Full wwPDB EM Validation Report ⓘ

Nov 20, 2022 – 03:35 pm GMT

PDB ID	:	2VDC
EMDB ID	:	EMD-1440
Title	:	THE 9.5 A RESOLUTION STRUCTURE OF GLUTAMATE SYNTHASE FROM CRYO-ELECTRON MICROSCOPY AND ITS OLIGOMERIZATION BEHAVIOR IN SOLUTION: FUNCTIONAL IMPLICATIONS.
Authors	:	Cottevieille, M.; Larquet, E.; Jonic, S.; Petoukhov, M.V.; Caprini, G.; Paravisi, S.; Svergun, D.I.; Vanoni, M.A.; Boisset, N.
Deposited on	:	2007-10-04
Resolution	:	9.50 Å(reported)
Based on initial model	:	2VDC

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

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
https://www.wwpdb.org/validation/2017/EMValidationReportHelp
with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at
http://www.wwpdb.org/validation/2017/FAQs#types.

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

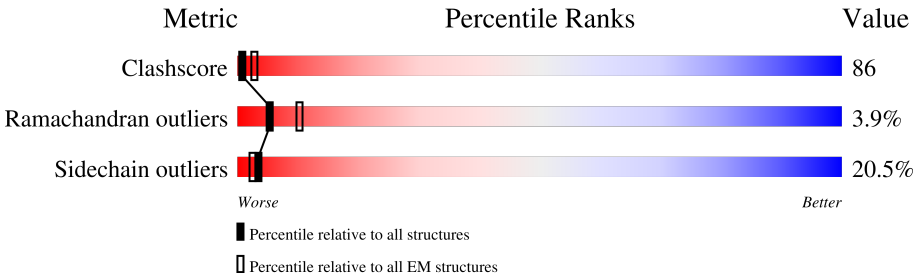
EMDB validation analysis	:	0.0.1.dev43
Mogul	:	1.8.4, CSD as541be (2020)
MolProbity	:	4.02b-467
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ	:	1.9.9
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.31.2

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:
ELECTRON MICROSCOPY

The reported resolution of this entry is 9.50 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	1472	29% 26% 52% 20% ·
1	B	1472	29% 30% 49% 17% ·
1	C	1472	31% 27% 51% 20% ·
1	D	1472	30% 30% 49% 17% ·
1	E	1472	30% 26% 51% 20% ·
1	F	1472	31% 30% 49% 17% ·
2	G	456	21% 18% 49% 25% 8%

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Mol	Chain	Length	Quality of chain
2	H	456	22% 17% 49% 25% 8%
2	I	456	24% 17% 49% 25% 8%
2	J	456	21% 17% 49% 25% 8%
2	K	456	24% 18% 49% 25% 8%
2	L	456	22% 18% 49% 25% 8%

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

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
3	OMT	A	2473	-	X	-	-
3	OMT	B	2473	-	X	-	-
3	OMT	C	2473	-	X	-	-
3	OMT	D	2473	-	X	-	-
3	OMT	E	2473	-	X	-	-
3	OMT	F	2473	-	X	-	-
6	F3S	A	2476	-	-	X	-
6	F3S	B	2476	-	-	X	-
6	F3S	C	2476	-	-	X	-
6	F3S	D	2476	-	-	X	-
6	F3S	E	2476	-	-	X	-
6	F3S	F	2476	-	-	X	-
7	SF4	G	483	-	-	X	-
7	SF4	H	483	-	-	X	-
7	SF4	I	483	-	-	X	-
7	SF4	J	483	-	-	X	-
7	SF4	K	483	-	-	X	-
7	SF4	L	483	-	-	X	-

2 Entry composition (i)

There are 8 unique types of molecules in this entry. The entry contains 89598 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.

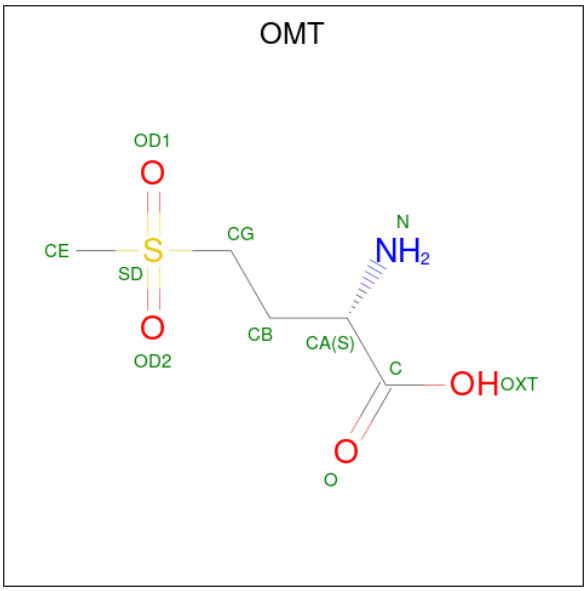
- Molecule 1 is a protein called GLUTAMATE SYNTHASE [NADPH] LARGE CHAIN.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	1472	Total	C	N	O	S	0	0
			11337	7109	2036	2132	60		
1	B	1472	Total	C	N	O	S	0	0
			11337	7109	2036	2132	60		
1	C	1472	Total	C	N	O	S	0	0
			11337	7109	2036	2132	60		
1	D	1472	Total	C	N	O	S	0	0
			11337	7109	2036	2132	60		
1	E	1472	Total	C	N	O	S	0	0
			11337	7109	2036	2132	60		
1	F	1472	Total	C	N	O	S	0	0
			11337	7109	2036	2132	60		

- Molecule 2 is a protein called GLUTAMATE SYNTHASE [NADPH] SMALL CHAIN.

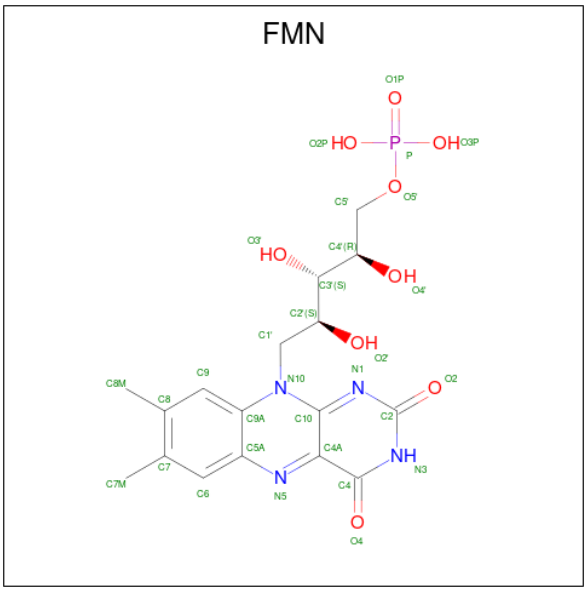
Mol	Chain	Residues	Atoms					AltConf	Trace
2	G	456	Total	C	N	O	S	0	0
			3468	2163	624	666	15		
2	H	456	Total	C	N	O	S	0	0
			3468	2163	624	666	15		
2	I	456	Total	C	N	O	S	0	0
			3468	2163	624	666	15		
2	J	456	Total	C	N	O	S	0	0
			3468	2163	624	666	15		
2	K	456	Total	C	N	O	S	0	0
			3468	2163	624	666	15		
2	L	456	Total	C	N	O	S	0	0
			3468	2163	624	666	15		

- Molecule 3 is S-DIOXYMETHIONINE (three-letter code: OMT) (formula: $C_5H_{11}NO_4S$).



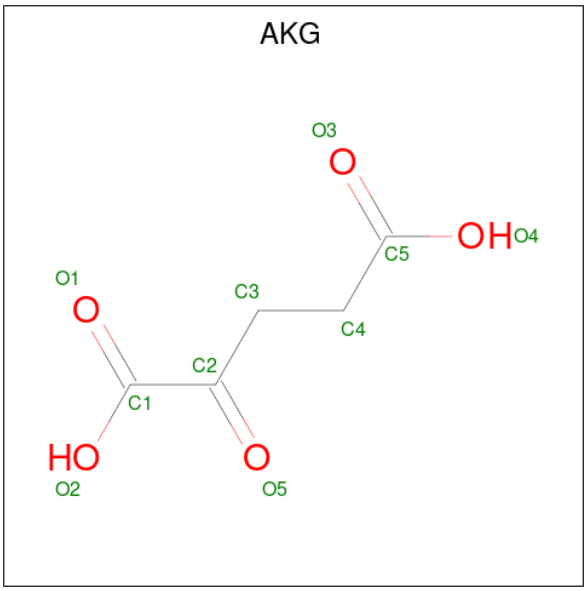
Mol	Chain	Residues	Atoms					AltConf
3	A	1	Total	C	N	O	S	0
			11	5	1	4	1	
3	B	1	Total	C	N	O	S	0
			11	5	1	4	1	
3	C	1	Total	C	N	O	S	0
			11	5	1	4	1	
3	D	1	Total	C	N	O	S	0
			11	5	1	4	1	
3	E	1	Total	C	N	O	S	0
			11	5	1	4	1	
3	F	1	Total	C	N	O	S	0
			11	5	1	4	1	

- Molecule 4 is FLAVIN MONONUCLEOTIDE (three-letter code: FMN) (formula: $C_{17}H_{21}N_4O_9P$).



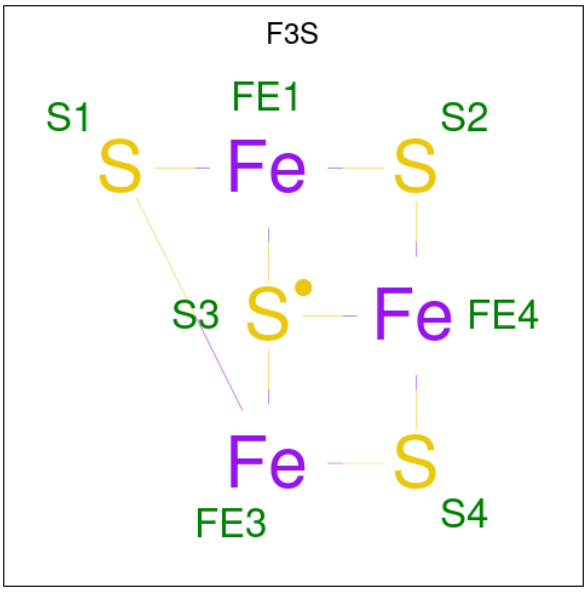
Mol	Chain	Residues	Atoms					AltConf
4	A	1	Total	C	N	O	P	0
			31	17	4	9	1	
4	B	1	Total	C	N	O	P	0
			31	17	4	9	1	
4	C	1	Total	C	N	O	P	0
			31	17	4	9	1	
4	D	1	Total	C	N	O	P	0
			31	17	4	9	1	
4	E	1	Total	C	N	O	P	0
			31	17	4	9	1	
4	F	1	Total	C	N	O	P	0
			31	17	4	9	1	

- Molecule 5 is 2-OXOGLUTARIC ACID (three-letter code: AKG) (formula: $C_5H_6O_5$).



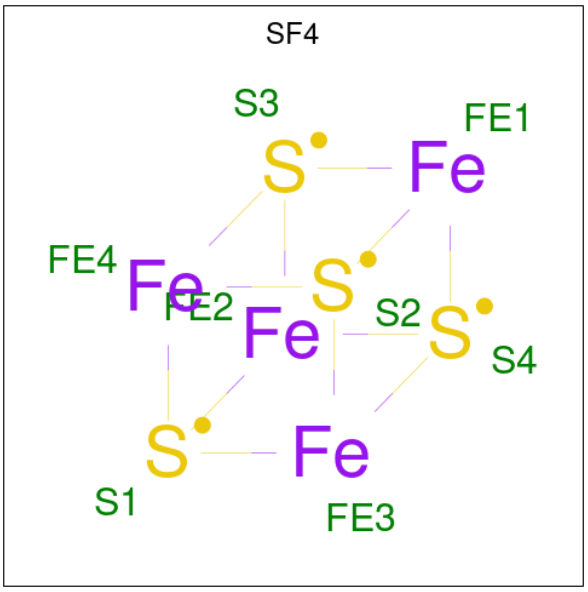
Mol	Chain	Residues	Atoms			AltConf
5	A	1	Total	C	O	0
			10	5	5	
5	B	1	Total	C	O	0
			10	5	5	
5	C	1	Total	C	O	0
			10	5	5	
5	D	1	Total	C	O	0
			10	5	5	
5	E	1	Total	C	O	0
			10	5	5	
5	F	1	Total	C	O	0
			10	5	5	

- Molecule 6 is FE3-S4 CLUSTER (three-letter code: F3S) (formula: Fe_3S_4).



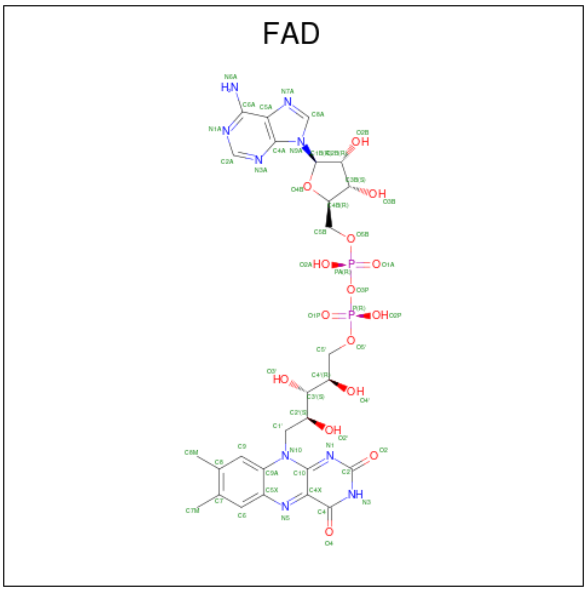
Mol	Chain	Residues	Atoms			AltConf
			Total	Fe	S	
6	A	1	7	3	4	0
6	B	1	7	3	4	0
6	C	1	7	3	4	0
6	D	1	7	3	4	0
6	E	1	7	3	4	0
6	F	1	7	3	4	0

- Molecule 7 is IRON/SULFUR CLUSTER (three-letter code: SF4) (formula: Fe_4S_4).



Mol	Chain	Residues	Atoms			AltConf
7	G	1	Total	Fe	S	0
			16	8	8	
7	G	1	Total	Fe	S	0
			16	8	8	
7	H	1	Total	Fe	S	0
			16	8	8	
7	H	1	Total	Fe	S	0
			16	8	8	
7	I	1	Total	Fe	S	0
			16	8	8	
7	I	1	Total	Fe	S	0
			16	8	8	
7	J	1	Total	Fe	S	0
			16	8	8	
7	J	1	Total	Fe	S	0
			16	8	8	
7	K	1	Total	Fe	S	0
			16	8	8	
7	K	1	Total	Fe	S	0
			16	8	8	
7	L	1	Total	Fe	S	0
			16	8	8	
7	L	1	Total	Fe	S	0
			16	8	8	

- Molecule 8 is FLAVIN-ADENINE DINUCLEOTIDE (three-letter code: FAD) (formula: $C_{27}H_{33}N_9O_{15}P_2$).

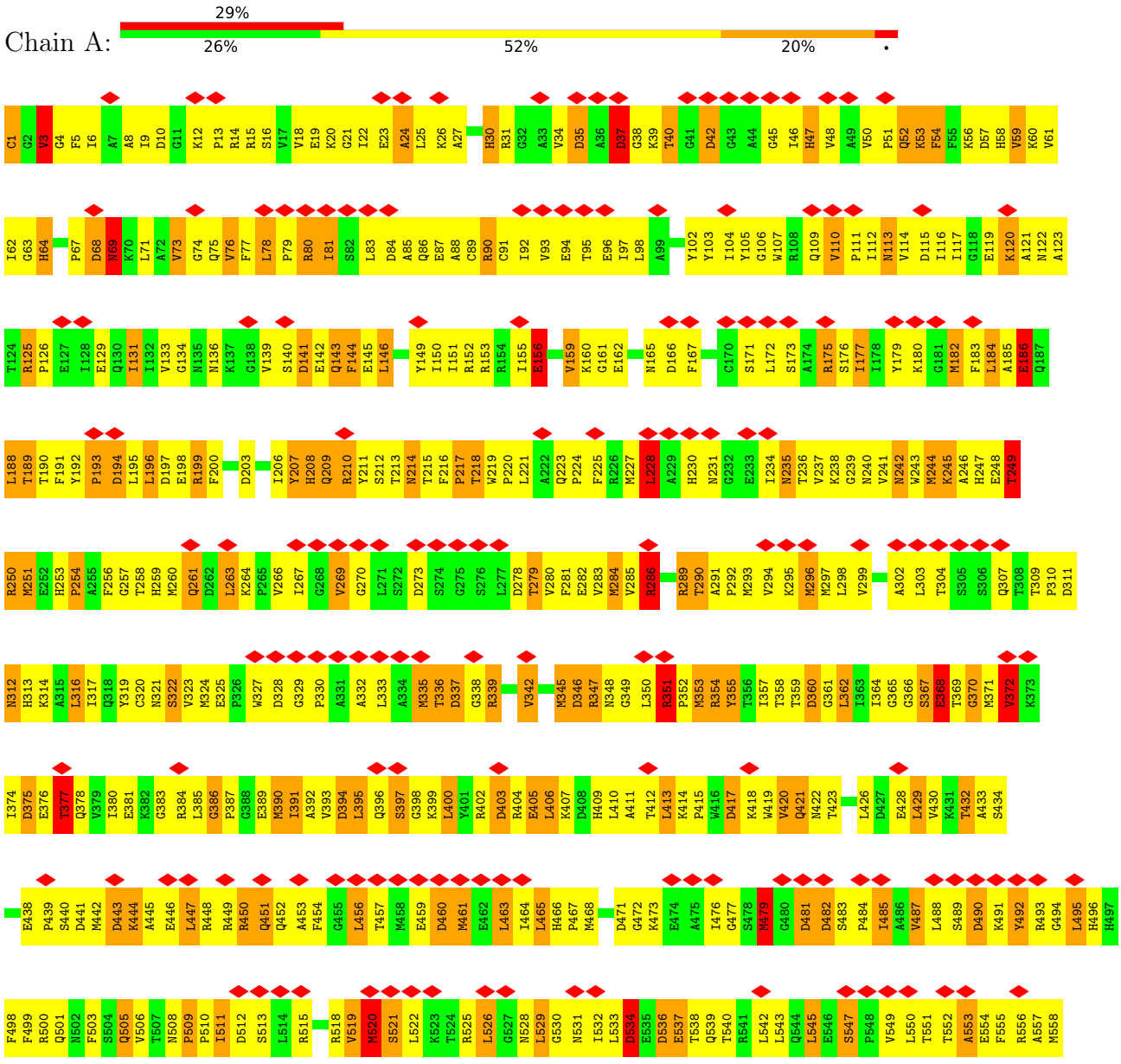


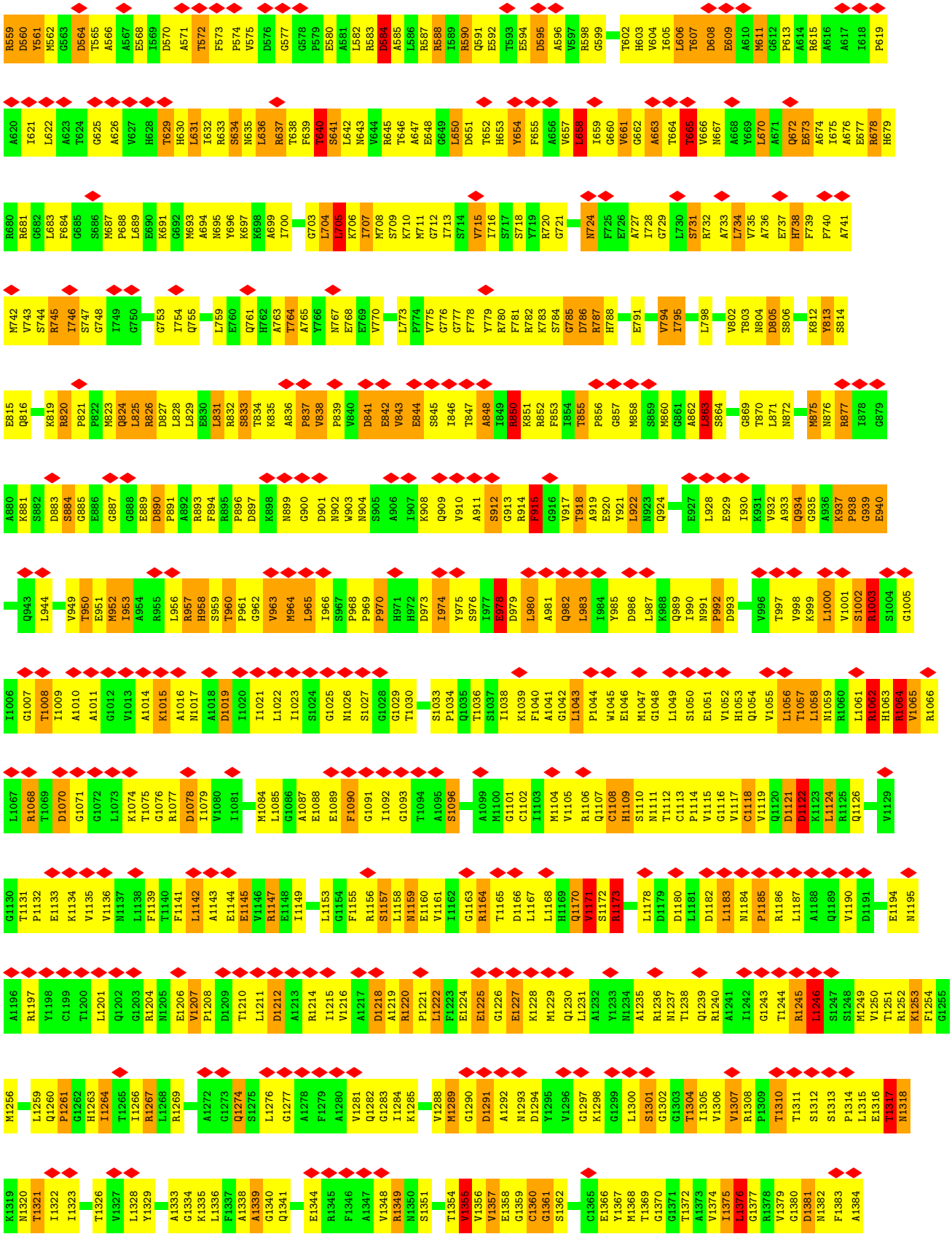
Mol	Chain	Residues	Atoms					AltConf
8	G	1	Total	C	N	O	P	0
			53	27	9	15	2	
8	H	1	Total	C	N	O	P	0
			53	27	9	15	2	
8	I	1	Total	C	N	O	P	0
			53	27	9	15	2	
8	J	1	Total	C	N	O	P	0
			53	27	9	15	2	
8	K	1	Total	C	N	O	P	0
			53	27	9	15	2	
8	L	1	Total	C	N	O	P	0
			53	27	9	15	2	

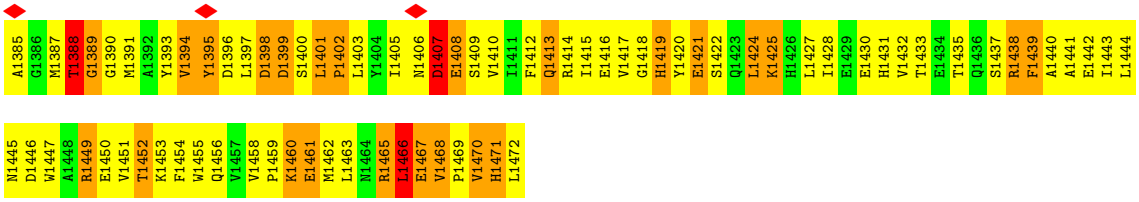
3 Residue-property plots (i)

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: GLUTAMATE SYNTHASE [NADPH] LARGE CHAIN

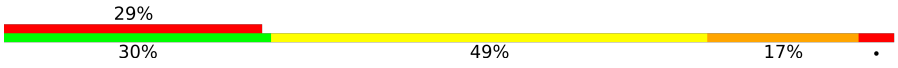


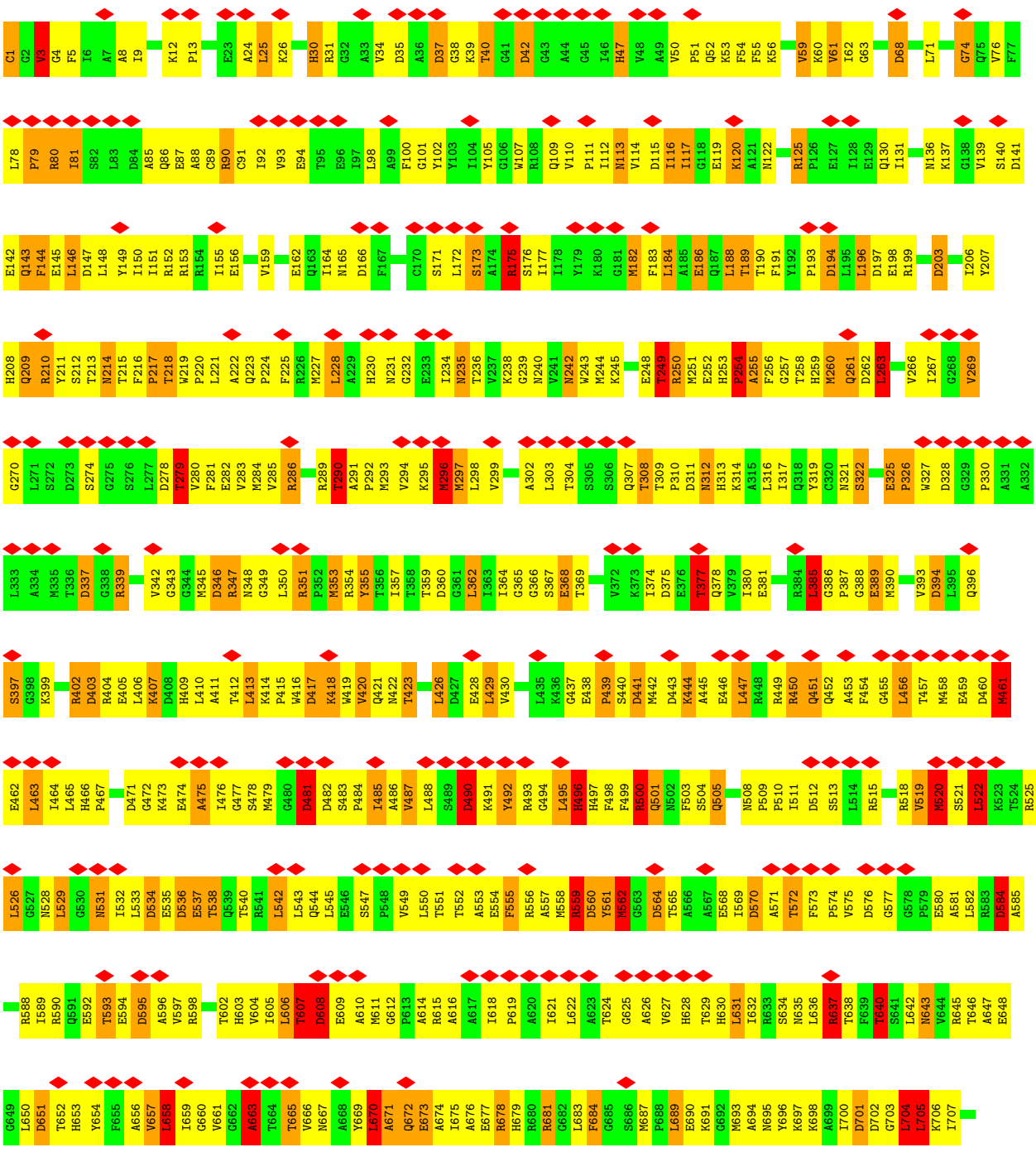

R559 D560 Y561 M562 G563 D564 T565 A566 A567 E568 I569 D570 A571 T572 F573 P574 V575 D576 G577 G578 P579 E580 A581 L582 R583 D584 A585 L586 R587 R588 I589 R590 Q591 E592 T593 E594 D595 A596 V597 R598 G599 T602 H603 V604 I605 L606 T607 D608 E609 A610 M611 G612 P613 A614 R615 A616 A617 I618 P619
A620 I621 L622 A623 T624 G625 A626 V627 H628 T629 H630 L631 I632 R633 S634 N635 L636 R637 T638 F639 T640 S641 L642 N643 V644 R645 T646 A647 E648 G649 L650 D651 T652 H653 Y654 F655 A656 V657 L658 I659 G660 V661 G662 A663 T664 T665 V666 N667 A668 Y669 L670 A671 Q672 E673 A674 I675 A676 E677 R678 H679
R680 R681 G682 L683 F684 G685 S686 M687 P688 L689 E690 K691 G692 M693 A694 N695 Y696 K697 K698 A699 I700 G703 L704 L705 K706 I707 M708 S709 K710 M711 G712 I713 S714 V715 I716 S717 S718 Y719 R720 G721 N724 F725 E726 A727 I728 G729 L730 S731 R732 A733 L734 V735 A736 E737 H738 F739 P740 A741
M742 V743 S744 R745 I746 S747 G748 I749 G750 G753 I754 Q755 L759 E760 Q761 H762 A763 T764 A765 Y766 N767 E768 E769 V770 L773 P774 V775 G776 G777 F778 Y779 R780 F781 R782 K783 S784 G785 D786 R787 H788 E791 V794 I795 L798 V802 T803 N804 D805 S806 K812 Y813 S814
E815 Q816 K819 R820 P821 P822 M823 Q824 L825 R826 D827 L828 L829 E830 L831 R832 S833 T834 K835 A836 P837 V838 P839 V840 D841 E842 V843 E844 S845 I846 T847 A848 I849 R850 K851 R852 F853 I854 T855 P856 G857 M858 S859 M860 G861 A862 L863 S864 G869 T870 L871 N872 M875 N876 R877 I878 G879
A880 K881 S882 D883 S884 G885 E886 G887 G888 E889 D890 P891 A892 R893 F894 R895 P896 D897 K898 N899 G900 D901 N902 W903 N904 S905 A906 I907 K908 Q909 V910 A911 S912 G913 R914 F915 G916 V917 T918 A919 E920 Y921 L922 N923 Q924 E927 L928 E929 I930 K931 V932 A933 Q934 G935 A936 K937 P938 G939 E940
Q943 L944 V949 T950 E951 M952 I953 A954 R955 L956 R957 H958 S959 T960 P961 G962 V963 M964 L965 I966 S967 P968 P969 P970 H971 H972 D973 I974 Y975 S976 I977 E978 D979 L980 A981 Q982 L983 I984 Y985 D986 L987 K988 Q989 I990 N991 P992 D993 V996 T997 V998 K999 L1000 V1001 S1002 R1003 S1004 G1005
I1006 G1007 T1008 I1009 A1010 A1011 G1012 V1013 A1014 A1015 A1016 N1017 A1018 D1019 I1020 I1021 L1022 I1023 S1024 G1025 N1026 S1027 G1028 G1029 T1030 S1033 P1034 Q1035 T1036 S1037 I1038 K1039 F1040 A1041 G1042 L1043 P1044 W1045 E1046 M1047 G1048 L1049 S1050 E1051 V1052 H1053 Q1054 V1055 L1056 T1057 L1058 N1059 R1060 L1061 R1062 H1063 R1064 V1065 R1066
L1067 R1068 T1069 D1070 G1071 G1072 L1073 K1074 T1075 G1076 R1077 D1078 I1079 V1080 I1081 M1084 L1085 G1086 A1087 E1088 E1089 F1090 G1091 I1092 G1093 T1094 A1095 S1096 A1099 M1100 G1101 C1102 I1103 M1104 V1105 R1106 Q1107 C1108 H1109 S1110 N1111 T1112 C1113 P1114 V1115 G1116 V1117 C1118 V1119 Q1120 D1121 D1122 K1123 L1124 R1125 Q1126 V1129
G1130 T1131 P1132 E1133 K1134 V1135 V1136 N1137 L1138 F1139 T1140 F1141 L1142 A1143 E1144 E1145 V1146 R1147 E1148 I1149 L1153 G1154 F1155 R1156 S1157 L1158 N1159 E1160 V1161 I1162 G1163 R1164 T1165 D1166 L1167 L1168 H1169 Q1170 V1171 S1172 R1173 L1178 D1179 D1180 L1181 D1182 L1183 N1184 P1185 R1186 V1187 A1188 Q1189 V1190 D1191 E1194 N1195
A1196 R1197 Y1198 C1199 T1200 L1201 Q1202 G1203 R1204 N1205 E1206 V1207 P1208 D1209 T1210 L1211 D1212 A1213 R1214 I1215 V1216 A1217 D1218 A1219 R1220 P1221 L1222 F1223 E1224 E1225 G1226 E1227 K1228 M1229 Q1230 L1231 A1232 Y1233 N1234 A1235 R1236 N1237 T1238 Q1239 R1240 A1241 I1242 G1243 T1244 R1245 L1246 S1247 S1248 M1249 V1250 T1251 R1252 K1253 F1254 G1255
M1256 L1259 Q1260 P1261 G1262 H1263 I1264 T1265 I1266 R1267 L1268 R1269 A1272 G1273 Q1274 S1275 L1276 G1277 A1278 F1279 A1280 V1281 Q1282 G1283 I1284 K1285 V1288 M1289 G1290 D1291 A1292 N1293 D1294 Y1295 V1296 G1297 K1298 G1299 L1300 S1301 G1302 G1303 T1304 I1305 V1306 V1307 R1308 P1309 T1310 T1311 S1312 S1313 P1314 L1315 E1316 T1317 N1318
K1319 N1320 T1321 I1322 I1323 T1326 V1327 L1328 Y1329 A1333 G1334 K1335 L1336 F1337 A1338 A1339 G1340 Q1341 E1344 R1345 F1346 A1347 V1348 R1349 N1350 S1351 T1354 V1355 V1356 V1357 E1358 G1359 C1360 G1361 S1362 C1365 E1366 Y1367 M1368 T1369 G1370 G1371 T1372 A1373 V1374 I1375 L1376 G1377 R1378 V1379 G1380 D1381 N1382 F1383 A1384

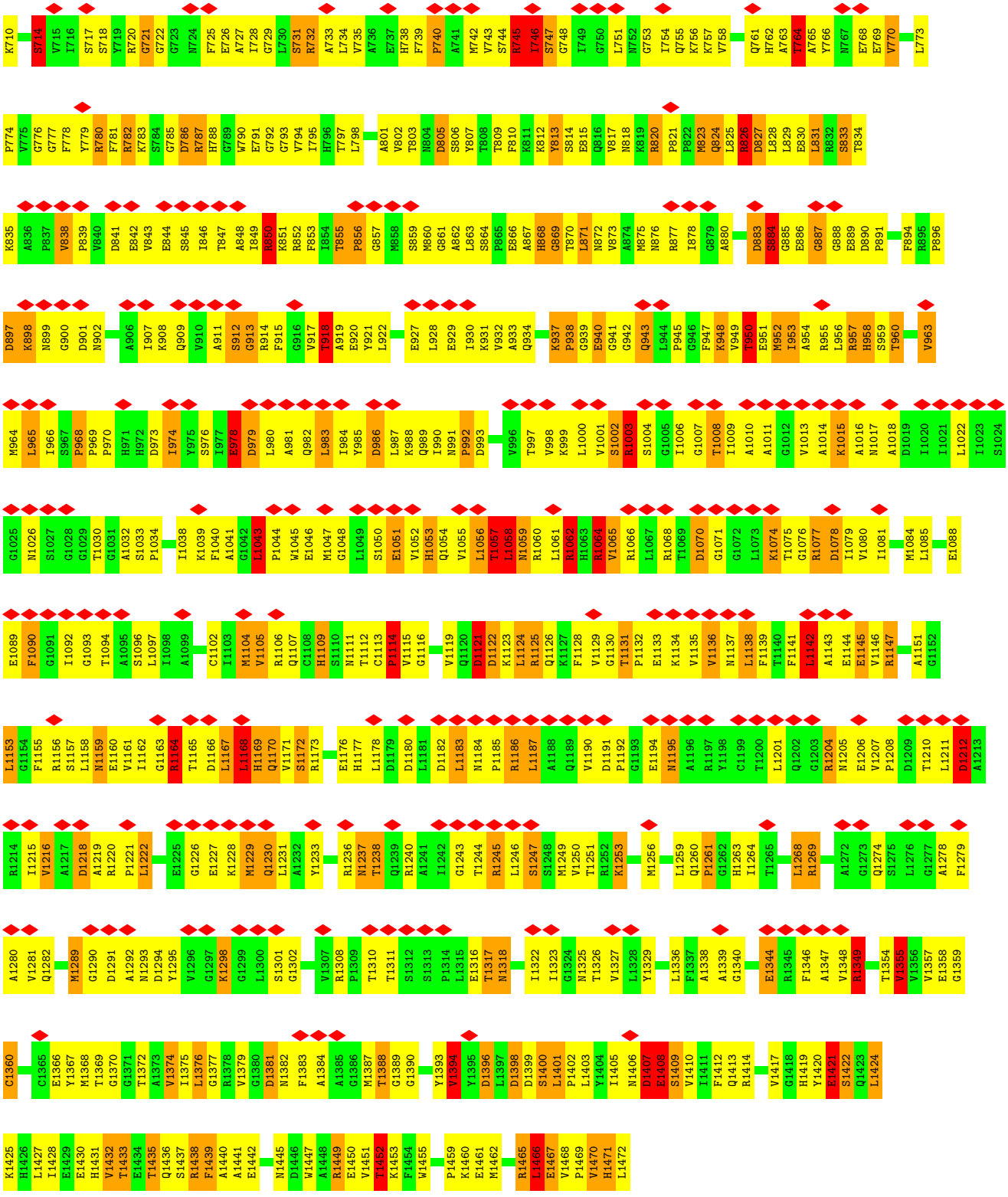


• Molecule 1: GLUTAMATE SYNTHASE [NADPH] LARGE CHAIN

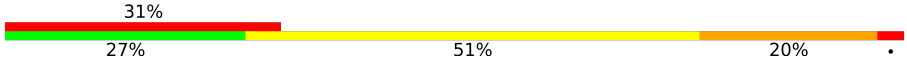
Chain B:

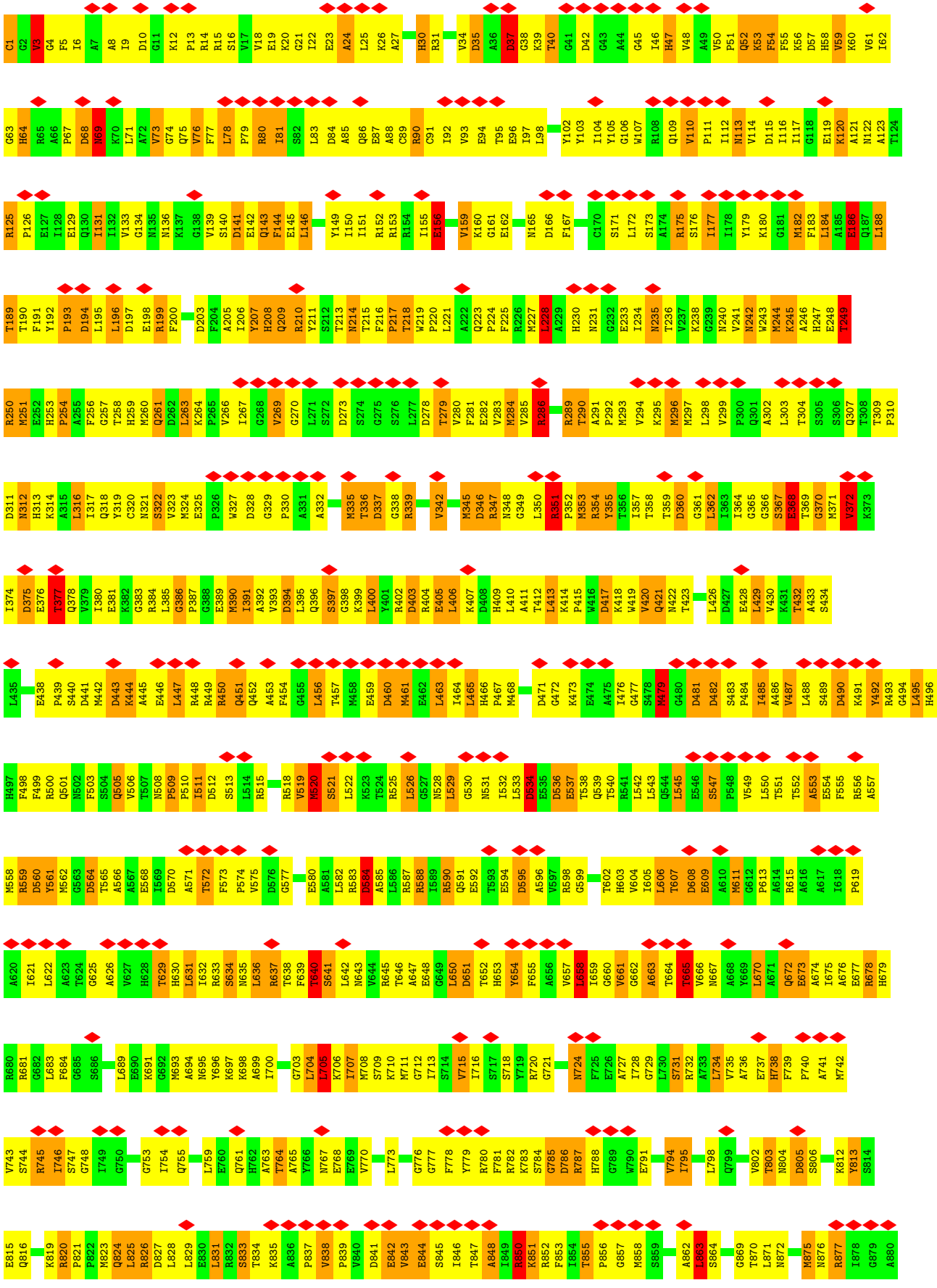


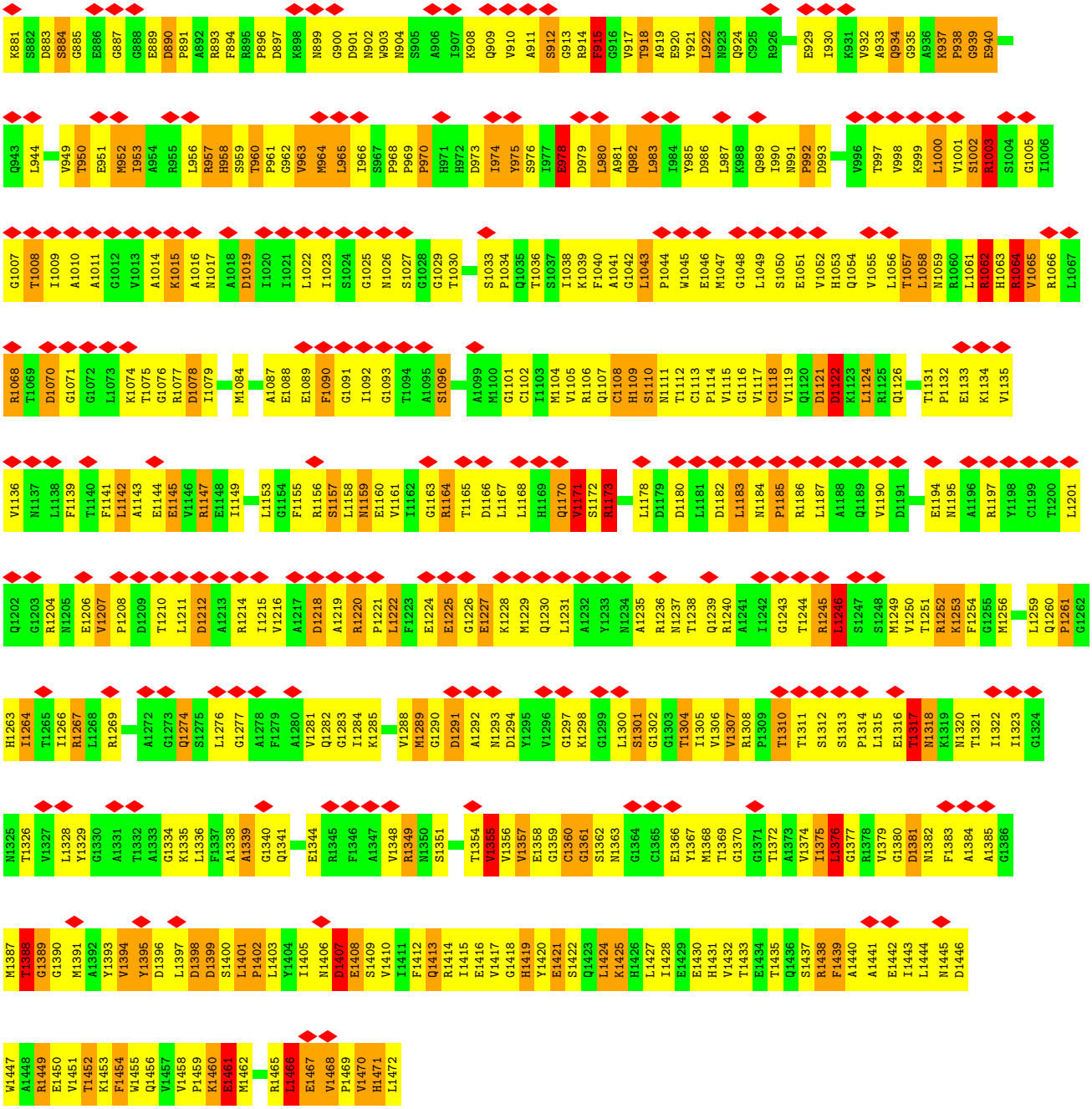




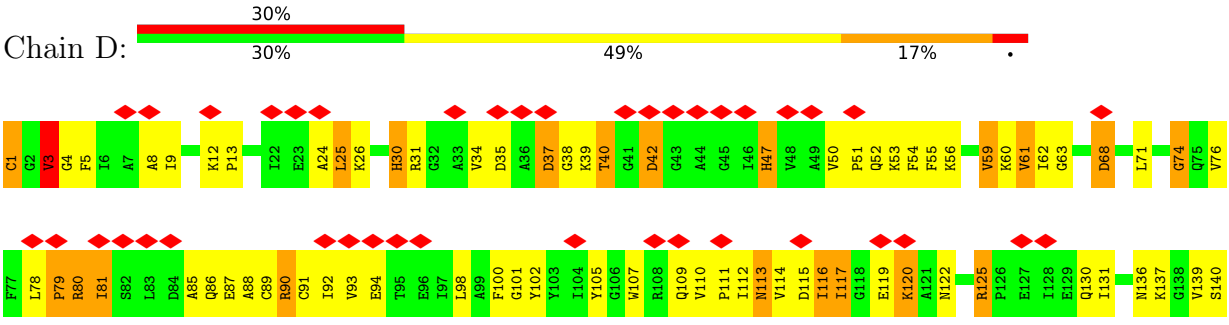
• Molecule 1: GLUTAMATE SYNTHASE [NADPH] LARGE CHAIN

