	0.84
1:C:621:LEU:HD23	1:D:984:LEU:HB2	1.58	0.84
1:G:1036:TRP:HB2	1:H:699:ARG:CG	2.09	0.83
1:D:133:LYS:CE	1:H:3:MET:CE	2.53	0.83
1:C:984:LEU:HB2	1:D:621:LEU:HD23	1.61	0.82
1:G:699:ARG:HG2	1:H:1036:TRP:CB	2.10	0.82
1:F:848:ALA:HA	1:F:878:LYS:HD3	1.63	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:848:ALA:HA	1:C:878:LYS:HD3	1.63	0.81
1:E:1036:TRP:CB	1:F:699:ARG:HG2	2.10	0.81
1:D:848:ALA:HA	1:D:878:LYS:HD3	1.63	0.81
1:C:1036:TRP:HB2	1:D:699:ARG:CG	2.10	0.81
1:A:848:ALA:HA	1:A:878:LYS:HD3	1.63	0.81
1:C:699:ARG:CG	1:D:1036:TRP:HB2	2.11	0.80
1:E:699:ARG:HG2	1:F:1036:TRP:CB	2.11	0.80
1:E:848:ALA:HA	1:E:878:LYS:HD3	1.63	0.80
1:J:848:ALA:HA	1:J:878:LYS:HD3	1.63	0.80
1:G:848:ALA:HA	1:G:878:LYS:HD3	1.63	0.80
1:H:848:ALA:HA	1:H:878:LYS:HD3	1.63	0.79
1:H:66:LYS:NZ	1:H:126:ARG:HA	1.98	0.79
1:I:848:ALA:HA	1:I:878:LYS:HD3	1.63	0.79
1:E:148:PHE:HA	1:E:237:ARG:HH21	1.48	0.79
1:B:848:ALA:HA	1:B:878:LYS:HD3	1.63	0.79
1:I:984:LEU:HB2	1:J:621:LEU:HD23	1.65	0.79
1:B:410:PHE:CD2	1:B:411:ILE:HG13	2.18	0.79
1:D:410:PHE:CD2	1:D:411:ILE:HG13	2.18	0.79
1:G:410:PHE:CD2	1:G:411:ILE:HG13	2.19	0.78
1:C:821:GLY:O	1:C:826:LEU:HD12	1.84	0.78
1:D:148:PHE:HA	1:D:237:ARG:HH21	1.48	0.78
1:B:148:PHE:HA	1:B:237:ARG:HH21	1.48	0.78
1:B:821:GLY:O	1:B:826:LEU:HD12	1.84	0.78
1:E:410:PHE:CD2	1:E:411:ILE:HG13	2.18	0.78
1:J:410:PHE:CD2	1:J:411:ILE:HG13	2.18	0.78
1:E:821:GLY:O	1:E:826:LEU:HD12	1.84	0.78
1:I:410:PHE:CD2	1:I:411:ILE:HG13	2.18	0.78
1:G:821:GLY:O	1:G:826:LEU:HD12	1.84	0.78
1:A:621:LEU:HD23	1:B:984:LEU:HB2	1.65	0.78
1:H:410:PHE:CD2	1:H:411:ILE:HG13	2.18	0.78
1:H:821:GLY:O	1:H:826:LEU:HD12	1.84	0.78
1:H:954:THR:HA	1:H:980:ASP:HB2	1.66	0.78
1:I:699:ARG:CG	1:J:1036:TRP:HB2	2.13	0.78
1:I:954:THR:HA	1:I:980:ASP:HB2	1.66	0.78
1:F:410:PHE:CD2	1:F:411:ILE:HG13	2.19	0.78
1:H:148:PHE:HA	1:H:237:ARG:HH21	1.48	0.78
1:B:954:THR:HA	1:B:980:ASP:HB2	1.65	0.78
1:C:148:PHE:HA	1:C:237:ARG:HH21	1.48	0.78
1:F:821:GLY:O	1:F:826:LEU:HD12	1.84	0.78
1:B:300:LEU:CD1	1:B:347:LEU:HD22	2.14	0.78
1:C:954:THR:HA	1:C:980:ASP:HB2	1.65	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:821:GLY:O	1:I:826:LEU:HD12	1.84	0.78
1:I:1036:TRP:HB2	1:J:699:ARG:CG	2.14	0.78
1:A:699:ARG:CG	1:B:1036:TRP:HB2	2.14	0.77
1:E:300:LEU:CD1	1:E:347:LEU:HD22	2.14	0.77
1:F:300:LEU:CD1	1:F:347:LEU:HD22	2.14	0.77
1:G:1036:TRP:CB	1:H:699:ARG:HG2	2.13	0.77
1:I:621:LEU:HD23	1:J:984:LEU:HB2	1.66	0.77
1:J:821:GLY:O	1:J:826:LEU:HD12	1.84	0.77
1:A:300:LEU:CD1	1:A:347:LEU:HD22	2.14	0.77
1:C:410:PHE:CD2	1:C:411:ILE:HG13	2.18	0.77
1:G:300:LEU:CD1	1:G:347:LEU:HD22	2.14	0.77
1:H:300:LEU:CD1	1:H:347:LEU:HD22	2.14	0.77
1:D:821:GLY:O	1:D:826:LEU:HD12	1.84	0.77
1:F:954:THR:HA	1:F:980:ASP:HB2	1.65	0.77
1:G:954:THR:HA	1:G:980:ASP:HB2	1.65	0.77
1:A:954:THR:HA	1:A:980:ASP:HB2	1.65	0.77
1:C:300:LEU:CD1	1:C:347:LEU:HD22	2.14	0.77
1:H:90:ASP:HA	1:H:93:LYS:HB2	1.67	0.77
1:I:148:PHE:HA	1:I:237:ARG:HH21	1.48	0.77
1:J:294:PRO:HB2	1:J:343:GLU:HB2	1.67	0.77
1:A:410:PHE:CD2	1:A:411:ILE:HG13	2.18	0.77
1:A:984:LEU:HB2	1:B:621:LEU:HD23	1.66	0.77
1:J:954:THR:HA	1:J:980:ASP:HB2	1.66	0.77
1:J:148:PHE:HA	1:J:237:ARG:HH21	1.48	0.77
1:I:294:PRO:HB2	1:I:343:GLU:HB2	1.67	0.77
1:I:300:LEU:CD1	1:I:347:LEU:HD22	2.14	0.77
1:A:294:PRO:HB2	1:A:343:GLU:HB2	1.67	0.77
1:A:821:GLY:O	1:A:826:LEU:HD12	1.84	0.77
1:A:119:GLY:O	1:A:123:TYR:CD2	2.38	0.77
1:G:294:PRO:HB2	1:G:343:GLU:HB2	1.67	0.77
1:H:294:PRO:HB2	1:H:343:GLU:HB2	1.67	0.76
1:J:300:LEU:CD1	1:J:347:LEU:HD22	2.14	0.76
1:F:294:PRO:HB2	1:F:343:GLU:HB2	1.67	0.76
1:D:954:THR:HA	1:D:980:ASP:HB2	1.65	0.76
1:E:954:THR:HA	1:E:980:ASP:HB2	1.65	0.76
1:G:148:PHE:HA	1:G:237:ARG:HH21	1.48	0.76
1:C:1036:TRP:CB	1:D:699:ARG:HG2	2.14	0.76
1:F:148:PHE:HA	1:F:237:ARG:HH21	1.48	0.76
1:A:1036:TRP:HB2	1:B:699:ARG:CG	2.14	0.76
1:C:699:ARG:HG2	1:D:1036:TRP:CB	2.14	0.76
1:D:300:LEU:CD1	1:D:347:LEU:HD22	2.14	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:148:PHE:HA	1:A:237:ARG:HH21	1.48	0.75
1:D:294:PRO:HB2	1:D:343:GLU:HB2	1.67	0.75
1:A:699:ARG:HG2	1:B:1036:TRP:CB	2.17	0.75
1:I:1036:TRP:CB	1:J:699:ARG:HG2	2.17	0.75
1:E:294:PRO:HB2	1:E:343:GLU:HB2	1.67	0.75
1:A:119:GLY:O	1:A:123:TYR:HD2	1.68	0.75
1:H:846:ASP:OD1	1:H:846:ASP:N	2.21	0.74
1:A:846:ASP:N	1:A:846:ASP:OD1	2.21	0.74
1:B:148:PHE:CA	1:B:237:ARG:HH21	2.01	0.74
1:C:294:PRO:HB2	1:C:343:GLU:HB2	1.67	0.74
1:E:148:PHE:CA	1:E:237:ARG:HH21	2.01	0.74
1:A:148:PHE:CA	1:A:237:ARG:HH21	2.01	0.74
1:H:148:PHE:CA	1:H:237:ARG:HH21	2.01	0.74
1:I:699:ARG:HG2	1:J:1036:TRP:CB	2.17	0.74
1:D:148:PHE:CA	1:D:237:ARG:HH21	2.00	0.74
1:B:294:PRO:HB2	1:B:343:GLU:HB2	1.67	0.74
1:I:148:PHE:CA	1:I:237:ARG:HH21	2.01	0.74
1:G:148:PHE:CA	1:G:237:ARG:HH21	2.01	0.74
1:F:846:ASP:OD1	1:F:846:ASP:N	2.21	0.73
1:F:148:PHE:CA	1:F:237:ARG:HH21	2.01	0.73
1:C:148:PHE:CA	1:C:237:ARG:HH21	2.01	0.73
1:B:846:ASP:N	1:B:846:ASP:OD1	2.20	0.73
1:J:148:PHE:CA	1:J:237:ARG:HH21	2.01	0.73
1:A:1036:TRP:CB	1:B:699:ARG:HG2	2.17	0.73
1:E:846:ASP:OD1	1:E:846:ASP:N	2.21	0.73
1:G:846:ASP:N	1:G:846:ASP:OD1	2.21	0.73
1:A:104:PRO:HB2	1:A:112:SER:HB3	1.70	0.72
1:A:106:VAL:HG22	1:A:111:ASP:HA	1.71	0.72
1:C:846:ASP:OD1	1:C:846:ASP:N	2.21	0.72
1:I:180:GLN:HB3	1:I:708:LEU:HD13	1.72	0.72
1:J:180:GLN:HB3	1:J:708:LEU:HD13	1.72	0.72
1:G:180:GLN:HB3	1:G:708:LEU:HD13	1.71	0.72
1:I:846:ASP:N	1:I:846:ASP:OD1	2.21	0.72
1:A:72:VAL:HG22	1:A:87:ALA:HB1	1.72	0.72
1:A:108:CYS:O	1:A:111:ASP:OD1	2.07	0.72
1:H:180:GLN:HB3	1:H:708:LEU:HD13	1.71	0.72
1:D:220:HIS:HB3	1:D:345:SER:HA	1.72	0.72
1:C:220:HIS:HB3	1:C:345:SER:HA	1.72	0.72
1:F:220:HIS:HB3	1:F:345:SER:HA	1.72	0.72
1:G:243:TRP:HD1	1:G:249:TYR:HB3	1.55	0.72
1:I:243:TRP:HD1	1:I:249:TYR:HB3	1.55	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:180:GLN:HB3	1:D:708:LEU:HD13	1.71	0.71
1:H:243:TRP:HD1	1:H:249:TYR:HB3	1.55	0.71
1:I:410:PHE:HD2	1:I:411:ILE:HG13	1.55	0.71
1:A:180:GLN:HB3	1:A:708:LEU:HD13	1.72	0.71
1:A:220:HIS:HB3	1:A:345:SER:HA	1.72	0.71
1:C:180:GLN:HB3	1:C:708:LEU:HD13	1.71	0.71
1:E:984:LEU:H	1:F:621:LEU:HD23	1.54	0.71
1:J:462:LEU:O	1:J:466:LEU:N	2.24	0.71
1:A:243:TRP:HD1	1:A:249:TYR:HB3	1.55	0.71
1:E:621:LEU:HD23	1:F:984:LEU:H	1.54	0.71
1:J:846:ASP:N	1:J:846:ASP:OD1	2.20	0.71
1:H:887:GLN:NE2	1:H:913:ASN:O	2.24	0.71
1:F:410:PHE:HD2	1:F:411:ILE:HG13	1.55	0.71
1:F:887:GLN:NE2	1:F:913:ASN:O	2.24	0.71
1:H:220:HIS:HB3	1:H:345:SER:HA	1.72	0.71
1:J:243:TRP:HD1	1:J:249:TYR:HB3	1.55	0.71
1:B:180:GLN:HB3	1:B:708:LEU:HD13	1.71	0.71
1:G:473:ALA:O	1:G:526:GLN:NE2	2.24	0.71
1:A:410:PHE:HD2	1:A:411:ILE:HG13	1.55	0.71
1:H:410:PHE:HD2	1:H:411:ILE:HG13	1.55	0.71
1:I:887:GLN:NE2	1:I:913:ASN:O	2.24	0.71
1:B:887:GLN:NE2	1:B:913:ASN:O	2.24	0.71
1:E:887:GLN:NE2	1:E:913:ASN:O	2.24	0.71
1:J:473:ALA:O	1:J:526:GLN:NE2	2.24	0.71
1:B:473:ALA:O	1:B:526:GLN:NE2	2.24	0.70
1:C:887:GLN:NE2	1:C:913:ASN:O	2.24	0.70
1:I:220:HIS:HB3	1:I:345:SER:HA	1.72	0.70
1:B:220:HIS:HB3	1:B:345:SER:HA	1.72	0.70
1:C:462:LEU:O	1:C:466:LEU:N	2.24	0.70
1:E:180:GLN:HB3	1:E:708:LEU:HD13	1.72	0.70
1:E:473:ALA:O	1:E:526:GLN:NE2	2.24	0.70
1:D:410:PHE:HD2	1:D:411:ILE:HG13	1.55	0.70
1:E:243:TRP:HD1	1:E:249:TYR:HB3	1.55	0.70
1:A:887:GLN:NE2	1:A:913:ASN:O	2.24	0.70
1:D:846:ASP:N	1:D:846:ASP:OD1	2.20	0.70
1:F:180:GLN:HB3	1:F:708:LEU:HD13	1.72	0.70
1:B:243:TRP:HD1	1:B:249:TYR:HB3	1.55	0.70
1:D:243:TRP:HD1	1:D:249:TYR:HB3	1.56	0.70
1:E:220:HIS:HB3	1:E:345:SER:HA	1.72	0.70
1:F:243:TRP:HD1	1:F:249:TYR:HB3	1.55	0.70
1:D:887:GLN:NE2	1:D:913:ASN:O	2.24	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:410:PHE:HD2	1:E:411:ILE:HG13	1.55	0.70
1:J:887:GLN:NE2	1:J:913:ASN:O	2.24	0.70
1:F:473:ALA:O	1:F:526:GLN:NE2	2.24	0.70
1:G:887:GLN:NE2	1:G:913:ASN:O	2.24	0.70
1:B:687:MET:N	1:B:687:MET:SD	2.65	0.70
1:E:462:LEU:O	1:E:466:LEU:N	2.24	0.70
1:G:410:PHE:HD2	1:G:411:ILE:HG13	1.55	0.70
1:G:687:MET:N	1:G:687:MET:SD	2.65	0.70
1:H:473:ALA:O	1:H:526:GLN:NE2	2.24	0.70
1:C:687:MET:N	1:C:687:MET:SD	2.65	0.70
1:E:687:MET:N	1:E:687:MET:SD	2.65	0.70
1:H:126:ARG:CG	1:H:129:ILE:HB	2.22	0.70
1:H:687:MET:N	1:H:687:MET:SD	2.65	0.70
1:D:462:LEU:O	1:D:466:LEU:N	2.24	0.69
1:F:687:MET:N	1:F:687:MET:SD	2.65	0.69
1:G:220:HIS:HB3	1:G:345:SER:HA	1.72	0.69
1:I:462:LEU:O	1:I:466:LEU:N	2.24	0.69
1:A:473:ALA:O	1:A:526:GLN:NE2	2.24	0.69
1:C:243:TRP:HD1	1:C:249:TYR:HB3	1.55	0.69
1:J:220:HIS:HB3	1:J:345:SER:HA	1.72	0.69
1:J:410:PHE:HD2	1:J:411:ILE:HG13	1.55	0.69
1:J:687:MET:N	1:J:687:MET:SD	2.65	0.69
1:A:687:MET:SD	1:A:687:MET:N	2.65	0.69
1:C:473:ALA:O	1:C:526:GLN:NE2	2.24	0.69
1:H:91:GLU:HB3	1:H:92:PRO:HD3	1.73	0.69
1:I:687:MET:SD	1:I:687:MET:N	2.65	0.69
1:D:473:ALA:O	1:D:526:GLN:NE2	2.24	0.69
1:F:462:LEU:O	1:F:466:LEU:N	2.23	0.69
1:I:473:ALA:O	1:I:526:GLN:NE2	2.24	0.69
1:A:462:LEU:O	1:A:466:LEU:N	2.24	0.69
1:A:467:TRP:HE1	1:A:538:GLU:HG2	1.58	0.69
1:D:687:MET:SD	1:D:687:MET:N	2.65	0.69
1:J:467:TRP:HE1	1:J:538:GLU:HG2	1.58	0.69
1:C:467:TRP:HE1	1:C:538:GLU:HG2	1.58	0.69
1:D:467:TRP:HE1	1:D:538:GLU:HG2	1.58	0.69
1:B:410:PHE:HD2	1:B:411:ILE:HG13	1.55	0.69
1:F:467:TRP:HE1	1:F:538:GLU:HG2	1.58	0.69
1:H:467:TRP:HE1	1:H:538:GLU:HG2	1.58	0.69
1:B:467:TRP:HE1	1:B:538:GLU:HG2	1.58	0.68
1:E:467:TRP:HE1	1:E:538:GLU:HG2	1.58	0.68
1:B:688:PRO:HB2	1:B:704:VAL:HG21	1.76	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:688:PRO:HB2	1:I:704:VAL:HG21	1.76	0.68
1:J:635:TYR:O	1:J:638:GLN:NE2	2.27	0.68
1:A:95:GLY:O	1:A:96:SER:CB	2.40	0.68
1:I:467:TRP:HE1	1:I:538:GLU:HG2	1.58	0.68
1:I:635:TYR:O	1:I:638:GLN:NE2	2.27	0.68
1:E:295:SER:HB2	1:E:343:GLU:HB3	1.76	0.68
1:H:295:SER:HB2	1:H:343:GLU:HB3	1.76	0.68
1:I:295:SER:HB2	1:I:343:GLU:HB3	1.76	0.68
1:B:295:SER:HB2	1:B:343:GLU:HB3	1.76	0.68
1:C:635:TYR:O	1:C:638:GLN:NE2	2.27	0.68
1:D:133:LYS:HZ1	1:H:3:MET:HG2	1.43	0.68
1:J:295:SER:HB2	1:J:343:GLU:HB3	1.76	0.68
1:B:462:LEU:O	1:B:466:LEU:N	2.24	0.68
1:D:635:TYR:O	1:D:638:GLN:NE2	2.27	0.68
1:E:688:PRO:HB2	1:E:704:VAL:HG21	1.76	0.68
1:G:467:TRP:HE1	1:G:538:GLU:HG2	1.58	0.68
1:B:635:TYR:O	1:B:638:GLN:NE2	2.27	0.67
1:H:688:PRO:HB2	1:H:704:VAL:HG21	1.76	0.67
1:C:410:PHE:HD2	1:C:411:ILE:HG13	1.55	0.67
1:D:133:LYS:NZ	1:H:3:MET:HB2	1.94	0.67
1:G:295:SER:HB2	1:G:343:GLU:HB3	1.76	0.67
1:I:396:PHE:O	1:I:400:GLN:NE2	2.28	0.67
1:A:295:SER:HB2	1:A:343:GLU:HB3	1.76	0.67
1:J:688:PRO:HB2	1:J:704:VAL:HG21	1.76	0.67
1:C:688:PRO:HB2	1:C:704:VAL:HG21	1.76	0.67
1:F:635:TYR:O	1:F:638:GLN:NE2	2.27	0.67
1:F:688:PRO:HB2	1:F:704:VAL:HG21	1.76	0.67
1:G:984:LEU:H	1:H:621:LEU:HD23	1.60	0.67
1:H:396:PHE:O	1:H:400:GLN:NE2	2.28	0.67
1:E:635:TYR:O	1:E:638:GLN:NE2	2.27	0.67
1:H:224:PHE:CE1	1:H:347:LEU:HD21	2.30	0.67
1:I:224:PHE:CE1	1:I:347:LEU:HD21	2.30	0.67
1:J:224:PHE:CE1	1:J:347:LEU:HD21	2.30	0.67
1:A:635:TYR:O	1:A:638:GLN:NE2	2.27	0.67
1:D:224:PHE:CE1	1:D:347:LEU:HD21	2.30	0.67
1:E:396:PHE:O	1:E:400:GLN:NE2	2.28	0.67
1:A:95:GLY:O	1:A:96:SER:HB3	1.95	0.67
1:A:688:PRO:HB2	1:A:704:VAL:HG21	1.76	0.67
1:D:396:PHE:O	1:D:400:GLN:NE2	2.28	0.67
1:D:688:PRO:HB2	1:D:704:VAL:HG21	1.76	0.67
1:G:224:PHE:CE1	1:G:347:LEU:HD21	2.30	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:635:TYR:O	1:G:638:GLN:NE2	2.27	0.67
1:G:688:PRO:HB2	1:G:704:VAL:HG21	1.76	0.67
1:H:462:LEU:O	1:H:466:LEU:N	2.24	0.67
1:A:410:PHE:HD2	1:A:411:ILE:CD1	2.08	0.67
1:C:224:PHE:CE1	1:C:347:LEU:HD21	2.30	0.67
1:D:295:SER:HB2	1:D:343:GLU:HB3	1.76	0.67
1:F:295:SER:HB2	1:F:343:GLU:HB3	1.76	0.67
1:H:635:TYR:O	1:H:638:GLN:NE2	2.27	0.67
1:J:396:PHE:O	1:J:400:GLN:NE2	2.28	0.67
1:F:410:PHE:HD2	1:F:411:ILE:CD1	2.08	0.67
1:D:831:LYS:HG3	1:D:859:ARG:HB2	1.77	0.66
1:E:831:LYS:HG3	1:E:859:ARG:HB2	1.77	0.66
1:A:224:PHE:CE1	1:A:347:LEU:HD21	2.30	0.66
1:A:396:PHE:O	1:A:400:GLN:NE2	2.28	0.66
1:B:140:TYR:OH	1:B:290:ILE:HD11	1.95	0.66
1:B:396:PHE:O	1:B:400:GLN:NE2	2.28	0.66
1:C:410:PHE:HD2	1:C:411:ILE:CD1	2.08	0.66
1:G:462:LEU:O	1:G:466:LEU:N	2.24	0.66
1:I:140:TYR:OH	1:I:290:ILE:HD11	1.96	0.66
1:A:140:TYR:OH	1:A:290:ILE:HD11	1.96	0.66
1:B:198:SER:OG	1:B:716:CYS:SG	2.54	0.66
1:C:621:LEU:HD23	1:D:984:LEU:H	1.60	0.66
1:F:140:TYR:OH	1:F:290:ILE:HD11	1.96	0.66
1:G:831:LYS:HG3	1:G:859:ARG:HB2	1.77	0.66
1:J:831:LYS:HG3	1:J:859:ARG:HB2	1.77	0.66
1:E:224:PHE:CE1	1:E:347:LEU:HD21	2.30	0.66
1:G:396:PHE:O	1:G:400:GLN:NE2	2.28	0.66
1:B:831:LYS:HG3	1:B:859:ARG:HB2	1.77	0.66
1:C:295:SER:HB2	1:C:343:GLU:HB3	1.76	0.66
1:C:396:PHE:O	1:C:400:GLN:NE2	2.28	0.66
1:C:831:LYS:HG3	1:C:859:ARG:HB2	1.77	0.66
1:H:66:LYS:NZ	1:H:126:ARG:HG3	2.11	0.66
1:G:140:TYR:OH	1:G:290:ILE:HD11	1.96	0.66
1:J:198:SER:OG	1:J:716:CYS:SG	2.54	0.66
1:E:140:TYR:OH	1:E:290:ILE:HD11	1.96	0.66
1:I:410:PHE:HD2	1:I:411:ILE:CD1	2.08	0.66
1:F:224:PHE:CE1	1:F:347:LEU:HD21	2.30	0.66
1:F:396:PHE:O	1:F:400:GLN:NE2	2.28	0.66
1:J:140:TYR:OH	1:J:290:ILE:HD11	1.96	0.66
1:D:410:PHE:HD2	1:D:411:ILE:CD1	2.08	0.66
1:H:140:TYR:OH	1:H:290:ILE:HD11	1.96	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:410:PHE:HD2	1:J:411:ILE:CD1	2.08	0.66
1:F:198:SER:OG	1:F:716:CYS:SG	2.54	0.65
1:C:984:LEU:H	1:D:621:LEU:HD23	1.61	0.65
1:E:254:ASP:HB3	1:E:296:ARG:HG3	1.79	0.65
1:I:831:LYS:HG3	1:I:859:ARG:HB2	1.77	0.65
1:A:254:ASP:HB3	1:A:296:ARG:HG3	1.79	0.65
1:A:480:GLN:NE2	1:A:569:GLU:O	2.30	0.65
1:B:480:GLN:NE2	1:B:569:GLU:O	2.30	0.65
1:D:882:PRO:O	1:D:912:GLN:NE2	2.30	0.65
1:F:254:ASP:HB3	1:F:296:ARG:HG3	1.79	0.65
1:J:480:GLN:NE2	1:J:569:GLU:O	2.30	0.65
1:D:198:SER:OG	1:D:716:CYS:SG	2.54	0.65
1:D:254:ASP:HB3	1:D:296:ARG:HG3	1.79	0.65
1:D:480:GLN:NE2	1:D:569:GLU:O	2.30	0.65
1:E:410:PHE:HD2	1:E:411:ILE:CD1	2.08	0.65
1:F:480:GLN:NE2	1:F:569:GLU:O	2.30	0.65
1:G:410:PHE:HD2	1:G:411:ILE:CD1	2.08	0.65
1:G:480:GLN:NE2	1:G:569:GLU:O	2.30	0.65
1:H:410:PHE:HD2	1:H:411:ILE:CD1	2.08	0.65
1:I:198:SER:OG	1:I:716:CYS:SG	2.54	0.65
1:B:410:PHE:HD2	1:B:411:ILE:CD1	2.08	0.65
1:C:198:SER:OG	1:C:716:CYS:SG	2.54	0.65
1:D:140:TYR:OH	1:D:290:ILE:HD11	1.96	0.65
1:B:224:PHE:CE1	1:B:347:LEU:HD21	2.30	0.65
1:C:254:ASP:HB3	1:C:296:ARG:HG3	1.79	0.65
1:C:882:PRO:O	1:C:912:GLN:NE2	2.30	0.65
1:E:882:PRO:O	1:E:912:GLN:NE2	2.30	0.65
1:A:198:SER:OG	1:A:716:CYS:SG	2.54	0.65
1:A:882:PRO:O	1:A:912:GLN:NE2	2.30	0.65
1:H:254:ASP:HB3	1:H:296:ARG:HG3	1.79	0.65
1:J:882:PRO:O	1:J:912:GLN:NE2	2.30	0.65
1:B:254:ASP:HB3	1:B:296:ARG:HG3	1.79	0.65
1:E:198:SER:OG	1:E:716:CYS:SG	2.54	0.65
1:H:831:LYS:HG3	1:H:859:ARG:HB2	1.77	0.65
1:I:882:PRO:O	1:I:912:GLN:NE2	2.30	0.65
1:B:882:PRO:O	1:B:912:GLN:NE2	2.30	0.65
1:C:140:TYR:OH	1:C:290:ILE:HD11	1.96	0.65
1:E:480:GLN:NE2	1:E:569:GLU:O	2.30	0.64
1:F:882:PRO:O	1:F:912:GLN:NE2	2.30	0.64
1:G:198:SER:OG	1:G:716:CYS:SG	2.54	0.64
1:F:831:LYS:HG3	1:F:859:ARG:HB2	1.77	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:198:SER:OG	1:H:716:CYS:SG	2.54	0.64
1:H:480:GLN:NE2	1:H:569:GLU:O	2.30	0.64
1:C:480:GLN:NE2	1:C:569:GLU:O	2.30	0.64
1:I:254:ASP:HB3	1:I:296:ARG:HG3	1.79	0.64
1:A:831:LYS:HG3	1:A:859:ARG:HB2	1.77	0.64
1:B:485:GLU:HG3	1:B:517:PHE:HA	1.80	0.64
1:G:485:GLU:HG3	1:G:517:PHE:HA	1.80	0.64
1:E:485:GLU:HG3	1:E:517:PHE:HA	1.80	0.64
1:J:485:GLU:HG3	1:J:517:PHE:HA	1.80	0.64
1:G:254:ASP:HB3	1:G:296:ARG:HG3	1.79	0.64
1:G:882:PRO:O	1:G:912:GLN:NE2	2.30	0.64
1:I:480:GLN:NE2	1:I:569:GLU:O	2.30	0.64
1:H:882:PRO:O	1:H:912:GLN:NE2	2.30	0.64
1:J:254:ASP:HB3	1:J:296:ARG:HG3	1.79	0.64
1:A:42:PRO:HG2	1:A:45:GLN:HB2	1.79	0.64
1:A:85:GLU:O	1:A:89:ARG:HG3	1.98	0.64
1:I:485:GLU:HG3	1:I:517:PHE:HA	1.80	0.63
1:H:485:GLU:HG3	1:H:517:PHE:HA	1.80	0.63
1:G:621:LEU:HD23	1:H:984:LEU:H	1.63	0.63
1:C:485:GLU:HG3	1:C:517:PHE:HA	1.80	0.63
1:C:288:HIS:O	1:C:292:ARG:NH1	2.32	0.63
1:D:485:GLU:HG3	1:D:517:PHE:HA	1.80	0.63
1:J:288:HIS:O	1:J:292:ARG:NH1	2.32	0.63
1:A:288:HIS:O	1:A:292:ARG:NH1	2.32	0.62
1:E:288:HIS:O	1:E:292:ARG:NH1	2.32	0.62
1:B:288:HIS:O	1:B:292:ARG:NH1	2.32	0.62
1:I:288:HIS:O	1:I:292:ARG:NH1	2.32	0.62
1:A:485:GLU:HG3	1:A:517:PHE:HA	1.80	0.62
1:B:977:GLY:O	1:B:979:ASN:ND2	2.33	0.62
1:F:288:HIS:O	1:F:292:ARG:NH1	2.32	0.62
1:H:288:HIS:O	1:H:292:ARG:NH1	2.32	0.62
1:E:977:GLY:O	1:E:979:ASN:ND2	2.33	0.62
1:E:621:LEU:CD2	1:F:984:LEU:H	2.11	0.62
1:G:288:HIS:O	1:G:292:ARG:NH1	2.32	0.62
1:G:647:MET:HB3	1:G:673:CYS:SG	2.40	0.62
1:C:977:GLY:O	1:C:979:ASN:ND2	2.33	0.62
1:D:288:HIS:O	1:D:292:ARG:NH1	2.32	0.62
1:E:984:LEU:H	1:F:621:LEU:CD2	2.12	0.62
1:C:647:MET:HB3	1:C:673:CYS:SG	2.40	0.62
1:H:977:GLY:O	1:H:979:ASN:ND2	2.33	0.62
1:G:977:GLY:O	1:G:979:ASN:ND2	2.33	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:647:MET:HB3	1:H:673:CYS:SG	2.40	0.62
1:A:647:MET:HB3	1:A:673:CYS:SG	2.40	0.62
1:A:977:GLY:O	1:A:979:ASN:ND2	2.33	0.62
1:B:410:PHE:HD2	1:B:411:ILE:CG1	2.13	0.62
1:B:647:MET:HB3	1:B:673:CYS:SG	2.40	0.62
1:E:410:PHE:HD2	1:E:411:ILE:CG1	2.13	0.62
1:E:647:MET:HB3	1:E:673:CYS:SG	2.40	0.62
1:J:647:MET:HB3	1:J:673:CYS:SG	2.40	0.62
1:I:977:GLY:O	1:I:979:ASN:ND2	2.33	0.62
1:J:977:GLY:O	1:J:979:ASN:ND2	2.33	0.62
1:D:977:GLY:O	1:D:979:ASN:ND2	2.33	0.61
1:I:695:GLU:OE2	1:I:859:ARG:NH2	2.33	0.61
1:F:410:PHE:HD2	1:F:411:ILE:CG1	2.13	0.61
1:A:410:PHE:HD2	1:A:411:ILE:CG1	2.13	0.61
1:D:133:LYS:HE2	1:H:3:MET:CE	2.30	0.61
1:F:1028:LEU:HG	1:F:1030:VAL:HG22	1.83	0.61
1:H:695:GLU:OE2	1:H:859:ARG:NH2	2.33	0.61
1:B:1028:LEU:HG	1:B:1030:VAL:HG22	1.83	0.61
1:C:1028:LEU:HG	1:C:1030:VAL:HG22	1.83	0.61
1:D:647:MET:HB3	1:D:673:CYS:SG	2.40	0.61
1:F:485:GLU:HG3	1:F:517:PHE:HA	1.80	0.61
1:F:977:GLY:O	1:F:979:ASN:ND2	2.33	0.61
1:G:410:PHE:HD2	1:G:411:ILE:CG1	2.13	0.61
1:G:1028:LEU:HG	1:G:1030:VAL:HG22	1.83	0.61
1:E:1028:LEU:HG	1:E:1030:VAL:HG22	1.82	0.61
1:H:486:GLU:O	1:H:490:ARG:NE	2.31	0.61
1:I:647:MET:HB3	1:I:673:CYS:SG	2.40	0.61
1:J:410:PHE:HD2	1:J:411:ILE:CG1	2.13	0.61
1:A:695:GLU:OE2	1:A:859:ARG:NH2	2.33	0.61
1:E:475:ASP:OD1	1:E:479:ASN:ND2	2.34	0.61
1:E:954:THR:OG1	1:E:956:HIS:ND1	2.32	0.61
1:B:486:GLU:O	1:B:490:ARG:NE	2.31	0.61
1:F:475:ASP:OD1	1:F:479:ASN:ND2	2.34	0.61
1:F:647:MET:HB3	1:F:673:CYS:SG	2.40	0.61
1:I:598:CYS:SG	1:I:599:LYS:N	2.74	0.61
1:A:475:ASP:OD1	1:A:479:ASN:ND2	2.34	0.61
1:C:695:GLU:OE2	1:C:859:ARG:NH2	2.33	0.61
1:D:475:ASP:OD1	1:D:479:ASN:ND2	2.34	0.61
1:D:695:GLU:OE2	1:D:859:ARG:NH2	2.33	0.61
1:J:1028:LEU:HG	1:J:1030:VAL:HG22	1.83	0.61
1:A:1028:LEU:HG	1:A:1030:VAL:HG22	1.83	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:475:ASP:OD1	1:H:479:ASN:ND2	2.34	0.61
1:D:1028:LEU:HG	1:D:1030:VAL:HG22	1.83	0.60
1:E:695:GLU:OE2	1:E:859:ARG:NH2	2.33	0.60
1:I:410:PHE:HD2	1:I:411:ILE:CG1	2.13	0.60
1:I:475:ASP:OD1	1:I:479:ASN:ND2	2.34	0.60
1:C:410:PHE:HD2	1:C:411:ILE:CG1	2.13	0.60
1:C:475:ASP:OD1	1:C:479:ASN:ND2	2.34	0.60
1:F:695:GLU:OE2	1:F:859:ARG:NH2	2.33	0.60
1:G:475:ASP:OD1	1:G:479:ASN:ND2	2.34	0.60
1:A:954:THR:OG1	1:A:956:HIS:ND1	2.32	0.60
1:G:695:GLU:OE2	1:G:859:ARG:NH2	2.33	0.60
1:H:410:PHE:HD2	1:H:411:ILE:CG1	2.13	0.60
1:I:222:VAL:HA	1:I:366:ARG:HB2	1.84	0.60
1:J:695:GLU:OE2	1:J:859:ARG:NH2	2.33	0.60
1:B:695:GLU:OE2	1:B:859:ARG:NH2	2.33	0.60
1:D:410:PHE:HD2	1:D:411:ILE:CG1	2.13	0.60
1:G:222:VAL:HA	1:G:366:ARG:HB2	1.84	0.60
1:J:222:VAL:HA	1:J:366:ARG:HB2	1.84	0.60
1:H:222:VAL:HA	1:H:366:ARG:HB2	1.84	0.60
1:G:954:THR:OG1	1:G:956:HIS:ND1	2.32	0.60
1:H:598:CYS:SG	1:H:599:LYS:N	2.74	0.60
1:J:475:ASP:OD1	1:J:479:ASN:ND2	2.34	0.60
1:B:475:ASP:OD1	1:B:479:ASN:ND2	2.34	0.60
1:H:66:LYS:HZ3	1:H:126:ARG:HA	1.67	0.60
1:I:481:LYS:NZ	1:I:483:LEU:O	2.35	0.60
1:B:222:VAL:HA	1:B:366:ARG:HB2	1.84	0.60
1:I:1028:LEU:HG	1:I:1030:VAL:HG22	1.83	0.60
1:H:1028:LEU:HG	1:H:1030:VAL:HG22	1.83	0.60
1:A:389:GLU:O	1:A:393:ARG:N	2.35	0.60
1:C:598:CYS:SG	1:C:599:LYS:N	2.74	0.60
1:E:481:LYS:NZ	1:E:483:LEU:O	2.35	0.60
1:D:252:ARG:O	1:D:296:ARG:NH1	2.35	0.59
1:F:389:GLU:O	1:F:393:ARG:N	2.35	0.59
1:F:858:THR:HG22	1:F:859:ARG:HG3	1.84	0.59
1:A:486:GLU:O	1:A:490:ARG:NE	2.31	0.59
1:A:806:SER:O	1:A:808:ASN:ND2	2.35	0.59
1:H:252:ARG:O	1:H:296:ARG:NH1	2.35	0.59
1:J:481:LYS:NZ	1:J:483:LEU:O	2.35	0.59
1:B:481:LYS:NZ	1:B:483:LEU:O	2.35	0.59
1:C:252:ARG:O	1:C:296:ARG:NH1	2.35	0.59
1:E:252:ARG:O	1:E:296:ARG:NH1	2.35	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:486:GLU:O	1:E:490:ARG:NE	2.31	0.59
1:H:806:SER:O	1:H:808:ASN:ND2	2.36	0.59
1:I:252:ARG:O	1:I:296:ARG:NH1	2.35	0.59
1:J:252:ARG:O	1:J:296:ARG:NH1	2.35	0.59
1:J:389:GLU:O	1:J:393:ARG:N	2.35	0.59
1:C:753:LEU:HD21	1:C:757:GLY:HA3	1.85	0.59
1:E:658:SER:OG	1:E:662:ASP:OD2	2.18	0.59
1:G:806:SER:O	1:G:808:ASN:ND2	2.36	0.59
1:G:1011:ASN:ND2	1:H:687:MET:H	2.00	0.59
1:I:858:THR:HG22	1:I:859:ARG:HG3	1.84	0.59
1:A:222:VAL:HA	1:A:366:ARG:HB2	1.83	0.59
1:A:858:THR:HG22	1:A:859:ARG:HG3	1.84	0.59
1:B:806:SER:O	1:B:808:ASN:ND2	2.36	0.59
1:D:753:LEU:HD21	1:D:757:GLY:HA3	1.84	0.59
1:E:222:VAL:HA	1:E:366:ARG:HB2	1.84	0.59
1:F:753:LEU:HD21	1:F:757:GLY:HA3	1.85	0.59
1:H:481:LYS:NZ	1:H:483:LEU:O	2.35	0.59
1:F:598:CYS:SG	1:F:599:LYS:N	2.74	0.59
1:J:753:LEU:HD21	1:J:757:GLY:HA3	1.85	0.59
1:J:858:THR:HG22	1:J:859:ARG:HG3	1.84	0.59
1:A:753:LEU:HD21	1:A:757:GLY:HA3	1.85	0.59
1:E:806:SER:O	1:E:808:ASN:ND2	2.36	0.59
1:F:954:THR:OG1	1:F:956:HIS:ND1	2.32	0.59
1:H:389:GLU:O	1:H:393:ARG:N	2.35	0.59
1:B:252:ARG:O	1:B:296:ARG:NH1	2.36	0.59
1:B:389:GLU:O	1:B:393:ARG:N	2.35	0.59
1:D:806:SER:O	1:D:808:ASN:ND2	2.36	0.59
1:D:954:THR:OG1	1:D:956:HIS:ND1	2.32	0.59
1:G:148:PHE:HB3	1:G:237:ARG:HE	1.68	0.59
1:D:389:GLU:O	1:D:393:ARG:N	2.35	0.59
1:D:658:SER:OG	1:D:662:ASP:OD2	2.18	0.59
1:I:779:ARG:HA	1:I:807:ASP:HB3	1.85	0.59
1:A:163:SER:OG	1:A:166:LYS:HB2	2.03	0.59
1:A:252:ARG:O	1:A:296:ARG:NH1	2.35	0.59
1:B:148:PHE:HB3	1:B:237:ARG:HE	1.68	0.59
1:C:858:THR:HG22	1:C:859:ARG:HG3	1.84	0.59
1:C:954:THR:OG1	1:C:956:HIS:ND1	2.32	0.59
1:D:133:LYS:NZ	1:H:3:MET:CA	2.66	0.59
1:D:163:SER:OG	1:D:166:LYS:HB2	2.03	0.59
1:E:389:GLU:O	1:E:393:ARG:N	2.35	0.58
1:F:163:SER:OG	1:F:166:LYS:HB2	2.03	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:753:LEU:HD21	1:G:757:GLY:HA3	1.85	0.58
1:H:779:ARG:HA	1:H:807:ASP:HB3	1.85	0.58
1:I:984:LEU:H	1:J:621:LEU:HD23	1.67	0.58
1:D:481:LYS:NZ	1:D:483:LEU:O	2.35	0.58
1:F:222:VAL:HA	1:F:366:ARG:HB2	1.84	0.58
1:F:481:LYS:NZ	1:F:483:LEU:O	2.35	0.58
1:F:806:SER:O	1:F:808:ASN:ND2	2.35	0.58
1:H:66:LYS:HZ1	1:H:126:ARG:HA	1.68	0.58
1:I:806:SER:O	1:I:808:ASN:ND2	2.36	0.58
1:A:481:LYS:NZ	1:A:483:LEU:O	2.35	0.58
1:A:598:CYS:SG	1:A:599:LYS:N	2.74	0.58
1:B:858:THR:HG22	1:B:859:ARG:HG3	1.84	0.58
1:C:389:GLU:O	1:C:393:ARG:N	2.35	0.58
1:D:222:VAL:HA	1:D:366:ARG:HB2	1.84	0.58
1:G:481:LYS:NZ	1:G:483:LEU:O	2.35	0.58
1:H:163:SER:OG	1:H:166:LYS:HB2	2.03	0.58
1:C:806:SER:O	1:C:808:ASN:ND2	2.36	0.58
1:E:858:THR:HG22	1:E:859:ARG:HG3	1.84	0.58
1:C:163:SER:OG	1:C:166:LYS:HB2	2.03	0.58
1:G:252:ARG:O	1:G:296:ARG:NH1	2.35	0.58
1:H:858:THR:HG22	1:H:859:ARG:HG3	1.84	0.58
1:I:621:LEU:HD23	1:J:984:LEU:H	1.68	0.58
1:J:148:PHE:HB3	1:J:237:ARG:HE	1.68	0.58
1:A:692:GLU:O	1:A:699:ARG:NH1	2.37	0.58
1:B:779:ARG:HA	1:B:807:ASP:HB3	1.85	0.58
1:C:481:LYS:NZ	1:C:483:LEU:O	2.35	0.58
1:F:133:LYS:O	1:F:137:ARG:HG2	2.04	0.58
1:F:223:VAL:HG12	1:F:348:ILE:HB	1.86	0.58
1:J:133:LYS:O	1:J:137:ARG:HG2	2.04	0.58
1:J:806:SER:O	1:J:808:ASN:ND2	2.36	0.58
1:A:223:VAL:HG12	1:A:348:ILE:HB	1.86	0.58
1:B:658:SER:OG	1:B:662:ASP:OD2	2.18	0.58
1:E:598:CYS:SG	1:E:599:LYS:N	2.74	0.58
1:E:779:ARG:HA	1:E:807:ASP:HB3	1.85	0.58
1:G:223:VAL:HG12	1:G:348:ILE:HB	1.86	0.58
1:G:389:GLU:O	1:G:393:ARG:N	2.35	0.58
1:G:692:GLU:O	1:G:699:ARG:NH1	2.37	0.58
1:H:954:THR:OG1	1:H:956:HIS:ND1	2.32	0.58
1:D:148:PHE:HB3	1:D:237:ARG:HE	1.68	0.58
1:E:148:PHE:HB3	1:E:237:ARG:HE	1.68	0.58
1:F:486:GLU:O	1:F:490:ARG:NE	2.31	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:692:GLU:O	1:H:699:ARG:NH1	2.37	0.58
1:J:223:VAL:HG12	1:J:348:ILE:HB	1.86	0.58
1:A:133:LYS:O	1:A:137:ARG:HG2	2.04	0.58
1:A:148:PHE:HB3	1:A:237:ARG:HE	1.68	0.58
1:G:133:LYS:O	1:G:137:ARG:HG2	2.04	0.58
1:G:232:LYS:NZ	2:G:1101:ADP:O3B	2.34	0.58
1:I:163:SER:OG	1:I:166:LYS:HB2	2.03	0.58
1:J:954:THR:OG1	1:J:956:HIS:ND1	2.32	0.58
1:A:896:LEU:N	1:A:922:ASN:OD1	2.37	0.58
1:E:753:LEU:HD21	1:E:757:GLY:HA3	1.85	0.58
1:G:598:CYS:SG	1:G:599:LYS:N	2.74	0.58
1:G:858:THR:HG22	1:G:859:ARG:HG3	1.84	0.58
1:G:984:LEU:H	1:H:621:LEU:CD2	2.15	0.58
1:H:753:LEU:HD21	1:H:757:GLY:HA3	1.84	0.58
1:I:389:GLU:O	1:I:393:ARG:N	2.35	0.58
1:C:222:VAL:HA	1:C:366:ARG:HB2	1.84	0.57
1:D:918:TYR:HA	1:D:947:GLU:HB2	1.86	0.57
1:E:133:LYS:O	1:E:137:ARG:HG2	2.04	0.57
1:F:764:THR:O	1:F:770:CYS:SG	2.63	0.57
1:G:300:LEU:HD13	1:G:347:LEU:HD13	1.86	0.57
1:I:223:VAL:HG12	1:I:348:ILE:HB	1.86	0.57
1:I:918:TYR:HA	1:I:947:GLU:HB2	1.86	0.57
1:A:779:ARG:HA	1:A:807:ASP:HB3	1.85	0.57
1:A:984:LEU:H	1:B:621:LEU:HD23	1.68	0.57
1:B:163:SER:OG	1:B:166:LYS:HB2	2.03	0.57
1:B:598:CYS:SG	1:B:599:LYS:N	2.74	0.57
1:B:697:GLU:OE1	1:B:699:ARG:N	2.37	0.57
1:C:300:LEU:HD13	1:C:347:LEU:HD13	1.86	0.57
1:D:779:ARG:HA	1:D:807:ASP:HB3	1.85	0.57
1:D:896:LEU:N	1:D:922:ASN:OD1	2.37	0.57
1:F:896:LEU:N	1:F:922:ASN:OD1	2.37	0.57
1:H:223:VAL:HG12	1:H:348:ILE:HB	1.86	0.57
1:I:692:GLU:O	1:I:699:ARG:NH1	2.37	0.57
1:J:918:TYR:HA	1:J:947:GLU:HB2	1.86	0.57
1:B:692:GLU:O	1:B:699:ARG:NH1	2.37	0.57
1:C:764:THR:O	1:C:770:CYS:SG	2.63	0.57
1:C:918:TYR:HA	1:C:947:GLU:HB2	1.86	0.57
1:D:133:LYS:O	1:D:137:ARG:HG2	2.04	0.57
1:E:163:SER:OG	1:E:166:LYS:HB2	2.03	0.57
1:F:148:PHE:HB3	1:F:237:ARG:HE	1.68	0.57
1:F:779:ARG:HA	1:F:807:ASP:HB3	1.85	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:133:LYS:O	1:I:137:ARG:HG2	2.04	0.57
1:B:753:LEU:HD21	1:B:757:GLY:HA3	1.85	0.57
1:E:692:GLU:O	1:E:699:ARG:NH1	2.37	0.57
1:H:764:THR:O	1:H:770:CYS:SG	2.63	0.57
1:J:300:LEU:HD13	1:J:347:LEU:HD13	1.86	0.57
1:J:353:VAL:HG21	1:J:574:ILE:HD11	1.87	0.57
1:A:621:LEU:HD23	1:B:984:LEU:H	1.68	0.57
1:D:858:THR:HG22	1:D:859:ARG:HG3	1.84	0.57
1:E:918:TYR:HA	1:E:947:GLU:HB2	1.86	0.57
1:G:163:SER:OG	1:G:166:LYS:HB2	2.03	0.57
1:G:238:LYS:HE3	1:G:242:ASP:HB2	1.87	0.57
1:H:148:PHE:HB3	1:H:237:ARG:HE	1.68	0.57
1:H:232:LYS:NZ	2:H:1101:ADP:O1B	2.34	0.57
1:H:918:TYR:HA	1:H:947:GLU:HB2	1.86	0.57
1:I:259:ILE:HG23	1:I:301:MET:HA	1.86	0.57
1:J:163:SER:OG	1:J:166:LYS:HB2	2.03	0.57
1:A:353:VAL:HG21	1:A:574:ILE:HD11	1.87	0.57
1:C:238:LYS:HE3	1:C:242:ASP:HB2	1.87	0.57
1:D:259:ILE:HG23	1:D:301:MET:HA	1.86	0.57
1:G:697:GLU:OE1	1:G:699:ARG:N	2.37	0.57
1:G:896:LEU:N	1:G:922:ASN:OD1	2.37	0.57
1:I:764:THR:O	1:I:770:CYS:SG	2.63	0.57
1:J:692:GLU:O	1:J:699:ARG:NH1	2.37	0.57
1:J:779:ARG:HA	1:J:807:ASP:HB3	1.85	0.57
1:A:764:THR:O	1:A:770:CYS:SG	2.63	0.57
1:A:778:GLY:HA2	1:A:808:ASN:HD21	1.70	0.57
1:B:238:LYS:HE3	1:B:242:ASP:HB2	1.87	0.57
1:B:259:ILE:HG23	1:B:301:MET:HA	1.86	0.57
1:B:300:LEU:HD13	1:B:347:LEU:HD13	1.86	0.57
1:C:658:SER:OG	1:C:662:ASP:OD2	2.18	0.57
1:C:779:ARG:HA	1:C:807:ASP:HB3	1.85	0.57
1:D:697:GLU:OE1	1:D:699:ARG:N	2.37	0.57
1:D:764:THR:O	1:D:770:CYS:SG	2.63	0.57
1:F:300:LEU:HD13	1:F:347:LEU:HD13	1.86	0.57
1:F:502:PHE:O	1:F:506:ASN:ND2	2.35	0.57
1:F:918:TYR:HA	1:F:947:GLU:HB2	1.86	0.57
1:I:753:LEU:HD21	1:I:757:GLY:HA3	1.85	0.57
1:D:238:LYS:HE3	1:D:242:ASP:HB2	1.87	0.57
1:E:238:LYS:HE3	1:E:242:ASP:HB2	1.87	0.57
1:F:252:ARG:O	1:F:296:ARG:NH1	2.36	0.57
1:G:353:VAL:HG21	1:G:574:ILE:HD11	1.87	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:779:ARG:HA	1:G:807:ASP:HB3	1.85	0.57
1:H:353:VAL:HG21	1:H:574:ILE:HD11	1.87	0.57
1:J:238:LYS:HE3	1:J:242:ASP:HB2	1.87	0.57
1:C:692:GLU:O	1:C:699:ARG:NH1	2.37	0.57
1:C:778:GLY:HA2	1:C:808:ASN:HD21	1.70	0.57
1:E:259:ILE:HG23	1:E:301:MET:HA	1.86	0.57
1:E:697:GLU:OE1	1:E:699:ARG:N	2.37	0.57
1:G:918:TYR:HA	1:G:947:GLU:HB2	1.86	0.57
1:I:307:LEU:HB3	1:I:568:PHE:HZ	1.70	0.57
1:J:259:ILE:HG23	1:J:301:MET:HA	1.86	0.57
1:J:307:LEU:HB3	1:J:568:PHE:HZ	1.70	0.57
1:J:598:CYS:SG	1:J:599:LYS:N	2.74	0.57
1:J:697:GLU:OE1	1:J:699:ARG:N	2.37	0.57
1:A:1025:LYS:HE3	1:A:1027:GLU:HB2	1.87	0.57
1:C:259:ILE:HG23	1:C:301:MET:HA	1.86	0.57
1:C:307:LEU:HB3	1:C:568:PHE:HZ	1.70	0.57
1:C:447:LEU:HD11	1:C:528:PHE:HE2	1.70	0.57
1:D:692:GLU:O	1:D:699:ARG:NH1	2.37	0.57
1:D:778:GLY:HA2	1:D:808:ASN:HD21	1.70	0.57
1:E:764:THR:O	1:E:770:CYS:SG	2.63	0.57
1:F:307:LEU:HB3	1:F:568:PHE:HZ	1.70	0.57
1:G:764:THR:O	1:G:770:CYS:SG	2.62	0.57
1:H:259:ILE:HG23	1:H:301:MET:HA	1.86	0.57
1:H:307:LEU:HB3	1:H:568:PHE:HZ	1.70	0.57
1:I:148:PHE:HB3	1:I:237:ARG:HE	1.68	0.57
1:J:764:THR:O	1:J:770:CYS:SG	2.63	0.57
1:B:447:LEU:HD11	1:B:528:PHE:HE2	1.70	0.56
1:C:896:LEU:N	1:C:922:ASN:OD1	2.37	0.56
1:C:983:ASP:OD2	1:D:621:LEU:HB2	2.05	0.56
1:D:307:LEU:HB3	1:D:568:PHE:HZ	1.70	0.56
1:E:223:VAL:HG12	1:E:348:ILE:HB	1.86	0.56
1:F:447:LEU:HD11	1:F:528:PHE:HE2	1.70	0.56
1:F:692:GLU:O	1:F:699:ARG:NH1	2.37	0.56
1:I:300:LEU:HD13	1:I:347:LEU:HD13	1.86	0.56
1:I:896:LEU:N	1:I:922:ASN:OD1	2.37	0.56
1:A:30:GLU:HG2	1:A:43:ARG:HA	1.86	0.56
1:A:447:LEU:HD11	1:A:528:PHE:HE2	1.71	0.56
1:C:133:LYS:O	1:C:137:ARG:HG2	2.04	0.56
1:D:447:LEU:HD11	1:D:528:PHE:HE2	1.70	0.56
1:D:486:GLU:O	1:D:490:ARG:NE	2.31	0.56
1:F:778:GLY:HA2	1:F:808:ASN:HD21	1.70	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:699:ARG:HD3	1:H:1036:TRP:CD1	2.40	0.56
1:H:1025:LYS:HE3	1:H:1027:GLU:HB2	1.87	0.56
1:I:447:LEU:HD11	1:I:528:PHE:HE2	1.71	0.56
1:A:106:VAL:O	1:A:111:ASP:OD1	2.23	0.56
1:A:259:ILE:HG23	1:A:301:MET:HA	1.86	0.56
1:B:133:LYS:O	1:B:137:ARG:HG2	2.04	0.56
1:B:764:THR:O	1:B:770:CYS:SG	2.63	0.56
1:C:148:PHE:HB3	1:C:237:ARG:HE	1.68	0.56
1:C:223:VAL:HG12	1:C:348:ILE:HB	1.86	0.56
1:D:223:VAL:HG12	1:D:348:ILE:HB	1.86	0.56
1:D:300:LEU:HD13	1:D:347:LEU:HD13	1.86	0.56
1:E:300:LEU:HD13	1:E:347:LEU:HD13	1.86	0.56
1:E:896:LEU:N	1:E:922:ASN:OD1	2.37	0.56
1:F:697:GLU:OE1	1:F:699:ARG:N	2.37	0.56
1:F:810:LEU:HD21	1:F:814:GLY:HA3	1.88	0.56
1:G:259:ILE:HG23	1:G:301:MET:HA	1.86	0.56
1:J:896:LEU:N	1:J:922:ASN:OD1	2.37	0.56
1:A:502:PHE:O	1:A:506:ASN:ND2	2.35	0.56
1:A:918:TYR:HA	1:A:947:GLU:HB2	1.86	0.56
1:B:223:VAL:HG12	1:B:348:ILE:HB	1.86	0.56
1:C:486:GLU:O	1:C:490:ARG:NE	2.31	0.56
1:C:810:LEU:HD21	1:C:814:GLY:HA3	1.88	0.56
1:G:509:GLN:O	1:G:519:SER:N	2.29	0.56
1:H:300:LEU:HD13	1:H:347:LEU:HD13	1.86	0.56
1:I:697:GLU:OE1	1:I:699:ARG:N	2.37	0.56