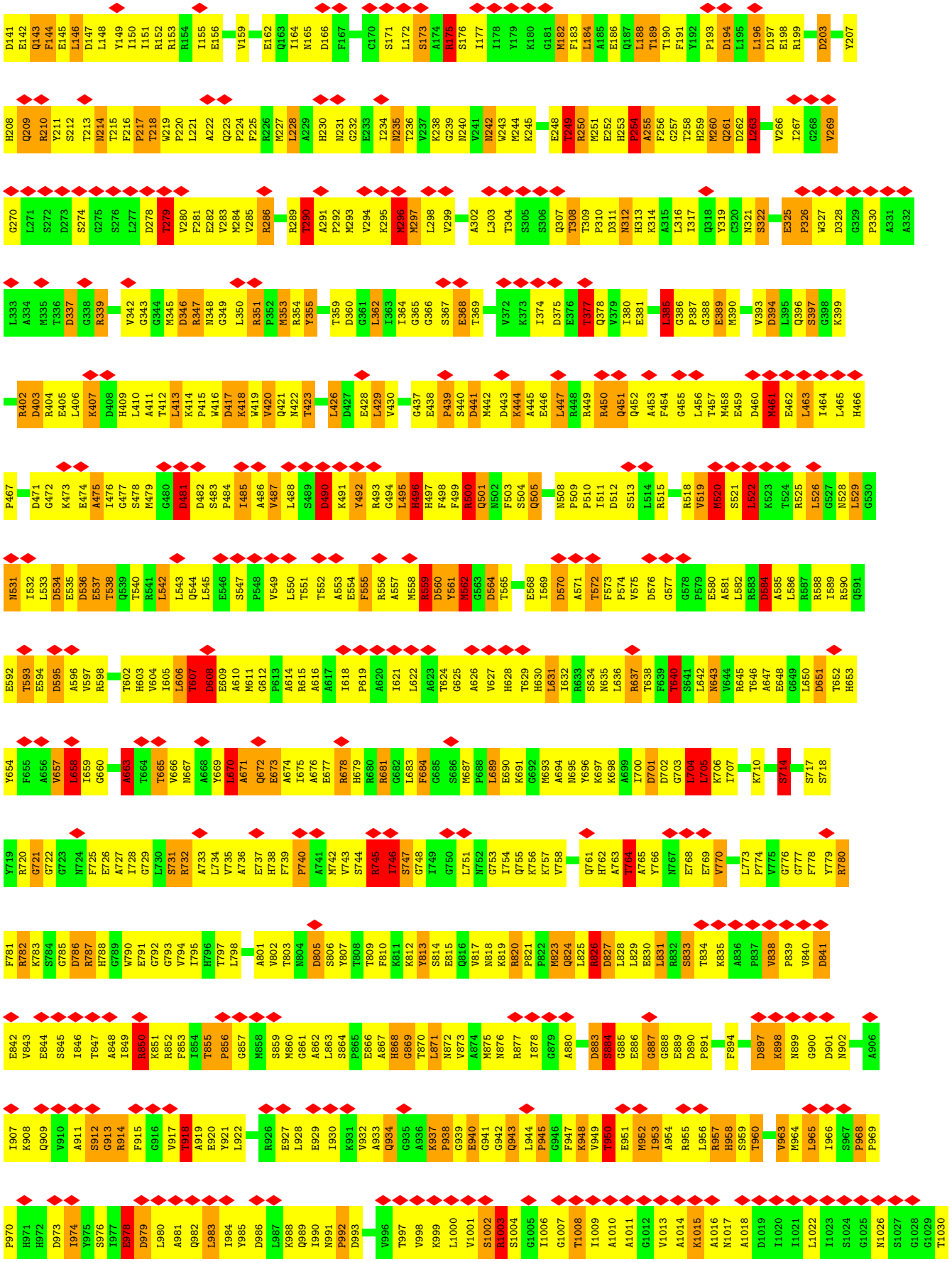


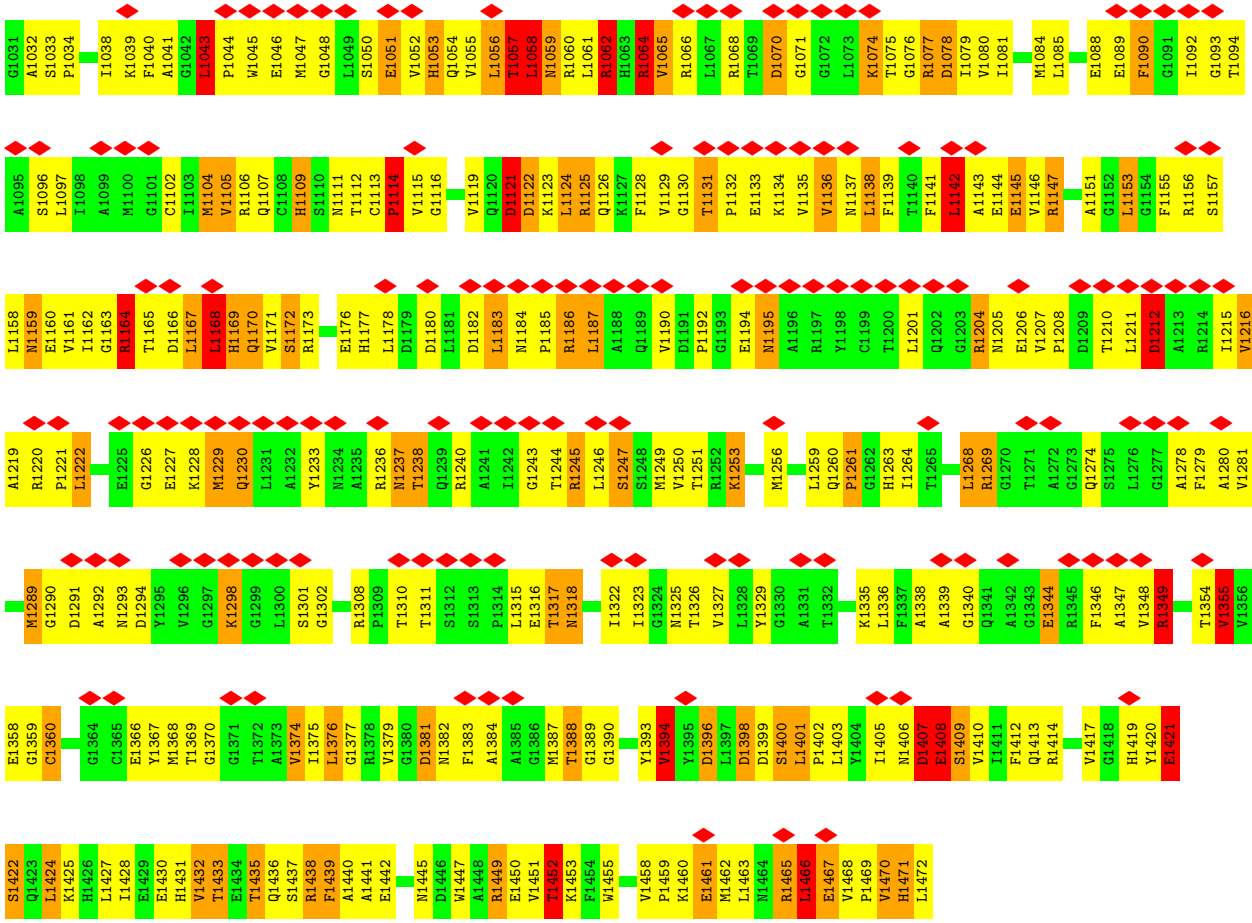




• Molecule 1: GLUTAMATE SYNTHASE [NADPH] LARGE CHAIN

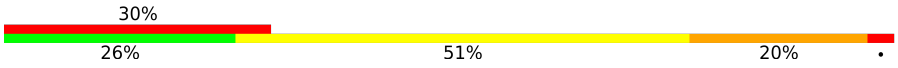


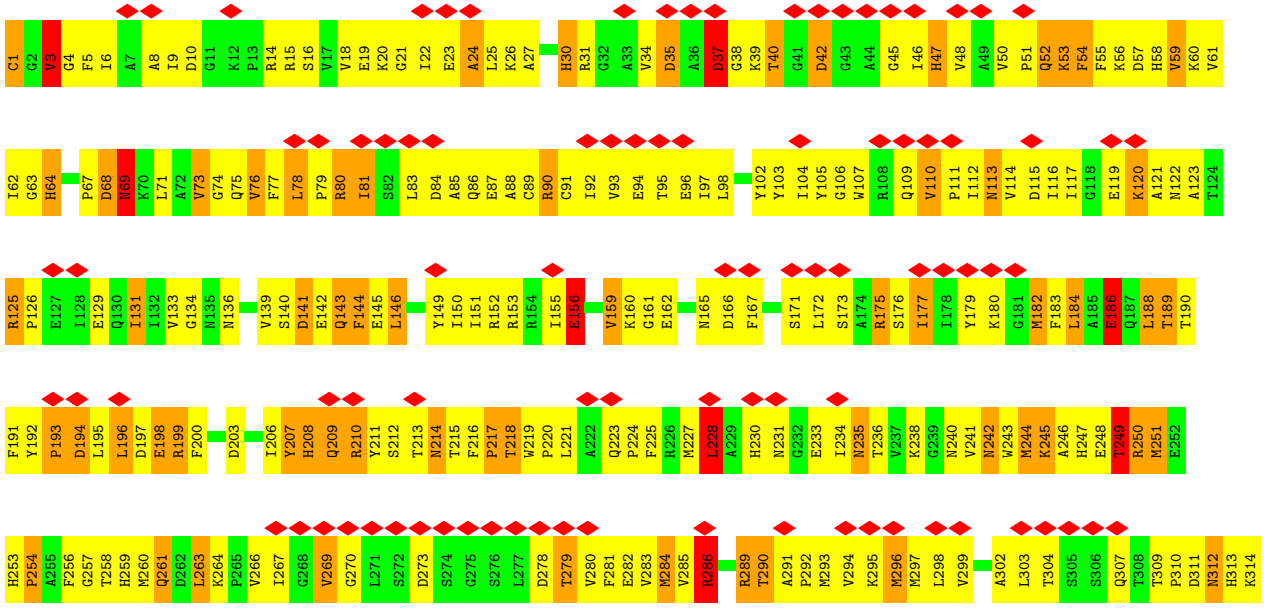


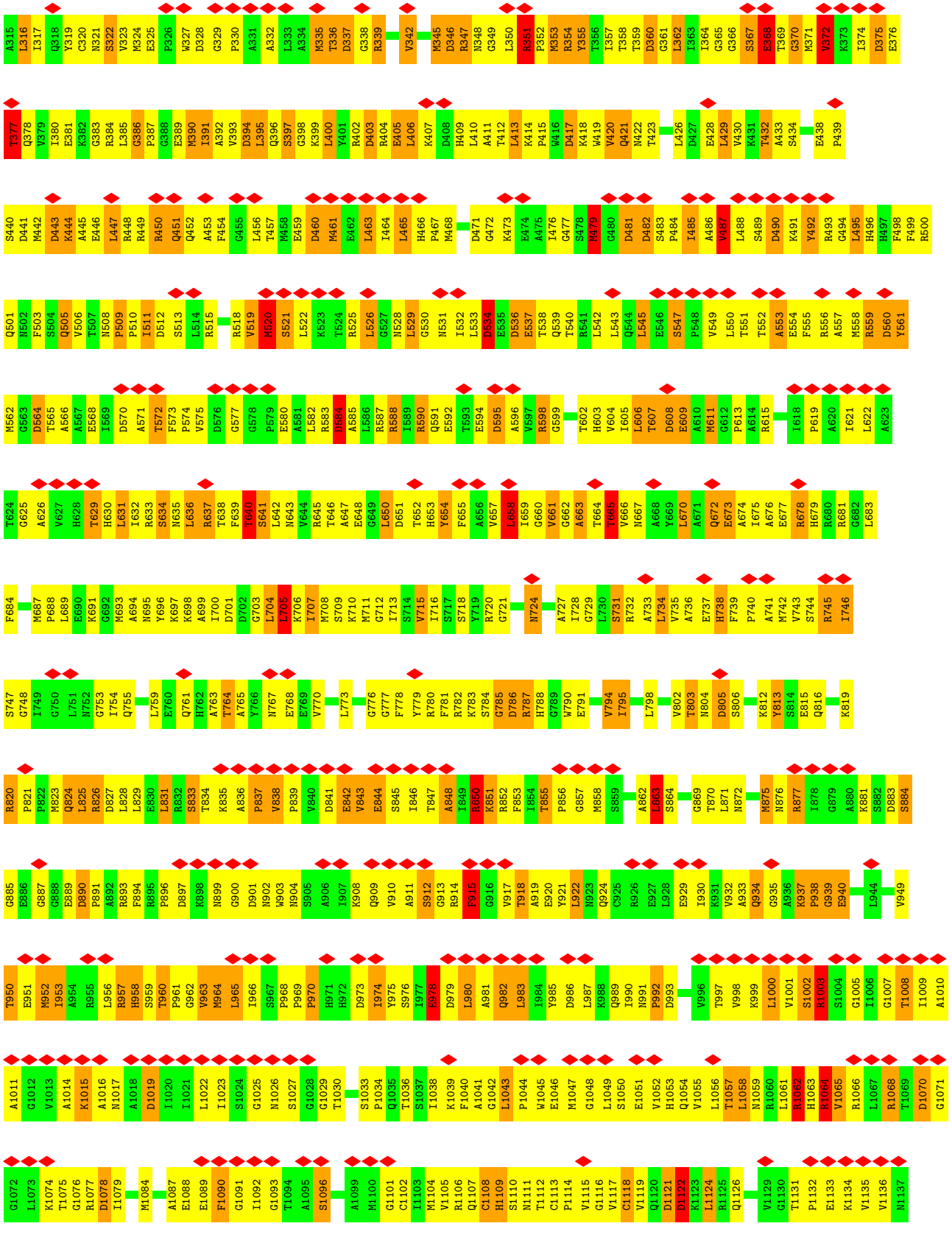


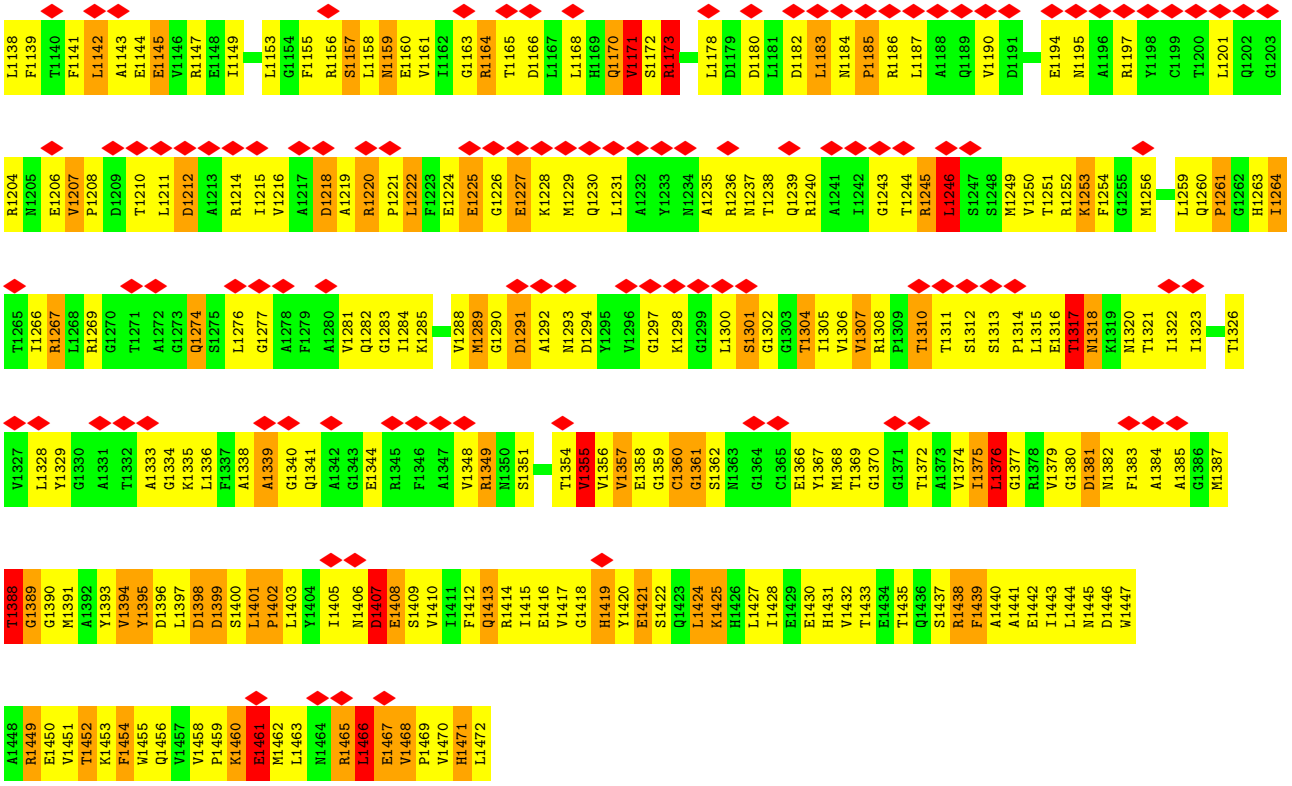
• Molecule 1: GLUTAMATE SYNTHASE [NADPH] LARGE CHAIN

Chain E:



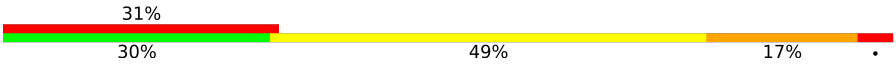


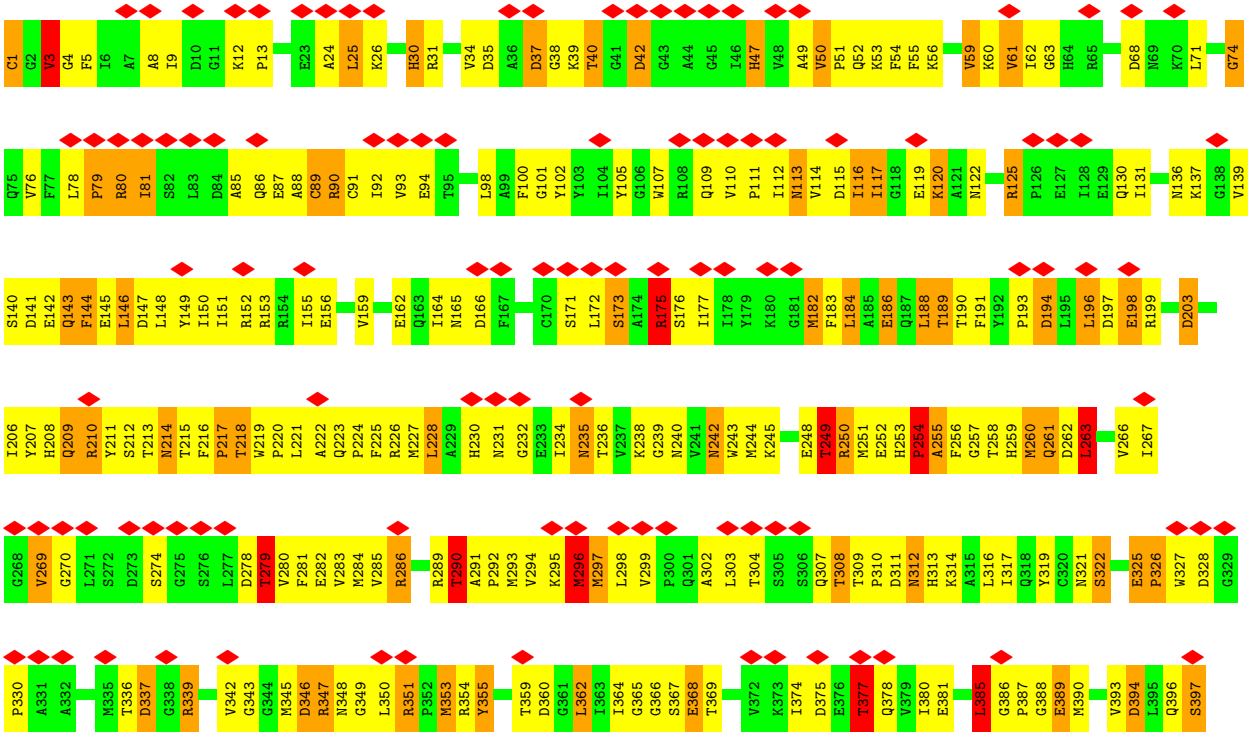


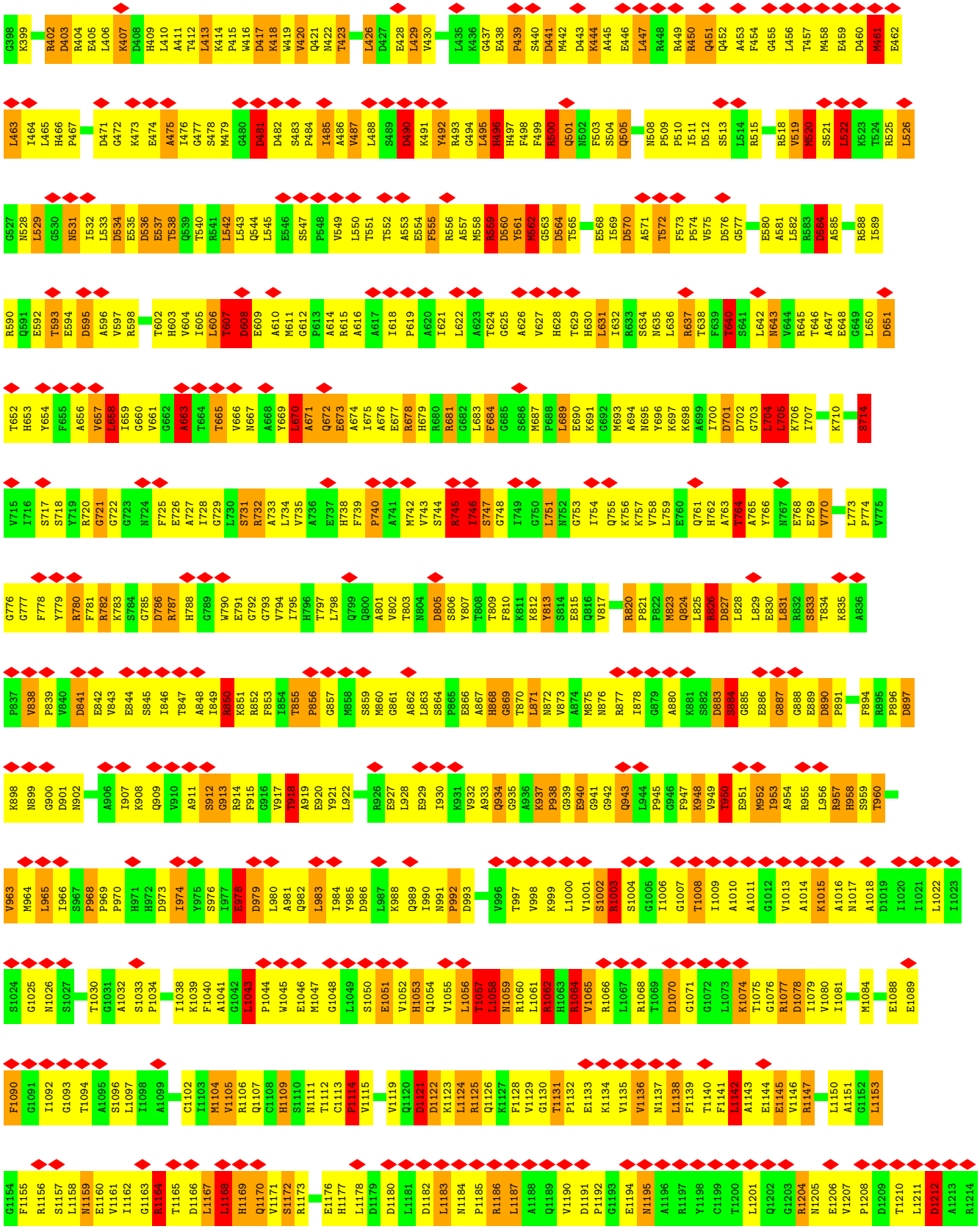


• Molecule 1: GLUTAMATE SYNTHASE [NADPH] LARGE CHAIN

Chain F:



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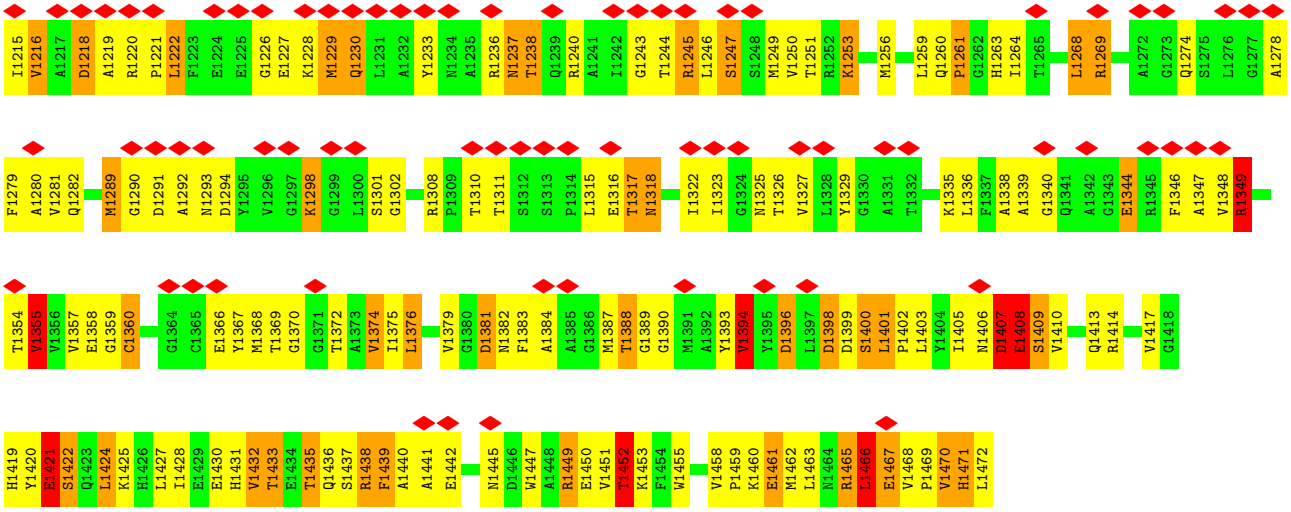
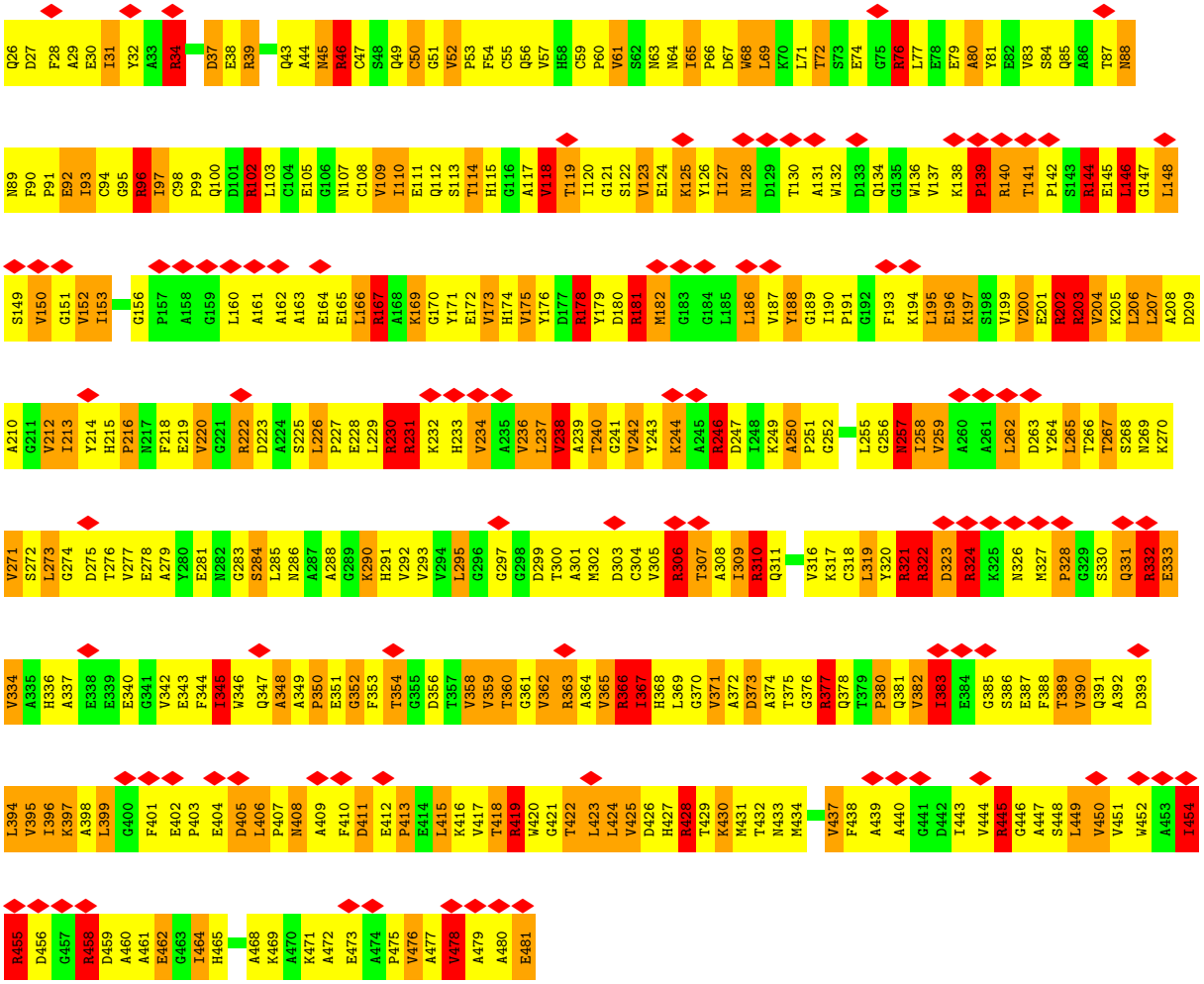
L463 I464 L465 H466 P467 D471 G472 K473 E474 A475 I476 G477 S478 M479 G480 D481 D482 S483 P484 I485 A486 V487 L488 S489 D490 K491 Y492 R493 G494 L495 H496 H497 F498 F499 R500 Q501 N502 F503 S504 Q505 N508 P509 P510 I511 D512 S513 L514 R515 R518 V519 M520 S521 L522 K523 T524 R525 L526
G527 N528 L529 G530 N531 I532 L533 D534 E535 D536 E537 T538 Q539 T540 R541 L542 L543 Q544 L545 E546 S547 P548 V549 L550 T551 T552 A553 E554 P555 R556 A557 M558 R559 D560 Y561 M562 G563 D564 T565 E568 I569 D570 A571 T572 F573 P574 V575 D576 G577 E580 A581 L582 R583 D584 A585 R588 I589
R590 Q591 E592 T593 E594 D595 A596 V597 R598 T602 H603 V604 I605 L606 T607 D608 E609 A610 M611 G612 P613 A614 R615 A616 A617 I618 P619 A620 I621 L622 A623 T624 G625 A626 V627 H628 T629 H630 L631 I632 R633 S634 N635 L636 R637 T638 F639 T640 S641 L642 N643 V644 R645 T646 A647 E648 G649 L650 D651
T652 H653 Y654 F655 A656 V657 L658 I659 G660 V661 G662 A663 T664 T665 V666 N667 A668 Y669 L670 A671 Q672 E673 A674 I675 A676 E677 R678 H679 R680 R681 G682 L683 F684 G685 S686 M687 P688 L689 E690 K691 G692 M693 A694 N695 Y696 K697 K698 A699 I700 D701 D702 G703 L704 L705 K706 I707 K710 S714
V715 I716 S717 S718 Y719 R720 G721 G722 G723 N724 F725 E726 A727 I728 G729 L730 S731 R732 A733 L734 V735 A736 E737 H738 F739 P740 A741 M742 V743 S744 R745 I746 S747 G748 I749 G750 L751 N752 G753 I754 Q755 K756 K757 V758 L759 E760 Q761 H762 A763 I764 A765 Y766 N767 E768 E769 V770 L773 P774 V775
G776 G777 F778 Y779 R780 F781 R782 K783 S784 G785 D786 R787 H788 G789 W790 E791 G792 G793 V794 I795 H796 T797 L798 Q799 Q800 A801 V802 T803 N804 D805 S806 Y807 T808 T809 F810 K811 K812 Y813 S814 E815 Q816 V817 R820 P821 P822 M823 Q824 L825 R826 D827 L828 L829 E830 L831 R832 S833 T834 K835 A836
P837 V838 P839 V840 D841 E842 V843 E844 S845 I846 T847 A848 I849 R850 K851 R852 F853 I854 T855 P856 G857 M858 S859 M860 G861 A862 L863 S864 P865 E866 A867 H868 G869 T870 L871 N872 V873 A874 M875 N876 R877 I878 G879 A880 K881 S882 D883 S884 G885 E886 G887 G888 E889 D890 P891 F894 H895 P896 D897
K898 N899 G900 D901 N902 A906 I907 K908 Q909 V910 A911 S912 G913 R914 F915 G916 V917 T918 A919 E920 Y921 L922 R926 E927 L928 E929 I930 K931 V932 A933 Q934 G935 A936 K937 P938 G939 E940 G941 G942 Q943 L944 P945 G946 F947 K948 V949 T950 E951 M952 I953 A954 R955 L956 R957 H958 S959 T960
V963 M964 L965 I966 S967 P968 P969 P970 H971 H972 D973 I974 Y975 S976 I977 E978 D979 L980 A981 Q982 L983 I984 Y985 D986 L987 K988 Q989 I990 N991 P992 D993 V996 T997 V998 K999 L1000 V1001 S1002 R1003 S1004 G1005 I1006 G1007 T1008 I1009 A1010 A1011 G1012 V1013 A1014 K1015 A1016 N1017 A1018 D1019 I1020 I1021 L1022 I1023
S1024 G1025 N1026 S1027 T1030 G1031 A1032 S1033 P1034 I1038 K1039 F1040 A1041 G1042 L1043 P1044 W1045 E1046 M1047 G1048 L1049 S1050 E1051 V1052 H1053 Q1054 V1055 L1056 T1057 L1058 N1059 R1060 L1061 R1062 H1063 R1064 V1065 R1066 L1067 R1068 T1069 D1070 G1071 G1072 L1073 K1074 T1075 G1076 R1077 D1078 I1079 V1080 I1081 M1084 E1088 E1089
F1090 G1091 I1092 G1093 T1094 A1095 S1096 L1097 I1098 A1099 C1102 I1103 M1104 V1105 R1106 Q1107 C1108 H1109 S1110 N1111 T1112 C1113 P1114 V1115 V1119 Q1120 D1121 D1122 K1123 L1124 R1125 Q1126 K1127 F1128 V1129 G1130 T1131 P1132 E1133 K1134 V1135 V1136 N1137 L1138 F1139 T1140 F1141 L1142 A1143 E1144 E1145 V1146 R1147 L1150 A1151 G1152 L1153
G1154 F1155 R1156 S1157 L1158 N1159 E1160 V1161 I1162 G1163 R1164 T1165 D1166 L1167 L1168 H1169 Q1170 V1171 S1172 R1173 E1176 H1177 L1178 D1179 D1180 L1181 D1182 L1183 N1184 P1185 R1186 L1187 A1188 Q1189 V1190 D1191 P1192 G1193 E1194 N1195 A1196 R1197 Y1198 C1199 T1200 L1201 Q1202 G1203 R1204 N1205 E1206 V1207 P1208 D1209 T1210 L1211 D1212 A1213 R1214



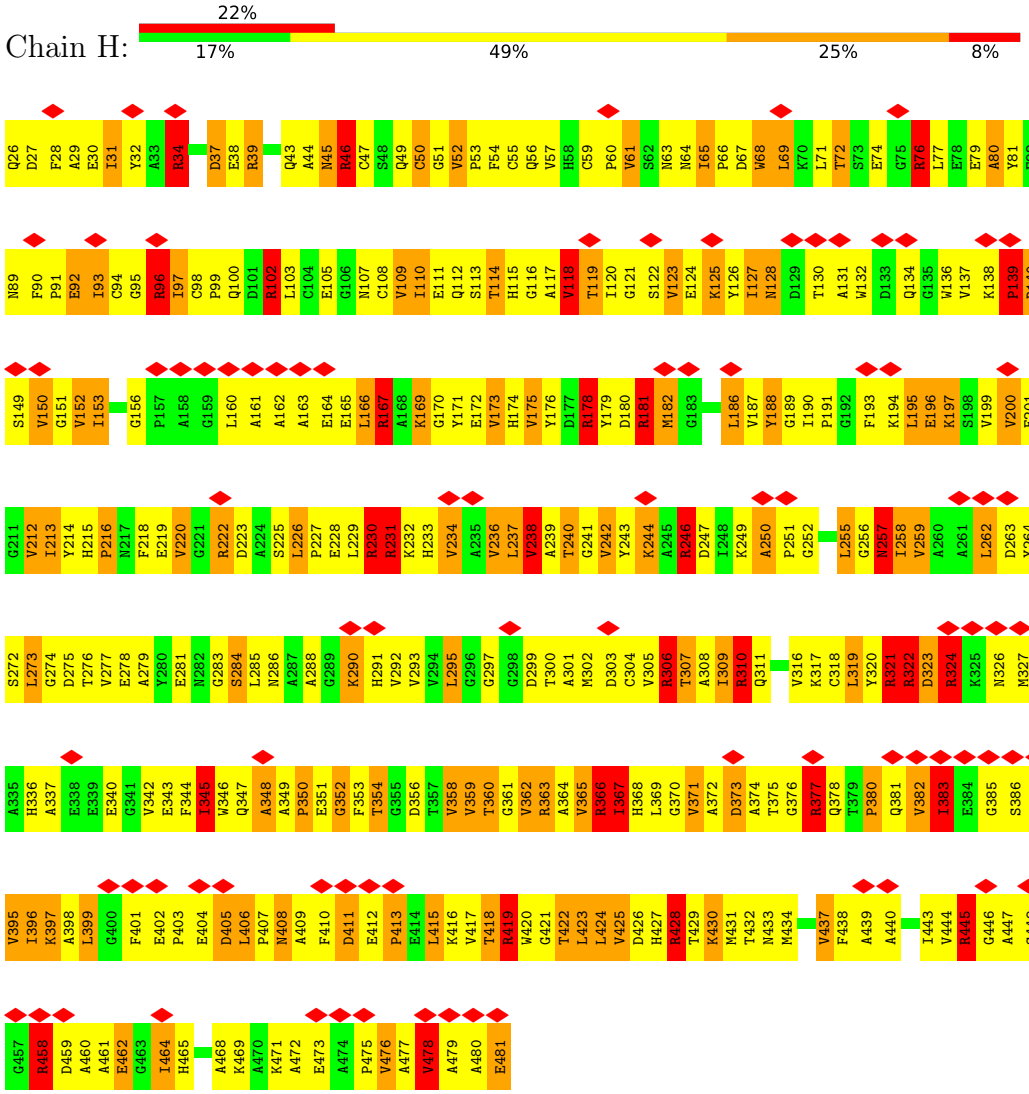
• Molecule 2: GLUTAMATE SYNTHASE [NADPH] SMALL CHAIN

Chain G:



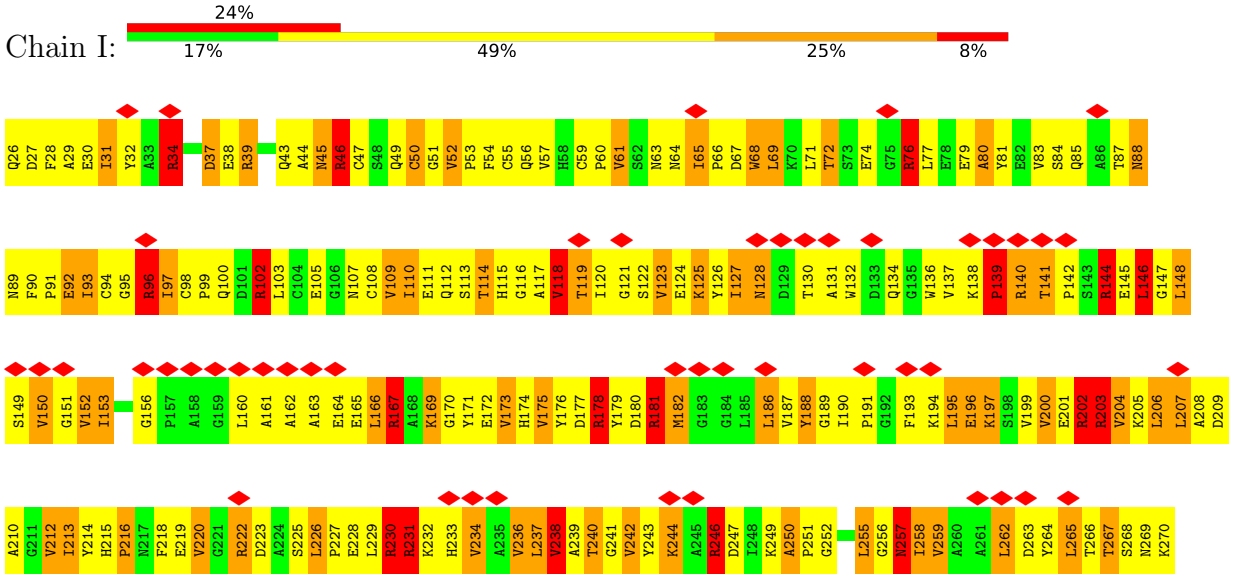
• Molecule 2: GLUTAMATE SYNTHASE [NADPH] SMALL CHAIN

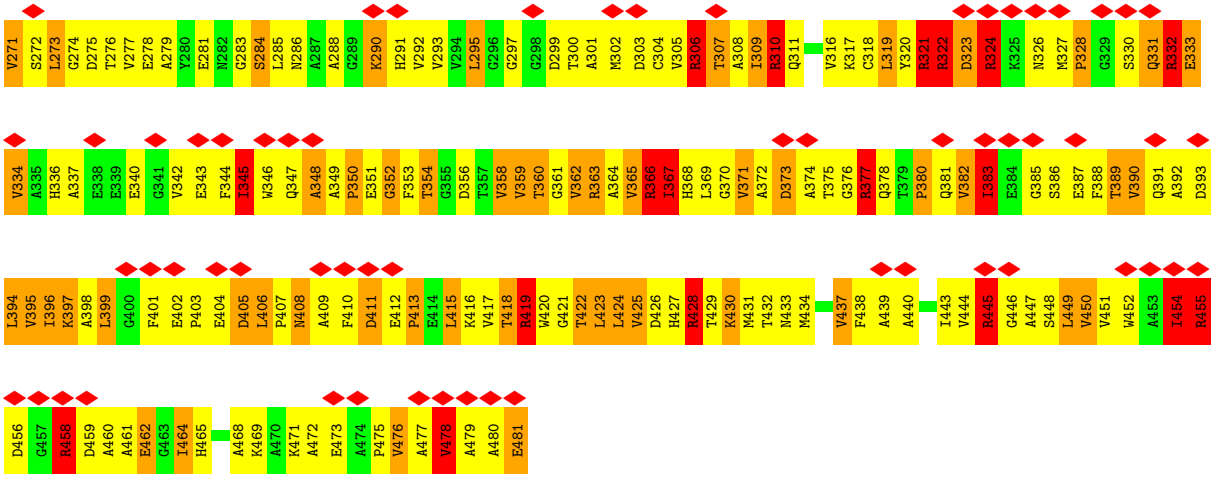
Chain H:



• Molecule 2: GLUTAMATE SYNTHASE [NADPH] SMALL CHAIN

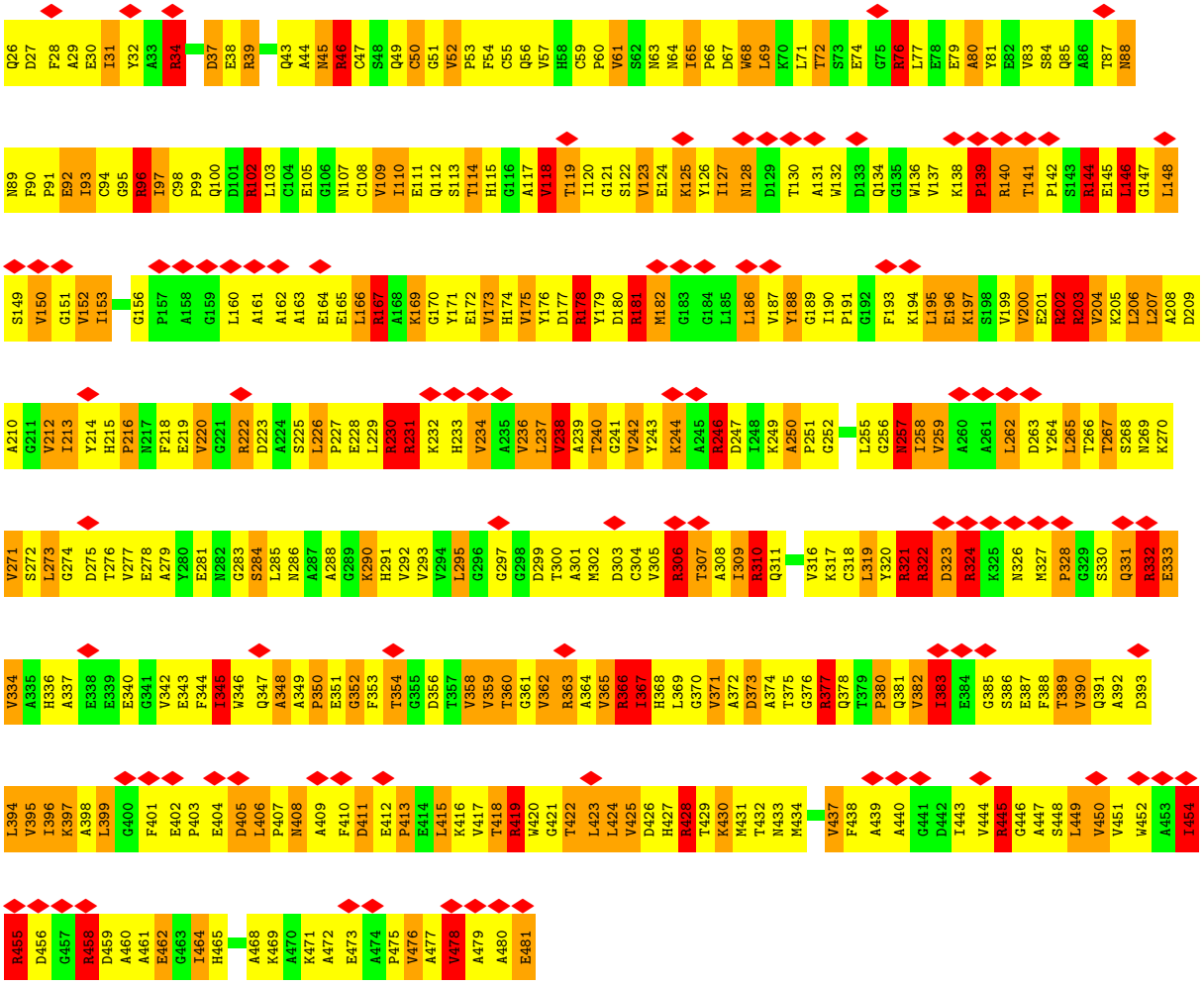
Chain I:





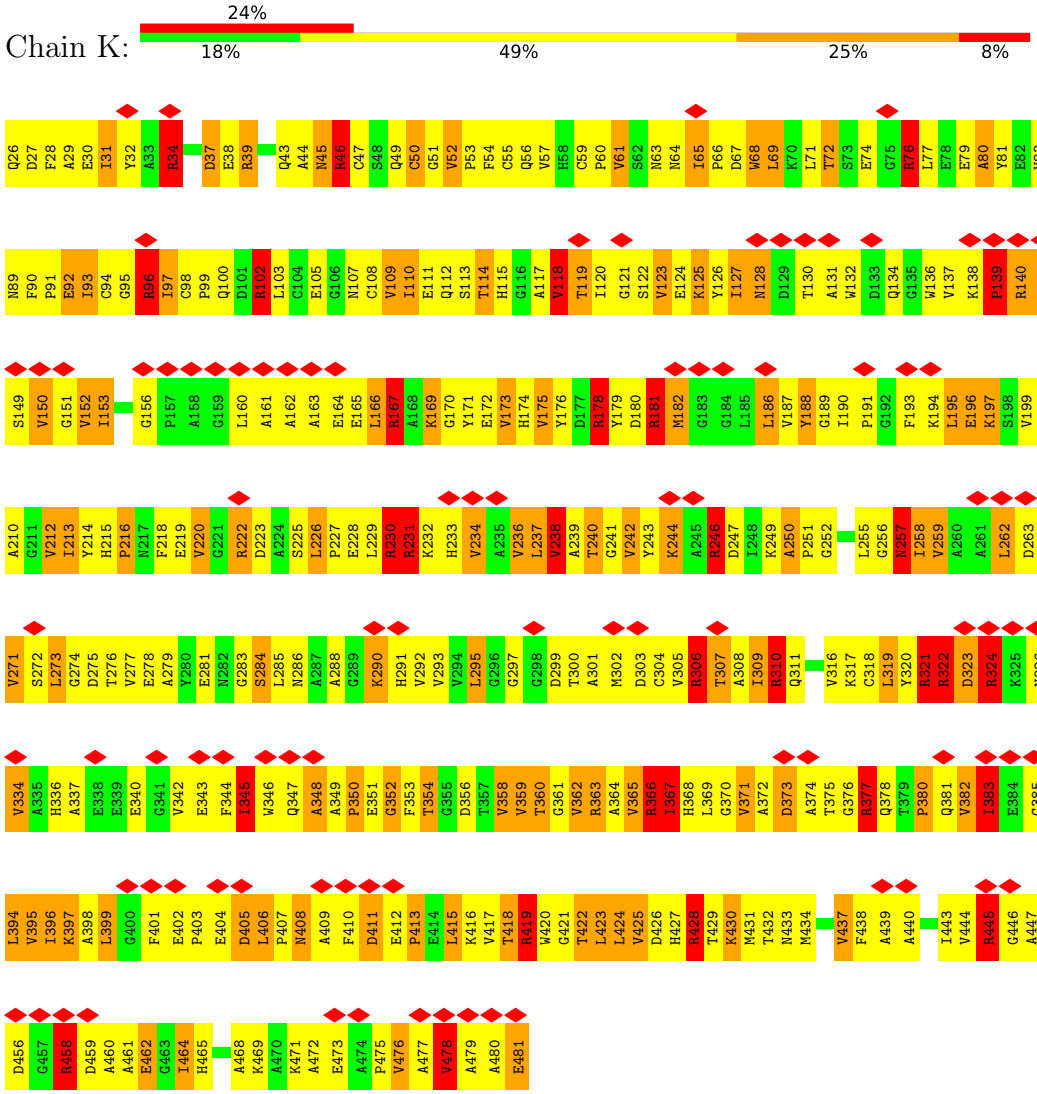
• Molecule 2: GLUTAMATE SYNTHASE [NADPH] SMALL CHAIN

Chain J:



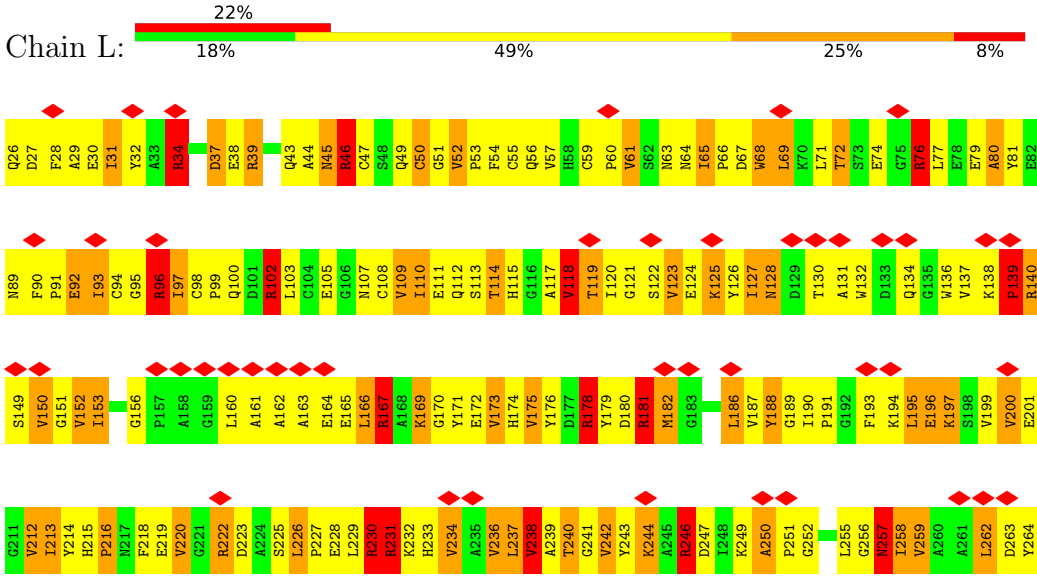
• Molecule 2: GLUTAMATE SYNTHASE [NADPH] SMALL CHAIN

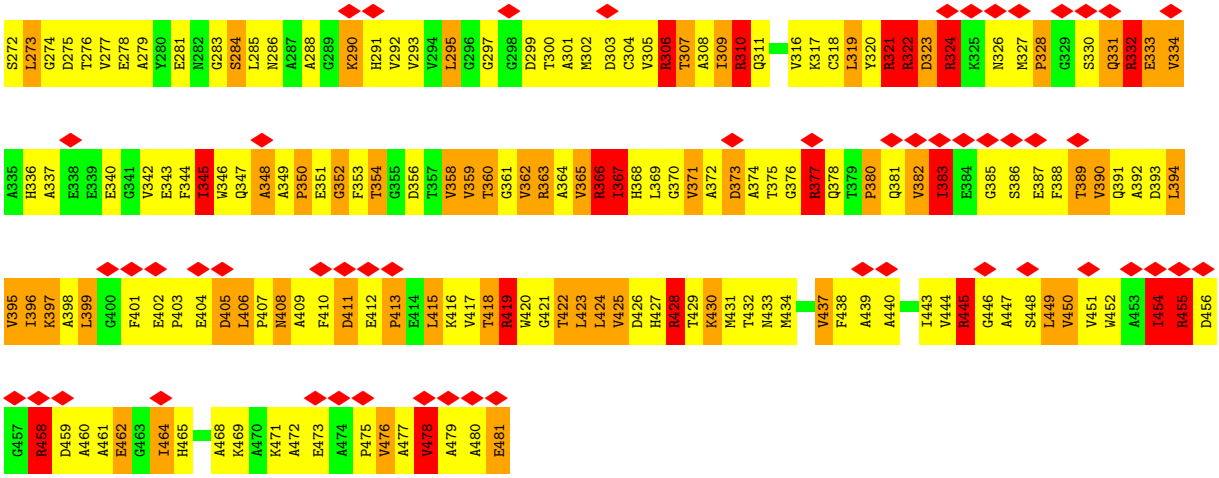
Chain K:



• Molecule 2: GLUTAMATE SYNTHASE [NADPH] SMALL CHAIN

Chain L:

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V316 K317 C318 L319 Y320 R321 R322 D323 R324 K325 N326 M327 P328 G329 S330 Q331 R332 E333 V334
A335 H336 A337 E338 E339 E340 G341 V342 E343 F344 I345 W346 Q347 A348 A349 P350 E351 G352 F353 T354 G355 D356 T357 V358 V359 T360 G361 V362 R363 A364 V365 R366 I367 H368 L369 G370 V371 A372 D373 A374 T375 G376
R377 Q378 T379 P380 Q381 V382 I383 E384 G385 S386 E387 F388 T389 V390 Q391 A392 D393 L394
V395 I396 K397 A398 L399 G400 F401 E402 P403 E404 D405 L406 P407 N408 A409 F410 D411 E412 P413 E414 L415 K416 V417 T418 R419 W420 G421 T422 L423 L424 V425 D426 H427 R428 T429 K430 M431 T432 N433 M434
V437 F438 A439 A440
I443 V444 R445 G446 A447 S448 L449 V450 V451 W452 A453 I454 R455 D456
G457 R458 D459 A460 A461 E462 G463 I464 H465
A468 K469 A470 K471 A472 E473 A474 P475 V476 A477 V478 A479 A480 E481

4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, I	Depositor
Number of particles used	12800	Depositor
Resolution determination method	Not provided	
CTF correction method	WIENER FILTERING OF VOLUMES FROM FOCAL SERIES	Depositor
Microscope	JEOL 2010UHR	Depositor
Voltage (kV)	200	Depositor
Electron dose ($e^-/Å^2$)	10	Depositor
Minimum defocus (nm)	1700	Depositor
Maximum defocus (nm)	3200	Depositor
Magnification	50000	Depositor
Image detector	KODAK SO-163 FILM	Depositor
Maximum map value	1332.420	Depositor
Minimum map value	-799.538	Depositor
Average map value	5.063	Depositor
Map value standard deviation	98.686	Depositor
Recommended contour level	125.0	Depositor
Map size (Å)	304.8, 304.8, 304.8	wwPDB
Map dimensions	192, 192, 192	wwPDB
Map angles (°)	90, 90, 90	wwPDB
Pixel spacing (Å)	1.5875, 1.5875, 1.5875	Depositor

5 Model quality (i)

5.1 Standard geometry (i)

Bond lengths and bond angles in the following residue types are not validated in this section: AKG, F3S, FAD, OMT, SF4, FMN

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	1.06	7/11545 (0.1%)	1.58	200/15613 (1.3%)
1	B	1.10	7/11545 (0.1%)	1.58	192/15613 (1.2%)
1	C	1.06	8/11545 (0.1%)	1.58	201/15613 (1.3%)
1	D	1.10	7/11545 (0.1%)	1.58	191/15613 (1.2%)
1	E	1.06	7/11545 (0.1%)	1.58	200/15613 (1.3%)
1	F	1.10	7/11545 (0.1%)	1.58	194/15613 (1.2%)
2	G	1.00	0/3533	1.78	76/4793 (1.6%)
2	H	1.00	0/3533	1.78	76/4793 (1.6%)
2	I	1.00	0/3533	1.78	76/4793 (1.6%)
2	J	1.00	0/3533	1.78	76/4793 (1.6%)
2	K	1.00	0/3533	1.78	76/4793 (1.6%)
2	L	1.00	0/3533	1.78	76/4793 (1.6%)
All	All	1.07	43/90468 (0.0%)	1.63	1634/122436 (1.3%)

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	1	3
1	B	0	2
1	C	1	3
1	D	0	2
1	E	1	3
1	F	0	2
2	G	0	31
2	H	0	31
2	I	0	31
2	J	0	31
2	K	0	31

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Mol	Chain	#Chirality outliers	#Planarity outliers
2	L	0	31
All	All	3	201

All (43) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	838	VAL	CA-CB	-7.81	1.38	1.54
1	A	838	VAL	CA-CB	-7.78	1.38	1.54
1	E	838	VAL	CA-CB	-7.76	1.38	1.54
1	E	746	ILE	CA-CB	-7.49	1.37	1.54
1	A	746	ILE	CA-CB	-7.46	1.37	1.54
1	C	746	ILE	CA-CB	-7.44	1.37	1.54
1	A	848	ALA	CA-CB	-6.52	1.38	1.52
1	E	848	ALA	CA-CB	-6.52	1.38	1.52
1	C	848	ALA	CA-CB	-6.52	1.38	1.52
1	A	1065	VAL	CB-CG2	-6.17	1.39	1.52
1	E	1065	VAL	CB-CG2	-6.17	1.39	1.52
1	C	1065	VAL	CB-CG2	-6.17	1.39	1.52
1	E	3	VAL	CA-CB	-5.69	1.42	1.54
1	A	3	VAL	CA-CB	-5.68	1.42	1.54
1	C	3	VAL	CA-CB	-5.67	1.42	1.54
1	D	1216	VAL	CB-CG1	-5.53	1.41	1.52
1	B	1394	VAL	CB-CG1	-5.52	1.41	1.52
1	B	1216	VAL	CB-CG1	-5.52	1.41	1.52
1	D	1394	VAL	CB-CG1	-5.52	1.41	1.52
1	E	910	VAL	CA-CB	-5.51	1.43	1.54
1	F	1216	VAL	CB-CG1	-5.50	1.41	1.52
1	C	910	VAL	CA-CB	-5.49	1.43	1.54
1	F	1394	VAL	CB-CG1	-5.49	1.41	1.52
1	A	910	VAL	CA-CB	-5.49	1.43	1.54
1	F	1136	VAL	CA-CB	-5.21	1.43	1.54
1	F	500	ARG	C-O	-5.20	1.13	1.23
1	B	500	ARG	C-O	-5.20	1.13	1.23
1	D	500	ARG	C-O	-5.18	1.13	1.23
1	B	1136	VAL	CA-CB	-5.18	1.43	1.54
1	D	1136	VAL	CA-CB	-5.18	1.43	1.54
1	F	1051	GLU	CD-OE2	5.11	1.31	1.25
1	D	1051	GLU	CD-OE2	5.08	1.31	1.25
1	F	222	ALA	CA-CB	-5.08	1.41	1.52
1	D	222	ALA	CA-CB	-5.08	1.41	1.52
1	B	222	ALA	CA-CB	-5.06	1.41	1.52
1	B	1051	GLU	CD-OE2	5.06	1.31	1.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	862	ALA	CA-CB	-5.05	1.41	1.52
1	D	862	ALA	CA-CB	-5.05	1.41	1.52
1	F	862	ALA	CA-CB	-5.05	1.41	1.52
1	C	741	ALA	CA-CB	-5.05	1.41	1.52
1	A	741	ALA	CA-CB	-5.04	1.41	1.52
1	E	741	ALA	CA-CB	-5.04	1.41	1.52
1	C	975	TYR	CE2-CZ	-5.01	1.32	1.38