1:I:778:GLY:HA2	1:I:808:ASN:HD21	1.70	0.56
1:A:307:LEU:HB3	1:A:568:PHE:HZ	1.70	0.56
1:B:896:LEU:N	1:B:922:ASN:OD1	2.37	0.56
1:B:918:TYR:HA	1:B:947:GLU:HB2	1.86	0.56
1:D:598:CYS:SG	1:D:599:LYS:N	2.74	0.56
1:F:238:LYS:HE3	1:F:242:ASP:HB2	1.87	0.56
1:H:66:LYS:HZ1	1:H:126:ARG:HG3	1.70	0.56
1:G:307:LEU:HB3	1:G:568:PHE:HZ	1.70	0.56
1:D:810:LEU:HD21	1:D:814:GLY:HA3	1.88	0.56
1:E:307:LEU:HB3	1:E:568:PHE:HZ	1.70	0.56
1:E:447:LEU:HD11	1:E:528:PHE:HE2	1.71	0.56
1:G:502:PHE:O	1:G:506:ASN:ND2	2.35	0.56
1:G:810:LEU:HD21	1:G:814:GLY:HA3	1.88	0.56
1:H:447:LEU:HD11	1:H:528:PHE:HE2	1.70	0.56
1:H:896:LEU:N	1:H:922:ASN:OD1	2.37	0.56
1:C:353:VAL:HG21	1:C:574:ILE:HD11	1.87	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:778:GLY:HA2	1:E:808:ASN:HD21	1.70	0.56
1:J:1025:LYS:HE3	1:J:1027:GLU:HB2	1.87	0.56
1:E:353:VAL:HG21	1:E:574:ILE:HD11	1.87	0.56
1:E:1025:LYS:HE3	1:E:1027:GLU:HB2	1.87	0.56
1:F:353:VAL:HG21	1:F:574:ILE:HD11	1.87	0.56
1:C:697:GLU:OE1	1:C:699:ARG:N	2.37	0.56
1:F:1025:LYS:HE3	1:F:1027:GLU:HB2	1.87	0.56
1:B:778:GLY:HA2	1:B:808:ASN:HD21	1.70	0.55
1:D:562:LEU:HD13	1:D:611:TRP:HB2	1.89	0.55
1:H:238:LYS:HE3	1:H:242:ASP:HB2	1.87	0.55
1:I:238:LYS:HE3	1:I:242:ASP:HB2	1.87	0.55
1:J:778:GLY:HA2	1:J:808:ASN:HD21	1.70	0.55
1:A:300:LEU:HD13	1:A:347:LEU:HD13	1.86	0.55
1:A:785:GLU:HA	1:D:813:PHE:CE2	2.41	0.55
1:A:810:LEU:HD21	1:A:814:GLY:HA3	1.88	0.55
1:A:864:GLU:HG2	1:A:893:ASN:HB2	1.89	0.55
1:B:198:SER:HG	1:B:716:CYS:HG	1.52	0.55
1:C:621:LEU:CD2	1:D:984:LEU:H	2.18	0.55
1:D:353:VAL:HG21	1:D:574:ILE:HD11	1.87	0.55
1:E:621:LEU:HB2	1:F:983:ASP:OD2	2.06	0.55
1:F:232:LYS:NZ	2:F:1101:ADP:O1B	2.34	0.55
1:G:1025:LYS:HE3	1:G:1027:GLU:HB2	1.87	0.55
1:I:353:VAL:HG21	1:I:574:ILE:HD11	1.87	0.55
1:I:621:LEU:HB2	1:J:983:ASP:OD2	2.05	0.55
1:A:697:GLU:OE1	1:A:699:ARG:N	2.37	0.55
1:E:502:PHE:O	1:E:506:ASN:ND2	2.35	0.55
1:H:778:GLY:HA2	1:H:808:ASN:HD21	1.70	0.55
1:J:810:LEU:HD21	1:J:814:GLY:HA3	1.88	0.55
1:A:14:LEU:HD23	1:A:22:LEU:HD11	1.88	0.55
1:B:232:LYS:NZ	2:B:1101:ADP:O1B	2.34	0.55
1:B:864:GLU:HG2	1:B:893:ASN:HB2	1.89	0.55
1:C:562:LEU:HD13	1:C:611:TRP:HB2	1.89	0.55
1:G:778:GLY:HA2	1:G:808:ASN:HD21	1.70	0.55
1:J:447:LEU:HD11	1:J:528:PHE:HE2	1.70	0.55
1:J:864:GLU:HG2	1:J:893:ASN:HB2	1.89	0.55
1:B:307:LEU:HB3	1:B:568:PHE:HZ	1.70	0.55
1:B:1025:LYS:HE3	1:B:1027:GLU:HB2	1.88	0.55
1:F:740:SER:OG	1:F:770:CYS:O	2.19	0.55
1:F:864:GLU:HG2	1:F:893:ASN:HB2	1.88	0.55
1:G:447:LEU:HD11	1:G:528:PHE:HE2	1.71	0.55
1:B:353:VAL:HG21	1:B:574:ILE:HD11	1.87	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:562:LEU:HD13	1:B:611:TRP:HB2	1.89	0.55
1:C:272:LEU:O	1:C:276:ILE:N	2.36	0.55
1:C:621:LEU:HB2	1:D:983:ASP:OD2	2.06	0.55
1:D:374:SER:O	1:D:378:ARG:HG3	2.07	0.55
1:E:687:MET:H	1:F:1011:ASN:ND2	2.05	0.55
1:F:259:ILE:HG23	1:F:301:MET:HA	1.86	0.55
1:G:864:GLU:HG2	1:G:893:ASN:HB2	1.89	0.55
1:H:864:GLU:HG2	1:H:893:ASN:HB2	1.89	0.55
1:I:864:GLU:HG2	1:I:893:ASN:HB2	1.89	0.55
1:I:1025:LYS:HE3	1:I:1027:GLU:HB2	1.87	0.55
1:A:238:LYS:HE3	1:A:242:ASP:HB2	1.87	0.55
1:A:983:ASP:OD2	1:B:621:LEU:HB2	2.06	0.55
1:B:892:VAL:HG12	1:B:920:ARG:H	1.72	0.55
1:D:1025:LYS:HE3	1:D:1027:GLU:HB2	1.87	0.55
1:E:198:SER:HG	1:E:716:CYS:HG	1.53	0.55
1:E:810:LEU:HD21	1:E:814:GLY:HA3	1.88	0.55
1:F:948:LEU:HB2	1:F:976:LEU:HD23	1.89	0.55
1:G:374:SER:O	1:G:378:ARG:HG3	2.07	0.55
1:A:621:LEU:HB2	1:B:983:ASP:OD2	2.07	0.55
1:C:948:LEU:HB2	1:C:976:LEU:HD23	1.89	0.55
1:G:562:LEU:HD13	1:G:611:TRP:HB2	1.89	0.55
1:H:502:PHE:O	1:H:506:ASN:ND2	2.35	0.55
1:I:232:LYS:NZ	2:I:1101:ADP:O3B	2.35	0.55
1:I:374:SER:O	1:I:378:ARG:HG3	2.07	0.55
1:J:740:SER:OG	1:J:770:CYS:O	2.19	0.55
1:A:374:SER:O	1:A:378:ARG:HG3	2.07	0.55
1:A:948:LEU:HB2	1:A:976:LEU:HD23	1.89	0.55
1:D:948:LEU:HB2	1:D:976:LEU:HD23	1.89	0.55
1:E:222:VAL:HG22	1:E:366:ARG:HB2	1.89	0.55
1:E:864:GLU:HG2	1:E:893:ASN:HB2	1.89	0.55
1:E:983:ASP:OD2	1:F:621:LEU:HB2	2.06	0.55
1:J:374:SER:O	1:J:378:ARG:HG3	2.07	0.55
1:A:337:ARG:NE	1:A:361:LEU:O	2.40	0.55
1:B:810:LEU:HD21	1:B:814:GLY:HA3	1.88	0.55
1:C:892:VAL:HG12	1:C:920:ARG:H	1.72	0.55
1:C:1025:LYS:HE3	1:C:1027:GLU:HB2	1.87	0.55
1:F:374:SER:O	1:F:378:ARG:HG3	2.07	0.55
1:G:274:ASP:OD1	1:G:274:ASP:N	2.40	0.55
1:G:875:LEU:O	1:G:878:LYS:NZ	2.31	0.55
1:G:892:VAL:HG12	1:G:920:ARG:H	1.72	0.55
1:C:374:SER:O	1:C:378:ARG:HG3	2.07	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:232:LYS:NZ	2:D:1101:ADP:O1B	2.34	0.54
1:E:892:VAL:HG12	1:E:920:ARG:H	1.72	0.54
1:G:337:ARG:NE	1:G:361:LEU:O	2.40	0.54
1:I:274:ASP:N	1:I:274:ASP:OD1	2.40	0.54
1:I:983:ASP:OD2	1:J:621:LEU:HB2	2.06	0.54
1:A:740:SER:OG	1:A:770:CYS:O	2.19	0.54
1:E:1011:ASN:ND2	1:F:687:MET:H	2.05	0.54
1:G:222:VAL:HG22	1:G:366:ARG:HB2	1.89	0.54
1:H:374:SER:O	1:H:378:ARG:HG3	2.07	0.54
1:H:810:LEU:HD21	1:H:814:GLY:HA3	1.88	0.54
1:D:243:TRP:CD1	1:D:249:TYR:HB3	2.41	0.54
1:D:495:GLN:HG2	1:D:496:LYS:HG2	1.90	0.54
1:E:948:LEU:HB2	1:E:976:LEU:HD23	1.89	0.54
1:F:892:VAL:HG12	1:F:920:ARG:H	1.72	0.54
1:F:929:ILE:HG13	1:F:953:LEU:HD12	1.90	0.54
1:F:991:GLU:OE2	1:F:995:GLN:NE2	2.39	0.54
1:G:621:LEU:CD2	1:H:984:LEU:H	2.21	0.54
1:G:658:SER:OG	1:G:662:ASP:OD2	2.18	0.54
1:H:948:LEU:HB2	1:H:976:LEU:HD23	1.89	0.54
1:I:495:GLN:HG2	1:I:496:LYS:HG2	1.90	0.54
1:J:892:VAL:HG12	1:J:920:ARG:H	1.72	0.54
1:B:660:ARG:HG2	1:B:729:PHE:CE2	2.43	0.54
1:F:337:ARG:NE	1:F:361:LEU:O	2.40	0.54
1:F:509:GLN:O	1:F:519:SER:N	2.29	0.54
1:I:660:ARG:HG2	1:I:729:PHE:CE2	2.43	0.54
1:C:243:TRP:CD1	1:C:249:TYR:HB3	2.41	0.54
1:D:929:ILE:HG13	1:D:953:LEU:HD12	1.90	0.54
1:E:929:ILE:HG13	1:E:953:LEU:HD12	1.90	0.54
1:G:1036:TRP:CD1	1:H:699:ARG:HD3	2.43	0.54
1:H:562:LEU:HD13	1:H:611:TRP:HB2	1.89	0.54
1:I:810:LEU:HD21	1:I:814:GLY:HA3	1.88	0.54
1:C:929:ILE:HG13	1:C:953:LEU:HD12	1.90	0.54
1:D:892:VAL:HG12	1:D:920:ARG:H	1.72	0.54
1:E:562:LEU:HD13	1:E:611:TRP:HB2	1.89	0.54
1:F:222:VAL:HG22	1:F:366:ARG:HB2	1.89	0.54
1:F:588:ARG:HE	1:F:592:LEU:HD12	1.73	0.54
1:G:740:SER:OG	1:G:770:CYS:O	2.19	0.54
1:H:495:GLN:HG2	1:H:496:LYS:HG2	1.90	0.54
1:I:588:ARG:HE	1:I:592:LEU:HD12	1.73	0.54
1:I:954:THR:OG1	1:I:956:HIS:ND1	2.32	0.54
1:J:222:VAL:HG22	1:J:366:ARG:HB2	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:929:ILE:HG13	1:A:953:LEU:HD12	1.90	0.54
1:C:984:LEU:H	1:D:621:LEU:CD2	2.20	0.54
1:D:831:LYS:HG3	1:D:859:ARG:HD2	1.90	0.54
1:E:272:LEU:O	1:E:276:ILE:N	2.36	0.54
1:I:948:LEU:HB2	1:I:976:LEU:HD23	1.89	0.54
1:J:562:LEU:HD13	1:J:611:TRP:HB2	1.89	0.54
1:J:991:GLU:OE2	1:J:995:GLN:NE2	2.39	0.54
1:A:222:VAL:HG22	1:A:366:ARG:HB2	1.89	0.54
1:A:892:VAL:HG12	1:A:920:ARG:H	1.72	0.54
1:C:495:GLN:HG2	1:C:496:LYS:HG2	1.90	0.54
1:C:864:GLU:HG2	1:C:893:ASN:HB2	1.89	0.54
1:D:222:VAL:HG22	1:D:366:ARG:HB2	1.89	0.54
1:D:864:GLU:HG2	1:D:893:ASN:HB2	1.89	0.54
1:E:1036:TRP:CD1	1:F:699:ARG:HD3	2.43	0.54
1:H:740:SER:OG	1:H:770:CYS:O	2.19	0.54
1:I:562:LEU:HD13	1:I:611:TRP:HB2	1.89	0.54
1:A:272:LEU:O	1:A:276:ILE:N	2.36	0.54
1:A:495:GLN:HG2	1:A:496:LYS:HG2	1.90	0.54
1:A:588:ARG:HE	1:A:592:LEU:HD12	1.73	0.54
1:A:991:GLU:OE2	1:A:995:GLN:NE2	2.39	0.54
1:E:660:ARG:HG2	1:E:729:PHE:CE2	2.43	0.54
1:G:272:LEU:O	1:G:276:ILE:N	2.36	0.54
1:H:660:ARG:HG2	1:H:729:PHE:CE2	2.43	0.54
1:I:740:SER:OG	1:I:770:CYS:O	2.19	0.54
1:I:892:VAL:HG12	1:I:920:ARG:H	1.72	0.54
1:I:991:GLU:OE2	1:I:995:GLN:NE2	2.39	0.54
1:A:562:LEU:HD13	1:A:611:TRP:HB2	1.89	0.54
1:B:337:ARG:NE	1:B:361:LEU:O	2.40	0.54
1:B:495:GLN:HG2	1:B:496:LYS:HG2	1.90	0.54
1:B:588:ARG:HE	1:B:592:LEU:HD12	1.73	0.54
1:B:948:LEU:HB2	1:B:976:LEU:HD23	1.89	0.54
1:D:588:ARG:HE	1:D:592:LEU:HD12	1.73	0.54
1:H:222:VAL:HG22	1:H:366:ARG:HB2	1.89	0.54
1:I:222:VAL:HG22	1:I:366:ARG:HB2	1.89	0.54
1:A:660:ARG:HG2	1:A:729:PHE:CE2	2.43	0.53
1:B:222:VAL:HG22	1:B:366:ARG:HB2	1.89	0.53
1:C:143:TYR:CZ	1:C:280:CYS:HA	2.43	0.53
1:E:374:SER:O	1:E:378:ARG:HG3	2.07	0.53
1:E:495:GLN:HG2	1:E:496:LYS:HG2	1.90	0.53
1:E:699:ARG:HD3	1:F:1036:TRP:CD1	2.43	0.53
1:E:831:LYS:HG3	1:E:859:ARG:HD2	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:495:GLN:HG2	1:F:496:LYS:HG2	1.90	0.53
1:F:660:ARG:HG2	1:F:729:PHE:CE2	2.43	0.53
1:I:502:PHE:O	1:I:506:ASN:ND2	2.35	0.53
1:J:274:ASP:OD1	1:J:274:ASP:N	2.40	0.53
1:J:588:ARG:HE	1:J:592:LEU:HD12	1.73	0.53
1:B:394:ALA:O	1:B:397:SER:OG	2.25	0.53
1:F:243:TRP:CD1	1:F:249:TYR:HB3	2.41	0.53
1:F:658:SER:OG	1:F:662:ASP:OD2	2.18	0.53
1:G:143:TYR:CZ	1:G:280:CYS:HA	2.43	0.53
1:G:495:GLN:HG2	1:G:496:LYS:HG2	1.90	0.53
1:G:831:LYS:HG3	1:G:859:ARG:HD2	1.90	0.53
1:G:948:LEU:HB2	1:G:976:LEU:HD23	1.89	0.53
1:H:697:GLU:OE1	1:H:699:ARG:N	2.37	0.53
1:H:831:LYS:HG3	1:H:859:ARG:HD2	1.90	0.53
1:H:929:ILE:HG13	1:H:953:LEU:HD12	1.90	0.53
1:I:831:LYS:HG3	1:I:859:ARG:HD2	1.90	0.53
1:J:495:GLN:HG2	1:J:496:LYS:HG2	1.90	0.53
1:B:929:ILE:HG13	1:B:953:LEU:HD12	1.90	0.53
1:C:1000:LEU:HB3	1:C:1028:LEU:HD13	1.91	0.53
1:E:243:TRP:CD1	1:E:249:TYR:HB3	2.41	0.53
1:F:143:TYR:CZ	1:F:280:CYS:HA	2.43	0.53
1:G:621:LEU:HB2	1:H:983:ASP:OD2	2.08	0.53
1:H:588:ARG:HE	1:H:592:LEU:HD12	1.73	0.53
1:J:658:SER:OG	1:J:662:ASP:OD2	2.18	0.53
1:A:143:TYR:CZ	1:A:280:CYS:HA	2.43	0.53
1:A:372:GLY:N	1:A:410:PHE:CZ	2.66	0.53
1:B:374:SER:O	1:B:378:ARG:HG3	2.07	0.53
1:B:831:LYS:HG3	1:B:859:ARG:HD2	1.90	0.53
1:C:991:GLU:OE2	1:C:995:GLN:NE2	2.39	0.53
1:D:274:ASP:N	1:D:274:ASP:OD1	2.40	0.53
1:F:134:LYS:HZ3	1:H:111:ASP:HA	1.74	0.53
1:H:274:ASP:OD1	1:H:274:ASP:N	2.40	0.53
1:H:802:GLU:HG3	1:H:831:LYS:HE2	1.91	0.53
1:H:892:VAL:HG12	1:H:920:ARG:H	1.72	0.53
1:I:732:GLY:O	1:I:735:SER:OG	2.21	0.53
1:J:337:ARG:NE	1:J:361:LEU:O	2.40	0.53
1:J:831:LYS:HG3	1:J:859:ARG:HD2	1.90	0.53
1:A:232:LYS:NZ	2:A:1101:ADP:O3B	2.34	0.53
1:C:588:ARG:HE	1:C:592:LEU:HD12	1.73	0.53
1:C:740:SER:OG	1:C:770:CYS:O	2.19	0.53
1:C:831:LYS:HG3	1:C:859:ARG:HD2	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:148:PHE:O	1:G:164:LEU:HD11	2.09	0.53
1:G:687:MET:H	1:H:1011:ASN:ND2	2.06	0.53
1:I:1000:LEU:HB3	1:I:1028:LEU:HD13	1.91	0.53
1:J:660:ARG:HG2	1:J:729:PHE:CE2	2.43	0.53
1:B:274:ASP:OD1	1:B:274:ASP:N	2.40	0.53
1:B:954:THR:OG1	1:B:956:HIS:ND1	2.32	0.53
1:C:200:VAL:HG12	1:C:202:PRO:HD3	1.91	0.53
1:C:660:ARG:HG2	1:C:729:PHE:CE2	2.43	0.53
1:D:148:PHE:O	1:D:164:LEU:HD11	2.09	0.53
1:E:143:TYR:CZ	1:E:280:CYS:HA	2.43	0.53
1:F:240:MET:HE1	1:F:256:LEU:HD12	1.91	0.53
1:I:658:SER:OG	1:I:662:ASP:OD2	2.18	0.53
1:J:948:LEU:HB2	1:J:976:LEU:HD23	1.89	0.53
1:J:1000:LEU:HB3	1:J:1028:LEU:HD13	1.91	0.53
1:A:802:GLU:HG3	1:A:831:LYS:HE2	1.91	0.53
1:C:232:LYS:NZ	2:C:1101:ADP:O3B	2.34	0.53
1:D:143:TYR:CZ	1:D:280:CYS:HA	2.43	0.53
1:D:272:LEU:O	1:D:276:ILE:N	2.36	0.53
1:D:1000:LEU:HB3	1:D:1028:LEU:HD13	1.91	0.53
1:F:148:PHE:O	1:F:164:LEU:HD11	2.09	0.53
1:F:200:VAL:HG12	1:F:202:PRO:HD3	1.91	0.53
1:G:243:TRP:CD1	1:G:249:TYR:HB3	2.41	0.53
1:H:1000:LEU:HB3	1:H:1028:LEU:HD13	1.91	0.53
1:I:802:GLU:HG3	1:I:831:LYS:HE2	1.91	0.53
1:J:143:TYR:CZ	1:J:280:CYS:HA	2.43	0.53
1:J:200:VAL:HG12	1:J:202:PRO:HD3	1.91	0.53
1:J:240:MET:HE1	1:J:256:LEU:HD12	1.91	0.53
1:J:486:GLU:O	1:J:490:ARG:NE	2.31	0.53
1:B:341:LEU:HD22	1:B:344:ALA:HB2	1.91	0.53
1:C:341:LEU:HD22	1:C:344:ALA:HB2	1.91	0.53
1:F:562:LEU:HD13	1:F:611:TRP:HB2	1.89	0.53
1:G:200:VAL:HG12	1:G:202:PRO:HD3	1.91	0.53
1:G:240:MET:HE1	1:G:256:LEU:HD12	1.91	0.53
1:G:1000:LEU:HB3	1:G:1028:LEU:HD13	1.91	0.53
1:H:991:GLU:OE2	1:H:995:GLN:NE2	2.39	0.53
1:J:148:PHE:O	1:J:164:LEU:HD11	2.09	0.53
1:A:148:PHE:O	1:A:164:LEU:HD11	2.09	0.53
1:A:831:LYS:HG3	1:A:859:ARG:HD2	1.90	0.53
1:D:660:ARG:HG2	1:D:729:PHE:CE2	2.43	0.53
1:E:372:GLY:N	1:E:410:PHE:CZ	2.66	0.53
1:G:175:LYS:HB2	1:G:368:VAL:HG22	1.91	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:126:ARG:C	1:H:128:SER:H	2.10	0.53
1:H:200:VAL:HG12	1:H:202:PRO:HD3	1.91	0.53
1:H:933:CYS:HA	1:H:964:LEU:HD22	1.91	0.53
1:I:143:TYR:CZ	1:I:280:CYS:HA	2.43	0.53
1:I:200:VAL:HG12	1:I:202:PRO:HD3	1.91	0.53
1:J:802:GLU:HG3	1:J:831:LYS:HE2	1.91	0.53
1:A:200:VAL:HG12	1:A:202:PRO:HD3	1.91	0.53
1:A:274:ASP:N	1:A:274:ASP:OD1	2.40	0.53
1:C:933:CYS:HA	1:C:964:LEU:HD22	1.91	0.53
1:E:232:LYS:NZ	2:E:1101:ADP:O3B	2.35	0.53
1:F:223:VAL:HG23	1:F:367:HIS:HA	1.91	0.53
1:F:802:GLU:HG3	1:F:831:LYS:HE2	1.91	0.53
1:G:660:ARG:HG2	1:G:729:PHE:CE2	2.43	0.53
1:H:175:LYS:HB2	1:H:368:VAL:HG22	1.91	0.53
1:J:175:LYS:HB2	1:J:368:VAL:HG22	1.91	0.53
1:A:80:ARG:HB3	1:A:83:LEU:HB2	1.90	0.52
1:A:933:CYS:HA	1:A:964:LEU:HD22	1.91	0.52
1:B:143:TYR:CZ	1:B:280:CYS:HA	2.43	0.52
1:B:175:LYS:HB2	1:B:368:VAL:HG22	1.91	0.52
1:B:600:ILE:O	1:B:603:GLN:HG2	2.09	0.52
1:D:372:GLY:N	1:D:410:PHE:CZ	2.66	0.52
1:D:394:ALA:O	1:D:397:SER:OG	2.25	0.52
1:E:148:PHE:O	1:E:164:LEU:HD11	2.09	0.52
1:E:223:VAL:HG23	1:E:367:HIS:HA	1.91	0.52
1:E:341:LEU:HD22	1:E:344:ALA:HB2	1.91	0.52
1:F:274:ASP:N	1:F:274:ASP:OD1	2.40	0.52
1:F:831:LYS:HG3	1:F:859:ARG:HD2	1.90	0.52
1:G:1009:TYR:OH	1:H:688:PRO:HB3	2.09	0.52
1:I:175:LYS:HB2	1:I:368:VAL:HG22	1.91	0.52
1:D:341:LEU:HD22	1:D:344:ALA:HB2	1.91	0.52
1:G:588:ARG:HE	1:G:592:LEU:HD12	1.73	0.52
1:G:600:ILE:O	1:G:603:GLN:HG2	2.10	0.52
1:G:802:GLU:HG3	1:G:831:LYS:HE2	1.91	0.52
1:I:212:ASP:OD1	1:I:212:ASP:N	2.39	0.52
1:I:272:LEU:O	1:I:276:ILE:N	2.36	0.52
1:I:929:ILE:HG13	1:I:953:LEU:HD12	1.90	0.52
1:J:600:ILE:O	1:J:603:GLN:HG2	2.10	0.52
1:J:771:ASN:O	1:J:773:ARG:NH1	2.42	0.52
1:A:240:MET:HE1	1:A:256:LEU:HD12	1.91	0.52
1:B:240:MET:HE1	1:B:256:LEU:HD12	1.91	0.52
1:B:243:TRP:CD1	1:B:249:TYR:HB3	2.41	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:222:VAL:HG22	1:C:366:ARG:HB2	1.89	0.52
1:C:274:ASP:N	1:C:274:ASP:OD1	2.40	0.52
1:C:771:ASN:O	1:C:773:ARG:NH1	2.42	0.52
1:D:337:ARG:NE	1:D:361:LEU:O	2.40	0.52
1:F:771:ASN:O	1:F:773:ARG:NH1	2.42	0.52
1:G:929:ILE:HG13	1:G:953:LEU:HD12	1.90	0.52
1:H:926:ASP:OD2	1:H:954:THR:OG1	2.22	0.52
1:I:933:CYS:HA	1:I:964:LEU:HD22	1.91	0.52
1:C:687:MET:H	1:D:1011:ASN:ND2	2.07	0.52
1:C:888:LYS:HA	1:C:916:HIS:HB2	1.92	0.52
1:D:200:VAL:HG12	1:D:202:PRO:HD3	1.91	0.52
1:D:489:LEU:HD11	1:D:499:VAL:HG11	1.92	0.52
1:E:588:ARG:HE	1:E:592:LEU:HD12	1.73	0.52
1:E:600:ILE:O	1:E:603:GLN:HG2	2.10	0.52
1:E:621:LEU:HD23	1:F:984:LEU:N	2.24	0.52
1:F:272:LEU:O	1:F:276:ILE:N	2.36	0.52
1:F:933:CYS:HA	1:F:964:LEU:HD22	1.91	0.52
1:H:148:PHE:O	1:H:164:LEU:HD11	2.09	0.52
1:I:148:PHE:O	1:I:164:LEU:HD11	2.09	0.52
1:A:697:GLU:OE1	1:A:698:GLY:N	2.43	0.52
1:D:223:VAL:HG23	1:D:367:HIS:HA	1.91	0.52
1:E:240:MET:HE1	1:E:256:LEU:HD12	1.91	0.52
1:E:489:LEU:HD11	1:E:499:VAL:HG11	1.92	0.52
1:E:771:ASN:O	1:E:773:ARG:NH1	2.42	0.52
1:F:697:GLU:OE1	1:F:698:GLY:N	2.43	0.52
1:G:341:LEU:HD22	1:G:344:ALA:HB2	1.91	0.52
1:G:486:GLU:O	1:G:490:ARG:NE	2.31	0.52
1:G:984:LEU:CB	1:H:621:LEU:HD23	2.33	0.52
1:H:372:GLY:N	1:H:410:PHE:CZ	2.66	0.52
1:I:486:GLU:O	1:I:490:ARG:NE	2.31	0.52
1:J:929:ILE:HG13	1:J:953:LEU:HD12	1.90	0.52
1:A:223:VAL:HG23	1:A:367:HIS:HA	1.91	0.52
1:A:658:SER:OG	1:A:662:ASP:OD2	2.18	0.52
1:A:771:ASN:O	1:A:773:ARG:NH1	2.42	0.52
1:C:394:ALA:O	1:C:397:SER:OG	2.25	0.52
1:C:502:PHE:O	1:C:506:ASN:ND2	2.35	0.52
1:D:933:CYS:HA	1:D:964:LEU:HD22	1.91	0.52
1:F:704:VAL:HG12	1:F:706:CYS:H	1.75	0.52
1:A:175:LYS:HB2	1:A:368:VAL:HG22	1.91	0.52
1:A:243:TRP:CD1	1:A:249:TYR:HB3	2.41	0.52
1:B:200:VAL:HG12	1:B:202:PRO:HD3	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:697:GLU:OE1	1:B:698:GLY:N	2.43	0.52
1:C:337:ARG:NE	1:C:361:LEU:O	2.40	0.52
1:C:489:LEU:HD11	1:C:499:VAL:HG11	1.92	0.52
1:C:697:GLU:OE1	1:C:698:GLY:N	2.43	0.52
1:D:771:ASN:O	1:D:773:ARG:NH1	2.42	0.52
1:E:274:ASP:OD1	1:E:274:ASP:N	2.40	0.52
1:E:621:LEU:HD23	1:F:984:LEU:CB	2.34	0.52
1:G:537:GLU:HB2	1:G:540:LYS:HA	1.92	0.52
1:G:771:ASN:O	1:G:773:ARG:NH1	2.42	0.52
1:G:888:LYS:HA	1:G:916:HIS:HB2	1.92	0.52
1:I:771:ASN:O	1:I:773:ARG:NH1	2.42	0.52
1:I:926:ASP:OD2	1:I:954:THR:OG1	2.22	0.52
1:J:272:LEU:O	1:J:276:ILE:N	2.36	0.52
1:J:697:GLU:OE1	1:J:698:GLY:N	2.43	0.52
1:A:64:GLU:HG3	1:A:94:TRP:HB3	1.91	0.52
1:B:148:PHE:O	1:B:164:LEU:HD11	2.09	0.52
1:B:537:GLU:HB2	1:B:540:LYS:HA	1.92	0.52
1:C:148:PHE:O	1:C:164:LEU:HD11	2.09	0.52
1:C:240:MET:HE1	1:C:256:LEU:HD12	1.91	0.52
1:C:600:ILE:O	1:C:603:GLN:HG2	2.10	0.52
1:E:337:ARG:NE	1:E:361:LEU:O	2.40	0.52
1:F:141:ARG:O	1:F:144:VAL:HG12	2.10	0.52
1:F:537:GLU:HB2	1:F:540:LYS:HA	1.92	0.52
1:G:704:VAL:HG12	1:G:706:CYS:H	1.75	0.52
1:H:143:TYR:CZ	1:H:280:CYS:HA	2.43	0.52
1:H:341:LEU:HD22	1:H:344:ALA:HB2	1.91	0.52
1:H:771:ASN:O	1:H:773:ARG:NH1	2.42	0.52
1:A:537:GLU:HB2	1:A:540:LYS:HA	1.92	0.52
1:B:771:ASN:O	1:B:773:ARG:NH1	2.42	0.52
1:D:141:ARG:O	1:D:144:VAL:HG12	2.10	0.52
1:E:175:LYS:HB2	1:E:368:VAL:HG22	1.91	0.52
1:F:341:LEU:HD22	1:F:344:ALA:HB2	1.91	0.52
1:F:888:LYS:HA	1:F:916:HIS:HB2	1.92	0.52
1:I:141:ARG:O	1:I:144:VAL:HG12	2.10	0.52
1:I:600:ILE:O	1:I:603:GLN:HG2	2.10	0.52
1:J:223:VAL:HG23	1:J:367:HIS:HA	1.91	0.52
1:B:223:VAL:HG23	1:B:367:HIS:HA	1.91	0.52
1:B:740:SER:OG	1:B:770:CYS:O	2.19	0.52
1:C:704:VAL:HG12	1:C:706:CYS:H	1.75	0.52
1:D:888:LYS:HA	1:D:916:HIS:HB2	1.92	0.52
1:E:394:ALA:O	1:E:397:SER:OG	2.25	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1000:LEU:HB3	1:E:1028:LEU:HD13	1.91	0.52
1:F:489:LEU:HD11	1:F:499:VAL:HG11	1.92	0.52
1:G:551:LEU:HG	1:G:552:LYS:HG3	1.92	0.52
1:H:704:VAL:HG12	1:H:706:CYS:H	1.75	0.52
1:I:223:VAL:HG23	1:I:367:HIS:HA	1.91	0.52
1:J:933:CYS:HA	1:J:964:LEU:HD22	1.91	0.52
1:A:141:ARG:O	1:A:144:VAL:HG12	2.10	0.51
1:B:1000:LEU:HB3	1:B:1028:LEU:HD13	1.91	0.51
1:C:223:VAL:HG23	1:C:367:HIS:HA	1.91	0.51
1:E:537:GLU:HB2	1:E:540:LYS:HA	1.92	0.51
1:E:551:LEU:HG	1:E:552:LYS:HG3	1.93	0.51
1:E:697:GLU:OE1	1:E:698:GLY:N	2.43	0.51
1:G:141:ARG:O	1:G:144:VAL:HG12	2.10	0.51
1:H:126:ARG:HB3	1:H:130:CYS:H	1.75	0.51
1:I:888:LYS:HA	1:I:916:HIS:HB2	1.92	0.51
1:J:888:LYS:HA	1:J:916:HIS:HB2	1.92	0.51
1:A:600:ILE:O	1:A:603:GLN:HG2	2.09	0.51
1:A:1000:LEU:HB3	1:A:1028:LEU:HD13	1.91	0.51
1:B:489:LEU:HD11	1:B:499:VAL:HG11	1.92	0.51
1:D:502:PHE:O	1:D:506:ASN:ND2	2.35	0.51
1:D:697:GLU:OE1	1:D:698:GLY:N	2.43	0.51
1:D:802:GLU:HG3	1:D:831:LYS:HE2	1.91	0.51
1:F:600:ILE:O	1:F:603:GLN:HG2	2.10	0.51
1:G:688:PRO:HB3	1:H:1009:TYR:OH	2.11	0.51
1:H:7:ARG:HD2	1:H:56:THR:OG1	2.10	0.51
1:I:240:MET:HE1	1:I:256:LEU:HD12	1.91	0.51
1:J:537:GLU:HB2	1:J:540:LYS:HA	1.92	0.51
1:A:489:LEU:HD11	1:A:499:VAL:HG11	1.92	0.51
1:A:888:LYS:HA	1:A:916:HIS:HB2	1.92	0.51
1:B:551:LEU:HG	1:B:552:LYS:HG3	1.93	0.51
1:B:802:GLU:HG3	1:B:831:LYS:HE2	1.91	0.51
1:C:175:LYS:HB2	1:C:368:VAL:HG22	1.91	0.51
1:C:509:GLN:O	1:C:519:SER:N	2.29	0.51
1:D:551:LEU:HG	1:D:552:LYS:HG3	1.92	0.51
1:D:786:CYS:SG	1:D:787:CYS:N	2.84	0.51
1:E:200:VAL:HG12	1:E:202:PRO:HD3	1.91	0.51
1:E:802:GLU:HG3	1:E:831:LYS:HE2	1.91	0.51
1:H:32:TYR:CG	1:H:33:PRO:HD2	2.46	0.51
1:H:141:ARG:O	1:H:144:VAL:HG12	2.10	0.51
1:I:489:LEU:HD11	1:I:499:VAL:HG11	1.92	0.51
1:J:551:LEU:HG	1:J:552:LYS:HG3	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:141:ARG:O	1:C:144:VAL:HG12	2.10	0.51
1:C:537:GLU:HB2	1:C:540:LYS:HA	1.92	0.51
1:D:537:GLU:HB2	1:D:540:LYS:HA	1.92	0.51
1:E:933:CYS:HA	1:E:964:LEU:HD22	1.91	0.51
1:G:697:GLU:OE1	1:G:698:GLY:N	2.43	0.51
1:H:537:GLU:HB2	1:H:540:LYS:HA	1.92	0.51
1:H:600:ILE:O	1:H:603:GLN:HG2	2.10	0.51
1:H:697:GLU:OE1	1:H:698:GLY:N	2.43	0.51
1:I:230:ILE:HD13	1:I:411:ILE:HA	1.93	0.51
1:J:786:CYS:SG	1:J:787:CYS:N	2.84	0.51
1:B:140:TYR:OH	1:B:290:ILE:CD1	2.59	0.51
1:B:410:PHE:CD2	1:B:411:ILE:N	2.79	0.51
1:C:410:PHE:CD2	1:C:411:ILE:N	2.79	0.51
1:D:410:PHE:CD2	1:D:411:ILE:N	2.79	0.51
1:E:140:TYR:OH	1:E:290:ILE:CD1	2.59	0.51
1:F:827:CYS:HB3	1:F:855:HIS:HB2	1.93	0.51
1:G:223:VAL:HG23	1:G:367:HIS:HA	1.91	0.51
1:G:827:CYS:HB3	1:G:855:HIS:HB2	1.93	0.51
1:I:551:LEU:HG	1:I:552:LYS:HG3	1.92	0.51
1:J:489:LEU:HD11	1:J:499:VAL:HG11	1.92	0.51
1:A:827:CYS:HB3	1:A:855:HIS:HB2	1.93	0.51
1:B:141:ARG:O	1:B:144:VAL:HG12	2.10	0.51
1:B:827:CYS:HB3	1:B:855:HIS:HB2	1.93	0.51
1:D:827:CYS:HB3	1:D:855:HIS:HB2	1.93	0.51
1:E:786:CYS:SG	1:E:787:CYS:N	2.84	0.51
1:F:175:LYS:HB2	1:F:368:VAL:HG22	1.91	0.51
1:H:223:VAL:HG23	1:H:367:HIS:HA	1.91	0.51
1:H:230:ILE:HD13	1:H:411:ILE:HA	1.93	0.51
1:H:888:LYS:HA	1:H:916:HIS:HB2	1.92	0.51
1:J:925:GLY:O	1:J:929:ILE:HG12	2.11	0.51
1:A:925:GLY:O	1:A:929:ILE:HG12	2.11	0.51
1:C:786:CYS:SG	1:C:787:CYS:N	2.84	0.51
1:C:827:CYS:HB3	1:C:855:HIS:HB2	1.93	0.51
1:E:704:VAL:HG12	1:E:706:CYS:H	1.75	0.51
1:E:925:GLY:O	1:E:929:ILE:HG12	2.11	0.51
1:G:732:GLY:O	1:G:735:SER:OG	2.21	0.51
1:H:108:CYS:HB3	1:H:110:GLU:HG2	1.92	0.51
1:I:697:GLU:OE1	1:I:698:GLY:N	2.43	0.51
1:A:732:GLY:O	1:A:735:SER:OG	2.21	0.51
1:B:379:LYS:HB2	1:B:396:PHE:CZ	2.46	0.51
1:E:576:VAL:O	1:E:580:LEU:HG	2.11	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:827:CYS:HB3	1:E:855:HIS:HB2	1.93	0.51
1:E:888:LYS:HA	1:E:916:HIS:HB2	1.92	0.51
1:F:804:ASP:HA	1:F:833:TRP:HB2	1.93	0.51
1:F:1000:LEU:HB3	1:F:1028:LEU:HD13	1.91	0.51
1:G:786:CYS:SG	1:G:787:CYS:N	2.84	0.51
1:G:933:CYS:HA	1:G:964:LEU:HD22	1.91	0.51
1:H:272:LEU:O	1:H:276:ILE:N	2.36	0.51
1:I:704:VAL:HG12	1:I:706:CYS:H	1.75	0.51
1:J:141:ARG:O	1:J:144:VAL:HG12	2.10	0.51
1:J:341:LEU:HD22	1:J:344:ALA:HB2	1.91	0.51
1:J:372:GLY:N	1:J:410:PHE:CZ	2.66	0.51
1:J:509:GLN:O	1:J:519:SER:N	2.29	0.51
1:J:827:CYS:HB3	1:J:855:HIS:HB2	1.93	0.51
1:A:341:LEU:HD22	1:A:344:ALA:HB2	1.91	0.51
1:A:379:LYS:HB2	1:A:396:PHE:CZ	2.46	0.51
1:A:804:ASP:HA	1:A:833:TRP:HB2	1.93	0.51
1:B:256:LEU:HD22	1:B:298:LEU:HB3	1.93	0.51
1:B:576:VAL:O	1:B:580:LEU:HG	2.11	0.51
1:D:230:ILE:HD13	1:D:411:ILE:HA	1.93	0.51
1:E:141:ARG:O	1:E:144:VAL:HG12	2.10	0.51
1:E:379:LYS:HB2	1:E:396:PHE:CZ	2.46	0.51
1:G:925:GLY:O	1:G:929:ILE:HG12	2.11	0.51
1:H:379:LYS:HB2	1:H:396:PHE:CZ	2.46	0.51
1:H:489:LEU:HD11	1:H:499:VAL:HG11	1.92	0.51
1:H:551:LEU:HG	1:H:552:LYS:HG3	1.92	0.51
1:I:341:LEU:HD22	1:I:344:ALA:HB2	1.91	0.51
1:J:232:LYS:NZ	2:J:1101:ADP:O1B	2.35	0.51
1:A:14:LEU:HA	1:A:17:LEU:HD12	1.91	0.51
1:A:410:PHE:CD2	1:A:411:ILE:N	2.79	0.51
1:A:704:VAL:HG12	1:A:706:CYS:H	1.75	0.51
1:B:704:VAL:HG12	1:B:706:CYS:H	1.75	0.51
1:B:925:GLY:O	1:B:929:ILE:HG12	2.11	0.51
1:C:140:TYR:OH	1:C:290:ILE:CD1	2.59	0.51
1:D:140:TYR:OH	1:D:290:ILE:CD1	2.59	0.51
1:D:600:ILE:O	1:D:603:GLN:HG2	2.09	0.51
1:E:802:GLU:OE2	1:E:831:LYS:NZ	2.39	0.51
1:F:410:PHE:CD2	1:F:411:ILE:N	2.79	0.51
1:I:224:PHE:HE1	1:I:347:LEU:HG	1.76	0.51
1:I:786:CYS:SG	1:I:787:CYS:N	2.84	0.51
1:B:888:LYS:HA	1:B:916:HIS:HB2	1.92	0.50
1:B:933:CYS:HA	1:B:964:LEU:HD22	1.91	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:991:GLU:OE2	1:B:995:GLN:NE2	2.39	0.50
1:C:802:GLU:HG3	1:C:831:LYS:HE2	1.91	0.50
1:C:804:ASP:HA	1:C:833:TRP:HB2	1.93	0.50
1:D:240:MET:HE1	1:D:256:LEU:HD12	1.91	0.50
1:D:804:ASP:HA	1:D:833:TRP:HB2	1.93	0.50
1:D:991:GLU:OE2	1:D:995:GLN:NE2	2.39	0.50
1:E:804:ASP:HA	1:E:833:TRP:HB2	1.93	0.50
1:F:551:LEU:HG	1:F:552:LYS:HG3	1.92	0.50
1:G:426:MET:HE3	1:G:431:SER:HB2	1.93	0.50
1:H:576:VAL:O	1:H:580:LEU:HG	2.11	0.50
1:I:537:GLU:HB2	1:I:540:LYS:HA	1.92	0.50
1:J:256:LEU:HD22	1:J:298:LEU:HB3	1.94	0.50
1:A:576:VAL:O	1:A:580:LEU:HG	2.11	0.50
1:D:740:SER:OG	1:D:770:CYS:O	2.19	0.50
1:E:984:LEU:N	1:F:621:LEU:HD23	2.25	0.50
1:F:379:LYS:HB2	1:F:396:PHE:CZ	2.46	0.50
1:F:786:CYS:SG	1:F:787:CYS:N	2.84	0.50
1:G:576:VAL:O	1:G:580:LEU:HG	2.11	0.50
1:H:240:MET:HE1	1:H:256:LEU:HD12	1.91	0.50
1:I:256:LEU:HD22	1:I:298:LEU:HB3	1.94	0.50
1:I:410:PHE:CD2	1:I:411:ILE:N	2.79	0.50
1:J:224:PHE:HE1	1:J:347:LEU:CG	2.25	0.50
1:A:468:GLY:O	1:A:471:SER:OG	2.28	0.50
1:A:551:LEU:HG	1:A:552:LYS:HG3	1.92	0.50
1:A:816:ARG:HD2	1:D:788:PHE:CD2	2.46	0.50
1:B:272:LEU:O	1:B:276:ILE:N	2.36	0.50
1:C:230:ILE:HD13	1:C:411:ILE:HA	1.93	0.50
1:C:699:ARG:HD3	1:D:1036:TRP:CD1	2.45	0.50
1:C:785:GLU:HA	1:F:813:PHE:CE2	2.46	0.50
1:C:925:GLY:O	1:C:929:ILE:HG12	2.11	0.50
1:E:410:PHE:CD2	1:E:411:ILE:N	2.79	0.50
1:E:991:GLU:OE2	1:E:995:GLN:NE2	2.39	0.50
1:F:953:LEU:O	1:F:980:ASP:N	2.43	0.50
1:G:224:PHE:HE1	1:G:347:LEU:CG	2.25	0.50
1:G:256:LEU:HD22	1:G:298:LEU:HB3	1.93	0.50
1:G:410:PHE:CD2	1:G:411:ILE:N	2.79	0.50
1:G:489:LEU:HD11	1:G:499:VAL:HG11	1.92	0.50
1:H:8:CYS:O	1:H:12:ARG:HG3	2.11	0.50
1:H:140:TYR:OH	1:H:290:ILE:CD1	2.59	0.50
1:H:410:PHE:CD2	1:H:411:ILE:N	2.79	0.50
1:H:786:CYS:SG	1:H:787:CYS:N	2.84	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:509:GLN:O	1:I:519:SER:N	2.29	0.50
1:J:140:TYR:OH	1:J:290:ILE:CD1	2.59	0.50
1:J:704:VAL:HG12	1:J:706:CYS:H	1.75	0.50
1:D:133:LYS:HZ1	1:H:3:MET:CA	2.24	0.50
1:G:230:ILE:HD13	1:G:411:ILE:HA	1.93	0.50
1:H:925:GLY:O	1:H:929:ILE:HG12	2.11	0.50
1:I:337:ARG:NE	1:I:361:LEU:O	2.40	0.50
1:J:410:PHE:CD2	1:J:411:ILE:N	2.79	0.50
1:C:576:VAL:O	1:C:580:LEU:HG	2.11	0.50
1:C:732:GLY:O	1:C:735:SER:OG	2.21	0.50
1:C:1036:TRP:CD1	1:D:699:ARG:HD3	2.46	0.50
1:D:175:LYS:HB2	1:D:368:VAL:HG22	1.91	0.50
1:D:576:VAL:O	1:D:580:LEU:HG	2.11	0.50
1:E:256:LEU:HD22	1:E:298:LEU:HB3	1.94	0.50
1:I:699:ARG:HD3	1:J:1036:TRP:CD1	2.47	0.50
1:I:925:GLY:O	1:I:929:ILE:HG12	2.11	0.50
1:A:224:PHE:HE1	1:A:347:LEU:CG	2.25	0.50
1:A:699:ARG:HD3	1:B:1036:TRP:CD1	2.47	0.50
1:A:786:CYS:SG	1:A:787:CYS:N	2.84	0.50
1:C:551:LEU:HG	1:C:552:LYS:HG3	1.92	0.50
1:D:224:PHE:HE1	1:D:347:LEU:HG	1.76	0.50
1:E:230:ILE:HD13	1:E:411:ILE:HA	1.93	0.50
1:F:468:GLY:O	1:F:471:SER:OG	2.28	0.50
1:H:114:GLU:HG2	1:H:116:GLU:HG2	1.93	0.50
1:H:224:PHE:HE1	1:H:347:LEU:HG	1.76	0.50
1:H:243:TRP:CD1	1:H:249:TYR:HB3	2.41	0.50
1:J:926:ASP:OD2	1:J:954:THR:OG1	2.22	0.50
1:A:426:MET:HE3	1:A:431:SER:HB2	1.93	0.50
1:C:224:PHE:HE1	1:C:347:LEU:HG	1.76	0.50
1:D:925:GLY:O	1:D:929:ILE:HG12	2.11	0.50
1:E:953:LEU:O	1:E:980:ASP:N	2.43	0.50
1:F:925:GLY:O	1:F:929:ILE:HG12	2.11	0.50
1:H:224:PHE:HE1	1:H:347:LEU:CG	2.25	0.50
1:H:256:LEU:HD22	1:H:298:LEU:HB3	1.93	0.50
1:I:224:PHE:HE1	1:I:347:LEU:CG	2.25	0.50
1:I:379:LYS:HB2	1:I:396:PHE:CZ	2.46	0.50
1:J:379:LYS:HB2	1:J:396:PHE:CZ	2.46	0.50
1:J:411:ILE:O	1:J:413:LEU:N	2.45	0.50
1:J:953:LEU:O	1:J:980:ASP:N	2.43	0.50
1:A:267:VAL:H	1:A:327:ARG:HD3	1.77	0.50
1:B:411:ILE:O	1:B:413:LEU:N	2.45	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:224:PHE:HE1	1:E:347:LEU:HG	1.76	0.50
1:E:740:SER:OG	1:E:770:CYS:O	2.19	0.50
1:G:379:LYS:HB2	1:G:396:PHE:CZ	2.46	0.50
1:I:140:TYR:OH	1:I:290:ILE:CD1	2.59	0.50
1:I:1036:TRP:CD1	1:J:699:ARG:HD3	2.47	0.50
1:J:426:MET:HE3	1:J:431:SER:HB2	1.94	0.50
1:A:373:PHE:HB3	1:A:377:LYS:HB3	1.94	0.50
1:A:694:GLU:O	1:A:888:LYS:NZ	2.41	0.50
1:B:804:ASP:HA	1:B:833:TRP:HB2	1.93	0.50
1:D:704:VAL:HG12	1:D:706:CYS:H	1.75	0.50
1:E:426:MET:HE3	1:E:431:SER:HB2	1.94	0.50
1:F:426:MET:HE3	1:F:431:SER:HB2	1.93	0.50
1:G:171:LEU:HD13	1:G:373:PHE:HE1	1.77	0.50
1:G:411:ILE:O	1:G:413:LEU:N	2.45	0.50
1:H:411:ILE:O	1:H:413:LEU:N	2.45	0.50
1:H:426:MET:HE3	1:H:431:SER:HB2	1.94	0.50
1:I:576:VAL:O	1:I:580:LEU:HG	2.11	0.50
1:J:394:ALA:O	1:J:397:SER:OG	2.26	0.50
1:A:58:MET:HB3	1:A:67:ALA:HB1	1.94	0.49
1:B:786:CYS:SG	1:B:787:CYS:N	2.84	0.49
1:C:373:PHE:HB3	1:C:377:LYS:HB3	1.94	0.49
1:C:379:LYS:HB2	1:C:396:PHE:CZ	2.46	0.49
1:D:411:ILE:O	1:D:413:LEU:N	2.45	0.49
1:F:576:VAL:O	1:F:580:LEU:HG	2.11	0.49
1:G:140:TYR:OH	1:G:290:ILE:CD1	2.59	0.49
1:H:212:ASP:OD1	1:H:212:ASP:N	2.39	0.49
1:H:827:CYS:HB3	1:H:855:HIS:HB2	1.93	0.49
1:J:732:GLY:O	1:J:735:SER:OG	2.21	0.49
1:A:411:ILE:O	1:A:413:LEU:N	2.45	0.49
1:E:171:LEU:HD13	1:E:373:PHE:HE1	1.78	0.49
1:F:224:PHE:HE1	1:F:347:LEU:CG	2.25	0.49
1:F:352:PRO:HA	1:F:355:LEU:HG	1.95	0.49
1:F:373:PHE:HB3	1:F:377:LYS:HB3	1.94	0.49
1:G:224:PHE:HE1	1:G:347:LEU:HG	1.76	0.49
1:J:230:ILE:HD13	1:J:411:ILE:HA	1.93	0.49
1:A:352:PRO:HA	1:A:355:LEU:HG	1.94	0.49
1:A:889:LEU:HG	1:A:891:LEU:HG	1.94	0.49
1:B:257:PHE:HE2	1:B:276:ILE:HG23	1.78	0.49
1:B:352:PRO:HA	1:B:355:LEU:HG	1.95	0.49
1:C:224:PHE:HE1	1:C:347:LEU:CG	2.25	0.49
1:D:171:LEU:HD13	1:D:373:PHE:HE1	1.77	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:256:LEU:HD22	1:F:298:LEU:HB3	1.93	0.49
1:F:267:VAL:H	1:F:327:ARG:HD3	1.77	0.49
1:F:411:ILE:O	1:F:413:LEU:N	2.45	0.49
1:H:373:PHE:HB3	1:H:377:LYS:HB3	1.94	0.49
1:H:804:ASP:HA	1:H:833:TRP:HB2	1.93	0.49
1:I:300:LEU:HD12	1:I:347:LEU:HD22	1.95	0.49
1:I:394:ALA:O	1:I:397:SER:OG	2.26	0.49
1:J:576:VAL:O	1:J:580:LEU:HG	2.11	0.49
1:J:889:LEU:HG	1:J:891:LEU:HG	1.95	0.49
1:B:230:ILE:HD13	1:B:411:ILE:HA	1.93	0.49
1:B:245:SER:OG	1:B:247:THR:OG1	2.24	0.49
1:B:426:MET:HE3	1:B:431:SER:HB2	1.95	0.49
1:C:468:GLY:O	1:C:471:SER:OG	2.28	0.49
1:D:267:VAL:H	1:D:327:ARG:HD3	1.77	0.49
1:D:379:LYS:HB2	1:D:396:PHE:CZ	2.46	0.49
1:H:257:PHE:HE2	1:H:276:ILE:HG23	1.78	0.49
1:I:426:MET:HE3	1:I:431:SER:HB2	1.94	0.49
1:A:68:TRP:O	1:A:72:VAL:HG23	2.12	0.49
1:B:509:GLN:O	1:B:519:SER:N	2.29	0.49
1:D:256:LEU:HD22	1:D:298:LEU:HB3	1.93	0.49
1:D:869:ASP:OD2	1:D:897:THR:OG1	2.24	0.49
1:E:267:VAL:H	1:E:327:ARG:HD3	1.77	0.49
1:F:224:PHE:HE1	1:F:347:LEU:HG	1.76	0.49
1:F:230:ILE:HD13	1:F:411:ILE:HA	1.93	0.49
1:H:953:LEU:O	1:H:980:ASP:N	2.43	0.49
1:I:257:PHE:HE2	1:I:276:ILE:HG23	1.78	0.49
1:I:889:LEU:HG	1:I:891:LEU:HG	1.95	0.49
1:J:257:PHE:HE2	1:J:276:ILE:HG23	1.78	0.49
1:J:267:VAL:H	1:J:327:ARG:HD3	1.77	0.49
1:J:300:LEU:HD12	1:J:347:LEU:HD22	1.95	0.49
1:J:804:ASP:HA	1:J:833:TRP:HB2	1.93	0.49
1:B:171:LEU:HD13	1:B:373:PHE:HE1	1.78	0.49
1:B:224:PHE:HE1	1:B:347:LEU:CG	2.25	0.49
1:B:373:PHE:HB3	1:B:377:LYS:HB3	1.94	0.49
1:C:171:LEU:HD13	1:C:373:PHE:HE1	1.77	0.49
1:E:224:PHE:HE1	1:E:347:LEU:CG	2.25	0.49
1:E:352:PRO:HA	1:E:355:LEU:HG	1.95	0.49
1:E:813:PHE:CE2	1:H:785:GLU:HA	2.48	0.49
1:F:140:TYR:OH	1:F:290:ILE:CD1	2.59	0.49
1:F:869:ASP:OD2	1:F:897:THR:OG1	2.24	0.49
1:G:804:ASP:HA	1:G:833:TRP:HB2	1.93	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:171:LEU:HD13	1:H:373:PHE:HE1	1.78	0.49
1:H:337:ARG:NE	1:H:361:LEU:O	2.40	0.49
1:H:394:ALA:O	1:H:397:SER:OG	2.26	0.49
1:H:889:LEU:HG	1:H:891:LEU:HG	1.95	0.49
1:I:171:LEU:HD13	1:I:373:PHE:HE1	1.77	0.49
1:I:411:ILE:O	1:I:413:LEU:N	2.45	0.49
1:A:256:LEU:HD22	1:A:298:LEU:HB3	1.94	0.49
1:B:267:VAL:H	1:B:327:ARG:HD3	1.77	0.49
1:C:267:VAL:H	1:C:327:ARG:HD3	1.77	0.49
1:E:257:PHE:HE2	1:E:276:ILE:HG23	1.78	0.49
1:E:411:ILE:O	1:E:413:LEU:N	2.45	0.49
1:F:889:LEU:HG	1:F:891:LEU:HG	1.95	0.49
1:G:267:VAL:H	1:G:327:ARG:HD3	1.77	0.49
1:H:92:PRO:HG3	1:H:113:ILE:HA	1.94	0.49