All (1634) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	H	45	ASN	CB-CG-OD1	-39.98	41.63	121.60
2	L	45	ASN	CB-CG-OD1	-39.98	41.63	121.60
2	G	45	ASN	CB-CG-OD1	-39.98	41.65	121.60
2	J	45	ASN	CB-CG-OD1	-39.98	41.65	121.60
2	I	45	ASN	CB-CG-OD1	-39.95	41.70	121.60
2	K	45	ASN	CB-CG-OD1	-39.95	41.70	121.60
2	H	50	CYS	CA-CB-SG	14.46	140.03	114.00
2	I	50	CYS	CA-CB-SG	14.46	140.03	114.00
2	K	50	CYS	CA-CB-SG	14.46	140.03	114.00
2	L	50	CYS	CA-CB-SG	14.46	140.03	114.00
2	G	50	CYS	CA-CB-SG	14.46	140.02	114.00
2	J	50	CYS	CA-CB-SG	14.46	140.02	114.00
1	D	1062	ARG	NE-CZ-NH1	-12.70	113.95	120.30
1	B	1062	ARG	NE-CZ-NH1	-12.67	113.96	120.30
1	F	1062	ARG	NE-CZ-NH1	-12.63	113.98	120.30
1	A	608	ASP	CB-CG-OD2	12.17	129.25	118.30
1	C	608	ASP	CB-CG-OD2	12.15	129.23	118.30
1	E	608	ASP	CB-CG-OD2	12.14	129.23	118.30
1	C	141	ASP	CB-CG-OD2	11.98	129.08	118.30
1	A	141	ASP	CB-CG-OD2	11.98	129.08	118.30
1	E	141	ASP	CB-CG-OD2	11.98	129.08	118.30
1	B	888	GLY	N-CA-C	-11.66	83.96	113.10
1	D	888	GLY	N-CA-C	-11.66	83.96	113.10
1	F	888	GLY	N-CA-C	-11.65	83.97	113.10
2	H	50	CYS	N-CA-CB	-11.57	89.77	110.60
2	L	50	CYS	N-CA-CB	-11.57	89.77	110.60
2	G	50	CYS	N-CA-CB	-11.57	89.78	110.60
2	J	50	CYS	N-CA-CB	-11.57	89.78	110.60
2	I	50	CYS	N-CA-CB	-11.56	89.79	110.60
2	K	50	CYS	N-CA-CB	-11.56	89.79	110.60
1	B	890	ASP	CB-CG-OD1	11.27	128.44	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	F	890	ASP	CB-CG-OD1	11.26	128.44	118.30
1	D	890	ASP	CB-CG-OD1	11.24	128.41	118.30
1	B	683	LEU	CB-CG-CD2	-11.20	91.97	111.00
1	F	683	LEU	CB-CG-CD2	-11.19	91.98	111.00
1	D	683	LEU	CB-CG-CD2	-11.17	92.01	111.00
1	F	1056	LEU	CB-CG-CD1	-10.59	93.00	111.00
1	B	1056	LEU	CB-CG-CD1	-10.57	93.03	111.00
1	E	1019	ASP	CB-CG-OD2	10.57	127.81	118.30
1	A	1019	ASP	CB-CG-OD2	10.57	127.81	118.30
1	C	1019	ASP	CB-CG-OD2	10.55	127.80	118.30
1	D	1056	LEU	CB-CG-CD1	-10.54	93.08	111.00
1	F	1466	LEU	CB-CG-CD1	-10.41	93.30	111.00
1	B	1466	LEU	CB-CG-CD1	-10.41	93.31	111.00
1	D	1466	LEU	CB-CG-CD1	-10.41	93.31	111.00
1	F	852	ARG	NE-CZ-NH2	-10.31	115.14	120.30
1	E	1003	ARG	NE-CZ-NH1	10.29	125.44	120.30
1	D	456	LEU	CB-CG-CD2	-10.28	93.53	111.00
1	B	456	LEU	CB-CG-CD2	-10.28	93.53	111.00
1	F	456	LEU	CB-CG-CD2	-10.27	93.54	111.00
1	B	852	ARG	NE-CZ-NH2	-10.23	115.19	120.30
1	C	1003	ARG	NE-CZ-NH1	10.22	125.41	120.30
1	A	1003	ARG	NE-CZ-NH1	10.18	125.39	120.30
1	D	852	ARG	NE-CZ-NH2	-10.18	115.21	120.30
1	E	805	ASP	CB-CG-OD2	10.10	127.39	118.30
1	A	805	ASP	CB-CG-OD2	10.09	127.38	118.30
1	C	805	ASP	CB-CG-OD2	10.07	127.36	118.30
1	D	460	ASP	CB-CG-OD2	9.96	127.26	118.30
1	B	460	ASP	CB-CG-OD2	9.94	127.24	118.30
1	F	460	ASP	CB-CG-OD2	9.91	127.22	118.30
2	G	118	VAL	CA-CB-CG2	-9.86	96.11	110.90
2	J	118	VAL	CA-CB-CG2	-9.86	96.11	110.90
2	H	118	VAL	CA-CB-CG2	-9.85	96.12	110.90
2	I	118	VAL	CA-CB-CG2	-9.85	96.12	110.90
2	K	118	VAL	CA-CB-CG2	-9.85	96.12	110.90
2	L	118	VAL	CA-CB-CG2	-9.85	96.12	110.90
1	F	394	ASP	CB-CG-OD2	9.84	127.15	118.30
1	B	394	ASP	CB-CG-OD2	9.82	127.14	118.30
1	D	394	ASP	CB-CG-OD2	9.79	127.12	118.30
1	A	351	ARG	NE-CZ-NH2	9.71	125.16	120.30
1	E	351	ARG	NE-CZ-NH2	9.71	125.16	120.30
1	C	479	MET	CG-SD-CE	9.69	115.70	100.20
1	C	351	ARG	NE-CZ-NH2	9.69	125.14	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	479	MET	CG-SD-CE	9.68	115.69	100.20
1	E	479	MET	CG-SD-CE	9.68	115.69	100.20
1	D	608	ASP	CB-CG-OD1	-9.65	109.61	118.30
1	B	608	ASP	CB-CG-OD1	-9.64	109.63	118.30
1	E	1003	ARG	NE-CZ-NH2	-9.63	115.49	120.30
1	F	608	ASP	CB-CG-OD1	-9.62	109.64	118.30
1	C	1064	ARG	NE-CZ-NH1	-9.60	115.50	120.30
1	B	940	GLU	N-CA-C	9.59	136.90	111.00
1	D	940	GLU	N-CA-C	9.58	136.87	111.00
1	F	940	GLU	N-CA-C	9.58	136.87	111.00
1	C	1003	ARG	NE-CZ-NH2	-9.58	115.51	120.30
1	A	1064	ARG	NE-CZ-NH1	-9.55	115.53	120.30
1	A	1062	ARG	NE-CZ-NH1	-9.55	115.53	120.30
1	E	1064	ARG	NE-CZ-NH1	-9.54	115.53	120.30
1	A	1003	ARG	NE-CZ-NH2	-9.53	115.54	120.30
1	E	1062	ARG	NE-CZ-NH1	-9.52	115.54	120.30
1	C	460	ASP	CB-CG-OD2	9.48	126.83	118.30
1	E	460	ASP	CB-CG-OD2	9.48	126.83	118.30
1	C	1062	ARG	NE-CZ-NH1	-9.48	115.56	120.30
1	A	460	ASP	CB-CG-OD2	9.46	126.81	118.30
1	B	1218	ASP	CB-CG-OD2	9.43	126.79	118.30
1	D	1218	ASP	CB-CG-OD2	9.43	126.79	118.30
1	D	915	PHE	CA-C-N	9.41	135.02	116.20
1	B	915	PHE	CA-C-N	9.40	134.99	116.20
1	F	1218	ASP	CB-CG-OD2	9.39	126.75	118.30
1	F	915	PHE	CA-C-N	9.38	134.97	116.20
1	C	584	ASP	CB-CG-OD2	9.38	126.74	118.30
1	A	584	ASP	CB-CG-OD2	9.36	126.73	118.30
1	E	584	ASP	CB-CG-OD2	9.35	126.72	118.30
1	D	608	ASP	CB-CG-OD2	9.30	126.67	118.30
1	B	608	ASP	CB-CG-OD2	9.27	126.65	118.30
1	F	608	ASP	CB-CG-OD2	9.27	126.64	118.30
1	B	584	ASP	CB-CG-OD2	9.23	126.61	118.30
1	F	584	ASP	CB-CG-OD2	9.23	126.61	118.30
1	D	584	ASP	CB-CG-OD2	9.20	126.58	118.30
1	B	1355	VAL	CB-CA-C	-9.18	93.95	111.40
1	B	938	PRO	C-N-CA	-9.18	103.03	122.30
1	D	938	PRO	C-N-CA	-9.18	103.03	122.30
1	F	1355	VAL	CB-CA-C	-9.18	93.97	111.40
1	D	1355	VAL	CB-CA-C	-9.17	93.98	111.40
1	F	938	PRO	C-N-CA	-9.17	103.05	122.30
1	A	940	GLU	N-CA-C	9.16	135.74	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	C	890	ASP	CB-CG-OD1	9.16	126.55	118.30
1	E	940	GLU	N-CA-C	9.16	135.73	111.00
1	C	940	GLU	N-CA-C	9.16	135.72	111.00
1	A	890	ASP	CB-CG-OD1	9.15	126.54	118.30
1	E	890	ASP	CB-CG-OD1	9.12	126.50	118.30
1	E	1355	VAL	CB-CA-C	-9.04	94.22	111.40
1	A	1355	VAL	CB-CA-C	-9.04	94.23	111.40
1	C	1355	VAL	CB-CA-C	-9.03	94.25	111.40
1	E	394	ASP	CB-CG-OD2	9.02	126.42	118.30
1	A	394	ASP	CB-CG-OD2	9.01	126.41	118.30
1	F	1164	ARG	NE-CZ-NH1	-9.01	115.80	120.30
1	C	394	ASP	CB-CG-OD2	8.99	126.39	118.30
1	B	1164	ARG	NE-CZ-NH1	-8.92	115.84	120.30
1	D	1164	ARG	NE-CZ-NH1	-8.89	115.85	120.30
1	D	228	LEU	CB-CG-CD1	-8.84	95.98	111.00
1	B	228	LEU	CB-CG-CD1	-8.82	96.00	111.00
1	F	228	LEU	CB-CG-CD1	-8.82	96.01	111.00
1	E	403	ASP	CB-CG-OD2	8.79	126.21	118.30
1	A	403	ASP	CB-CG-OD2	8.73	126.16	118.30
1	E	1062	ARG	NE-CZ-NH2	8.73	124.66	120.30
1	A	1062	ARG	NE-CZ-NH2	8.72	124.66	120.30
1	C	403	ASP	CB-CG-OD2	8.71	126.14	118.30
1	A	351	ARG	NE-CZ-NH1	-8.69	115.95	120.30
1	C	351	ARG	NE-CZ-NH1	-8.68	115.96	120.30
1	C	1062	ARG	NE-CZ-NH2	8.66	124.63	120.30
1	C	1218	ASP	CB-CG-OD2	8.64	126.08	118.30
1	E	351	ARG	NE-CZ-NH1	-8.61	115.99	120.30
1	E	1218	ASP	CB-CG-OD2	8.61	126.05	118.30
1	A	1218	ASP	CB-CG-OD2	8.60	126.04	118.30
1	B	915	PHE	CB-CG-CD2	-8.56	114.81	120.80
1	D	915	PHE	CB-CG-CD2	-8.56	114.81	120.80
1	F	915	PHE	CB-CG-CD2	-8.56	114.81	120.80
2	I	333	GLU	CB-CG-CD	-8.52	91.20	114.20
2	K	333	GLU	CB-CG-CD	-8.52	91.20	114.20
2	H	333	GLU	CB-CG-CD	-8.52	91.21	114.20
2	L	333	GLU	CB-CG-CD	-8.52	91.21	114.20
2	G	333	GLU	CB-CG-CD	-8.51	91.23	114.20
2	J	333	GLU	CB-CG-CD	-8.51	91.23	114.20
1	F	915	PHE	CB-CG-CD1	8.44	126.70	120.80
1	D	915	PHE	CB-CG-CD1	8.42	126.69	120.80
1	A	337	ASP	CB-CG-OD1	8.39	125.85	118.30
1	B	915	PHE	CB-CG-CD1	8.38	126.67	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	C	337	ASP	CB-CG-OD1	8.38	125.84	118.30
1	C	534	ASP	CB-CG-OD2	8.37	125.83	118.30
1	E	534	ASP	CB-CG-OD2	8.37	125.83	118.30
1	A	534	ASP	CB-CG-OD2	8.37	125.83	118.30
1	E	337	ASP	CB-CG-OD1	8.36	125.82	118.30
1	E	228	LEU	CB-CG-CD1	-8.34	96.82	111.00
1	A	228	LEU	CB-CG-CD1	-8.34	96.83	111.00
1	C	228	LEU	CB-CG-CD1	-8.34	96.83	111.00
2	H	45	ASN	CB-CG-ND2	-8.32	96.73	116.70
1	A	1171	VAL	C-N-CA	-8.32	100.90	121.70
2	G	45	ASN	CB-CG-ND2	-8.32	96.73	116.70
2	I	45	ASN	CB-CG-ND2	-8.32	96.73	116.70
2	J	45	ASN	CB-CG-ND2	-8.32	96.73	116.70
2	K	45	ASN	CB-CG-ND2	-8.32	96.73	116.70
2	L	45	ASN	CB-CG-ND2	-8.32	96.73	116.70
1	E	1171	VAL	C-N-CA	-8.32	100.91	121.70
1	C	1171	VAL	C-N-CA	-8.31	100.92	121.70
1	A	545	LEU	CA-CB-CG	-8.29	96.23	115.30
1	C	545	LEU	CA-CB-CG	-8.28	96.25	115.30
1	D	337	ASP	N-CA-C	-8.28	88.64	111.00
1	D	979	ASP	CB-CG-OD2	8.28	125.75	118.30
1	E	545	LEU	CA-CB-CG	-8.28	96.26	115.30
1	B	337	ASP	N-CA-C	-8.28	88.65	111.00
1	B	1390	GLY	N-CA-C	-8.28	92.41	113.10
1	D	1390	GLY	N-CA-C	-8.28	92.41	113.10
1	F	337	ASP	N-CA-C	-8.28	88.66	111.00
1	B	369	THR	C-N-CA	-8.27	104.93	122.30
1	F	369	THR	C-N-CA	-8.27	104.94	122.30
1	F	1390	GLY	N-CA-C	-8.27	92.43	113.10
1	D	369	THR	C-N-CA	-8.26	104.95	122.30
1	F	979	ASP	CB-CG-OD2	8.26	125.73	118.30
1	B	979	ASP	CB-CG-OD2	8.23	125.71	118.30
1	B	1349	ARG	NE-CZ-NH1	-8.22	116.19	120.30
1	F	1349	ARG	NE-CZ-NH1	-8.20	116.20	120.30
1	F	1466	LEU	CA-CB-CG	8.18	134.12	115.30
2	H	246	ARG	C-N-CA	8.18	142.16	121.70
2	L	246	ARG	C-N-CA	8.18	142.16	121.70
1	D	1466	LEU	CA-CB-CG	8.18	134.11	115.30
1	B	1466	LEU	CA-CB-CG	8.18	134.10	115.30
2	G	246	ARG	C-N-CA	8.18	142.14	121.70
2	I	246	ARG	C-N-CA	8.18	142.14	121.70
2	J	246	ARG	C-N-CA	8.18	142.14	121.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	K	246	ARG	C-N-CA	8.18	142.14	121.70
1	D	1349	ARG	NE-CZ-NH1	-8.15	116.23	120.30
1	B	182	MET	CG-SD-CE	-8.14	87.18	100.20
1	D	182	MET	CG-SD-CE	-8.12	87.20	100.20
1	F	182	MET	CG-SD-CE	-8.12	87.20	100.20
2	H	352	GLY	N-CA-C	-8.11	92.82	113.10
2	L	352	GLY	N-CA-C	-8.11	92.82	113.10
2	G	352	GLY	N-CA-C	-8.11	92.84	113.10
2	J	352	GLY	N-CA-C	-8.11	92.84	113.10
2	I	352	GLY	N-CA-C	-8.10	92.86	113.10
2	K	352	GLY	N-CA-C	-8.10	92.86	113.10
2	H	88	ASN	N-CA-CB	8.06	125.10	110.60
2	L	88	ASN	N-CA-CB	8.06	125.10	110.60
2	G	88	ASN	N-CA-CB	8.05	125.09	110.60
2	I	88	ASN	N-CA-CB	8.05	125.09	110.60
2	J	88	ASN	N-CA-CB	8.05	125.09	110.60
2	K	88	ASN	N-CA-CB	8.05	125.09	110.60
1	C	1466	LEU	CB-CG-CD1	-8.04	97.32	111.00
1	A	1466	LEU	CB-CG-CD1	-8.04	97.34	111.00
1	E	1466	LEU	CB-CG-CD1	-8.03	97.36	111.00
1	C	746	ILE	CG1-CB-CG2	7.99	128.99	111.40
1	A	746	ILE	CG1-CB-CG2	7.98	128.95	111.40
1	F	650	LEU	CB-CG-CD2	-7.97	97.45	111.00
1	F	678	ARG	NE-CZ-NH1	-7.97	116.31	120.30
1	D	650	LEU	CB-CG-CD2	-7.97	97.46	111.00
1	B	650	LEU	CB-CG-CD2	-7.96	97.47	111.00
1	E	746	ILE	CG1-CB-CG2	7.96	128.91	111.40
1	D	678	ARG	NE-CZ-NH1	-7.95	116.33	120.30
1	B	678	ARG	NE-CZ-NH1	-7.95	116.33	120.30
1	E	1466	LEU	CA-CB-CG	7.90	133.47	115.30
1	A	1466	LEU	CA-CB-CG	7.89	133.46	115.30
1	C	482	ASP	CB-CG-OD1	7.88	125.40	118.30
1	A	482	ASP	CB-CG-OD1	7.88	125.39	118.30
1	C	1466	LEU	CA-CB-CG	7.88	133.42	115.30
1	E	482	ASP	CB-CG-OD1	7.86	125.37	118.30
1	A	372	VAL	CB-CA-C	-7.81	96.57	111.40
1	A	805	ASP	CB-CG-OD1	-7.80	111.28	118.30
1	E	805	ASP	CB-CG-OD1	-7.80	111.28	118.30
1	E	372	VAL	CB-CA-C	-7.79	96.61	111.40
1	E	286	ARG	NE-CZ-NH1	-7.78	116.41	120.30
1	C	372	VAL	CB-CA-C	-7.78	96.62	111.40
1	C	805	ASP	CB-CG-OD1	-7.76	111.32	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	F	536	ASP	CB-CG-OD2	7.74	125.27	118.30
1	A	286	ARG	NE-CZ-NH1	-7.74	116.43	120.30
1	D	536	ASP	CB-CG-OD2	7.72	125.25	118.30
1	B	536	ASP	CB-CG-OD2	7.71	125.24	118.30
1	A	965	LEU	CB-CG-CD2	-7.70	97.90	111.00
1	C	965	LEU	CB-CG-CD2	-7.70	97.91	111.00
1	E	965	LEU	CB-CG-CD2	-7.70	97.91	111.00
1	B	705	LEU	CB-CG-CD2	-7.66	97.98	111.00
1	C	286	ARG	NE-CZ-NH1	-7.66	116.47	120.30
1	F	705	LEU	CB-CG-CD2	-7.66	97.98	111.00
1	D	705	LEU	CB-CG-CD2	-7.65	98.00	111.00
1	F	805	ASP	CB-CG-OD2	7.63	125.17	118.30
1	B	805	ASP	CB-CG-OD2	7.62	125.16	118.30
1	F	560	ASP	CB-CG-OD1	7.62	125.16	118.30
1	B	560	ASP	CB-CG-OD1	7.61	125.15	118.30
1	F	826	ARG	NE-CZ-NH1	-7.60	116.50	120.30
1	D	560	ASP	CB-CG-OD1	7.60	125.14	118.30
1	B	689	LEU	CB-CG-CD1	-7.60	98.09	111.00
1	F	689	LEU	CB-CG-CD1	-7.59	98.09	111.00
1	D	805	ASP	CB-CG-OD2	7.59	125.13	118.30
1	D	826	ARG	NE-CZ-NH1	-7.58	116.51	120.30
1	D	689	LEU	CB-CG-CD1	-7.58	98.12	111.00
1	F	360	ASP	CB-CG-OD2	7.57	125.12	118.30
1	B	826	ARG	NE-CZ-NH1	-7.57	116.52	120.30
1	B	360	ASP	CB-CG-OD2	7.56	125.11	118.30
1	D	360	ASP	CB-CG-OD2	7.56	125.11	118.30
1	A	1376	LEU	CA-CB-CG	-7.55	97.93	115.30
1	C	1376	LEU	CA-CB-CG	-7.55	97.94	115.30
1	E	1173	ARG	NE-CZ-NH2	-7.55	116.53	120.30
1	E	1376	LEU	CA-CB-CG	-7.55	97.94	115.30
2	H	216	PRO	N-CA-C	7.54	131.72	112.10
2	L	216	PRO	N-CA-C	7.54	131.72	112.10
1	C	360	ASP	CB-CG-OD2	7.54	125.09	118.30
1	E	360	ASP	CB-CG-OD2	7.54	125.09	118.30
2	G	216	PRO	N-CA-C	7.54	131.70	112.10
2	J	216	PRO	N-CA-C	7.54	131.70	112.10
1	A	360	ASP	CB-CG-OD2	7.54	125.08	118.30
2	I	216	PRO	N-CA-C	7.53	131.67	112.10
2	K	216	PRO	N-CA-C	7.53	131.67	112.10
1	A	1173	ARG	NE-CZ-NH2	-7.53	116.54	120.30
1	F	993	ASP	CB-CG-OD2	7.52	125.07	118.30
1	D	993	ASP	CB-CG-OD2	7.51	125.06	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	993	ASP	CB-CG-OD2	7.50	125.05	118.30
1	E	993	ASP	CB-CG-OD2	7.50	125.05	118.30
1	C	993	ASP	CB-CG-OD2	7.49	125.04	118.30
1	B	993	ASP	CB-CG-OD2	7.49	125.04	118.30
2	I	50	CYS	CB-CA-C	7.48	125.36	110.40
2	K	50	CYS	CB-CA-C	7.48	125.36	110.40
1	D	175	ARG	NE-CZ-NH1	-7.48	116.56	120.30
1	A	608	ASP	CB-CG-OD1	-7.47	111.57	118.30
1	C	1173	ARG	NE-CZ-NH2	-7.47	116.56	120.30
1	D	689	LEU	CA-CB-CG	-7.47	98.11	115.30
1	E	608	ASP	CB-CG-OD1	-7.47	111.58	118.30
1	F	689	LEU	CA-CB-CG	-7.47	98.13	115.30
1	F	175	ARG	NE-CZ-NH1	-7.46	116.57	120.30
1	B	689	LEU	CA-CB-CG	-7.46	98.14	115.30
1	D	91	CYS	CA-CB-SG	-7.46	100.57	114.00
2	G	50	CYS	CB-CA-C	7.46	125.31	110.40
2	J	50	CYS	CB-CA-C	7.46	125.31	110.40
1	B	91	CYS	CA-CB-SG	-7.46	100.58	114.00
1	F	91	CYS	CA-CB-SG	-7.46	100.58	114.00
2	H	50	CYS	CB-CA-C	7.45	125.29	110.40
2	L	50	CYS	CB-CA-C	7.45	125.29	110.40
1	B	175	ARG	NE-CZ-NH1	-7.44	116.58	120.30
1	D	746	ILE	CG1-CB-CG2	7.43	127.74	111.40
1	C	608	ASP	CB-CG-OD1	-7.42	111.62	118.30
1	F	746	ILE	CG1-CB-CG2	7.42	127.73	111.40
1	B	746	ILE	CG1-CB-CG2	7.42	127.72	111.40
1	C	1147	ARG	NE-CZ-NH1	-7.40	116.60	120.30
1	F	915	PHE	C-N-CA	-7.40	106.76	122.30
1	B	915	PHE	C-N-CA	-7.40	106.76	122.30
1	A	1147	ARG	NE-CZ-NH1	-7.39	116.61	120.30
1	D	915	PHE	C-N-CA	-7.39	106.78	122.30
1	A	354	ARG	NE-CZ-NH1	-7.38	116.61	120.30
1	E	354	ARG	NE-CZ-NH1	-7.38	116.61	120.30
1	E	1147	ARG	NE-CZ-NH1	-7.37	116.61	120.30
1	E	1390	GLY	N-CA-C	-7.37	94.67	113.10
1	E	490	ASP	N-CA-CB	-7.37	97.33	110.60
1	D	228	LEU	CB-CA-C	-7.37	96.20	110.20
1	C	354	ARG	NE-CZ-NH1	-7.37	116.62	120.30
1	F	228	LEU	CB-CA-C	-7.37	96.20	110.20
1	A	490	ASP	N-CA-CB	-7.36	97.36	110.60
1	B	228	LEU	CB-CA-C	-7.36	96.23	110.20
1	A	1390	GLY	N-CA-C	-7.35	94.72	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	C	584	ASP	CB-CG-OD1	-7.35	111.68	118.30
1	C	1390	GLY	N-CA-C	-7.35	94.73	113.10
1	C	490	ASP	N-CA-CB	-7.34	97.38	110.60
1	A	584	ASP	CB-CG-OD1	-7.34	111.70	118.30
2	H	310	ARG	NH1-CZ-NH2	-7.33	111.34	119.40
2	L	310	ARG	NH1-CZ-NH2	-7.33	111.34	119.40
1	E	584	ASP	CB-CG-OD1	-7.32	111.72	118.30
2	G	310	ARG	NH1-CZ-NH2	-7.30	111.37	119.40
2	J	310	ARG	NH1-CZ-NH2	-7.30	111.37	119.40
2	I	310	ARG	NH1-CZ-NH2	-7.29	111.38	119.40
2	K	310	ARG	NH1-CZ-NH2	-7.29	111.38	119.40
1	B	1168	LEU	CA-CB-CG	7.27	132.02	115.30
1	D	1168	LEU	CA-CB-CG	7.27	132.01	115.30
1	F	1168	LEU	CA-CB-CG	7.27	132.01	115.30
2	I	203	ARG	NH1-CZ-NH2	-7.25	111.42	119.40
2	K	203	ARG	NH1-CZ-NH2	-7.25	111.42	119.40
2	H	203	ARG	NH1-CZ-NH2	-7.25	111.42	119.40
2	L	203	ARG	NH1-CZ-NH2	-7.25	111.42	119.40
1	A	915	PHE	C-N-CA	-7.24	107.09	122.30
1	C	915	PHE	C-N-CA	-7.24	107.09	122.30
1	E	915	PHE	C-N-CA	-7.24	107.09	122.30
2	G	203	ARG	NH1-CZ-NH2	-7.23	111.45	119.40
2	J	203	ARG	NH1-CZ-NH2	-7.23	111.45	119.40
2	I	45	ASN	OD1-CG-ND2	7.18	138.42	121.90
2	K	45	ASN	OD1-CG-ND2	7.18	138.42	121.90
2	G	45	ASN	OD1-CG-ND2	7.16	138.38	121.90
2	J	45	ASN	OD1-CG-ND2	7.16	138.38	121.90
2	H	45	ASN	OD1-CG-ND2	7.15	138.35	121.90
2	L	45	ASN	OD1-CG-ND2	7.15	138.35	121.90
1	B	263	LEU	CA-CB-CG	-7.14	98.87	115.30
2	H	181	ARG	NH1-CZ-NH2	-7.14	111.54	119.40
2	L	181	ARG	NH1-CZ-NH2	-7.14	111.54	119.40
1	A	835	LYS	CD-CE-NZ	7.14	128.12	111.70
1	F	263	LEU	CA-CB-CG	-7.14	98.88	115.30
1	F	1153	LEU	CA-CB-CG	-7.14	98.88	115.30
1	D	263	LEU	CA-CB-CG	-7.14	98.89	115.30
1	D	1153	LEU	CA-CB-CG	-7.14	98.89	115.30
1	C	835	LYS	CD-CE-NZ	7.13	128.11	111.70
1	E	835	LYS	CD-CE-NZ	7.13	128.10	111.70
2	G	181	ARG	NH1-CZ-NH2	-7.13	111.56	119.40
2	J	181	ARG	NH1-CZ-NH2	-7.13	111.56	119.40
2	I	181	ARG	NH1-CZ-NH2	-7.13	111.56	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	K	181	ARG	NH1-CZ-NH2	-7.13	111.56	119.40
1	B	1153	LEU	CA-CB-CG	-7.12	98.91	115.30
1	E	595	ASP	CB-CG-OD2	7.11	124.69	118.30
1	E	490	ASP	CB-CG-OD1	-7.10	111.91	118.30
1	A	263	LEU	CA-CB-CG	-7.10	98.97	115.30
1	B	339	ARG	NE-CZ-NH1	-7.10	116.75	120.30
1	C	263	LEU	CA-CB-CG	-7.09	98.98	115.30
1	A	595	ASP	CB-CG-OD2	7.09	124.68	118.30
1	E	263	LEU	CA-CB-CG	-7.09	98.99	115.30
1	A	490	ASP	CB-CG-OD1	-7.09	111.92	118.30
1	C	490	ASP	CB-CG-OD1	-7.08	111.92	118.30
1	F	368	GLU	CA-CB-CG	7.08	128.99	113.40
1	C	595	ASP	CB-CG-OD2	7.08	124.67	118.30
2	I	332	ARG	NH1-CZ-NH2	-7.08	111.61	119.40
2	K	332	ARG	NH1-CZ-NH2	-7.08	111.61	119.40
2	G	202	ARG	NH1-CZ-NH2	-7.08	111.61	119.40
2	I	202	ARG	NH1-CZ-NH2	-7.08	111.61	119.40
2	J	202	ARG	NH1-CZ-NH2	-7.08	111.61	119.40
2	K	202	ARG	NH1-CZ-NH2	-7.08	111.61	119.40
1	B	368	GLU	CA-CB-CG	7.08	128.97	113.40
1	F	826	ARG	NE-CZ-NH2	7.08	123.84	120.30
2	G	332	ARG	NH1-CZ-NH2	-7.08	111.62	119.40
2	J	332	ARG	NH1-CZ-NH2	-7.08	111.62	119.40
1	E	519	VAL	CB-CA-C	-7.07	97.96	111.40
1	B	1003	ARG	NE-CZ-NH2	-7.07	116.76	120.30
1	A	519	VAL	CB-CA-C	-7.07	97.97	111.40
1	D	339	ARG	NE-CZ-NH1	-7.07	116.76	120.30
1	C	519	VAL	CB-CA-C	-7.07	97.97	111.40
1	D	368	GLU	CA-CB-CG	7.07	128.95	113.40
1	F	339	ARG	NE-CZ-NH1	-7.06	116.77	120.30
2	I	167	ARG	NH1-CZ-NH2	-7.06	111.63	119.40
2	K	167	ARG	NH1-CZ-NH2	-7.06	111.63	119.40
1	D	500	ARG	NE-CZ-NH2	-7.06	116.77	120.30
1	E	1068	ARG	NE-CZ-NH1	-7.06	116.77	120.30
2	H	202	ARG	NH1-CZ-NH2	-7.06	111.63	119.40
2	L	202	ARG	NH1-CZ-NH2	-7.06	111.63	119.40
1	B	835	LYS	CD-CE-NZ	7.06	127.93	111.70
1	D	835	LYS	CD-CE-NZ	7.06	127.93	111.70
1	F	835	LYS	CD-CE-NZ	7.06	127.93	111.70
1	D	826	ARG	NE-CZ-NH2	7.05	123.83	120.30
1	C	1068	ARG	NE-CZ-NH1	-7.05	116.77	120.30
1	B	826	ARG	NE-CZ-NH2	7.05	123.83	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	H	332	ARG	NH1-CZ-NH2	-7.05	111.65	119.40
2	L	332	ARG	NH1-CZ-NH2	-7.05	111.65	119.40
1	A	1252	ARG	NE-CZ-NH1	-7.04	116.78	120.30
1	B	850	ARG	NE-CZ-NH2	-7.04	116.78	120.30
1	E	1252	ARG	NE-CZ-NH1	-7.03	116.79	120.30
1	C	1252	ARG	NE-CZ-NH1	-7.02	116.79	120.30
1	D	1003	ARG	NE-CZ-NH2	-7.01	116.80	120.30
2	G	167	ARG	NH1-CZ-NH2	-7.01	111.69	119.40
2	J	167	ARG	NH1-CZ-NH2	-7.01	111.69	119.40
1	A	1068	ARG	NE-CZ-NH1	-7.01	116.80	120.30
1	F	963	VAL	CB-CA-C	-7.00	98.09	111.40
2	H	167	ARG	NH1-CZ-NH2	-7.00	111.70	119.40
2	L	167	ARG	NH1-CZ-NH2	-7.00	111.70	119.40
1	D	368	GLU	N-CA-CB	7.00	123.20	110.60
1	D	963	VAL	CB-CA-C	-7.00	98.11	111.40
1	E	613	PRO	N-CD-CG	-7.00	92.71	103.20
1	B	913	GLY	N-CA-C	-6.99	95.62	113.10
1	B	963	VAL	CB-CA-C	-6.99	98.11	111.40
1	F	913	GLY	N-CA-C	-6.99	95.61	113.10
1	B	500	ARG	NE-CZ-NH2	-6.99	116.80	120.30
1	D	850	ARG	NE-CZ-NH2	-6.99	116.80	120.30
1	D	913	GLY	N-CA-C	-6.99	95.63	113.10
1	C	613	PRO	N-CD-CG	-6.98	92.72	103.20
1	A	613	PRO	N-CD-CG	-6.98	92.73	103.20
1	F	500	ARG	NE-CZ-NH2	-6.98	116.81	120.30
1	F	1003	ARG	NE-CZ-NH2	-6.98	116.81	120.30
1	F	850	ARG	NE-CZ-NH2	-6.98	116.81	120.30
1	B	368	GLU	N-CA-CB	6.97	123.15	110.60
1	F	368	GLU	N-CA-CB	6.97	123.14	110.60
2	I	127	ILE	CG1-CB-CG2	6.97	126.73	111.40
2	K	127	ILE	CG1-CB-CG2	6.97	126.73	111.40
2	G	127	ILE	CG1-CB-CG2	6.96	126.71	111.40
2	H	127	ILE	CG1-CB-CG2	6.96	126.71	111.40
2	J	127	ILE	CG1-CB-CG2	6.96	126.71	111.40
2	L	127	ILE	CG1-CB-CG2	6.96	126.71	111.40
1	A	564	ASP	CB-CG-OD2	6.94	124.55	118.30
1	C	1056	LEU	CB-CG-CD1	-6.94	99.20	111.00
1	E	1056	LEU	CB-CG-CD1	-6.94	99.20	111.00
1	C	564	ASP	CB-CG-OD2	6.94	124.54	118.30
1	E	564	ASP	CB-CG-OD2	6.94	124.54	118.30
1	A	1056	LEU	CB-CG-CD1	-6.93	99.21	111.00
1	D	337	ASP	C-N-CA	-6.93	107.74	122.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	I	324	ARG	NH1-CZ-NH2	-6.92	111.78	119.40
2	K	324	ARG	NH1-CZ-NH2	-6.92	111.78	119.40
1	B	337	ASP	C-N-CA	-6.92	107.77	122.30
2	H	324	ARG	NH1-CZ-NH2	-6.92	111.79	119.40
2	L	324	ARG	NH1-CZ-NH2	-6.92	111.79	119.40
2	G	324	ARG	NH1-CZ-NH2	-6.92	111.79	119.40
2	J	324	ARG	NH1-CZ-NH2	-6.92	111.79	119.40
2	I	178	ARG	NH1-CZ-NH2	-6.91	111.80	119.40
2	K	178	ARG	NH1-CZ-NH2	-6.91	111.80	119.40
1	B	1153	LEU	CB-CG-CD2	-6.91	99.25	111.00
1	D	1153	LEU	CB-CG-CD2	-6.91	99.25	111.00
1	F	1153	LEU	CB-CG-CD2	-6.91	99.25	111.00
2	I	46	ARG	NH1-CZ-NH2	-6.91	111.80	119.40
2	K	46	ARG	NH1-CZ-NH2	-6.91	111.80	119.40
2	G	46	ARG	NH1-CZ-NH2	-6.91	111.81	119.40
2	J	46	ARG	NH1-CZ-NH2	-6.91	111.81	119.40
1	C	837	PRO	N-CD-CG	-6.90	92.85	103.20
2	H	46	ARG	NH1-CZ-NH2	-6.90	111.81	119.40
2	H	178	ARG	NH1-CZ-NH2	-6.90	111.81	119.40
2	L	46	ARG	NH1-CZ-NH2	-6.90	111.81	119.40
2	L	178	ARG	NH1-CZ-NH2	-6.90	111.81	119.40
1	E	837	PRO	N-CD-CG	-6.90	92.85	103.20
1	F	337	ASP	C-N-CA	-6.90	107.82	122.30
2	H	153	ILE	CG1-CB-CG2	6.90	126.57	111.40
2	L	153	ILE	CG1-CB-CG2	6.90	126.57	111.40
1	A	837	PRO	N-CD-CG	-6.90	92.86	103.20
2	G	153	ILE	CG1-CB-CG2	6.89	126.56	111.40
2	J	153	ILE	CG1-CB-CG2	6.89	126.56	111.40
1	A	346	ASP	CB-CG-OD1	6.88	124.49	118.30
2	I	146	LEU	C-N-CA	-6.88	107.85	122.30
2	K	146	LEU	C-N-CA	-6.88	107.85	122.30
1	E	346	ASP	CB-CG-OD1	6.88	124.49	118.30
2	G	178	ARG	NH1-CZ-NH2	-6.88	111.83	119.40
2	I	153	ILE	CG1-CB-CG2	6.88	126.53	111.40
2	J	178	ARG	NH1-CZ-NH2	-6.88	111.83	119.40
2	K	153	ILE	CG1-CB-CG2	6.88	126.53	111.40
1	C	346	ASP	CB-CG-OD1	6.87	124.48	118.30
2	G	146	LEU	C-N-CA	-6.87	107.87	122.30
2	J	146	LEU	C-N-CA	-6.87	107.87	122.30
1	D	683	LEU	CA-CB-CG	-6.87	99.50	115.30
2	H	76	ARG	NH1-CZ-NH2	-6.87	111.84	119.40
2	H	146	LEU	C-N-CA	-6.87	107.88	122.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	L	76	ARG	NH1-CZ-NH2	-6.87	111.84	119.40
2	L	146	LEU	C-N-CA	-6.87	107.88	122.30
1	B	683	LEU	CA-CB-CG	-6.87	99.51	115.30
1	F	683	LEU	CA-CB-CG	-6.87	99.51	115.30
2	H	428	ARG	NH1-CZ-NH2	-6.86	111.85	119.40
2	L	428	ARG	NH1-CZ-NH2	-6.86	111.85	119.40
1	F	481	ASP	CB-CG-OD2	6.86	124.47	118.30
2	G	34	ARG	NH1-CZ-NH2	-6.85	111.86	119.40
2	I	428	ARG	NH1-CZ-NH2	-6.85	111.86	119.40
2	J	34	ARG	NH1-CZ-NH2	-6.85	111.86	119.40
2	K	428	ARG	NH1-CZ-NH2	-6.85	111.86	119.40
2	H	34	ARG	NH1-CZ-NH2	-6.85	111.87	119.40
2	H	458	ARG	NH1-CZ-NH2	-6.85	111.87	119.40
2	I	76	ARG	NH1-CZ-NH2	-6.85	111.87	119.40
2	K	76	ARG	NH1-CZ-NH2	-6.85	111.87	119.40
2	L	34	ARG	NH1-CZ-NH2	-6.85	111.87	119.40
2	L	458	ARG	NH1-CZ-NH2	-6.85	111.87	119.40
2	G	76	ARG	NH1-CZ-NH2	-6.85	111.87	119.40
2	J	76	ARG	NH1-CZ-NH2	-6.85	111.87	119.40
2	I	34	ARG	NH1-CZ-NH2	-6.84	111.87	119.40
2	K	34	ARG	NH1-CZ-NH2	-6.84	111.87	119.40
2	G	322	ARG	NH1-CZ-NH2	-6.84	111.87	119.40
2	I	322	ARG	NH1-CZ-NH2	-6.84	111.87	119.40
2	J	322	ARG	NH1-CZ-NH2	-6.84	111.87	119.40
2	K	322	ARG	NH1-CZ-NH2	-6.84	111.87	119.40
2	G	458	ARG	NH1-CZ-NH2	-6.84	111.88	119.40
2	J	458	ARG	NH1-CZ-NH2	-6.84	111.88	119.40
2	G	428	ARG	NH1-CZ-NH2	-6.84	111.88	119.40
2	H	96	ARG	NH1-CZ-NH2	-6.84	111.88	119.40
2	J	428	ARG	NH1-CZ-NH2	-6.84	111.88	119.40
2	L	96	ARG	NH1-CZ-NH2	-6.84	111.88	119.40
1	F	1062	ARG	NE-CZ-NH2	6.84	123.72	120.30
2	I	445	ARG	NH1-CZ-NH2	-6.84	111.88	119.40
2	I	455	ARG	NH1-CZ-NH2	-6.84	111.88	119.40
2	K	445	ARG	NH1-CZ-NH2	-6.84	111.88	119.40
2	K	455	ARG	NH1-CZ-NH2	-6.84	111.88	119.40
1	D	481	ASP	CB-CG-OD2	6.83	124.45	118.30
2	G	96	ARG	NH1-CZ-NH2	-6.83	111.88	119.40
2	H	455	ARG	NH1-CZ-NH2	-6.83	111.88	119.40
2	J	96	ARG	NH1-CZ-NH2	-6.83	111.88	119.40
2	L	455	ARG	NH1-CZ-NH2	-6.83	111.88	119.40
2	G	445	ARG	NH1-CZ-NH2	-6.83	111.88	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	J	445	ARG	NH1-CZ-NH2	-6.83	111.88	119.40
2	G	144	ARG	NH1-CZ-NH2	-6.83	111.89	119.40
2	J	144	ARG	NH1-CZ-NH2	-6.83	111.89	119.40
1	C	228	LEU	CB-CA-C	-6.82	97.24	110.20
1	E	228	LEU	CB-CA-C	-6.82	97.24	110.20
2	I	96	ARG	NH1-CZ-NH2	-6.82	111.89	119.40
2	K	96	ARG	NH1-CZ-NH2	-6.82	111.89	119.40
2	G	455	ARG	NH1-CZ-NH2	-6.82	111.90	119.40
2	H	322	ARG	NH1-CZ-NH2	-6.82	111.90	119.40
2	J	455	ARG	NH1-CZ-NH2	-6.82	111.90	119.40
2	L	322	ARG	NH1-CZ-NH2	-6.82	111.90	119.40
1	B	831	LEU	CA-CB-CG	6.82	130.99	115.30
1	B	1062	ARG	NE-CZ-NH2	6.82	123.71	120.30
2	H	144	ARG	NH1-CZ-NH2	-6.82	111.90	119.40
2	L	144	ARG	NH1-CZ-NH2	-6.82	111.90	119.40
1	B	481	ASP	CB-CG-OD2	6.82	124.44	118.30
2	H	377	ARG	NH1-CZ-NH2	-6.82	111.90	119.40
2	L	377	ARG	NH1-CZ-NH2	-6.82	111.90	119.40
2	I	144	ARG	NH1-CZ-NH2	-6.82	111.90	119.40
2	I	366	ARG	NH1-CZ-NH2	-6.82	111.90	119.40
2	K	144	ARG	NH1-CZ-NH2	-6.82	111.90	119.40
2	K	366	ARG	NH1-CZ-NH2	-6.82	111.90	119.40
1	F	831	LEU	CA-CB-CG	6.81	130.97	115.30
1	A	228	LEU	CB-CA-C	-6.81	97.26	110.20
1	D	1062	ARG	NE-CZ-NH2	6.81	123.70	120.30
1	D	831	LEU	CA-CB-CG	6.81	130.96	115.30
2	G	377	ARG	NH1-CZ-NH2	-6.81	111.91	119.40
2	H	231	ARG	NH1-CZ-NH2	-6.81	111.91	119.40
2	J	377	ARG	NH1-CZ-NH2	-6.81	111.91	119.40
2	L	231	ARG	NH1-CZ-NH2	-6.81	111.91	119.40
2	I	377	ARG	NH1-CZ-NH2	-6.80	111.92	119.40
2	K	377	ARG	NH1-CZ-NH2	-6.80	111.92	119.40
2	G	231	ARG	NH1-CZ-NH2	-6.80	111.92	119.40
2	G	366	ARG	NH1-CZ-NH2	-6.80	111.92	119.40
2	J	231	ARG	NH1-CZ-NH2	-6.80	111.92	119.40
2	J	366	ARG	NH1-CZ-NH2	-6.80	111.92	119.40
1	E	536	ASP	CB-CG-OD2	6.79	124.41	118.30
2	I	458	ARG	NH1-CZ-NH2	-6.79	111.93	119.40
2	K	458	ARG	NH1-CZ-NH2	-6.79	111.93	119.40
1	D	1269	ARG	NE-CZ-NH2	-6.79	116.91	120.30
2	H	445	ARG	NH1-CZ-NH2	-6.79	111.93	119.40
2	I	39	ARG	NH1-CZ-NH2	-6.79	111.93	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	K	39	ARG	NH1-CZ-NH2	-6.79	111.93	119.40
2	L	445	ARG	NH1-CZ-NH2	-6.79	111.93	119.40
2	G	306	ARG	NH1-CZ-NH2	-6.79	111.94	119.40
2	I	230	ARG	NH1-CZ-NH2	-6.79	111.94	119.40
2	J	306	ARG	NH1-CZ-NH2	-6.79	111.94	119.40
2	K	230	ARG	NH1-CZ-NH2	-6.79	111.94	119.40
1	B	1269	ARG	NE-CZ-NH2	-6.78	116.91	120.30
2	H	419	ARG	NH1-CZ-NH2	-6.78	111.94	119.40
2	L	419	ARG	NH1-CZ-NH2	-6.78	111.94	119.40
2	H	246	ARG	NH1-CZ-NH2	-6.78	111.94	119.40
2	L	246	ARG	NH1-CZ-NH2	-6.78	111.94	119.40
1	F	1269	ARG	NE-CZ-NH2	-6.78	116.91	120.30
2	G	39	ARG	NH1-CZ-NH2	-6.78	111.94	119.40
2	G	419	ARG	NH1-CZ-NH2	-6.78	111.94	119.40
2	J	39	ARG	NH1-CZ-NH2	-6.78	111.94	119.40
2	J	419	ARG	NH1-CZ-NH2	-6.78	111.94	119.40
1	A	536	ASP	CB-CG-OD2	6.78	124.40	118.30
2	G	246	ARG	NH1-CZ-NH2	-6.78	111.94	119.40
2	H	366	ARG	NH1-CZ-NH2	-6.78	111.94	119.40
2	J	246	ARG	NH1-CZ-NH2	-6.78	111.94	119.40
2	L	366	ARG	NH1-CZ-NH2	-6.78	111.94	119.40
1	C	536	ASP	CB-CG-OD2	6.77	124.39	118.30
2	G	321	ARG	NH1-CZ-NH2	-6.77	111.95	119.40
2	I	231	ARG	NH1-CZ-NH2	-6.77	111.95	119.40
2	I	321	ARG	NH1-CZ-NH2	-6.77	111.95	119.40
2	J	321	ARG	NH1-CZ-NH2	-6.77	111.95	119.40
2	K	231	ARG	NH1-CZ-NH2	-6.77	111.95	119.40
2	K	321	ARG	NH1-CZ-NH2	-6.77	111.95	119.40
1	E	505	GLN	C-N-CA	-6.77	104.78	121.70
2	H	321	ARG	NH1-CZ-NH2	-6.77	111.96	119.40
2	L	321	ARG	NH1-CZ-NH2	-6.77	111.96	119.40
1	B	915	PHE	CA-C-O	-6.77	105.89	120.10
2	I	246	ARG	NH1-CZ-NH2	-6.77	111.96	119.40
2	K	246	ARG	NH1-CZ-NH2	-6.77	111.96	119.40
1	A	505	GLN	C-N-CA	-6.76	104.79	121.70
1	B	607	THR	N-CA-C	6.76	129.26	111.00
2	H	39	ARG	NH1-CZ-NH2	-6.76	111.96	119.40
2	H	306	ARG	NH1-CZ-NH2	-6.76	111.96	119.40
2	I	419	ARG	NH1-CZ-NH2	-6.76	111.96	119.40
2	K	419	ARG	NH1-CZ-NH2	-6.76	111.96	119.40
2	L	39	ARG	NH1-CZ-NH2	-6.76	111.96	119.40
2	L	306	ARG	NH1-CZ-NH2	-6.76	111.96	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	D	607	THR	N-CA-C	6.76	129.26	111.00
1	D	915	PHE	CA-C-O	-6.76	105.90	120.10
1	F	607	THR	N-CA-C	6.76	129.26	111.00
1	F	1121	ASP	CB-CG-OD2	6.76	124.39	118.30
1	C	505	GLN	C-N-CA	-6.76	104.80	121.70
2	H	230	ARG	NH1-CZ-NH2	-6.76	111.96	119.40
2	I	306	ARG	NH1-CZ-NH2	-6.76	111.96	119.40
2	K	306	ARG	NH1-CZ-NH2	-6.76	111.96	119.40
2	L	230	ARG	NH1-CZ-NH2	-6.76	111.96	119.40
2	G	230	ARG	NH1-CZ-NH2	-6.76	111.97	119.40
2	H	363	ARG	NH1-CZ-NH2	-6.76	111.97	119.40
2	J	230	ARG	NH1-CZ-NH2	-6.76	111.97	119.40
2	L	363	ARG	NH1-CZ-NH2	-6.76	111.97	119.40
1	C	963	VAL	CB-CA-C	-6.75	98.57	111.40
1	F	915	PHE	CA-C-O	-6.75	105.93	120.10
2	I	140	ARG	NH1-CZ-NH2	-6.75	111.98	119.40
2	K	140	ARG	NH1-CZ-NH2	-6.75	111.98	119.40
1	B	1121	ASP	CB-CG-OD2	6.75	124.37	118.30
2	I	363	ARG	NH1-CZ-NH2	-6.74	111.98	119.40
2	K	363	ARG	NH1-CZ-NH2	-6.74	111.98	119.40
1	E	963	VAL	CB-CA-C	-6.74	98.59	111.40
2	G	363	ARG	NH1-CZ-NH2	-6.74	111.98	119.40
2	J	363	ARG	NH1-CZ-NH2	-6.74	111.98	119.40
1	A	963	VAL	CB-CA-C	-6.74	98.59	111.40
2	H	140	ARG	NH1-CZ-NH2	-6.74	111.99	119.40
2	L	140	ARG	NH1-CZ-NH2	-6.74	111.99	119.40
2	G	140	ARG	NH1-CZ-NH2	-6.73	111.99	119.40
2	J	140	ARG	NH1-CZ-NH2	-6.73	111.99	119.40
1	D	1121	ASP	CB-CG-OD2	6.73	124.35	118.30
2	I	258	ILE	CG1-CB-CG2	6.72	126.19	111.40
2	K	258	ILE	CG1-CB-CG2	6.72	126.19	111.40
1	C	681	ARG	N-CA-C	-6.72	92.86	111.00
1	A	681	ARG	N-CA-C	-6.72	92.87	111.00
2	G	258	ILE	CG1-CB-CG2	6.71	126.17	111.40
2	J	258	ILE	CG1-CB-CG2	6.71	126.17	111.40
1	E	681	ARG	N-CA-C	-6.71	92.88	111.00
1	B	184	LEU	CB-CG-CD1	6.70	122.39	111.00
1	C	590	ARG	NE-CZ-NH1	-6.70	116.95	120.30
2	H	258	ILE	CG1-CB-CG2	6.70	126.13	111.40
2	L	258	ILE	CG1-CB-CG2	6.70	126.13	111.40
2	I	222	ARG	NH1-CZ-NH2	-6.70	112.03	119.40
2	K	222	ARG	NH1-CZ-NH2	-6.70	112.03	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	D	184	LEU	CB-CG-CD1	6.69	122.37	111.00
1	F	184	LEU	CB-CG-CD1	6.68	122.36	111.00
2	G	222	ARG	NH1-CZ-NH2	-6.67	112.06	119.40
2	J	222	ARG	NH1-CZ-NH2	-6.67	112.06	119.40
2	I	333	GLU	N-CA-CB	6.67	122.61	110.60
2	K	333	GLU	N-CA-CB	6.67	122.61	110.60
1	B	897	ASP	CB-CG-OD2	6.67	124.30	118.30
2	H	333	GLU	N-CA-CB	6.67	122.61	110.60
2	L	333	GLU	N-CA-CB	6.67	122.61	110.60
2	G	333	GLU	N-CA-CB	6.67	122.60	110.60
2	J	333	GLU	N-CA-CB	6.67	122.60	110.60
1	E	590	ARG	NE-CZ-NH1	-6.66	116.97	120.30
2	H	222	ARG	NH1-CZ-NH2	-6.66	112.07	119.40
2	L	222	ARG	NH1-CZ-NH2	-6.66	112.07	119.40
2	H	247	ASP	N-CA-C	6.66	128.98	111.00
2	L	247	ASP	N-CA-C	6.66	128.98	111.00
1	A	590	ARG	NE-CZ-NH1	-6.66	116.97	120.30
2	G	247	ASP	N-CA-C	6.66	128.97	111.00
2	H	102	ARG	NH1-CZ-NH2	-6.66	112.08	119.40
2	I	247	ASP	N-CA-C	6.66	128.97	111.00
2	J	247	ASP	N-CA-C	6.66	128.97	111.00
2	K	247	ASP	N-CA-C	6.66	128.97	111.00
2	L	102	ARG	NH1-CZ-NH2	-6.66	112.08	119.40
1	D	897	ASP	CB-CG-OD2	6.65	124.28	118.30
1	F	897	ASP	CB-CG-OD2	6.64	124.28	118.30
2	G	102	ARG	NH1-CZ-NH2	-6.64	112.10	119.40
2	J	102	ARG	NH1-CZ-NH2	-6.64	112.10	119.40
2	I	102	ARG	NH1-CZ-NH2	-6.61	112.13	119.40
2	K	102	ARG	NH1-CZ-NH2	-6.61	112.13	119.40
1	B	704	LEU	N-CA-CB	-6.59	97.21	110.40
1	D	704	LEU	N-CA-CB	-6.59	97.23	110.40
1	F	704	LEU	N-CA-CB	-6.57	97.25	110.40
1	D	704	LEU	CB-CG-CD1	6.56	122.15	111.00
1	B	637	ARG	NE-CZ-NH1	-6.55	117.02	120.30
2	G	383	ILE	CG1-CB-CG2	6.55	125.82	111.40
2	J	383	ILE	CG1-CB-CG2	6.55	125.82	111.40
1	B	704	LEU	CB-CG-CD1	6.55	122.14	111.00
1	F	637	ARG	NE-CZ-NH1	-6.55	117.03	120.30
2	H	383	ILE	CG1-CB-CG2	6.55	125.81	111.40
2	I	383	ILE	CG1-CB-CG2	6.55	125.81	111.40
2	K	383	ILE	CG1-CB-CG2	6.55	125.81	111.40
2	L	383	ILE	CG1-CB-CG2	6.55	125.81	111.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	B	726	GLU	N-CA-C	-6.55	93.32	111.00
1	D	726	GLU	N-CA-C	-6.55	93.33	111.00
1	D	637	ARG	NE-CZ-NH1	-6.54	117.03	120.30
1	F	704	LEU	CB-CG-CD1	6.54	122.12	111.00
1	F	726	GLU	N-CA-C	-6.54	93.35	111.00
1	D	42	ASP	CB-CG-OD2	6.53	124.18	118.30
1	E	337	ASP	N-CA-C	-6.53	93.38	111.00
1	B	42	ASP	CB-CG-OD2	6.52	124.17	118.30
1	A	337	ASP	N-CA-C	-6.51	93.41	111.00
1	C	481	ASP	CB-CG-OD2	6.51	124.16	118.30
1	D	570	ASP	CB-CG-OD1	6.51	124.16	118.30
1	D	883	ASP	CB-CG-OD1	6.51	124.16	118.30
1	A	481	ASP	CB-CG-OD2	6.50	124.16	118.30
1	F	570	ASP	CB-CG-OD1	6.50	124.15	118.30
1	C	337	ASP	N-CA-C	-6.50	93.45	111.00
1	C	803	THR	CA-CB-CG2	-6.50	103.30	112.40
2	I	238	VAL	C-N-CA	6.50	137.95	121.70
2	K	238	VAL	C-N-CA	6.50	137.95	121.70
1	B	570	ASP	CB-CG-OD1	6.50	124.15	118.30
1	B	883	ASP	CB-CG-OD1	6.50	124.15	118.30
1	F	42	ASP	CB-CG-OD2	6.49	124.14	118.30
1	F	196	LEU	CA-CB-CG	-6.49	100.38	115.30
1	F	595	ASP	CB-CG-OD2	6.49	124.14	118.30
1	A	803	THR	CA-CB-CG2	-6.49	103.32	112.40
2	G	238	VAL	C-N-CA	6.49	137.91	121.70
2	J	238	VAL	C-N-CA	6.49	137.91	121.70
1	D	196	LEU	CA-CB-CG	-6.48	100.39	115.30
1	C	887	GLY	N-CA-C	6.48	129.31	113.10
1	D	595	ASP	CB-CG-OD2	6.48	124.13	118.30
1	E	803	THR	CA-CB-CG2	-6.48	103.33	112.40
1	B	196	LEU	CA-CB-CG	-6.48	100.41	115.30
1	E	481	ASP	CB-CG-OD2	6.48	124.13	118.30
1	A	938	PRO	C-N-CA	-6.47	108.70	122.30
1	F	529	LEU	CA-CB-CG	-6.47	100.41	115.30
2	H	238	VAL	C-N-CA	6.47	137.88	121.70
2	L	238	VAL	C-N-CA	6.47	137.88	121.70
1	A	887	GLY	N-CA-C	6.47	129.28	113.10
1	E	887	GLY	N-CA-C	6.47	129.28	113.10
1	E	938	PRO	C-N-CA	-6.47	108.71	122.30
1	F	883	ASP	CB-CG-OD1	6.47	124.12	118.30
1	B	529	LEU	CA-CB-CG	-6.47	100.43	115.30
1	D	346	ASP	CB-CG-OD2	6.47	124.12	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	B	595	ASP	CB-CG-OD2	6.46	124.12	118.30
1	F	346	ASP	CB-CG-OD2	6.46	124.12	118.30
1	A	850	ARG	NE-CZ-NH2	-6.46	117.07	120.30
1	B	346	ASP	CB-CG-OD2	6.46	124.12	118.30
1	D	529	LEU	CA-CB-CG	-6.46	100.44	115.30
2	G	92	GLU	CB-CA-C	-6.46	97.48	110.40
2	H	213	ILE	CG1-CB-CG2	6.46	125.62	111.40
2	J	92	GLU	CB-CA-C	-6.46	97.48	110.40
2	L	213	ILE	CG1-CB-CG2	6.46	125.62	111.40
1	C	938	PRO	C-N-CA	-6.46	108.74	122.30
2	H	92	GLU	CB-CA-C	-6.46	97.49	110.40
2	L	92	GLU	CB-CA-C	-6.46	97.49	110.40
2	G	213	ILE	CG1-CB-CG2	6.45	125.60	111.40
2	I	92	GLU	CB-CA-C	-6.45	97.49	110.40
2	I	367	ILE	CG1-CB-CG2	6.45	125.60	111.40
2	J	213	ILE	CG1-CB-CG2	6.45	125.60	111.40
2	K	92	GLU	CB-CA-C	-6.45	97.49	110.40
2	K	367	ILE	CG1-CB-CG2	6.45	125.60	111.40
2	G	367	ILE	CG1-CB-CG2	6.45	125.59	111.40
2	J	367	ILE	CG1-CB-CG2	6.45	125.59	111.40
2	I	213	ILE	CG1-CB-CG2	6.45	125.58	111.40
2	K	213	ILE	CG1-CB-CG2	6.45	125.58	111.40
1	C	850	ARG	NE-CZ-NH2	-6.44	117.08	120.30
2	H	367	ILE	CG1-CB-CG2	6.44	125.56	111.40
2	L	367	ILE	CG1-CB-CG2	6.44	125.56	111.40
1	E	850	ARG	NE-CZ-NH2	-6.43	117.08	120.30
1	D	141	ASP	CB-CG-OD2	6.41	124.07	118.30
1	F	141	ASP	CB-CG-OD2	6.41	124.07	118.30
1	B	141	ASP	CB-CG-OD2	6.40	124.06	118.30
1	D	590	ARG	NE-CZ-NH1	-6.40	117.10	120.30
1	F	1125	ARG	NE-CZ-NH1	-6.38	117.11	120.30
1	A	715	VAL	CB-CA-C	-6.37	99.30	111.40
1	C	715	VAL	CB-CA-C	-6.37	99.30	111.40
1	E	1078	ASP	CB-CG-OD2	6.36	124.03	118.30
1	B	1125	ARG	NE-CZ-NH1	-6.36	117.12	120.30
1	E	715	VAL	CB-CA-C	-6.36	99.31	111.40
1	C	1078	ASP	CB-CG-OD2	6.36	124.02	118.30
1	E	978	GLU	CA-CB-CG	-6.36	99.41	113.40
1	A	1078	ASP	CB-CG-OD2	6.35	124.02	118.30
1	D	1125	ARG	NE-CZ-NH1	-6.35	117.12	120.30
1	A	978	GLU	CA-CB-CG	-6.35	99.44	113.40
1	E	1376	LEU	CB-CG-CD1	6.34	121.79	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	B	1058	LEU	CB-CG-CD2	-6.34	100.22	111.00
1	C	978	GLU	CA-CB-CG	-6.34	99.45	113.40
1	A	1376	LEU	CB-CG-CD1	6.34	121.78	111.00
1	C	1376	LEU	CB-CG-CD1	6.33	121.76	111.00
1	F	1058	LEU	CB-CG-CD2	-6.33	100.24	111.00
1	B	1138	LEU	CB-CG-CD1	-6.33	100.24	111.00
1	D	1138	LEU	CB-CG-CD1	-6.32	100.25	111.00
1	F	1138	LEU	CB-CG-CD1	-6.32	100.25	111.00
1	B	590	ARG	NE-CZ-NH1	-6.32	117.14	120.30
1	D	1058	LEU	CB-CG-CD2	-6.32	100.26	111.00
2	H	257	ASN	CB-CG-OD1	-6.31	108.98	121.60
2	L	257	ASN	CB-CG-OD1	-6.31	108.98	121.60
1	A	964	MET	CB-CA-C	-6.30	97.79	110.40
1	E	964	MET	CB-CA-C	-6.30	97.79	110.40
1	F	590	ARG	NE-CZ-NH1	-6.30	117.15	120.30
1	A	3	VAL	CB-CA-C	-6.30	99.42	111.40
1	C	3	VAL	CB-CA-C	-6.30	99.42	111.40
1	C	964	MET	CB-CA-C	-6.30	97.80	110.40
2	G	257	ASN	CB-CG-OD1	-6.29	109.01	121.60
2	J	257	ASN	CB-CG-OD1	-6.29	109.01	121.60
1	E	3	VAL	CB-CA-C	-6.29	99.45	111.40
2	I	257	ASN	CB-CG-OD1	-6.28	109.04	121.60
2	K	257	ASN	CB-CG-OD1	-6.28	109.04	121.60
1	F	214	ASN	CB-CA-C	-6.26	97.89	110.40
1	B	214	ASN	CB-CA-C	-6.25	97.89	110.40
1	D	214	ASN	CB-CA-C	-6.25	97.89	110.40
1	A	520	MET	CB-CG-SD	-6.25	93.66	112.40
1	E	520	MET	CB-CG-SD	-6.24	93.68	112.40
1	C	520	MET	CB-CG-SD	-6.24	93.69	112.40
1	C	106	GLY	N-CA-C	6.24	128.69	113.10
1	A	106	GLY	N-CA-C	6.24	128.69	113.10
1	A	110	VAL	CA-CB-CG1	-6.24	101.55	110.90
1	E	106	GLY	N-CA-C	6.24	128.69	113.10
1	F	1222	LEU	CB-CG-CD1	-6.23	100.41	111.00
1	C	110	VAL	CA-CB-CG1	-6.23	101.55	110.90
1	E	110	VAL	CA-CB-CG1	-6.23	101.56	110.90
1	D	1222	LEU	CB-CG-CD1	-6.22	100.42	111.00
2	I	309	ILE	CG1-CB-CG2	6.22	125.08	111.40
2	K	309	ILE	CG1-CB-CG2	6.22	125.08	111.40
1	B	1222	LEU	CB-CG-CD1	-6.22	100.43	111.00
1	E	443	ASP	CB-CG-OD2	6.22	123.90	118.30
1	B	732	ARG	NE-CZ-NH2	-6.22	117.19	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	C	91	CYS	CA-CB-SG	-6.21	102.82	114.00
1	C	443	ASP	CB-CG-OD2	6.21	123.89	118.30
1	A	91	CYS	CA-CB-SG	-6.21	102.83	114.00
1	A	443	ASP	CB-CG-OD2	6.21	123.89	118.30
1	D	125	ARG	NE-CZ-NH2	-6.21	117.20	120.30
2	G	309	ILE	CG1-CB-CG2	6.21	125.06	111.40
2	H	309	ILE	CG1-CB-CG2	6.21	125.06	111.40
2	J	309	ILE	CG1-CB-CG2	6.21	125.06	111.40
2	L	309	ILE	CG1-CB-CG2	6.21	125.06	111.40
1	D	182	MET	CB-CA-C	-6.20	98.00	110.40
1	F	732	ARG	NE-CZ-NH2	-6.20	117.20	120.30
1	B	182	MET	CB-CA-C	-6.20	98.00	110.40
1	F	182	MET	CB-CA-C	-6.20	98.00	110.40
2	H	345	ILE	N-CA-C	-6.20	94.26	111.00
2	L	345	ILE	N-CA-C	-6.20	94.26	111.00
2	I	345	ILE	N-CA-C	-6.20	94.27	111.00
2	K	345	ILE	N-CA-C	-6.20	94.27	111.00
1	B	1053	HIS	CB-CA-C	-6.19	98.01	110.40
1	E	91	CYS	CA-CB-SG	-6.19	102.85	114.00
1	E	289	ARG	NE-CZ-NH1	-6.19	117.20	120.30
1	F	1053	HIS	CB-CA-C	-6.19	98.02	110.40
1	D	732	ARG	NE-CZ-NH2	-6.19	117.21	120.30
2	G	345	ILE	N-CA-C	-6.19	94.30	111.00
2	J	345	ILE	N-CA-C	-6.19	94.30	111.00
1	D	1053	HIS	CB-CA-C	-6.19	98.03	110.40
2	G	93	ILE	CG1-CB-CG2	6.17	124.99	111.40
2	H	93	ILE	CG1-CB-CG2	6.17	124.99	111.40
2	J	93	ILE	CG1-CB-CG2	6.17	124.99	111.40
2	L	93	ILE	CG1-CB-CG2	6.17	124.99	111.40
2	I	93	ILE	CG1-CB-CG2	6.17	124.97	111.40
2	K	93	ILE	CG1-CB-CG2	6.17	124.97	111.40
1	A	289	ARG	NE-CZ-NH1	-6.16	117.22	120.30
1	A	915	PHE	N-CA-C	6.16	127.63	111.00
1	E	915	PHE	N-CA-C	6.15	127.62	111.00
1	B	125	ARG	NE-CZ-NH2	-6.14	117.23	120.30
1	C	915	PHE	N-CA-C	6.14	127.59	111.00
1	C	289	ARG	NE-CZ-NH1	-6.14	117.23	120.30
1	D	50	VAL	CB-CA-C	-6.13	99.75	111.40
1	B	50	VAL	CB-CA-C	-6.13	99.75	111.40
1	E	1070	ASP	CB-CG-OD2	6.12	123.81	118.30
1	F	90	ARG	NE-CZ-NH1	-6.12	117.24	120.30
2	G	345	ILE	CG1-CB-CG2	6.12	124.86	111.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	J	345	ILE	CG1-CB-CG2	6.12	124.86	111.40
1	C	1074	LYS	CB-CA-C	-6.12	98.16	110.40
2	I	345	ILE	CG1-CB-CG2	6.12	124.86	111.40
2	K	345	ILE	CG1-CB-CG2	6.12	124.86	111.40
1	F	50	VAL	CB-CA-C	-6.12	99.78	111.40
2	H	345	ILE	CG1-CB-CG2	6.12	124.85	111.40
2	L	345	ILE	CG1-CB-CG2	6.12	124.85	111.40
1	D	986	ASP	CB-CG-OD2	6.11	123.80	118.30
1	F	986	ASP	CB-CG-OD2	6.11	123.80	118.30
1	B	90	ARG	NE-CZ-NH1	-6.10	117.25	120.30
1	A	1074	LYS	CB-CA-C	-6.09	98.21	110.40
1	B	986	ASP	CB-CG-OD2	6.09	123.78	118.30
1	F	519	VAL	CB-CA-C	-6.09	99.83	111.40
1	D	519	VAL	CB-CA-C	-6.09	99.83	111.40
1	D	890	ASP	CB-CG-OD2	-6.09	112.82	118.30
1	B	519	VAL	CB-CA-C	-6.08	99.84	111.40
1	A	1070	ASP	CB-CG-OD2	6.08	123.77	118.30
1	D	850	ARG	NE-CZ-NH1	6.08	123.34	120.30
1	F	890	ASP	CB-CG-OD2	-6.08	112.83	118.30
1	E	1074	LYS	CB-CA-C	-6.08	98.25	110.40
1	C	141	ASP	CB-CG-OD1	-6.07	112.83	118.30
1	C	1070	ASP	CB-CG-OD2	6.07	123.76	118.30
1	E	141	ASP	CB-CG-OD1	-6.07	112.84	118.30
1	B	203	ASP	CB-CG-OD2	6.07	123.76	118.30
1	B	250	ARG	CB-CA-C	-6.07	98.27	110.40
1	A	141	ASP	CB-CG-OD1	-6.06	112.84	118.30
1	B	890	ASP	CB-CG-OD2	-6.06	112.85	118.30
1	F	250	ARG	CB-CA-C	-6.06	98.28	110.40
1	B	732	ARG	CG-CD-NE	-6.05	99.09	111.80
1	D	250	ARG	CB-CA-C	-6.05	98.30	110.40
1	E	1180	ASP	CB-CG-OD2	6.05	123.75	118.30
2	I	110	ILE	CG1-CB-CG2	6.05	124.71	111.40
2	K	110	ILE	CG1-CB-CG2	6.05	124.71	111.40
1	A	286	ARG	NE-CZ-NH2	6.05	123.32	120.30
1	D	732	ARG	CG-CD-NE	-6.05	99.10	111.80
1	D	296	MET	CA-CB-CG	-6.05	103.02	113.30
1	F	732	ARG	CG-CD-NE	-6.05	99.10	111.80
2	H	110	ILE	CG1-CB-CG2	6.05	124.70	111.40
2	L	110	ILE	CG1-CB-CG2	6.05	124.70	111.40
1	B	850	ARG	NE-CZ-NH1	6.04	123.32	120.30
1	F	125	ARG	NE-CZ-NH2	-6.04	117.28	120.30
1	C	560	ASP	CB-CG-OD1	6.04	123.74	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	D	684	PHE	N-CA-C	-6.04	94.70	111.00
2	G	110	ILE	CG1-CB-CG2	6.04	124.68	111.40
2	J	110	ILE	CG1-CB-CG2	6.04	124.68	111.40
1	C	1180	ASP	CB-CG-OD2	6.04	123.73	118.30
1	B	684	PHE	N-CA-C	-6.03	94.71	111.00
1	D	203	ASP	CB-CG-OD2	6.03	123.73	118.30
1	F	684	PHE	N-CA-C	-6.03	94.72	111.00
1	B	296	MET	CA-CB-CG	-6.03	103.05	113.30
1	F	3	VAL	CB-CA-C	-6.03	99.95	111.40
1	F	203	ASP	CB-CG-OD2	6.03	123.72	118.30
1	F	296	MET	CA-CB-CG	-6.03	103.05	113.30
1	D	978	GLU	CA-CB-CG	-6.03	100.14	113.40
1	D	965	LEU	CB-CG-CD2	-6.02	100.76	111.00
1	F	965	LEU	CB-CG-CD2	-6.02	100.76	111.00
1	A	560	ASP	CB-CG-OD1	6.02	123.72	118.30
1	B	887	GLY	N-CA-C	6.02	128.15	113.10
1	D	1013	VAL	CG1-CB-CG2	-6.02	101.26	110.90
1	E	286	ARG	NE-CZ-NH2	6.02	123.31	120.30
1	E	560	ASP	CB-CG-OD1	6.02	123.72	118.30
1	F	978	GLU	CA-CB-CG	-6.02	100.15	113.40
1	B	965	LEU	CB-CG-CD2	-6.02	100.77	111.00
1	B	978	GLU	CA-CB-CG	-6.02	100.16	113.40
1	E	196	LEU	CB-CG-CD1	-6.02	100.77	111.00
1	A	1180	ASP	CB-CG-OD2	6.02	123.72	118.30
1	C	196	LEU	CB-CG-CD1	-6.01	100.78	111.00
1	D	887	GLY	N-CA-C	6.01	128.14	113.10
1	F	887	GLY	N-CA-C	6.01	128.14	113.10
1	D	3	VAL	CB-CA-C	-6.01	99.98	111.40
1	B	1013	VAL	CG1-CB-CG2	-6.01	101.28	110.90
1	E	1068	ARG	NE-CZ-NH2	6.01	123.31	120.30
1	A	196	LEU	CB-CG-CD1	-6.01	100.78	111.00
1	B	3	VAL	CB-CA-C	-6.01	99.98	111.40
1	F	1013	VAL	CG1-CB-CG2	-6.01	101.29	110.90
1	E	199	ARG	NE-CZ-NH2	-6.00	117.30	120.30
1	A	199	ARG	NE-CZ-NH2	-6.00	117.30	120.30
1	C	1068	ARG	NE-CZ-NH2	6.00	123.30	120.30
1	C	940	GLU	C-N-CA	-6.00	109.70	122.30
1	D	74	GLY	N-CA-C	-6.00	98.10	113.10
1	F	850	ARG	NE-CZ-NH1	6.00	123.30	120.30
1	A	940	GLU	C-N-CA	-6.00	109.71	122.30
1	E	940	GLU	C-N-CA	-6.00	109.71	122.30
1	D	640	THR	CB-CA-C	-5.99	95.42	111.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	F	640	THR	CB-CA-C	-5.99	95.42	111.60
1	A	1122	ASP	CB-CG-OD2	5.99	123.69	118.30
1	B	74	GLY	N-CA-C	-5.99	98.13	113.10
1	B	640	THR	CB-CA-C	-5.99	95.44	111.60
1	C	471	ASP	CB-CG-OD2	5.99	123.69	118.30
1	A	672	GLN	N-CA-C	-5.98	94.85	111.00
1	C	286	ARG	NE-CZ-NH2	5.98	123.29	120.30
1	A	843	VAL	CB-CA-C	-5.98	100.04	111.40
1	C	672	GLN	N-CA-C	-5.98	94.85	111.00
1	C	843	VAL	CB-CA-C	-5.98	100.04	111.40
1	F	74	GLY	N-CA-C	-5.98	98.15	113.10
1	E	843	VAL	CB-CA-C	-5.98	100.05	111.40
2	I	454	ILE	CG1-CB-CG2	5.97	124.55	111.40
2	K	454	ILE	CG1-CB-CG2	5.97	124.55	111.40
1	E	672	GLN	N-CA-C	-5.97	94.87	111.00
2	H	454	ILE	CG1-CB-CG2	5.97	124.54	111.40
2	L	454	ILE	CG1-CB-CG2	5.97	124.54	111.40
1	C	283	VAL	CB-CA-C	-5.97	100.06	111.40
1	A	1068	ARG	NE-CZ-NH2	5.97	123.28	120.30
1	A	471	ASP	CB-CG-OD2	5.97	123.67	118.30
2	G	454	ILE	CG1-CB-CG2	5.97	124.53	111.40
2	J	454	ILE	CG1-CB-CG2	5.97	124.53	111.40
1	C	199	ARG	NE-CZ-NH2	-5.97	117.32	120.30
1	D	90	ARG	NE-CZ-NH1	-5.97	117.32	120.30
1	F	1399	ASP	CB-CG-OD2	5.96	123.67	118.30
1	A	283	VAL	CB-CA-C	-5.96	100.07	111.40
1	E	283	VAL	CB-CA-C	-5.96	100.08	111.40
1	E	471	ASP	CB-CG-OD2	5.96	123.66	118.30
1	C	1122	ASP	CB-CG-OD2	5.96	123.66	118.30
1	E	490	ASP	CB-CG-OD2	5.95	123.66	118.30
1	B	1399	ASP	CB-CG-OD2	5.94	123.64	118.30
1	D	1374	VAL	CB-CA-C	-5.93	100.12	111.40
1	B	956	LEU	CB-CG-CD2	-5.93	100.92	111.00
1	D	125	ARG	NE-CZ-NH1	5.93	123.27	120.30
1	F	956	LEU	CB-CG-CD2	-5.93	100.91	111.00
1	F	1374	VAL	CB-CA-C	-5.93	100.13	111.40
1	C	490	ASP	CB-CG-OD2	5.93	123.64	118.30
1	B	803	THR	CA-CB-CG2	-5.93	104.10	112.40
1	B	1374	VAL	CB-CA-C	-5.93	100.14	111.40
1	E	1122	ASP	CB-CG-OD2	5.93	123.63	118.30
1	F	803	THR	CA-CB-CG2	-5.92	104.11	112.40
1	A	490	ASP	CB-CG-OD2	5.92	123.63	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	D	956	LEU	CB-CG-CD2	-5.92	100.94	111.00
1	A	511	ILE	CB-CA-C	-5.91	99.79	111.60
1	B	125	ARG	NE-CZ-NH1	5.90	123.25	120.30
1	D	803	THR	CA-CB-CG2	-5.90	104.14	112.40
1	F	461	MET	CG-SD-CE	5.90	109.64	100.20
1	B	651	ASP	CB-CG-OD2	5.90	123.61	118.30
1	B	461	MET	CG-SD-CE	5.90	109.64	100.20
1	D	461	MET	CG-SD-CE	5.90	109.64	100.20
1	D	651	ASP	CB-CG-OD2	5.90	123.61	118.30
1	C	511	ILE	CB-CA-C	-5.89	99.81	111.60
1	E	511	ILE	CB-CA-C	-5.89	99.81	111.60
1	D	1399	ASP	CB-CG-OD2	5.89	123.60	118.30
1	E	193	PRO	N-CD-CG	-5.89	94.37	103.20
1	F	651	ASP	CB-CG-OD2	5.89	123.60	118.30
1	B	1003	ARG	NE-CZ-NH1	5.88	123.24	120.30
1	C	193	PRO	N-CD-CG	-5.88	94.38	103.20
1	C	980	LEU	CB-CA-C	-5.88	99.03	110.20
1	E	980	LEU	CB-CA-C	-5.88	99.03	110.20
1	B	782	ARG	N-CA-C	-5.87	95.14	111.00
1	A	980	LEU	CB-CA-C	-5.87	99.05	110.20
1	F	782	ARG	N-CA-C	-5.87	95.15	111.00
1	A	193	PRO	N-CD-CG	-5.87	94.40	103.20
1	B	1180	ASP	CB-CG-OD2	5.87	123.58	118.30
1	D	522	LEU	CA-CB-CG	5.87	128.80	115.30
1	C	354	ARG	CG-CD-NE	-5.87	99.48	111.80
1	D	782	ARG	N-CA-C	-5.86	95.17	111.00
1	E	850	ARG	CA-CB-CG	5.86	126.30	113.40
1	B	522	LEU	CA-CB-CG	5.86	128.78	115.30
1	C	831	LEU	CA-CB-CG	5.86	128.77	115.30
1	F	522	LEU	CA-CB-CG	5.86	128.77	115.30
1	A	850	ARG	CA-CB-CG	5.85	126.27	113.40
1	F	337	ASP	CB-CG-OD1	5.85	123.57	118.30
1	E	831	LEU	CA-CB-CG	5.85	128.76	115.30
1	F	125	ARG	NE-CZ-NH1	5.85	123.22	120.30
1	A	831	LEU	CA-CB-CG	5.85	128.75	115.30
1	F	564	ASP	CB-CG-OD2	5.85	123.56	118.30
1	A	354	ARG	CG-CD-NE	-5.85	99.52	111.80
1	D	1180	ASP	CB-CG-OD2	5.85	123.56	118.30
1	E	354	ARG	CG-CD-NE	-5.85	99.52	111.80
1	B	564	ASP	CB-CG-OD2	5.84	123.56	118.30
1	C	456	LEU	CB-CG-CD2	-5.84	101.07	111.00
1	F	1180	ASP	CB-CG-OD2	5.84	123.56	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	456	LEU	CB-CG-CD2	-5.84	101.07	111.00
1	C	850	ARG	CA-CB-CG	5.84	126.24	113.40
1	B	337	ASP	CB-CG-OD1	5.83	123.55	118.30
1	D	337	ASP	CB-CG-OD1	5.83	123.55	118.30
1	F	1003	ARG	NE-CZ-NH1	5.83	123.22	120.30
1	A	1294	ASP	CB-CG-OD2	5.83	123.54	118.30
1	D	564	ASP	CB-CG-OD2	5.82	123.54	118.30
1	E	456	LEU	CB-CG-CD2	-5.82	101.10	111.00
1	F	651	ASP	CB-CA-C	-5.82	98.76	110.40
1	A	42	ASP	CB-CG-OD2	5.82	123.53	118.30
1	D	651	ASP	CB-CA-C	-5.82	98.77	110.40
1	B	651	ASP	CB-CA-C	-5.81	98.77	110.40
1	E	311	ASP	CB-CG-OD1	5.81	123.53	118.30
1	D	1003	ARG	NE-CZ-NH1	5.80	123.20	120.30
1	E	42	ASP	CB-CG-OD2	5.80	123.52	118.30
1	E	50	VAL	CB-CA-C	-5.80	100.37	111.40
1	D	485	ILE	CG1-CB-CG2	-5.80	98.64	111.40
1	A	50	VAL	CB-CA-C	-5.80	100.39	111.40
1	B	485	ILE	CG1-CB-CG2	-5.79	98.65	111.40
1	C	42	ASP	CB-CG-OD2	5.79	123.51	118.30
1	C	1294	ASP	CB-CG-OD2	5.79	123.51	118.30
1	F	485	ILE	CG1-CB-CG2	-5.79	98.66	111.40
1	A	311	ASP	CB-CG-OD1	5.79	123.51	118.30
1	C	50	VAL	CB-CA-C	-5.79	100.40	111.40
1	E	1294	ASP	CB-CG-OD2	5.79	123.51	118.30
1	F	1407	ASP	CB-CA-C	-5.78	98.84	110.40
1	C	194	ASP	CB-CG-OD2	5.78	123.50	118.30
1	E	1306	VAL	CB-CA-C	-5.78	100.43	111.40
1	D	1407	ASP	CB-CA-C	-5.77	98.86	110.40
1	F	1396	ASP	CB-CG-OD2	5.77	123.50	118.30
1	D	79	PRO	N-CA-C	-5.77	97.09	112.10
2	I	481	GLU	N-CA-CB	-5.77	100.21	110.60
2	K	481	GLU	N-CA-CB	-5.77	100.21	110.60
1	A	1000	LEU	CB-CG-CD1	-5.77	101.19	111.00
2	G	481	GLU	N-CA-CB	-5.77	100.22	110.60
2	H	481	GLU	N-CA-CB	-5.77	100.22	110.60
2	J	481	GLU	N-CA-CB	-5.77	100.22	110.60
2	L	481	GLU	N-CA-CB	-5.77	100.22	110.60
1	C	1306	VAL	CB-CA-C	-5.77	100.44	111.40
1	A	1306	VAL	CB-CA-C	-5.76	100.45	111.40
1	B	1396	ASP	CB-CG-OD2	5.76	123.49	118.30
1	B	1407	ASP	CB-CA-C	-5.76	98.87	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	C	1000	LEU	CB-CG-CD1	-5.76	101.20	111.00
1	B	79	PRO	N-CA-C	-5.76	97.13	112.10
1	F	79	PRO	N-CA-C	-5.76	97.13	112.10
1	E	1000	LEU	CB-CG-CD1	-5.75	101.22	111.00
1	A	194	ASP	CB-CG-OD2	5.75	123.47	118.30
1	E	1218	ASP	CB-CG-OD1	-5.75	113.13	118.30
1	D	714	SER	CB-CA-C	-5.74	99.19	110.10
1	E	1171	VAL	CA-CB-CG1	-5.74	102.28	110.90
1	A	746	ILE	CB-CA-C	-5.74	100.12	111.60
1	C	311	ASP	CB-CG-OD1	5.74	123.47	118.30
1	E	194	ASP	CB-CG-OD2	5.74	123.47	118.30
1	C	746	ILE	CB-CA-C	-5.74	100.12	111.60
1	E	746	ILE	CB-CA-C	-5.74	100.12	111.60
1	A	1171	VAL	CA-CB-CG1	-5.73	102.30	110.90
1	B	714	SER	CB-CA-C	-5.73	99.21	110.10
1	C	1218	ASP	CB-CG-OD1	-5.73	113.14	118.30
1	F	403	ASP	CB-CG-OD2	5.73	123.46	118.30
1	D	1396	ASP	CB-CG-OD2	5.73	123.45	118.30
1	F	714	SER	CB-CA-C	-5.73	99.22	110.10
1	C	1171	VAL	CA-CB-CG1	-5.72	102.32	110.90
1	E	368	GLU	N-CA-CB	5.72	120.90	110.60
1	A	337	ASP	C-N-CA	-5.72	110.29	122.30
1	F	1407	ASP	CB-CG-OD2	5.72	123.45	118.30
1	E	337	ASP	C-N-CA	-5.72	110.29	122.30
1	F	1064	ARG	NE-CZ-NH1	-5.71	117.44	120.30
1	A	1218	ASP	CB-CG-OD1	-5.71	113.16	118.30
1	C	368	GLU	N-CA-CB	5.71	120.88	110.60
1	A	368	GLU	N-CA-CB	5.71	120.88	110.60
1	B	1407	ASP	CB-CG-OD2	5.71	123.44	118.30
1	C	337	ASP	C-N-CA	-5.71	110.32	122.30
1	E	794	VAL	CB-CA-C	5.71	122.24	111.40
1	B	403	ASP	CB-CG-OD2	5.70	123.43	118.30
1	F	992	PRO	N-CD-CG	-5.70	94.65	103.20
1	E	1468	VAL	CB-CA-C	-5.70	100.57	111.40
1	A	1468	VAL	CB-CA-C	-5.70	100.58	111.40
1	C	1468	VAL	CB-CA-C	-5.70	100.58	111.40
1	E	577	GLY	N-CA-C	5.69	127.33	113.10
1	C	794	VAL	CB-CA-C	5.69	122.21	111.40
1	A	794	VAL	CB-CA-C	5.69	122.20	111.40
1	B	992	PRO	N-CD-CG	-5.68	94.68	103.20
1	A	577	GLY	N-CA-C	5.68	127.29	113.10
1	D	1407	ASP	CB-CG-OD2	5.68	123.41	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	D	992	PRO	N-CD-CG	-5.67	94.69	103.20
1	F	945	PRO	N-CD-CG	-5.67	94.69	103.20
1	C	577	GLY	N-CA-C	5.67	127.27	113.10
1	E	1212	ASP	CB-CG-OD2	5.66	123.39	118.30
1	C	339	ARG	NE-CZ-NH2	-5.66	117.47	120.30
1	B	945	PRO	N-CD-CG	-5.66	94.72	103.20
1	D	403	ASP	CB-CG-OD2	5.66	123.39	118.30
1	D	945	PRO	N-CD-CG	-5.65	94.72	103.20
1	B	385	LEU	CA-CB-CG	5.65	128.29	115.30
1	B	1064	ARG	NE-CZ-NH1	-5.65	117.48	120.30
1	F	385	LEU	CA-CB-CG	5.65	128.29	115.30
2	H	464	ILE	CB-CA-C	-5.64	100.31	111.60
2	L	464	ILE	CB-CA-C	-5.64	100.31	111.60
1	D	471	ASP	CB-CG-OD2	5.64	123.38	118.30
2	G	464	ILE	CB-CA-C	-5.64	100.32	111.60
2	J	464	ILE	CB-CA-C	-5.64	100.32	111.60
1	D	385	LEU	CA-CB-CG	5.64	128.27	115.30
1	F	471	ASP	CB-CG-OD2	5.64	123.38	118.30
1	A	1212	ASP	CB-CG-OD2	5.64	123.37	118.30
1	D	1064	ARG	NE-CZ-NH1	-5.63	117.48	120.30
2	I	464	ILE	CB-CA-C	-5.63	100.33	111.60
2	K	464	ILE	CB-CA-C	-5.63	100.33	111.60
1	B	471	ASP	CB-CG-OD2	5.62	123.36	118.30
1	E	339	ARG	NE-CZ-NH2	-5.62	117.49	120.30
1	C	1212	ASP	CB-CG-OD2	5.62	123.35	118.30
1	F	608	ASP	N-CA-CB	-5.62	100.49	110.60
1	B	608	ASP	N-CA-CB	-5.61	100.51	110.60
1	D	608	ASP	N-CA-CB	-5.60	100.52	110.60
1	A	339	ARG	NE-CZ-NH2	-5.60	117.50	120.30
1	A	182	MET	CG-SD-CE	-5.60	91.24	100.20
1	D	545	LEU	CA-CB-CG	-5.59	102.43	115.30
1	E	182	MET	CG-SD-CE	-5.59	91.25	100.20
1	E	863	LEU	CA-CB-CG	5.59	128.16	115.30
1	E	1183	LEU	CB-CG-CD1	-5.59	101.50	111.00
1	C	182	MET	CG-SD-CE	-5.59	91.26	100.20
1	D	940	GLU	C-N-CA	-5.59	110.56	122.30
1	A	863	LEU	CA-CB-CG	5.59	128.15	115.30
1	A	1183	LEU	CB-CG-CD1	-5.58	101.51	111.00
1	B	407	LYS	CD-CE-NZ	5.58	124.54	111.70
1	B	941	GLY	N-CA-C	5.58	127.06	113.10
1	B	940	GLU	C-N-CA	-5.58	110.58	122.30
1	C	863	LEU	CA-CB-CG	5.58	128.14	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	D	407	LYS	CD-CE-NZ	5.58	124.54	111.70
1	F	545	LEU	CA-CB-CG	-5.58	102.46	115.30
1	B	545	LEU	CA-CB-CG	-5.58	102.47	115.30
1	F	407	LYS	CD-CE-NZ	5.58	124.53	111.70
1	F	940	GLU	C-N-CA	-5.58	110.58	122.30
1	C	1	CYS	CA-CB-SG	-5.58	103.96	114.00
1	C	1183	LEU	CB-CG-CD1	-5.57	101.53	111.00
1	C	406	LEU	CB-CG-CD1	-5.57	101.54	111.00
1	D	941	GLY	N-CA-C	5.57	127.01	113.10
1	F	283	VAL	CB-CA-C	-5.57	100.83	111.40
2	H	139	PRO	N-CA-C	5.57	126.57	112.10
2	L	139	PRO	N-CA-C	5.57	126.57	112.10
2	I	139	PRO	N-CA-C	5.56	126.57	112.10
2	K	139	PRO	N-CA-C	5.56	126.57	112.10
1	A	1	CYS	CA-CB-SG	-5.56	103.99	114.00
1	E	1	CYS	CA-CB-SG	-5.56	103.99	114.00
1	F	941	GLY	N-CA-C	5.56	127.01	113.10
1	B	283	VAL	CB-CA-C	-5.56	100.84	111.40
1	F	745	ARG	NE-CZ-NH1	-5.56	117.52	120.30
2	G	478	VAL	CB-CA-C	-5.56	100.84	111.40
2	J	478	VAL	CB-CA-C	-5.56	100.84	111.40
1	A	406	LEU	CB-CG-CD1	-5.55	101.56	111.00
2	G	139	PRO	N-CA-C	5.55	126.53	112.10
2	J	139	PRO	N-CA-C	5.55	126.53	112.10
1	C	534	ASP	CB-CG-OD1	-5.55	113.31	118.30
1	D	283	VAL	CB-CA-C	-5.55	100.86	111.40
2	H	396	ILE	CB-CA-C	-5.55	100.50	111.60
2	L	396	ILE	CB-CA-C	-5.55	100.50	111.60
2	H	478	VAL	CB-CA-C	-5.55	100.86	111.40
2	L	478	VAL	CB-CA-C	-5.55	100.86	111.40
1	D	505	GLN	C-N-CA	-5.54	107.84	121.70
2	I	478	VAL	CB-CA-C	-5.54	100.86	111.40
2	K	478	VAL	CB-CA-C	-5.54	100.86	111.40
2	G	396	ILE	CB-CA-C	-5.54	100.52	111.60
2	I	396	ILE	CG1-CB-CG2	5.54	123.59	111.40
2	J	396	ILE	CB-CA-C	-5.54	100.52	111.60
2	K	396	ILE	CG1-CB-CG2	5.54	123.59	111.40
1	B	505	GLN	C-N-CA	-5.54	107.85	121.70
1	E	406	LEU	CB-CG-CD1	-5.54	101.59	111.00
1	F	505	GLN	C-N-CA	-5.54	107.86	121.70
1	D	745	ARG	NE-CZ-NH1	-5.53	117.53	120.30
2	I	396	ILE	CB-CA-C	-5.53	100.53	111.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	K	396	ILE	CB-CA-C	-5.53	100.53	111.60
1	E	214	ASN	CB-CA-C	-5.53	99.34	110.40
2	G	396	ILE	CG1-CB-CG2	5.53	123.57	111.40
2	H	396	ILE	CG1-CB-CG2	5.53	123.57	111.40
2	J	396	ILE	CG1-CB-CG2	5.53	123.57	111.40
2	L	396	ILE	CG1-CB-CG2	5.53	123.57	111.40
1	B	745	ARG	NE-CZ-NH1	-5.53	117.54	120.30
1	D	194	ASP	CB-CG-OD2	5.53	123.27	118.30
1	E	1108	CYS	CB-CA-C	5.53	121.45	110.40
1	A	214	ASN	CB-CA-C	-5.52	99.35	110.40
2	I	234	VAL	CB-CA-C	-5.52	100.91	111.40
2	K	234	VAL	CB-CA-C	-5.52	100.91	111.40
1	A	1108	CYS	CB-CA-C	5.52	121.44	110.40
1	C	214	ASN	CB-CA-C	-5.52	99.36	110.40
1	C	1108	CYS	CB-CA-C	5.52	121.43	110.40
1	E	534	ASP	CB-CG-OD1	-5.52	113.33	118.30
2	G	234	VAL	CB-CA-C	-5.51	100.92	111.40
2	J	234	VAL	CB-CA-C	-5.51	100.92	111.40
1	D	490	ASP	N-CA-CB	-5.51	100.68	110.60
1	D	838	VAL	CB-CA-C	-5.51	100.93	111.40
1	B	490	ASP	N-CA-CB	-5.51	100.69	110.60
1	F	490	ASP	N-CA-CB	-5.51	100.69	110.60
1	A	534	ASP	CB-CG-OD1	-5.51	113.34	118.30
1	C	1407	ASP	CB-CA-C	-5.50	99.39	110.40
1	B	194	ASP	CB-CG-OD2	5.50	123.25	118.30
1	B	624	THR	OG1-CB-CG2	-5.50	97.34	110.00
1	B	838	VAL	CB-CA-C	-5.50	100.95	111.40
1	D	441	ASP	CB-CG-OD2	5.50	123.25	118.30
1	B	298	LEU	CB-CG-CD1	-5.50	101.66	111.00
1	D	624	THR	OG1-CB-CG2	-5.50	97.36	110.00
1	E	1407	ASP	CB-CA-C	-5.50	99.41	110.40
1	F	838	VAL	CB-CA-C	-5.50	100.96	111.40
1	B	441	ASP	CB-CG-OD2	5.50	123.25	118.30
1	B	1187	LEU	CB-CG-CD1	-5.50	101.66	111.00
1	D	1212	ASP	CB-CG-OD2	5.50	123.25	118.30
1	F	624	THR	OG1-CB-CG2	-5.50	97.36	110.00
1	D	298	LEU	CB-CG-CD1	-5.49	101.66	111.00
2	H	234	VAL	CB-CA-C	-5.49	100.96	111.40
2	L	234	VAL	CB-CA-C	-5.49	100.96	111.40
1	F	1187	LEU	CB-CG-CD1	-5.49	101.66	111.00
1	A	1407	ASP	CB-CA-C	-5.49	99.42	110.40
1	D	1187	LEU	CB-CG-CD1	-5.49	101.67	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	F	441	ASP	CB-CG-OD2	5.49	123.24	118.30
1	F	298	LEU	CB-CG-CD1	-5.48	101.68	111.00
1	A	14	ARG	NE-CZ-NH2	-5.48	117.56	120.30
1	E	251	MET	CB-CG-SD	-5.48	95.97	112.40
1	F	194	ASP	CB-CG-OD2	5.48	123.23	118.30
1	A	251	MET	CB-CG-SD	-5.47	95.98	112.40
1	C	251	MET	CB-CG-SD	-5.47	95.99	112.40
1	F	456	LEU	CA-CB-CG	-5.47	102.72	115.30
1	D	863	LEU	CB-CA-C	5.47	120.59	110.20
1	B	1212	ASP	CB-CG-OD2	5.47	123.22	118.30
1	E	182	MET	CA-CB-CG	-5.47	104.01	113.30
1	E	934	GLN	CB-CA-C	-5.46	99.47	110.40
1	B	456	LEU	CA-CB-CG	-5.46	102.74	115.30
1	C	992	PRO	N-CD-CG	-5.46	95.01	103.20
1	C	182	MET	CA-CB-CG	-5.46	104.02	113.30
1	D	456	LEU	CA-CB-CG	-5.46	102.74	115.30
1	A	182	MET	CA-CB-CG	-5.46	104.02	113.30
1	A	650	LEU	CB-CG-CD1	-5.46	101.72	111.00
1	A	992	PRO	N-CD-CG	-5.46	95.01	103.20
1	F	1212	ASP	CB-CG-OD2	5.46	123.21	118.30
1	E	14	ARG	NE-CZ-NH2	-5.45	117.57	120.30
1	E	73	VAL	CB-CA-C	-5.45	101.04	111.40
1	A	73	VAL	CB-CA-C	-5.45	101.04	111.40
1	D	918	THR	N-CA-CB	-5.45	99.94	110.30
1	A	934	GLN	CB-CA-C	-5.45	99.50	110.40
2	G	323	ASP	CB-CG-OD1	5.45	123.21	118.30
2	J	323	ASP	CB-CG-OD1	5.45	123.21	118.30
1	C	934	GLN	CB-CA-C	-5.45	99.50	110.40
1	F	262	ASP	CB-CG-OD2	5.45	123.20	118.30
1	C	73	VAL	CB-CA-C	-5.45	101.05	111.40
1	E	650	LEU	CB-CG-CD1	-5.45	101.74	111.00
1	F	863	LEU	CB-CA-C	5.45	120.55	110.20
1	D	968	PRO	N-CD-CG	-5.44	95.03	103.20
1	C	650	LEU	CB-CG-CD1	-5.44	101.75	111.00
1	E	992	PRO	N-CD-CG	-5.44	95.04	103.20
1	B	863	LEU	CB-CA-C	5.44	120.54	110.20
1	B	918	THR	N-CA-CB	-5.44	99.97	110.30
1	B	968	PRO	N-CD-CG	-5.43	95.05	103.20
2	I	323	ASP	CB-CG-OD1	5.43	123.19	118.30
2	K	323	ASP	CB-CG-OD1	5.43	123.19	118.30
1	B	262	ASP	CB-CG-OD2	5.43	123.19	118.30
1	F	918	THR	N-CA-CB	-5.43	99.98	110.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	H	323	ASP	CB-CG-OD1	5.43	123.19	118.30
2	L	323	ASP	CB-CG-OD1	5.43	123.19	118.30
1	E	665	THR	N-CA-CB	-5.43	99.98	110.30
1	D	463	LEU	CA-CB-CG	-5.43	102.82	115.30
1	B	463	LEU	CA-CB-CG	-5.42	102.82	115.30
1	F	463	LEU	CA-CB-CG	-5.42	102.82	115.30
1	A	156	GLU	CA-CB-CG	5.42	125.33	113.40
1	C	1399	ASP	CB-CG-OD2	5.42	123.18	118.30
1	C	156	GLU	CA-CB-CG	5.42	125.33	113.40
2	H	397	LYS	C-N-CA	5.42	135.24	121.70
2	L	397	LYS	C-N-CA	5.42	135.24	121.70
1	A	1399	ASP	CB-CG-OD2	5.42	123.17	118.30
2	G	397	LYS	C-N-CA	5.41	135.23	121.70
2	J	397	LYS	C-N-CA	5.41	135.23	121.70
1	A	665	THR	N-CA-CB	-5.41	100.02	110.30
1	E	156	GLU	CA-CB-CG	5.41	125.30	113.40
1	F	968	PRO	N-CD-CG	-5.41	95.08	103.20
1	C	125	ARG	NE-CZ-NH2	-5.41	117.60	120.30
1	D	262	ASP	CB-CG-OD2	5.41	123.17	118.30
2	I	397	LYS	C-N-CA	5.41	135.21	121.70
2	K	397	LYS	C-N-CA	5.41	135.21	121.70
1	C	665	THR	N-CA-CB	-5.40	100.03	110.30
1	E	290	THR	CB-CA-C	-5.40	97.02	111.60
1	A	125	ARG	NE-CZ-NH2	-5.40	117.60	120.30
1	A	290	THR	CB-CA-C	-5.40	97.03	111.60
1	C	290	THR	CB-CA-C	-5.40	97.03	111.60
1	C	14	ARG	NE-CZ-NH2	-5.39	117.60	120.30
1	C	738	HIS	N-CA-C	5.39	125.55	111.00
1	F	658	LEU	CB-CG-CD2	-5.39	101.84	111.00
1	F	1183	LEU	CB-CG-CD1	-5.38	101.85	111.00
1	C	482	ASP	CB-CG-OD2	-5.38	113.46	118.30
1	B	658	LEU	CB-CG-CD2	-5.38	101.86	111.00
2	I	31	ILE	CG1-CB-CG2	5.38	123.23	111.40
2	K	31	ILE	CG1-CB-CG2	5.38	123.23	111.40
1	E	1399	ASP	CB-CG-OD2	5.38	123.14	118.30
1	A	738	HIS	N-CA-C	5.37	125.51	111.00
1	B	1183	LEU	CB-CG-CD1	-5.37	101.86	111.00
1	D	1183	LEU	CB-CG-CD1	-5.37	101.86	111.00
1	E	738	HIS	N-CA-C	5.37	125.51	111.00
2	H	31	ILE	CG1-CB-CG2	5.37	123.22	111.40
2	L	31	ILE	CG1-CB-CG2	5.37	123.22	111.40
1	D	658	LEU	CB-CG-CD2	-5.37	101.87	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	E	125	ARG	NE-CZ-NH2	-5.37	117.61	120.30
1	B	701	ASP	CB-CG-OD2	5.37	123.13	118.30
1	C	986	ASP	CB-CG-OD2	5.37	123.13	118.30
1	A	609	GLU	C-N-CA	-5.37	108.28	121.70
1	E	609	GLU	C-N-CA	-5.37	108.28	121.70
1	F	701	ASP	CB-CG-OD2	5.37	123.13	118.30
1	A	482	ASP	CB-CG-OD2	-5.36	113.47	118.30
1	A	1321	THR	OG1-CB-CG2	-5.36	97.68	110.00
1	E	986	ASP	CB-CG-OD2	5.36	123.12	118.30
1	C	609	GLU	C-N-CA	-5.36	108.31	121.70
1	E	1321	THR	OG1-CB-CG2	-5.36	97.68	110.00
2	G	31	ILE	CG1-CB-CG2	5.36	123.18	111.40
2	J	31	ILE	CG1-CB-CG2	5.36	123.18	111.40
1	D	1043	LEU	CA-CB-CG	-5.35	102.99	115.30
1	D	529	LEU	CB-CG-CD2	-5.35	101.91	111.00
1	E	3	VAL	N-CA-C	-5.35	96.56	111.00
1	F	671	ALA	N-CA-C	-5.35	96.56	111.00
1	A	986	ASP	CB-CG-OD2	5.35	123.11	118.30
1	B	1043	LEU	CA-CB-CG	-5.34	103.01	115.30
1	D	671	ALA	N-CA-C	-5.34	96.57	111.00
1	D	701	ASP	CB-CG-OD2	5.34	123.11	118.30
1	B	311	ASP	CB-CG-OD1	5.34	123.11	118.30
1	B	671	ALA	N-CA-C	-5.34	96.58	111.00
1	F	529	LEU	CB-CG-CD2	-5.34	101.92	111.00
1	A	3	VAL	N-CA-C	-5.34	96.58	111.00
1	C	1321	THR	OG1-CB-CG2	-5.34	97.72	110.00
1	E	69	ASN	CB-CA-C	-5.34	99.72	110.40
1	E	482	ASP	CB-CG-OD2	-5.34	113.49	118.30
1	B	529	LEU	CB-CG-CD2	-5.34	101.93	111.00
1	E	131	ILE	CG1-CB-CG2	-5.34	99.66	111.40
1	C	3	VAL	N-CA-C	-5.34	96.59	111.00
1	B	957	ARG	NE-CZ-NH1	-5.33	117.63	120.30
1	A	69	ASN	CB-CA-C	-5.33	99.74	110.40
1	A	131	ILE	CG1-CB-CG2	-5.33	99.67	111.40
1	B	650	LEU	CA-CB-CG	5.33	127.56	115.30
1	B	871	LEU	CB-CG-CD1	5.33	120.06	111.00
1	E	940	GLU	O-C-N	-5.33	114.14	123.20
1	F	311	ASP	CB-CG-OD1	5.33	123.10	118.30
1	D	871	LEU	CB-CG-CD1	5.33	120.06	111.00
1	C	940	GLU	O-C-N	-5.33	114.14	123.20
1	D	90	ARG	N-CA-CB	5.33	120.19	110.60
1	E	159	VAL	CB-CA-C	-5.33	101.28	111.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	F	650	LEU	CA-CB-CG	5.33	127.56	115.30
1	F	1043	LEU	CA-CB-CG	-5.33	103.05	115.30
1	C	69	ASN	CB-CA-C	-5.33	99.75	110.40
1	F	90	ARG	N-CA-CB	5.33	120.19	110.60
1	D	650	LEU	CA-CB-CG	5.32	127.54	115.30
1	D	311	ASP	CB-CG-OD1	5.32	123.09	118.30
1	B	90	ARG	N-CA-CB	5.32	120.17	110.60
1	C	159	VAL	CB-CA-C	-5.32	101.30	111.40
2	G	216	PRO	C-N-CA	-5.32	108.40	121.70
2	J	216	PRO	C-N-CA	-5.32	108.40	121.70
1	A	940	GLU	O-C-N	-5.32	114.16	123.20
1	C	131	ILE	CG1-CB-CG2	-5.32	99.71	111.40
1	A	159	VAL	CB-CA-C	-5.31	101.30	111.40
2	I	216	PRO	C-N-CA	-5.31	108.41	121.70
2	K	216	PRO	C-N-CA	-5.31	108.41	121.70
1	F	871	LEU	CB-CG-CD1	5.31	120.03	111.00
1	E	827	ASP	CB-CG-OD2	5.31	123.08	118.30
1	C	186	GLU	CA-CB-CG	-5.31	101.73	113.40
2	H	216	PRO	C-N-CA	-5.30	108.44	121.70
2	L	216	PRO	C-N-CA	-5.30	108.44	121.70
1	C	263	LEU	CB-CG-CD1	-5.30	101.99	111.00
1	C	827	ASP	CB-CG-OD2	5.30	123.07	118.30
1	E	448	ARG	CB-CA-C	5.30	121.00	110.40
1	A	186	GLU	CA-CB-CG	-5.30	101.75	113.40
1	F	948	LYS	CB-CG-CD	-5.30	97.83	111.60
1	A	448	ARG	CB-CA-C	5.29	120.99	110.40
1	D	948	LYS	CB-CG-CD	-5.29	97.84	111.60
1	A	263	LEU	CB-CG-CD1	-5.29	102.00	111.00
1	E	186	GLU	CA-CB-CG	-5.29	101.76	113.40
1	A	827	ASP	CB-CG-OD2	5.29	123.06	118.30
1	B	948	LYS	CB-CG-CD	-5.29	97.85	111.60
1	C	448	ARG	CB-CA-C	5.29	120.97	110.40
1	E	263	LEU	CB-CG-CD1	-5.29	102.02	111.00
1	F	957	ARG	NE-CZ-NH1	-5.28	117.66	120.30
1	F	827	ASP	CB-CG-OD2	5.27	123.05	118.30
1	A	64	HIS	N-CA-C	-5.27	96.77	111.00
2	H	65	ILE	CG1-CB-CG2	5.27	122.99	111.40
2	L	65	ILE	CG1-CB-CG2	5.27	122.99	111.40
1	D	943	GLN	CB-CA-C	-5.27	99.87	110.40
1	C	1259	LEU	CB-CG-CD2	5.26	119.95	111.00
1	E	64	HIS	N-CA-C	-5.26	96.78	111.00
1	C	64	HIS	N-CA-C	-5.26	96.79	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	F	1268	LEU	CB-CA-C	-5.26	100.20	110.20
1	B	943	GLN	CB-CA-C	-5.25	99.89	110.40
1	E	90	ARG	NE-CZ-NH1	-5.25	117.67	120.30
1	F	1074	LYS	CB-CA-C	-5.25	99.89	110.40
2	G	65	ILE	CG1-CB-CG2	5.25	122.96	111.40
2	J	65	ILE	CG1-CB-CG2	5.25	122.96	111.40
1	A	1259	LEU	CB-CG-CD2	5.25	119.93	111.00
1	D	1074	LYS	CB-CA-C	-5.25	99.90	110.40
1	F	943	GLN	CB-CA-C	-5.25	99.89	110.40
1	D	957	ARG	NE-CZ-NH1	-5.25	117.68	120.30
2	I	65	ILE	CG1-CB-CG2	5.25	122.95	111.40
2	K	65	ILE	CG1-CB-CG2	5.25	122.95	111.40
1	B	1074	LYS	CB-CA-C	-5.25	99.91	110.40
1	E	850	ARG	NE-CZ-NH1	5.25	122.92	120.30
1	B	1268	LEU	CB-CA-C	-5.24	100.24	110.20
1	E	1259	LEU	CB-CG-CD2	5.24	119.90	111.00
1	D	1268	LEU	CB-CA-C	-5.23	100.26	110.20
1	E	1147	ARG	NE-CZ-NH2	5.23	122.92	120.30
1	C	196	LEU	CB-CG-CD2	-5.23	102.11	111.00
1	C	1065	VAL	N-CA-CB	-5.23	100.00	111.50
1	C	1147	ARG	NE-CZ-NH2	5.23	122.91	120.30
1	A	196	LEU	CB-CG-CD2	-5.22	102.13	111.00
1	A	1096	SER	N-CA-CB	5.22	118.33	110.50
1	C	1096	SER	N-CA-CB	5.22	118.33	110.50
1	E	196	LEU	CB-CG-CD2	-5.22	102.13	111.00
1	E	1096	SER	N-CA-CB	5.22	118.33	110.50
1	E	1065	VAL	N-CA-CB	-5.22	100.02	111.50
1	A	1065	VAL	N-CA-CB	-5.21	100.03	111.50
1	D	663	ALA	N-CA-CB	-5.21	102.80	110.10
1	F	663	ALA	N-CA-CB	-5.21	102.81	110.10
1	C	918	THR	N-CA-CB	-5.21	100.41	110.30
1	B	663	ALA	N-CA-CB	-5.21	102.81	110.10
1	E	918	THR	N-CA-CB	-5.21	100.41	110.30
1	F	670	LEU	CB-CG-CD2	-5.21	102.15	111.00
1	F	1	CYS	CA-CB-SG	-5.20	104.63	114.00
1	F	1043	LEU	CB-CG-CD1	5.20	119.84	111.00
1	B	670	LEU	CB-CG-CD2	-5.20	102.16	111.00
1	A	918	THR	N-CA-CB	-5.20	100.42	110.30
1	C	296	MET	CA-CB-CG	-5.20	104.46	113.30
1	A	296	MET	CA-CB-CG	-5.20	104.47	113.30
1	E	284	MET	CG-SD-CE	-5.20	91.89	100.20
1	A	90	ARG	NE-CZ-NH1	-5.19	117.70	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	B	1	CYS	CA-CB-SG	-5.19	104.65	114.00
1	A	850	ARG	NE-CZ-NH1	5.19	122.90	120.30
1	B	1043	LEU	CB-CG-CD1	5.19	119.83	111.00
1	D	1043	LEU	CB-CG-CD1	5.19	119.83	111.00
2	I	80	ALA	N-CA-CB	5.19	117.37	110.10
2	K	80	ALA	N-CA-CB	5.19	117.37	110.10
1	D	670	LEU	CB-CG-CD2	-5.19	102.18	111.00
1	E	296	MET	CA-CB-CG	-5.19	104.48	113.30
1	A	284	MET	CG-SD-CE	-5.19	91.90	100.20
1	E	658	LEU	CB-CG-CD1	5.18	119.81	111.00
2	G	80	ALA	N-CA-CB	5.18	117.36	110.10
2	J	80	ALA	N-CA-CB	5.18	117.36	110.10
1	E	400	LEU	CB-CG-CD1	-5.18	102.19	111.00
2	H	80	ALA	N-CA-CB	5.18	117.35	110.10
2	L	80	ALA	N-CA-CB	5.18	117.35	110.10
1	C	400	LEU	CB-CG-CD1	-5.18	102.20	111.00
1	D	1	CYS	CA-CB-SG	-5.18	104.68	114.00
1	A	400	LEU	CB-CG-CD1	-5.18	102.20	111.00
1	B	827	ASP	CB-CG-OD2	5.18	122.96	118.30
1	C	284	MET	CG-SD-CE	-5.18	91.92	100.20
1	A	881	LYS	CD-CE-NZ	5.17	123.60	111.70
1	D	279	THR	N-CA-CB	-5.17	100.47	110.30
1	A	658	LEU	CB-CG-CD1	5.17	119.79	111.00
1	B	279	THR	N-CA-CB	-5.17	100.47	110.30
1	E	881	LYS	CD-CE-NZ	5.17	123.59	111.70
1	A	1147	ARG	NE-CZ-NH2	5.17	122.89	120.30
1	C	658	LEU	CB-CG-CD1	5.17	119.79	111.00
1	E	922	LEU	CB-CG-CD2	5.17	119.79	111.00
1	C	881	LYS	CD-CE-NZ	5.17	123.58	111.70
1	A	922	LEU	CB-CG-CD2	5.17	119.78	111.00
1	D	827	ASP	CB-CG-OD2	5.16	122.94	118.30
1	E	588	ARG	NE-CZ-NH1	-5.16	117.72	120.30
1	B	914	ARG	NE-CZ-NH1	-5.15	117.72	120.30
1	A	1388	THR	N-CA-C	5.15	124.91	111.00
1	B	915	PHE	CA-CB-CG	-5.15	101.54	113.90
1	C	922	LEU	CB-CG-CD2	5.15	119.75	111.00
1	E	1388	THR	N-CA-C	5.15	124.91	111.00
1	F	279	THR	N-CA-CB	-5.15	100.52	110.30
1	F	914	ARG	NE-CZ-NH1	-5.15	117.73	120.30
1	F	915	PHE	CA-CB-CG	-5.15	101.54	113.90
1	A	651	ASP	CB-CA-C	-5.15	100.10	110.40
1	C	250	ARG	CB-CA-C	-5.15	100.11	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	345	MET	CA-CB-CG	-5.14	104.56	113.30
1	C	1388	THR	N-CA-C	5.14	124.89	111.00
1	D	914	ARG	NE-CZ-NH1	-5.14	117.73	120.30
1	F	1269	ARG	CG-CD-NE	-5.14	101.00	111.80
1	B	520	MET	CB-CG-SD	-5.14	96.97	112.40
1	D	915	PHE	CA-CB-CG	-5.14	101.56	113.90
1	D	520	MET	CB-CG-SD	-5.14	96.98	112.40
1	B	1269	ARG	CG-CD-NE	-5.14	101.00	111.80
1	C	651	ASP	CB-CA-C	-5.14	100.12	110.40
1	A	250	ARG	CB-CA-C	-5.14	100.12	110.40
1	E	651	ASP	CB-CA-C	-5.14	100.12	110.40
1	C	773	LEU	CA-CB-CG	-5.14	103.49	115.30
1	C	850	ARG	NE-CZ-NH1	5.14	122.87	120.30
1	F	1070	ASP	CB-CG-OD2	5.14	122.92	118.30
1	E	773	LEU	CA-CB-CG	-5.13	103.49	115.30
1	E	1118	CYS	CB-CA-C	5.13	120.67	110.40
1	E	1246	LEU	CA-CB-CG	-5.13	103.50	115.30
1	A	773	LEU	CA-CB-CG	-5.13	103.50	115.30
1	D	3	VAL	N-CA-C	-5.13	97.14	111.00
1	D	1070	ASP	CB-CG-OD2	5.13	122.92	118.30
1	E	250	ARG	CB-CA-C	-5.13	100.14	110.40
1	B	1070	ASP	CB-CG-OD2	5.13	122.92	118.30
1	D	1465	ARG	C-N-CA	-5.13	108.88	121.70
1	F	520	MET	CB-CG-SD	-5.13	97.01	112.40
1	F	861	GLY	N-CA-C	-5.13	100.28	113.10
1	E	345	MET	CA-CB-CG	-5.13	104.58	113.30
1	B	3	VAL	N-CA-C	-5.12	97.16	111.00
1	C	877	ARG	NE-CZ-NH1	-5.12	117.74	120.30
1	A	640	THR	CB-CA-C	-5.12	97.77	111.60
2	H	128	ASN	CA-CB-CG	-5.12	102.13	113.40
2	L	128	ASN	CA-CB-CG	-5.12	102.13	113.40
1	A	1246	LEU	CA-CB-CG	-5.12	103.52	115.30
1	B	1465	ARG	C-N-CA	-5.12	108.90	121.70
1	C	90	ARG	NE-CZ-NH1	-5.12	117.74	120.30
1	C	1246	LEU	CA-CB-CG	-5.12	103.52	115.30
1	D	1269	ARG	CG-CD-NE	-5.12	101.05	111.80
1	E	640	THR	CB-CA-C	-5.12	97.77	111.60
2	I	128	ASN	CA-CB-CG	-5.12	102.13	113.40
2	K	128	ASN	CA-CB-CG	-5.12	102.13	113.40
1	C	375	ASP	CB-CG-OD1	5.12	122.91	118.30
1	C	1222	LEU	CA-CB-CG	-5.12	103.53	115.30
1	F	3	VAL	N-CA-C	-5.12	97.18	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1222	LEU	CA-CB-CG	-5.12	103.53	115.30
1	C	345	MET	CA-CB-CG	-5.12	104.60	113.30
1	F	377	THR	N-CA-CB	-5.12	100.57	110.30
1	F	1465	ARG	C-N-CA	-5.12	108.90	121.70
1	C	37	ASP	CB-CG-OD2	5.12	122.91	118.30
1	A	1118	CYS	CB-CA-C	5.11	120.63	110.40
1	C	339	ARG	N-CA-CB	-5.11	101.40	110.60
1	C	640	THR	CB-CA-C	-5.11	97.79	111.60
1	E	384	ARG	NE-CZ-NH2	-5.11	117.74	120.30
2	G	128	ASN	CA-CB-CG	-5.11	102.15	113.40
2	J	128	ASN	CA-CB-CG	-5.11	102.15	113.40
1	E	339	ARG	N-CA-CB	-5.11	101.40	110.60
1	A	588	ARG	NE-CZ-NH1	-5.11	117.74	120.30
1	C	1118	CYS	CB-CA-C	5.11	120.62	110.40
1	E	1222	LEU	CA-CB-CG	-5.11	103.55	115.30
1	A	339	ARG	N-CA-CB	-5.11	101.41	110.60
1	B	861	GLY	N-CA-C	-5.11	100.34	113.10
1	C	588	ARG	NE-CZ-NH1	-5.11	117.75	120.30
1	B	377	THR	N-CA-CB	-5.10	100.60	110.30
1	C	1307	VAL	CB-CA-C	-5.10	101.71	111.40
1	D	377	THR	N-CA-CB	-5.10	100.61	110.30
1	A	375	ASP	CB-CG-OD1	5.10	122.89	118.30
1	E	375	ASP	CB-CG-OD1	5.10	122.89	118.30
2	I	188	TYR	CA-CB-CG	5.10	123.09	113.40
2	K	188	TYR	CA-CB-CG	5.10	123.09	113.40
1	A	386	GLY	N-CA-C	-5.10	100.36	113.10
1	E	877	ARG	NE-CZ-NH1	-5.10	117.75	120.30
1	A	1307	VAL	CB-CA-C	-5.10	101.72	111.40
1	E	386	GLY	N-CA-C	-5.10	100.36	113.10
1	A	384	ARG	NE-CZ-NH2	-5.09	117.75	120.30
1	A	877	ARG	NE-CZ-NH1	-5.09	117.75	120.30
1	C	386	GLY	N-CA-C	-5.09	100.37	113.10
1	D	861	GLY	N-CA-C	-5.09	100.37	113.10
2	G	188	TYR	CA-CB-CG	5.09	123.07	113.40
2	J	188	TYR	CA-CB-CG	5.09	123.07	113.40
2	H	188	TYR	CA-CB-CG	5.09	123.06	113.40
2	L	188	TYR	CA-CB-CG	5.09	123.06	113.40
1	E	1307	VAL	CB-CA-C	-5.08	101.75	111.40
1	A	37	ASP	CB-CG-OD2	5.08	122.87	118.30
1	A	641	SER	N-CA-C	-5.08	97.29	111.00
1	C	957	ARG	NE-CZ-NH2	5.08	122.84	120.30
1	E	37	ASP	CB-CG-OD2	5.08	122.87	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	C	641	SER	N-CA-C	-5.07	97.30	111.00
1	E	641	SER	N-CA-C	-5.07	97.31	111.00
1	E	661	VAL	N-CA-C	-5.07	97.32	111.00
1	A	785	GLY	N-CA-C	5.06	125.75	113.10
1	A	661	VAL	N-CA-C	-5.06	97.34	111.00
1	C	785	GLY	N-CA-C	5.06	125.74	113.10
1	E	825	LEU	CB-CG-CD2	5.06	119.60	111.00
1	C	661	VAL	N-CA-C	-5.06	97.35	111.00
1	C	738	HIS	CB-CA-C	-5.06	100.29	110.40
1	E	785	GLY	N-CA-C	5.05	125.74	113.10
1	F	1398	ASP	CB-CG-OD2	5.05	122.85	118.30
1	E	957	ARG	NE-CZ-NH2	5.05	122.83	120.30
1	A	738	HIS	CB-CA-C	-5.05	100.30	110.40
1	C	529	LEU	CA-CB-CG	-5.05	103.68	115.30
1	E	738	HIS	CB-CA-C	-5.05	100.30	110.40
1	A	825	LEU	CB-CG-CD2	5.05	119.58	111.00
1	E	1173	ARG	N-CA-C	-5.05	97.38	111.00
1	C	384	ARG	NE-CZ-NH2	-5.04	117.78	120.30
1	E	529	LEU	CA-CB-CG	-5.04	103.70	115.30
1	A	529	LEU	CA-CB-CG	-5.04	103.71	115.30
1	C	1173	ARG	N-CA-C	-5.04	97.39	111.00
1	C	395	LEU	CB-CG-CD1	-5.04	102.43	111.00
1	C	825	LEU	CB-CG-CD2	5.04	119.57	111.00
1	A	1173	ARG	N-CA-C	-5.04	97.39	111.00
1	F	1057	THR	CA-CB-CG2	-5.04	105.35	112.40
1	B	672	GLN	N-CA-C	-5.04	97.40	111.00
1	D	1398	ASP	CB-CG-OD2	5.04	122.83	118.30
1	B	1057	THR	CA-CB-CG2	-5.03	105.35	112.40
1	F	672	GLN	N-CA-C	-5.03	97.41	111.00
1	A	395	LEU	CB-CG-CD1	-5.03	102.44	111.00
1	A	485	ILE	CG1-CB-CG2	-5.03	100.33	111.40
1	E	485	ILE	CG1-CB-CG2	-5.03	100.33	111.40
1	D	1057	THR	CA-CB-CG2	-5.03	105.36	112.40
1	A	391	ILE	N-CA-C	-5.02	97.43	111.00
1	C	485	ILE	CG1-CB-CG2	-5.02	100.35	111.40
1	D	672	GLN	N-CA-C	-5.02	97.44	111.00
1	C	391	ILE	N-CA-C	-5.02	97.44	111.00
1	F	522	LEU	CB-CG-CD1	-5.02	102.47	111.00
1	A	957	ARG	NE-CZ-NH2	5.02	122.81	120.30
1	B	1398	ASP	CB-CG-OD2	5.02	122.82	118.30
1	E	391	ILE	N-CA-C	-5.02	97.45	111.00
1	E	395	LEU	CB-CG-CD1	-5.02	102.47	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	487	VAL	CB-CA-C	-5.02	101.87	111.40
1	E	487	VAL	CB-CA-C	-5.01	101.88	111.40
1	C	487	VAL	CB-CA-C	-5.01	101.88	111.40
1	C	1110	SER	N-CA-CB	-5.01	102.99	110.50
1	F	89	CYS	CA-CB-SG	-5.00	104.99	114.00
1	B	522	LEU	CB-CG-CD1	-5.00	102.50	111.00
1	F	1168	LEU	CB-CA-C	-5.00	100.70	110.20