1:H:658:SER:OG	1:H:662:ASP:OD2	2.18	0.49
1:A:230:ILE:HD13	1:A:411:ILE:HA	1.93	0.49
1:A:586:GLN:O	1:A:590:SER:OG	2.20	0.49
1:C:257:PHE:HE2	1:C:276:ILE:HG23	1.78	0.49
1:E:984:LEU:CB	1:F:621:LEU:HD23	2.35	0.49
1:G:257:PHE:HE2	1:G:276:ILE:HG23	1.78	0.49
1:G:889:LEU:HG	1:G:891:LEU:HG	1.95	0.49
1:A:3:MET:HA	1:A:9:LYS:NZ	2.28	0.49
1:A:140:TYR:OH	1:A:290:ILE:CD1	2.59	0.49
1:A:224:PHE:HE1	1:A:347:LEU:HG	1.76	0.49
1:A:477:ILE:HG12	1:A:526:GLN:HE22	1.78	0.49
1:A:926:ASP:OD2	1:A:954:THR:OG1	2.22	0.49
1:B:797:ASN:O	1:B:799:LYS:N	2.46	0.49
1:C:411:ILE:O	1:C:413:LEU:N	2.45	0.49
1:C:889:LEU:HG	1:C:891:LEU:HG	1.95	0.49
1:D:212:ASP:OD1	1:D:212:ASP:N	2.39	0.49
1:D:477:ILE:HG12	1:D:526:GLN:HE22	1.78	0.49
1:F:171:LEU:HD13	1:F:373:PHE:HE1	1.77	0.49
1:G:372:GLY:N	1:G:410:PHE:CZ	2.66	0.49
1:G:813:PHE:CE2	1:J:785:GLU:HA	2.47	0.49
1:I:827:CYS:HB3	1:I:855:HIS:HB2	1.93	0.49
1:J:224:PHE:HE1	1:J:347:LEU:HG	1.76	0.49
1:A:171:LEU:HD13	1:A:373:PHE:HE1	1.77	0.49
1:A:257:PHE:HE2	1:A:276:ILE:HG23	1.78	0.49
1:D:889:LEU:HG	1:D:891:LEU:HG	1.95	0.49
1:E:373:PHE:HB3	1:E:377:LYS:HB3	1.94	0.49
1:G:300:LEU:HD12	1:G:347:LEU:HD22	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:983:ASP:OD2	1:H:621:LEU:HB2	2.12	0.49
1:H:267:VAL:H	1:H:327:ARG:HD3	1.77	0.49
1:J:171:LEU:HD13	1:J:373:PHE:HE1	1.77	0.49
1:J:243:TRP:CD1	1:J:249:TYR:HB3	2.41	0.49
1:D:373:PHE:HB3	1:D:377:LYS:HB3	1.94	0.48
1:D:802:GLU:OE2	1:D:831:LYS:NZ	2.39	0.48
1:F:257:PHE:HE2	1:F:276:ILE:HG23	1.78	0.48
1:G:245:SER:OG	1:G:247:THR:OG1	2.24	0.48
1:I:243:TRP:CD1	1:I:249:TYR:HB3	2.41	0.48
1:I:804:ASP:HA	1:I:833:TRP:HB2	1.93	0.48
1:I:885:ASN:HA	1:I:913:ASN:HD22	1.78	0.48
1:J:468:GLY:O	1:J:471:SER:OG	2.28	0.48
1:D:224:PHE:HE1	1:D:347:LEU:CG	2.25	0.48
1:D:426:MET:HE3	1:D:431:SER:HB2	1.94	0.48
1:D:468:GLY:O	1:D:471:SER:OG	2.28	0.48
1:E:797:ASN:O	1:E:799:LYS:N	2.46	0.48
1:F:477:ILE:HG12	1:F:526:GLN:HE22	1.78	0.48
1:G:394:ALA:O	1:G:397:SER:OG	2.25	0.48
1:G:797:ASN:O	1:G:799:LYS:N	2.46	0.48
1:H:885:ASN:HA	1:H:913:ASN:HD22	1.79	0.48
1:I:267:VAL:H	1:I:327:ARG:HD3	1.77	0.48
1:I:373:PHE:HB3	1:I:377:LYS:HB3	1.94	0.48
1:A:1036:TRP:CD1	1:B:699:ARG:HD3	2.48	0.48
1:C:256:LEU:HD22	1:C:298:LEU:HB3	1.93	0.48
1:C:477:ILE:HG12	1:C:526:GLN:HE22	1.78	0.48
1:C:802:GLU:OE2	1:C:831:LYS:NZ	2.39	0.48
1:G:373:PHE:HB3	1:G:377:LYS:HB3	1.94	0.48
1:H:114:GLU:HB3	1:H:117:TRP:HB2	1.95	0.48
1:I:352:PRO:HA	1:I:355:LEU:HG	1.95	0.48
1:J:352:PRO:HA	1:J:355:LEU:HG	1.94	0.48
1:B:224:PHE:HE1	1:B:347:LEU:HG	1.76	0.48
1:C:1011:ASN:ND2	1:D:687:MET:H	2.11	0.48
1:G:171:LEU:HD13	1:G:373:PHE:CE1	2.49	0.48
1:G:926:ASP:OD2	1:G:954:THR:OG1	2.22	0.48
1:H:797:ASN:O	1:H:799:LYS:N	2.46	0.48
1:A:687:MET:H	1:B:1011:ASN:ND2	2.11	0.48
1:B:502:PHE:O	1:B:506:ASN:ND2	2.35	0.48
1:F:885:ASN:HA	1:F:913:ASN:HD22	1.79	0.48
1:G:991:GLU:OE2	1:G:995:GLN:NE2	2.39	0.48
1:I:586:GLN:O	1:I:590:SER:OG	2.20	0.48
1:A:783:SER:O	1:A:786:CYS:SG	2.72	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:885:ASN:HA	1:A:913:ASN:HD22	1.79	0.48
1:D:176:GLU:HB3	1:D:367:HIS:HB2	1.96	0.48
1:E:885:ASN:HA	1:E:913:ASN:HD22	1.78	0.48
1:G:352:PRO:HA	1:G:355:LEU:HG	1.95	0.48
1:I:953:LEU:O	1:I:980:ASP:N	2.43	0.48
1:I:984:LEU:H	1:J:621:LEU:CD2	2.27	0.48
1:I:1011:ASN:ND2	1:J:687:MET:H	2.11	0.48
1:J:885:ASN:HA	1:J:913:ASN:HD22	1.78	0.48
1:A:688:PRO:HB3	1:B:1009:TYR:OH	2.13	0.48
1:A:953:LEU:O	1:A:980:ASP:N	2.43	0.48
1:B:885:ASN:HA	1:B:913:ASN:HD22	1.79	0.48
1:G:174:ILE:H	1:G:174:ILE:HG12	1.38	0.48
1:G:953:LEU:O	1:G:980:ASP:N	2.43	0.48
1:H:134:LYS:HE3	1:H:134:LYS:HB2	1.50	0.48
1:A:171:LEU:HD13	1:A:373:PHE:CE1	2.49	0.48
1:B:889:LEU:HG	1:B:891:LEU:HG	1.95	0.48
1:C:307:LEU:HD22	1:C:307:LEU:HA	1.71	0.48
1:C:352:PRO:HA	1:C:355:LEU:HG	1.95	0.48
1:C:885:ASN:HA	1:C:913:ASN:HD22	1.78	0.48
1:D:797:ASN:O	1:D:799:LYS:N	2.46	0.48
1:J:171:LEU:HD13	1:J:373:PHE:CE1	2.49	0.48
1:J:373:PHE:HB3	1:J:377:LYS:HB3	1.94	0.48
1:B:171:LEU:HD13	1:B:373:PHE:CE1	2.49	0.48
1:B:477:ILE:HG12	1:B:526:GLN:HE22	1.78	0.48
1:E:889:LEU:HG	1:E:891:LEU:HG	1.95	0.48
1:G:198:SER:HG	1:G:716:CYS:HG	1.51	0.48
1:H:503:LEU:O	1:H:507:LEU:N	2.42	0.48
1:A:176:GLU:HB3	1:A:367:HIS:HB2	1.96	0.48
1:B:783:SER:O	1:B:786:CYS:SG	2.72	0.48
1:D:171:LEU:HD13	1:D:373:PHE:CE1	2.49	0.48
1:F:249:TYR:O	1:F:251:ASP:N	2.47	0.48
1:F:372:GLY:N	1:F:410:PHE:CZ	2.66	0.48
1:H:20:VAL:HG13	1:H:21:ASP:N	2.29	0.48
1:I:477:ILE:HG12	1:I:526:GLN:HE22	1.78	0.48
1:J:147:ARG:HE	1:J:147:ARG:HB2	1.40	0.48
1:J:502:PHE:O	1:J:506:ASN:ND2	2.35	0.48
1:B:143:TYR:CE2	1:B:280:CYS:HA	2.49	0.47
1:C:176:GLU:HB3	1:C:367:HIS:HB2	1.96	0.47
1:D:137:ARG:HD3	1:D:141:ARG:HH12	1.79	0.47
1:D:257:PHE:HE2	1:D:276:ILE:HG23	1.78	0.47
1:D:308:GLN:HB3	1:D:480:GLN:HB3	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:885:ASN:HA	1:D:913:ASN:HD22	1.78	0.47
1:E:171:LEU:HD13	1:E:373:PHE:CE1	2.49	0.47
1:F:134:LYS:HE3	1:H:114:GLU:N	2.29	0.47
1:H:137:ARG:HD3	1:H:141:ARG:HH12	1.79	0.47
1:H:352:PRO:HA	1:H:355:LEU:HG	1.95	0.47
1:I:143:TYR:CE2	1:I:280:CYS:HA	2.49	0.47
1:J:477:ILE:HG12	1:J:526:GLN:HE22	1.78	0.47
1:B:307:LEU:HD22	1:B:307:LEU:HA	1.71	0.47
1:D:830:LYS:O	1:D:858:THR:N	2.48	0.47
1:F:597:SER:OG	1:F:598:CYS:N	2.47	0.47
1:F:732:GLY:O	1:F:735:SER:OG	2.21	0.47
1:F:797:ASN:O	1:F:799:LYS:N	2.46	0.47
1:H:171:LEU:HD13	1:H:373:PHE:CE1	2.49	0.47
1:H:477:ILE:HG12	1:H:526:GLN:HE22	1.78	0.47
1:I:797:ASN:O	1:I:799:LYS:N	2.46	0.47
1:I:1009:TYR:OH	1:J:688:PRO:HB3	2.14	0.47
1:J:176:GLU:HB3	1:J:367:HIS:HB2	1.96	0.47
1:J:308:GLN:HB3	1:J:480:GLN:HB3	1.96	0.47
1:C:137:ARG:HD3	1:C:141:ARG:HH12	1.79	0.47
1:D:352:PRO:HA	1:D:355:LEU:HG	1.95	0.47
1:E:137:ARG:HD3	1:E:141:ARG:HH12	1.79	0.47
1:F:926:ASP:OD2	1:F:954:THR:OG1	2.22	0.47
1:I:176:GLU:HB3	1:I:367:HIS:HB2	1.96	0.47
1:I:308:GLN:HB3	1:I:480:GLN:HB3	1.96	0.47
1:J:143:TYR:CE2	1:J:280:CYS:HA	2.50	0.47
1:J:797:ASN:O	1:J:799:LYS:N	2.46	0.47
1:A:797:ASN:O	1:A:799:LYS:N	2.46	0.47
1:B:137:ARG:HD3	1:B:141:ARG:HH12	1.79	0.47
1:B:830:LYS:O	1:B:858:THR:N	2.48	0.47
1:C:143:TYR:CE2	1:C:280:CYS:HA	2.49	0.47
1:C:171:LEU:HD13	1:C:373:PHE:CE1	2.49	0.47
1:C:308:GLN:HB3	1:C:480:GLN:HB3	1.96	0.47
1:D:133:LYS:HE2	1:H:3:MET:CG	2.21	0.47
1:D:249:TYR:O	1:D:251:ASP:N	2.47	0.47
1:D:953:LEU:O	1:D:980:ASP:N	2.43	0.47
1:E:143:TYR:CE2	1:E:280:CYS:HA	2.49	0.47
1:F:134:LYS:NZ	1:H:111:ASP:HA	2.28	0.47
1:F:171:LEU:HD13	1:F:373:PHE:CE1	2.49	0.47
1:G:308:GLN:HB3	1:G:480:GLN:HB3	1.96	0.47
1:G:699:ARG:HD3	1:H:1036:TRP:HD1	1.79	0.47
1:H:66:LYS:HZ2	1:H:126:ARG:HH21	1.62	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:308:GLN:HB3	1:H:480:GLN:HB3	1.96	0.47
1:J:597:SER:OG	1:J:598:CYS:N	2.47	0.47
1:A:143:TYR:CE2	1:A:280:CYS:HA	2.49	0.47
1:B:468:GLY:O	1:B:471:SER:OG	2.28	0.47
1:C:688:PRO:HB3	1:D:1009:TYR:OH	2.14	0.47
1:C:830:LYS:O	1:C:858:THR:N	2.48	0.47
1:D:245:SER:OG	1:D:247:THR:OG1	2.24	0.47
1:D:877:GLU:O	1:D:880:LYS:NZ	2.48	0.47
1:E:308:GLN:HB3	1:E:480:GLN:HB3	1.96	0.47
1:F:176:GLU:HB3	1:F:367:HIS:HB2	1.96	0.47
1:G:143:TYR:CE2	1:G:280:CYS:HA	2.49	0.47
1:G:176:GLU:HB3	1:G:367:HIS:HB2	1.96	0.47
1:C:426:MET:HE3	1:C:431:SER:HB2	1.95	0.47
1:C:926:ASP:OD2	1:C:954:THR:OG1	2.22	0.47
1:D:174:ILE:H	1:D:174:ILE:HG12	1.38	0.47
1:E:732:GLY:O	1:E:735:SER:OG	2.21	0.47
1:G:1036:TRP:HD1	1:H:699:ARG:HD3	1.80	0.47
1:J:491:ASN:O	1:J:547:PRO:HB2	2.15	0.47
1:A:509:GLN:O	1:A:519:SER:N	2.29	0.47
1:A:621:LEU:CD2	1:B:984:LEU:H	2.28	0.47
1:B:953:LEU:O	1:B:980:ASP:N	2.43	0.47
1:E:477:ILE:HG12	1:E:526:GLN:HE22	1.78	0.47
1:G:491:ASN:O	1:G:547:PRO:HB2	2.15	0.47
1:H:93:LYS:HA	1:H:93:LYS:HD2	1.51	0.47
1:H:468:GLY:O	1:H:471:SER:OG	2.28	0.47
1:I:783:SER:O	1:I:786:CYS:SG	2.72	0.47
1:I:802:GLU:OE2	1:I:831:LYS:NZ	2.39	0.47
1:J:830:LYS:O	1:J:858:THR:N	2.48	0.47
1:A:242:ASP:O	1:A:247:THR:OG1	2.25	0.47
1:A:374:SER:O	1:A:378:ARG:NE	2.48	0.47
1:A:597:SER:OG	1:A:598:CYS:N	2.47	0.47
1:A:875:LEU:O	1:A:878:LYS:NZ	2.31	0.47
1:C:797:ASN:O	1:C:799:LYS:N	2.46	0.47
1:C:877:GLU:O	1:C:880:LYS:NZ	2.48	0.47
1:C:896:LEU:O	1:C:922:ASN:ND2	2.48	0.47
1:D:961:LEU:O	1:D:965:LEU:HG	2.15	0.47
1:E:586:GLN:O	1:E:590:SER:OG	2.20	0.47
1:F:143:TYR:CE2	1:F:280:CYS:HA	2.49	0.47
1:G:477:ILE:HG12	1:G:526:GLN:HE22	1.78	0.47
1:H:896:LEU:O	1:H:922:ASN:ND2	2.48	0.47
1:I:137:ARG:HD3	1:I:141:ARG:HH12	1.79	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:174:ILE:H	1:I:174:ILE:HG12	1.38	0.47
1:B:308:GLN:HB3	1:B:480:GLN:HB3	1.96	0.47
1:B:510:LYS:HG3	1:B:518:TYR:CZ	2.50	0.47
1:C:961:LEU:O	1:C:965:LEU:HG	2.15	0.47
1:D:509:GLN:O	1:D:519:SER:N	2.29	0.47
1:E:176:GLU:HB3	1:E:367:HIS:HB2	1.96	0.47
1:E:510:LYS:HG3	1:E:518:TYR:CZ	2.50	0.47
1:E:783:SER:O	1:E:786:CYS:SG	2.72	0.47
1:E:877:GLU:O	1:E:880:LYS:NZ	2.48	0.47
1:F:307:LEU:HD22	1:F:307:LEU:HA	1.71	0.47
1:F:308:GLN:HB3	1:F:480:GLN:HB3	1.96	0.47
1:G:137:ARG:HD3	1:G:141:ARG:HH12	1.79	0.47
1:G:885:ASN:HA	1:G:913:ASN:HD22	1.79	0.47
1:H:783:SER:O	1:H:786:CYS:SG	2.72	0.47
1:I:171:LEU:HD13	1:I:373:PHE:CE1	2.49	0.47
1:I:936:LEU:HB2	1:I:964:LEU:HD21	1.97	0.47
1:J:137:ARG:HD3	1:J:141:ARG:HH12	1.79	0.47
1:J:936:LEU:HB2	1:J:964:LEU:HD21	1.97	0.47
1:A:308:GLN:HB3	1:A:480:GLN:HB3	1.96	0.47
1:A:510:LYS:HG3	1:A:518:TYR:CZ	2.50	0.47
1:C:740:SER:HB2	1:C:743:LEU:HB3	1.97	0.47
1:F:740:SER:HB2	1:F:743:LEU:HB3	1.97	0.47
1:G:249:TYR:O	1:G:251:ASP:N	2.47	0.47
1:G:783:SER:O	1:G:786:CYS:SG	2.72	0.47
1:H:143:TYR:CE2	1:H:280:CYS:HA	2.49	0.47
1:H:732:GLY:O	1:H:735:SER:OG	2.21	0.47
1:H:936:LEU:HB2	1:H:964:LEU:HD21	1.97	0.47
1:I:372:GLY:N	1:I:410:PHE:CZ	2.66	0.47
1:I:503:LEU:O	1:I:507:LEU:N	2.42	0.47
1:B:135:ASP:O	1:B:139:LYS:HD2	2.16	0.46
1:B:961:LEU:O	1:B:965:LEU:HG	2.15	0.46
1:D:143:TYR:CE2	1:D:280:CYS:HA	2.49	0.46
1:E:830:LYS:O	1:E:858:THR:N	2.48	0.46
1:E:961:LEU:O	1:E:965:LEU:HG	2.15	0.46
1:G:135:ASP:O	1:G:139:LYS:HD2	2.16	0.46
1:G:510:LYS:HG3	1:G:518:TYR:CZ	2.50	0.46
1:G:597:SER:OG	1:G:598:CYS:N	2.47	0.46
1:H:510:LYS:HG3	1:H:518:TYR:CZ	2.50	0.46
1:H:885:ASN:HA	1:H:913:ASN:ND2	2.31	0.46
1:I:468:GLY:O	1:I:471:SER:OG	2.28	0.46
1:J:802:GLU:OE2	1:J:831:LYS:NZ	2.39	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:961:LEU:O	1:J:965:LEU:HG	2.15	0.46
1:A:885:ASN:HA	1:A:913:ASN:ND2	2.31	0.46
1:A:896:LEU:O	1:A:922:ASN:ND2	2.48	0.46
1:A:984:LEU:H	1:B:621:LEU:CD2	2.28	0.46
1:B:372:GLY:N	1:B:410:PHE:CZ	2.66	0.46
1:C:224:PHE:CE1	1:C:347:LEU:CD2	2.99	0.46
1:C:885:ASN:HA	1:C:913:ASN:ND2	2.31	0.46
1:E:135:ASP:O	1:E:139:LYS:HD2	2.16	0.46
1:E:143:TYR:OH	1:E:281:PRO:HD2	2.16	0.46
1:E:503:LEU:O	1:E:507:LEU:N	2.42	0.46
1:F:137:ARG:HD3	1:F:141:ARG:HH12	1.79	0.46
1:F:503:LEU:O	1:F:507:LEU:N	2.42	0.46
1:F:877:GLU:O	1:F:880:LYS:NZ	2.48	0.46
1:G:374:SER:O	1:G:378:ARG:NE	2.48	0.46
1:G:936:LEU:HB2	1:G:964:LEU:HD21	1.97	0.46
1:G:961:LEU:O	1:G:965:LEU:HG	2.15	0.46
1:H:92:PRO:HG2	1:H:113:ILE:HG12	1.97	0.46
1:H:176:GLU:HB3	1:H:367:HIS:HB2	1.96	0.46
1:I:374:SER:O	1:I:378:ARG:NE	2.48	0.46
1:I:510:LYS:HG3	1:I:518:TYR:CZ	2.50	0.46
1:J:135:ASP:O	1:J:139:LYS:HD2	2.16	0.46
1:B:176:GLU:HB3	1:B:367:HIS:HB2	1.96	0.46
1:B:322:TRP:CE2	1:B:323:GLN:HB2	2.51	0.46
1:C:510:LYS:HG3	1:C:518:TYR:CZ	2.50	0.46
1:D:135:ASP:O	1:D:139:LYS:HD2	2.16	0.46
1:D:143:TYR:OH	1:D:281:PRO:HD2	2.16	0.46
1:E:287:ILE:O	1:E:291:VAL:N	2.44	0.46
1:E:740:SER:HB2	1:E:743:LEU:HB3	1.97	0.46
1:F:885:ASN:HA	1:F:913:ASN:ND2	2.31	0.46
1:H:877:GLU:O	1:H:880:LYS:NZ	2.48	0.46
1:I:830:LYS:O	1:I:858:THR:N	2.48	0.46
1:A:260:HIS:CE1	1:A:306:GLU:HG3	2.51	0.46
1:A:740:SER:HB2	1:A:743:LEU:HB3	1.97	0.46
1:B:249:TYR:O	1:B:251:ASP:N	2.47	0.46
1:B:877:GLU:O	1:B:880:LYS:NZ	2.48	0.46
1:D:224:PHE:CE1	1:D:347:LEU:CD2	2.99	0.46
1:D:300:LEU:HD12	1:D:347:LEU:HD22	1.95	0.46
1:D:374:SER:O	1:D:378:ARG:NE	2.48	0.46
1:D:740:SER:HB2	1:D:743:LEU:HB3	1.97	0.46
1:D:896:LEU:O	1:D:922:ASN:ND2	2.48	0.46
1:G:830:LYS:O	1:G:858:THR:N	2.48	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:885:ASN:HA	1:I:913:ASN:ND2	2.31	0.46
1:I:896:LEU:O	1:I:922:ASN:ND2	2.48	0.46
1:J:143:TYR:OH	1:J:281:PRO:HD2	2.16	0.46
1:J:322:TRP:CE2	1:J:323:GLN:HB2	2.51	0.46
1:A:249:TYR:O	1:A:251:ASP:N	2.47	0.46
1:B:374:SER:O	1:B:378:ARG:NE	2.48	0.46
1:B:896:LEU:O	1:B:922:ASN:ND2	2.48	0.46
1:B:936:LEU:HB2	1:B:964:LEU:HD21	1.97	0.46
1:D:885:ASN:HA	1:D:913:ASN:ND2	2.31	0.46
1:E:322:TRP:CE2	1:E:323:GLN:HB2	2.51	0.46
1:E:785:GLU:HA	1:H:813:PHE:CE2	2.50	0.46
1:F:260:HIS:CE1	1:F:306:GLU:HG3	2.51	0.46
1:F:322:TRP:CE2	1:F:323:GLN:HB2	2.51	0.46
1:F:374:SER:O	1:F:378:ARG:NE	2.48	0.46
1:F:802:GLU:OE2	1:F:831:LYS:NZ	2.39	0.46
1:G:877:GLU:O	1:G:880:LYS:NZ	2.48	0.46
1:H:260:HIS:CE1	1:H:306:GLU:HG3	2.51	0.46
1:I:143:TYR:OH	1:I:281:PRO:HD2	2.16	0.46
1:I:260:HIS:CE1	1:I:306:GLU:HG3	2.51	0.46
1:I:688:PRO:HB3	1:J:1009:TYR:OH	2.15	0.46
1:I:877:GLU:O	1:I:880:LYS:NZ	2.48	0.46
1:J:510:LYS:HG3	1:J:518:TYR:CZ	2.50	0.46
1:A:594:LYS:HA	1:A:594:LYS:HD2	1.72	0.46
1:A:877:GLU:O	1:A:880:LYS:NZ	2.48	0.46
1:A:1009:TYR:OH	1:B:688:PRO:HB3	2.16	0.46
1:A:1011:ASN:ND2	1:B:687:MET:H	2.13	0.46
1:B:282:ASP:OD2	1:B:286:PRO:HD3	2.16	0.46
1:B:300:LEU:HD12	1:B:347:LEU:HD22	1.95	0.46
1:C:282:ASP:OD2	1:C:286:PRO:HD3	2.16	0.46
1:C:850:VAL:O	1:C:854:SER:N	2.49	0.46
1:D:260:HIS:CE1	1:D:306:GLU:HG3	2.51	0.46
1:D:491:ASN:O	1:D:547:PRO:HB2	2.15	0.46
1:D:762:CYS:HA	1:D:793:VAL:CG2	2.46	0.46
1:D:783:SER:O	1:D:786:CYS:SG	2.72	0.46
1:E:282:ASP:OD2	1:E:286:PRO:HD3	2.16	0.46
1:E:688:PRO:HB3	1:F:1009:TYR:OH	2.16	0.46
1:E:1009:TYR:OH	1:F:688:PRO:HB3	2.16	0.46
1:F:282:ASP:OD2	1:F:286:PRO:HD3	2.16	0.46
1:H:249:TYR:O	1:H:251:ASP:N	2.47	0.46
1:I:135:ASP:O	1:I:139:LYS:HD2	2.16	0.46
1:J:669:CYS:O	1:J:672:ASN:ND2	2.47	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:394:ALA:O	1:A:397:SER:OG	2.25	0.46
1:A:562:LEU:HD22	1:A:611:TRP:CD2	2.51	0.46
1:A:936:LEU:HB2	1:A:964:LEU:HD21	1.97	0.46
1:A:961:LEU:O	1:A:965:LEU:HG	2.15	0.46
1:B:491:ASN:O	1:B:547:PRO:HB2	2.15	0.46
1:B:503:LEU:O	1:B:507:LEU:N	2.42	0.46
1:C:374:SER:O	1:C:378:ARG:NE	2.48	0.46
1:D:510:LYS:HG3	1:D:518:TYR:CZ	2.50	0.46
1:D:562:LEU:HD22	1:D:611:TRP:CD2	2.51	0.46
1:D:850:VAL:O	1:D:854:SER:N	2.49	0.46
1:E:936:LEU:HB2	1:E:964:LEU:HD21	1.97	0.46
1:G:260:HIS:CE1	1:G:306:GLU:HG3	2.51	0.46
1:H:224:PHE:CE1	1:H:347:LEU:CD2	2.99	0.46
1:H:374:SER:O	1:H:378:ARG:NE	2.48	0.46
1:I:282:ASP:OD2	1:I:286:PRO:HD3	2.16	0.46
1:J:850:VAL:O	1:J:854:SER:N	2.49	0.46
1:A:137:ARG:HD3	1:A:141:ARG:HH12	1.79	0.46
1:A:143:TYR:OH	1:A:281:PRO:HD2	2.16	0.46
1:C:135:ASP:O	1:C:139:LYS:HD2	2.16	0.46
1:C:260:HIS:CE1	1:C:306:GLU:HG3	2.51	0.46
1:C:816:ARG:HD2	1:F:788:PHE:CD2	2.51	0.46
1:D:594:LYS:HD2	1:D:594:LYS:HA	1.72	0.46
1:E:509:GLN:O	1:E:519:SER:N	2.29	0.46
1:G:282:ASP:OD2	1:G:286:PRO:HD3	2.16	0.46
1:H:830:LYS:O	1:H:858:THR:N	2.47	0.46
1:I:322:TRP:CE2	1:I:323:GLN:HB2	2.51	0.46
1:I:850:VAL:O	1:I:854:SER:N	2.49	0.46
1:J:762:CYS:HA	1:J:793:VAL:CG2	2.46	0.46
1:A:898:SER:HB2	1:A:924:LEU:O	2.16	0.46
1:B:597:SER:OG	1:B:598:CYS:N	2.48	0.46
1:B:740:SER:HB2	1:B:743:LEU:HB3	1.98	0.46
1:B:885:ASN:HA	1:B:913:ASN:ND2	2.31	0.46
1:C:491:ASN:O	1:C:547:PRO:HB2	2.15	0.46
1:C:562:LEU:HD22	1:C:611:TRP:CD2	2.51	0.46
1:F:174:ILE:H	1:F:174:ILE:HG12	1.38	0.46
1:F:491:ASN:O	1:F:547:PRO:HB2	2.15	0.46
1:F:510:LYS:HG3	1:F:518:TYR:CZ	2.50	0.46
1:F:562:LEU:HD22	1:F:611:TRP:CD2	2.51	0.46
1:F:850:VAL:O	1:F:854:SER:N	2.49	0.46
1:F:936:LEU:HB2	1:F:964:LEU:HD21	1.97	0.46
1:H:562:LEU:HD22	1:H:611:TRP:CD2	2.51	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:961:LEU:O	1:I:965:LEU:HG	2.15	0.46
1:J:234:ILE:HG12	2:J:1101:ADP:O1A	2.16	0.46
1:J:249:TYR:O	1:J:251:ASP:N	2.47	0.46
1:J:374:SER:O	1:J:378:ARG:NE	2.48	0.46
1:J:896:LEU:O	1:J:922:ASN:ND2	2.48	0.46
1:A:282:ASP:OD2	1:A:286:PRO:HD3	2.16	0.46
1:B:143:TYR:OH	1:B:281:PRO:HD2	2.16	0.46
1:B:732:GLY:O	1:B:735:SER:OG	2.21	0.46
1:C:174:ILE:H	1:C:174:ILE:HG12	1.38	0.46
1:C:783:SER:O	1:C:786:CYS:SG	2.72	0.46
1:D:282:ASP:OD2	1:D:286:PRO:HD3	2.16	0.46
1:E:234:ILE:HG12	2:E:1101:ADP:O2A	2.16	0.46
1:E:374:SER:O	1:E:378:ARG:NE	2.48	0.46
1:E:885:ASN:HA	1:E:913:ASN:ND2	2.30	0.46
1:G:322:TRP:CE2	1:G:323:GLN:HB2	2.51	0.46
1:G:850:VAL:O	1:G:854:SER:N	2.49	0.46
1:G:885:ASN:HA	1:G:913:ASN:ND2	2.31	0.46
1:H:740:SER:HB2	1:H:743:LEU:HB3	1.98	0.46
1:I:491:ASN:O	1:I:547:PRO:HB2	2.15	0.46
1:C:762:CYS:HA	1:C:793:VAL:CG2	2.46	0.45
1:D:322:TRP:CE2	1:D:323:GLN:HB2	2.51	0.45
1:E:565:TYR:HA	1:E:573:LEU:HD12	1.99	0.45
1:F:762:CYS:HA	1:F:793:VAL:CG2	2.46	0.45
1:G:224:PHE:CE1	1:G:347:LEU:CD2	2.99	0.45
1:G:562:LEU:HD22	1:G:611:TRP:CD2	2.51	0.45
1:G:762:CYS:HA	1:G:793:VAL:CG2	2.46	0.45
1:H:282:ASP:OD2	1:H:286:PRO:HD3	2.16	0.45
1:H:307:LEU:HD22	1:H:307:LEU:HA	1.71	0.45
1:H:491:ASN:O	1:H:547:PRO:HB2	2.15	0.45
1:I:224:PHE:CE1	1:I:347:LEU:CD2	2.99	0.45
1:I:562:LEU:HD22	1:I:611:TRP:CD2	2.51	0.45
1:I:687:MET:H	1:J:1011:ASN:ND2	2.13	0.45
1:I:762:CYS:HA	1:I:793:VAL:CG2	2.46	0.45
1:J:898:SER:HB2	1:J:924:LEU:O	2.16	0.45
1:A:762:CYS:HA	1:A:793:VAL:CG2	2.46	0.45
1:B:174:ILE:H	1:B:174:ILE:HG12	1.38	0.45
1:B:234:ILE:HG12	2:B:1101:ADP:O1A	2.16	0.45
1:C:143:TYR:OH	1:C:281:PRO:HD2	2.16	0.45
1:C:249:TYR:O	1:C:251:ASP:N	2.47	0.45
1:C:300:LEU:HD12	1:C:347:LEU:HD22	1.95	0.45
1:C:1009:TYR:OH	1:D:688:PRO:HB3	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:562:LEU:HD22	1:E:611:TRP:CD2	2.51	0.45
1:F:143:TYR:OH	1:F:281:PRO:HD2	2.16	0.45
1:G:143:TYR:OH	1:G:281:PRO:HD2	2.16	0.45
1:G:212:ASP:OD1	1:G:212:ASP:N	2.39	0.45
1:H:135:ASP:O	1:H:139:LYS:HD2	2.16	0.45
1:H:322:TRP:CE2	1:H:323:GLN:HB2	2.51	0.45
1:I:594:LYS:HA	1:I:594:LYS:HD2	1.72	0.45
1:J:877:GLU:O	1:J:880:LYS:NZ	2.48	0.45
1:B:562:LEU:HD22	1:B:611:TRP:CD2	2.51	0.45
1:C:588:ARG:NE	1:C:592:LEU:HD12	2.32	0.45
1:E:594:LYS:HA	1:E:594:LYS:HD2	1.72	0.45
1:F:961:LEU:O	1:F:965:LEU:HG	2.15	0.45
1:H:850:VAL:O	1:H:854:SER:N	2.49	0.45
1:I:452:GLN:HB3	1:I:453:PRO:HD3	1.99	0.45
1:J:224:PHE:CE1	1:J:347:LEU:CD2	2.99	0.45
1:A:80:ARG:HA	1:A:80:ARG:HD2	1.59	0.45
1:A:135:ASP:O	1:A:139:LYS:HD2	2.16	0.45
1:A:322:TRP:CE2	1:A:323:GLN:HB2	2.51	0.45
1:D:898:SER:HB2	1:D:924:LEU:O	2.16	0.45
1:E:762:CYS:HA	1:E:793:VAL:CG2	2.46	0.45
1:F:588:ARG:NE	1:F:592:LEU:HD12	2.32	0.45
1:F:669:CYS:O	1:F:672:ASN:ND2	2.47	0.45
1:H:143:TYR:OH	1:H:281:PRO:HD2	2.16	0.45
1:H:452:GLN:HB3	1:H:453:PRO:HD3	1.99	0.45
1:H:961:LEU:O	1:H:965:LEU:HG	2.15	0.45
1:J:282:ASP:OD2	1:J:286:PRO:HD3	2.16	0.45
1:J:783:SER:O	1:J:786:CYS:SG	2.72	0.45
1:J:885:ASN:HA	1:J:913:ASN:ND2	2.31	0.45
1:A:491:ASN:O	1:A:547:PRO:HB2	2.15	0.45
1:A:588:ARG:NE	1:A:592:LEU:HD12	2.32	0.45
1:B:565:TYR:HA	1:B:573:LEU:HD12	1.99	0.45
1:D:540:LYS:HE2	1:D:540:LYS:HB2	1.79	0.45
1:E:491:ASN:O	1:E:547:PRO:HB2	2.15	0.45
1:E:898:SER:HB2	1:E:924:LEU:O	2.16	0.45
1:F:661:MET:O	1:F:665:VAL:HG12	2.17	0.45
1:G:898:SER:HB2	1:G:924:LEU:O	2.16	0.45
1:G:984:LEU:N	1:H:621:LEU:HD23	2.30	0.45
1:H:509:GLN:O	1:H:519:SER:N	2.29	0.45
1:H:762:CYS:HA	1:H:793:VAL:CG2	2.46	0.45
1:J:260:HIS:CE1	1:J:306:GLU:HG3	2.51	0.45
1:A:830:LYS:O	1:A:858:THR:N	2.48	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:260:HIS:CE1	1:B:306:GLU:HG3	2.51	0.45
1:E:260:HIS:CE1	1:E:306:GLU:HG3	2.51	0.45
1:E:588:ARG:NE	1:E:592:LEU:HD12	2.32	0.45
1:F:135:ASP:O	1:F:139:LYS:HD2	2.16	0.45
1:F:830:LYS:O	1:F:858:THR:N	2.48	0.45
1:F:898:SER:HB2	1:F:924:LEU:O	2.16	0.45
1:G:503:LEU:O	1:G:507:LEU:N	2.42	0.45
1:H:898:SER:HB2	1:H:924:LEU:O	2.16	0.45
1:I:249:TYR:O	1:I:251:ASP:N	2.47	0.45
1:J:245:SER:OG	1:J:247:THR:OG1	2.24	0.45
1:A:224:PHE:CE1	1:A:347:LEU:CD2	2.99	0.45
1:A:850:VAL:O	1:A:854:SER:N	2.49	0.45
1:B:287:ILE:O	1:B:291:VAL:N	2.44	0.45
1:C:171:LEU:HD12	1:C:171:LEU:HA	1.81	0.45
1:C:245:SER:OG	1:C:247:THR:OG1	2.24	0.45
1:C:322:TRP:CE2	1:C:323:GLN:HB2	2.51	0.45
1:D:597:SER:OG	1:D:598:CYS:N	2.47	0.45
1:E:850:VAL:O	1:E:854:SER:N	2.49	0.45
1:G:234:ILE:HG12	2:G:1101:ADP:O2A	2.16	0.45
1:H:588:ARG:NE	1:H:592:LEU:HD12	2.32	0.45
1:H:661:MET:O	1:H:665:VAL:HG12	2.17	0.45
1:I:740:SER:HB2	1:I:743:LEU:HB3	1.97	0.45
1:J:740:SER:HB2	1:J:743:LEU:HB3	1.97	0.45
1:A:62:ASN:HB3	1:A:66:LYS:HD2	1.99	0.45
1:B:632:TYR:OH	1:B:662:ASP:OD1	2.35	0.45
1:C:953:LEU:O	1:C:980:ASP:N	2.43	0.45
1:E:896:LEU:O	1:E:922:ASN:ND2	2.48	0.45
1:F:632:TYR:OH	1:F:662:ASP:OD1	2.35	0.45
1:G:588:ARG:NE	1:G:592:LEU:HD12	2.32	0.45
1:H:597:SER:OG	1:H:598:CYS:N	2.47	0.45
1:I:307:LEU:HD22	1:I:307:LEU:HA	1.71	0.45
1:J:594:LYS:HD2	1:J:594:LYS:HA	1.71	0.45
1:C:372:GLY:N	1:C:410:PHE:CZ	2.66	0.45
1:C:452:GLN:HB3	1:C:453:PRO:HD3	1.99	0.45
1:D:234:ILE:HG12	2:D:1101:ADP:O1A	2.16	0.45
1:D:588:ARG:NE	1:D:592:LEU:HD12	2.32	0.45
1:D:936:LEU:HB2	1:D:964:LEU:HD21	1.97	0.45
1:E:452:GLN:HB3	1:E:453:PRO:HD3	1.99	0.45
1:F:369:GLU:N	1:F:369:GLU:OE1	2.50	0.45
1:F:896:LEU:O	1:F:922:ASN:ND2	2.48	0.45
1:G:632:TYR:OH	1:G:662:ASP:OD1	2.35	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:684:LEU:C	1:H:686:ASN:H	2.21	0.45
1:I:234:ILE:HG12	2:I:1101:ADP:O2A	2.16	0.45
1:I:661:MET:O	1:I:665:VAL:HG12	2.17	0.45
1:J:765:LEU:HD12	1:J:765:LEU:HA	1.83	0.45
1:A:287:ILE:O	1:A:291:VAL:N	2.44	0.45
1:A:369:GLU:OE1	1:A:369:GLU:N	2.50	0.45
1:B:762:CYS:HA	1:B:793:VAL:CG2	2.46	0.45
1:B:850:VAL:O	1:B:854:SER:N	2.49	0.45
1:D:423:LYS:HE3	1:D:423:LYS:HB3	1.78	0.45
1:F:300:LEU:HD12	1:F:347:LEU:HD22	1.95	0.45
1:G:669:CYS:O	1:G:672:ASN:ND2	2.47	0.45
1:H:17:LEU:HD22	1:H:21:ASP:HB3	1.98	0.45
1:H:234:ILE:HG12	2:H:1101:ADP:O1A	2.16	0.45
1:H:369:GLU:OE1	1:H:369:GLU:N	2.50	0.45
1:I:684:LEU:C	1:I:686:ASN:H	2.21	0.45
1:I:898:SER:HB2	1:I:924:LEU:O	2.16	0.45
1:I:990:CYS:O	1:I:994:LYS:HG3	2.17	0.45
1:J:503:LEU:O	1:J:507:LEU:N	2.42	0.45
1:A:661:MET:O	1:A:665:VAL:HG12	2.17	0.44
1:B:378:ARG:HD2	1:B:406:PHE:HE1	1.83	0.44
1:B:762:CYS:SG	1:B:789:ASP:HB3	2.58	0.44
1:C:378:ARG:HD2	1:C:406:PHE:HE1	1.83	0.44
1:C:936:LEU:HB2	1:C:964:LEU:HD21	1.97	0.44
1:D:452:GLN:HB3	1:D:453:PRO:HD3	1.99	0.44
1:D:661:MET:O	1:D:665:VAL:HG12	2.17	0.44
1:E:597:SER:OG	1:E:598:CYS:N	2.47	0.44
1:E:632:TYR:OH	1:E:662:ASP:OD1	2.35	0.44
1:G:699:ARG:CG	1:H:1036:TRP:CD1	3.00	0.44
1:H:174:ILE:H	1:H:174:ILE:HG12	1.38	0.44
1:H:669:CYS:O	1:H:672:ASN:ND2	2.47	0.44
1:H:730:CYS:HB3	1:H:734:PHE:CE2	2.53	0.44
1:I:353:VAL:HG11	1:I:574:ILE:HD11	2.00	0.44
1:J:562:LEU:HD22	1:J:611:TRP:CD2	2.51	0.44
1:A:106:VAL:HG23	1:A:108:CYS:H	1.82	0.44
1:A:307:LEU:HD22	1:A:307:LEU:HA	1.71	0.44
1:B:785:GLU:HA	1:I:813:PHE:CE2	2.52	0.44
1:C:813:PHE:CE2	1:F:785:GLU:HA	2.52	0.44
1:C:898:SER:HB2	1:C:924:LEU:O	2.17	0.44
1:D:451:LEU:HG	1:D:455:GLY:HA3	2.00	0.44
1:F:378:ARG:HD2	1:F:406:PHE:HE1	1.83	0.44
1:F:783:SER:O	1:F:786:CYS:SG	2.72	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:740:SER:HB2	1:G:743:LEU:HB3	1.98	0.44
1:H:353:VAL:HG11	1:H:574:ILE:HD11	2.00	0.44
1:H:594:LYS:HD2	1:H:594:LYS:HA	1.72	0.44
1:H:632:TYR:OH	1:H:662:ASP:OD1	2.35	0.44
1:H:762:CYS:SG	1:H:789:ASP:HB3	2.58	0.44
1:I:621:LEU:CD2	1:J:984:LEU:H	2.28	0.44
1:J:452:GLN:HB3	1:J:453:PRO:HD3	1.99	0.44
1:J:632:TYR:OH	1:J:662:ASP:OD1	2.35	0.44
1:A:234:ILE:HG12	2:A:1101:ADP:O2A	2.16	0.44
1:B:169:THR:OG1	1:B:384:LYS:NZ	2.51	0.44
1:C:561:LEU:HD12	1:C:573:LEU:HD13	1.99	0.44
1:D:378:ARG:HD2	1:D:406:PHE:HE1	1.83	0.44
1:D:561:LEU:HD12	1:D:573:LEU:HD13	1.99	0.44
1:E:990:CYS:O	1:E:994:LYS:HG3	2.17	0.44
1:F:234:ILE:HG12	2:F:1101:ADP:O1A	2.16	0.44
1:F:394:ALA:O	1:F:397:SER:OG	2.25	0.44
1:F:730:CYS:HB3	1:F:734:PHE:CE2	2.53	0.44
1:G:730:CYS:HB3	1:G:734:PHE:CE2	2.53	0.44
1:H:169:THR:OG1	1:H:384:LYS:NZ	2.51	0.44
1:H:990:CYS:O	1:H:994:LYS:HG3	2.17	0.44
1:I:369:GLU:OE1	1:I:369:GLU:N	2.50	0.44
1:J:661:MET:O	1:J:665:VAL:HG12	2.17	0.44
1:J:990:CYS:O	1:J:994:LYS:HG3	2.17	0.44
1:A:245:SER:OG	1:A:247:THR:OG1	2.24	0.44
1:A:730:CYS:HB3	1:A:734:PHE:CE2	2.53	0.44
1:B:369:GLU:OE1	1:B:369:GLU:N	2.50	0.44
1:B:561:LEU:HD12	1:B:573:LEU:HD13	1.99	0.44
1:B:684:LEU:C	1:B:686:ASN:H	2.21	0.44
1:B:813:PHE:CE2	1:I:785:GLU:HA	2.52	0.44
1:C:169:THR:OG1	1:C:384:LYS:NZ	2.51	0.44
1:C:287:ILE:O	1:C:291:VAL:N	2.44	0.44
1:C:451:LEU:HG	1:C:455:GLY:HA3	2.00	0.44
1:C:540:LYS:HE2	1:C:540:LYS:HB2	1.79	0.44
1:C:661:MET:O	1:C:665:VAL:HG12	2.17	0.44
1:E:174:ILE:H	1:E:174:ILE:HG12	1.38	0.44
1:E:369:GLU:OE1	1:E:369:GLU:N	2.50	0.44
1:E:451:LEU:HG	1:E:455:GLY:HA3	2.00	0.44
1:E:561:LEU:HD12	1:E:573:LEU:HD13	1.99	0.44
1:E:661:MET:O	1:E:665:VAL:HG12	2.17	0.44
1:F:762:CYS:SG	1:F:789:ASP:HB3	2.58	0.44
1:G:561:LEU:HD12	1:G:573:LEU:HD13	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:762:CYS:SG	1:G:789:ASP:HB3	2.58	0.44
1:H:586:GLN:O	1:H:590:SER:OG	2.20	0.44
1:H:887:GLN:OE1	1:H:913:ASN:HB3	2.18	0.44
1:I:169:THR:OG1	1:I:384:LYS:NZ	2.51	0.44
1:I:588:ARG:NE	1:I:592:LEU:HD12	2.32	0.44
1:J:353:VAL:HG11	1:J:574:ILE:HD11	2.00	0.44
1:J:684:LEU:C	1:J:686:ASN:H	2.21	0.44
1:A:887:GLN:OE1	1:A:913:ASN:HB3	2.18	0.44
1:A:915:THR:OG1	1:A:944:GLN:HB2	2.18	0.44
1:B:205:MET:SD	1:B:206:GLU:N	2.91	0.44
1:B:224:PHE:CE1	1:B:347:LEU:CD2	2.99	0.44
1:B:452:GLN:HB3	1:B:453:PRO:HD3	1.99	0.44
1:B:898:SER:HB2	1:B:924:LEU:O	2.16	0.44
1:E:669:CYS:O	1:E:672:ASN:ND2	2.47	0.44
1:E:762:CYS:SG	1:E:789:ASP:HB3	2.58	0.44
1:F:287:ILE:O	1:F:291:VAL:N	2.44	0.44
1:F:875:LEU:O	1:F:878:LYS:NZ	2.31	0.44
1:F:915:THR:OG1	1:F:944:GLN:HB2	2.18	0.44
1:G:169:THR:OG1	1:G:384:LYS:NZ	2.51	0.44
1:G:353:VAL:HG11	1:G:574:ILE:HD11	2.00	0.44
1:I:565:TYR:HA	1:I:573:LEU:HD12	1.99	0.44
1:I:730:CYS:HB3	1:I:734:PHE:CE2	2.53	0.44
1:I:762:CYS:SG	1:I:789:ASP:HB3	2.58	0.44
1:A:169:THR:OG1	1:A:384:LYS:NZ	2.51	0.44
1:A:632:TYR:OH	1:A:662:ASP:OD1	2.35	0.44
1:B:540:LYS:HB2	1:B:540:LYS:HE2	1.79	0.44
1:B:669:CYS:O	1:B:672:ASN:ND2	2.47	0.44
1:B:915:THR:OG1	1:B:944:GLN:HB2	2.18	0.44
1:C:730:CYS:HB3	1:C:734:PHE:CE2	2.53	0.44
1:C:990:CYS:O	1:C:994:LYS:HG3	2.17	0.44
1:E:378:ARG:HD2	1:E:406:PHE:HE1	1.83	0.44
1:E:1036:TRP:HD1	1:F:699:ARG:HD3	1.82	0.44
1:G:205:MET:SD	1:G:206:GLU:N	2.91	0.44
1:H:565:TYR:HA	1:H:573:LEU:HD12	1.99	0.44
1:I:262:ARG:NH1	1:I:513:ASP:OD1	2.51	0.44
1:A:353:VAL:HG11	1:A:574:ILE:HD11	2.00	0.44
1:A:990:CYS:O	1:A:994:LYS:HG3	2.17	0.44
1:C:762:CYS:SG	1:C:789:ASP:HB3	2.58	0.44
1:E:249:TYR:O	1:E:251:ASP:N	2.47	0.44
1:E:468:GLY:O	1:E:471:SER:OG	2.28	0.44
1:E:788:PHE:CD2	1:H:816:ARG:HD2	2.53	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:661:MET:O	1:G:665:VAL:HG12	2.17	0.44
1:G:684:LEU:C	1:G:686:ASN:H	2.21	0.44
1:H:262:ARG:NH1	1:H:513:ASP:OD1	2.51	0.44
1:I:887:GLN:OE1	1:I:913:ASN:HB3	2.18	0.44
1:J:304:PHE:HD1	1:J:304:PHE:HA	1.73	0.44
1:A:304:PHE:HD1	1:A:304:PHE:HA	1.73	0.44
1:A:378:ARG:HD2	1:A:406:PHE:HE1	1.83	0.44
1:A:452:GLN:HB3	1:A:453:PRO:HD3	1.99	0.44
1:A:485:GLU:HG2	1:A:486:GLU:H	1.83	0.44
1:A:565:TYR:HA	1:A:573:LEU:HD12	1.99	0.44
1:A:762:CYS:SG	1:A:789:ASP:HB3	2.58	0.44
1:B:222:VAL:HG22	1:B:366:ARG:HG3	2.00	0.44
1:B:353:VAL:HG11	1:B:574:ILE:HD11	2.00	0.44
1:B:485:GLU:HG2	1:B:486:GLU:H	1.83	0.44
1:C:222:VAL:HG22	1:C:366:ARG:HG3	2.00	0.44
1:D:689:LYS:HB2	1:D:704:VAL:HB	2.00	0.44
1:D:730:CYS:HB3	1:D:734:PHE:CE2	2.53	0.44
1:D:915:THR:OG1	1:D:944:GLN:HB2	2.18	0.44
1:E:169:THR:OG1	1:E:384:LYS:NZ	2.51	0.44
1:E:699:ARG:HD3	1:F:1036:TRP:HD1	1.82	0.44
1:E:826:LEU:HD23	1:E:826:LEU:HA	1.88	0.44
1:E:887:GLN:OE1	1:E:913:ASN:HB3	2.18	0.44
1:F:887:GLN:OE1	1:F:913:ASN:HB3	2.18	0.44
1:G:171:LEU:HD12	1:G:171:LEU:HA	1.81	0.44
1:G:262:ARG:NH1	1:G:513:ASP:OD1	2.51	0.44
1:G:369:GLU:OE1	1:G:369:GLU:N	2.50	0.44
1:G:621:LEU:HD23	1:H:984:LEU:CB	2.40	0.44
1:G:896:LEU:O	1:G:922:ASN:ND2	2.48	0.44
1:H:205:MET:SD	1:H:206:GLU:N	2.91	0.44
1:H:845:GLN:HA	1:H:874:ILE:HG21	2.00	0.44
1:J:262:ARG:NH1	1:J:513:ASP:OD1	2.51	0.44
1:J:887:GLN:OE1	1:J:913:ASN:HB3	2.18	0.44
1:A:503:LEU:O	1:A:507:LEU:N	2.42	0.44
1:B:451:LEU:HG	1:B:455:GLY:HA3	2.00	0.44
1:B:887:GLN:OE1	1:B:913:ASN:HB3	2.18	0.44
1:C:234:ILE:HG12	2:C:1101:ADP:O2A	2.16	0.44
1:D:169:THR:OG1	1:D:384:LYS:NZ	2.51	0.44
1:D:990:CYS:O	1:D:994:LYS:HG3	2.17	0.44
1:E:730:CYS:HB3	1:E:734:PHE:CE2	2.53	0.44
1:F:222:VAL:HG22	1:F:366:ARG:HG3	2.00	0.44
1:G:243:TRP:CZ3	1:G:256:LEU:HB2	2.53	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:565:TYR:HA	1:G:573:LEU:HD12	1.99	0.44
1:H:178:ARG:H	1:H:178:ARG:HG3	1.56	0.44
1:I:205:MET:SD	1:I:206:GLU:N	2.91	0.44
1:I:222:VAL:HG22	1:I:366:ARG:HG3	2.00	0.44
1:J:169:THR:OG1	1:J:384:LYS:NZ	2.51	0.44
1:J:588:ARG:NE	1:J:592:LEU:HD12	2.32	0.44
1:A:81:ARG:HD3	1:A:81:ARG:HA	1.74	0.43
1:B:243:TRP:CZ3	1:B:256:LEU:HB2	2.53	0.43
1:B:588:ARG:NE	1:B:592:LEU:HD12	2.32	0.43
1:C:485:GLU:HG2	1:C:486:GLU:H	1.83	0.43
1:D:171:LEU:HD23	1:D:370:ILE:HD11	2.00	0.43
1:E:243:TRP:CZ3	1:E:256:LEU:HB2	2.53	0.43
1:E:353:VAL:HG11	1:E:574:ILE:HD11	1.99	0.43
1:E:689:LYS:HB2	1:E:704:VAL:HB	2.00	0.43
1:E:915:THR:OG1	1:E:944:GLN:HB2	2.18	0.43
1:F:224:PHE:CE1	1:F:347:LEU:CD2	2.99	0.43
1:F:284:ASN:OD1	1:F:284:ASN:N	2.51	0.43
1:G:147:ARG:HE	1:G:147:ARG:HB2	1.40	0.43
1:G:845:GLN:HA	1:G:874:ILE:HG21	2.00	0.43
1:H:374:SER:O	1:H:378:ARG:CG	2.67	0.43
1:I:632:TYR:OH	1:I:662:ASP:OD1	2.35	0.43
1:J:369:GLU:OE1	1:J:369:GLU:N	2.50	0.43
1:J:378:ARG:HD2	1:J:406:PHE:HE1	1.83	0.43
1:J:451:LEU:HG	1:J:455:GLY:HA3	2.00	0.43
1:J:485:GLU:HG2	1:J:486:GLU:H	1.83	0.43
1:A:171:LEU:HD23	1:A:370:ILE:HD11	2.01	0.43
1:A:669:CYS:O	1:A:672:ASN:ND2	2.47	0.43
1:C:255:TYR:HB2	1:C:297:ILE:HG23	2.01	0.43
1:C:565:TYR:HA	1:C:573:LEU:HD12	1.98	0.43
1:C:594:LYS:HA	1:C:594:LYS:HD2	1.72	0.43
1:D:222:VAL:HG22	1:D:366:ARG:HG3	2.00	0.43
1:D:503:LEU:O	1:D:507:LEU:N	2.42	0.43
1:D:762:CYS:SG	1:D:789:ASP:HB3	2.58	0.43
1:E:684:LEU:C	1:E:686:ASN:H	2.21	0.43
1:F:178:ARG:H	1:F:178:ARG:HG3	1.56	0.43
1:G:378:ARG:HD2	1:G:406:PHE:HE1	1.83	0.43
1:G:452:GLN:HB3	1:G:453:PRO:HD3	1.99	0.43
1:G:887:GLN:OE1	1:G:913:ASN:HB3	2.18	0.43
1:G:990:CYS:O	1:G:994:LYS:HG3	2.17	0.43
1:I:284:ASN:OD1	1:I:284:ASN:N	2.51	0.43
1:I:374:SER:O	1:I:378:ARG:CG	2.66	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:451:LEU:HG	1:I:455:GLY:HA3	1.99	0.43
1:J:243:TRP:CZ3	1:J:256:LEU:HB2	2.53	0.43
1:J:307:LEU:HD22	1:J:307:LEU:HA	1.71	0.43
1:J:730:CYS:HB3	1:J:734:PHE:CE2	2.52	0.43
1:A:222:VAL:HG22	1:A:366:ARG:HG3	2.00	0.43
1:A:593:GLU:C	1:A:595:LYS:H	2.22	0.43
1:A:674:HIS:O	1:A:675:ARG:HG2	2.19	0.43
1:C:205:MET:SD	1:C:206:GLU:N	2.91	0.43
1:C:353:VAL:HG11	1:C:574:ILE:HD11	2.00	0.43
1:C:674:HIS:O	1:C:675:ARG:HG2	2.19	0.43
1:C:689:LYS:HB2	1:C:704:VAL:HB	2.00	0.43
1:C:915:THR:OG1	1:C:944:GLN:HB2	2.18	0.43
1:D:262:ARG:NH1	1:D:513:ASP:OD1	2.51	0.43
1:D:284:ASN:OD1	1:D:284:ASN:N	2.51	0.43
1:D:565:TYR:HA	1:D:573:LEU:HD12	1.99	0.43
1:D:632:TYR:OH	1:D:662:ASP:OD1	2.35	0.43
1:E:205:MET:SD	1:E:206:GLU:N	2.91	0.43
1:E:224:PHE:HE1	1:E:347:LEU:CD2	2.32	0.43
1:F:243:TRP:CZ3	1:F:256:LEU:HB2	2.53	0.43
1:F:262:ARG:NH1	1:F:513:ASP:OD1	2.51	0.43
1:F:485:GLU:HG2	1:F:486:GLU:H	1.83	0.43
1:F:561:LEU:HD12	1:F:573:LEU:HD13	1.99	0.43
1:F:674:HIS:O	1:F:675:ARG:HG2	2.19	0.43
1:F:990:CYS:O	1:F:994:LYS:HG3	2.17	0.43
1:G:485:GLU:HG2	1:G:486:GLU:H	1.83	0.43
1:J:561:LEU:HD12	1:J:573:LEU:HD13	2.00	0.43
1:J:593:GLU:C	1:J:595:LYS:H	2.22	0.43
1:J:962:SER:HA	1:J:965:LEU:HD12	2.00	0.43
1:A:205:MET:SD	1:A:206:GLU:N	2.91	0.43
1:B:661:MET:O	1:B:665:VAL:HG12	2.17	0.43
1:B:990:CYS:O	1:B:994:LYS:HG3	2.17	0.43
1:C:171:LEU:HD23	1:C:370:ILE:HD11	2.00	0.43
1:C:593:GLU:C	1:C:595:LYS:H	2.22	0.43
1:D:205:MET:SD	1:D:206:GLU:N	2.91	0.43
1:D:887:GLN:OE1	1:D:913:ASN:HB3	2.18	0.43
1:F:205:MET:SD	1:F:206:GLU:N	2.91	0.43
1:F:353:VAL:HG11	1:F:574:ILE:HD11	2.00	0.43
1:G:451:LEU:HG	1:G:455:GLY:HA3	2.00	0.43
1:G:503:LEU:HD13	1:G:509:GLN:HB2	2.01	0.43
1:H:255:TYR:HB2	1:H:297:ILE:HG23	2.01	0.43
1:H:284:ASN:OD1	1:H:284:ASN:N	2.51	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:378:ARG:HD2	1:H:406:PHE:HE1	1.83	0.43
1:I:689:LYS:HB2	1:I:704:VAL:HB	2.00	0.43
1:J:224:PHE:HE1	1:J:347:LEU:CD2	2.32	0.43
1:A:284:ASN:OD1	1:A:284:ASN:N	2.51	0.43
1:A:451:LEU:HG	1:A:455:GLY:HA3	2.00	0.43
1:A:561:LEU:HD12	1:A:573:LEU:HD13	1.99	0.43
1:A:684:LEU:C	1:A:686:ASN:H	2.21	0.43
1:A:699:ARG:CG	1:B:1036:TRP:CD1	3.01	0.43
1:A:845:GLN:HA	1:A:874:ILE:HG21	2.00	0.43
1:D:255:TYR:HB2	1:D:297:ILE:HG23	2.01	0.43
1:D:353:VAL:HG11	1:D:574:ILE:HD11	2.00	0.43
1:D:593:GLU:C	1:D:595:LYS:H	2.22	0.43
1:D:732:GLY:O	1:D:735:SER:OG	2.21	0.43
1:E:222:VAL:HG22	1:E:366:ARG:HG3	2.00	0.43
1:E:245:SER:OG	1:E:247:THR:OG1	2.24	0.43
1:E:300:LEU:HD12	1:E:347:LEU:HD22	1.95	0.43
1:E:485:GLU:HG2	1:E:486:GLU:H	1.83	0.43
1:F:169:THR:OG1	1:F:384:LYS:NZ	2.51	0.43
1:F:171:LEU:HD23	1:F:370:ILE:HD11	2.01	0.43
1:F:255:TYR:HB2	1:F:297:ILE:HG23	2.01	0.43
1:F:338:LYS:O	1:F:342:PRO:HA	2.19	0.43
1:G:224:PHE:HE1	1:G:347:LEU:CD2	2.32	0.43
1:G:594:LYS:HD2	1:G:594:LYS:HA	1.72	0.43
1:G:788:PHE:CD2	1:J:816:ARG:HD2	2.53	0.43
1:H:88:LYS:HB3	1:H:88:LYS:HE2	1.52	0.43
1:H:123:TYR:O	1:H:130:CYS:HB2	2.19	0.43
1:H:338:LYS:O	1:H:342:PRO:HA	2.19	0.43
1:I:224:PHE:HE1	1:I:347:LEU:CD2	2.32	0.43
1:I:255:TYR:HB2	1:I:297:ILE:HG23	2.01	0.43
1:I:915:THR:OG1	1:I:944:GLN:HB2	2.18	0.43
1:I:962:SER:HA	1:I:965:LEU:HD12	2.01	0.43
1:J:762:CYS:SG	1:J:789:ASP:HB3	2.58	0.43
1:J:845:GLN:HA	1:J:874:ILE:HG21	2.00	0.43
1:A:222:VAL:HG22	1:A:366:ARG:CB	2.49	0.43
1:A:224:PHE:HE1	1:A:347:LEU:CD2	2.32	0.43
1:A:243:TRP:CZ3	1:A:256:LEU:HB2	2.53	0.43
1:A:255:TYR:HB2	1:A:297:ILE:HG23	2.01	0.43
1:A:338:LYS:O	1:A:342:PRO:HA	2.19	0.43
1:A:930:LYS:HE2	1:A:930:LYS:HB3	1.88	0.43
1:C:503:LEU:O	1:C:507:LEU:N	2.42	0.43
1:C:597:SER:OG	1:C:598:CYS:N	2.47	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:669:CYS:O	1:D:672:ASN:ND2	2.47	0.43
1:E:171:LEU:HD23	1:E:370:ILE:HD11	2.01	0.43
1:E:540:LYS:HE2	1:E:540:LYS:HB2	1.79	0.43
1:F:222:VAL:HG22	1:F:366:ARG:CB	2.49	0.43
1:F:565:TYR:HA	1:F:573:LEU:HD12	1.99	0.43
1:G:586:GLN:O	1:G:590:SER:OG	2.20	0.43
1:G:915:THR:OG1	1:G:944:GLN:HB2	2.18	0.43
1:H:674:HIS:O	1:H:675:ARG:HG2	2.19	0.43
1:H:915:THR:OG1	1:H:944:GLN:HB2	2.18	0.43
1:I:222:VAL:HG22	1:I:366:ARG:CB	2.49	0.43
1:I:845:GLN:HA	1:I:874:ILE:HG21	2.00	0.43
1:J:205:MET:SD	1:J:206:GLU:N	2.91	0.43
1:J:287:ILE:O	1:J:291:VAL:N	2.44	0.43
1:A:300:LEU:HD12	1:A:347:LEU:HD22	1.95	0.43
1:B:171:LEU:HD23	1:B:370:ILE:HD11	2.01	0.43
1:B:845:GLN:HA	1:B:874:ILE:HG21	2.00	0.43
1:D:674:HIS:O	1:D:675:ARG:HG2	2.19	0.43
1:F:374:SER:O	1:F:378:ARG:CG	2.66	0.43
1:F:452:GLN:HB3	1:F:453:PRO:HD3	1.99	0.43
1:G:222:VAL:HG22	1:G:366:ARG:HG3	2.00	0.43
1:G:674:HIS:O	1:G:675:ARG:HG2	2.19	0.43
1:H:222:VAL:HG22	1:H:366:ARG:HG3	2.00	0.43
1:H:224:PHE:HE1	1:H:347:LEU:CD2	2.32	0.43
1:H:485:GLU:HG2	1:H:486:GLU:H	1.83	0.43
1:H:689:LYS:HB2	1:H:704:VAL:HB	2.00	0.43
1:J:222:VAL:HG22	1:J:366:ARG:HG3	2.00	0.43
1:J:300:LEU:HD11	1:J:347:LEU:HD22	1.99	0.43
1:J:462:LEU:HD13	1:J:502:PHE:CZ	2.54	0.43
1:A:410:PHE:HB3	1:A:411:ILE:HD12	2.01	0.43
1:A:423:LYS:HE3	1:A:423:LYS:HB3	1.78	0.43
1:A:462:LEU:HD13	1:A:502:PHE:CZ	2.54	0.43
1:A:813:PHE:CE2	1:D:785:GLU:HA	2.54	0.43
1:A:964:LEU:O	1:A:968:SER:N	2.52	0.43
1:B:410:PHE:HB3	1:B:411:ILE:HD12	2.01	0.43
1:B:503:LEU:HD13	1:B:509:GLN:HB2	2.01	0.43
1:B:689:LYS:HB2	1:B:704:VAL:HB	2.00	0.43
1:D:485:GLU:HG2	1:D:486:GLU:H	1.83	0.43
1:E:284:ASN:OD1	1:E:284:ASN:N	2.51	0.43
1:F:245:SER:OG	1:F:247:THR:OG1	2.24	0.43
1:F:451:LEU:HG	1:F:455:GLY:HA3	2.00	0.43
1:F:593:GLU:C	1:F:595:LYS:H	2.22	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:594:LYS:HA	1:F:594:LYS:HD2	1.72	0.43
1:G:962:SER:HA	1:G:965:LEU:HD12	2.01	0.43
1:H:962:SER:HA	1:H:965:LEU:HD12	2.00	0.43
1:I:485:GLU:HG2	1:I:486:GLU:H	1.83	0.43
1:J:565:TYR:HA	1:J:573:LEU:HD12	1.99	0.43
1:J:674:HIS:O	1:J:675:ARG:HG2	2.18	0.43
1:J:915:THR:OG1	1:J:944:GLN:HB2	2.18	0.43
1:A:262:ARG:NH1	1:A:513:ASP:OD1	2.51	0.43
1:B:262:ARG:NH1	1:B:513:ASP:OD1	2.51	0.43
1:B:964:LEU:O	1:B:968:SER:N	2.52	0.43
1:C:224:PHE:HE1	1:C:347:LEU:CD2	2.32	0.43
1:C:374:SER:O	1:C:378:ARG:CG	2.66	0.43
1:C:423:LYS:HE3	1:C:423:LYS:HB3	1.78	0.43
1:C:621:LEU:HD23	1:D:984:LEU:CB	2.39	0.43
1:C:632:TYR:OH	1:C:662:ASP:OD1	2.35	0.43
1:C:669:CYS:O	1:C:672:ASN:ND2	2.47	0.43
1:C:887:GLN:OE1	1:C:913:ASN:HB3	2.18	0.43
1:E:262:ARG:NH1	1:E:513:ASP:OD1	2.51	0.43
1:E:462:LEU:HD13	1:E:502:PHE:CZ	2.54	0.43
1:E:845:GLN:HA	1:E:874:ILE:HG21	2.00	0.43
1:F:684:LEU:C	1:F:686:ASN:H	2.21	0.43
1:F:845:GLN:HA	1:F:874:ILE:HG21	2.00	0.43
1:H:171:LEU:HD23	1:H:370:ILE:HD11	2.00	0.43
1:H:451:LEU:HG	1:H:455:GLY:HA3	1.99	0.43
1:H:964:LEU:O	1:H:968:SER:N	2.52	0.43
1:B:674:HIS:O	1:B:675:ARG:HG2	2.19	0.43
1:B:730:CYS:HB3	1:B:734:PHE:CE2	2.53	0.43
1:C:222:VAL:HG22	1:C:366:ARG:CB	2.49	0.43
1:C:262:ARG:NH1	1:C:513:ASP:OD1	2.51	0.43
1:C:338:LYS:O	1:C:342:PRO:HA	2.19	0.43
1:E:674:HIS:O	1:E:675:ARG:HG2	2.19	0.43
1:E:964:LEU:O	1:E:968:SER:N	2.52	0.43
1:F:930:LYS:HE2	1:F:930:LYS:HB3	1.88	0.43
1:G:284:ASN:OD1	1:G:284:ASN:N	2.51	0.43
1:G:287:ILE:O	1:G:291:VAL:N	2.44	0.43
1:H:243:TRP:CZ3	1:H:256:LEU:HB2	2.53	0.43
1:H:503:LEU:HD13	1:H:509:GLN:HB2	2.01	0.43
1:H:561:LEU:HD12	1:H:573:LEU:HD13	2.00	0.43
1:I:378:ARG:HD2	1:I:406:PHE:HE1	1.83	0.43
1:I:503:LEU:HD13	1:I:509:GLN:HB2	2.01	0.43
1:A:214:GLU:HB3	1:A:215:HIS:H	1.71	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:300:LEU:HD11	1:D:347:LEU:HD22	1.99	0.42
1:E:224:PHE:CE1	1:E:347:LEU:CD2	2.98	0.42
1:E:374:SER:O	1:E:378:ARG:CG	2.66	0.42
1:E:410:PHE:HB3	1:E:411:ILE:HD12	2.01	0.42
1:F:287:ILE:O	1:F:291:VAL:HG23	2.20	0.42
1:F:410:PHE:HB3	1:F:411:ILE:HD12	2.01	0.42
1:F:689:LYS:HB2	1:F:704:VAL:HB	2.00	0.42
1:G:338:LYS:O	1:G:342:PRO:HA	2.19	0.42
1:H:300:LEU:HD12	1:H:347:LEU:HD22	1.95	0.42
1:H:896:LEU:C	1:H:922:ASN:HD21	2.23	0.42
1:I:171:LEU:HD23	1:I:370:ILE:HD11	2.01	0.42
1:J:503:LEU:HD13	1:J:509:GLN:HB2	2.01	0.42
1:A:287:ILE:O	1:A:291:VAL:HG23	2.19	0.42
1:A:896:LEU:C	1:A:922:ASN:HD21	2.23	0.42
1:B:224:PHE:HE1	1:B:347:LEU:CD2	2.32	0.42
1:B:782:LEU:HD23	1:B:786:CYS:SG	2.60	0.42
1:B:822:LEU:HA	1:B:826:LEU:HD13	2.01	0.42
1:B:826:LEU:HD23	1:B:826:LEU:HA	1.88	0.42
1:B:827:CYS:O	1:B:856:SER:HB2	2.20	0.42
1:B:926:ASP:OD2	1:B:954:THR:OG1	2.22	0.42
1:C:503:LEU:HD13	1:C:509:GLN:HB2	2.01	0.42
1:C:684:LEU:C	1:C:686:ASN:H	2.21	0.42
1:C:845:GLN:HA	1:C:874:ILE:HG21	2.00	0.42
1:D:374:SER:O	1:D:378:ARG:CG	2.66	0.42
1:D:503:LEU:HD13	1:D:509:GLN:HB2	2.01	0.42
1:D:845:GLN:HA	1:D:874:ILE:HG21	2.00	0.42
1:E:338:LYS:O	1:E:342:PRO:HA	2.19	0.42
1:E:892:VAL:HG12	1:E:920:ARG:N	2.35	0.42
1:E:962:SER:HA	1:E:965:LEU:HD12	2.01	0.42
1:F:962:SER:HA	1:F:965:LEU:HD12	2.01	0.42
1:G:287:ILE:O	1:G:291:VAL:HG23	2.19	0.42
1:H:44:GLY:O	1:H:48:LYS:HG3	2.20	0.42
1:H:133:LYS:O	1:H:137:ARG:HG2	2.18	0.42
1:H:222:VAL:HG22	1:H:366:ARG:CB	2.49	0.42
1:H:627:GLN:HG3	1:H:631:PHE:CE2	2.55	0.42
1:J:374:SER:O	1:J:378:ARG:CG	2.67	0.42
1:A:299:PHE:HB2	1:A:346:LEU:HD22	2.02	0.42
1:A:374:SER:O	1:A:378:ARG:CG	2.67	0.42
1:A:540:LYS:HE2	1:A:540:LYS:HB2	1.79	0.42
1:A:962:SER:HA	1:A:965:LEU:HD12	2.01	0.42
1:C:930:LYS:HE2	1:C:930:LYS:HB3	1.88	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:257:PHE:HB2	1:D:299:PHE:HA	2.02	0.42
1:D:410:PHE:HB3	1:D:411:ILE:HD12	2.01	0.42
1:D:684:LEU:C	1:D:686:ASN:H	2.21	0.42
1:D:822:LEU:HA	1:D:826:LEU:HD13	2.01	0.42
1:F:627:GLN:HG3	1:F:631:PHE:CE2	2.54	0.42
1:F:647:MET:HA	1:F:650:PHE:CZ	2.55	0.42
1:G:257:PHE:HB2	1:G:299:PHE:HA	2.02	0.42
1:G:374:SER:O	1:G:378:ARG:CG	2.66	0.42
1:G:423:LYS:HE3	1:G:423:LYS:HB3	1.78	0.42
1:G:462:LEU:HD13	1:G:502:PHE:CZ	2.54	0.42
1:G:510:LYS:HG2	1:G:517:PHE:O	2.19	0.42
1:H:410:PHE:HB3	1:H:411:ILE:HD12	2.01	0.42
1:H:510:LYS:HG2	1:H:517:PHE:O	2.19	0.42
1:I:410:PHE:HB3	1:I:411:ILE:HD12	2.01	0.42
1:I:510:LYS:HG2	1:I:517:PHE:O	2.19	0.42
1:I:597:SER:OG	1:I:598:CYS:N	2.47	0.42
1:I:647:MET:HA	1:I:650:PHE:CZ	2.55	0.42
1:J:338:LYS:O	1:J:342:PRO:HA	2.19	0.42
1:J:660:ARG:HG2	1:J:729:PHE:CZ	2.55	0.42
1:A:24:LYS:HE2	1:A:24:LYS:HB2	1.75	0.42
1:B:374:SER:O	1:B:378:ARG:CG	2.66	0.42
1:B:962:SER:HA	1:B:965:LEU:HD12	2.01	0.42
1:C:243:TRP:CZ3	1:C:256:LEU:HB2	2.53	0.42
1:C:257:PHE:HB2	1:C:299:PHE:HA	2.02	0.42
1:C:369:GLU:OE1	1:C:369:GLU:N	2.50	0.42
1:C:410:PHE:HB3	1:C:411:ILE:HD12	2.01	0.42
1:C:892:VAL:HG12	1:C:920:ARG:N	2.35	0.42
1:C:962:SER:HA	1:C:965:LEU:HD12	2.01	0.42
1:D:315:ILE:HG13	1:D:317:PRO:HD2	2.02	0.42
1:E:510:LYS:HG2	1:E:517:PHE:O	2.19	0.42
1:E:660:ARG:HG2	1:E:729:PHE:CZ	2.55	0.42
1:F:462:LEU:HD13	1:F:502:PHE:CZ	2.54	0.42
1:F:660:ARG:HG2	1:F:729:PHE:CZ	2.55	0.42
1:F:896:LEU:C	1:F:922:ASN:HD21	2.23	0.42
1:F:964:LEU:O	1:F:968:SER:N	2.52	0.42
1:G:593:GLU:C	1:G:595:LYS:H	2.22	0.42
1:G:660:ARG:HG2	1:G:729:PHE:CZ	2.55	0.42
1:H:130:CYS:O	1:H:131:LYS:C	2.57	0.42
1:I:669:CYS:O	1:I:672:ASN:ND2	2.47	0.42
1:I:674:HIS:O	1:I:675:ARG:HG2	2.19	0.42
1:I:782:LEU:HD23	1:I:786:CYS:SG	2.60	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:1036:TRP:CD1	1:J:699:ARG:CG	3.02	0.42
1:J:815:ILE:O	1:J:819:CYS:SG	2.72	0.42
1:B:255:TYR:HB2	1:B:297:ILE:HG23	2.01	0.42
1:B:593:GLU:C	1:B:595:LYS:H	2.22	0.42
1:B:594:LYS:HD2	1:B:594:LYS:HA	1.72	0.42
1:B:892:VAL:HG12	1:B:920:ARG:N	2.35	0.42
1:C:782:LEU:HD23	1:C:786:CYS:SG	2.60	0.42
1:C:827:CYS:O	1:C:856:SER:HB2	2.20	0.42
1:D:224:PHE:HE1	1:D:347:LEU:CD2	2.32	0.42
1:D:287:ILE:O	1:D:291:VAL:N	2.44	0.42
1:D:627:GLN:HG3	1:D:631:PHE:CE2	2.54	0.42
1:D:892:VAL:HG12	1:D:920:ARG:N	2.35	0.42
1:D:962:SER:HA	1:D:965:LEU:HD12	2.01	0.42
1:D:964:LEU:O	1:D:968:SER:N	2.52	0.42
1:E:255:TYR:HB2	1:E:297:ILE:HG23	2.01	0.42
1:E:315:ILE:HG13	1:E:317:PRO:HD2	2.02	0.42
1:E:816:ARG:HD2	1:H:788:PHE:CD2	2.54	0.42
1:E:822:LEU:HA	1:E:826:LEU:HD13	2.02	0.42
1:F:175:LYS:HG3	1:F:175:LYS:O	2.20	0.42
1:F:224:PHE:HE1	1:F:347:LEU:CD2	2.32	0.42
1:F:299:PHE:HB2	1:F:346:LEU:HD22	2.02	0.42
1:F:327:ARG:HB2	1:F:330:ILE:HD12	2.02	0.42
1:G:782:LEU:HD23	1:G:786:CYS:SG	2.60	0.42
1:G:827:CYS:O	1:G:856:SER:HB2	2.20	0.42
1:H:660:ARG:HG2	1:H:729:PHE:CZ	2.55	0.42
1:I:175:LYS:HG3	1:I:175:LYS:O	2.20	0.42
1:I:338:LYS:O	1:I:342:PRO:HA	2.19	0.42
1:I:561:LEU:HD12	1:I:573:LEU:HD13	1.99	0.42
1:I:627:GLN:HG3	1:I:631:PHE:CE2	2.55	0.42
1:I:767:HIS:CD2	1:I:769:GLY:H	2.38	0.42
1:I:964:LEU:O	1:I:968:SER:N	2.52	0.42
1:J:782:LEU:HD23	1:J:786:CYS:SG	2.60	0.42
1:A:147:ARG:HE	1:A:147:ARG:HB2	1.40	0.42
1:A:327:ARG:HB2	1:A:330:ILE:HD12	2.02	0.42
1:A:647:MET:HA	1:A:650:PHE:CZ	2.55	0.42
1:B:299:PHE:HB2	1:B:346:LEU:HD22	2.02	0.42
1:B:338:LYS:O	1:B:342:PRO:HA	2.19	0.42
1:B:374:SER:OG	1:B:377:LYS:HE2	2.20	0.42
1:B:647:MET:HA	1:B:650:PHE:CZ	2.55	0.42
1:B:660:ARG:HG2	1:B:729:PHE:CZ	2.55	0.42
1:C:327:ARG:HB2	1:C:330:ILE:HD12	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:462:LEU:HD13	1:C:502:PHE:CZ	2.54	0.42
1:C:822:LEU:HA	1:C:826:LEU:HD13	2.01	0.42
1:D:510:LYS:HG2	1:D:517:PHE:O	2.20	0.42
1:D:660:ARG:HG2	1:D:729:PHE:CZ	2.55	0.42
1:E:300:LEU:HD11	1:E:347:LEU:HD22	1.99	0.42
1:E:782:LEU:HD23	1:E:786:CYS:SG	2.60	0.42
1:G:410:PHE:HB3	1:G:411:ILE:HD12	2.01	0.42
1:H:116:GLU:O	1:H:120:LEU:HG	2.19	0.42
1:H:287:ILE:O	1:H:291:VAL:HG23	2.20	0.42
1:H:462:LEU:HD13	1:H:502:PHE:CZ	2.54	0.42
1:H:540:LYS:HB2	1:H:540:LYS:HE2	1.79	0.42
1:H:759:ARG:HE	1:H:759:ARG:HB3	1.73	0.42
1:H:822:LEU:HA	1:H:826:LEU:HD13	2.01	0.42
1:I:243:TRP:CZ3	1:I:256:LEU:HB2	2.53	0.42
1:I:462:LEU:HD13	1:I:502:PHE:CZ	2.54	0.42
1:J:284:ASN:OD1	1:J:284:ASN:N	2.51	0.42
1:A:224:PHE:HE1	1:A:347:LEU:HD21	1.84	0.42
1:A:432:LEU:HG	1:A:433:ALA:H	1.85	0.42
1:A:627:GLN:HG3	1:A:631:PHE:CE2	2.54	0.42
1:A:689:LYS:HB2	1:A:704:VAL:HB	2.00	0.42
1:B:257:PHE:HB2	1:B:299:PHE:HA	2.02	0.42
1:B:324:LYS:HD3	1:B:325:ALA:N	2.35	0.42
1:C:178:ARG:H	1:C:178:ARG:HG3	1.56	0.42
1:C:581:PHE:CE1	1:C:633:CYS:HB3	2.55	0.42
1:C:621:LEU:HD23	1:D:984:LEU:N	2.30	0.42
1:C:896:LEU:C	1:C:922:ASN:HD21	2.23	0.42
1:D:327:ARG:HB2	1:D:330:ILE:HD12	2.02	0.42
1:D:338:LYS:O	1:D:342:PRO:HA	2.19	0.42
1:E:503:LEU:HD13	1:E:509:GLN:HB2	2.01	0.42
1:E:627:GLN:HG3	1:E:631:PHE:CE2	2.54	0.42
1:E:827:CYS:O	1:E:856:SER:HB2	2.20	0.42
1:F:214:GLU:HB3	1:F:215:HIS:H	1.71	0.42
1:F:315:ILE:HG13	1:F:317:PRO:HD2	2.02	0.42
1:G:324:LYS:HD3	1:G:325:ALA:N	2.35	0.42
1:G:632:TYR:O	1:G:636:GLU:HG2	2.20	0.42
1:H:593:GLU:C	1:H:595:LYS:H	2.22	0.42
1:H:782:LEU:HD23	1:H:786:CYS:SG	2.60	0.42
1:I:287:ILE:O	1:I:291:VAL:N	2.44	0.42
1:I:324:LYS:HD3	1:I:325:ALA:N	2.35	0.42
1:I:699:ARG:CG	1:J:1036:TRP:CD1	3.02	0.42
1:I:896:LEU:C	1:I:922:ASN:HD21	2.23	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:432:LEU:HG	1:J:433:ALA:H	1.85	0.42
1:J:581:PHE:CE1	1:J:633:CYS:HB3	2.55	0.42
1:J:632:TYR:O	1:J:636:GLU:HG2	2.20	0.42
1:A:503:LEU:HD13	1:A:509:GLN:HB2	2.00	0.42
1:A:785:GLU:HA	1:D:813:PHE:CZ	2.55	0.42
1:A:1036:TRP:CD1	1:B:699:ARG:CG	3.03	0.42
1:B:284:ASN:OD1	1:B:284:ASN:N	2.51	0.42
1:B:287:ILE:O	1:B:291:VAL:HG23	2.20	0.42
1:B:767:HIS:CD2	1:B:769:GLY:H	2.38	0.42
1:C:284:ASN:OD1	1:C:284:ASN:N	2.51	0.42
1:C:315:ILE:HG13	1:C:317:PRO:HD2	2.02	0.42
1:C:964:LEU:O	1:C:968:SER:N	2.52	0.42
1:D:632:TYR:O	1:D:636:GLU:HG2	2.20	0.42
1:E:287:ILE:O	1:E:291:VAL:HG23	2.19	0.42
1:G:175:LYS:O	1:G:175:LYS:HG3	2.20	0.42
1:G:689:LYS:HB2	1:G:704:VAL:HB	2.00	0.42
1:G:822:LEU:HA	1:G:826:LEU:HD13	2.01	0.42
1:H:214:GLU:HB3	1:H:215:HIS:H	1.71	0.42
1:J:171:LEU:HD23	1:J:370:ILE:HD11	2.01	0.42
1:J:212:ASP:OD1	1:J:212:ASP:N	2.39	0.42
1:J:255:TYR:HB2	1:J:297:ILE:HG23	2.01	0.42
1:J:287:ILE:O	1:J:291:VAL:HG23	2.19	0.42
1:J:410:PHE:HB3	1:J:411:ILE:HD12	2.01	0.42
1:J:627:GLN:HG3	1:J:631:PHE:CE2	2.55	0.42
1:A:660:ARG:HG2	1:A:729:PHE:CZ	2.55	0.42
1:A:767:HIS:CD2	1:A:769:GLY:H	2.38	0.42
1:B:462:LEU:HD13	1:B:502:PHE:CZ	2.54	0.42
1:C:299:PHE:HB2	1:C:346:LEU:HD22	2.02	0.42
1:C:627:GLN:HG3	1:C:631:PHE:CE2	2.54	0.42
1:D:243:TRP:CZ3	1:D:256:LEU:HB2	2.53	0.42
1:D:287:ILE:O	1:D:291:VAL:HG23	2.20	0.42
1:D:308:GLN:HG3	1:D:480:GLN:CD	2.40	0.42
1:D:369:GLU:OE1	1:D:369:GLU:N	2.50	0.42
1:D:374:SER:OG	1:D:377:LYS:HE2	2.20	0.42
1:D:647:MET:HA	1:D:650:PHE:CZ	2.55	0.42
1:F:761:LEU:HD23	1:F:761:LEU:HA	1.93	0.42
1:F:782:LEU:HD23	1:F:786:CYS:SG	2.60	0.42
1:G:171:LEU:HD23	1:G:370:ILE:HD11	2.01	0.42
1:G:581:PHE:CE1	1:G:633:CYS:HB3	2.55	0.42
1:G:627:GLN:HG3	1:G:631:PHE:CE2	2.54	0.42
1:H:175:LYS:HG3	1:H:175:LYS:O	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:299:PHE:HB2	1:H:346:LEU:HD22	2.02	0.42
1:H:324:LYS:HD3	1:H:325:ALA:N	2.35	0.42
1:H:374:SER:OG	1:H:377:LYS:HE2	2.20	0.42
1:I:287:ILE:O	1:I:291:VAL:HG23	2.20	0.42
1:I:593:GLU:C	1:I:595:LYS:H	2.22	0.42
1:J:327:ARG:HB2	1:J:330:ILE:HD12	2.02	0.42
1:J:827:CYS:O	1:J:856:SER:HB2	2.20	0.42
1:B:432:LEU:HG	1:B:433:ALA:H	1.85	0.42
1:C:374:SER:OG	1:C:377:LYS:HE2	2.20	0.42
1:C:510:LYS:HG2	1:C:517:PHE:O	2.19	0.42
1:C:647:MET:HA	1:C:650:PHE:CZ	2.55	0.42
1:D:827:CYS:O	1:D:856:SER:HB2	2.20	0.42
1:E:222:VAL:HG22	1:E:366:ARG:CB	2.49	0.42
1:E:374:SER:OG	1:E:377:LYS:HE2	2.20	0.42
1:E:632:TYR:O	1:E:636:GLU:HG2	2.20	0.42
1:E:926:ASP:OD2	1:E:954:THR:OG1	2.22	0.42
1:F:503:LEU:HD13	1:F:509:GLN:HB2	2.01	0.42
1:F:540:LYS:HE2	1:F:540:LYS:HB2	1.79	0.42
1:G:255:TYR:HB2	1:G:297:ILE:HG23	2.01	0.42
1:G:374:SER:OG	1:G:377:LYS:HE2	2.20	0.42
1:G:432:LEU:HG	1:G:433:ALA:H	1.85	0.42
1:G:468:GLY:O	1:G:471:SER:OG	2.28	0.42
1:I:374:SER:OG	1:I:377:LYS:HE2	2.20	0.42
1:I:660:ARG:HG2	1:I:729:PHE:CZ	2.55	0.42
1:J:315:ILE:HG13	1:J:317:PRO:HD2	2.02	0.42
1:J:324:LYS:HD3	1:J:325:ALA:N	2.35	0.42
1:J:510:LYS:HG2	1:J:517:PHE:O	2.19	0.42
1:J:647:MET:HA	1:J:650:PHE:CZ	2.55	0.42
1:J:964:LEU:O	1:J:968:SER:N	2.52	0.42
1:A:83:LEU:HD13	1:A:83:LEU:HA	1.83	0.41
1:B:896:LEU:C	1:B:922:ASN:HD21	2.23	0.41
1:C:587:GLU:H	1:C:587:GLU:CD	2.24	0.41
1:D:324:LYS:HD3	1:D:325:ALA:N	2.35	0.41
1:D:432:LEU:HG	1:D:433:ALA:H	1.85	0.41
1:D:581:PHE:CE1	1:D:633:CYS:HB3	2.55	0.41
1:E:307:LEU:HD22	1:E:307:LEU:HA	1.71	0.41
1:E:432:LEU:HG	1:E:433:ALA:H	1.85	0.41
1:E:767:HIS:CD2	1:E:769:GLY:H	2.38	0.41
1:F:324:LYS:HD3	1:F:325:ALA:N	2.35	0.41
1:F:827:CYS:O	1:F:856:SER:HB2	2.20	0.41
1:G:337:ARG:HE	1:G:361:LEU:HD23	1.85	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:647:MET:HA	1:G:650:PHE:CZ	2.55	0.41
1:H:10:LEU:HD23	1:H:10:LEU:HA	1.89	0.41
1:H:647:MET:HA	1:H:650:PHE:CZ	2.55	0.41
1:I:178:ARG:H	1:I:178:ARG:HG3	1.56	0.41
1:I:315:ILE:HG13	1:I:317:PRO:HD2	2.02	0.41
1:I:581:PHE:CE1	1:I:633:CYS:HB3	2.55	0.41
1:I:822:LEU:HA	1:I:826:LEU:HD13	2.01	0.41
1:J:257:PHE:HB2	1:J:299:PHE:HA	2.02	0.41
1:J:308:GLN:HG3	1:J:480:GLN:CD	2.40	0.41
1:A:315:ILE:HG13	1:A:317:PRO:HD2	2.02	0.41
1:A:374:SER:OG	1:A:377:LYS:HE2	2.20	0.41
1:A:827:CYS:O	1:A:856:SER:HB2	2.20	0.41
1:B:308:GLN:HG3	1:B:480:GLN:CD	2.40	0.41
1:B:315:ILE:HG13	1:B:317:PRO:HD2	2.02	0.41
1:C:287:ILE:O	1:C:291:VAL:HG23	2.20	0.41
1:C:324:LYS:HD3	1:C:325:ALA:N	2.35	0.41
1:E:308:GLN:HG3	1:E:480:GLN:CD	2.40	0.41
1:E:647:MET:HA	1:E:650:PHE:CZ	2.55	0.41
1:E:765:LEU:HD12	1:E:765:LEU:HA	1.83	0.41
1:G:308:GLN:HG3	1:G:480:GLN:CD	2.40	0.41
1:G:621:LEU:HD23	1:H:984:LEU:N	2.34	0.41
1:H:287:ILE:O	1:H:291:VAL:N	2.44	0.41
1:J:586:GLN:O	1:J:590:SER:OG	2.20	0.41
1:J:896:LEU:C	1:J:922:ASN:HD21	2.23	0.41
1:C:632:TYR:O	1:C:636:GLU:HG2	2.20	0.41
1:C:660:ARG:HG2	1:C:729:PHE:CZ	2.55	0.41
1:C:767:HIS:CD2	1:C:769:GLY:H	2.38	0.41
1:D:462:LEU:HD13	1:D:502:PHE:CZ	2.54	0.41
1:D:767:HIS:CD2	1:D:769:GLY:H	2.38	0.41
1:D:896:LEU:C	1:D:922:ASN:HD21	2.23	0.41
1:E:441:ALA:HA	1:E:444:VAL:HG12	2.03	0.41
1:E:593:GLU:C	1:E:595:LYS:H	2.22	0.41
1:F:432:LEU:HG	1:F:433:ALA:H	1.85	0.41
1:F:767:HIS:CD2	1:F:769:GLY:H	2.38	0.41
1:H:308:GLN:HG3	1:H:480:GLN:CD	2.40	0.41
1:H:315:ILE:HG13	1:H:317:PRO:HD2	2.02	0.41
1:H:767:HIS:CD2	1:H:769:GLY:H	2.38	0.41
1:H:827:CYS:O	1:H:856:SER:HB2	2.20	0.41
1:I:632:TYR:O	1:I:636:GLU:HG2	2.20	0.41
1:J:175:LYS:O	1:J:175:LYS:HG3	2.20	0.41
1:J:822:LEU:HA	1:J:826:LEU:HD13	2.01	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:826:LEU:HA	1:J:826:LEU:HD23	1.88	0.41
1:A:510:LYS:HG2	1:A:517:PHE:O	2.20	0.41
1:B:337:ARG:HE	1:B:361:LEU:HD23	1.85	0.41
1:B:510:LYS:HG2	1:B:517:PHE:O	2.19	0.41
1:C:143:TYR:OH	1:C:281:PRO:CD	2.69	0.41
1:C:788:PHE:CD2	1:F:816:ARG:HD2	2.55	0.41
1:D:587:GLU:H	1:D:587:GLU:CD	2.23	0.41
1:E:299:PHE:HB2	1:E:346:LEU:HD22	2.02	0.41
1:E:324:LYS:HD3	1:E:325:ALA:N	2.35	0.41
1:E:425:GLN:O	1:E:429:GLY:N	2.39	0.41
1:E:581:PHE:CE1	1:E:633:CYS:HB3	2.55	0.41
1:F:257:PHE:HB2	1:F:299:PHE:HA	2.01	0.41
1:G:222:VAL:HG22	1:G:366:ARG:CB	2.49	0.41
1:G:327:ARG:HB2	1:G:330:ILE:HD12	2.02	0.41
1:H:32:TYR:CD2	1:H:33:PRO:HD2	2.55	0.41
1:I:214:GLU:HB3	1:I:215:HIS:H	1.71	0.41
1:I:540:LYS:HB2	1:I:540:LYS:HE2	1.79	0.41
1:I:605:ARG:NH1	1:I:608:LEU:HD23	2.36	0.41
1:I:891:LEU:HB2	1:I:919:LEU:HD23	2.03	0.41
1:J:143:TYR:OH	1:J:281:PRO:CD	2.69	0.41
1:J:222:VAL:HG22	1:J:366:ARG:CB	2.49	0.41
1:A:324:LYS:HD3	1:A:325:ALA:N	2.35	0.41
1:A:782:LEU:HD23	1:A:786:CYS:SG	2.60	0.41
1:A:802:GLU:OE2	1:A:831:LYS:NZ	2.39	0.41
1:B:522:HIS:CE1	1:B:524:THR:HG23	2.56	0.41
1:B:605:ARG:NH1	1:B:608:LEU:HD23	2.36	0.41
1:B:805:LEU:HB2	1:B:834:LEU:HD23	2.03	0.41
1:C:308:GLN:HG3	1:C:480:GLN:CD	2.40	0.41
1:C:765:LEU:HD12	1:C:765:LEU:HA	1.83	0.41
1:D:304:PHE:HD1	1:D:304:PHE:HA	1.73	0.41
1:E:423:LYS:HB3	1:E:423:LYS:HE3	1.78	0.41
1:E:896:LEU:C	1:E:922:ASN:HD21	2.23	0.41
1:F:147:ARG:HE	1:F:147:ARG:HB2	1.40	0.41
1:F:308:GLN:HG3	1:F:480:GLN:CD	2.40	0.41
1:G:891:LEU:HB2	1:G:919:LEU:HD23	2.03	0.41
1:G:964:LEU:O	1:G:968:SER:N	2.52	0.41
1:H:126:ARG:C	1:H:128:SER:N	2.74	0.41
1:H:337:ARG:HE	1:H:361:LEU:HD23	1.85	0.41
1:H:432:LEU:HG	1:H:433:ALA:H	1.85	0.41
1:H:632:TYR:O	1:H:636:GLU:HG2	2.20	0.41
1:J:605:ARG:NH1	1:J:608:LEU:HD23	2.36	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:689:LYS:HB2	1:J:704:VAL:HB	2.00	0.41
1:A:175:LYS:O	1:A:175:LYS:HG3	2.20	0.41
1:A:522:HIS:CE1	1:A:524:THR:HG23	2.56	0.41
1:A:581:PHE:CE1	1:A:633:CYS:HB3	2.55	0.41
1:B:581:PHE:CE1	1:B:633:CYS:HB3	2.55	0.41
1:B:632:TYR:O	1:B:636:GLU:HG2	2.20	0.41
1:C:175:LYS:O	1:C:175:LYS:HG3	2.20	0.41
1:C:441:ALA:HA	1:C:444:VAL:HG12	2.03	0.41
1:C:699:ARG:CG	1:D:1036:TRP:CD1	3.04	0.41
1:E:337:ARG:HE	1:E:361:LEU:HD23	1.85	0.41
1:E:805:LEU:HB2	1:E:834:LEU:HD23	2.03	0.41
1:F:510:LYS:HG2	1:F:517:PHE:O	2.19	0.41
1:G:605:ARG:NH1	1:G:608:LEU:HD23	2.36	0.41
1:J:759:ARG:HE	1:J:759:ARG:HB3	1.73	0.41
1:J:891:LEU:HB2	1:J:919:LEU:HD23	2.03	0.41
1:A:143:TYR:OH	1:A:281:PRO:CD	2.69	0.41
1:B:212:ASP:OD1	1:B:212:ASP:N	2.39	0.41
1:B:300:LEU:HD11	1:B:347:LEU:HD22	1.99	0.41
1:C:432:LEU:HG	1:C:433:ALA:H	1.85	0.41
1:C:605:ARG:NH1	1:C:608:LEU:HD23	2.36	0.41
1:D:299:PHE:HB2	1:D:346:LEU:HD22	2.02	0.41
1:F:374:SER:OG	1:F:377:LYS:HE2	2.20	0.41
1:G:143:TYR:OH	1:G:281:PRO:CD	2.69	0.41
1:H:522:HIS:CE1	1:H:524:THR:HG23	2.56	0.41
1:H:581:PHE:CE1	1:H:633:CYS:HB3	2.55	0.41
1:I:299:PHE:HB2	1:I:346:LEU:HD22	2.02	0.41
1:A:308:GLN:HG3	1:A:480:GLN:CD	2.40	0.41
1:A:337:ARG:HD3	1:A:337:ARG:HA	1.96	0.41
1:A:788:PHE:CD2	1:D:816:ARG:HD2	2.56	0.41
1:A:953:LEU:N	1:A:979:ASN:OD1	2.52	0.41
1:D:222:VAL:HG22	1:D:366:ARG:CB	2.49	0.41
1:D:761:LEU:HD23	1:D:761:LEU:HA	1.93	0.41
1:E:522:HIS:CE1	1:E:524:THR:HG23	2.56	0.41
1:E:605:ARG:NH1	1:E:608:LEU:HD23	2.36	0.41
1:F:143:TYR:OH	1:F:281:PRO:CD	2.69	0.41
1:F:632:TYR:O	1:F:636:GLU:HG2	2.20	0.41
1:G:299:PHE:HB2	1:G:346:LEU:HD22	2.02	0.41
1:G:315:ILE:HG13	1:G:317:PRO:HD2	2.02	0.41
1:G:896:LEU:C	1:G:922:ASN:HD21	2.23	0.41
1:H:143:TYR:OH	1:H:281:PRO:CD	2.69	0.41
1:H:257:PHE:O	1:H:300:LEU:N	2.33	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:327:ARG:HB2	1:H:330:ILE:HD12	2.02	0.41
1:I:143:TYR:OH	1:I:281:PRO:CD	2.69	0.41
1:I:441:ALA:HA	1:I:444:VAL:HG12	2.03	0.41
1:I:827:CYS:O	1:I:856:SER:HB2	2.20	0.41
1:J:337:ARG:HE	1:J:361:LEU:HD23	1.85	0.41
1:J:767:HIS:CD2	1:J:769:GLY:H	2.38	0.41
1:J:892:VAL:HG12	1:J:920:ARG:N	2.35	0.41
1:A:257:PHE:O	1:A:300:LEU:N	2.33	0.41
1:A:822:LEU:HA	1:A:826:LEU:HD13	2.01	0.41
1:B:222:VAL:HG22	1:B:366:ARG:CB	2.49	0.41
1:B:441:ALA:HA	1:B:444:VAL:HG12	2.03	0.41
1:B:627:GLN:HG3	1:B:631:PHE:CE2	2.55	0.41
1:B:759:ARG:HE	1:B:759:ARG:HB3	1.73	0.41
1:B:891:LEU:HB2	1:B:919:LEU:HD23	2.03	0.41
1:C:337:ARG:HE	1:C:361:LEU:HD23	1.85	0.41
1:C:826:LEU:HD23	1:C:826:LEU:HA	1.88	0.41
1:D:175:LYS:O	1:D:175:LYS:HG3	2.20	0.41
1:D:178:ARG:H	1:D:178:ARG:HG3	1.56	0.41
1:D:516:LYS:HA	1:D:516:LYS:HD3	1.95	0.41
1:D:605:ARG:NH1	1:D:608:LEU:HD23	2.36	0.41
1:D:782:LEU:HD23	1:D:786:CYS:SG	2.60	0.41
1:D:930:LYS:HE2	1:D:930:LYS:HB3	1.88	0.41
1:E:143:TYR:CE2	1:E:280:CYS:CB	3.04	0.41
1:E:143:TYR:OH	1:E:281:PRO:CD	2.69	0.41
1:E:257:PHE:HB2	1:E:299:PHE:HA	2.02	0.41
1:E:327:ARG:HB2	1:E:330:ILE:HD12	2.02	0.41
1:F:522:HIS:CE1	1:F:524:THR:HG23	2.56	0.41
1:F:581:PHE:CE1	1:F:633:CYS:HB3	2.55	0.41
1:F:605:ARG:NH1	1:F:608:LEU:HD23	2.36	0.41
1:F:822:LEU:HA	1:F:826:LEU:HD13	2.01	0.41
1:G:767:HIS:CD2	1:G:769:GLY:H	2.38	0.41
1:G:785:GLU:HA	1:J:813:PHE:CE2	2.56	0.41
1:G:892:VAL:HG12	1:G:920:ARG:N	2.35	0.41
1:H:257:PHE:HB2	1:H:299:PHE:HA	2.02	0.41
1:H:441:ALA:HA	1:H:444:VAL:HG12	2.03	0.41
1:H:891:LEU:HB2	1:H:919:LEU:HD23	2.03	0.41
1:I:337:ARG:HE	1:I:361:LEU:HD23	1.85	0.41
1:J:441:ALA:HA	1:J:444:VAL:HG12	2.03	0.41
1:A:805:LEU:HB2	1:A:834:LEU:HD23	2.03	0.41
1:B:143:TYR:CE2	1:B:280:CYS:CB	3.04	0.41
1:B:151:ILE:HD11	1:B:508:PHE:HZ	1.86	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:751:ASN:ND2	1:B:753:LEU:HB2	2.36	0.41
1:C:751:ASN:ND2	1:C:753:LEU:HB2	2.36	0.41
1:D:143:TYR:OH	1:D:281:PRO:CD	2.69	0.41
1:D:147:ARG:HE	1:D:147:ARG:HB2	1.40	0.41
1:D:337:ARG:HE	1:D:361:LEU:HD23	1.85	0.41
1:E:151:ILE:HD11	1:E:508:PHE:HZ	1.86	0.41
1:E:260:HIS:ND1	1:E:262:ARG:HG3	2.36	0.41
1:H:245:SER:OG	1:H:247:THR:OG1	2.24	0.41
1:H:423:LYS:HB3	1:H:423:LYS:HE3	1.78	0.41
1:H:605:ARG:NH1	1:H:608:LEU:HD23	2.36	0.41
1:H:892:VAL:HG12	1:H:920:ARG:N	2.35	0.41
1:I:245:SER:OG	1:I:247:THR:OG1	2.24	0.41
1:J:374:SER:OG	1:J:377:LYS:HE2	2.20	0.41
1:J:805:LEU:HB2	1:J:834:LEU:HD23	2.03	0.41
1:A:151:ILE:HD11	1:A:508:PHE:HZ	1.86	0.40
1:A:257:PHE:HB2	1:A:299:PHE:HA	2.02	0.40
1:A:632:TYR:O	1:A:636:GLU:HG2	2.20	0.40
1:B:175:LYS:HG3	1:B:175:LYS:O	2.20	0.40
1:B:260:HIS:ND1	1:B:262:ARG:HG3	2.36	0.40
1:B:327:ARG:HB2	1:B:330:ILE:HD12	2.02	0.40
1:C:143:TYR:CE2	1:C:280:CYS:CB	3.04	0.40
1:C:203:ILE:HB	1:C:208:LEU:HA	2.03	0.40
1:C:207:LEU:HB3	1:C:210:ASP:HB3	2.03	0.40
1:C:761:LEU:HD23	1:C:761:LEU:HA	1.93	0.40
1:D:926:ASP:OD2	1:D:954:THR:OG1	2.22	0.40
1:E:178:ARG:H	1:E:178:ARG:HG3	1.56	0.40
1:F:143:TYR:CE2	1:F:280:CYS:CB	3.04	0.40
1:F:151:ILE:HD11	1:F:508:PHE:HZ	1.86	0.40
1:F:207:LEU:HB3	1:F:210:ASP:HB3	2.03	0.40
1:G:260:HIS:ND1	1:G:262:ARG:HG3	2.36	0.40
1:G:522:HIS:CE1	1:G:524:THR:HG23	2.56	0.40
1:G:540:LYS:HB2	1:G:540:LYS:HE2	1.79	0.40
1:G:587:GLU:H	1:G:587:GLU:CD	2.23	0.40
1:I:308:GLN:HG3	1:I:480:GLN:CD	2.40	0.40
1:I:751:ASN:ND2	1:I:753:LEU:HB2	2.36	0.40
1:J:260:HIS:ND1	1:J:262:ARG:HG3	2.36	0.40
1:J:635:TYR:HB2	1:J:665:VAL:HG23	2.04	0.40
1:A:223:VAL:HG23	1:A:225:GLN:HE22	1.86	0.40
1:A:605:ARG:NH1	1:A:608:LEU:HD23	2.36	0.40
1:D:425:GLN:O	1:D:429:GLY:N	2.39	0.40
1:E:223:VAL:HG23	1:E:225:GLN:HE22	1.86	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:805:LEU:HB2	1:F:834:LEU:HD23	2.03	0.40
1:G:304:PHE:HD1	1:G:304:PHE:HA	1.73	0.40
1:G:930:LYS:HE2	1:G:930:LYS:HB3	1.88	0.40
1:I:223:VAL:HG23	1:I:225:GLN:HE22	1.86	0.40
1:I:432:LEU:HG	1:I:433:ALA:H	1.85	0.40
1:J:587:GLU:CD	1:J:587:GLU:H	2.23	0.40
1:A:46:THR:HG23	1:A:54:LEU:HD11	2.04	0.40
1:A:54:LEU:HD12	1:A:54:LEU:HA	1.87	0.40
1:A:236:ALA:HB1	1:A:300:LEU:HD21	2.04	0.40
1:A:699:ARG:HD3	1:B:1036:TRP:HD1	1.86	0.40
1:B:143:TYR:OH	1:B:281:PRO:CD	2.69	0.40
1:B:587:GLU:H	1:B:587:GLU:CD	2.23	0.40
1:C:699:ARG:HD3	1:D:1036:TRP:HD1	1.85	0.40
1:C:984:LEU:CB	1:D:621:LEU:HD23	2.42	0.40
1:C:1025:LYS:HG3	1:C:1028:LEU:H	1.86	0.40
1:D:203:ILE:HB	1:D:208:LEU:HA	2.04	0.40
1:D:751:ASN:ND2	1:D:753:LEU:HB2	2.36	0.40
1:E:175:LYS:O	1:E:175:LYS:HG3	2.20	0.40
1:F:441:ALA:HA	1:F:444:VAL:HG12	2.03	0.40
1:F:587:GLU:H	1:F:587:GLU:CD	2.23	0.40
1:F:891:LEU:HB2	1:F:919:LEU:HD23	2.03	0.40
1:G:151:ILE:HD11	1:G:508:PHE:HZ	1.86	0.40
1:G:805:LEU:HB2	1:G:834:LEU:HD23	2.03	0.40
1:H:1025:LYS:HG3	1:H:1028:LEU:H	1.86	0.40
1:I:143:TYR:CE2	1:I:280:CYS:CB	3.04	0.40
1:J:299:PHE:HB2	1:J:346:LEU:HD22	2.02	0.40
1:J:423:LYS:HB3	1:J:423:LYS:HE3	1.78	0.40
1:J:969:GLN:O	1:J:972:ARG:NH1	2.33	0.40
1:A:635:TYR:HB2	1:A:665:VAL:HG23	2.04	0.40
1:A:813:PHE:HZ	1:D:788:PHE:HB2	1.87	0.40
1:C:891:LEU:HB2	1:C:919:LEU:HD23	2.03	0.40
1:C:1036:TRP:CD1	1:D:699:ARG:CG	3.04	0.40
1:C:1036:TRP:HD1	1:D:699:ARG:HD3	1.86	0.40
1:E:203:ILE:HB	1:E:208:LEU:HA	2.04	0.40
1:F:430:LYS:HE3	1:F:430:LYS:HB3	1.92	0.40
1:G:410:PHE:CG	1:G:411:ILE:N	2.90	0.40
1:G:635:TYR:HB2	1:G:665:VAL:HG23	2.04	0.40
1:H:223:VAL:HG23	1:H:225:GLN:HE22	1.86	0.40
1:H:587:GLU:H	1:H:587:GLU:CD	2.23	0.40
1:H:696:LYS:HD2	1:H:696:LYS:HA	1.95	0.40
1:H:751:ASN:ND2	1:H:753:LEU:HB2	2.36	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:823:LYS:HE2	1:H:823:LYS:HB3	1.93	0.40
1:H:826:LEU:HA	1:H:826:LEU:HD23	1.88	0.40
1:H:953:LEU:N	1:H:979:ASN:OD1	2.52	0.40
1:J:143:TYR:CE2	1:J:280:CYS:CB	3.04	0.40
1:J:151:ILE:HD11	1:J:508:PHE:HZ	1.86	0.40
1:A:143:TYR:CE2	1:A:280:CYS:CB	3.04	0.40
1:A:207:LEU:HB3	1:A:210:ASP:HB3	2.03	0.40
1:A:751:ASN:ND2	1:A:753:LEU:HB2	2.36	0.40
1:B:207:LEU:HB3	1:B:210:ASP:HB3	2.03	0.40
1:B:223:VAL:HG23	1:B:225:GLN:HE22	1.86	0.40
1:B:257:PHE:N	1:B:298:LEU:O	2.55	0.40
1:B:400:GLN:HG3	1:B:406:PHE:HE2	1.87	0.40
1:C:522:HIS:CE1	1:C:524:THR:HG23	2.56	0.40
1:D:143:TYR:CE2	1:D:280:CYS:CB	3.04	0.40
1:D:260:HIS:ND1	1:D:262:ARG:HG3	2.36	0.40
1:F:304:PHE:HD1	1:F:304:PHE:HA	1.73	0.40
1:F:337:ARG:HE	1:F:361:LEU:HD23	1.85	0.40
1:F:826:LEU:HD23	1:F:826:LEU:HA	1.88	0.40
1:G:266:LEU:O	1:G:267:VAL:HG12	2.22	0.40
1:H:151:ILE:HD11	1:H:508:PHE:HZ	1.86	0.40
1:I:257:PHE:HB2	1:I:299:PHE:HA	2.02	0.40
1:I:327:ARG:HB2	1:I:330:ILE:HD12	2.02	0.40
1:I:587:GLU:H	1:I:587:GLU:CD	2.24	0.40
1:I:699:ARG:HD3	1:J:1036:TRP:HD1	1.87	0.40
1:J:831:LYS:HE3	1:J:833:TRP:CD1	2.57	0.40
1:J:923:THR:HG23	1:J:952:ASN:HB2	2.04	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	1004/1036 (97%)	878 (88%)	120 (12%)	6 (1%)	25	63
1	B	874/1036 (84%)	757 (87%)	113 (13%)	4 (0%)	29	67
1	C	874/1036 (84%)	757 (87%)	113 (13%)	4 (0%)	29	67
1	D	874/1036 (84%)	757 (87%)	113 (13%)	4 (0%)	29	67
1	E	874/1036 (84%)	757 (87%)	113 (13%)	4 (0%)	29	67
1	F	874/1036 (84%)	757 (87%)	113 (13%)	4 (0%)	29	67
1	G	874/1036 (84%)	757 (87%)	113 (13%)	4 (0%)	29	67
1	H	1004/1036 (97%)	872 (87%)	125 (12%)	7 (1%)	22	60
1	I	874/1036 (84%)	757 (87%)	113 (13%)	4 (0%)	29	67
1	J	874/1036 (84%)	757 (87%)	113 (13%)	4 (0%)	29	67
All	All	9000/10360 (87%)	7806 (87%)	1149 (13%)	45 (0%)	32	67