All (3) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
1	A	915	PHE	CA
1	C	915	PHE	CA
1	E	915	PHE	CA

All (201) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	1002	SER	Mainchain
1	A	1171	VAL	Peptide
1	A	325	GLU	Mainchain
1	B	1168	LEU	Mainchain
1	B	725	PHE	Mainchain
1	C	1002	SER	Mainchain
1	C	1171	VAL	Peptide
1	C	325	GLU	Mainchain
1	D	1168	LEU	Mainchain
1	D	725	PHE	Mainchain
1	E	1002	SER	Mainchain
1	E	1171	VAL	Peptide
1	E	325	GLU	Mainchain
1	F	1168	LEU	Mainchain
1	F	725	PHE	Mainchain
2	G	102	ARG	Sidechain
2	G	140	ARG	Sidechain
2	G	144	ARG	Sidechain
2	G	167	ARG	Sidechain
2	G	178	ARG	Sidechain
2	G	181	ARG	Sidechain
2	G	202	ARG	Sidechain
2	G	203	ARG	Sidechain
2	G	222	ARG	Sidechain

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Mol	Chain	Res	Type	Group
2	G	230	ARG	Sidechain
2	G	231	ARG	Sidechain
2	G	246	ARG	Sidechain
2	G	306	ARG	Sidechain
2	G	310	ARG	Sidechain
2	G	321	ARG	Sidechain
2	G	322	ARG	Sidechain
2	G	324	ARG	Sidechain
2	G	332	ARG	Sidechain
2	G	34	ARG	Sidechain
2	G	363	ARG	Sidechain
2	G	366	ARG	Sidechain
2	G	377	ARG	Sidechain
2	G	39	ARG	Sidechain
2	G	419	ARG	Sidechain
2	G	428	ARG	Sidechain
2	G	445	ARG	Sidechain
2	G	455	ARG	Sidechain
2	G	458	ARG	Sidechain
2	G	46	ARG	Sidechain
2	G	76	ARG	Sidechain
2	G	96	ARG	Sidechain
2	H	102	ARG	Sidechain
2	H	140	ARG	Sidechain
2	H	144	ARG	Sidechain
2	H	167	ARG	Sidechain
2	H	178	ARG	Sidechain
2	H	181	ARG	Sidechain
2	H	202	ARG	Sidechain
2	H	203	ARG	Sidechain
2	H	222	ARG	Sidechain
2	H	230	ARG	Sidechain
2	H	231	ARG	Sidechain
2	H	246	ARG	Sidechain
2	H	306	ARG	Sidechain
2	H	310	ARG	Sidechain
2	H	321	ARG	Sidechain
2	H	322	ARG	Sidechain
2	H	324	ARG	Sidechain
2	H	332	ARG	Sidechain
2	H	34	ARG	Sidechain
2	H	363	ARG	Sidechain

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Mol	Chain	Res	Type	Group
2	H	366	ARG	Sidechain
2	H	377	ARG	Sidechain
2	H	39	ARG	Sidechain
2	H	419	ARG	Sidechain
2	H	428	ARG	Sidechain
2	H	445	ARG	Sidechain
2	H	455	ARG	Sidechain
2	H	458	ARG	Sidechain
2	H	46	ARG	Sidechain
2	H	76	ARG	Sidechain
2	H	96	ARG	Sidechain
2	I	102	ARG	Sidechain
2	I	140	ARG	Sidechain
2	I	144	ARG	Sidechain
2	I	167	ARG	Sidechain
2	I	178	ARG	Sidechain
2	I	181	ARG	Sidechain
2	I	202	ARG	Sidechain
2	I	203	ARG	Sidechain
2	I	222	ARG	Sidechain
2	I	230	ARG	Sidechain
2	I	231	ARG	Sidechain
2	I	246	ARG	Sidechain
2	I	306	ARG	Sidechain
2	I	310	ARG	Sidechain
2	I	321	ARG	Sidechain
2	I	322	ARG	Sidechain
2	I	324	ARG	Sidechain
2	I	332	ARG	Sidechain
2	I	34	ARG	Sidechain
2	I	363	ARG	Sidechain
2	I	366	ARG	Sidechain
2	I	377	ARG	Sidechain
2	I	39	ARG	Sidechain
2	I	419	ARG	Sidechain
2	I	428	ARG	Sidechain
2	I	445	ARG	Sidechain
2	I	455	ARG	Sidechain
2	I	458	ARG	Sidechain
2	I	46	ARG	Sidechain
2	I	76	ARG	Sidechain
2	I	96	ARG	Sidechain

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Mol	Chain	Res	Type	Group
2	J	102	ARG	Sidechain
2	J	140	ARG	Sidechain
2	J	144	ARG	Sidechain
2	J	167	ARG	Sidechain
2	J	178	ARG	Sidechain
2	J	181	ARG	Sidechain
2	J	202	ARG	Sidechain
2	J	203	ARG	Sidechain
2	J	222	ARG	Sidechain
2	J	230	ARG	Sidechain
2	J	231	ARG	Sidechain
2	J	246	ARG	Sidechain
2	J	306	ARG	Sidechain
2	J	310	ARG	Sidechain
2	J	321	ARG	Sidechain
2	J	322	ARG	Sidechain
2	J	324	ARG	Sidechain
2	J	332	ARG	Sidechain
2	J	34	ARG	Sidechain
2	J	363	ARG	Sidechain
2	J	366	ARG	Sidechain
2	J	377	ARG	Sidechain
2	J	39	ARG	Sidechain
2	J	419	ARG	Sidechain
2	J	428	ARG	Sidechain
2	J	445	ARG	Sidechain
2	J	455	ARG	Sidechain
2	J	458	ARG	Sidechain
2	J	46	ARG	Sidechain
2	J	76	ARG	Sidechain
2	J	96	ARG	Sidechain
2	K	102	ARG	Sidechain
2	K	140	ARG	Sidechain
2	K	144	ARG	Sidechain
2	K	167	ARG	Sidechain
2	K	178	ARG	Sidechain
2	K	181	ARG	Sidechain
2	K	202	ARG	Sidechain
2	K	203	ARG	Sidechain
2	K	222	ARG	Sidechain
2	K	230	ARG	Sidechain
2	K	231	ARG	Sidechain

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Mol	Chain	Res	Type	Group
2	K	246	ARG	Sidechain
2	K	306	ARG	Sidechain
2	K	310	ARG	Sidechain
2	K	321	ARG	Sidechain
2	K	322	ARG	Sidechain
2	K	324	ARG	Sidechain
2	K	332	ARG	Sidechain
2	K	34	ARG	Sidechain
2	K	363	ARG	Sidechain
2	K	366	ARG	Sidechain
2	K	377	ARG	Sidechain
2	K	39	ARG	Sidechain
2	K	419	ARG	Sidechain
2	K	428	ARG	Sidechain
2	K	445	ARG	Sidechain
2	K	455	ARG	Sidechain
2	K	458	ARG	Sidechain
2	K	46	ARG	Sidechain
2	K	76	ARG	Sidechain
2	K	96	ARG	Sidechain
2	L	102	ARG	Sidechain
2	L	140	ARG	Sidechain
2	L	144	ARG	Sidechain
2	L	167	ARG	Sidechain
2	L	178	ARG	Sidechain
2	L	181	ARG	Sidechain
2	L	202	ARG	Sidechain
2	L	203	ARG	Sidechain
2	L	222	ARG	Sidechain
2	L	230	ARG	Sidechain
2	L	231	ARG	Sidechain
2	L	246	ARG	Sidechain
2	L	306	ARG	Sidechain
2	L	310	ARG	Sidechain
2	L	321	ARG	Sidechain
2	L	322	ARG	Sidechain
2	L	324	ARG	Sidechain
2	L	332	ARG	Sidechain
2	L	34	ARG	Sidechain
2	L	363	ARG	Sidechain
2	L	366	ARG	Sidechain
2	L	377	ARG	Sidechain

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Mol	Chain	Res	Type	Group
2	L	39	ARG	Sidechain
2	L	419	ARG	Sidechain
2	L	428	ARG	Sidechain
2	L	445	ARG	Sidechain
2	L	455	ARG	Sidechain
2	L	458	ARG	Sidechain
2	L	46	ARG	Sidechain
2	L	76	ARG	Sidechain
2	L	96	ARG	Sidechain

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	11337	0	11347	1766	0
1	B	11337	0	11350	1542	0
1	C	11337	0	11347	1762	0
1	D	11337	0	11350	1536	0
1	E	11337	0	11347	1774	0
1	F	11337	0	11350	1543	0
2	G	3468	0	3397	1086	0
2	H	3468	0	3397	1079	0
2	I	3468	0	3397	1089	0
2	J	3468	0	3399	1075	0
2	K	3468	0	3399	1080	0
2	L	3468	0	3399	1078	0
3	A	11	0	10	3	0
3	B	11	0	10	0	0
3	C	11	0	10	3	0
3	D	11	0	10	0	0
3	E	11	0	10	3	0
3	F	11	0	10	1	0
4	A	31	0	19	4	0
4	B	31	0	19	7	0
4	C	31	0	19	3	0
4	D	31	0	19	7	0
4	E	31	0	19	4	0
4	F	31	0	19	6	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
5	A	10	0	4	0	0
5	B	10	0	4	2	0
5	C	10	0	4	0	0
5	D	10	0	4	2	0
5	E	10	0	4	0	0
5	F	10	0	4	1	0
6	A	7	0	0	3	0
6	B	7	0	0	3	0
6	C	7	0	0	3	0
6	D	7	0	0	3	0
6	E	7	0	0	6	0
6	F	7	0	0	3	0
7	G	16	0	0	2	0
7	H	16	0	0	2	0
7	I	16	0	0	2	0
7	J	16	0	0	2	0
7	K	16	0	0	2	0
7	L	16	0	0	2	0
8	G	53	0	31	18	0
8	H	53	0	31	18	0
8	I	53	0	31	18	0
8	J	53	0	31	18	0
8	K	53	0	31	18	0
8	L	53	0	31	17	0
All	All	89598	0	88863	15415	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 86.

All (15415) 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:B:1263:HIS:CE1	1:D:900:GLY:CA	1.77	1.66
1:A:782:ARG:CG	2:J:53:PRO:HD2	1.19	1.65
1:E:782:ARG:CG	2:L:53:PRO:HD2	1.19	1.64
1:F:182:MET:CE	1:F:217:PRO:HB2	1.30	1.61
1:A:902:ASN:HB2	1:C:1227:GLU:CG	1.13	1.61
1:C:782:ARG:CG	2:K:53:PRO:HD2	1.19	1.61
1:E:782:ARG:HG2	2:L:53:PRO:CD	1.14	1.61
1:D:182:MET:HE3	1:D:217:PRO:CB	1.27	1.60
1:D:1263:HIS:CE1	1:F:900:GLY:CA	1.77	1.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:182:MET:HE3	1:A:217:PRO:CB	1.28	1.60
1:F:182:MET:HE3	1:F:217:PRO:CB	1.18	1.60
1:D:182:MET:CE	1:D:217:PRO:HB2	1.30	1.59
1:A:902:ASN:CB	1:C:1227:GLU:HG2	1.27	1.59
1:F:1449:ARG:HH11	1:F:1449:ARG:CB	0.97	1.58
1:A:1227:GLU:HG2	1:E:902:ASN:CB	1.27	1.58
1:B:900:GLY:CA	1:F:1263:HIS:CE1	1.77	1.57
1:A:782:ARG:HG2	2:J:53:PRO:CD	1.14	1.56
1:B:1449:ARG:HH11	1:B:1449:ARG:CB	0.97	1.56
1:D:1449:ARG:HH11	1:D:1449:ARG:CB	0.97	1.56
1:D:1263:HIS:CE1	1:F:900:GLY:HA3	1.07	1.55
1:B:900:GLY:HA3	1:F:1263:HIS:CE1	1.07	1.55
1:B:1263:HIS:CE1	1:D:900:GLY:HA3	1.07	1.55
1:C:782:ARG:HG2	2:K:53:PRO:CD	1.14	1.55
1:C:182:MET:HE3	1:C:217:PRO:CB	1.33	1.54
1:C:902:ASN:HB2	1:E:1227:GLU:CG	1.13	1.54
1:C:902:ASN:CB	1:E:1227:GLU:HG2	1.27	1.54
1:B:182:MET:CE	1:B:217:PRO:HB2	1.30	1.54
1:A:1227:GLU:CG	1:E:902:ASN:HB2	1.13	1.54
1:E:182:MET:HE3	1:E:217:PRO:CB	1.34	1.53
1:A:1227:GLU:CG	1:E:902:ASN:CB	1.80	1.53
1:B:182:MET:HE3	1:B:217:PRO:CB	1.29	1.52
1:A:1438:ARG:CG	2:L:376:GLY:HA2	1.24	1.52
1:A:1227:GLU:CD	1:E:902:ASN:HB3	1.28	1.51
1:E:1449:ARG:HB2	1:E:1449:ARG:NH1	1.18	1.48
1:C:1438:ARG:CG	2:J:376:GLY:CA	1.84	1.47
1:D:1289:MET:SD	1:D:1289:MET:CE	2.02	1.47
1:F:1289:MET:SD	1:F:1289:MET:CE	2.02	1.47
1:C:182:MET:CE	1:C:217:PRO:HB2	1.45	1.46
1:C:1438:ARG:CG	2:J:376:GLY:HA2	1.24	1.46
1:F:782:ARG:CG	2:I:53:PRO:HD2	1.23	1.46
1:A:182:MET:CE	1:A:217:PRO:HB2	1.45	1.46
1:B:1289:MET:SD	1:B:1289:MET:CE	2.02	1.46
1:C:902:ASN:HB3	1:E:1227:GLU:CD	1.28	1.45
1:D:782:ARG:CG	2:H:53:PRO:HD2	1.23	1.45
1:A:1449:ARG:HB2	1:A:1449:ARG:NH1	1.18	1.45
1:A:902:ASN:HB3	1:C:1227:GLU:CD	1.28	1.44
1:E:522:LEU:HD21	1:E:705:LEU:CD2	1.48	1.44
1:A:902:ASN:CB	1:C:1227:GLU:CG	1.80	1.44
1:A:1449:ARG:HH11	1:A:1449:ARG:CB	1.31	1.44
1:E:1449:ARG:HH11	1:E:1449:ARG:CB	1.31	1.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:522:LEU:HD21	1:C:705:LEU:CD2	1.48	1.43
1:C:902:ASN:CB	1:E:1227:GLU:CG	1.80	1.43
1:A:522:LEU:HD21	1:A:705:LEU:CD2	1.48	1.42
1:C:1449:ARG:HB2	1:C:1449:ARG:NH1	1.18	1.42
1:C:1449:ARG:HH11	1:C:1449:ARG:CB	1.31	1.42
1:A:253:HIS:ND1	1:A:254:PRO:HD2	1.17	1.42
1:A:782:ARG:CG	2:J:52:VAL:HA	1.27	1.41
1:E:182:MET:CE	1:E:217:PRO:HB2	1.45	1.41
1:F:782:ARG:HG2	2:I:53:PRO:CD	0.94	1.41
1:A:825:LEU:CD1	1:A:1186:ARG:HH12	1.31	1.41
1:B:782:ARG:CG	2:G:53:PRO:HD2	1.23	1.41
1:E:253:HIS:ND1	1:E:254:PRO:HD2	1.17	1.41
1:E:1438:ARG:CG	2:K:376:GLY:CA	1.84	1.41
1:E:825:LEU:CD1	1:E:1186:ARG:HH12	1.31	1.41
1:D:782:ARG:HG2	2:H:53:PRO:CD	0.93	1.40
1:C:825:LEU:CD1	1:C:1186:ARG:HH12	1.31	1.40
1:C:900:GLY:HA3	1:E:1263:HIS:NE2	1.35	1.40
1:C:253:HIS:ND1	1:C:254:PRO:HD2	1.17	1.40
1:C:782:ARG:HG3	2:K:52:VAL:CA	1.09	1.40
1:B:782:ARG:HG2	2:G:53:PRO:CD	0.94	1.39
1:A:900:GLY:HA3	1:C:1263:HIS:NE2	1.35	1.39
1:A:1438:ARG:CG	2:L:376:GLY:CA	1.84	1.39
1:E:1438:ARG:CG	2:K:376:GLY:HA2	1.24	1.39
1:E:782:ARG:HG3	2:L:52:VAL:CA	1.09	1.39
1:C:825:LEU:HD13	1:C:1186:ARG:NH1	1.35	1.38
1:A:1263:HIS:NE2	1:E:900:GLY:HA3	1.35	1.38
1:E:782:ARG:CG	2:L:52:VAL:HA	1.27	1.38
1:D:182:MET:CE	1:D:217:PRO:CB	1.89	1.38
1:E:505:GLN:NE2	1:E:1001:VAL:H	1.23	1.37
1:A:505:GLN:NE2	1:A:1001:VAL:H	1.23	1.37
1:C:505:GLN:NE2	1:C:1001:VAL:H	1.23	1.36
1:A:825:LEU:HD13	1:A:1186:ARG:NH1	1.35	1.36
1:E:825:LEU:HD13	1:E:1186:ARG:NH1	1.35	1.35
1:A:782:ARG:HG3	2:J:52:VAL:CA	1.09	1.35
1:F:182:MET:CE	1:F:217:PRO:CB	1.89	1.34
1:E:782:ARG:CG	2:L:52:VAL:CA	1.86	1.34
1:F:777:GLY:HA2	2:I:52:VAL:CG1	1.58	1.34
1:F:1104:MET:O	2:I:54:PHE:HZ	1.09	1.34
1:F:253:HIS:CG	1:F:254:PRO:HD2	1.62	1.33
1:B:253:HIS:CG	1:B:254:PRO:HD2	1.62	1.33
1:A:290:THR:CG2	1:A:292:PRO:HD2	1.58	1.33