All (45) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	96	SER
1	H	127	ILE
1	H	131	LYS
1	A	303	GLY
1	A	721	VAL
1	B	303	GLY
1	B	721	VAL
1	C	303	GLY
1	C	721	VAL
1	D	303	GLY
1	D	721	VAL
1	E	303	GLY
1	E	721	VAL
1	F	303	GLY
1	F	721	VAL
1	G	303	GLY
1	G	721	VAL
1	H	303	GLY
1	H	721	VAL
1	I	303	GLY
1	I	721	VAL
1	J	303	GLY
1	J	721	VAL
1	A	215	HIS

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Mol	Chain	Res	Type
1	B	215	HIS
1	C	215	HIS
1	D	215	HIS
1	E	215	HIS
1	F	215	HIS
1	G	215	HIS
1	H	215	HIS
1	I	215	HIS
1	J	215	HIS
1	A	267	VAL
1	B	267	VAL
1	C	267	VAL
1	D	267	VAL
1	E	267	VAL
1	F	267	VAL
1	G	267	VAL
1	H	137	ARG
1	H	267	VAL
1	I	267	VAL
1	J	267	VAL
1	A	129	ILE

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	911/933 (98%)	825 (91%)	86 (9%)	8	33
1	B	797/933 (85%)	726 (91%)	71 (9%)	9	36
1	C	797/933 (85%)	726 (91%)	71 (9%)	9	36
1	D	797/933 (85%)	726 (91%)	71 (9%)	9	36
1	E	797/933 (85%)	726 (91%)	71 (9%)	9	36
1	F	797/933 (85%)	726 (91%)	71 (9%)	9	36
1	G	797/933 (85%)	726 (91%)	71 (9%)	9	36
1	H	911/933 (98%)	827 (91%)	84 (9%)	9	34

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
1	I	797/933 (85%)	726 (91%)	71 (9%)	9 36
1	J	797/933 (85%)	726 (91%)	71 (9%)	9 36
All	All	8198/9330 (88%)	7460 (91%)	738 (9%)	13 36

All (738) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	14	LEU
1	A	29	LEU
1	A	41	LEU
1	A	46	THR
1	A	56	THR
1	A	57	LEU
1	A	60	ASP
1	A	61	PHE
1	A	64	GLU
1	A	80	ARG
1	A	83	LEU
1	A	106	VAL
1	A	113	ILE
1	A	115	GLU
1	A	117	TRP
1	A	138	LYS
1	A	141	ARG
1	A	147	ARG
1	A	166	LYS
1	A	167	ARG
1	A	169	THR
1	A	173	LEU
1	A	174	ILE
1	A	175	LYS
1	A	178	ARG
1	A	212	ASP
1	A	247	THR
1	A	256	LEU
1	A	267	VAL
1	A	274	ASP
1	A	284	ASN
1	A	304	PHE
1	A	305	ASP
1	A	307	LEU

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Mol	Chain	Res	Type
1	A	308	GLN
1	A	311	PHE
1	A	327	ARG
1	A	341	LEU
1	A	346	LEU
1	A	349	THR
1	A	350	THR
1	A	406	PHE
1	A	414	VAL
1	A	423	LYS
1	A	454	ARG
1	A	520	PHE
1	A	533	TYR
1	A	534	TYR
1	A	538	GLU
1	A	589	THR
1	A	596	LEU
1	A	602	GLN
1	A	624	GLN
1	A	641	ASP
1	A	643	VAL
1	A	644	GLN
1	A	647	MET
1	A	650	PHE
1	A	674	HIS
1	A	680	SER
1	A	687	MET
1	A	697	GLU
1	A	703	MET
1	A	707	VAL
1	A	708	LEU
1	A	739	THR
1	A	741	GLN
1	A	747	ASP
1	A	761	LEU
1	A	764	THR
1	A	765	LEU
1	A	766	GLN
1	A	784	HIS
1	A	786	CYS
1	A	787	CYS
1	A	791	SER

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Mol	Chain	Res	Type
1	A	793	VAL
1	A	810	LEU
1	A	817	LEU
1	A	841	SER
1	A	846	ASP
1	A	867	LEU
1	A	960	ASP
1	A	980	ASP
1	A	1030	VAL
1	A	1032	PHE
1	B	138	LYS
1	B	141	ARG
1	B	147	ARG
1	B	166	LYS
1	B	167	ARG
1	B	169	THR
1	B	173	LEU
1	B	174	ILE
1	B	175	LYS
1	B	178	ARG
1	B	212	ASP
1	B	247	THR
1	B	256	LEU
1	B	267	VAL
1	B	274	ASP
1	B	284	ASN
1	B	304	PHE
1	B	305	ASP
1	B	307	LEU
1	B	308	GLN
1	B	311	PHE
1	B	327	ARG
1	B	341	LEU
1	B	346	LEU
1	B	349	THR
1	B	350	THR
1	B	406	PHE
1	B	414	VAL
1	B	423	LYS
1	B	454	ARG
1	B	520	PHE
1	B	533	TYR

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Mol	Chain	Res	Type
1	B	534	TYR
1	B	538	GLU
1	B	589	THR
1	B	596	LEU
1	B	602	GLN
1	B	624	GLN
1	B	641	ASP
1	B	643	VAL
1	B	644	GLN
1	B	647	MET
1	B	650	PHE
1	B	674	HIS
1	B	680	SER
1	B	687	MET
1	B	697	GLU
1	B	703	MET
1	B	707	VAL
1	B	708	LEU
1	B	739	THR
1	B	741	GLN
1	B	747	ASP
1	B	761	LEU
1	B	764	THR
1	B	765	LEU
1	B	766	GLN
1	B	784	HIS
1	B	786	CYS
1	B	787	CYS
1	B	791	SER
1	B	793	VAL
1	B	810	LEU
1	B	817	LEU
1	B	841	SER
1	B	846	ASP
1	B	867	LEU
1	B	960	ASP
1	B	980	ASP
1	B	1030	VAL
1	B	1032	PHE
1	C	138	LYS
1	C	141	ARG
1	C	147	ARG

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Mol	Chain	Res	Type
1	C	166	LYS
1	C	167	ARG
1	C	169	THR
1	C	173	LEU
1	C	174	ILE
1	C	175	LYS
1	C	178	ARG
1	C	212	ASP
1	C	247	THR
1	C	256	LEU
1	C	267	VAL
1	C	274	ASP
1	C	284	ASN
1	C	304	PHE
1	C	305	ASP
1	C	307	LEU
1	C	308	GLN
1	C	311	PHE
1	C	327	ARG
1	C	341	LEU
1	C	346	LEU
1	C	349	THR
1	C	350	THR
1	C	406	PHE
1	C	414	VAL
1	C	423	LYS
1	C	454	ARG
1	C	520	PHE
1	C	533	TYR
1	C	534	TYR
1	C	538	GLU
1	C	589	THR
1	C	596	LEU
1	C	602	GLN
1	C	624	GLN
1	C	641	ASP
1	C	643	VAL
1	C	644	GLN
1	C	647	MET
1	C	650	PHE
1	C	674	HIS
1	C	680	SER

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Mol	Chain	Res	Type
1	C	687	MET
1	C	697	GLU
1	C	703	MET
1	C	707	VAL
1	C	708	LEU
1	C	739	THR
1	C	741	GLN
1	C	747	ASP
1	C	761	LEU
1	C	764	THR
1	C	765	LEU
1	C	766	GLN
1	C	784	HIS
1	C	786	CYS
1	C	787	CYS
1	C	791	SER
1	C	793	VAL
1	C	810	LEU
1	C	817	LEU
1	C	841	SER
1	C	846	ASP
1	C	867	LEU
1	C	960	ASP
1	C	980	ASP
1	C	1030	VAL
1	C	1032	PHE
1	D	138	LYS
1	D	141	ARG
1	D	147	ARG
1	D	166	LYS
1	D	167	ARG
1	D	169	THR
1	D	173	LEU
1	D	174	ILE
1	D	175	LYS
1	D	178	ARG
1	D	212	ASP
1	D	247	THR
1	D	256	LEU
1	D	267	VAL
1	D	274	ASP
1	D	284	ASN

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Mol	Chain	Res	Type
1	D	304	PHE
1	D	305	ASP
1	D	307	LEU
1	D	308	GLN
1	D	311	PHE
1	D	327	ARG
1	D	341	LEU
1	D	346	LEU
1	D	349	THR
1	D	350	THR
1	D	406	PHE
1	D	414	VAL
1	D	423	LYS
1	D	454	ARG
1	D	520	PHE
1	D	533	TYR
1	D	534	TYR
1	D	538	GLU
1	D	589	THR
1	D	596	LEU
1	D	602	GLN
1	D	624	GLN
1	D	641	ASP
1	D	643	VAL
1	D	644	GLN
1	D	647	MET
1	D	650	PHE
1	D	674	HIS
1	D	680	SER
1	D	687	MET
1	D	697	GLU
1	D	703	MET
1	D	707	VAL
1	D	708	LEU
1	D	739	THR
1	D	741	GLN
1	D	747	ASP
1	D	761	LEU
1	D	764	THR
1	D	765	LEU
1	D	766	GLN
1	D	784	HIS

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Mol	Chain	Res	Type
1	D	786	CYS
1	D	787	CYS
1	D	791	SER
1	D	793	VAL
1	D	810	LEU
1	D	817	LEU
1	D	841	SER
1	D	846	ASP
1	D	867	LEU
1	D	960	ASP
1	D	980	ASP
1	D	1030	VAL
1	D	1032	PHE
1	E	138	LYS
1	E	141	ARG
1	E	147	ARG
1	E	166	LYS
1	E	167	ARG
1	E	169	THR
1	E	173	LEU
1	E	174	ILE
1	E	175	LYS
1	E	178	ARG
1	E	212	ASP
1	E	247	THR
1	E	256	LEU
1	E	267	VAL
1	E	274	ASP
1	E	284	ASN
1	E	304	PHE
1	E	305	ASP
1	E	307	LEU
1	E	308	GLN
1	E	311	PHE
1	E	327	ARG
1	E	341	LEU
1	E	346	LEU
1	E	349	THR
1	E	350	THR
1	E	406	PHE
1	E	414	VAL
1	E	423	LYS

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Mol	Chain	Res	Type
1	E	454	ARG
1	E	520	PHE
1	E	533	TYR
1	E	534	TYR
1	E	538	GLU
1	E	589	THR
1	E	596	LEU
1	E	602	GLN
1	E	624	GLN
1	E	641	ASP
1	E	643	VAL
1	E	644	GLN
1	E	647	MET
1	E	650	PHE
1	E	674	HIS
1	E	680	SER
1	E	687	MET
1	E	697	GLU
1	E	703	MET
1	E	707	VAL
1	E	708	LEU
1	E	739	THR
1	E	741	GLN
1	E	747	ASP
1	E	761	LEU
1	E	764	THR
1	E	765	LEU
1	E	766	GLN
1	E	784	HIS
1	E	786	CYS
1	E	787	CYS
1	E	791	SER
1	E	793	VAL
1	E	810	LEU
1	E	817	LEU
1	E	841	SER
1	E	846	ASP
1	E	867	LEU
1	E	960	ASP
1	E	980	ASP
1	E	1030	VAL
1	E	1032	PHE

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Mol	Chain	Res	Type
1	F	138	LYS
1	F	141	ARG
1	F	147	ARG
1	F	166	LYS
1	F	167	ARG
1	F	169	THR
1	F	173	LEU
1	F	174	ILE
1	F	175	LYS
1	F	178	ARG
1	F	212	ASP
1	F	247	THR
1	F	256	LEU
1	F	267	VAL
1	F	274	ASP
1	F	284	ASN
1	F	304	PHE
1	F	305	ASP
1	F	307	LEU
1	F	308	GLN
1	F	311	PHE
1	F	327	ARG
1	F	341	LEU
1	F	346	LEU
1	F	349	THR
1	F	350	THR
1	F	406	PHE
1	F	414	VAL
1	F	423	LYS
1	F	454	ARG
1	F	520	PHE
1	F	533	TYR
1	F	534	TYR
1	F	538	GLU
1	F	589	THR
1	F	596	LEU
1	F	602	GLN
1	F	624	GLN
1	F	641	ASP
1	F	643	VAL
1	F	644	GLN
1	F	647	MET

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Mol	Chain	Res	Type
1	F	650	PHE
1	F	674	HIS
1	F	680	SER
1	F	687	MET
1	F	697	GLU
1	F	703	MET
1	F	707	VAL
1	F	708	LEU
1	F	739	THR
1	F	741	GLN
1	F	747	ASP
1	F	761	LEU
1	F	764	THR
1	F	765	LEU
1	F	766	GLN
1	F	784	HIS
1	F	786	CYS
1	F	787	CYS
1	F	791	SER
1	F	793	VAL
1	F	810	LEU
1	F	817	LEU
1	F	841	SER
1	F	846	ASP
1	F	867	LEU
1	F	960	ASP
1	F	980	ASP
1	F	1030	VAL
1	F	1032	PHE
1	G	138	LYS
1	G	141	ARG
1	G	147	ARG
1	G	166	LYS
1	G	167	ARG
1	G	169	THR
1	G	173	LEU
1	G	174	ILE
1	G	175	LYS
1	G	178	ARG
1	G	212	ASP
1	G	247	THR
1	G	256	LEU

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Mol	Chain	Res	Type
1	G	267	VAL
1	G	274	ASP
1	G	284	ASN
1	G	304	PHE
1	G	305	ASP
1	G	307	LEU
1	G	308	GLN
1	G	311	PHE
1	G	327	ARG
1	G	341	LEU
1	G	346	LEU
1	G	349	THR
1	G	350	THR
1	G	406	PHE
1	G	414	VAL
1	G	423	LYS
1	G	454	ARG
1	G	520	PHE
1	G	533	TYR
1	G	534	TYR
1	G	538	GLU
1	G	589	THR
1	G	596	LEU
1	G	602	GLN
1	G	624	GLN
1	G	641	ASP
1	G	643	VAL
1	G	644	GLN
1	G	647	MET
1	G	650	PHE
1	G	674	HIS
1	G	680	SER
1	G	687	MET
1	G	697	GLU
1	G	703	MET
1	G	707	VAL
1	G	708	LEU
1	G	739	THR
1	G	741	GLN
1	G	747	ASP
1	G	761	LEU
1	G	764	THR

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Mol	Chain	Res	Type
1	G	765	LEU
1	G	766	GLN
1	G	784	HIS
1	G	786	CYS
1	G	787	CYS
1	G	791	SER
1	G	793	VAL
1	G	810	LEU
1	G	817	LEU
1	G	841	SER
1	G	846	ASP
1	G	867	LEU
1	G	960	ASP
1	G	980	ASP
1	G	1030	VAL
1	G	1032	PHE
1	H	3	MET
1	H	23	LYS
1	H	27	MET
1	H	88	LYS
1	H	89	ARG
1	H	93	LYS
1	H	105	THR
1	H	106	VAL
1	H	112	SER
1	H	126	ARG
1	H	127	ILE
1	H	132	MET
1	H	134	LYS
1	H	138	LYS
1	H	141	ARG
1	H	147	ARG
1	H	166	LYS
1	H	167	ARG
1	H	169	THR
1	H	173	LEU
1	H	174	ILE
1	H	175	LYS
1	H	178	ARG
1	H	212	ASP
1	H	247	THR
1	H	256	LEU

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Mol	Chain	Res	Type
1	H	267	VAL
1	H	274	ASP
1	H	284	ASN
1	H	304	PHE
1	H	305	ASP
1	H	307	LEU
1	H	308	GLN
1	H	311	PHE
1	H	327	ARG
1	H	341	LEU
1	H	346	LEU
1	H	349	THR
1	H	350	THR
1	H	406	PHE
1	H	414	VAL
1	H	423	LYS
1	H	454	ARG
1	H	520	PHE
1	H	533	TYR
1	H	534	TYR
1	H	538	GLU
1	H	589	THR
1	H	596	LEU
1	H	602	GLN
1	H	624	GLN
1	H	641	ASP
1	H	643	VAL
1	H	644	GLN
1	H	647	MET
1	H	650	PHE
1	H	674	HIS
1	H	680	SER
1	H	687	MET
1	H	697	GLU
1	H	703	MET
1	H	707	VAL
1	H	708	LEU
1	H	739	THR
1	H	741	GLN
1	H	747	ASP
1	H	761	LEU
1	H	764	THR

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Mol	Chain	Res	Type
1	H	765	LEU
1	H	766	GLN
1	H	784	HIS
1	H	786	CYS
1	H	787	CYS
1	H	791	SER
1	H	793	VAL
1	H	810	LEU
1	H	817	LEU
1	H	841	SER
1	H	846	ASP
1	H	867	LEU
1	H	960	ASP
1	H	980	ASP
1	H	1030	VAL
1	H	1032	PHE
1	I	138	LYS
1	I	141	ARG
1	I	147	ARG
1	I	166	LYS
1	I	167	ARG
1	I	169	THR
1	I	173	LEU
1	I	174	ILE
1	I	175	LYS
1	I	178	ARG
1	I	212	ASP
1	I	247	THR
1	I	256	LEU
1	I	267	VAL
1	I	274	ASP
1	I	284	ASN
1	I	304	PHE
1	I	305	ASP
1	I	307	LEU
1	I	308	GLN
1	I	311	PHE
1	I	327	ARG
1	I	341	LEU
1	I	346	LEU
1	I	349	THR
1	I	350	THR

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Mol	Chain	Res	Type
1	I	406	PHE
1	I	414	VAL
1	I	423	LYS
1	I	454	ARG
1	I	520	PHE
1	I	533	TYR
1	I	534	TYR
1	I	538	GLU
1	I	589	THR
1	I	596	LEU
1	I	602	GLN
1	I	624	GLN
1	I	641	ASP
1	I	643	VAL
1	I	644	GLN
1	I	647	MET
1	I	650	PHE
1	I	674	HIS
1	I	680	SER
1	I	687	MET
1	I	697	GLU
1	I	703	MET
1	I	707	VAL
1	I	708	LEU
1	I	739	THR
1	I	741	GLN
1	I	747	ASP
1	I	761	LEU
1	I	764	THR
1	I	765	LEU
1	I	766	GLN
1	I	784	HIS
1	I	786	CYS
1	I	787	CYS
1	I	791	SER
1	I	793	VAL
1	I	810	LEU
1	I	817	LEU
1	I	841	SER
1	I	846	ASP
1	I	867	LEU
1	I	960	ASP

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Mol	Chain	Res	Type
1	I	980	ASP
1	I	1030	VAL
1	I	1032	PHE
1	J	138	LYS
1	J	141	ARG
1	J	147	ARG
1	J	166	LYS
1	J	167	ARG
1	J	169	THR
1	J	173	LEU
1	J	174	ILE
1	J	175	LYS
1	J	178	ARG
1	J	212	ASP
1	J	247	THR
1	J	256	LEU
1	J	267	VAL
1	J	274	ASP
1	J	284	ASN
1	J	304	PHE
1	J	305	ASP
1	J	307	LEU
1	J	308	GLN
1	J	311	PHE
1	J	327	ARG
1	J	341	LEU
1	J	346	LEU
1	J	349	THR
1	J	350	THR
1	J	406	PHE
1	J	414	VAL
1	J	423	LYS
1	J	454	ARG
1	J	520	PHE
1	J	533	TYR
1	J	534	TYR
1	J	538	GLU
1	J	589	THR
1	J	596	LEU
1	J	602	GLN
1	J	624	GLN
1	J	641	ASP

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Mol	Chain	Res	Type
1	J	643	VAL
1	J	644	GLN
1	J	647	MET
1	J	650	PHE
1	J	674	HIS
1	J	680	SER
1	J	687	MET
1	J	697	GLU
1	J	703	MET
1	J	707	VAL
1	J	708	LEU
1	J	739	THR
1	J	741	GLN
1	J	747	ASP
1	J	761	LEU
1	J	764	THR
1	J	765	LEU
1	J	766	GLN
1	J	784	HIS
1	J	786	CYS
1	J	787	CYS
1	J	791	SER
1	J	793	VAL
1	J	810	LEU
1	J	817	LEU
1	J	841	SER
1	J	846	ASP
1	J	867	LEU
1	J	960	ASP
1	J	980	ASP
1	J	1030	VAL
1	J	1032	PHE

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (64) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	103	ASN
1	A	479	ASN
1	A	545	ASN
1	A	638	GLN
1	A	808	ASN
1	A	828	ASN

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Mol	Chain	Res	Type
1	A	885	ASN
1	A	913	ASN
1	B	479	ASN
1	B	545	ASN
1	B	638	GLN
1	B	808	ASN
1	B	885	ASN
1	B	913	ASN
1	C	479	ASN
1	C	545	ASN
1	C	638	GLN
1	C	808	ASN
1	C	885	ASN
1	C	913	ASN
1	D	479	ASN
1	D	545	ASN
1	D	638	GLN
1	D	808	ASN
1	D	885	ASN
1	D	913	ASN
1	E	479	ASN
1	E	545	ASN
1	E	638	GLN
1	E	808	ASN
1	E	885	ASN
1	E	913	ASN
1	F	479	ASN
1	F	545	ASN
1	F	638	GLN
1	F	808	ASN
1	F	828	ASN
1	F	885	ASN
1	F	913	ASN
1	G	479	ASN
1	G	545	ASN
1	G	638	GLN
1	G	808	ASN
1	G	885	ASN
1	G	913	ASN
1	H	479	ASN
1	H	545	ASN
1	H	638	GLN

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Mol	Chain	Res	Type
1	H	808	ASN
1	H	885	ASN
1	H	913	ASN
1	I	479	ASN
1	I	545	ASN
1	I	638	GLN
1	I	808	ASN
1	I	828	ASN
1	I	885	ASN
1	I	913	ASN
1	J	479	ASN
1	J	545	ASN
1	J	638	GLN
1	J	808	ASN
1	J	885	ASN
1	J	913	ASN

5.3.3 RNA

There are no RNA molecules in this entry.

5.4 Non-standard residues in protein, DNA, RNA chains

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

5.5 Carbohydrates

There are no monosaccharides in this entry.

5.6 Ligand geometry

20 ligands are modelled in this entry.

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	$\#\|Z\|>2$
2	ADP	D	1101	-	24,29,29	0.93	1 (4%)	29,45,45	1.52	4 (13%)
2	ADP	C	1101	-	24,29,29	0.93	1 (4%)	29,45,45	1.52	4 (13%)
2	ADP	F	1101	-	24,29,29	0.94	1 (4%)	29,45,45	1.52	4 (13%)
3	8GI	J	1102	-	27,31,31	1.62	7 (25%)	33,48,48	3.04	9 (27%)
3	8GI	B	1102	-	27,31,31	1.62	7 (25%)	33,48,48	3.04	9 (27%)
2	ADP	E	1101	-	24,29,29	0.93	1 (4%)	29,45,45	1.52	4 (13%)
3	8GI	G	1102	-	27,31,31	1.61	7 (25%)	33,48,48	3.04	9 (27%)
2	ADP	I	1101	-	24,29,29	0.93	1 (4%)	29,45,45	1.52	4 (13%)
3	8GI	H	1102	-	27,31,31	1.61	7 (25%)	33,48,48	3.04	9 (27%)
3	8GI	A	1102	-	27,31,31	1.62	7 (25%)	33,48,48	3.05	9 (27%)
3	8GI	D	1102	-	27,31,31	1.62	7 (25%)	33,48,48	3.05	9 (27%)
2	ADP	J	1101	-	24,29,29	0.92	1 (4%)	29,45,45	1.52	4 (13%)
2	ADP	G	1101	-	24,29,29	0.93	1 (4%)	29,45,45	1.52	4 (13%)
3	8GI	F	1102	-	27,31,31	1.60	7 (25%)	33,48,48	3.04	9 (27%)
3	8GI	C	1102	-	27,31,31	1.62	7 (25%)	33,48,48	3.04	9 (27%)
2	ADP	A	1101	-	24,29,29	0.93	1 (4%)	29,45,45	1.53	4 (13%)
2	ADP	H	1101	-	24,29,29	0.93	1 (4%)	29,45,45	1.53	4 (13%)
3	8GI	E	1102	-	27,31,31	1.62	7 (25%)	33,48,48	3.04	9 (27%)
3	8GI	I	1102	-	27,31,31	1.62	7 (25%)	33,48,48	3.04	9 (27%)
2	ADP	B	1101	-	24,29,29	0.94	1 (4%)	29,45,45	1.52	4 (13%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
2	ADP	D	1101	-	-	3/12/32/32	0/3/3/3
2	ADP	C	1101	-	-	2/12/32/32	0/3/3/3
2	ADP	F	1101	-	-	3/12/32/32	0/3/3/3
3	8GI	J	1102	-	-	1/11/33/33	0/4/4/4
3	8GI	B	1102	-	-	1/11/33/33	0/4/4/4
2	ADP	E	1101	-	-	2/12/32/32	0/3/3/3
3	8GI	G	1102	-	-	1/11/33/33	0/4/4/4
2	ADP	I	1101	-	-	2/12/32/32	0/3/3/3
3	8GI	H	1102	-	-	1/11/33/33	0/4/4/4
3	8GI	A	1102	-	-	1/11/33/33	0/4/4/4

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
3	8GI	D	1102	-	-	1/11/33/33	0/4/4/4
2	ADP	J	1101	-	-	3/12/32/32	0/3/3/3
2	ADP	G	1101	-	-	2/12/32/32	0/3/3/3
3	8GI	F	1102	-	-	1/11/33/33	0/4/4/4
3	8GI	C	1102	-	-	1/11/33/33	0/4/4/4
2	ADP	A	1101	-	-	2/12/32/32	0/3/3/3
2	ADP	H	1101	-	-	3/12/32/32	0/3/3/3
3	8GI	E	1102	-	-	1/11/33/33	0/4/4/4
3	8GI	I	1102	-	-	1/11/33/33	0/4/4/4
2	ADP	B	1101	-	-	3/12/32/32	0/3/3/3

All (80) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A	1102	8GI	O24-C22	-3.62	1.39	1.44
3	C	1102	8GI	O24-C22	-3.61	1.39	1.44
3	D	1102	8GI	O24-C22	-3.60	1.39	1.44
3	J	1102	8GI	O24-C22	-3.59	1.39	1.44
3	G	1102	8GI	O24-C22	-3.59	1.39	1.44
3	I	1102	8GI	O24-C22	-3.59	1.39	1.44
3	H	1102	8GI	O24-C22	-3.58	1.39	1.44
3	F	1102	8GI	O24-C22	-3.57	1.39	1.44
3	B	1102	8GI	O24-C22	-3.57	1.39	1.44
3	E	1102	8GI	O24-C22	-3.54	1.39	1.44
3	B	1102	8GI	C17-C13	3.34	1.56	1.51
3	E	1102	8GI	C17-C13	3.33	1.56	1.51
3	I	1102	8GI	C17-C13	3.32	1.56	1.51
3	C	1102	8GI	C17-C13	3.31	1.56	1.51
3	J	1102	8GI	C17-C13	3.31	1.56	1.51
3	A	1102	8GI	C17-C13	3.30	1.56	1.51
3	D	1102	8GI	C17-C13	3.27	1.55	1.51
3	G	1102	8GI	C17-C13	3.26	1.55	1.51
3	H	1102	8GI	C17-C13	3.25	1.55	1.51
3	F	1102	8GI	C17-C13	3.24	1.55	1.51
3	E	1102	8GI	O18-C04	-3.16	1.16	1.23
3	B	1102	8GI	O18-C04	-3.14	1.16	1.23
3	C	1102	8GI	O18-C04	-3.13	1.16	1.23
3	I	1102	8GI	O18-C04	-3.13	1.16	1.23
3	F	1102	8GI	O18-C04	-3.13	1.16	1.23
3	J	1102	8GI	O18-C04	-3.12	1.16	1.23
3	G	1102	8GI	O18-C04	-3.12	1.16	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	H	1102	8GI	O18-C04	-3.12	1.16	1.23
3	D	1102	8GI	O18-C04	-3.11	1.16	1.23
3	A	1102	8GI	O18-C04	-3.11	1.16	1.23
3	E	1102	8GI	C04-N05	3.09	1.43	1.37
3	I	1102	8GI	C04-N05	3.09	1.43	1.37
3	D	1102	8GI	C04-N05	3.08	1.43	1.37
3	A	1102	8GI	C04-N05	3.07	1.43	1.37
3	G	1102	8GI	C04-N05	3.07	1.43	1.37
3	J	1102	8GI	C04-N05	3.06	1.43	1.37
3	H	1102	8GI	C04-N05	3.05	1.43	1.37
3	B	1102	8GI	C04-N05	3.05	1.43	1.37
3	C	1102	8GI	C04-N05	3.04	1.43	1.37
3	F	1102	8GI	C04-N05	3.01	1.43	1.37
2	F	1101	ADP	C5-C4	2.44	1.47	1.40
2	E	1101	ADP	C5-C4	2.43	1.47	1.40
2	A	1101	ADP	C5-C4	2.43	1.47	1.40
2	I	1101	ADP	C5-C4	2.42	1.47	1.40
2	H	1101	ADP	C5-C4	2.41	1.47	1.40
2	G	1101	ADP	C5-C4	2.41	1.47	1.40
2	J	1101	ADP	C5-C4	2.41	1.47	1.40
2	D	1101	ADP	C5-C4	2.40	1.47	1.40
2	C	1101	ADP	C5-C4	2.40	1.47	1.40
2	B	1101	ADP	C5-C4	2.40	1.47	1.40
3	H	1102	8GI	O01-S02	2.28	1.46	1.43
3	D	1102	8GI	O01-S02	2.25	1.46	1.43
3	D	1102	8GI	C19-S02	2.25	1.80	1.76
3	J	1102	8GI	C19-S02	2.25	1.80	1.76
3	B	1102	8GI	C19-S02	2.24	1.80	1.76
3	I	1102	8GI	O01-S02	2.24	1.46	1.43
3	C	1102	8GI	O01-S02	2.23	1.46	1.43
3	E	1102	8GI	C19-S02	2.22	1.80	1.76
3	G	1102	8GI	O01-S02	2.22	1.46	1.43
3	G	1102	8GI	C19-S02	2.22	1.80	1.76
3	C	1102	8GI	C19-S02	2.22	1.80	1.76
3	A	1102	8GI	O01-S02	2.21	1.46	1.43
3	F	1102	8GI	C19-S02	2.21	1.80	1.76
3	E	1102	8GI	O28-S02	2.20	1.46	1.43
3	J	1102	8GI	O01-S02	2.20	1.46	1.43
3	B	1102	8GI	O01-S02	2.19	1.46	1.43
3	H	1102	8GI	C19-S02	2.19	1.80	1.76
3	F	1102	8GI	O01-S02	2.19	1.46	1.43
3	G	1102	8GI	O28-S02	2.18	1.46	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A	1102	8GI	C19-S02	2.18	1.80	1.76
3	I	1102	8GI	C19-S02	2.18	1.80	1.76
3	E	1102	8GI	O01-S02	2.17	1.46	1.43
3	I	1102	8GI	O28-S02	2.16	1.46	1.43
3	A	1102	8GI	O28-S02	2.15	1.46	1.43
3	D	1102	8GI	O28-S02	2.14	1.46	1.43
3	F	1102	8GI	O28-S02	2.14	1.45	1.43
3	C	1102	8GI	O28-S02	2.13	1.45	1.43
3	J	1102	8GI	O28-S02	2.12	1.45	1.43
3	B	1102	8GI	O28-S02	2.12	1.45	1.43
3	H	1102	8GI	O28-S02	2.07	1.45	1.43

All (130) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A	1102	8GI	O28-S02-O01	-14.23	102.06	119.55
3	G	1102	8GI	O28-S02-O01	-14.19	102.10	119.55
3	E	1102	8GI	O28-S02-O01	-14.19	102.10	119.55
3	D	1102	8GI	O28-S02-O01	-14.19	102.11	119.55
3	F	1102	8GI	O28-S02-O01	-14.18	102.12	119.55
3	I	1102	8GI	O28-S02-O01	-14.18	102.12	119.55
3	C	1102	8GI	O28-S02-O01	-14.18	102.12	119.55
3	H	1102	8GI	O28-S02-O01	-14.18	102.12	119.55
3	B	1102	8GI	O28-S02-O01	-14.18	102.12	119.55
3	J	1102	8GI	O28-S02-O01	-14.18	102.12	119.55
3	E	1102	8GI	C06-N05-C04	-4.81	114.71	121.82
3	I	1102	8GI	C06-N05-C04	-4.78	114.76	121.82
3	A	1102	8GI	C06-N05-C04	-4.77	114.76	121.82
3	J	1102	8GI	C06-N05-C04	-4.77	114.76	121.82
3	F	1102	8GI	C06-N05-C04	-4.77	114.77	121.82
3	D	1102	8GI	C06-N05-C04	-4.77	114.77	121.82
3	B	1102	8GI	C06-N05-C04	-4.77	114.77	121.82
3	H	1102	8GI	C06-N05-C04	-4.77	114.77	121.82
3	G	1102	8GI	C06-N05-C04	-4.76	114.78	121.82
3	C	1102	8GI	C06-N05-C04	-4.76	114.79	121.82
2	A	1101	ADP	PA-O3A-PB	-3.99	119.14	132.83
2	F	1101	ADP	PA-O3A-PB	-3.99	119.14	132.83
2	I	1101	ADP	PA-O3A-PB	-3.98	119.17	132.83
2	E	1101	ADP	PA-O3A-PB	-3.97	119.19	132.83
2	G	1101	ADP	PA-O3A-PB	-3.97	119.19	132.83
2	B	1101	ADP	PA-O3A-PB	-3.97	119.19	132.83
2	C	1101	ADP	PA-O3A-PB	-3.97	119.19	132.83