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:253:HIS:CG	1:D:254:PRO:HD2	1.62	1.33
1:D:430:VAL:HG13	1:D:554:GLU:CB	1.58	1.33
1:B:1104:MET:O	2:G:54:PHE:HZ	1.09	1.33
1:C:290:THR:CG2	1:C:292:PRO:HD2	1.58	1.33
1:B:182:MET:CE	1:B:217:PRO:CB	1.89	1.32
1:B:777:GLY:HA2	2:G:52:VAL:CG1	1.58	1.32
1:A:782:ARG:HG3	2:J:52:VAL:C	1.49	1.32
1:F:430:VAL:HG13	1:F:554:GLU:CB	1.59	1.32
1:B:900:GLY:O	1:F:1227:GLU:C	1.68	1.32
1:B:782:ARG:C	2:G:57:VAL:HG23	1.50	1.31
1:F:782:ARG:C	2:I:57:VAL:HG23	1.50	1.31
1:C:782:ARG:HG3	2:K:52:VAL:C	1.49	1.31
1:D:777:GLY:HA2	2:H:52:VAL:CG1	1.58	1.31
1:E:1104:MET:O	2:L:54:PHE:HZ	1.10	1.31
1:B:430:VAL:HG13	1:B:554:GLU:CB	1.59	1.31
1:E:290:THR:CG2	1:E:292:PRO:HD2	1.58	1.31
1:B:780:ARG:NH1	2:G:50:CYS:SG	2.04	1.30
1:C:1438:ARG:CB	2:J:376:GLY:N	1.75	1.30
1:D:782:ARG:C	2:H:57:VAL:HG23	1.50	1.30
1:E:780:ARG:NH1	2:L:50:CYS:SG	2.04	1.30
1:B:825:LEU:HD13	1:B:1186:ARG:NH1	1.46	1.30
1:C:253:HIS:ND1	1:C:254:PRO:CD	1.94	1.30
1:C:780:ARG:NH1	2:K:50:CYS:SG	2.04	1.30
1:D:780:ARG:NH1	2:H:50:CYS:SG	2.04	1.30
1:A:253:HIS:ND1	1:A:254:PRO:CD	1.94	1.29
1:E:782:ARG:HG3	2:L:52:VAL:C	1.49	1.29
1:A:1438:ARG:CB	2:L:376:GLY:N	1.75	1.29
1:B:182:MET:HE3	1:B:217:PRO:CA	1.63	1.29
1:B:782:ARG:CZ	2:G:51:GLY:HA2	1.08	1.29
1:B:1227:GLU:C	1:D:900:GLY:O	1.68	1.29
1:D:1263:HIS:NE2	1:F:900:GLY:HA3	1.48	1.29
1:A:780:ARG:NH1	2:J:50:CYS:SG	2.04	1.29
1:C:253:HIS:CG	1:C:254:PRO:HD2	1.67	1.29
1:B:1263:HIS:NE2	1:D:900:GLY:HA3	1.48	1.29
1:F:825:LEU:CD1	1:F:1186:ARG:HH12	1.46	1.29
1:B:900:GLY:N	1:F:1263:HIS:HE1	1.30	1.29
1:B:1263:HIS:HE1	1:D:900:GLY:N	1.30	1.29
1:E:253:HIS:CG	1:E:254:PRO:HD2	1.67	1.29
1:A:253:HIS:CG	1:A:254:PRO:HD2	1.67	1.28
1:A:1438:ARG:HG3	2:L:376:GLY:CA	1.52	1.28
1:C:1104:MET:O	2:K:54:PHE:HZ	1.10	1.28

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:825:LEU:HD13	1:D:1186:ARG:NH1	1.46	1.28
1:D:825:LEU:CD1	1:D:1186:ARG:HH12	1.46	1.28
1:D:1227:GLU:C	1:F:900:GLY:O	1.68	1.28
1:E:253:HIS:ND1	1:E:254:PRO:CD	1.94	1.28
1:A:900:GLY:CA	1:C:1263:HIS:NE2	1.96	1.28
1:D:1104:MET:O	2:H:54:PHE:HZ	1.09	1.28
1:D:1263:HIS:HE1	1:F:900:GLY:N	1.30	1.28
1:B:825:LEU:CD1	1:B:1186:ARG:HH12	1.46	1.27
1:F:780:ARG:NH1	2:I:50:CYS:SG	2.04	1.27
1:C:900:GLY:CA	1:E:1263:HIS:NE2	1.96	1.27
1:F:825:LEU:HD13	1:F:1186:ARG:NH1	1.46	1.27
1:A:902:ASN:CB	1:C:1227:GLU:CD	1.93	1.27
1:A:1263:HIS:CE1	1:E:900:GLY:CA	2.17	1.27
1:D:182:MET:HE3	1:D:217:PRO:CA	1.63	1.27
1:C:430:VAL:HG13	1:C:554:GLU:CB	1.64	1.27
1:C:875:MET:HE1	1:C:1139:PHE:CE2	1.68	1.27
1:A:430:VAL:HG13	1:A:554:GLU:CB	1.64	1.27
1:F:182:MET:HE3	1:F:217:PRO:CA	1.65	1.26
1:F:782:ARG:HB3	2:I:56:GLN:NE2	1.50	1.26
1:A:900:GLY:CA	1:C:1263:HIS:CE1	2.17	1.26
1:A:1104:MET:O	2:J:54:PHE:HZ	1.10	1.26
1:A:1263:HIS:NE2	1:E:900:GLY:CA	1.96	1.26
1:E:430:VAL:HG13	1:E:554:GLU:CB	1.64	1.26
1:E:782:ARG:HB3	2:L:56:GLN:NE2	1.49	1.26
1:C:777:GLY:HA2	2:K:52:VAL:CG1	1.65	1.26
1:F:1449:ARG:HB2	1:F:1449:ARG:NH1	0.93	1.26
1:B:729:GLY:O	1:B:748:GLY:HA3	1.31	1.26
1:C:782:ARG:CG	2:K:52:VAL:CA	1.86	1.26
1:C:782:ARG:HB3	2:K:56:GLN:NE2	1.49	1.26
1:C:1438:ARG:HG3	2:J:376:GLY:CA	1.52	1.26
1:D:729:GLY:O	1:D:748:GLY:HA3	1.31	1.26
1:D:782:ARG:HB3	2:H:56:GLN:NE2	1.50	1.26
1:C:900:GLY:CA	1:E:1263:HIS:CE1	2.17	1.26
1:D:1449:ARG:NH1	1:D:1449:ARG:HB2	0.93	1.25
1:A:777:GLY:HA2	2:J:52:VAL:CG1	1.65	1.25
1:A:782:ARG:HB3	2:J:56:GLN:NE2	1.49	1.25
1:B:900:GLY:HA3	1:F:1263:HIS:NE2	1.48	1.25
1:F:783:LYS:CA	2:I:57:VAL:CG2	2.15	1.25
1:A:375:ASP:OD2	1:A:377:THR:HB	1.35	1.25
1:F:729:GLY:O	1:F:748:GLY:HA3	1.31	1.25
1:B:1228:LYS:N	1:D:900:GLY:O	1.71	1.24

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:777:GLY:HA2	2:L:52:VAL:CG1	1.65	1.24
1:E:1438:ARG:HG3	2:K:376:GLY:CA	1.52	1.24
1:C:902:ASN:CB	1:E:1227:GLU:CD	1.93	1.24
1:B:783:LYS:CA	2:G:57:VAL:CG2	2.15	1.24
1:B:1449:ARG:NH1	1:B:1449:ARG:HB2	0.93	1.24
1:E:375:ASP:OD2	1:E:377:THR:HB	1.35	1.24
1:D:783:LYS:CA	2:H:57:VAL:CG2	2.15	1.23
1:F:452:GLN:HE21	1:F:764:THR:CG2	1.51	1.23
1:B:900:GLY:O	1:F:1228:LYS:N	1.71	1.23
1:B:452:GLN:HE21	1:B:764:THR:CG2	1.51	1.23
1:E:875:MET:CE	1:E:1139:PHE:CE2	2.22	1.23
1:D:782:ARG:CZ	2:H:51:GLY:HA2	1.08	1.23
1:D:1228:LYS:N	1:F:900:GLY:O	1.70	1.23
1:B:782:ARG:HB3	2:G:56:GLN:NE2	1.50	1.22
1:A:875:MET:CE	1:A:1139:PHE:CE2	2.22	1.22
1:D:452:GLN:HE21	1:D:764:THR:CG2	1.51	1.22
1:C:782:ARG:CG	2:K:52:VAL:HA	1.27	1.22
1:F:781:PHE:C	2:I:52:VAL:HB	1.38	1.21
1:F:783:LYS:HA	2:I:57:VAL:CG2	1.69	1.21
1:A:1227:GLU:CD	1:E:902:ASN:CB	1.93	1.21
1:C:375:ASP:OD2	1:C:377:THR:HB	1.35	1.21
1:C:875:MET:CE	1:C:1139:PHE:CE2	2.22	1.21
1:D:1047:MET:HG2	1:D:1186:ARG:CZ	1.69	1.21
1:F:782:ARG:CZ	2:I:51:GLY:HA2	1.08	1.21
1:A:875:MET:HE1	1:A:1139:PHE:CE2	1.76	1.20
1:E:875:MET:HE1	1:E:1139:PHE:CE2	1.75	1.20
1:F:746:ILE:CG2	1:F:1182:ASP:H	1.54	1.20
2:H:259:VAL:HG21	2:H:264:TYR:HB2	1.21	1.20
1:B:746:ILE:CG2	1:B:1182:ASP:H	1.54	1.20
1:B:1047:MET:HG2	1:B:1186:ARG:CZ	1.69	1.20
1:E:782:ARG:CD	2:L:53:PRO:CD	2.20	1.20
1:F:1047:MET:HG2	1:F:1186:ARG:CZ	1.69	1.20
1:F:782:ARG:NH2	2:I:51:GLY:C	1.88	1.20
1:E:1438:ARG:CB	2:K:376:GLY:N	1.75	1.20
1:A:782:ARG:C	2:J:57:VAL:HG23	1.62	1.20
1:B:783:LYS:HA	2:G:57:VAL:CG2	1.69	1.20
1:C:782:ARG:CD	2:K:53:PRO:CD	2.20	1.20
2:G:152:VAL:HG13	2:G:175:VAL:HA	1.24	1.19
2:K:259:VAL:HG21	2:K:264:TYR:HB2	1.21	1.19
1:A:59:VAL:HG21	1:A:105:TYR:CD2	1.77	1.19
1:C:59:VAL:HG21	1:C:105:TYR:CD2	1.77	1.19

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:782:ARG:C	2:K:57:VAL:HG23	1.62	1.19
1:D:1047:MET:SD	1:D:1186:ARG:NH2	2.16	1.19
1:B:1047:MET:SD	1:B:1186:ARG:NH2	2.16	1.18
1:D:783:LYS:HA	2:H:57:VAL:CG2	1.69	1.18
1:E:782:ARG:C	2:L:57:VAL:HG23	1.62	1.18
1:D:253:HIS:ND1	1:D:254:PRO:HD2	1.57	1.18
1:D:746:ILE:CG2	1:D:1182:ASP:H	1.54	1.18
1:A:782:ARG:CD	2:J:53:PRO:CD	2.20	1.18
1:A:783:LYS:CA	2:J:57:VAL:HG22	1.64	1.17
1:C:900:GLY:N	1:E:1263:HIS:CE1	2.12	1.17
1:E:59:VAL:HG21	1:E:105:TYR:CD2	1.77	1.17
1:E:515:ARG:HD2	1:E:1367:TYR:CE1	1.80	1.17
2:K:244:LYS:HD2	2:K:404:GLU:HB3	1.26	1.17
1:F:253:HIS:ND1	1:F:254:PRO:HD2	1.57	1.17
1:E:1111:ASN:OD1	1:E:1119:VAL:HG23	1.44	1.17
1:B:253:HIS:ND1	1:B:254:PRO:HD2	1.57	1.17
1:D:783:LYS:CA	2:H:57:VAL:HG22	1.60	1.17
1:F:783:LYS:N	2:I:57:VAL:HG23	1.59	1.17
1:A:900:GLY:N	1:C:1263:HIS:CE1	2.13	1.17
1:B:781:PHE:C	2:G:52:VAL:HB	1.38	1.17
1:B:1401:LEU:HD12	1:B:1401:LEU:O	1.45	1.17
1:A:1263:HIS:CE1	1:E:900:GLY:N	2.13	1.16
1:B:1104:MET:O	2:G:54:PHE:CZ	1.97	1.16
1:C:515:ARG:HD2	1:C:1367:TYR:CE1	1.80	1.16
1:C:746:ILE:CG2	1:C:1182:ASP:H	1.58	1.16
1:F:1047:MET:SD	1:F:1186:ARG:NH2	2.16	1.16
1:A:1104:MET:O	2:J:54:PHE:CZ	1.98	1.16
1:D:1111:ASN:OD1	1:D:1119:VAL:HG23	1.45	1.16
1:F:1401:LEU:HD12	1:F:1401:LEU:O	1.45	1.16
2:J:259:VAL:HG21	2:J:264:TYR:HB2	1.21	1.16
2:J:319:LEU:HD11	2:J:369:LEU:HD21	1.26	1.16
1:D:783:LYS:N	2:H:57:VAL:HG23	1.59	1.16
1:E:825:LEU:CD1	1:E:1186:ARG:NH1	1.98	1.16
1:F:1104:MET:O	2:I:54:PHE:CZ	1.97	1.16
2:J:244:LYS:HD2	2:J:404:GLU:HB3	1.26	1.16
1:A:746:ILE:CG2	1:A:1182:ASP:H	1.58	1.16
1:C:783:LYS:CA	2:K:57:VAL:HG22	1.64	1.16
1:E:1104:MET:O	2:L:54:PHE:CZ	1.98	1.16
1:A:515:ARG:HD2	1:A:1367:TYR:CE1	1.80	1.16
1:B:1111:ASN:OD1	1:B:1119:VAL:HG23	1.45	1.16
1:E:746:ILE:CG2	1:E:1182:ASP:H	1.58	1.16

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:319:LEU:HD11	2:I:369:LEU:HD21	1.26	1.16
1:D:1401:LEU:O	1:D:1401:LEU:HD12	1.45	1.15
1:E:782:ARG:CG	2:L:53:PRO:CD	1.88	1.15
1:E:783:LYS:CA	2:L:57:VAL:HG22	1.64	1.15
1:A:782:ARG:CG	2:J:52:VAL:CA	1.86	1.15
1:D:1104:MET:O	2:H:54:PHE:CZ	1.97	1.15
1:E:838:VAL:HG13	1:E:839:PRO:HD2	1.23	1.15
1:E:1212:ASP:O	1:E:1216:VAL:HG23	1.47	1.15
2:H:319:LEU:HD11	2:H:369:LEU:HD21	1.26	1.15
2:K:152:VAL:HG13	2:K:175:VAL:HA	1.24	1.15
1:B:783:LYS:CA	2:G:57:VAL:HG22	1.60	1.15
1:C:182:MET:CE	1:C:217:PRO:CB	2.13	1.15
1:C:515:ARG:CD	1:C:1367:TYR:CE1	2.30	1.15
1:C:778:PHE:CE2	1:C:1039:LYS:HD2	1.80	1.15
1:E:778:PHE:CE2	1:E:1039:LYS:HD2	1.80	1.15
2:G:244:LYS:HD2	2:G:404:GLU:HB3	1.26	1.15
2:K:319:LEU:HD11	2:K:369:LEU:HD21	1.26	1.15
1:A:1111:ASN:OD1	1:A:1119:VAL:HG23	1.44	1.15
1:C:182:MET:HE3	1:C:217:PRO:CA	1.77	1.15
1:C:1104:MET:O	2:K:54:PHE:CZ	1.98	1.15
2:H:244:LYS:HD2	2:H:404:GLU:HB3	1.26	1.15
2:I:186:LEU:HD23	2:I:195:LEU:HD21	1.17	1.15
2:J:152:VAL:HG13	2:J:175:VAL:HA	1.24	1.15
1:F:777:GLY:HA2	2:I:52:VAL:HG13	1.22	1.14
2:I:259:VAL:HG21	2:I:264:TYR:HB2	1.21	1.14
1:A:778:PHE:CE2	1:A:1039:LYS:HD2	1.80	1.14
1:A:1212:ASP:O	1:A:1216:VAL:HG23	1.47	1.14
1:B:290:THR:HG23	1:B:292:PRO:HD2	1.27	1.14
1:D:782:ARG:CD	2:H:53:PRO:CD	2.25	1.14
1:D:999:LYS:HG3	1:D:1022:LEU:HD23	1.19	1.14
1:F:782:ARG:CD	2:I:53:PRO:CD	2.25	1.14
2:H:371:VAL:HG23	2:H:383:ILE:HG23	1.28	1.14
2:J:371:VAL:HG23	2:J:383:ILE:HG23	1.28	1.14
2:L:53:PRO:HG2	2:L:56:GLN:HG2	1.18	1.14
1:A:290:THR:HG22	1:A:292:PRO:HD2	1.29	1.14
1:C:522:LEU:HD21	1:C:705:LEU:HD21	1.22	1.14
1:E:515:ARG:CD	1:E:1367:TYR:CE1	2.30	1.14
1:E:783:LYS:CA	2:L:57:VAL:CG2	2.26	1.14
2:I:53:PRO:HG2	2:I:56:GLN:HG2	1.18	1.14
1:B:452:GLN:HE21	1:B:764:THR:HG21	0.98	1.14
1:B:783:LYS:N	2:G:57:VAL:HG23	1.59	1.14

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1349:ARG:HH11	1:B:1349:ARG:HG2	0.97	1.14
1:C:139:VAL:HG12	1:C:140:SER:H	1.01	1.14
1:C:783:LYS:CA	2:K:57:VAL:CG2	2.26	1.14
1:F:290:THR:HG23	1:F:292:PRO:HD2	1.27	1.14
2:G:319:LEU:HD11	2:G:369:LEU:HD21	1.26	1.14
1:A:430:VAL:HG13	1:A:554:GLU:HB3	1.17	1.13
1:B:999:LYS:CG	1:B:1022:LEU:HD23	1.78	1.13
1:C:381:GLU:OE1	1:C:402:ARG:NH1	1.81	1.13
1:A:825:LEU:CD1	1:A:1186:ARG:NH1	1.98	1.13
1:A:1438:ARG:HB2	2:L:376:GLY:N	1.47	1.13
1:C:715:VAL:HG12	1:C:715:VAL:O	1.44	1.13
1:D:782:ARG:NH2	2:H:51:GLY:C	1.88	1.13
1:E:182:MET:HE3	1:E:217:PRO:CA	1.77	1.13
1:A:515:ARG:CD	1:A:1367:TYR:CE1	2.30	1.13
1:B:782:ARG:CD	2:G:53:PRO:CD	2.25	1.13
1:B:900:GLY:CA	1:F:1263:HIS:HE1	1.33	1.13
1:C:236:THR:HG21	1:C:328:ASP:H	1.00	1.13
1:C:1111:ASN:OD1	1:C:1119:VAL:HG23	1.44	1.13
1:C:1212:ASP:O	1:C:1216:VAL:HG23	1.47	1.13
1:D:781:PHE:C	2:H:52:VAL:HB	1.38	1.13
2:G:148:LEU:HD12	2:G:149:SER:H	1.14	1.13
1:A:182:MET:CE	1:A:217:PRO:CB	2.13	1.13
2:G:259:VAL:HG21	2:G:264:TYR:HB2	1.21	1.13
2:I:152:VAL:HG13	2:I:175:VAL:HA	1.24	1.13
2:L:152:VAL:HG13	2:L:175:VAL:HA	1.24	1.13
1:A:526:LEU:HD12	1:A:526:LEU:N	1.63	1.12
1:A:783:LYS:HA	2:J:57:VAL:CG2	1.79	1.13
1:A:1230:GLN:H	1:E:877:ARG:HG2	1.13	1.12
1:D:290:THR:HG23	1:D:292:PRO:HD2	1.27	1.12
1:D:777:GLY:CA	2:H:52:VAL:CG1	2.28	1.12
1:E:783:LYS:N	2:L:57:VAL:HG23	1.64	1.12
1:F:777:GLY:CA	2:I:52:VAL:CG1	2.27	1.12
1:F:1111:ASN:OD1	1:F:1119:VAL:HG23	1.45	1.13
2:J:186:LEU:HD23	2:J:195:LEU:HD21	1.17	1.12
2:L:423:LEU:HD21	2:L:443:ILE:HD13	1.28	1.12
1:A:139:VAL:HG12	1:A:140:SER:H	1.01	1.12
1:C:783:LYS:HA	2:K:57:VAL:CG2	1.79	1.12
1:D:999:LYS:CG	1:D:1022:LEU:HD23	1.78	1.12
1:E:381:GLU:OE1	1:E:402:ARG:NH1	1.81	1.12
1:E:715:VAL:O	1:E:715:VAL:HG12	1.44	1.12
2:L:259:VAL:HG21	2:L:264:TYR:HB2	1.21	1.12

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:781:PHE:C	2:K:52:VAL:HB	1.51	1.12
1:F:710:LYS:HG2	1:F:939:GLY:HA3	1.25	1.12
1:F:999:LYS:CG	1:F:1022:LEU:HD23	1.78	1.12
2:H:186:LEU:HD23	2:H:195:LEU:HD21	1.17	1.12
2:L:244:LYS:HD2	2:L:404:GLU:HB3	1.26	1.12
1:A:182:MET:HE3	1:A:217:PRO:CA	1.79	1.12
1:B:430:VAL:HG13	1:B:554:GLU:HB3	1.31	1.12
1:C:783:LYS:N	2:K:57:VAL:HG23	1.64	1.12
1:C:1221:PRO:HB2	1:C:1229:MET:HE2	1.15	1.12
1:D:30:HIS:CD2	1:D:31:ARG:HG3	1.85	1.12
1:F:182:MET:HE2	1:F:217:PRO:HB2	1.15	1.12
1:F:783:LYS:CA	2:I:57:VAL:HG22	1.60	1.12
2:H:406:LEU:HD23	2:H:407:PRO:HD3	1.29	1.12
2:I:244:LYS:HD2	2:I:404:GLU:HB3	1.26	1.12
1:D:1263:HIS:HE1	1:F:900:GLY:CA	1.33	1.12
1:F:139:VAL:HG12	1:F:140:SER:N	1.60	1.12
2:J:406:LEU:HD23	2:J:407:PRO:HD3	1.29	1.12
1:A:781:PHE:C	2:J:52:VAL:HB	1.51	1.11
1:A:783:LYS:CA	2:J:57:VAL:CG2	2.26	1.11
1:B:782:ARG:NH2	2:G:51:GLY:C	1.88	1.11
1:D:782:ARG:O	2:H:57:VAL:CG2	1.98	1.11
2:H:152:VAL:HG13	2:H:175:VAL:HA	1.24	1.11
2:K:53:PRO:HG2	2:K:56:GLN:HG2	1.18	1.11
2:L:148:LEU:HD12	2:L:149:SER:H	1.14	1.11
1:B:782:ARG:O	2:G:57:VAL:CG2	1.98	1.11
1:F:30:HIS:CD2	1:F:31:ARG:HG3	1.85	1.11
1:A:253:HIS:CE1	1:A:254:PRO:HD2	1.85	1.11
1:C:59:VAL:CG2	1:C:105:TYR:CD2	2.34	1.11
2:K:148:LEU:HD12	2:K:149:SER:H	1.14	1.11
1:C:838:VAL:HG13	1:C:839:PRO:HD2	1.23	1.11
1:C:1438:ARG:HB2	2:J:376:GLY:N	1.47	1.11
1:E:253:HIS:CE1	1:E:254:PRO:HD2	1.85	1.11
1:E:1221:PRO:HB2	1:E:1229:MET:HE2	1.15	1.11
1:E:1391:MET:HE2	1:E:1458:VAL:HG22	1.11	1.11
2:L:186:LEU:HD23	2:L:195:LEU:HD21	1.17	1.11
1:B:515:ARG:HD2	1:B:1367:TYR:CE1	1.86	1.11
1:B:782:ARG:CD	2:G:53:PRO:HD3	1.81	1.11
1:B:1229:MET:HA	1:D:877:ARG:HG3	1.12	1.11
1:D:782:ARG:CB	2:H:56:GLN:HE21	1.63	1.11
1:E:139:VAL:HG12	1:E:140:SER:H	1.01	1.11
1:F:782:ARG:CD	2:I:53:PRO:HD3	1.81	1.11

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:999:LYS:HG3	1:F:1022:LEU:HD23	1.19	1.11
2:G:418:THR:HB	2:G:424:LEU:HD11	1.32	1.11
2:L:319:LEU:HD11	2:L:369:LEU:HD21	1.26	1.11
1:A:381:GLU:OE1	1:A:402:ARG:NH1	1.81	1.10
1:A:783:LYS:N	2:J:57:VAL:HG23	1.64	1.10
1:A:1221:PRO:HB2	1:A:1229:MET:HE2	1.13	1.10
1:C:253:HIS:CE1	1:C:254:PRO:HD2	1.85	1.10
1:E:783:LYS:HA	2:L:57:VAL:CG2	1.79	1.10
1:F:782:ARG:CB	2:I:56:GLN:HE21	1.63	1.10
2:J:423:LEU:HD21	2:J:443:ILE:HD13	1.28	1.10
1:A:387:PRO:HD3	1:A:1344:GLU:OE2	1.51	1.10
1:B:30:HIS:CD2	1:B:31:ARG:HG3	1.85	1.10
1:B:139:VAL:HG12	1:B:140:SER:N	1.60	1.10
1:C:387:PRO:HD3	1:C:1344:GLU:OE2	1.51	1.10
1:F:782:ARG:O	2:I:57:VAL:CG2	1.98	1.10
2:G:406:LEU:HD23	2:G:407:PRO:HD3	1.29	1.10
2:J:53:PRO:HG2	2:J:56:GLN:HG2	1.18	1.10
1:B:782:ARG:CB	2:G:56:GLN:HE21	1.63	1.10
1:B:999:LYS:HG3	1:B:1022:LEU:HD23	1.19	1.10
1:C:877:ARG:HG2	1:E:1230:GLN:H	1.13	1.10
1:D:430:VAL:CG1	1:D:554:GLU:HB2	1.81	1.10
1:E:236:THR:HG21	1:E:328:ASP:H	1.00	1.10
1:E:746:ILE:HG21	1:E:1182:ASP:H	1.12	1.10
1:E:1376:LEU:HD23	1:E:1376:LEU:N	1.62	1.10
2:I:367:ILE:HG23	2:I:390:VAL:HG23	1.34	1.10
2:I:371:VAL:HG23	2:I:383:ILE:HG23	1.27	1.10
1:A:1376:LEU:HD23	1:A:1376:LEU:N	1.62	1.10
1:B:710:LYS:HG2	1:B:939:GLY:HA3	1.25	1.10
1:D:710:LYS:HG2	1:D:939:GLY:HA3	1.25	1.10
1:F:430:VAL:HG13	1:F:554:GLU:HB3	1.31	1.10
1:F:515:ARG:HD2	1:F:1367:TYR:CE1	1.86	1.10
1:F:1349:ARG:HH11	1:F:1349:ARG:HG2	0.97	1.10
2:G:423:LEU:HD21	2:G:443:ILE:HD13	1.28	1.10
2:K:371:VAL:HG23	2:K:383:ILE:HG23	1.27	1.10
2:L:418:THR:HB	2:L:424:LEU:HD11	1.32	1.10
1:B:728:ILE:HD12	1:B:1047:MET:CE	1.82	1.10
1:C:960:THR:HG22	1:C:963:VAL:HG23	1.32	1.10
1:D:1227:GLU:CD	1:F:876:ASN:HB3	1.71	1.10
1:E:522:LEU:HD21	1:E:705:LEU:HD23	1.33	1.10
1:E:782:ARG:HB3	2:L:56:GLN:HE21	0.96	1.10
1:F:728:ILE:HD12	1:F:1047:MET:CE	1.82	1.10

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:148:LEU:HD12	2:H:149:SER:H	1.14	1.10
1:A:236:THR:HG21	1:A:328:ASP:H	1.00	1.09
1:B:876:ASN:HB3	1:F:1227:GLU:CD	1.71	1.09
1:C:1391:MET:CE	1:C:1458:VAL:HG22	1.82	1.09
2:G:186:LEU:HD23	2:G:195:LEU:HD21	1.17	1.09
2:H:367:ILE:HG23	2:H:390:VAL:HG23	1.34	1.09
2:I:418:THR:HB	2:I:424:LEU:HD11	1.32	1.09
1:A:715:VAL:O	1:A:715:VAL:HG12	1.44	1.09
1:C:1376:LEU:N	1:C:1376:LEU:HD23	1.62	1.09
1:D:782:ARG:CD	2:H:53:PRO:HD3	1.81	1.09
1:D:1047:MET:HE2	1:D:1186:ARG:HH22	1.13	1.09
1:E:59:VAL:CG2	1:E:105:TYR:CD2	2.34	1.09
1:E:777:GLY:HA2	2:L:52:VAL:HG13	1.33	1.09
2:I:406:LEU:HD23	2:I:407:PRO:HD3	1.29	1.09
1:A:59:VAL:CG2	1:A:105:TYR:CD2	2.34	1.09
1:A:513:SER:HB3	1:A:520:MET:HE2	1.30	1.09
1:B:777:GLY:CA	2:G:52:VAL:CG1	2.27	1.09
1:D:1349:ARG:HH11	1:D:1349:ARG:HG2	0.97	1.09
1:F:430:VAL:CG1	1:F:554:GLU:HB2	1.82	1.09
2:H:423:LEU:HD21	2:H:443:ILE:HD13	1.28	1.09
2:I:148:LEU:HD12	2:I:149:SER:H	1.14	1.09
1:F:236:THR:HG21	1:F:328:ASP:H	1.17	1.09
1:F:1047:MET:HE2	1:F:1186:ARG:HH22	1.11	1.09
2:G:371:VAL:HG23	2:G:383:ILE:HG23	1.28	1.09
2:L:371:VAL:HG23	2:L:383:ILE:HG23	1.28	1.09
1:A:522:LEU:HD21	1:A:705:LEU:HD21	1.22	1.09
1:A:838:VAL:HG13	1:A:839:PRO:HD2	1.23	1.09
1:B:1227:GLU:CD	1:D:876:ASN:HB3	1.72	1.09
1:C:430:VAL:HG13	1:C:554:GLU:HB3	1.17	1.09
1:C:526:LEU:HD12	1:C:526:LEU:N	1.63	1.09
1:C:1391:MET:HE2	1:C:1458:VAL:HG22	1.10	1.09
1:D:452:GLN:HE21	1:D:764:THR:HG21	0.98	1.09
1:D:728:ILE:HD12	1:D:1047:MET:CE	1.82	1.09
1:E:781:PHE:C	2:L:52:VAL:HB	1.51	1.09
1:F:238:LYS:O	1:F:242:ASN:ND2	1.86	1.09
2:G:53:PRO:HG2	2:G:56:GLN:HG2	1.18	1.09
2:G:225:SER:HB3	2:G:227:PRO:HD2	1.35	1.09
1:A:777:GLY:HA2	2:J:52:VAL:HG13	1.33	1.08
1:B:238:LYS:O	1:B:242:ASN:ND2	1.86	1.08
1:B:430:VAL:CG1	1:B:554:GLU:HB2	1.82	1.08
1:C:353:MET:HE2	1:C:366:GLY:O	1.53	1.08

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:452:GLN:HE21	1:C:764:THR:HG23	1.13	1.08
1:E:387:PRO:HD3	1:E:1344:GLU:OE2	1.51	1.08
1:E:1391:MET:CE	1:E:1458:VAL:HG22	1.83	1.08
1:B:746:ILE:HG23	1:B:1182:ASP:HB3	1.32	1.08
1:C:522:LEU:CD2	1:C:705:LEU:HD21	1.83	1.08
1:D:1229:MET:HA	1:F:877:ARG:HG3	1.12	1.08
1:F:746:ILE:HG21	1:F:1182:ASP:N	1.69	1.08
2:I:225:SER:HB3	2:I:227:PRO:HD2	1.35	1.08
1:A:1391:MET:CE	1:A:1458:VAL:HG22	1.83	1.08
1:C:345:MET:HG3	1:C:346:ASP:H	1.18	1.08
1:C:452:GLN:HE21	1:C:764:THR:CG2	1.66	1.08
1:D:299:VAL:HG12	1:D:299:VAL:O	1.53	1.08
1:D:430:VAL:HG13	1:D:554:GLU:HB3	1.31	1.08
1:D:515:ARG:HD2	1:D:1367:TYR:CE1	1.86	1.08
1:E:522:LEU:CD2	1:E:705:LEU:HD21	1.84	1.08
1:E:1438:ARG:HB2	2:K:376:GLY:N	1.47	1.08
2:L:367:ILE:HG23	2:L:390:VAL:HG23	1.34	1.08
1:D:139:VAL:HG12	1:D:140:SER:N	1.60	1.08
1:D:238:LYS:O	1:D:242:ASN:ND2	1.86	1.08
1:D:777:GLY:HA2	2:H:52:VAL:HG13	1.22	1.08
1:E:452:GLN:HE21	1:E:764:THR:HG23	1.13	1.08
1:F:295:LYS:HD2	1:F:390:MET:HE3	1.34	1.08
1:F:452:GLN:HE21	1:F:764:THR:HG21	0.98	1.08
2:J:148:LEU:HD12	2:J:149:SER:H	1.14	1.08
2:J:367:ILE:HG23	2:J:390:VAL:HG23	1.34	1.08
2:L:225:SER:HB3	2:L:227:PRO:HD2	1.35	1.08
1:B:430:VAL:HG13	1:B:554:GLU:HB2	1.36	1.08
1:C:290:THR:HG22	1:C:292:PRO:HD2	1.29	1.08
1:D:746:ILE:HG23	1:D:1182:ASP:HB3	1.32	1.08
2:K:186:LEU:HD23	2:K:195:LEU:HD21	1.17	1.08
2:K:225:SER:HB3	2:K:227:PRO:HD2	1.35	1.08
1:A:960:THR:HG22	1:A:963:VAL:HG23	1.32	1.07
1:B:295:LYS:HD2	1:B:390:MET:HE3	1.32	1.07
1:B:1263:HIS:HE1	1:D:900:GLY:CA	1.33	1.07
1:C:777:GLY:HA2	2:K:52:VAL:HG13	1.33	1.07
1:C:877:ARG:HG3	1:E:1229:MET:HA	1.33	1.07
1:C:974:ILE:HD11	1:C:983:LEU:HD12	1.33	1.07
1:E:452:GLN:HE21	1:E:764:THR:CG2	1.66	1.07
1:E:526:LEU:HD12	1:E:526:LEU:N	1.63	1.07
2:I:242:VAL:HG12	2:I:403:PRO:HD3	1.36	1.07
1:B:236:THR:HG21	1:B:328:ASP:H	1.17	1.07

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:513:SER:HB3	1:C:520:MET:HE2	1.35	1.07
1:D:430:VAL:CG1	1:D:554:GLU:CB	2.32	1.07
1:D:1076:GLY:HA3	1:D:1145:GLU:HG2	1.36	1.07
1:F:405:GLU:OE1	1:F:405:GLU:N	1.86	1.07
1:A:974:ILE:HD11	1:A:983:LEU:HD12	1.33	1.07
1:B:405:GLU:OE1	1:B:405:GLU:N	1.86	1.07
1:B:877:ARG:HG3	1:F:1229:MET:HA	1.12	1.07
1:C:235:ASN:HD22	1:C:236:THR:N	1.52	1.07
1:C:782:ARG:CG	2:K:53:PRO:CD	1.88	1.07
1:C:782:ARG:CB	2:K:56:GLN:HE21	1.68	1.07
1:C:825:LEU:CD1	1:C:1186:ARG:NH1	1.98	1.07
1:D:405:GLU:OE1	1:D:405:GLU:N	1.86	1.07
1:D:513:SER:HB3	1:D:520:MET:HE1	1.36	1.07
1:E:782:ARG:CB	2:L:56:GLN:HE21	1.68	1.07
2:K:367:ILE:HG23	2:K:390:VAL:HG23	1.34	1.07
2:K:418:THR:HB	2:K:424:LEU:HD11	1.32	1.07
1:A:877:ARG:HG2	1:C:1230:GLN:H	1.13	1.07
1:B:1115:VAL:O	1:B:1115:VAL:HG12	1.49	1.07
1:E:430:VAL:HG13	1:E:554:GLU:HB3	1.17	1.07
1:F:430:VAL:CG1	1:F:554:GLU:CB	2.32	1.07
2:I:167:ARG:HG2	2:I:210:ALA:HB1	1.07	1.07
1:A:522:LEU:HD21	1:A:705:LEU:HD23	1.33	1.07
1:A:900:GLY:HA3	1:C:1263:HIS:CE1	1.84	1.07
1:A:1210:THR:HG22	1:A:1211:LEU:H	0.91	1.07
1:B:139:VAL:HG11	1:B:143:GLN:HB3	1.36	1.07
1:C:746:ILE:HG21	1:C:1182:ASP:H	1.12	1.07
2:K:406:LEU:HD23	2:K:407:PRO:HD3	1.29	1.07
1:A:780:ARG:HD3	2:J:51:GLY:O	1.55	1.06
1:B:746:ILE:HG21	1:B:1182:ASP:N	1.69	1.06
1:B:1401:LEU:HD12	1:B:1401:LEU:C	1.74	1.06
1:F:746:ILE:HG23	1:F:1182:ASP:HB3	1.32	1.06
2:G:367:ILE:HG23	2:G:390:VAL:HG23	1.34	1.06
2:K:423:LEU:HD21	2:K:443:ILE:HD13	1.28	1.06
1:A:345:MET:HG3	1:A:346:ASP:H	1.18	1.06
1:A:452:GLN:HE21	1:A:764:THR:HG23	1.13	1.06
1:B:182:MET:HE2	1:B:217:PRO:HB2	1.07	1.06
1:B:777:GLY:HA2	2:G:52:VAL:HG13	1.22	1.06
1:B:782:ARG:CG	2:G:53:PRO:CD	1.77	1.06
1:C:782:ARG:CD	2:K:53:PRO:HD3	1.85	1.06
1:D:746:ILE:HG21	1:D:1182:ASP:N	1.69	1.06
1:D:1115:VAL:HG12	1:D:1115:VAL:O	1.49	1.06

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:290:THR:HG22	1:E:292:PRO:HD2	1.29	1.06
1:F:299:VAL:HG12	1:F:299:VAL:O	1.53	1.06
1:F:1115:VAL:O	1:F:1115:VAL:HG12	1.49	1.06
2:H:53:PRO:HG2	2:H:56:GLN:HG2	1.18	1.06
2:I:423:LEU:HD21	2:I:443:ILE:HD13	1.28	1.06
2:J:418:THR:HB	2:J:424:LEU:HD11	1.32	1.06
2:L:242:VAL:HG12	2:L:403:PRO:HD3	1.37	1.06
2:L:406:LEU:HD23	2:L:407:PRO:HD3	1.29	1.06
1:A:235:ASN:HD22	1:A:236:THR:N	1.52	1.06
1:A:780:ARG:NH2	2:J:50:CYS:SG	2.28	1.06
1:A:782:ARG:CB	2:J:56:GLN:HE21	1.68	1.06
1:A:1115:VAL:HG12	1:A:1115:VAL:O	1.55	1.06
1:B:417:ASP:O	1:B:419:TRP:N	1.89	1.06
1:D:113:ASN:ND2	1:D:115:ASP:H	1.54	1.06
2:H:225:SER:HB3	2:H:227:PRO:HD2	1.35	1.06
2:J:225:SER:HB3	2:J:227:PRO:HD2	1.35	1.06
2:L:71:LEU:HD12	2:L:80:ALA:HB2	1.38	1.06
2:L:366:ARG:HG2	2:L:391:GLN:HA	1.38	1.06
1:A:452:GLN:HE21	1:A:764:THR:CG2	1.66	1.06
1:A:522:LEU:CD2	1:A:705:LEU:HD21	1.84	1.06
1:B:513:SER:HB3	1:B:520:MET:HE1	1.38	1.06
1:C:1438:ARG:CD	2:J:376:GLY:C	2.20	1.06
1:D:783:LYS:CE	2:H:57:VAL:HG12	1.66	1.06
2:G:366:ARG:HG2	2:G:391:GLN:HA	1.38	1.06
2:I:366:ARG:HG2	2:I:391:GLN:HA	1.38	1.06
2:K:71:LEU:HD12	2:K:80:ALA:HB2	1.38	1.06
1:B:113:ASN:ND2	1:B:115:ASP:H	1.54	1.06
1:C:780:ARG:HD3	2:K:51:GLY:O	1.55	1.06
1:D:139:VAL:HG11	1:D:143:GLN:HB3	1.36	1.06
1:D:515:ARG:CD	1:D:1367:TYR:CE1	2.39	1.06
1:D:1317:THR:HG22	1:D:1318:ASN:N	1.71	1.06
1:E:522:LEU:HD21	1:E:705:LEU:HD21	1.22	1.06
1:D:417:ASP:O	1:D:419:TRP:N	1.89	1.05
1:E:780:ARG:NH2	2:L:50:CYS:SG	2.28	1.05
1:F:515:ARG:CD	1:F:1367:TYR:CE1	2.39	1.05
2:J:242:VAL:HG12	2:J:403:PRO:HD3	1.37	1.05
1:A:782:ARG:HB3	2:J:56:GLN:HE21	0.96	1.05
1:B:430:VAL:CG1	1:B:554:GLU:CB	2.32	1.05
1:B:515:ARG:CD	1:B:1367:TYR:CE1	2.39	1.05
1:D:236:THR:HG21	1:D:328:ASP:H	1.17	1.05
1:D:782:ARG:CB	2:H:53:PRO:HD2	1.86	1.05

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:235:ASN:HD22	1:E:236:THR:N	1.52	1.05
1:E:345:MET:HG3	1:E:346:ASP:H	1.18	1.05
1:E:513:SER:HB3	1:E:520:MET:HE2	1.33	1.05
1:F:182:MET:HE3	1:F:217:PRO:HB3	1.39	1.05
2:H:418:THR:HB	2:H:424:LEU:HD11	1.32	1.05
2:L:167:ARG:HG2	2:L:210:ALA:HB1	1.08	1.05
1:A:1229:MET:HA	1:E:877:ARG:HG3	1.34	1.05
1:C:780:ARG:NH2	2:K:50:CYS:SG	2.28	1.05
1:D:1047:MET:CE	1:D:1186:ARG:HH22	1.70	1.05
1:E:236:THR:CG2	1:E:328:ASP:H	1.69	1.05
1:E:780:ARG:HD3	2:L:51:GLY:O	1.55	1.05
1:F:227:MET:HE3	1:F:282:GLU:HA	1.37	1.05
2:G:71:LEU:HD12	2:G:80:ALA:HB2	1.38	1.05
2:I:71:LEU:HD12	2:I:80:ALA:HB2	1.38	1.05
2:J:167:ARG:HG2	2:J:210:ALA:HB1	1.08	1.05
1:A:877:ARG:HG3	1:C:1229:MET:HA	1.33	1.05
1:C:295:LYS:NZ	1:C:299:VAL:O	1.90	1.05
1:D:505:GLN:NE2	1:D:1000:LEU:HB3	1.72	1.05
1:D:825:LEU:HD13	1:D:1186:ARG:HH12	1.04	1.05
1:E:1115:VAL:HG12	1:E:1115:VAL:O	1.55	1.05
1:F:513:SER:HB3	1:F:520:MET:HE1	1.36	1.05
1:F:782:ARG:CG	2:I:53:PRO:CD	1.77	1.05
2:K:366:ARG:HG2	2:K:391:GLN:HA	1.38	1.05
1:A:1438:ARG:CD	2:L:376:GLY:C	2.20	1.05
1:B:505:GLN:NE2	1:B:1000:LEU:HB3	1.72	1.05
1:F:1076:GLY:HA3	1:F:1145:GLU:HG2	1.36	1.05
2:G:242:VAL:HG12	2:G:403:PRO:HD3	1.37	1.05
1:A:746:ILE:HG21	1:A:1182:ASP:H	1.12	1.04
1:A:875:MET:HE2	1:A:1139:PHE:CE2	1.92	1.04
1:A:1184:ASN:HB3	1:A:1185:PRO:HD3	1.39	1.04
1:B:782:ARG:CB	2:G:53:PRO:HD2	1.86	1.04
1:C:522:LEU:HD21	1:C:705:LEU:HD23	1.33	1.04
1:C:782:ARG:HB3	2:K:56:GLN:HE21	0.96	1.04
1:E:777:GLY:CA	2:L:52:VAL:CG1	2.36	1.04
1:E:960:THR:HG22	1:E:963:VAL:HG23	1.32	1.04
1:F:113:ASN:ND2	1:F:115:ASP:H	1.54	1.04
1:F:236:THR:CG2	1:F:328:ASP:H	1.70	1.04
1:F:417:ASP:O	1:F:419:TRP:N	1.89	1.04
1:F:782:ARG:CB	2:I:53:PRO:HD2	1.86	1.04
1:F:1131:THR:HG23	1:F:1133:GLU:OE1	1.57	1.04
2:J:449:LEU:HD21	2:J:451:VAL:HG13	1.39	1.04

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:782:ARG:CD	2:J:53:PRO:HD3	1.85	1.04
1:D:227:MET:HE3	1:D:282:GLU:HA	1.37	1.04
1:D:999:LYS:HG3	1:D:1022:LEU:CD2	1.87	1.04
1:E:826:ARG:HH11	1:E:826:ARG:HG2	1.18	1.04
1:E:974:ILE:HD11	1:E:983:LEU:HD12	1.33	1.04
2:I:449:LEU:HD21	2:I:451:VAL:HG13	1.39	1.04
1:C:236:THR:CG2	1:C:328:ASP:H	1.69	1.04
1:C:900:GLY:HA3	1:E:1263:HIS:CE1	1.84	1.04
1:F:139:VAL:HG11	1:F:143:GLN:HB3	1.36	1.04
1:F:1062:ARG:O	1:F:1062:ARG:HG3	1.58	1.04
1:F:1317:THR:HG22	1:F:1318:ASN:N	1.71	1.04
2:H:71:LEU:HD12	2:H:80:ALA:HB2	1.38	1.04
2:K:449:LEU:HD21	2:K:451:VAL:HG13	1.39	1.04
1:A:236:THR:CG2	1:A:328:ASP:H	1.69	1.04
1:A:782:ARG:HG2	2:J:53:PRO:N	1.73	1.04
1:D:182:MET:HE2	1:D:217:PRO:HB2	1.08	1.04
1:D:912:SER:HB2	1:D:968:PRO:HD2	1.39	1.04
1:E:238:LYS:O	1:E:242:ASN:ND2	1.91	1.04
1:E:1210:THR:HG22	1:E:1211:LEU:H	0.91	1.04
1:F:464:ILE:HD11	1:F:779:TYR:CE2	1.93	1.04
1:A:777:GLY:CA	2:J:52:VAL:CG1	2.35	1.04
1:C:1115:VAL:HG12	1:C:1115:VAL:O	1.55	1.04
1:D:1230:GLN:H	1:F:877:ARG:HG2	1.23	1.04
1:E:505:GLN:NE2	1:E:1001:VAL:N	2.06	1.04
1:F:1047:MET:CE	1:F:1186:ARG:HH22	1.70	1.04
2:H:449:LEU:HD21	2:H:451:VAL:HG13	1.39	1.04
1:A:145:GLU:OE1	1:A:173:SER:HB2	1.57	1.03
1:A:353:MET:HE2	1:A:366:GLY:O	1.57	1.03
1:A:405:GLU:OE1	1:A:405:GLU:N	1.91	1.03
1:A:1221:PRO:CB	1:A:1229:MET:HE2	1.87	1.03
1:B:227:MET:HE3	1:B:282:GLU:HA	1.37	1.03
1:C:782:ARG:HG2	2:K:53:PRO:N	1.73	1.03
1:C:1184:ASN:HB3	1:C:1185:PRO:HD3	1.39	1.03
1:E:295:LYS:NZ	1:E:299:VAL:O	1.90	1.03
1:E:1184:ASN:HB3	1:E:1185:PRO:HD3	1.39	1.03
1:F:746:ILE:HG21	1:F:1182:ASP:H	0.87	1.03
2:I:182:MET:HE2	2:I:216:PRO:HG3	1.39	1.03
2:J:440:ALA:HB1	2:J:456:ASP:HB3	1.40	1.03
1:C:777:GLY:CA	2:K:52:VAL:CG1	2.35	1.03
1:E:113:ASN:ND2	1:E:115:ASP:H	1.56	1.03
1:F:505:GLN:NE2	1:F:1000:LEU:HB3	1.72	1.03

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:783:LYS:CE	2:I:57:VAL:HG12	1.66	1.03
1:F:999:LYS:HG3	1:F:1022:LEU:CD2	1.87	1.03
2:G:167:ARG:HG2	2:G:210:ALA:HB1	1.08	1.03
2:J:71:LEU:HD12	2:J:80:ALA:HB2	1.38	1.03
2:J:366:ARG:HG2	2:J:391:GLN:HA	1.38	1.03
1:B:1047:MET:CE	1:B:1186:ARG:HH22	1.70	1.03
1:C:182:MET:HE2	1:C:217:PRO:HB2	1.41	1.03
1:D:236:THR:CG2	1:D:328:ASP:H	1.70	1.03
1:E:782:ARG:CD	2:L:53:PRO:HD2	1.83	1.03
1:E:782:ARG:CD	2:L:53:PRO:HD3	1.85	1.03
2:I:220:VAL:HG23	8:I:484:FAD:N6A	1.74	1.03
2:K:167:ARG:HG2	2:K:210:ALA:HB1	1.07	1.03
2:K:242:VAL:HG12	2:K:403:PRO:HD3	1.36	1.03
1:A:238:LYS:O	1:A:242:ASN:ND2	1.91	1.03
1:B:236:THR:CG2	1:B:328:ASP:H	1.70	1.03
1:B:299:VAL:HG12	1:B:299:VAL:O	1.53	1.03
1:B:1076:GLY:HA3	1:B:1145:GLU:HG2	1.36	1.03
1:B:1227:GLU:OE2	1:D:876:ASN:HB3	1.58	1.03
1:C:826:ARG:HH11	1:C:826:ARG:HG2	1.18	1.03
1:E:782:ARG:HG2	2:L:53:PRO:N	1.73	1.03
1:E:875:MET:HE2	1:E:1139:PHE:CE2	1.93	1.03
2:H:167:ARG:HG2	2:H:210:ALA:HB1	1.08	1.03
2:L:220:VAL:HG23	8:L:484:FAD:N6A	1.74	1.03
1:B:999:LYS:HG3	1:B:1022:LEU:CD2	1.87	1.03
1:C:113:ASN:C	1:C:113:ASN:HD22	1.59	1.03
1:D:1227:GLU:OE2	1:F:876:ASN:HB3	1.58	1.03
1:E:248:GLU:HA	1:E:251:MET:HG2	1.41	1.03
2:H:242:VAL:HG12	2:H:403:PRO:HD3	1.37	1.03
2:H:366:ARG:HG2	2:H:391:GLN:HA	1.38	1.03
2:J:220:VAL:HG23	8:J:484:FAD:N6A	1.74	1.03
1:A:295:LYS:NZ	1:A:299:VAL:O	1.90	1.02
1:A:505:GLN:NE2	1:A:1001:VAL:N	2.06	1.02
1:A:1263:HIS:CE1	1:E:900:GLY:HA3	1.84	1.02
1:B:464:ILE:HD11	1:B:779:TYR:CE2	1.93	1.02
1:B:746:ILE:HG21	1:B:1182:ASP:H	0.87	1.02
1:B:912:SER:HB2	1:B:968:PRO:HD2	1.39	1.02
1:B:1131:THR:HG23	1:B:1133:GLU:OE1	1.57	1.02
1:C:145:GLU:OE1	1:C:173:SER:HB2	1.57	1.02
1:C:782:ARG:CG	2:K:52:VAL:C	2.17	1.02
1:C:1210:THR:HG22	1:C:1211:LEU:N	1.74	1.02
1:D:464:ILE:HD11	1:D:779:TYR:CE2	1.93	1.02