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	H	1101	ADP	PA-O3A-PB	-3.97	119.20	132.83
2	D	1101	ADP	PA-O3A-PB	-3.97	119.22	132.83
2	J	1101	ADP	PA-O3A-PB	-3.96	119.22	132.83
3	E	1102	8GI	O01-S02-C19	3.68	113.72	107.66
3	A	1102	8GI	O01-S02-C19	3.68	113.71	107.66
3	D	1102	8GI	O01-S02-C19	3.67	113.71	107.66
3	F	1102	8GI	O01-S02-C19	3.67	113.70	107.66
3	G	1102	8GI	O01-S02-C19	3.67	113.70	107.66
3	B	1102	8GI	O01-S02-C19	3.67	113.70	107.66
3	I	1102	8GI	O01-S02-C19	3.66	113.69	107.66
3	H	1102	8GI	O01-S02-C19	3.66	113.68	107.66
3	C	1102	8GI	O01-S02-C19	3.65	113.67	107.66
3	J	1102	8GI	O01-S02-C19	3.65	113.67	107.66
2	B	1101	ADP	C3'-C2'-C1'	3.47	106.20	100.98
2	A	1101	ADP	C3'-C2'-C1'	3.46	106.18	100.98
2	D	1101	ADP	C3'-C2'-C1'	3.45	106.18	100.98
2	G	1101	ADP	C3'-C2'-C1'	3.45	106.17	100.98
2	H	1101	ADP	C3'-C2'-C1'	3.45	106.17	100.98
2	E	1101	ADP	C3'-C2'-C1'	3.44	106.16	100.98
2	I	1101	ADP	C3'-C2'-C1'	3.44	106.16	100.98
2	C	1101	ADP	C3'-C2'-C1'	3.44	106.16	100.98
2	J	1101	ADP	C3'-C2'-C1'	3.42	106.13	100.98
2	F	1101	ADP	C3'-C2'-C1'	3.42	106.12	100.98
2	H	1101	ADP	N3-C2-N1	-3.03	123.94	128.68
2	A	1101	ADP	N3-C2-N1	-3.03	123.95	128.68
2	D	1101	ADP	N3-C2-N1	-3.03	123.95	128.68
2	G	1101	ADP	N3-C2-N1	-3.02	123.95	128.68
2	B	1101	ADP	N3-C2-N1	-3.02	123.96	128.68
2	C	1101	ADP	N3-C2-N1	-3.02	123.96	128.68
2	I	1101	ADP	N3-C2-N1	-3.02	123.96	128.68
2	F	1101	ADP	N3-C2-N1	-3.01	123.97	128.68
2	E	1101	ADP	N3-C2-N1	-3.01	123.97	128.68
2	J	1101	ADP	N3-C2-N1	-3.00	123.99	128.68
3	I	1102	8GI	C16-C15-C14	2.87	107.31	103.52
3	C	1102	8GI	C16-C15-C14	2.86	107.28	103.52
3	H	1102	8GI	C16-C15-C14	2.85	107.28	103.52
3	D	1102	8GI	C16-C15-C14	2.85	107.27	103.52
3	J	1102	8GI	C16-C15-C14	2.84	107.27	103.52
3	E	1102	8GI	C16-C15-C14	2.84	107.26	103.52
3	A	1102	8GI	C16-C15-C14	2.83	107.25	103.52
3	G	1102	8GI	C16-C15-C14	2.83	107.25	103.52
3	B	1102	8GI	C16-C15-C14	2.83	107.25	103.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	F	1102	8GI	C16-C15-C14	2.82	107.23	103.52
2	H	1101	ADP	C4-C5-N7	-2.78	106.50	109.40
2	A	1101	ADP	C4-C5-N7	-2.78	106.51	109.40
2	G	1101	ADP	C4-C5-N7	-2.75	106.53	109.40
2	E	1101	ADP	C4-C5-N7	-2.74	106.54	109.40
2	C	1101	ADP	C4-C5-N7	-2.74	106.55	109.40
2	J	1101	ADP	C4-C5-N7	-2.73	106.55	109.40
2	I	1101	ADP	C4-C5-N7	-2.73	106.56	109.40
2	F	1101	ADP	C4-C5-N7	-2.73	106.56	109.40
3	I	1102	8GI	C15-C14-C13	-2.72	107.81	110.70
3	J	1102	8GI	C15-C14-C13	-2.72	107.81	110.70
2	B	1101	ADP	C4-C5-N7	-2.72	106.56	109.40
2	D	1101	ADP	C4-C5-N7	-2.70	106.58	109.40
3	A	1102	8GI	C15-C14-C13	-2.70	107.84	110.70
3	H	1102	8GI	C15-C14-C13	-2.70	107.84	110.70
3	A	1102	8GI	N03-C04-N05	2.69	118.50	114.93
3	D	1102	8GI	N03-C04-N05	2.68	118.48	114.93
3	I	1102	8GI	N03-C04-N05	2.68	118.48	114.93
3	H	1102	8GI	N03-C04-N05	2.68	118.47	114.93
3	C	1102	8GI	N03-C04-N05	2.67	118.47	114.93
3	G	1102	8GI	N03-C04-N05	2.67	118.47	114.93
3	B	1102	8GI	C15-C14-C13	-2.67	107.86	110.70
3	D	1102	8GI	C15-C14-C13	-2.67	107.87	110.70
3	F	1102	8GI	C15-C14-C13	-2.67	107.87	110.70
3	G	1102	8GI	C15-C14-C13	-2.67	107.87	110.70
3	E	1102	8GI	C15-C14-C13	-2.66	107.88	110.70
3	B	1102	8GI	N03-C04-N05	2.66	118.45	114.93
3	F	1102	8GI	N03-C04-N05	2.66	118.45	114.93
3	J	1102	8GI	N03-C04-N05	2.66	118.45	114.93
3	C	1102	8GI	C15-C14-C13	-2.64	107.89	110.70
3	E	1102	8GI	N03-C04-N05	2.62	118.41	114.93
3	D	1102	8GI	C17-C13-C14	-2.42	108.20	110.28
3	C	1102	8GI	C17-C13-C14	-2.40	108.21	110.28
3	B	1102	8GI	C17-C13-C14	-2.38	108.23	110.28
3	E	1102	8GI	C17-C13-C14	-2.38	108.23	110.28
3	G	1102	8GI	C17-C13-C14	-2.37	108.24	110.28
3	F	1102	8GI	C17-C13-C14	-2.36	108.25	110.28
3	H	1102	8GI	C17-C13-C14	-2.36	108.25	110.28
3	J	1102	8GI	C12-C13-C14	-2.35	118.82	120.50
3	H	1102	8GI	C12-C13-C14	-2.35	118.82	120.50
3	F	1102	8GI	C12-C13-C14	-2.35	118.83	120.50
3	D	1102	8GI	C12-C13-C14	-2.34	118.83	120.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	I	1102	8GI	C12-C13-C14	-2.34	118.83	120.50
3	J	1102	8GI	C17-C13-C14	-2.34	108.27	110.28
3	A	1102	8GI	C17-C13-C14	-2.32	108.28	110.28
3	A	1102	8GI	C12-C13-C14	-2.32	118.85	120.50
3	I	1102	8GI	C17-C13-C14	-2.32	108.28	110.28
3	E	1102	8GI	C12-C13-C14	-2.31	118.85	120.50
3	G	1102	8GI	C12-C13-C14	-2.29	118.87	120.50
3	C	1102	8GI	C12-C13-C14	-2.28	118.87	120.50
3	B	1102	8GI	C12-C13-C14	-2.26	118.89	120.50
3	D	1102	8GI	C17-C13-C12	2.18	132.96	129.41
3	H	1102	8GI	C17-C13-C12	2.15	132.92	129.41
3	F	1102	8GI	C17-C13-C12	2.15	132.92	129.41
3	C	1102	8GI	C17-C13-C12	2.14	132.91	129.41
3	J	1102	8GI	C17-C13-C12	2.14	132.91	129.41
3	E	1102	8GI	C17-C13-C12	2.14	132.91	129.41
3	G	1102	8GI	C17-C13-C12	2.13	132.89	129.41
3	B	1102	8GI	C17-C13-C12	2.12	132.88	129.41
3	I	1102	8GI	C17-C13-C12	2.12	132.88	129.41
3	A	1102	8GI	C17-C13-C12	2.12	132.87	129.41

There are no chirality outliers.

All (35) torsion outliers are listed below:

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

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Mol	Chain	Res	Type	Atoms
2	I	1101	ADP	O4'-C4'-C5'-O5'
2	J	1101	ADP	O4'-C4'-C5'-O5'
3	A	1102	8GI	C04-N03-S02-O01
3	B	1102	8GI	C04-N03-S02-O01
3	C	1102	8GI	C04-N03-S02-O01
3	D	1102	8GI	C04-N03-S02-O01
3	E	1102	8GI	C04-N03-S02-O01
3	F	1102	8GI	C04-N03-S02-O01
3	G	1102	8GI	C04-N03-S02-O01
3	H	1102	8GI	C04-N03-S02-O01
3	I	1102	8GI	C04-N03-S02-O01
3	J	1102	8GI	C04-N03-S02-O01
2	B	1101	ADP	C5'-O5'-PA-O1A
2	D	1101	ADP	C5'-O5'-PA-O1A
2	F	1101	ADP	C5'-O5'-PA-O1A
2	H	1101	ADP	C5'-O5'-PA-O1A
2	J	1101	ADP	C5'-O5'-PA-O1A

There are no ring outliers.

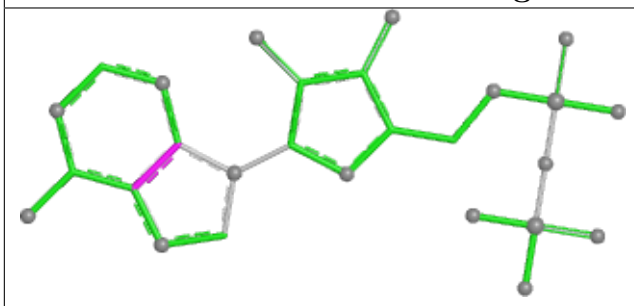
10 monomers are involved in 20 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
2	D	1101	ADP	2	0
2	C	1101	ADP	2	0
2	F	1101	ADP	2	0
2	E	1101	ADP	2	0
2	I	1101	ADP	2	0
2	J	1101	ADP	2	0
2	G	1101	ADP	2	0
2	A	1101	ADP	2	0
2	H	1101	ADP	2	0
2	B	1101	ADP	2	0

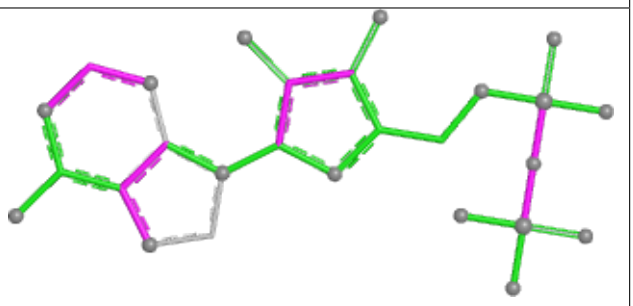
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less then 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.

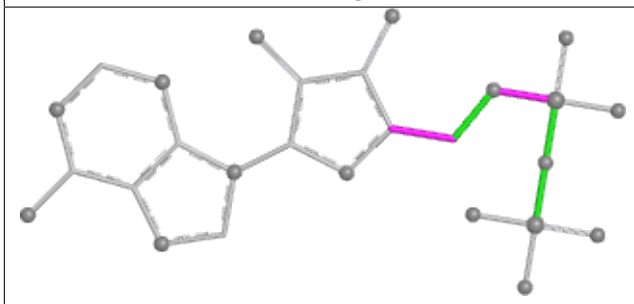
Ligand ADP D 1101



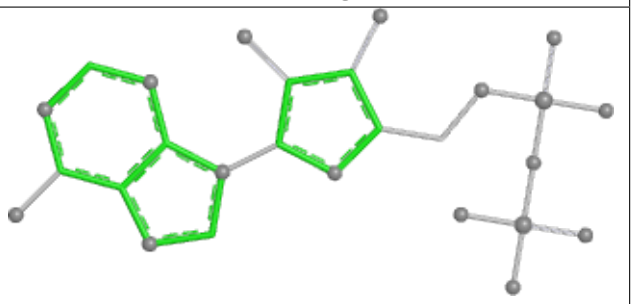
Bond lengths



Bond angles

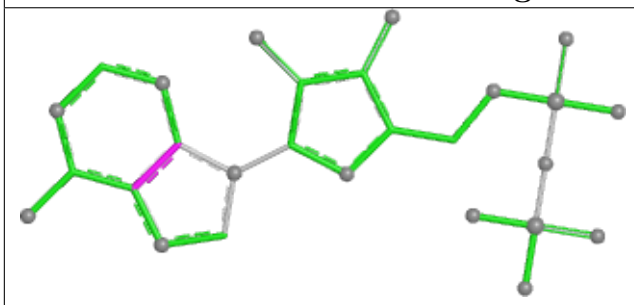


Torsions

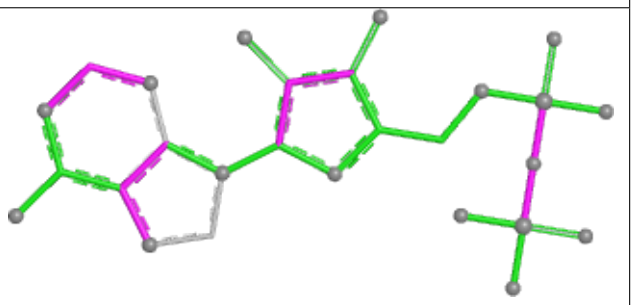


Rings

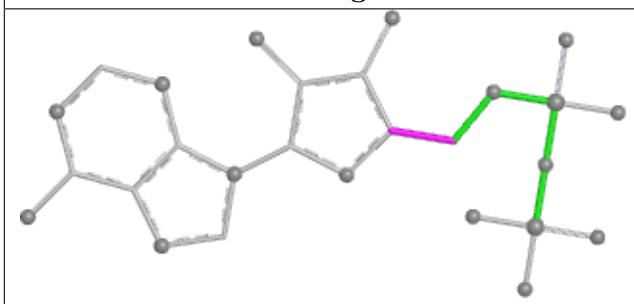
Ligand ADP C 1101



Bond lengths



Bond angles



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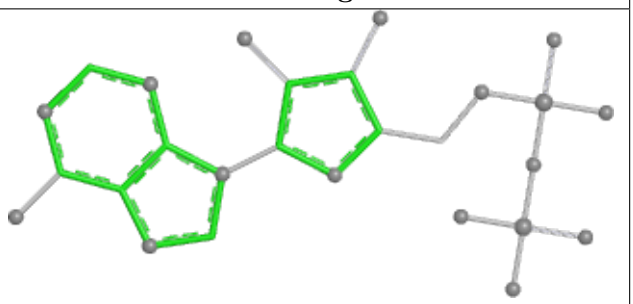

Rings

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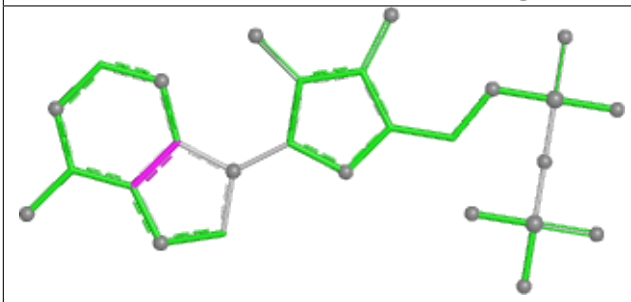
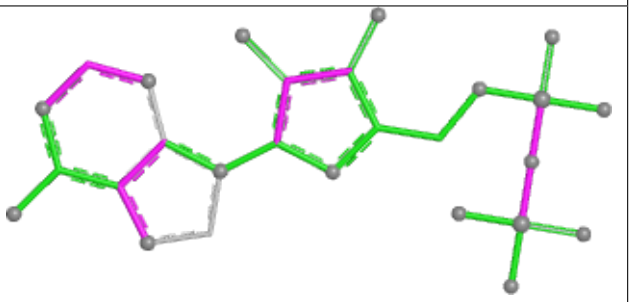
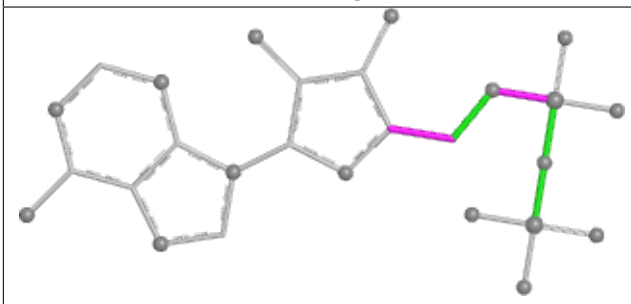
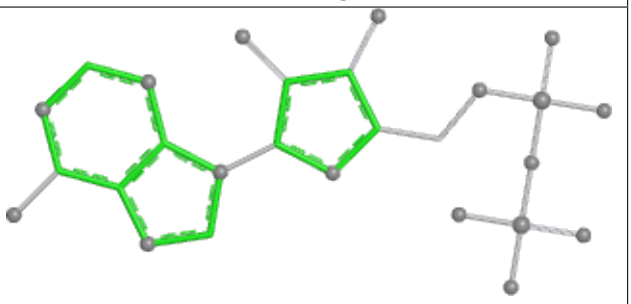
 Bond lengths	 Bond angles
 Torsions	 Rings

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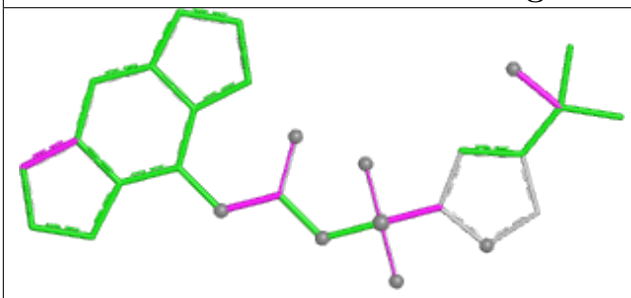
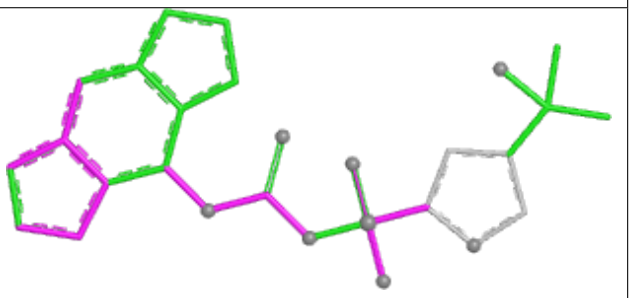
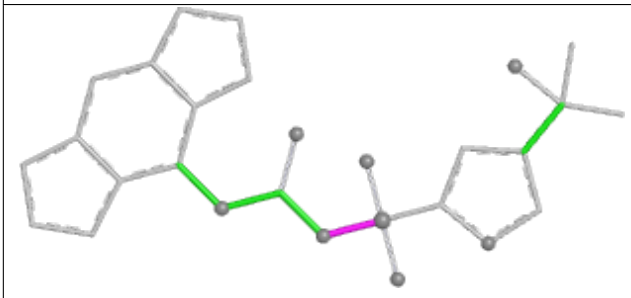
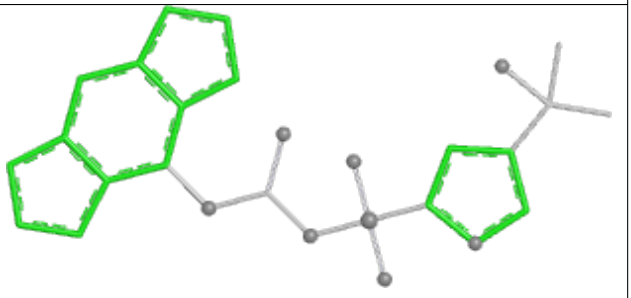
 Bond lengths	 Bond angles
 Torsions	 Rings

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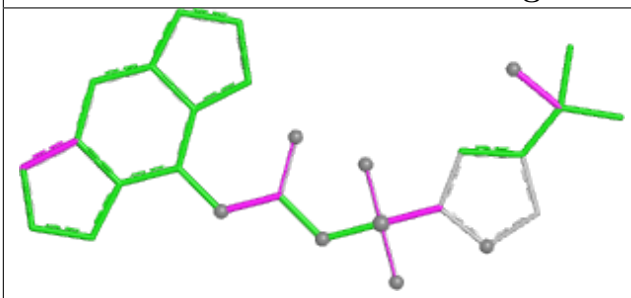
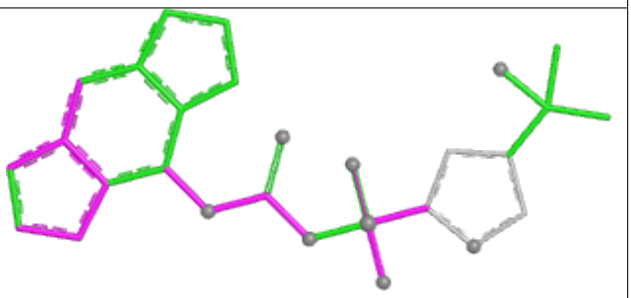
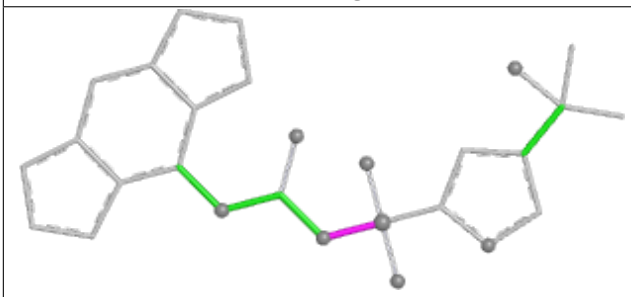
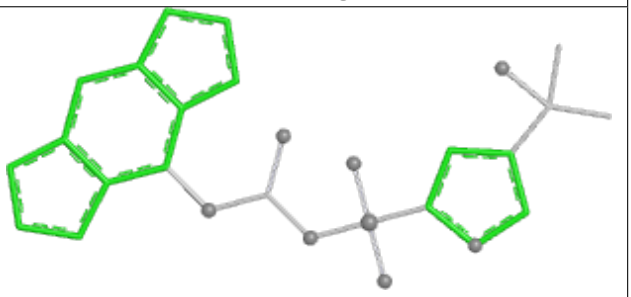
 Bond lengths	 Bond angles
 Torsions	 Rings

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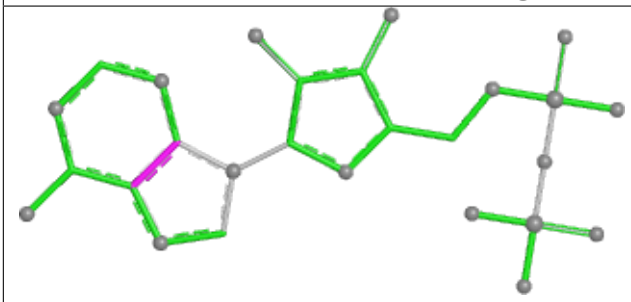
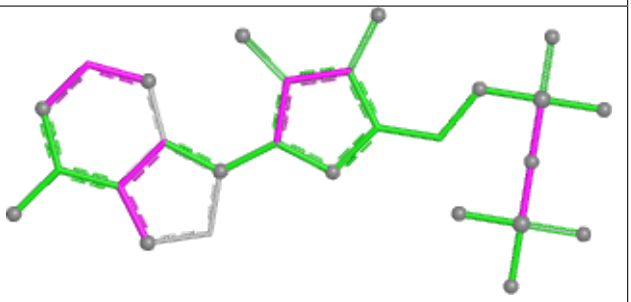
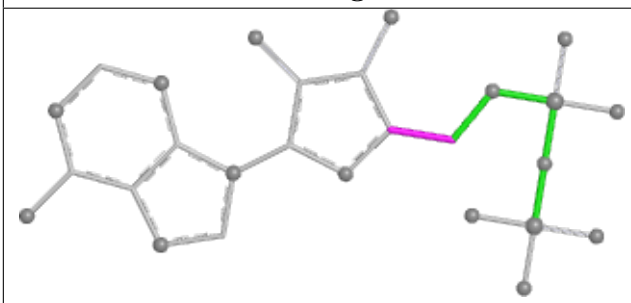
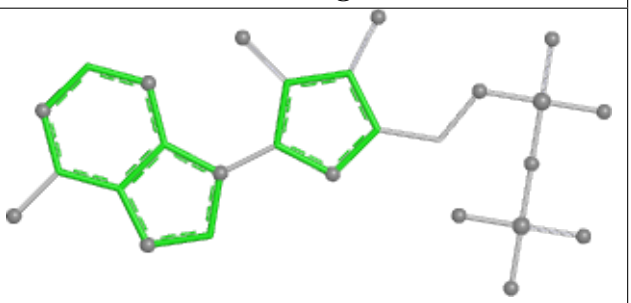
 Bond lengths	 Bond angles
 Torsions	 Rings

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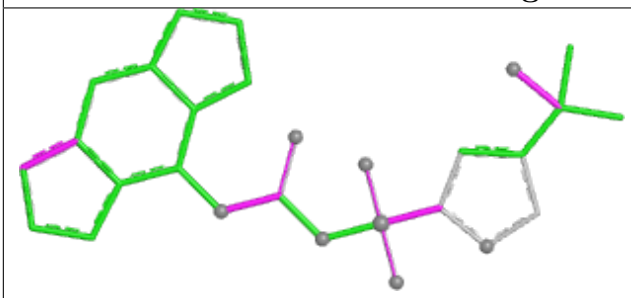
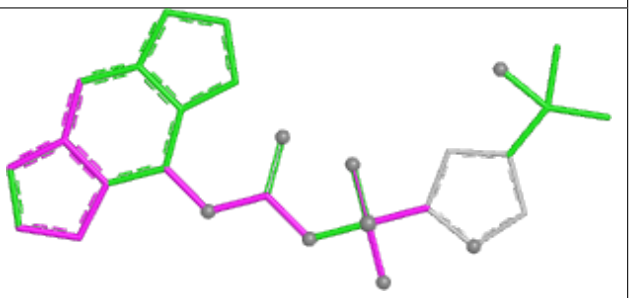
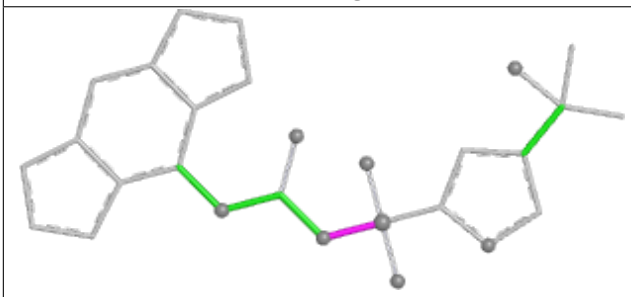
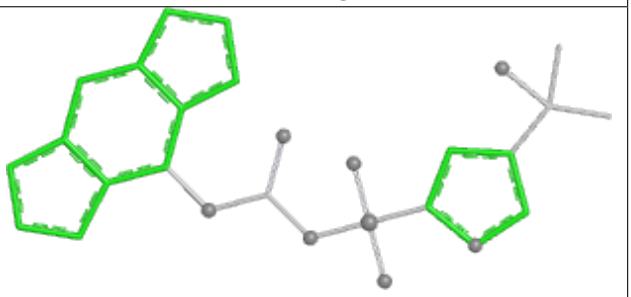
 Bond lengths	 Bond angles
 Torsions	 Rings

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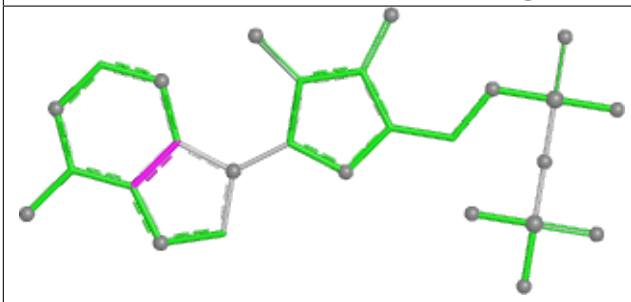
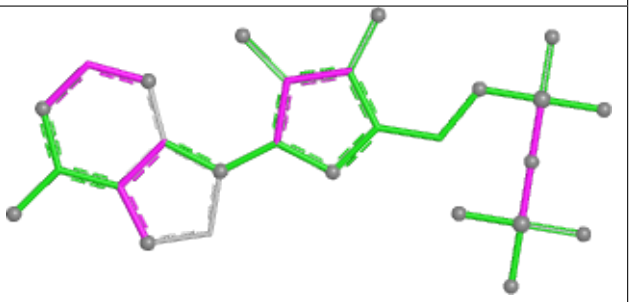
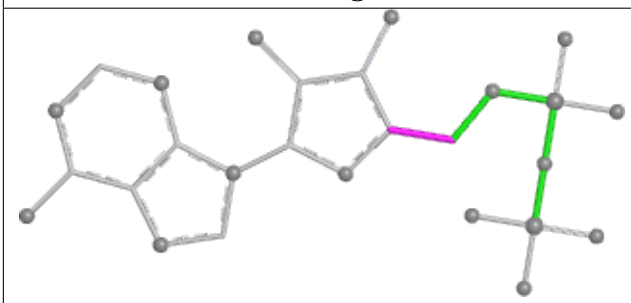
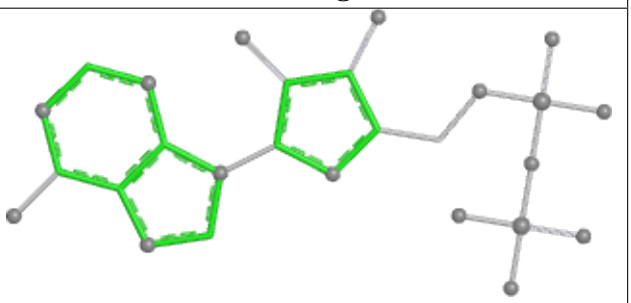
 Bond lengths	 Bond angles
 Torsions	 Rings

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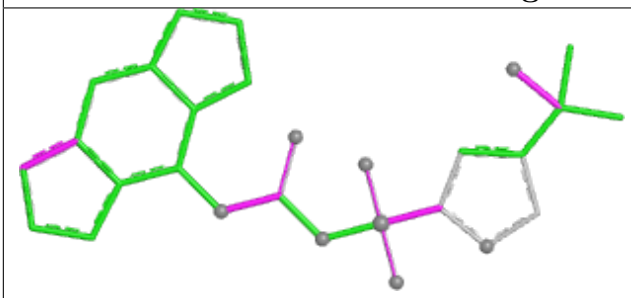
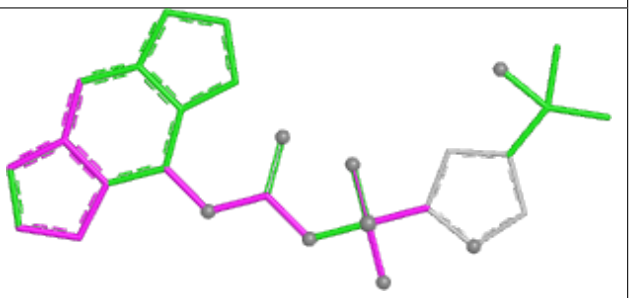
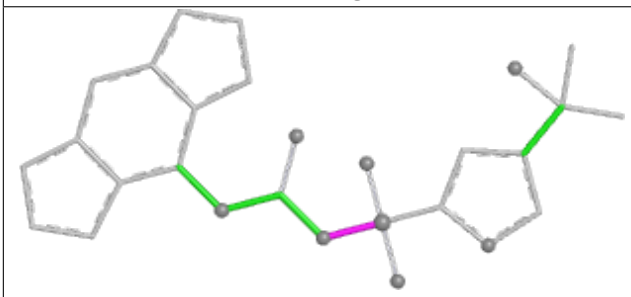
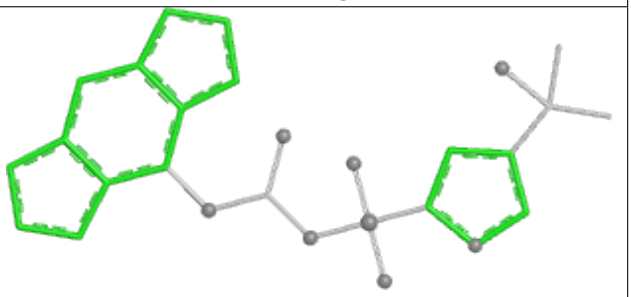
	
Bond lengths	Bond angles
	
Torsions	Rings

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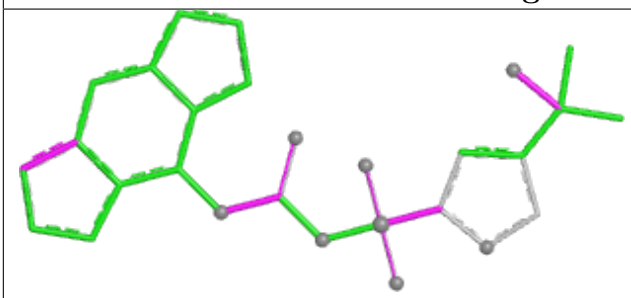
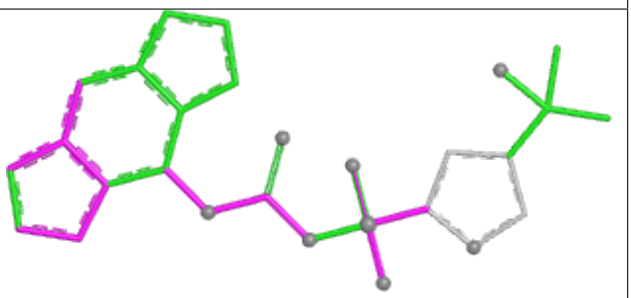
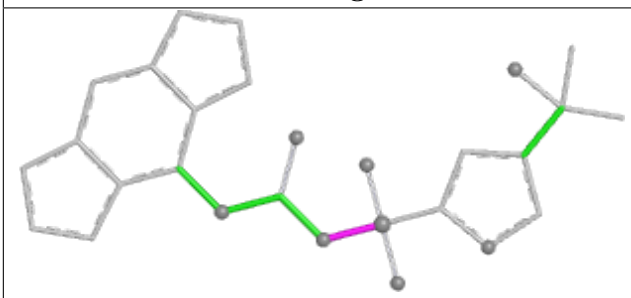
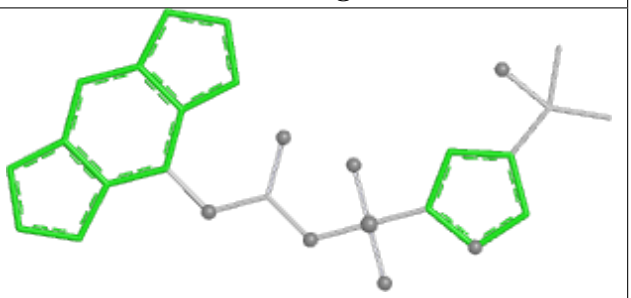
	
Bond lengths	Bond angles
	
Torsions	Rings

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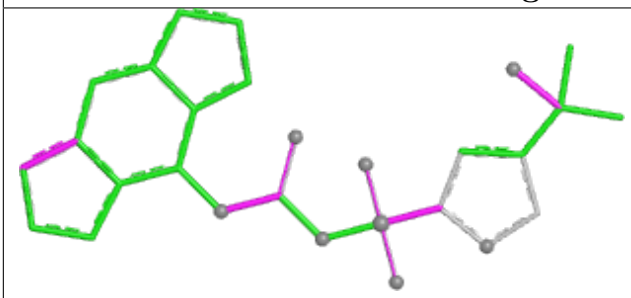
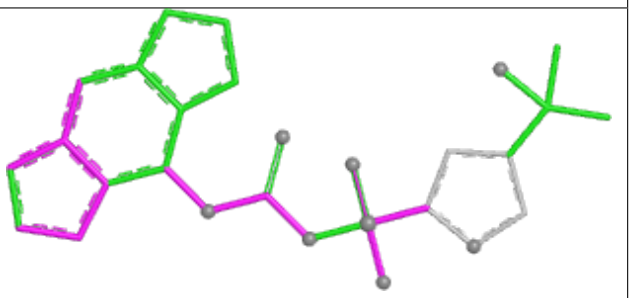
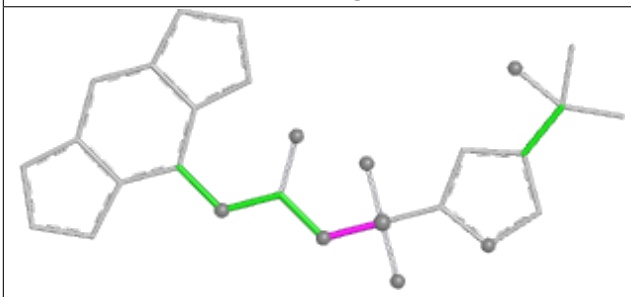
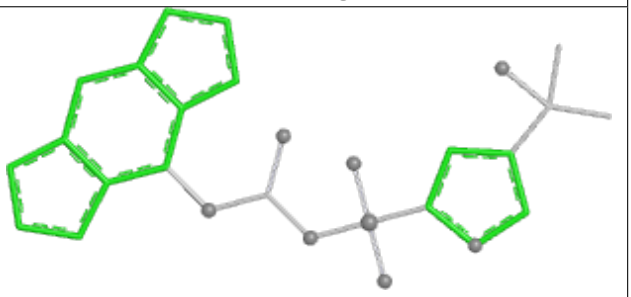
	
Bond lengths	Bond angles
	
Torsions	Rings

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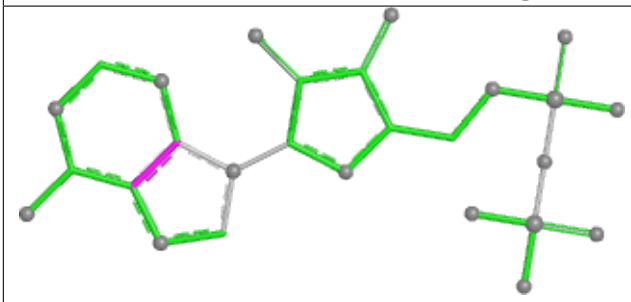
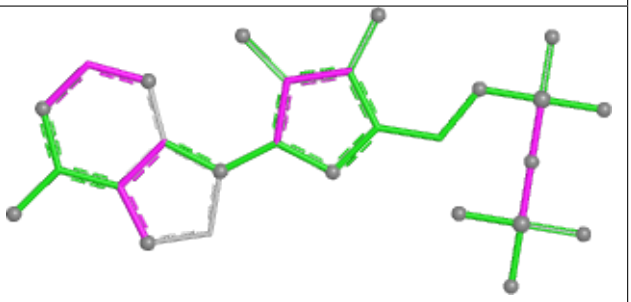
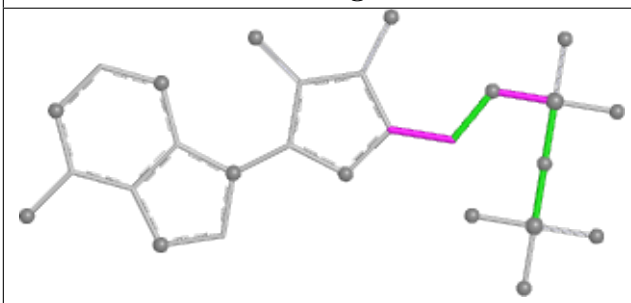
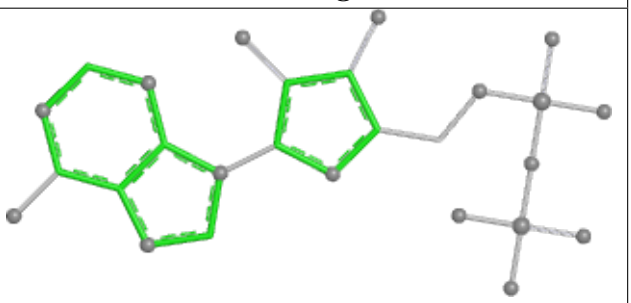
	