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1349:ARG:HH11	1:D:1349:ARG:CG	1.72	1.02
1:E:145:GLU:OE1	1:E:173:SER:HB2	1.57	1.02
2:G:440:ALA:HB1	2:G:456:ASP:HB3	1.40	1.02
2:G:449:LEU:HD21	2:G:451:VAL:HG13	1.39	1.02
1:A:782:ARG:CD	2:J:53:PRO:HD2	1.83	1.02
1:B:1047:MET:HE2	1:B:1186:ARG:HH22	1.18	1.02
1:D:1131:THR:HG23	1:D:1133:GLU:OE1	1.57	1.02
2:G:220:VAL:HG23	8:G:484:FAD:N6A	1.74	1.02
2:I:440:ALA:HB1	2:I:456:ASP:HB3	1.40	1.02
2:L:449:LEU:HD21	2:L:451:VAL:HG13	1.39	1.02
1:B:1230:GLN:H	1:D:877:ARG:HG2	1.23	1.02
1:B:1317:THR:HG22	1:B:1318:ASN:N	1.71	1.02
1:C:290:THR:HG22	1:C:292:PRO:CD	1.90	1.02
1:E:182:MET:CE	1:E:217:PRO:CB	2.13	1.02
1:E:1438:ARG:HD2	2:K:376:GLY:C	1.57	1.02
2:H:220:VAL:HG23	8:H:484:FAD:N6A	1.74	1.02
2:L:440:ALA:HB1	2:L:456:ASP:HB3	1.40	1.02
1:A:113:ASN:C	1:A:113:ASN:HD22	1.59	1.02
1:A:1317:THR:CG2	1:A:1358:GLU:OE1	2.08	1.02
1:B:782:ARG:NH1	2:G:51:GLY:HA2	1.75	1.02
1:B:1349:ARG:HG2	1:B:1349:ARG:NH1	1.71	1.02
1:E:522:LEU:CD2	1:E:705:LEU:CD2	2.37	1.02
2:H:471:LYS:HE2	2:H:471:LYS:HA	1.42	1.02
2:J:471:LYS:HE2	2:J:471:LYS:HA	1.42	1.02
1:C:238:LYS:O	1:C:242:ASN:ND2	1.91	1.02
1:C:248:GLU:HA	1:C:251:MET:HG2	1.41	1.02
1:E:102:TYR:CE2	1:E:144:PHE:CE1	2.48	1.02
1:E:405:GLU:OE1	1:E:405:GLU:N	1.91	1.02
1:F:100:PHE:O	1:F:137:LYS:HE3	1.60	1.02
2:H:93:ILE:HD11	2:H:195:LEU:HD22	1.41	1.02
2:K:220:VAL:HG23	8:K:484:FAD:N6A	1.74	1.02
2:K:471:LYS:HA	2:K:471:LYS:HE2	1.42	1.02
1:A:102:TYR:CE2	1:A:144:PHE:CE1	2.48	1.01
1:A:248:GLU:HA	1:A:251:MET:HG2	1.41	1.01
1:A:826:ARG:HH11	1:A:826:ARG:HG2	1.18	1.01
1:B:876:ASN:HB3	1:F:1227:GLU:OE2	1.58	1.01
1:C:102:TYR:CE2	1:C:144:PHE:CE1	2.48	1.01
1:C:113:ASN:ND2	1:C:115:ASP:H	1.56	1.01
1:C:405:GLU:OE1	1:C:405:GLU:N	1.91	1.01
1:C:505:GLN:NE2	1:C:1001:VAL:N	2.06	1.01
1:D:782:ARG:HH21	2:H:51:GLY:C	1.57	1.01

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:290:THR:HG22	1:E:292:PRO:CD	1.90	1.01
1:A:1391:MET:HE2	1:A:1458:VAL:HG22	1.05	1.01
1:B:780:ARG:HD3	2:G:51:GLY:O	1.60	1.01
1:B:877:ARG:HG2	1:F:1230:GLN:H	1.23	1.01
1:D:780:ARG:HD3	2:H:51:GLY:O	1.60	1.01
1:F:912:SER:HB2	1:F:968:PRO:HD2	1.39	1.01
2:K:93:ILE:HD11	2:K:195:LEU:HD22	1.41	1.01
1:A:310:PRO:HG3	1:A:404:ARG:NH2	1.75	1.01
1:A:672:GLN:HG3	1:A:693:MET:CE	1.91	1.01
1:B:782:ARG:C	2:G:57:VAL:CG2	2.29	1.01
1:C:782:ARG:CD	2:K:53:PRO:HD2	1.83	1.01
1:D:1401:LEU:HD12	1:D:1401:LEU:C	1.74	1.01
1:E:345:MET:HG3	1:E:346:ASP:N	1.72	1.01
1:A:113:ASN:ND2	1:A:115:ASP:H	1.56	1.01
1:B:100:PHE:O	1:B:137:LYS:HE3	1.60	1.01
1:C:310:PRO:HG3	1:C:404:ARG:NH2	1.75	1.01
1:D:1062:ARG:O	1:D:1062:ARG:HG3	1.58	1.01
2:G:153:ILE:HD11	8:G:484:FAD:C2A	1.90	1.01
1:A:782:ARG:CG	2:J:53:PRO:CD	1.88	1.01
1:C:522:LEU:CD2	1:C:705:LEU:CD2	2.37	1.01
1:D:139:VAL:HG12	1:D:140:SER:H	1.19	1.01
1:D:295:LYS:HD2	1:D:390:MET:HE3	1.39	1.01
1:D:1442:GLU:HG3	2:I:374:ALA:O	1.61	1.01
1:F:782:ARG:C	2:I:57:VAL:CG2	2.29	1.01
2:I:471:LYS:HE2	2:I:471:LYS:HA	1.42	1.01
1:A:290:THR:HG22	1:A:292:PRO:CD	1.90	1.00
1:B:389:GLU:HB3	1:B:403:ASP:OD2	1.61	1.00
1:B:1442:GLU:HG3	2:H:374:ALA:O	1.61	1.00
1:E:672:GLN:HG3	1:E:693:MET:CE	1.91	1.00
1:E:1008:THR:HG22	1:E:1009:ILE:N	1.74	1.00
1:E:1210:THR:HG22	1:E:1211:LEU:N	1.74	1.00
1:F:430:VAL:HG13	1:F:554:GLU:HB2	1.36	1.00
1:F:782:ARG:NH1	2:I:51:GLY:HA2	1.75	1.00
1:F:1184:ASN:HB3	1:F:1185:PRO:HD3	1.42	1.00
2:I:175:VAL:HG13	2:I:214:TYR:HA	1.43	1.00
2:J:324:ARG:HA	2:J:346:TRP:CE2	1.96	1.00
2:L:175:VAL:HG13	2:L:214:TYR:HA	1.43	1.00
1:A:1008:THR:HG22	1:A:1009:ILE:N	1.74	1.00
1:C:1210:THR:HG22	1:C:1211:LEU:H	0.91	1.00
1:D:782:ARG:NH1	2:H:51:GLY:HA2	1.75	1.00
1:E:1317:THR:CG2	1:E:1358:GLU:OE1	2.08	1.00

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:389:GLU:HB3	1:F:403:ASP:OD2	1.61	1.00
2:H:175:VAL:HG13	2:H:214:TYR:HA	1.43	1.00
2:I:324:ARG:HA	2:I:346:TRP:CE2	1.96	1.00
2:J:175:VAL:HG13	2:J:214:TYR:HA	1.43	1.00
2:J:182:MET:HE2	2:J:216:PRO:HG3	1.43	1.00
2:K:292:VAL:HG22	2:K:394:LEU:HD13	1.43	1.00
2:L:324:ARG:HA	2:L:346:TRP:CE2	1.96	1.00
2:L:471:LYS:HE2	2:L:471:LYS:HA	1.42	1.00
1:A:877:ARG:HG2	1:C:1230:GLN:N	1.77	1.00
1:B:1184:ASN:HB3	1:B:1185:PRO:HD3	1.42	1.00
1:C:780:ARG:CZ	2:K:50:CYS:SG	2.49	1.00
1:C:1221:PRO:CB	1:C:1229:MET:HE2	1.91	1.00
1:D:913:GLY:HA2	1:D:1349:ARG:HD3	1.44	1.00
1:E:310:PRO:HG3	1:E:404:ARG:NH2	1.75	1.00
1:E:780:ARG:CZ	2:L:50:CYS:SG	2.49	1.00
2:G:292:VAL:HG22	2:G:394:LEU:HD13	1.43	1.00
1:C:1317:THR:CG2	1:C:1358:GLU:OE1	2.08	1.00
2:G:324:ARG:HA	2:G:346:TRP:CE2	1.96	1.00
1:A:522:LEU:CD2	1:A:705:LEU:CD2	2.37	1.00
2:J:93:ILE:HD11	2:J:195:LEU:HD22	1.41	1.00
2:L:292:VAL:HG22	2:L:394:LEU:HD13	1.44	1.00
1:B:781:PHE:C	2:G:52:VAL:CB	2.29	1.00
2:K:153:ILE:HD11	8:K:484:FAD:C2A	1.90	1.00
2:K:440:ALA:HB1	2:K:456:ASP:HB3	1.40	1.00
1:A:958:HIS:O	1:A:1369:THR:HG22	1.62	1.00
1:A:1230:GLN:N	1:E:877:ARG:HG2	1.77	1.00
1:B:603:HIS:HA	1:B:640:THR:HG22	1.44	1.00
1:F:780:ARG:CD	2:I:51:GLY:O	2.10	1.00
1:F:1401:LEU:HD12	1:F:1401:LEU:C	1.74	1.00
2:G:93:ILE:HD11	2:G:195:LEU:HD22	1.41	1.00
2:I:153:ILE:HD11	8:I:484:FAD:C2A	1.90	1.00
2:L:153:ILE:HD11	8:L:484:FAD:C2A	1.90	1.00
1:F:781:PHE:C	2:I:52:VAL:CB	2.29	0.99
2:H:292:VAL:HG22	2:H:394:LEU:HD13	1.44	0.99
2:I:148:LEU:HG	2:I:234:VAL:HG23	1.44	0.99
2:J:153:ILE:HD11	8:J:484:FAD:C2A	1.90	0.99
2:K:148:LEU:HG	2:K:234:VAL:HG23	1.44	0.99
2:K:175:VAL:HG13	2:K:214:TYR:HA	1.43	0.99
1:B:787:ARG:HH12	1:B:821:PRO:HG2	1.26	0.99
1:D:780:ARG:CD	2:H:51:GLY:O	2.10	0.99
1:E:1438:ARG:CD	2:K:376:GLY:C	2.20	0.99

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:471:LYS:HA	2:G:471:LYS:HE2	1.42	0.99
2:H:148:LEU:HG	2:H:234:VAL:HG23	1.44	0.99
1:A:1210:THR:HG22	1:A:1211:LEU:N	1.74	0.99
1:C:672:GLN:HG3	1:C:693:MET:CE	1.91	0.99
1:D:746:ILE:HG21	1:D:1182:ASP:H	0.87	0.99
1:F:1349:ARG:HG2	1:F:1349:ARG:NH1	1.71	0.99
2:G:175:VAL:HG13	2:G:214:TYR:HA	1.43	0.99
2:H:324:ARG:HA	2:H:346:TRP:CE2	1.96	0.99
1:A:430:VAL:CG1	1:A:554:GLU:HB3	1.93	0.99
1:B:728:ILE:HD12	1:B:1047:MET:HE3	1.44	0.99
1:E:1221:PRO:CB	1:E:1229:MET:HE2	1.91	0.99
1:F:787:ARG:HH12	1:F:821:PRO:HG2	1.26	0.99
2:G:148:LEU:HG	2:G:234:VAL:HG23	1.44	0.99
1:C:1393:TYR:O	1:C:1394:VAL:HG23	1.62	0.99
1:E:182:MET:HE2	1:E:217:PRO:HB2	1.40	0.99
1:A:1393:TYR:O	1:A:1394:VAL:HG23	1.62	0.99
1:D:389:GLU:HB3	1:D:403:ASP:OD2	1.61	0.99
1:F:950:THR:HG22	1:F:951:GLU:N	1.78	0.99
1:F:1449:ARG:HH11	1:F:1449:ARG:HB3	1.26	0.99
2:H:153:ILE:HD11	8:H:484:FAD:C2A	1.90	0.99
1:B:290:THR:CG2	1:B:292:PRO:HD2	1.92	0.99
2:H:440:ALA:HB1	2:H:456:ASP:HB3	1.40	0.99
1:A:780:ARG:CZ	2:J:50:CYS:SG	2.49	0.99
1:B:1449:ARG:HH11	1:B:1449:ARG:HB3	1.26	0.99
1:D:1349:ARG:HG2	1:D:1349:ARG:NH1	1.71	0.99
1:F:290:THR:CG2	1:F:292:PRO:HD2	1.92	0.99
1:F:501:GLN:HE21	1:F:653:HIS:CD2	1.81	0.99
1:F:1221:PRO:HD2	1:F:1229:MET:HE1	1.42	0.99
1:C:295:LYS:NZ	1:C:299:VAL:HG12	1.78	0.99
1:D:781:PHE:C	2:H:52:VAL:CB	2.29	0.99
1:E:430:VAL:CG1	1:E:554:GLU:HB3	1.92	0.99
1:F:1210:THR:HG22	1:F:1211:LEU:H	1.28	0.99
2:K:324:ARG:HA	2:K:346:TRP:CE2	1.96	0.99
1:B:1062:ARG:O	1:B:1062:ARG:HG3	1.58	0.98
1:C:780:ARG:HH12	2:K:50:CYS:CB	1.75	0.98
1:F:381:GLU:OE1	1:F:402:ARG:NH1	1.96	0.98
1:F:825:LEU:HD13	1:F:1186:ARG:HH12	1.04	0.98
1:C:877:ARG:HG2	1:E:1230:GLN:N	1.76	0.98
1:D:782:ARG:C	2:H:57:VAL:CG2	2.29	0.98
1:E:295:LYS:NZ	1:E:299:VAL:HG12	1.78	0.98
2:L:93:ILE:HD11	2:L:195:LEU:HD22	1.41	0.98

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:565:THR:HG22	1:B:602:THR:HB	1.44	0.98
1:B:963:VAL:HG12	1:B:964:MET:N	1.76	0.98
1:D:381:GLU:OE1	1:D:402:ARG:NH1	1.96	0.98
1:D:565:THR:HG22	1:D:602:THR:HB	1.45	0.98
1:E:1210:THR:CG2	1:E:1211:LEU:H	1.76	0.98
2:I:93:ILE:HD11	2:I:195:LEU:HD22	1.41	0.98
1:A:1227:GLU:OE1	1:E:902:ASN:HB3	1.63	0.98
1:B:381:GLU:OE1	1:B:402:ARG:NH1	1.96	0.98
1:D:100:PHE:O	1:D:137:LYS:HE3	1.60	0.98
1:F:780:ARG:HH12	2:I:50:CYS:CB	1.76	0.98
2:H:220:VAL:HG22	8:H:484:FAD:N1A	1.78	0.98
2:L:100:GLN:HB3	2:L:105:GLU:HG2	1.46	0.98
2:I:108:CYS:SG	2:I:110:ILE:HG12	2.04	0.98
2:L:108:CYS:SG	2:L:110:ILE:HG12	2.04	0.98
1:A:782:ARG:C	2:J:57:VAL:CG2	2.32	0.98
1:B:877:ARG:CG	1:F:1229:MET:HA	1.93	0.98
1:E:430:VAL:CG1	1:E:554:GLU:CB	2.42	0.98
1:A:778:PHE:CZ	1:A:1039:LYS:HD2	1.99	0.98
1:A:780:ARG:HH12	2:J:50:CYS:CB	1.75	0.98
1:C:430:VAL:CG1	1:C:554:GLU:HB3	1.92	0.98
1:F:780:ARG:HD3	2:I:51:GLY:O	1.60	0.98
2:J:220:VAL:HG22	8:J:484:FAD:N1A	1.78	0.98
1:B:783:LYS:CE	2:G:57:VAL:HG12	1.66	0.98
1:D:501:GLN:HE21	1:D:653:HIS:CD2	1.81	0.98
1:E:1393:TYR:O	1:E:1394:VAL:HG23	1.62	0.98
1:F:603:HIS:HA	1:F:640:THR:HG22	1.44	0.98
2:J:108:CYS:SG	2:J:110:ILE:HG12	2.04	0.98
1:A:295:LYS:NZ	1:A:299:VAL:HG12	1.78	0.98
1:A:430:VAL:CG1	1:A:554:GLU:CB	2.42	0.98
1:B:501:GLN:HE21	1:B:653:HIS:CD2	1.81	0.98
1:B:825:LEU:HD13	1:B:1186:ARG:HH12	1.04	0.98
1:C:875:MET:CE	1:C:1139:PHE:HE2	1.73	0.98
2:H:100:GLN:HB3	2:H:105:GLU:HG2	1.46	0.98
1:A:291:ALA:HB3	1:A:292:PRO:HD3	1.46	0.98
1:C:782:ARG:C	2:K:57:VAL:CG2	2.32	0.98
1:F:1442:GLU:HG3	2:G:374:ALA:O	1.61	0.98
2:I:292:VAL:HG22	2:I:394:LEU:HD13	1.43	0.98
2:L:220:VAL:HG22	8:L:484:FAD:N1A	1.78	0.98
1:C:345:MET:HG3	1:C:346:ASP:N	1.72	0.97
2:G:108:CYS:SG	2:G:110:ILE:HG12	2.04	0.97
1:A:1447:TRP:CE2	1:A:1451:VAL:HG22	1.99	0.97

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:876:ASN:HB3	1:F:1227:GLU:OE1	1.64	0.97
1:B:1229:MET:HA	1:D:877:ARG:CG	1.93	0.97
1:D:290:THR:CG2	1:D:292:PRO:HD2	1.92	0.97
1:E:1387:MET:HG2	1:E:1387:MET:O	1.64	0.97
2:G:220:VAL:HG22	8:G:484:FAD:N1A	1.78	0.97
2:H:108:CYS:SG	2:H:110:ILE:HG12	2.04	0.97
1:B:780:ARG:CD	2:G:51:GLY:O	2.10	0.97
1:D:1184:ASN:HB3	1:D:1185:PRO:HD3	1.42	0.97
1:E:958:HIS:O	1:E:1369:THR:HG22	1.62	0.97
1:F:603:HIS:CA	1:F:640:THR:HG22	1.94	0.97
2:G:100:GLN:HB3	2:G:105:GLU:HG2	1.46	0.97
2:J:100:GLN:HB3	2:J:105:GLU:HG2	1.46	0.97
2:J:148:LEU:HG	2:J:234:VAL:HG23	1.44	0.97
1:C:1438:ARG:HD2	2:J:376:GLY:C	1.57	0.97
1:D:950:THR:HG22	1:D:951:GLU:N	1.78	0.97
2:J:292:VAL:HG22	2:J:394:LEU:HD13	1.43	0.97
2:L:90:PHE:HB3	2:L:93:ILE:CG2	1.95	0.97
1:A:1210:THR:CG2	1:A:1211:LEU:H	1.76	0.97
1:C:447:LEU:HD21	1:C:674:ALA:HA	1.46	0.97
1:C:1008:THR:HG22	1:C:1009:ILE:N	1.74	0.97
1:E:959:SER:HA	1:E:1369:THR:CG2	1.94	0.97
1:F:963:VAL:HG12	1:F:964:MET:N	1.77	0.97
2:J:71:LEU:HG	2:J:79:GLU:HB2	1.47	0.97
2:K:153:ILE:HD11	8:K:484:FAD:H2A	1.46	0.97
1:A:899:ASN:C	1:C:1263:HIS:CE1	2.38	0.97
1:D:182:MET:CE	1:D:217:PRO:HB3	1.95	0.97
1:D:780:ARG:NH2	2:H:50:CYS:SG	2.38	0.97
1:D:782:ARG:CG	2:H:53:PRO:CD	1.77	0.97
1:E:353:MET:HE2	1:E:366:GLY:O	1.64	0.97
1:E:782:ARG:C	2:L:57:VAL:CG2	2.32	0.97
1:E:1447:TRP:CE2	1:E:1451:VAL:HG22	1.99	0.97
2:J:44:ALA:HA	2:J:69:LEU:HD11	1.45	0.97
1:C:291:ALA:HB3	1:C:292:PRO:HD3	1.46	0.97
1:C:958:HIS:O	1:C:1369:THR:HG22	1.62	0.97
1:E:780:ARG:HH12	2:L:50:CYS:CB	1.75	0.97
1:B:603:HIS:CA	1:B:640:THR:HG22	1.95	0.97
1:B:913:GLY:HA2	1:B:1349:ARG:HD3	1.44	0.97
1:C:899:ASN:C	1:E:1263:HIS:CE1	2.38	0.97
2:I:44:ALA:HA	2:I:69:LEU:HD11	1.45	0.97
2:I:220:VAL:HG22	8:I:484:FAD:N1A	1.78	0.97
2:K:220:VAL:HG22	8:K:484:FAD:N1A	1.78	0.97

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1438:ARG:HD2	2:L:376:GLY:C	1.57	0.97
1:D:603:HIS:CA	1:D:640:THR:HG22	1.95	0.97
2:H:153:ILE:HD11	8:H:484:FAD:H2A	1.46	0.97
2:I:71:LEU:HG	2:I:79:GLU:HB2	1.47	0.97
2:L:71:LEU:HD12	2:L:80:ALA:CB	1.94	0.97
1:B:652:THR:HG22	1:B:703:GLY:HA3	1.47	0.96
1:B:1317:THR:CG2	1:B:1358:GLU:OE1	2.13	0.96
1:D:603:HIS:HA	1:D:640:THR:HG22	1.44	0.96
2:G:90:PHE:HB3	2:G:93:ILE:CG2	1.95	0.96
2:K:327:MET:HB2	2:K:346:TRP:CH2	2.00	0.96
1:A:182:MET:HE2	1:A:217:PRO:HB2	1.47	0.96
1:A:902:ASN:HB3	1:C:1227:GLU:OE1	1.63	0.96
1:A:1263:HIS:CE1	1:E:899:ASN:C	2.38	0.96
1:A:1387:MET:HG2	1:A:1387:MET:O	1.64	0.96
1:B:1227:GLU:OE2	1:D:876:ASN:CB	2.14	0.96
1:D:780:ARG:HH12	2:H:50:CYS:CB	1.76	0.96
1:F:780:ARG:NH2	2:I:50:CYS:SG	2.38	0.96
1:F:782:ARG:HH21	2:I:51:GLY:C	1.57	0.96
1:F:1039:LYS:O	1:F:1040:PHE:CD1	2.18	0.96
1:F:1349:ARG:HH11	1:F:1349:ARG:CG	1.72	0.96
2:I:327:MET:HB2	2:I:346:TRP:CH2	2.00	0.96
2:J:71:LEU:HD12	2:J:80:ALA:CB	1.94	0.96
1:A:782:ARG:CG	2:J:52:VAL:C	2.17	0.96
1:B:513:SER:HB3	1:B:520:MET:CE	1.95	0.96
1:B:780:ARG:HH12	2:G:50:CYS:CB	1.76	0.96
1:C:959:SER:HA	1:C:1369:THR:CG2	1.95	0.96
1:D:652:THR:HG22	1:D:703:GLY:HA3	1.47	0.96
1:E:505:GLN:HE22	1:E:1001:VAL:N	1.61	0.96
1:E:778:PHE:CZ	1:E:1039:LYS:HD2	1.99	0.96
1:F:513:SER:HB3	1:F:520:MET:CE	1.95	0.96
1:F:913:GLY:HA2	1:F:1349:ARG:HD3	1.44	0.96
2:H:71:LEU:HG	2:H:79:GLU:HB2	1.47	0.96
2:I:71:LEU:HD12	2:I:80:ALA:CB	1.95	0.96
2:L:148:LEU:HG	2:L:234:VAL:HG23	1.44	0.96
1:A:672:GLN:HG3	1:A:693:MET:HE2	1.46	0.96
1:A:959:SER:HA	1:A:1369:THR:CG2	1.94	0.96
1:B:876:ASN:CB	1:F:1227:GLU:OE2	2.14	0.96
1:C:505:GLN:HE22	1:C:1001:VAL:N	1.62	0.96
1:D:430:VAL:HG13	1:D:554:GLU:HB2	1.36	0.96
1:D:963:VAL:HG12	1:D:964:MET:N	1.77	0.96
1:D:1229:MET:HA	1:F:877:ARG:CG	1.93	0.96

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:K:90:PHE:HB3	2:K:93:ILE:CG2	1.95	0.96
1:A:505:GLN:HE22	1:A:1001:VAL:N	1.61	0.96
1:D:1210:THR:HG22	1:D:1211:LEU:H	1.28	0.96
1:D:1227:GLU:OE2	1:F:876:ASN:CB	2.14	0.96
1:D:1227:GLU:OE1	1:F:876:ASN:HB3	1.64	0.96
1:F:565:THR:HG22	1:F:602:THR:HB	1.44	0.96
1:F:959:SER:HA	1:F:1369:THR:CG2	1.96	0.96
2:G:327:MET:HB2	2:G:346:TRP:CH2	2.00	0.96
1:C:1105:VAL:HA	2:K:54:PHE:CE1	2.01	0.96
1:D:959:SER:HA	1:D:1369:THR:CG2	1.96	0.96
1:D:1317:THR:CG2	1:D:1358:GLU:OE1	2.13	0.96
2:J:90:PHE:CE2	2:J:203:ARG:HG3	2.01	0.96
1:B:780:ARG:CZ	2:G:50:CYS:SG	2.54	0.96
1:B:1039:LYS:O	1:B:1040:PHE:CD1	2.18	0.96
1:C:139:VAL:HG12	1:C:140:SER:N	1.76	0.96
1:C:1447:TRP:CE2	1:C:1451:VAL:HG22	1.99	0.96
1:D:1039:LYS:O	1:D:1040:PHE:CD1	2.18	0.96
1:E:734:LEU:CD1	1:E:738:HIS:HD2	1.79	0.96
2:H:90:PHE:HB3	2:H:93:ILE:CG2	1.95	0.96
2:H:327:MET:HB2	2:H:346:TRP:CH2	2.00	0.96
1:A:1105:VAL:HA	2:J:54:PHE:CE1	2.01	0.96
1:B:253:HIS:H	1:B:260:MET:HE1	1.31	0.96
1:B:950:THR:HG22	1:B:951:GLU:N	1.78	0.96
1:C:902:ASN:HB3	1:E:1227:GLU:OE1	1.63	0.96
2:H:200:VAL:HA	2:H:203:ARG:HD3	1.47	0.96
2:I:90:PHE:HB3	2:I:93:ILE:CG2	1.95	0.96
2:K:71:LEU:HD12	2:K:80:ALA:CB	1.95	0.96
2:K:108:CYS:SG	2:K:110:ILE:HG12	2.04	0.96
1:B:959:SER:HA	1:B:1369:THR:CG2	1.96	0.96
1:D:782:ARG:NH2	2:H:51:GLY:N	2.14	0.96
2:K:90:PHE:CE2	2:K:203:ARG:HG3	2.01	0.96
2:L:182:MET:HE2	2:L:216:PRO:HG3	1.46	0.96
1:A:139:VAL:HG12	1:A:140:SER:N	1.76	0.96
1:C:266:VAL:HG12	1:C:279:THR:CG2	1.96	0.96
1:E:266:VAL:HG12	1:E:279:THR:CG2	1.96	0.96
1:E:1105:VAL:HA	2:L:54:PHE:CE1	2.01	0.96
1:F:253:HIS:H	1:F:260:MET:HE1	1.31	0.96
1:F:1317:THR:CG2	1:F:1358:GLU:OE1	2.13	0.96
2:J:327:MET:HB2	2:J:346:TRP:CH2	2.00	0.96
1:E:1449:ARG:O	1:E:1452:THR:HB	1.66	0.95
2:J:90:PHE:HB3	2:J:93:ILE:CG2	1.95	0.95

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1449:ARG:HH11	1:D:1449:ARG:HB3	1.26	0.95
2:G:153:ILE:HD11	8:G:484:FAD:H2A	1.46	0.95
2:H:71:LEU:HD12	2:H:80:ALA:CB	1.94	0.95
1:C:430:VAL:CG1	1:C:554:GLU:CB	2.42	0.95
1:C:778:PHE:CZ	1:C:1039:LYS:HD2	1.99	0.95
1:D:780:ARG:CZ	2:H:50:CYS:SG	2.54	0.95
1:F:782:ARG:NH2	2:I:51:GLY:N	2.14	0.95
2:I:110:ILE:HD13	2:I:118:VAL:HG13	1.49	0.95
2:J:110:ILE:HD13	2:J:118:VAL:HG13	1.49	0.95
1:A:1105:VAL:HA	2:J:54:PHE:HE1	1.31	0.95
1:E:291:ALA:HB3	1:E:292:PRO:HD3	1.46	0.95
2:I:90:PHE:CE2	2:I:203:ARG:HG3	2.01	0.95
1:C:900:GLY:N	1:E:1263:HIS:HE1	1.65	0.95
1:F:780:ARG:CZ	2:I:50:CYS:SG	2.54	0.95
1:F:782:ARG:HD3	2:I:53:PRO:HD3	1.49	0.95
1:B:317:ILE:O	1:B:321:ASN:ND2	1.99	0.95
1:B:734:LEU:CD1	1:B:738:HIS:HD2	1.80	0.95
2:H:90:PHE:CE2	2:H:203:ARG:HG3	2.01	0.95
1:C:900:GLY:CA	1:E:1263:HIS:HE2	1.74	0.95
1:C:1449:ARG:O	1:C:1452:THR:HB	1.66	0.95
1:E:1438:ARG:CB	2:K:376:GLY:CA	2.31	0.95
1:F:652:THR:CG2	1:F:703:GLY:HA3	1.97	0.95
2:L:110:ILE:HD13	2:L:118:VAL:HG13	1.49	0.95
1:D:782:ARG:NH2	2:H:51:GLY:CA	0.80	0.95
1:F:782:ARG:NH2	2:I:51:GLY:CA	0.80	0.95
2:G:44:ALA:HA	2:G:69:LEU:HD11	1.45	0.95
2:H:44:ALA:HA	2:H:69:LEU:HD11	1.45	0.95
2:L:153:ILE:HD11	8:L:484:FAD:H2A	1.46	0.95
1:A:1230:GLN:HB2	1:E:877:ARG:HD3	1.49	0.95
1:D:30:HIS:ND1	1:D:1238:THR:HA	1.82	0.95
1:D:531:ASN:HB3	1:D:534:ASP:HB2	1.49	0.95
2:G:71:LEU:HD12	2:G:80:ALA:CB	1.94	0.95
2:L:327:MET:HB2	2:L:346:TRP:CH2	2.00	0.95
1:A:1391:MET:HE2	1:A:1458:VAL:CG2	1.96	0.95
1:B:30:HIS:ND1	1:B:1238:THR:HA	1.82	0.95
1:B:900:GLY:O	1:F:1227:GLU:CA	2.14	0.95
1:C:1387:MET:HG2	1:C:1387:MET:O	1.64	0.95
1:D:1221:PRO:HD2	1:D:1229:MET:HE1	1.44	0.95
1:E:139:VAL:HG12	1:E:140:SER:N	1.76	0.95
1:F:746:ILE:O	1:F:747:SER:O	1.85	0.95
2:J:200:VAL:HA	2:J:203:ARG:HD3	1.47	0.95

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:K:71:LEU:HG	2:K:79:GLU:HB2	1.47	0.95
2:K:100:GLN:HB3	2:K:105:GLU:HG2	1.46	0.95
2:L:71:LEU:HG	2:L:79:GLU:HB2	1.47	0.95
1:B:531:ASN:HB3	1:B:534:ASP:HB2	1.49	0.94
1:B:780:ARG:NH2	2:G:50:CYS:SG	2.38	0.94
1:B:950:THR:HG22	1:B:952:MET:H	1.32	0.94
1:C:1438:ARG:CB	2:J:376:GLY:CA	2.31	0.94
1:D:310:PRO:HG3	1:D:404:ARG:NH2	1.82	0.94
1:F:452:GLN:NE2	1:F:764:THR:HG21	1.82	0.94
1:B:452:GLN:NE2	1:B:764:THR:HG21	1.82	0.94
1:D:253:HIS:H	1:D:260:MET:HE1	1.31	0.94
1:D:447:LEU:HD12	1:D:451:GLN:HG3	1.50	0.94
1:D:728:ILE:HD12	1:D:1047:MET:HE3	1.46	0.94
2:I:100:GLN:HB3	2:I:105:GLU:HG2	1.46	0.94
2:K:44:ALA:HA	2:K:69:LEU:HD11	1.45	0.94
2:K:118:VAL:HG21	7:K:483:SF4:S4	2.07	0.94
2:L:80:ALA:HB3	2:L:127:ILE:HG12	1.49	0.94
2:L:305:VAL:CG1	2:L:342:VAL:HG21	1.97	0.94
1:B:182:MET:CE	1:B:217:PRO:HB3	1.95	0.94
1:B:310:PRO:HG3	1:B:404:ARG:NH2	1.82	0.94
1:B:782:ARG:NH2	2:G:51:GLY:CA	0.80	0.94
1:E:447:LEU:HD21	1:E:674:ALA:HA	1.46	0.94
1:F:310:PRO:HG3	1:F:404:ARG:NH2	1.82	0.94
1:F:317:ILE:O	1:F:321:ASN:ND2	1.99	0.94
2:G:90:PHE:CE2	2:G:203:ARG:HG3	2.01	0.94
2:I:305:VAL:CG1	2:I:342:VAL:HG21	1.97	0.94
1:B:387:PRO:HD3	1:B:1344:GLU:OE2	1.67	0.94
1:B:782:ARG:NH2	2:G:51:GLY:N	2.14	0.94
1:B:1227:GLU:OE1	1:D:876:ASN:HB3	1.64	0.94
1:C:426:LEU:HD22	1:C:543:LEU:HB3	1.47	0.94
1:D:145:GLU:OE1	1:D:173:SER:HB2	1.68	0.94
1:D:253:HIS:CG	1:D:254:PRO:CD	2.51	0.94
1:D:787:ARG:HH12	1:D:821:PRO:HG2	1.25	0.94
1:F:447:LEU:HD12	1:F:451:GLN:HG3	1.50	0.94
2:G:110:ILE:HD13	2:G:118:VAL:HG13	1.49	0.94
2:H:110:ILE:HD13	2:H:118:VAL:HG13	1.49	0.94
2:H:305:VAL:CG1	2:H:342:VAL:HG21	1.97	0.94
2:I:80:ALA:HB3	2:I:127:ILE:HG12	1.49	0.94
2:I:153:ILE:HD11	8:I:484:FAD:H2A	1.46	0.94
2:K:200:VAL:HA	2:K:203:ARG:HD3	1.47	0.94
2:K:305:VAL:CG1	2:K:342:VAL:HG21	1.97	0.94

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1210:THR:CG2	1:C:1211:LEU:H	1.76	0.94
2:H:71:LEU:HD21	2:H:76:ARG:HB2	1.50	0.94
2:I:167:ARG:CG	2:I:210:ALA:HB1	1.98	0.94
2:J:153:ILE:HD11	8:J:484:FAD:H2A	1.46	0.94
1:A:734:LEU:CD1	1:A:738:HIS:HD2	1.79	0.94
1:A:877:ARG:HD3	1:C:1230:GLN:HB2	1.49	0.94
1:A:1263:HIS:HE2	1:E:900:GLY:CA	1.74	0.94
1:D:513:SER:HB3	1:D:520:MET:CE	1.95	0.94
2:G:181:ARG:HG3	2:G:187:VAL:HG11	1.49	0.94
2:J:167:ARG:CG	2:J:210:ALA:HB1	1.98	0.94
1:A:1449:ARG:O	1:A:1452:THR:HB	1.66	0.94
1:B:1227:GLU:CA	1:D:900:GLY:O	2.15	0.94
1:B:1349:ARG:HH11	1:B:1349:ARG:CG	1.72	0.94
1:C:214:ASN:O	1:C:1015:LYS:HE2	1.67	0.94
1:C:999:LYS:HG3	1:C:1022:LEU:HD23	1.49	0.94
1:D:317:ILE:O	1:D:321:ASN:ND2	1.99	0.94
1:F:30:HIS:ND1	1:F:1238:THR:HA	1.82	0.94
2:L:90:PHE:CE2	2:L:203:ARG:HG3	2.01	0.94
1:A:266:VAL:HG12	1:A:279:THR:CG2	1.96	0.94
1:A:426:LEU:HD22	1:A:543:LEU:HB3	1.47	0.94
1:A:875:MET:CE	1:A:1139:PHE:HE2	1.73	0.94
1:B:920:GLU:HB3	1:B:1256:MET:HE2	1.49	0.94
1:C:734:LEU:CD1	1:C:738:HIS:HD2	1.79	0.94
1:C:877:ARG:HD3	1:E:1230:GLN:HB2	1.49	0.94
1:D:825:LEU:CD1	1:D:1186:ARG:NH1	2.17	0.94
1:D:1227:GLU:CA	1:F:900:GLY:O	2.15	0.94
1:E:113:ASN:C	1:E:113:ASN:HD22	1.59	0.94
1:E:426:LEU:HD22	1:E:543:LEU:HB3	1.47	0.94
1:F:145:GLU:OE1	1:F:173:SER:HB2	1.68	0.94
1:F:387:PRO:HD3	1:F:1344:GLU:OE2	1.67	0.94
2:J:305:VAL:HG13	2:J:342:VAL:HG21	1.50	0.94
2:K:110:ILE:HD13	2:K:118:VAL:HG13	1.49	0.94
2:L:167:ARG:CG	2:L:210:ALA:HB1	1.98	0.94
1:D:652:THR:CG2	1:D:703:GLY:HA3	1.97	0.94
2:G:71:LEU:HG	2:G:79:GLU:HB2	1.47	0.94
2:H:167:ARG:CG	2:H:210:ALA:HB1	1.98	0.94
2:K:327:MET:HB2	2:K:346:TRP:CZ2	2.03	0.94
2:L:44:ALA:HA	2:L:69:LEU:HD11	1.45	0.94
1:A:52:GLN:HE22	1:A:71:LEU:H	1.15	0.94
1:A:345:MET:HG3	1:A:346:ASP:N	1.72	0.94
1:A:1438:ARG:HB2	2:L:376:GLY:H	1.33	0.94

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1008:THR:HG22	1:B:1009:ILE:N	1.82	0.94
1:B:1210:THR:HG22	1:B:1211:LEU:H	1.28	0.94
1:C:782:ARG:CG	2:K:53:PRO:N	2.30	0.94
1:D:387:PRO:HD3	1:D:1344:GLU:OE2	1.67	0.94
1:E:782:ARG:CG	2:L:53:PRO:N	2.30	0.94
1:F:313:HIS:O	1:F:317:ILE:HG13	1.68	0.94
1:F:652:THR:HG22	1:F:703:GLY:HA3	1.47	0.94
2:G:449:LEU:HD11	2:G:451:VAL:HG12	1.49	0.94
2:H:182:MET:HE2	2:H:216:PRO:HG3	1.49	0.94
1:A:782:ARG:CG	2:J:53:PRO:N	2.30	0.93
1:B:746:ILE:O	1:B:747:SER:O	1.85	0.93
1:F:531:ASN:HB3	1:F:534:ASP:HB2	1.49	0.93
2:I:200:VAL:HA	2:I:203:ARG:HD3	1.47	0.93
2:I:327:MET:HB2	2:I:346:TRP:CZ2	2.03	0.93
2:J:305:VAL:CG1	2:J:342:VAL:HG21	1.97	0.93
2:K:321:ARG:HB2	2:K:351:GLU:HG2	1.49	0.93
2:L:305:VAL:HG13	2:L:342:VAL:HG21	1.50	0.93
1:E:950:THR:HG22	1:E:951:GLU:N	1.83	0.93
1:F:139:VAL:HG12	1:F:140:SER:H	1.19	0.93
1:F:253:HIS:CG	1:F:254:PRO:CD	2.51	0.93
1:F:706:LYS:NZ	1:F:940:GLU:OE1	2.02	0.93
1:F:1449:ARG:HB2	1:F:1449:ARG:CZ	1.98	0.93
2:I:305:VAL:HG13	2:I:342:VAL:HG21	1.50	0.93
2:J:61:VAL:HG22	2:J:87:THR:HB	1.51	0.93
2:J:429:THR:HG21	2:J:431:MET:HE1	1.50	0.93
2:K:181:ARG:HG3	2:K:187:VAL:HG11	1.49	0.93
1:B:652:THR:CG2	1:B:703:GLY:HA3	1.97	0.93
1:D:777:GLY:CA	2:H:52:VAL:HG12	1.99	0.93
2:J:71:LEU:HD21	2:J:76:ARG:HB2	1.50	0.93
1:E:782:ARG:CG	2:L:52:VAL:C	2.17	0.93
1:E:999:LYS:HG3	1:E:1022:LEU:HD23	1.49	0.93
2:H:31:ILE:HD13	2:H:336:HIS:CD2	2.03	0.93
2:K:31:ILE:HD13	2:K:336:HIS:CD2	2.04	0.93
2:K:449:LEU:HD11	2:K:451:VAL:HG12	1.49	0.93
1:D:734:LEU:CD1	1:D:738:HIS:HD2	1.80	0.93
1:D:746:ILE:O	1:D:747:SER:O	1.85	0.93
2:G:118:VAL:HG21	7:G:483:SF4:S4	2.07	0.93
2:G:167:ARG:CG	2:G:210:ALA:HB1	1.98	0.93
2:J:118:VAL:HG21	7:J:483:SF4:S4	2.07	0.93
2:K:167:ARG:CG	2:K:210:ALA:HB1	1.98	0.93
2:L:118:VAL:HG21	7:L:483:SF4:S4	2.07	0.93

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:290:THR:CG2	1:A:292:PRO:CD	2.46	0.93
1:C:1366:GLU:HG2	1:C:1367:TYR:CD2	2.04	0.93
1:D:706:LYS:NZ	1:D:940:GLU:OE1	2.02	0.93
1:F:734:LEU:CD1	1:F:738:HIS:HD2	1.80	0.93
1:F:768:GLU:HG2	1:F:769:GLU:H	1.34	0.93
2:I:118:VAL:HG21	7:I:483:SF4:S4	2.07	0.93
2:I:259:VAL:CG2	2:I:264:TYR:HB2	1.99	0.93
2:K:186:LEU:HD23	2:K:195:LEU:CD2	1.99	0.93
2:L:77:LEU:HD23	2:L:127:ILE:HA	1.51	0.93
2:L:200:VAL:HA	2:L:203:ARG:HD3	1.47	0.93
1:A:447:LEU:HD21	1:A:674:ALA:HA	1.46	0.93
1:A:1366:GLU:HG2	1:A:1367:TYR:CD2	2.04	0.93
1:B:145:GLU:OE1	1:B:173:SER:HB2	1.68	0.93
1:B:447:LEU:HD12	1:B:451:GLN:HG3	1.50	0.93
1:B:777:GLY:HA2	2:G:52:VAL:HG12	1.50	0.93
1:B:1317:THR:HG21	1:B:1358:GLU:OE1	1.69	0.93
1:E:266:VAL:HG12	1:E:279:THR:HG23	1.51	0.93
1:E:404:ARG:HB3	1:E:405:GLU:OE1	1.69	0.93
1:E:780:ARG:CD	2:L:51:GLY:O	2.17	0.93
1:E:875:MET:CE	1:E:1139:PHE:HE2	1.73	0.93
1:E:1076:GLY:HA3	1:E:1145:GLU:HG2	1.51	0.93
2:H:118:VAL:HG21	7:H:483:SF4:S4	2.07	0.93
2:H:181:ARG:HG3	2:H:187:VAL:HG11	1.49	0.93
2:L:449:LEU:HD11	2:L:451:VAL:HG12	1.49	0.93
1:A:404:ARG:HB3	1:A:405:GLU:OE1	1.69	0.93
1:D:950:THR:CG2	1:D:951:GLU:N	2.31	0.93
2:H:327:MET:HB2	2:H:346:TRP:CZ2	2.04	0.93
2:L:327:MET:HB2	2:L:346:TRP:CZ2	2.04	0.93
1:B:253:HIS:CG	1:B:254:PRO:CD	2.51	0.93
1:C:404:ARG:HB3	1:C:405:GLU:OE1	1.69	0.93
1:C:1076:GLY:HA3	1:C:1145:GLU:HG2	1.51	0.93
1:D:452:GLN:NE2	1:D:764:THR:HG21	1.82	0.93
1:F:777:GLY:CA	2:I:52:VAL:HG12	1.99	0.93
2:G:80:ALA:HB3	2:G:127:ILE:HG12	1.49	0.93
2:K:259:VAL:CG2	2:K:264:TYR:HB2	1.99	0.93
2:L:71:LEU:HD21	2:L:76:ARG:HB2	1.50	0.93
1:A:999:LYS:HG3	1:A:1022:LEU:HD23	1.49	0.93
1:B:950:THR:CG2	1:B:951:GLU:N	2.32	0.93
1:D:1008:THR:HG22	1:D:1009:ILE:N	1.82	0.93
1:E:1366:GLU:HG2	1:E:1367:TYR:CD2	2.04	0.93
2:H:61:VAL:HG22	2:H:87:THR:HB	1.51	0.93

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:186:LEU:HD23	2:H:195:LEU:CD2	1.99	0.93
2:I:61:VAL:HG22	2:I:87:THR:HB	1.51	0.93
2:L:259:VAL:CG2	2:L:264:TYR:HB2	1.99	0.93
1:A:958:HIS:O	1:A:1369:THR:CG2	2.17	0.92
1:B:464:ILE:HD11	1:B:779:TYR:CZ	2.04	0.92
1:C:875:MET:HE2	1:C:1139:PHE:CE2	2.01	0.92
2:G:71:LEU:HD21	2:G:76:ARG:HB2	1.50	0.92
2:G:186:LEU:HD23	2:G:195:LEU:CD2	1.99	0.92
1:A:510:PRO:HD2	1:A:970:PRO:HB3	1.52	0.92
1:E:510:PRO:HD2	1:E:970:PRO:HB3	1.51	0.92
2:G:77:LEU:HD23	2:G:127:ILE:HA	1.51	0.92
2:G:305:VAL:CG1	2:G:342:VAL:HG21	1.97	0.92
2:H:80:ALA:HB3	2:H:127:ILE:HG12	1.49	0.92
2:L:181:ARG:HG3	2:L:187:VAL:HG11	1.49	0.92
1:A:505:GLN:HE22	1:A:1001:VAL:H	0.93	0.92
1:A:780:ARG:CD	2:J:51:GLY:O	2.17	0.92
1:A:900:GLY:CA	1:C:1263:HIS:HE2	1.74	0.92
1:A:1076:GLY:HA3	1:A:1145:GLU:HG2	1.51	0.92
1:B:139:VAL:HG12	1:B:140:SER:H	1.19	0.92
2:G:200:VAL:HA	2:G:203:ARG:HD3	1.47	0.92
2:G:327:MET:HB2	2:G:346:TRP:CZ2	2.03	0.92
2:H:244:LYS:CD	2:H:404:GLU:HB3	1.99	0.92
2:I:321:ARG:HB2	2:I:351:GLU:HG2	1.49	0.92
1:B:313:HIS:O	1:B:317:ILE:HG13	1.68	0.92
1:B:706:LYS:NZ	1:B:940:GLU:OE1	2.02	0.92
1:D:464:ILE:HD11	1:D:779:TYR:CZ	2.04	0.92
1:E:214:ASN:O	1:E:1015:LYS:HE2	1.67	0.92
2:H:259:VAL:CG2	2:H:264:TYR:HB2	1.99	0.92
2:H:321:ARG:HB2	2:H:351:GLU:HG2	1.49	0.92
2:J:31:ILE:HD13	2:J:336:HIS:CD2	2.04	0.92
2:J:327:MET:HB2	2:J:346:TRP:CZ2	2.03	0.92
2:L:31:ILE:HD13	2:L:336:HIS:CD2	2.03	0.92
1:A:214:ASN:O	1:A:1015:LYS:HE2	1.67	0.92
1:B:782:ARG:HD3	2:G:53:PRO:HD3	1.49	0.92
1:D:182:MET:HE3	1:D:217:PRO:HB3	1.49	0.92
1:D:313:HIS:O	1:D:317:ILE:HG13	1.68	0.92
1:D:828:LEU:HD22	1:D:1172:SER:HA	1.50	0.92
1:D:920:GLU:HB3	1:D:1256:MET:HE2	1.50	0.92
1:F:920:GLU:HB3	1:F:1256:MET:HE2	1.49	0.92
1:F:950:THR:HG22	1:F:952:MET:H	1.32	0.92
2:H:440:ALA:HB1	2:H:456:ASP:CB	2.00	0.92