Bond lengths	Bond angles
	
Torsions	Rings

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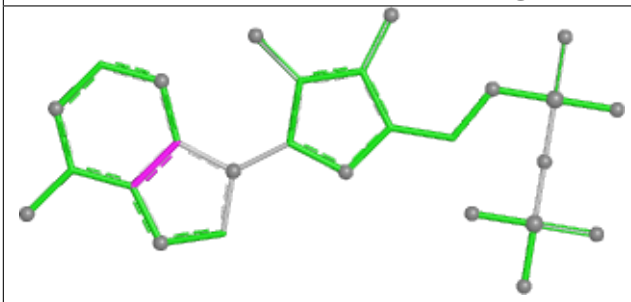
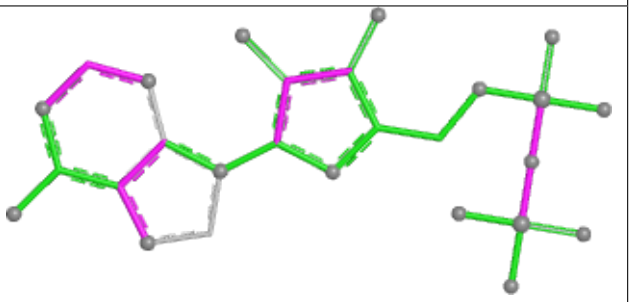
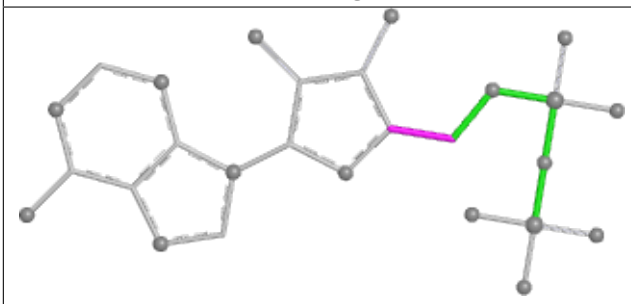
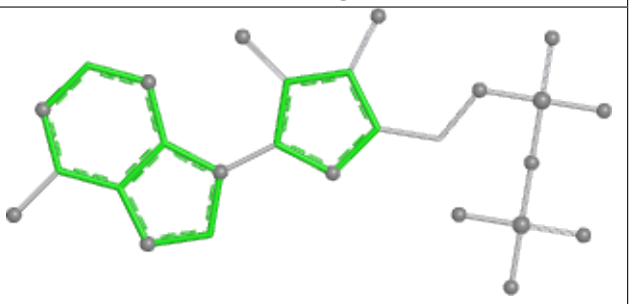
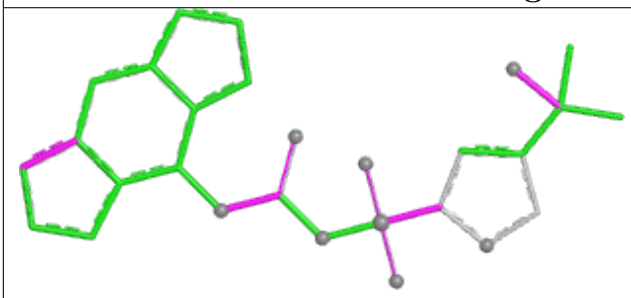
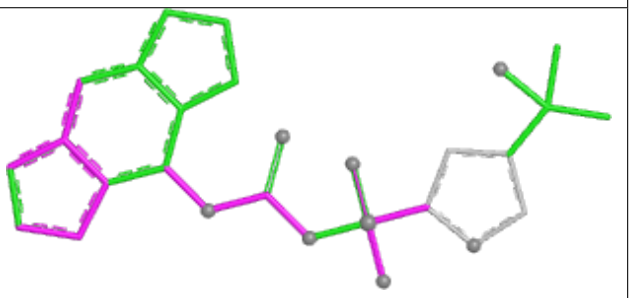
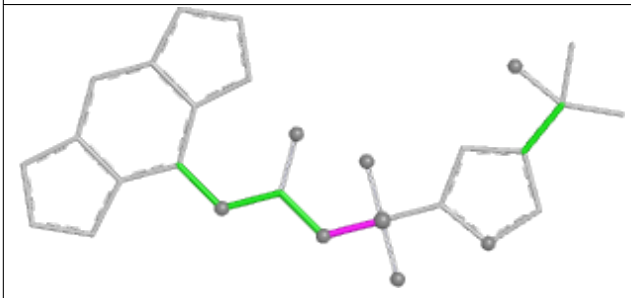
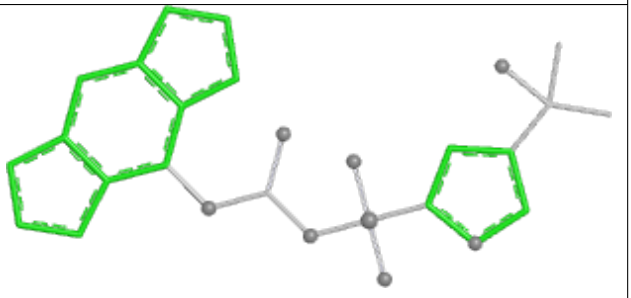
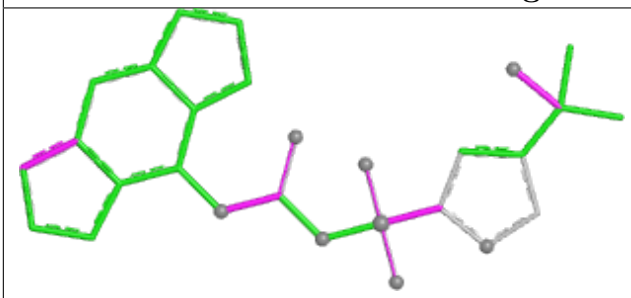
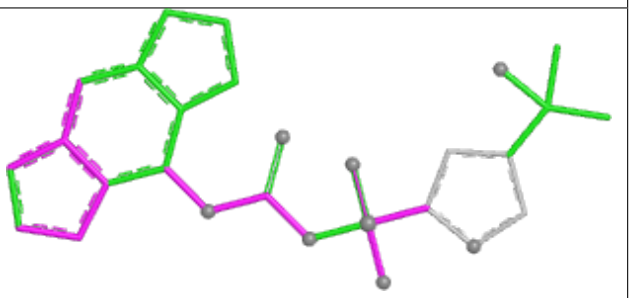
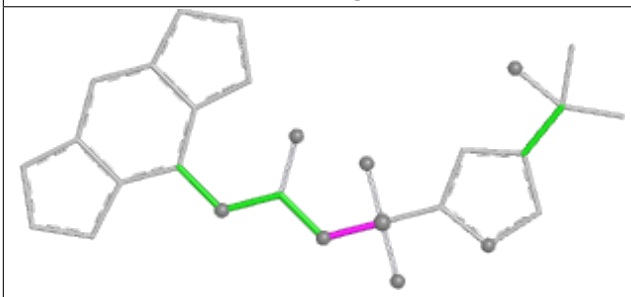
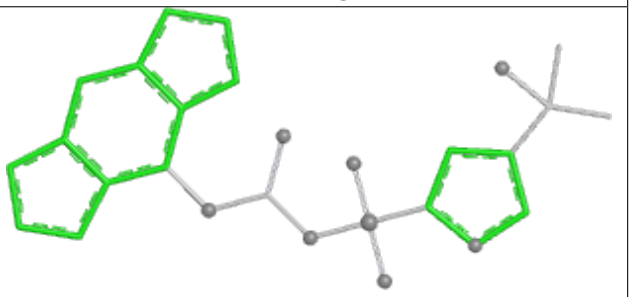
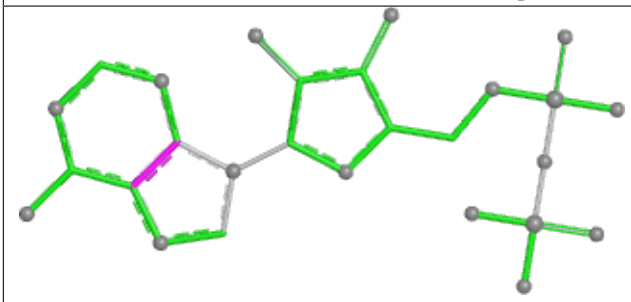
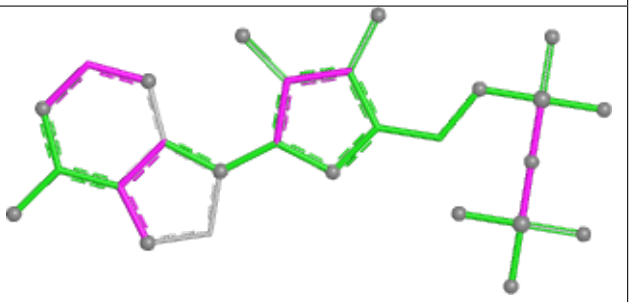
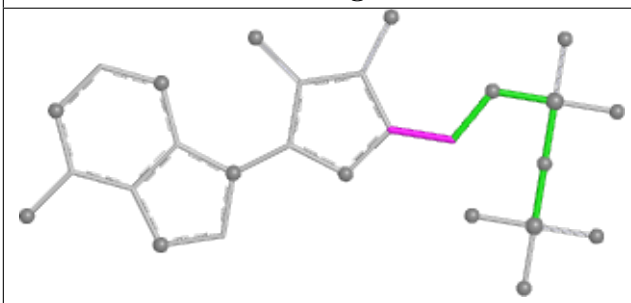
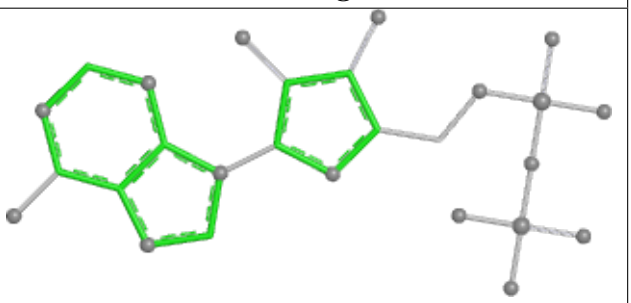
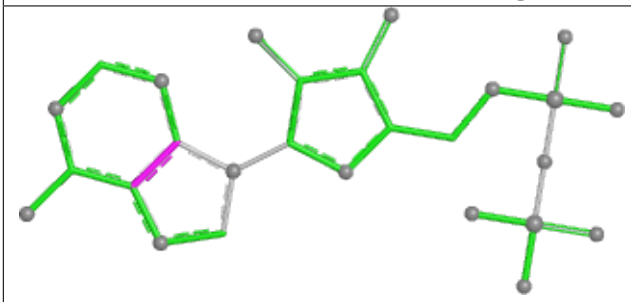
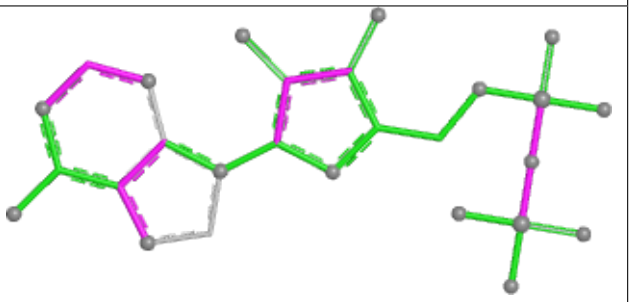
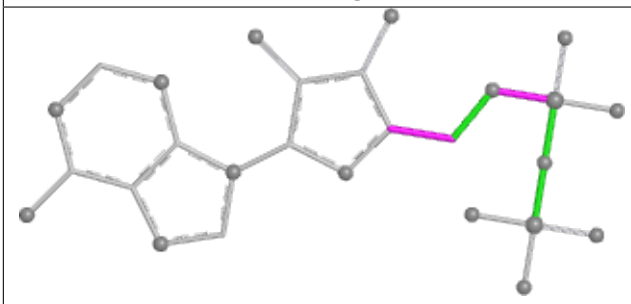
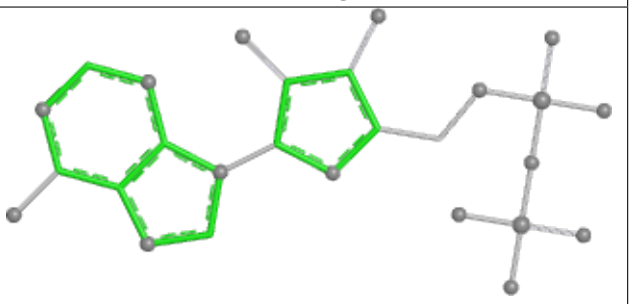
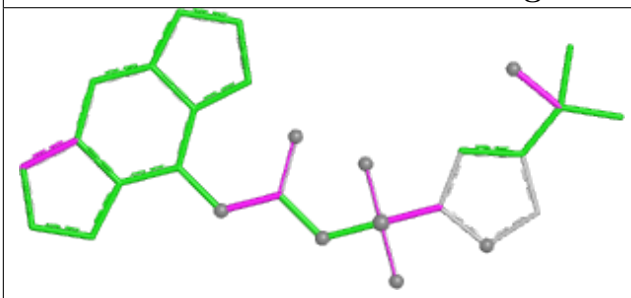
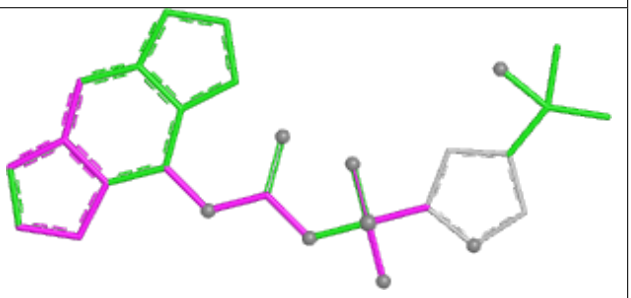
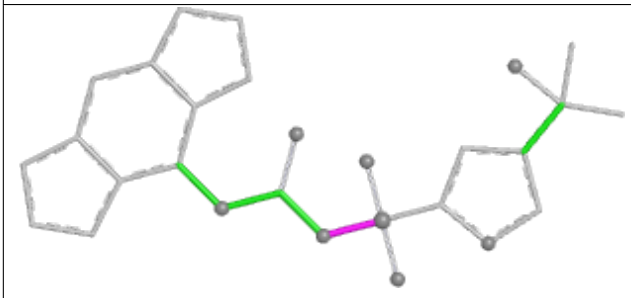
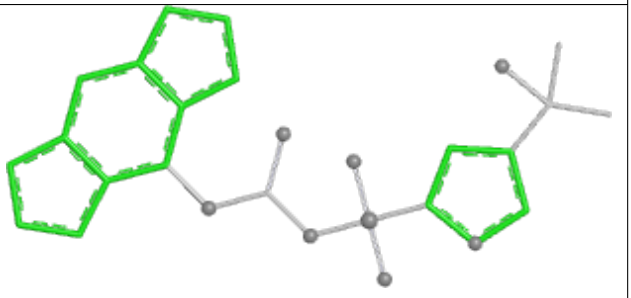
 Bond lengths	 Bond angles
 Torsions	 Rings

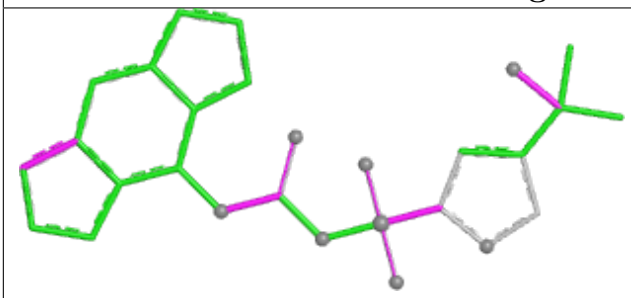
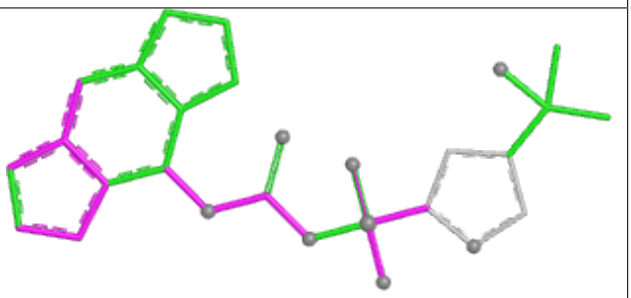
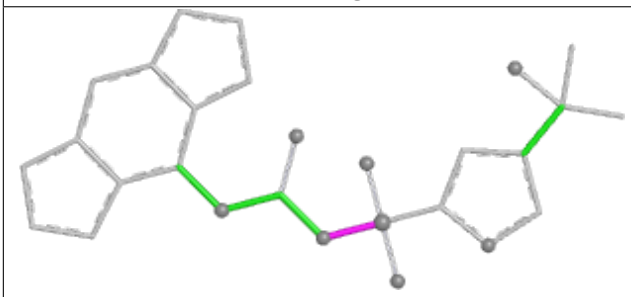
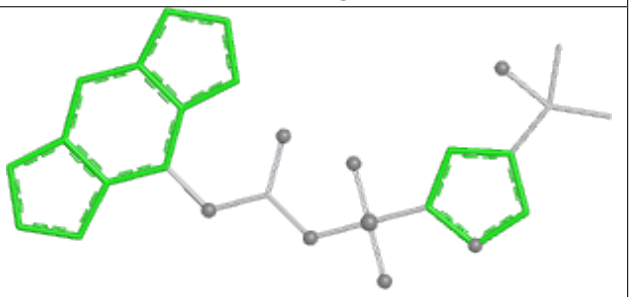
Ligand 8GI F 1102	
 Bond lengths	 Bond angles
 Torsions	 Rings

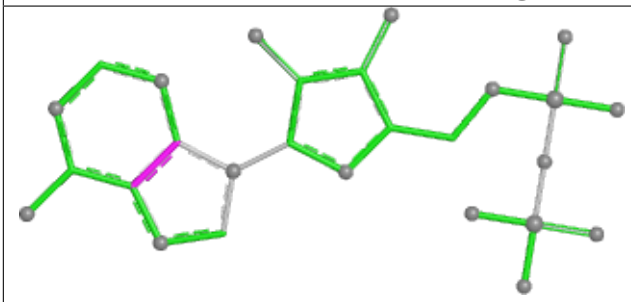
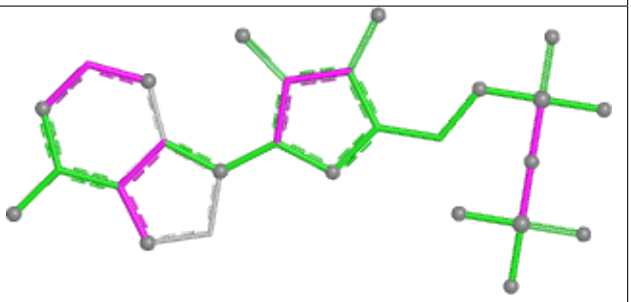
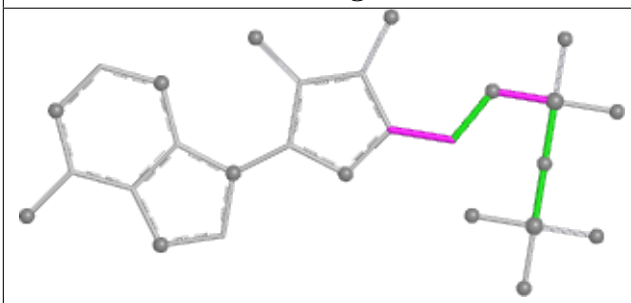
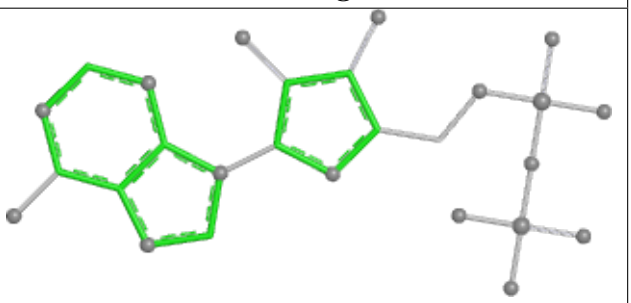
Ligand 8GI C 1102	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand ADP A 1101	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand ADP H 1101	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand 8GI E 1102	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand 8GI I 1102	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand ADP B 1101	
 Bond lengths	 Bond angles
 Torsions	 Rings

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.

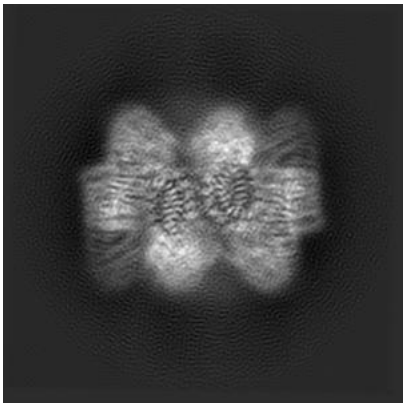
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-13686. These allow visual inspection of the internal detail of the map and identification of artifacts.

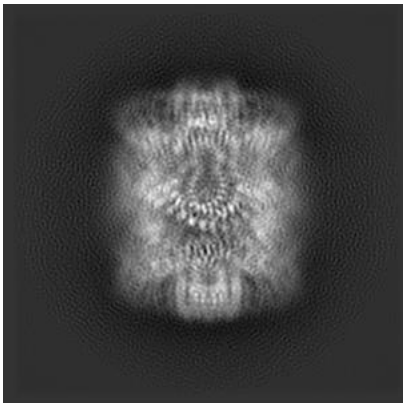
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections

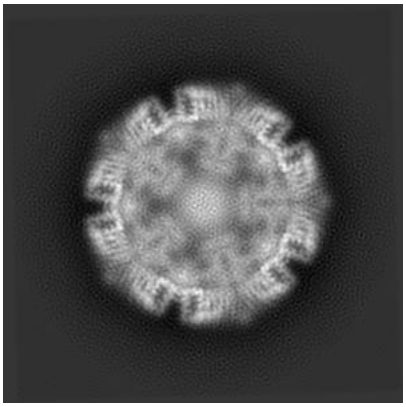
6.1.1 Primary map



X



Y

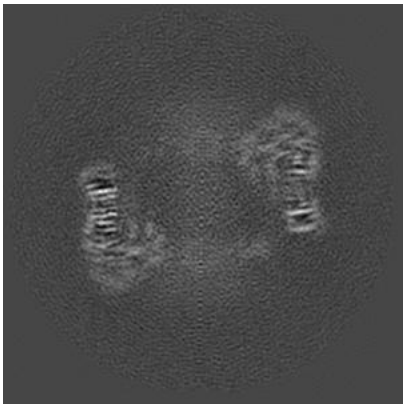


Z

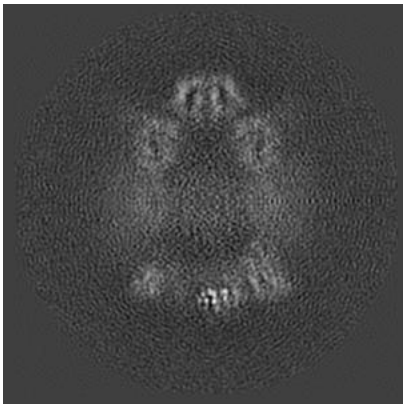
The images above show the map projected in three orthogonal directions.

6.2 Central slices

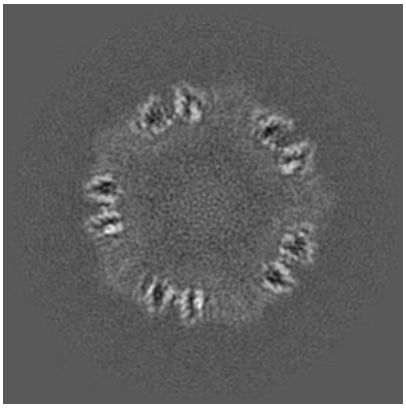
6.2.1 Primary map



X Index: 120



Y Index: 120

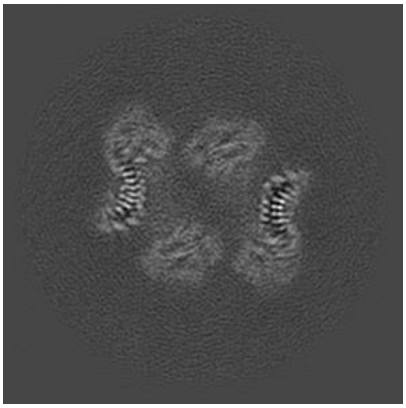


Z Index: 120

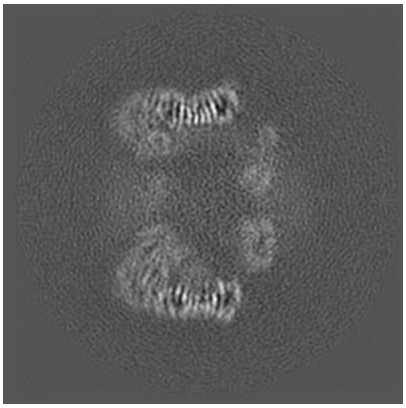
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

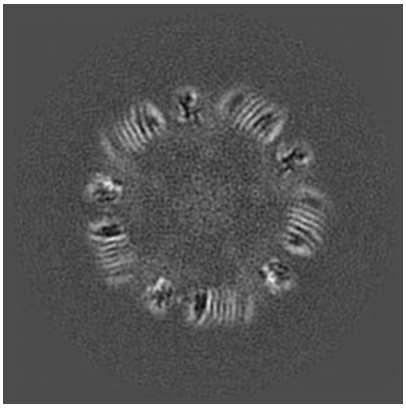
6.3.1 Primary map



X Index: 158



Y Index: 100

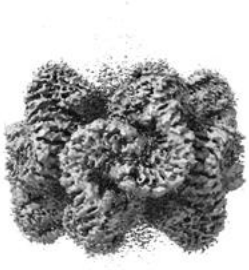


Z Index: 130

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

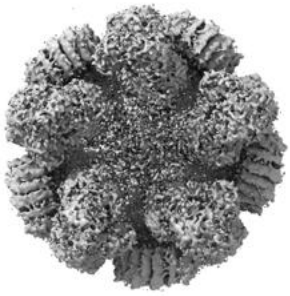
6.4 Orthogonal surface views (i)

6.4.1 Primary map



X

Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.00515. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

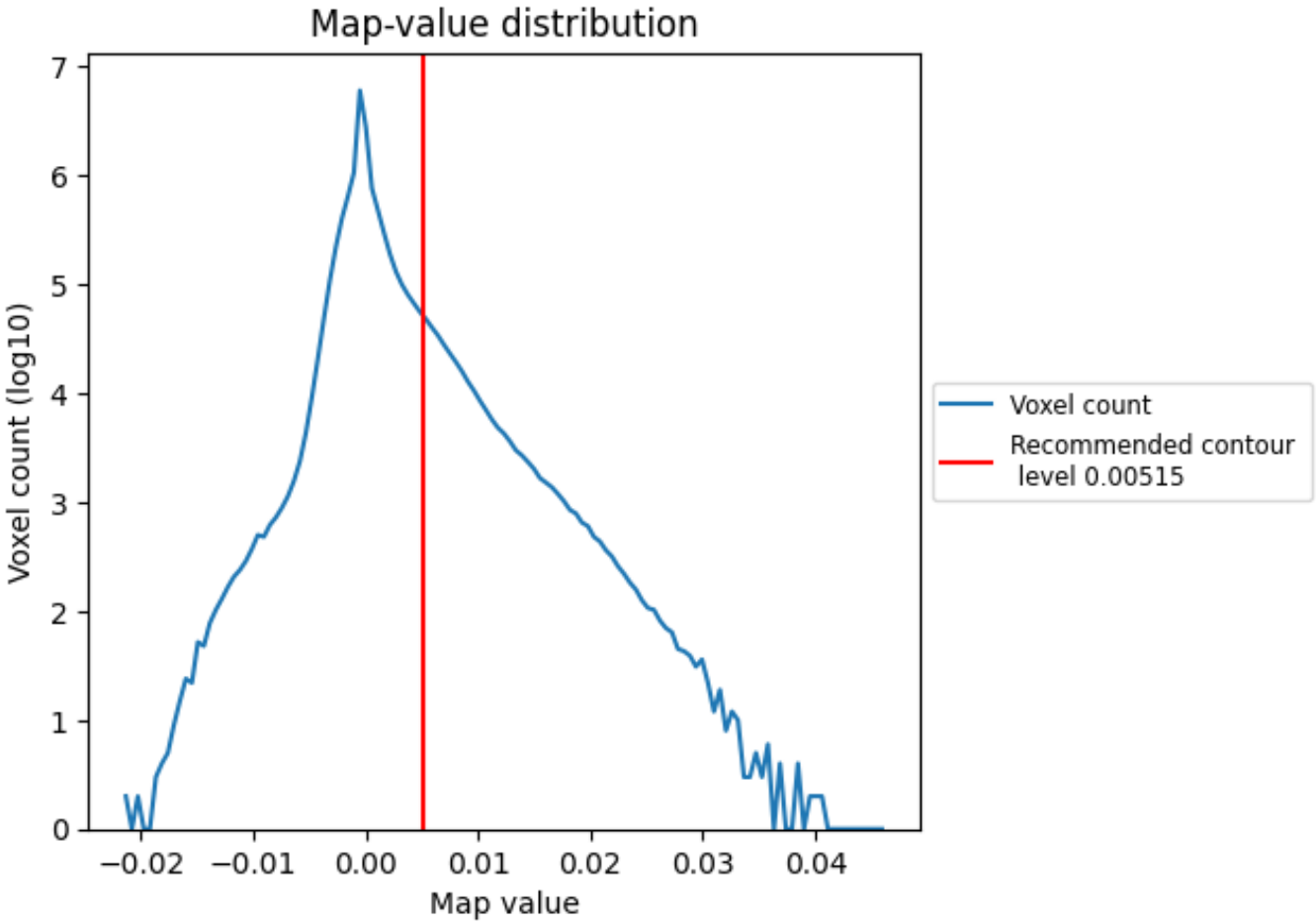
6.5 Mask visualisation (i)

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

7 Map analysis

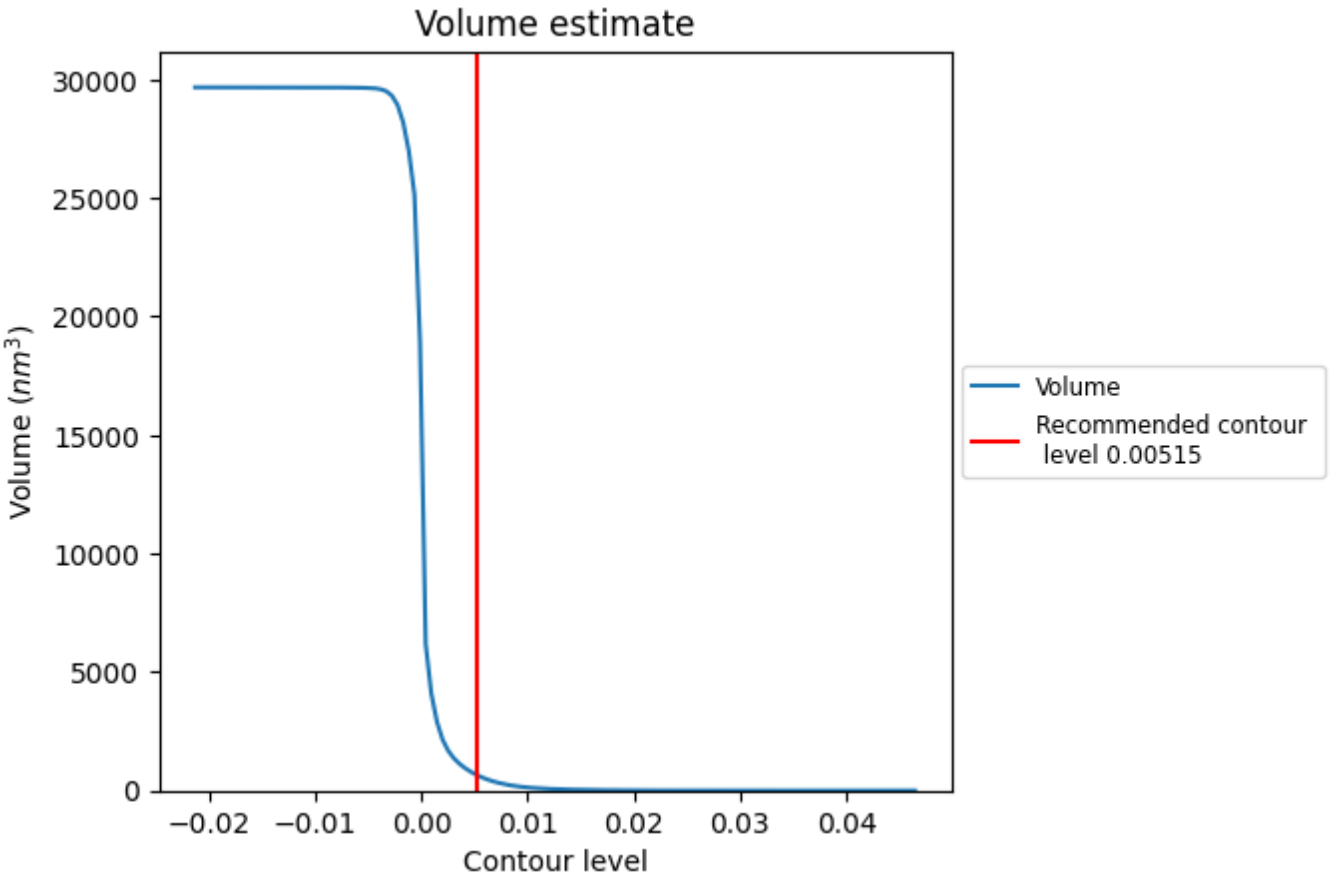
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution



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.

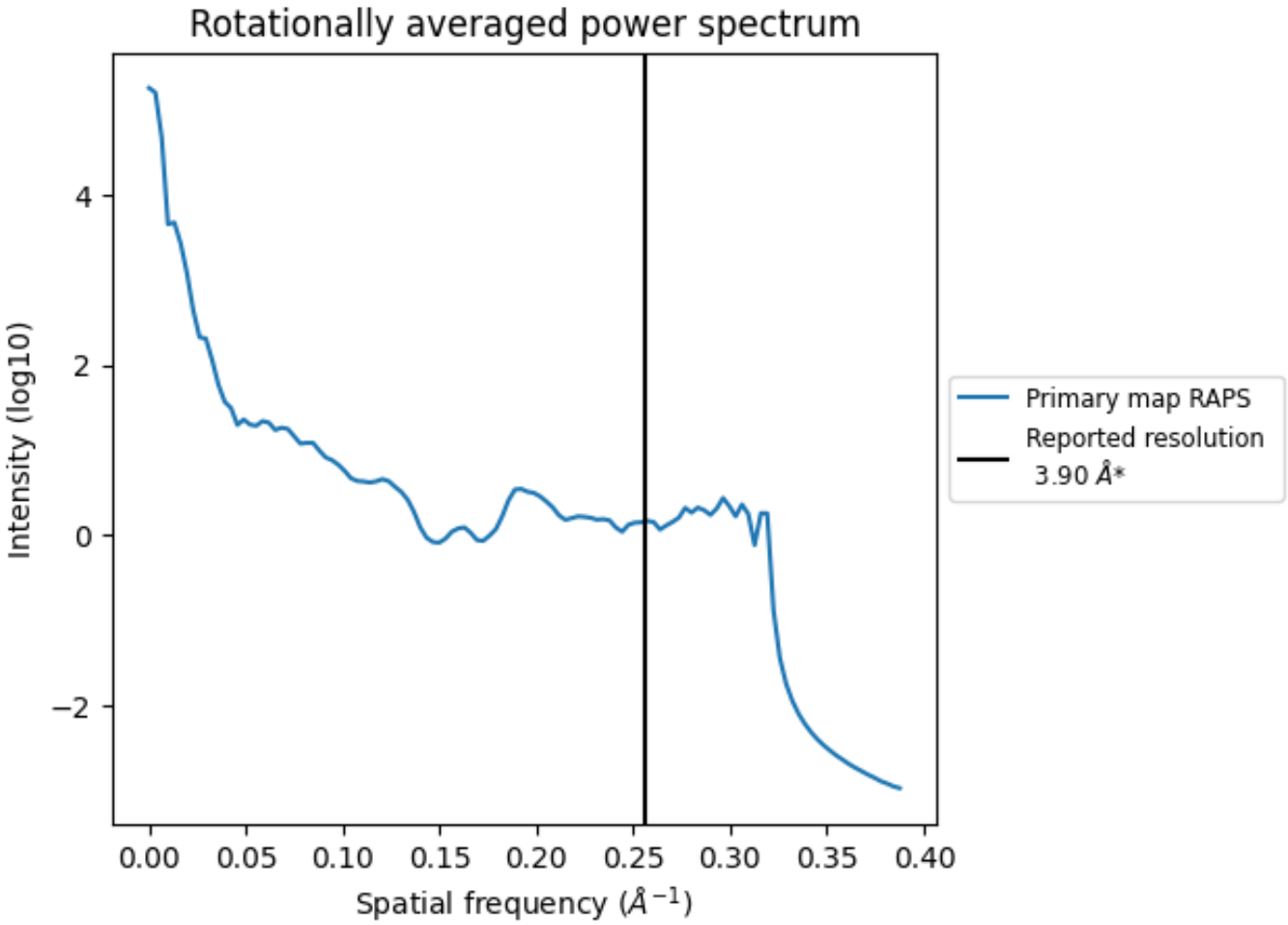
7.2 Volume estimate



The volume at the recommended contour level is 670 nm^3; this corresponds to an approximate mass of 605 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)

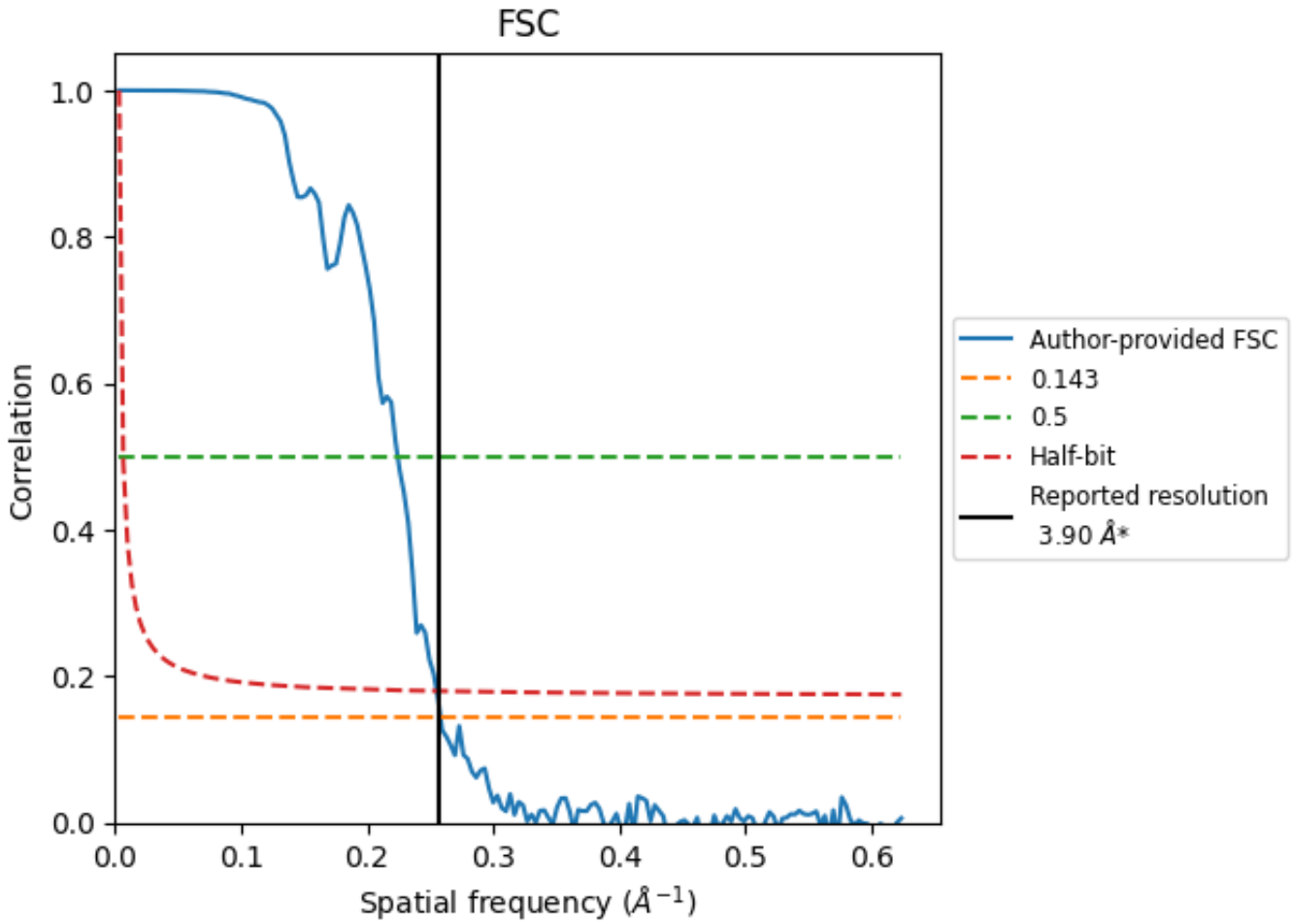


*Reported resolution corresponds to spatial frequency of 0.256 Å^{-1}

8 Fourier-Shell correlation

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



*Reported resolution corresponds to spatial frequency of 0.256 Å^{-1}

8.2 Resolution estimates (i)

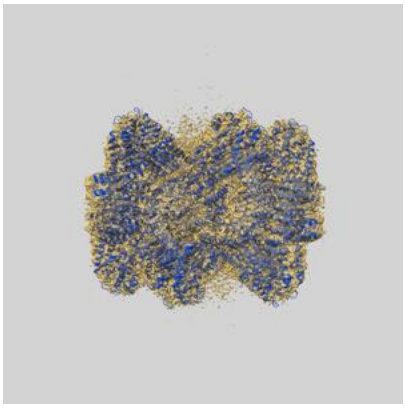
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	3.90	-	-
Author-provided FSC curve	3.87	4.46	3.92
Unmasked-calculated*	-	-	-

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps.

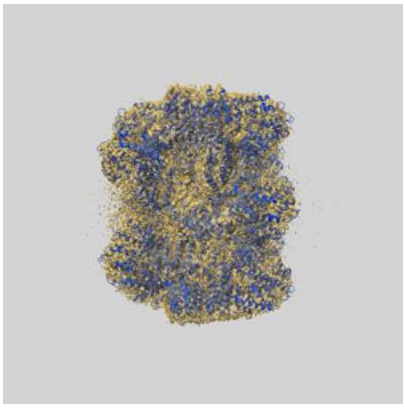
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-13686 and PDB model 7PZC. Per-residue inclusion information can be found in section 3 on page 7.

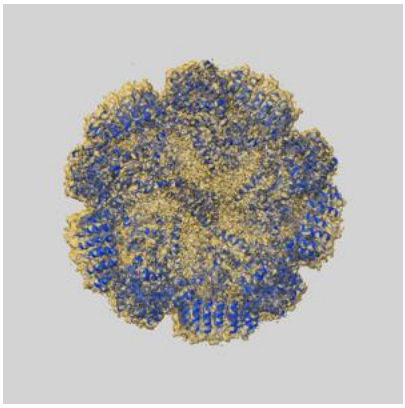
9.1 Map-model overlay



X



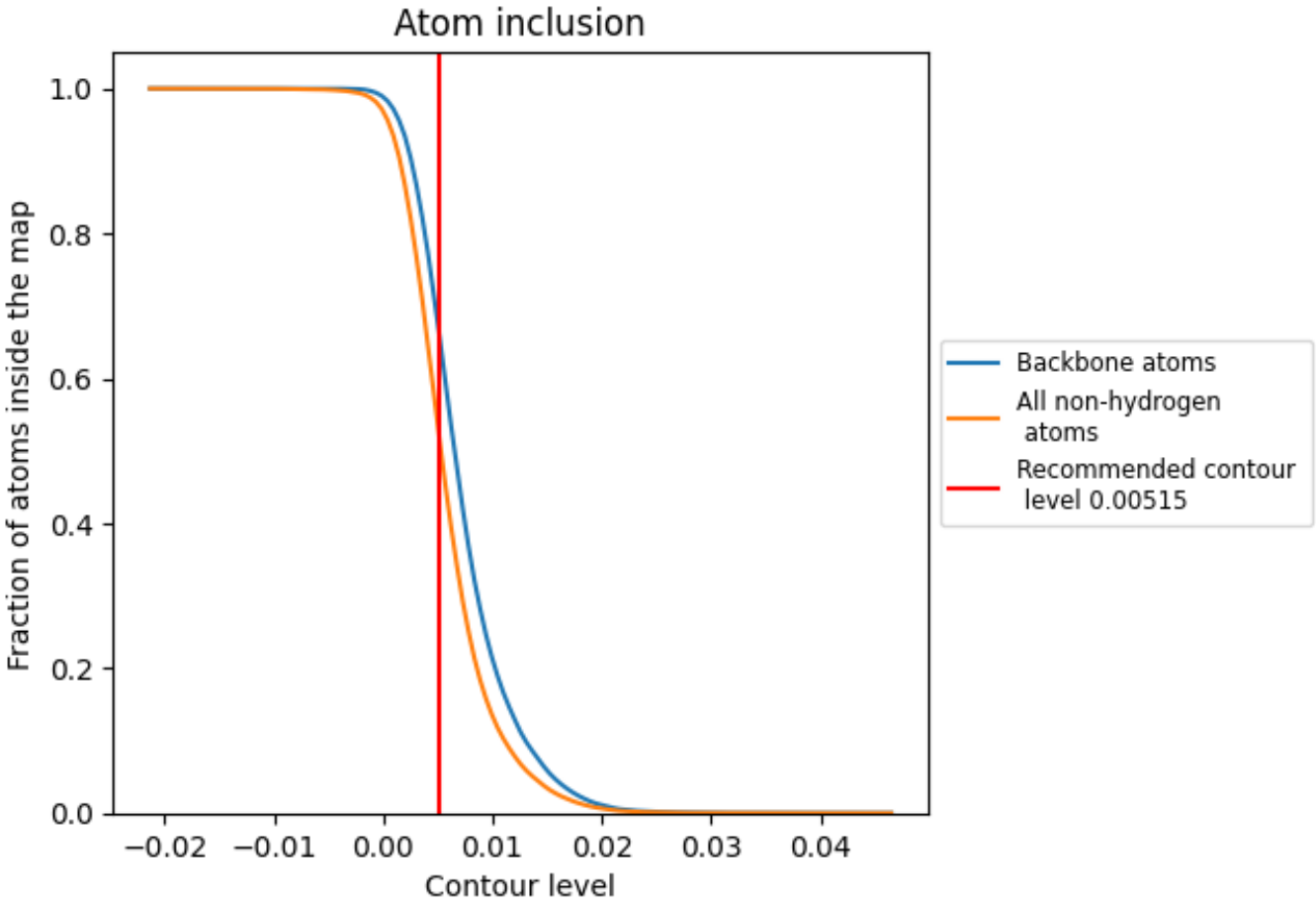
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.00515 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 Atom inclusion (i)



At the recommended contour level, 66% of all backbone atoms, 52% of all non-hydrogen atoms, are inside the map.