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:321:ARG:HB2	2:J:351:GLU:HG2	1.49	0.92
2:K:61:VAL:HG22	2:K:87:THR:HB	1.51	0.92
1:A:582:LEU:H	1:A:755:GLN:HE22	1.18	0.92
1:A:838:VAL:CG1	1:A:839:PRO:HD2	2.00	0.92
1:B:242:ASN:H	1:B:242:ASN:HD22	1.10	0.92
1:B:1449:ARG:HB2	1:B:1449:ARG:CZ	1.98	0.92
1:C:1105:VAL:HA	2:K:54:PHE:HE1	1.31	0.92
1:E:672:GLN:HG3	1:E:693:MET:HE2	1.49	0.92
1:E:958:HIS:O	1:E:1369:THR:CG2	2.17	0.92
1:F:464:ILE:HD11	1:F:779:TYR:CZ	2.04	0.92
2:G:31:ILE:HD13	2:G:336:HIS:CD2	2.04	0.92
2:H:447:ALA:HB1	2:H:452:TRP:CE3	2.05	0.92
2:I:31:ILE:HD13	2:I:336:HIS:CD2	2.04	0.92
2:I:71:LEU:HD21	2:I:76:ARG:HB2	1.50	0.92
2:K:244:LYS:CD	2:K:404:GLU:HB3	1.99	0.92
2:K:440:ALA:HB1	2:K:456:ASP:CB	2.00	0.92
1:B:826:ARG:HH11	1:B:826:ARG:HG2	1.35	0.92
1:B:1221:PRO:HD2	1:B:1229:MET:HE1	1.50	0.92
4:F:2474:FMN:C1'	4:F:2474:FMN:O4'	2.10	0.92
2:H:305:VAL:HG13	2:H:342:VAL:HG21	1.50	0.92
2:J:80:ALA:HB3	2:J:127:ILE:HG12	1.49	0.92
2:L:321:ARG:HB2	2:L:351:GLU:HG2	1.49	0.92
1:A:299:VAL:O	1:A:299:VAL:HG12	1.69	0.92
1:A:826:ARG:HG2	1:A:826:ARG:NH1	1.83	0.92
1:D:782:ARG:HD3	2:H:53:PRO:HD3	1.49	0.92
1:D:1449:ARG:HB2	1:D:1449:ARG:CZ	1.98	0.92
1:F:242:ASN:H	1:F:242:ASN:HD22	1.10	0.92
2:H:319:LEU:HD11	2:H:369:LEU:CD2	2.00	0.92
1:B:899:ASN:C	1:F:1263:HIS:CE1	2.43	0.92
1:E:838:VAL:CG1	1:E:839:PRO:HD2	2.00	0.92
1:F:1008:THR:HG22	1:F:1009:ILE:N	1.82	0.92
1:F:1317:THR:HG21	1:F:1358:GLU:OE1	1.69	0.92
2:G:440:ALA:HB1	2:G:456:ASP:CB	2.00	0.92
2:J:259:VAL:CG2	2:J:264:TYR:HB2	1.99	0.92
2:J:319:LEU:HD11	2:J:369:LEU:CD2	2.00	0.92
1:F:213:THR:HB	1:F:1008:THR:HG23	1.52	0.92
2:I:167:ARG:HG2	2:I:210:ALA:CB	2.00	0.92
1:A:218:THR:HG23	1:A:220:PRO:HD2	1.53	0.91
1:A:777:GLY:HA2	2:J:52:VAL:HG12	1.53	0.91
1:A:783:LYS:N	2:J:57:VAL:CG2	2.33	0.91
1:A:1263:HIS:HE1	1:E:900:GLY:N	1.65	0.91

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:510:PRO:HD2	1:C:970:PRO:HB3	1.52	0.91
1:E:52:GLN:HE22	1:E:71:LEU:H	1.16	0.91
2:G:429:THR:HG21	2:G:431:MET:HE1	1.52	0.91
2:J:440:ALA:HB1	2:J:456:ASP:CB	2.00	0.91
2:L:186:LEU:HD23	2:L:195:LEU:CD2	1.99	0.91
1:B:452:GLN:NE2	1:B:764:THR:CG2	2.33	0.91
1:C:780:ARG:CD	2:K:51:GLY:O	2.17	0.91
1:E:464:ILE:HD11	1:E:779:TYR:CE1	2.05	0.91
2:G:182:MET:HE2	2:G:216:PRO:HG3	1.50	0.91
2:G:259:VAL:CG2	2:G:264:TYR:HB2	1.99	0.91
2:G:321:ARG:HB2	2:G:351:GLU:HG2	1.49	0.91
2:G:430:LYS:CD	2:G:460:ALA:HB2	2.01	0.91
2:I:77:LEU:HD23	2:I:127:ILE:HA	1.51	0.91
2:J:167:ARG:HG2	2:J:210:ALA:CB	2.00	0.91
2:K:80:ALA:HB3	2:K:127:ILE:HG12	1.49	0.91
2:L:244:LYS:CD	2:L:404:GLU:HB3	1.99	0.91
1:A:950:THR:HG22	1:A:951:GLU:N	1.82	0.91
1:C:950:THR:HG22	1:C:951:GLU:N	1.82	0.91
1:D:452:GLN:NE2	1:D:764:THR:CG2	2.33	0.91
1:D:768:GLU:HG2	1:D:769:GLU:H	1.34	0.91
1:E:1105:VAL:HA	2:L:54:PHE:HE1	1.31	0.91
1:F:728:ILE:HD12	1:F:1047:MET:HE3	1.48	0.91
2:G:305:VAL:HG13	2:G:342:VAL:HG21	1.50	0.91
2:G:447:ALA:HB1	2:G:452:TRP:CE3	2.05	0.91
2:H:449:LEU:HD11	2:H:451:VAL:HG12	1.49	0.91
2:I:181:ARG:HG3	2:I:187:VAL:HG11	1.49	0.91
2:I:449:LEU:HD11	2:I:451:VAL:HG12	1.49	0.91
2:J:181:ARG:HG3	2:J:187:VAL:HG11	1.49	0.91
2:K:430:LYS:CD	2:K:460:ALA:HB2	2.01	0.91
1:A:464:ILE:HD11	1:A:779:TYR:CE1	2.05	0.91
1:B:464:ILE:CD1	1:B:779:TYR:CE2	2.54	0.91
1:F:826:ARG:HH11	1:F:826:ARG:HG2	1.35	0.91
1:F:1170:GLN:HG2	1:F:1170:GLN:O	1.69	0.91
1:C:838:VAL:CG1	1:C:839:PRO:HD2	2.00	0.91
1:D:242:ASN:HD22	1:D:242:ASN:H	1.10	0.91
1:D:1366:GLU:HG2	1:D:1367:TYR:CD2	2.05	0.91
1:E:781:PHE:CE2	2:L:57:VAL:HG21	2.05	0.91
2:J:244:LYS:CD	2:J:404:GLU:HB3	1.99	0.91
1:A:783:LYS:HA	2:J:57:VAL:HG22	0.92	0.91
1:C:958:HIS:O	1:C:1369:THR:CG2	2.17	0.91
1:F:254:PRO:HG2	1:F:255:ALA:H	1.36	0.91

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:K:71:LEU:HD21	2:K:76:ARG:HB2	1.50	0.91
2:K:305:VAL:HG13	2:K:342:VAL:HG21	1.50	0.91
2:L:430:LYS:CD	2:L:460:ALA:HB2	2.01	0.91
2:L:440:ALA:HB1	2:L:456:ASP:CB	2.00	0.91
1:A:266:VAL:O	1:A:279:THR:HG21	1.71	0.91
1:E:102:TYR:CE2	1:E:144:PHE:HE1	1.88	0.91
1:E:826:ARG:HG2	1:E:826:ARG:NH1	1.83	0.91
1:F:464:ILE:CD1	1:F:779:TYR:CE2	2.54	0.91
2:H:345:ILE:H	2:H:345:ILE:HD13	1.36	0.91
2:I:244:LYS:CD	2:I:404:GLU:HB3	1.99	0.91
2:L:61:VAL:HG22	2:L:87:THR:HB	1.51	0.91
2:L:367:ILE:HG23	2:L:390:VAL:CG2	2.01	0.91
2:L:447:ALA:HB1	2:L:452:TRP:CE3	2.05	0.91
1:A:102:TYR:CE2	1:A:144:PHE:HE1	1.88	0.91
1:B:782:ARG:HH21	2:G:51:GLY:C	1.57	0.91
1:B:1263:HIS:CE1	1:D:899:ASN:C	2.43	0.91
1:C:781:PHE:CE2	2:K:57:VAL:HG21	2.05	0.91
1:C:783:LYS:N	2:K:57:VAL:CG2	2.33	0.91
1:E:299:VAL:O	1:E:299:VAL:HG12	1.69	0.91
1:E:505:GLN:HE22	1:E:1001:VAL:H	0.93	0.91
2:H:61:VAL:CG2	2:H:87:THR:HB	2.01	0.91
2:I:447:ALA:HB1	2:I:452:TRP:CE3	2.05	0.91
2:K:345:ILE:HD13	2:K:345:ILE:H	1.36	0.91
2:L:319:LEU:HD11	2:L:369:LEU:CD2	2.00	0.91
1:B:768:GLU:HG2	1:B:769:GLU:H	1.34	0.91
1:C:582:LEU:H	1:C:755:GLN:HE22	1.18	0.91
1:E:182:MET:HE3	1:E:217:PRO:C	1.90	0.91
2:G:244:LYS:CD	2:G:404:GLU:HB3	1.99	0.91
1:A:59:VAL:CG2	1:A:105:TYR:HD2	1.82	0.91
1:C:266:VAL:HG12	1:C:279:THR:HG23	1.51	0.91
1:D:704:LEU:O	1:D:706:LYS:N	2.04	0.91
1:D:950:THR:HG22	1:D:952:MET:H	1.32	0.91
1:D:1263:HIS:CE1	1:F:899:ASN:C	2.43	0.91
4:D:2474:FMN:O4'	4:D:2474:FMN:H1'2	1.69	0.91
1:F:828:LEU:HD22	1:F:1172:SER:HA	1.50	0.91
2:G:61:VAL:HG22	2:G:87:THR:HB	1.51	0.91
2:G:319:LEU:HD11	2:G:369:LEU:CD2	2.00	0.91
2:H:430:LYS:CD	2:H:460:ALA:HB2	2.01	0.91
2:I:319:LEU:HD11	2:I:369:LEU:CD2	2.00	0.91
2:I:440:ALA:HB1	2:I:456:ASP:CB	2.00	0.91
2:J:447:ALA:HB1	2:J:452:TRP:CE3	2.05	0.91

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:K:61:VAL:CG2	2:K:87:THR:HB	2.01	0.91
2:L:167:ARG:HG2	2:L:210:ALA:CB	2.00	0.91
1:A:781:PHE:C	2:J:52:VAL:CB	2.39	0.90
1:B:1170:GLN:HG2	1:B:1170:GLN:O	1.68	0.90
1:D:838:VAL:HG13	1:D:839:PRO:HD2	1.53	0.90
1:D:1317:THR:HG21	1:D:1358:GLU:OE1	1.69	0.90
2:H:367:ILE:HG23	2:H:390:VAL:CG2	2.01	0.90
1:B:1366:GLU:HG2	1:B:1367:TYR:CD2	2.05	0.90
1:C:902:ASN:HD22	1:E:1227:GLU:HG3	1.35	0.90
1:D:826:ARG:HH11	1:D:826:ARG:HG2	1.35	0.90
2:H:167:ARG:HG2	2:H:210:ALA:CB	2.00	0.90
2:J:61:VAL:CG2	2:J:87:THR:HB	2.01	0.90
2:J:367:ILE:HG23	2:J:390:VAL:CG2	2.01	0.90
1:A:153:ARG:NH2	1:A:263:LEU:O	2.04	0.90
1:A:862:ALA:O	1:A:1118:CYS:HB2	1.71	0.90
1:A:902:ASN:HD22	1:C:1227:GLU:HG3	1.35	0.90
1:C:290:THR:CG2	1:C:292:PRO:CD	2.46	0.90
1:C:387:PRO:CD	1:C:1344:GLU:OE2	2.19	0.90
1:E:218:THR:HG23	1:E:220:PRO:HD2	1.52	0.90
2:I:367:ILE:HG23	2:I:390:VAL:CG2	2.01	0.90
2:J:345:ILE:HD13	2:J:345:ILE:H	1.36	0.90
2:K:447:ALA:HB1	2:K:452:TRP:CE3	2.05	0.90
1:C:862:ALA:O	1:C:1118:CYS:HB2	1.71	0.90
1:C:1438:ARG:HB3	2:J:376:GLY:N	1.84	0.90
1:E:266:VAL:O	1:E:279:THR:HG21	1.71	0.90
1:E:511:ILE:HG22	1:E:512:ASP:N	1.86	0.90
1:A:781:PHE:CE2	2:J:57:VAL:HG21	2.05	0.90
1:C:182:MET:HE3	1:C:217:PRO:C	1.91	0.90
1:C:266:VAL:O	1:C:279:THR:HG21	1.71	0.90
2:K:367:ILE:HG23	2:K:390:VAL:CG2	2.01	0.90
1:B:254:PRO:HG2	1:B:255:ALA:H	1.36	0.90
1:B:704:LEU:O	1:B:706:LYS:N	2.04	0.90
1:C:464:ILE:HD11	1:C:779:TYR:CE1	2.05	0.90
1:C:781:PHE:C	2:K:52:VAL:CB	2.39	0.90
1:C:783:LYS:HA	2:K:57:VAL:HG22	0.92	0.90
1:D:213:THR:HB	1:D:1008:THR:HG23	1.52	0.90
1:D:464:ILE:CD1	1:D:779:TYR:CE2	2.54	0.90
4:F:2474:FMN:O4'	4:F:2474:FMN:H1'2	1.69	0.90
2:G:345:ILE:HD13	2:G:345:ILE:H	1.36	0.90
2:K:319:LEU:HD11	2:K:369:LEU:CD2	2.00	0.90
1:A:266:VAL:HG12	1:A:279:THR:HG23	1.50	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:155:ILE:O	1:B:159:VAL:HG23	1.71	0.90
1:D:1263:HIS:CE1	1:F:900:GLY:N	2.20	0.90
1:F:659:ILE:HA	1:F:663:ALA:HB3	1.54	0.90
1:F:777:GLY:HA2	2:I:52:VAL:HG12	1.50	0.90
2:H:153:ILE:HD13	2:H:220:VAL:HG13	1.53	0.90
2:H:418:THR:CG2	2:H:422:THR:HG23	2.02	0.90
2:I:367:ILE:HD12	2:I:369:LEU:HD12	1.53	0.90
2:J:418:THR:CG2	2:J:422:THR:HG23	2.02	0.90
1:A:1227:GLU:HG3	1:E:902:ASN:HD22	1.35	0.90
1:B:213:THR:HB	1:B:1008:THR:HG23	1.52	0.90
1:B:588:ARG:O	1:B:592:GLU:HG3	1.72	0.90
1:C:218:THR:HG23	1:C:220:PRO:HD2	1.52	0.90
1:E:387:PRO:CD	1:E:1344:GLU:OE2	2.19	0.90
2:J:153:ILE:HD13	2:J:220:VAL:HG13	1.53	0.90
1:B:1230:GLN:N	1:D:877:ARG:HG2	1.86	0.90
1:C:299:VAL:O	1:C:299:VAL:HG12	1.69	0.90
1:C:900:GLY:HA2	1:E:1263:HIS:HE2	1.37	0.90
1:C:950:THR:CG2	1:C:951:GLU:N	2.35	0.90
1:E:862:ALA:O	1:E:1118:CYS:HB2	1.71	0.90
1:F:1438:ARG:HD2	2:G:377:ARG:N	1.49	0.90
2:G:418:THR:CG2	2:G:422:THR:HG23	2.02	0.90
1:D:588:ARG:O	1:D:592:GLU:HG3	1.72	0.90
1:D:777:GLY:HA2	2:H:52:VAL:HG12	1.50	0.90
1:D:1230:GLN:N	1:F:877:ARG:HG2	1.86	0.90
1:E:783:LYS:N	2:L:57:VAL:CG2	2.33	0.90
1:F:704:LEU:O	1:F:706:LYS:N	2.04	0.90
1:F:825:LEU:CD1	1:F:1186:ARG:NH1	2.17	0.90
1:F:950:THR:CG2	1:F:951:GLU:N	2.32	0.90
2:G:257:ASN:OD1	2:G:394:LEU:HA	1.72	0.90
2:H:77:LEU:HD23	2:H:127:ILE:HA	1.51	0.90
2:H:257:ASN:OD1	2:H:394:LEU:HA	1.72	0.90
2:I:186:LEU:HD23	2:I:195:LEU:CD2	1.99	0.90
1:A:387:PRO:CD	1:A:1344:GLU:OE2	2.19	0.89
1:F:139:VAL:CG1	1:F:140:SER:N	2.35	0.89
2:G:167:ARG:HG2	2:G:210:ALA:CB	2.00	0.89
2:I:61:VAL:CG2	2:I:87:THR:HB	2.01	0.89
2:I:418:THR:CG2	2:I:422:THR:HG23	2.02	0.89
2:J:449:LEU:HD11	2:J:451:VAL:HG12	1.49	0.89
2:K:418:THR:CG2	2:K:422:THR:HG23	2.02	0.89
1:A:950:THR:CG2	1:A:951:GLU:N	2.35	0.89
1:B:918:THR:HG22	1:B:921:TYR:H	1.38	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:52:GLN:HE22	1:C:71:LEU:H	1.15	0.89
1:C:236:THR:HG21	1:C:328:ASP:N	1.86	0.89
1:C:1438:ARG:HB2	2:J:376:GLY:CA	1.97	0.89
1:D:659:ILE:HA	1:D:663:ALA:HB3	1.54	0.89
1:E:781:PHE:C	2:L:52:VAL:CB	2.39	0.89
1:F:155:ILE:O	1:F:159:VAL:HG23	1.71	0.89
1:F:588:ARG:O	1:F:592:GLU:HG3	1.72	0.89
2:G:61:VAL:CG2	2:G:87:THR:HB	2.01	0.89
2:G:367:ILE:HG23	2:G:390:VAL:CG2	2.01	0.89
2:J:175:VAL:HG11	2:J:214:TYR:CD2	2.08	0.89
2:K:167:ARG:HG2	2:K:210:ALA:CB	2.00	0.89
2:K:366:ARG:HE	2:K:391:GLN:HG2	1.37	0.89
2:L:61:VAL:CG2	2:L:87:THR:HB	2.01	0.89
2:L:418:THR:CG2	2:L:422:THR:HG23	2.02	0.89
1:B:139:VAL:HG11	1:B:143:GLN:CB	2.02	0.89
1:D:526:LEU:HD12	1:D:526:LEU:N	1.88	0.89
1:E:236:THR:HG21	1:E:328:ASP:N	1.86	0.89
1:E:783:LYS:HA	2:L:57:VAL:HG22	0.91	0.89
1:F:437:GLY:HA2	1:F:690:GLU:OE2	1.73	0.89
2:G:322:ARG:HG3	2:G:323:ASP:H	1.37	0.89
2:I:430:LYS:CD	2:I:460:ALA:HB2	2.01	0.89
2:L:345:ILE:H	2:L:345:ILE:HD13	1.36	0.89
1:B:828:LEU:HD22	1:B:1172:SER:HA	1.50	0.89
1:C:227:MET:HE3	1:C:282:GLU:HA	1.54	0.89
1:C:403:ASP:OD1	1:C:407:LYS:NZ	2.05	0.89
1:C:777:GLY:HA2	2:K:52:VAL:HG12	1.53	0.89
1:C:777:GLY:CA	2:K:52:VAL:HG12	2.02	0.89
1:D:155:ILE:O	1:D:159:VAL:HG23	1.71	0.89
1:E:52:GLN:NE2	1:E:71:LEU:H	1.70	0.89
1:E:153:ARG:NH2	1:E:263:LEU:O	2.04	0.89
1:E:960:THR:HG22	1:E:963:VAL:CG2	2.03	0.89
1:F:515:ARG:HH22	1:F:966:ILE:HB	1.37	0.89
1:A:236:THR:HG21	1:A:328:ASP:N	1.86	0.89
1:B:877:ARG:HG2	1:F:1230:GLN:N	1.86	0.89
1:D:570:ASP:OD1	1:D:572:THR:HB	1.73	0.89
1:F:452:GLN:NE2	1:F:764:THR:CG2	2.33	0.89
1:F:1366:GLU:HG2	1:F:1367:TYR:CD2	2.05	0.89
2:G:366:ARG:HE	2:G:391:GLN:HG2	1.37	0.89
2:G:367:ILE:HD12	2:G:369:LEU:HD12	1.53	0.89
2:H:366:ARG:HE	2:H:391:GLN:HG2	1.37	0.89
2:I:175:VAL:HG11	2:I:214:TYR:CD2	2.08	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:246:ARG:HD3	2:J:399:LEU:HB3	1.55	0.89
2:K:367:ILE:HD12	2:K:369:LEU:HD12	1.53	0.89
2:L:246:ARG:HD3	2:L:399:LEU:HB3	1.55	0.89
1:B:501:GLN:HE21	1:B:653:HIS:HD2	0.90	0.89
1:B:900:GLY:N	1:F:1263:HIS:CE1	2.20	0.89
1:C:153:ARG:NH2	1:C:263:LEU:O	2.04	0.89
1:D:254:PRO:HG2	1:D:255:ALA:H	1.36	0.89
1:D:437:GLY:HA2	1:D:690:GLU:OE2	1.73	0.89
1:D:1170:GLN:HG2	1:D:1170:GLN:O	1.68	0.89
1:E:290:THR:CG2	1:E:292:PRO:CD	2.46	0.89
1:E:403:ASP:OD1	1:E:407:LYS:NZ	2.05	0.89
1:E:777:GLY:CA	2:L:52:VAL:HG12	2.02	0.89
2:I:345:ILE:H	2:I:345:ILE:HD13	1.36	0.89
2:J:257:ASN:OD1	2:J:394:LEU:HA	1.72	0.89
4:B:2474:FMN:H1'2	4:B:2474:FMN:O4'	1.69	0.89
1:C:505:GLN:HE22	1:C:1001:VAL:H	0.93	0.89
2:L:153:ILE:HD13	2:L:220:VAL:HG13	1.53	0.89
1:A:52:GLN:NE2	1:A:71:LEU:H	1.70	0.89
1:A:1263:HIS:HE2	1:E:900:GLY:HA2	1.37	0.89
1:B:950:THR:HG22	1:B:952:MET:N	1.88	0.89
1:E:710:LYS:HG2	1:E:939:GLY:HA3	1.55	0.89
2:I:110:ILE:HG13	2:I:117:ALA:HA	1.55	0.89
2:I:322:ARG:HG3	2:I:323:ASP:H	1.37	0.89
2:J:186:LEU:HD23	2:J:195:LEU:CD2	1.99	0.89
2:L:110:ILE:HG13	2:L:117:ALA:HA	1.55	0.89
1:C:511:ILE:HG22	1:C:512:ASP:N	1.86	0.89
1:C:672:GLN:HG3	1:C:693:MET:HE2	1.55	0.89
1:C:710:LYS:HG2	1:C:939:GLY:HA3	1.55	0.89
1:C:1438:ARG:HB2	2:J:376:GLY:H	1.33	0.89
1:D:652:THR:HG21	1:D:703:GLY:CA	2.03	0.89
1:E:582:LEU:H	1:E:755:GLN:NE2	1.71	0.89
2:G:110:ILE:HG13	2:G:117:ALA:HA	1.55	0.89
2:G:246:ARG:HD3	2:G:399:LEU:HB3	1.55	0.89
2:I:246:ARG:HD3	2:I:399:LEU:HB3	1.55	0.89
2:J:77:LEU:HD23	2:J:127:ILE:HA	1.51	0.89
2:K:257:ASN:OD1	2:K:394:LEU:HA	1.72	0.89
1:A:838:VAL:HG13	1:A:839:PRO:CD	2.03	0.89
1:C:52:GLN:NE2	1:C:71:LEU:H	1.70	0.89
1:C:960:THR:HG22	1:C:963:VAL:CG2	2.03	0.89
1:E:353:MET:CE	1:E:366:GLY:O	2.22	0.89
1:F:918:THR:HG22	1:F:921:TYR:H	1.38	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:175:VAL:HG11	2:H:214:TYR:CD2	2.08	0.89
2:J:146:LEU:HD23	2:J:147:GLY:H	1.38	0.89
2:J:366:ARG:HE	2:J:391:GLN:HG2	1.37	0.89
2:J:430:LYS:CD	2:J:460:ALA:HB2	2.01	0.89
1:A:1376:LEU:N	1:A:1376:LEU:CD2	2.33	0.88
1:C:353:MET:CE	1:C:366:GLY:O	2.21	0.88
1:D:218:THR:HG23	1:D:220:PRO:HD2	1.56	0.88
1:D:731:SER:HA	1:D:748:GLY:H	1.37	0.88
1:E:777:GLY:HA2	2:L:52:VAL:HG12	1.53	0.88
1:F:783:LYS:HA	2:I:57:VAL:HG22	0.90	0.88
2:G:175:VAL:HG11	2:G:214:TYR:CD2	2.08	0.88
2:H:148:LEU:HD12	2:H:149:SER:N	1.88	0.88
2:K:246:ARG:HD3	2:K:399:LEU:HB3	1.55	0.88
2:K:367:ILE:HD12	2:K:369:LEU:CD1	2.04	0.88
1:A:825:LEU:HD13	1:A:1186:ARG:HH11	1.38	0.88
1:A:900:GLY:HA2	1:C:1263:HIS:HE2	1.37	0.88
1:B:652:THR:HG21	1:B:703:GLY:CA	2.03	0.88
1:C:113:ASN:C	1:C:113:ASN:ND2	2.26	0.88
1:D:783:LYS:HA	2:H:57:VAL:HG22	0.90	0.88
2:H:367:ILE:HD12	2:H:369:LEU:CD1	2.04	0.88
2:J:110:ILE:HG13	2:J:117:ALA:HA	1.55	0.88
2:K:148:LEU:HD12	2:K:149:SER:N	1.88	0.88
2:L:175:VAL:HG11	2:L:214:TYR:CD2	2.08	0.88
1:B:838:VAL:HG13	1:B:839:PRO:HD2	1.54	0.88
2:H:110:ILE:HG13	2:H:117:ALA:HA	1.55	0.88
2:K:153:ILE:HD13	2:K:220:VAL:HG13	1.53	0.88
1:A:1311:THR:HG23	1:A:1312:SER:N	1.89	0.88
1:B:526:LEU:HD12	1:B:526:LEU:N	1.88	0.88
1:B:783:LYS:HA	2:G:57:VAL:HG22	0.90	0.88
1:B:876:ASN:CB	1:F:1227:GLU:OE1	2.22	0.88
1:D:734:LEU:CD1	1:D:738:HIS:CD2	2.57	0.88
2:G:148:LEU:HD12	2:G:149:SER:N	1.88	0.88
2:H:246:ARG:HD3	2:H:399:LEU:HB3	1.55	0.88
2:J:367:ILE:HD12	2:J:369:LEU:HD12	1.53	0.88
2:J:432:THR:HG22	2:J:434:MET:H	1.37	0.88
2:K:77:LEU:HD23	2:K:127:ILE:HA	1.51	0.88
2:K:110:ILE:HG13	2:K:117:ALA:HA	1.55	0.88
2:K:322:ARG:HG3	2:K:323:ASP:H	1.37	0.88
1:A:403:ASP:OD1	1:A:407:LYS:NZ	2.05	0.88
1:B:437:GLY:HA2	1:B:690:GLU:OE2	1.73	0.88
1:B:731:SER:HA	1:B:748:GLY:H	1.37	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:782:ARG:HB3	2:H:56:GLN:HE21	0.76	0.88
1:E:582:LEU:H	1:E:755:GLN:HE22	1.18	0.88
1:E:782:ARG:HD3	2:L:53:PRO:HD3	1.56	0.88
1:F:526:LEU:N	1:F:526:LEU:HD12	1.88	0.88
2:G:148:LEU:CG	2:G:234:VAL:HG23	2.03	0.88
1:A:372:VAL:HG12	1:A:372:VAL:O	1.74	0.88
1:A:960:THR:HG22	1:A:963:VAL:CG2	2.03	0.88
1:B:430:VAL:CG1	1:B:554:GLU:HB3	2.02	0.88
1:C:430:VAL:HG13	1:C:554:GLU:HB2	1.56	0.88
1:D:139:VAL:HG11	1:D:143:GLN:CB	2.02	0.88
2:G:367:ILE:HD12	2:G:369:LEU:CD1	2.04	0.88
2:H:146:LEU:HD23	2:H:147:GLY:H	1.38	0.88
2:H:367:ILE:HD12	2:H:369:LEU:HD12	1.53	0.88
2:I:257:ASN:OD1	2:I:394:LEU:HA	1.72	0.88
2:I:366:ARG:HE	2:I:391:GLN:HG2	1.37	0.88
2:K:175:VAL:HG11	2:K:214:TYR:CD2	2.08	0.88
2:K:430:LYS:HE2	2:K:440:ALA:CB	2.04	0.88
1:F:253:HIS:ND1	1:F:254:PRO:CD	2.37	0.88
2:L:257:ASN:OD1	2:L:394:LEU:HA	1.72	0.88
1:A:511:ILE:HG22	1:A:512:ASP:N	1.86	0.88
1:A:582:LEU:H	1:A:755:GLN:NE2	1.71	0.88
1:C:59:VAL:CG2	1:C:105:TYR:HD2	1.82	0.88
1:C:782:ARG:HD3	2:K:53:PRO:HD3	1.56	0.88
1:C:838:VAL:HG13	1:C:839:PRO:CD	2.03	0.88
1:E:838:VAL:HG13	1:E:839:PRO:CD	2.03	0.88
1:E:950:THR:CG2	1:E:951:GLU:N	2.35	0.88
1:F:139:VAL:HG11	1:F:143:GLN:CB	2.02	0.88
2:G:430:LYS:HE2	2:G:440:ALA:CB	2.04	0.88
2:I:148:LEU:HD12	2:I:149:SER:N	1.88	0.88
2:I:430:LYS:HE2	2:I:440:ALA:CB	2.04	0.88
2:L:148:LEU:CG	2:L:234:VAL:HG23	2.03	0.88
2:L:367:ILE:HD12	2:L:369:LEU:HD12	1.53	0.88
2:L:430:LYS:HE2	2:L:440:ALA:CB	2.03	0.88
1:A:182:MET:HE3	1:A:217:PRO:HB2	0.93	0.88
1:A:430:VAL:HG13	1:A:554:GLU:HB2	1.56	0.88
1:A:584:ASP:OD1	1:A:584:ASP:N	2.04	0.88
1:B:734:LEU:CD1	1:B:738:HIS:CD2	2.57	0.88
1:D:253:HIS:ND1	1:D:254:PRO:CD	2.37	0.88
1:F:783:LYS:CA	2:I:57:VAL:HG23	1.96	0.88
1:F:1115:VAL:O	1:F:1115:VAL:CG1	2.22	0.88
2:G:153:ILE:HD13	2:G:220:VAL:HG13	1.53	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:430:LYS:HE2	2:H:440:ALA:CB	2.03	0.88
2:I:153:ILE:HD13	2:I:220:VAL:HG13	1.53	0.88
2:L:366:ARG:HE	2:L:391:GLN:HG2	1.37	0.88
1:A:1401:LEU:O	1:A:1401:LEU:HD12	1.74	0.88
1:B:218:THR:HG23	1:B:220:PRO:HD2	1.56	0.88
1:D:139:VAL:CG1	1:D:140:SER:H	1.87	0.88
1:D:426:LEU:CD2	1:D:543:LEU:HB3	2.04	0.88
1:E:825:LEU:HD13	1:E:1186:ARG:HH11	1.38	0.88
2:J:166:LEU:HD23	2:J:461:ALA:HB1	1.56	0.88
2:K:292:VAL:CG2	2:K:394:LEU:HD13	2.04	0.88
2:L:166:LEU:HD23	2:L:461:ALA:HB1	1.56	0.88
1:B:253:HIS:ND1	1:B:254:PRO:CD	2.37	0.87
1:B:777:GLY:CA	2:G:52:VAL:HG12	1.99	0.87
1:C:582:LEU:H	1:C:755:GLN:NE2	1.71	0.87
1:D:501:GLN:NE2	1:D:653:HIS:HD2	1.72	0.87
1:F:838:VAL:HG13	1:F:839:PRO:HD2	1.54	0.87
2:J:148:LEU:CG	2:J:234:VAL:HG23	2.03	0.87
2:J:430:LYS:HE2	2:J:440:ALA:CB	2.04	0.87
1:A:710:LYS:HG2	1:A:939:GLY:HA3	1.55	0.87
1:B:426:LEU:CD2	1:B:543:LEU:HB3	2.04	0.87
1:B:501:GLN:NE2	1:B:653:HIS:HD2	1.73	0.87
1:B:515:ARG:HH22	1:B:966:ILE:HB	1.37	0.87
1:F:652:THR:HG21	1:F:703:GLY:CA	2.03	0.87
1:F:950:THR:HG22	1:F:952:MET:N	1.88	0.87
2:L:322:ARG:HG3	2:L:323:ASP:H	1.37	0.87
1:A:777:GLY:CA	2:J:52:VAL:HG12	2.02	0.87
2:G:146:LEU:HD23	2:G:147:GLY:H	1.38	0.87
2:G:166:LEU:HD23	2:G:461:ALA:HB1	1.56	0.87
2:H:166:LEU:HD23	2:H:461:ALA:HB1	1.56	0.87
2:J:322:ARG:HG3	2:J:323:ASP:H	1.37	0.87
2:K:186:LEU:CD2	2:K:195:LEU:HD21	2.04	0.87
2:L:148:LEU:HD12	2:L:149:SER:N	1.88	0.87
1:A:900:GLY:N	1:C:1263:HIS:HE1	1.65	0.87
1:B:1227:GLU:OE1	1:D:876:ASN:CB	2.22	0.87
1:F:734:LEU:CD1	1:F:738:HIS:CD2	2.56	0.87
1:F:734:LEU:HD11	1:F:738:HIS:CD2	2.10	0.87
2:H:148:LEU:CG	2:H:234:VAL:HG23	2.03	0.87
2:J:367:ILE:HD12	2:J:369:LEU:CD1	2.04	0.87
1:A:843:VAL:HG12	1:A:844:GLU:N	1.89	0.87
1:C:6:ILE:HG12	1:C:364:ILE:HG23	1.57	0.87
1:C:877:ARG:CG	1:E:1229:MET:HA	2.05	0.87

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:918:THR:HG22	1:D:921:TYR:H	1.38	0.87
1:E:1438:ARG:HB2	2:K:376:GLY:H	1.33	0.87
2:K:281:GLU:HG3	2:K:284:SER:H	1.39	0.87
2:K:415:LEU:HG	2:K:432:THR:CG2	2.05	0.87
1:B:570:ASP:OD1	1:B:572:THR:HB	1.73	0.87
1:C:52:GLN:HE22	1:C:71:LEU:N	1.73	0.87
1:C:146:LEU:HD12	1:C:146:LEU:O	1.75	0.87
1:D:505:GLN:HE22	1:D:1000:LEU:HB3	1.36	0.87
1:D:950:THR:HG22	1:D:952:MET:N	1.88	0.87
1:E:6:ILE:HG12	1:E:364:ILE:HG23	1.57	0.87
1:F:30:HIS:HD2	1:F:31:ARG:HG3	1.38	0.87
1:F:139:VAL:CG1	1:F:140:SER:H	1.87	0.87
2:H:92:GLU:HG2	2:H:128:ASN:CG	1.95	0.87
2:H:322:ARG:HG3	2:H:323:ASP:H	1.37	0.87
1:A:146:LEU:O	1:A:146:LEU:HD12	1.75	0.87
1:A:734:LEU:CD1	1:A:738:HIS:CD2	2.58	0.87
1:A:1438:ARG:CB	2:L:376:GLY:CA	2.31	0.87
1:B:659:ILE:HA	1:B:663:ALA:HB3	1.54	0.87
1:C:513:SER:CB	1:C:520:MET:HE2	2.04	0.87
1:D:430:VAL:CG1	1:D:554:GLU:HB3	2.02	0.87
2:J:148:LEU:HD12	2:J:149:SER:N	1.88	0.87
2:J:415:LEU:HG	2:J:432:THR:CG2	2.05	0.87
1:A:513:SER:CB	1:A:520:MET:HE2	2.05	0.87
1:B:505:GLN:HE22	1:B:1000:LEU:HB3	1.36	0.87
1:D:501:GLN:HE21	1:D:653:HIS:HD2	0.90	0.87
1:D:1227:GLU:OE1	1:F:876:ASN:CB	2.22	0.87
1:E:182:MET:HE3	1:E:217:PRO:HB2	1.00	0.87
2:I:148:LEU:CG	2:I:234:VAL:HG23	2.03	0.87
2:I:186:LEU:HD11	2:I:200:VAL:HB	1.57	0.87
2:I:432:THR:HG22	2:I:434:MET:H	1.37	0.87
2:K:148:LEU:CG	2:K:234:VAL:HG23	2.03	0.87
2:L:432:THR:HG22	2:L:434:MET:H	1.37	0.87
1:A:392:ALA:O	1:A:400:LEU:HD12	1.74	0.87
1:A:715:VAL:O	1:A:715:VAL:CG1	2.23	0.87
1:B:139:VAL:CG1	1:B:140:SER:H	1.87	0.87
1:B:734:LEU:HD11	1:B:738:HIS:CD2	2.10	0.87
1:D:218:THR:HG21	1:D:221:LEU:HG	1.56	0.87
1:D:377:THR:HG22	1:D:378:GLN:HG3	1.56	0.87
1:E:1401:LEU:O	1:E:1401:LEU:HD12	1.74	0.87
1:F:731:SER:HA	1:F:748:GLY:H	1.37	0.87
1:F:1349:ARG:NH1	1:F:1349:ARG:CG	2.34	0.87

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:80:ALA:HB3	2:G:127:ILE:CD1	2.05	0.87
2:G:186:LEU:CD2	2:G:195:LEU:HD21	2.04	0.87
2:G:197:LYS:HE2	2:G:275:ASP:H	1.40	0.87
2:H:153:ILE:CD1	2:H:220:VAL:HG13	2.04	0.87
2:I:166:LEU:HD23	2:I:461:ALA:HB1	1.56	0.87
2:K:153:ILE:CD1	2:K:220:VAL:HG13	2.04	0.87
2:L:367:ILE:HD12	2:L:369:LEU:CD1	2.04	0.87
1:A:353:MET:CE	1:A:366:GLY:O	2.21	0.86
1:B:782:ARG:HB3	2:G:56:GLN:HE21	0.76	0.86
1:D:1047:MET:CG	1:D:1186:ARG:NH2	2.38	0.86
1:E:430:VAL:HG13	1:E:554:GLU:HB2	1.56	0.86
1:E:828:LEU:HD22	1:E:1172:SER:HB2	1.57	0.86
1:F:218:THR:HG23	1:F:220:PRO:HD2	1.56	0.86
1:F:377:THR:HG22	1:F:378:GLN:HG3	1.56	0.86
1:F:570:ASP:OD1	1:F:572:THR:HB	1.73	0.86
2:H:281:GLU:HG3	2:H:284:SER:H	1.39	0.86
2:K:388:PHE:CD2	2:K:390:VAL:HG13	2.10	0.86
2:K:432:THR:HG22	2:K:434:MET:H	1.37	0.86
2:L:80:ALA:HB3	2:L:127:ILE:CD1	2.05	0.86
1:B:825:LEU:CD1	1:B:1186:ARG:NH1	2.17	0.86
1:C:1401:LEU:HD12	1:C:1401:LEU:O	1.74	0.86
1:E:227:MET:HE3	1:E:282:GLU:HA	1.56	0.86
1:F:426:LEU:CD2	1:F:543:LEU:HB3	2.04	0.86
1:F:501:GLN:NE2	1:F:653:HIS:HD2	1.73	0.86
2:H:292:VAL:CG2	2:H:394:LEU:HD13	2.04	0.86
2:L:146:LEU:HD23	2:L:147:GLY:H	1.38	0.86
1:A:290:THR:HG23	1:A:292:PRO:HD2	1.56	0.86
1:A:1229:MET:HA	1:E:877:ARG:CG	2.05	0.86
1:C:843:VAL:HG12	1:C:844:GLU:N	1.89	0.86
1:E:1311:THR:HG23	1:E:1312:SER:N	1.89	0.86
2:I:92:GLU:HG2	2:I:128:ASN:CG	1.95	0.86
2:J:186:LEU:HD11	2:J:200:VAL:HB	1.57	0.86
2:L:153:ILE:CD1	2:L:220:VAL:HG13	2.04	0.86
1:B:113:ASN:C	1:B:113:ASN:HD22	1.78	0.86
1:D:746:ILE:HG23	1:D:1182:ASP:CB	2.05	0.86
1:D:1263:HIS:NE2	1:F:900:GLY:CA	2.17	0.86
1:F:1047:MET:CG	1:F:1186:ARG:NH2	2.38	0.86
2:G:153:ILE:CD1	2:G:220:VAL:HG13	2.04	0.86
2:H:415:LEU:HG	2:H:432:THR:CG2	2.05	0.86
2:J:153:ILE:CD1	2:J:220:VAL:HG13	2.04	0.86
2:K:166:LEU:HD23	2:K:461:ALA:HB1	1.56	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:292:VAL:CG2	2:L:394:LEU:HD13	2.04	0.86
1:D:113:ASN:HD22	1:D:113:ASN:C	1.78	0.86
1:E:513:SER:CB	1:E:520:MET:HE2	2.04	0.86
1:F:505:GLN:HE22	1:F:1000:LEU:HB3	1.36	0.86
2:G:388:PHE:CD2	2:G:390:VAL:HG13	2.10	0.86
2:H:432:THR:HG22	2:H:434:MET:H	1.37	0.86
2:I:146:LEU:HD23	2:I:147:GLY:H	1.38	0.86
2:L:186:LEU:CD2	2:L:195:LEU:HD21	2.04	0.86
1:C:392:ALA:O	1:C:400:LEU:HD12	1.74	0.86
1:C:734:LEU:CD1	1:C:738:HIS:CD2	2.58	0.86
1:E:146:LEU:O	1:E:146:LEU:HD12	1.75	0.86
2:I:415:LEU:HG	2:I:432:THR:CG2	2.05	0.86
2:K:146:LEU:HD23	2:K:147:GLY:H	1.38	0.86
2:L:197:LYS:HE2	2:L:275:ASP:H	1.40	0.86
2:L:388:PHE:CD2	2:L:390:VAL:HG13	2.10	0.86
2:L:415:LEU:HG	2:L:432:THR:CG2	2.05	0.86
1:D:734:LEU:HD11	1:D:738:HIS:CD2	2.10	0.86
1:E:392:ALA:O	1:E:400:LEU:HD12	1.74	0.86
2:H:80:ALA:HB3	2:H:127:ILE:CG1	2.05	0.86
2:H:388:PHE:CD2	2:H:390:VAL:HG13	2.10	0.86
2:I:153:ILE:CD1	2:I:220:VAL:HG13	2.04	0.86
2:I:292:VAL:CG2	2:I:394:LEU:HD13	2.04	0.86
2:I:371:VAL:HG23	2:I:383:ILE:CG2	2.06	0.86
2:L:371:VAL:HG23	2:L:383:ILE:CG2	2.06	0.86
1:A:1438:ARG:HB2	2:L:376:GLY:CA	1.97	0.86
1:B:780:ARG:CG	2:G:51:GLY:O	2.24	0.86
1:C:290:THR:HG23	1:C:292:PRO:HD2	1.56	0.86
2:G:110:ILE:HD11	2:G:118:VAL:N	1.91	0.86
2:G:292:VAL:CG2	2:G:394:LEU:HD13	2.04	0.86
2:G:432:THR:HG22	2:G:434:MET:H	1.37	0.86
2:I:80:ALA:HB3	2:I:127:ILE:CG1	2.05	0.86
2:J:292:VAL:CG2	2:J:394:LEU:HD13	2.04	0.86
2:L:92:GLU:HG2	2:L:128:ASN:CG	1.95	0.86
1:B:218:THR:HG21	1:B:221:LEU:HG	1.56	0.86
1:B:901:ASP:OD1	1:F:1228:LYS:HB3	1.76	0.86
1:C:372:VAL:HG12	1:C:372:VAL:O	1.74	0.86
1:C:1115:VAL:O	1:C:1115:VAL:CG1	2.24	0.86
1:C:1338:ALA:O	1:C:1340:GLY:N	2.08	0.86
1:F:253:HIS:CE1	1:F:254:PRO:HD2	2.11	0.86
1:F:782:ARG:HB3	2:I:56:GLN:HE21	0.76	0.86
2:G:415:LEU:HG	2:G:432:THR:CG2	2.05	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:31:ILE:HD12	2:I:32:TYR:N	1.91	0.86
2:I:80:ALA:HB3	2:I:127:ILE:CD1	2.05	0.86
2:K:80:ALA:HB3	2:K:127:ILE:CG1	2.05	0.86
2:L:80:ALA:HB3	2:L:127:ILE:CG1	2.05	0.86
2:L:186:LEU:HD11	2:L:200:VAL:HB	1.57	0.86
1:A:409:HIS:O	1:A:412:THR:HB	1.76	0.86
1:C:482:ASP:OD1	1:C:788:HIS:CD2	2.29	0.86
1:D:515:ARG:HH22	1:D:966:ILE:HB	1.37	0.86
1:D:780:ARG:CG	2:H:51:GLY:O	2.24	0.86
1:E:59:VAL:CG2	1:E:105:TYR:HD2	1.82	0.86
1:E:1438:ARG:HB2	2:K:376:GLY:CA	1.97	0.86
1:F:417:ASP:O	1:F:418:LYS:C	2.13	0.86
2:G:371:VAL:HG23	2:G:383:ILE:CG2	2.06	0.86
2:H:303:ASP:O	2:H:307:THR:HG22	1.76	0.86
2:J:371:VAL:HG23	2:J:383:ILE:CG2	2.06	0.86
2:K:110:ILE:HD11	2:K:118:VAL:N	1.91	0.86
1:A:782:ARG:HD3	2:J:53:PRO:CD	2.05	0.85
1:A:1338:ALA:O	1:A:1340:GLY:N	2.08	0.85
1:B:377:THR:HG22	1:B:378:GLN:HG3	1.56	0.85
1:B:1047:MET:CG	1:B:1186:ARG:NH2	2.38	0.85
1:D:1128:PHE:CZ	1:D:1130:GLY:HA3	2.11	0.85
1:D:1438:ARG:HD2	2:I:377:ARG:N	1.49	0.85
2:K:430:LYS:HE2	2:K:440:ALA:HB2	1.58	0.85
2:L:31:ILE:HD12	2:L:32:TYR:N	1.91	0.85
2:L:250:ALA:HB1	2:L:251:PRO:HD2	1.57	0.85
1:A:482:ASP:OD1	1:A:788:HIS:HD2	1.59	0.85
1:A:537:GLU:HG3	1:A:538:THR:N	1.92	0.85
1:A:1115:VAL:O	1:A:1115:VAL:CG1	2.24	0.85
1:B:876:ASN:CG	1:F:1227:GLU:OE2	2.15	0.85
1:C:724:ASN:ND2	1:C:724:ASN:H	1.73	0.85
1:C:825:LEU:HD13	1:C:1186:ARG:HH11	1.38	0.85
1:C:1311:THR:HG23	1:C:1312:SER:N	1.89	0.85
1:D:1228:LYS:HB3	1:F:901:ASP:OD1	1.76	0.85
1:E:513:SER:HB3	1:E:520:MET:CE	2.06	0.85
2:I:250:ALA:HB1	2:I:251:PRO:HD2	1.57	0.85
2:K:371:VAL:HG23	2:K:383:ILE:CG2	2.06	0.85
1:B:899:ASN:O	1:F:1263:HIS:CE1	2.30	0.85
1:E:409:HIS:O	1:E:412:THR:HB	1.76	0.85
2:G:281:GLU:HG3	2:G:284:SER:H	1.39	0.85
2:H:80:ALA:HB3	2:H:127:ILE:CD1	2.05	0.85
2:H:371:VAL:HG23	2:H:383:ILE:CG2	2.06	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:367:ILE:HD12	2:I:369:LEU:CD1	2.04	0.85
2:J:166:LEU:HA	2:J:169:LYS:HE2	1.58	0.85
2:K:80:ALA:HB3	2:K:127:ILE:CD1	2.05	0.85
1:A:604:VAL:HG23	1:A:640:THR:HG21	1.58	0.85
1:C:537:GLU:HG3	1:C:538:THR:N	1.92	0.85
1:C:782:ARG:HD3	2:K:53:PRO:CD	2.05	0.85
1:D:1263:HIS:HE1	1:F:899:ASN:C	1.79	0.85
1:E:52:GLN:HE22	1:E:71:LEU:N	1.73	0.85
1:E:253:HIS:CG	1:E:254:PRO:CD	2.52	0.85
2:G:430:LYS:HE2	2:G:440:ALA:HB2	1.58	0.85
2:K:250:ALA:HB1	2:K:251:PRO:HD2	1.57	0.85
2:L:429:THR:HG21	2:L:431:MET:HE1	1.58	0.85
1:A:724:ASN:ND2	1:A:724:ASN:H	1.73	0.85
1:C:724:ASN:H	1:C:724:ASN:HD22	1.25	0.85
1:D:1229:MET:CA	1:F:877:ARG:HG3	2.03	0.85
1:E:604:VAL:HG23	1:E:640:THR:HG21	1.58	0.85
1:E:843:VAL:HG12	1:E:844:GLU:N	1.89	0.85
2:I:166:LEU:HA	2:I:169:LYS:HE2	1.58	0.85
2:K:303:ASP:O	2:K:307:THR:HG22	1.76	0.85
2:L:166:LEU:HA	2:L:169:LYS:HE2	1.58	0.85
1:A:731:SER:HA	1:A:748:GLY:H	1.42	0.85
1:C:479:MET:HG3	1:C:1104:MET:CE	2.05	0.85
1:C:900:GLY:HA2	1:E:1263:HIS:NE2	1.91	0.85
1:D:1227:GLU:CD	1:F:876:ASN:CB	2.45	0.85
1:E:482:ASP:OD1	1:E:788:HIS:HD2	1.59	0.85
1:E:734:LEU:CD1	1:E:738:HIS:CD2	2.58	0.85
2:J:80:ALA:HB3	2:J:127:ILE:CG1	2.05	0.85
2:J:281:GLU:HG3	2:J:284:SER:H	1.39	0.85
2:J:303:ASP:O	2:J:307:THR:HG22	1.76	0.85
2:L:110:ILE:HD11	2:L:118:VAL:N	1.91	0.85
1:A:479:MET:HG3	1:A:1104:MET:CE	2.05	0.85
1:B:1263:HIS:CE1	1:D:899:ASN:O	2.30	0.85
1:C:604:VAL:HG23	1:C:640:THR:HG21	1.58	0.85
1:C:704:LEU:O	1:C:706:LYS:N	2.10	0.85
1:C:1438:ARG:HD2	2:J:377:ARG:N	1.90	0.85
1:E:479:MET:HG3	1:E:1104:MET:CE	2.05	0.85
1:E:734:LEU:HD11	1:E:738:HIS:CD2	2.12	0.85
1:F:568:GLU:C	1:F:569:ILE:HD13	1.96	0.85
2:H:132:TRP:CD1	2:H:202:ARG:HD2	2.12	0.85
2:I:388:PHE:CD2	2:I:390:VAL:HG13	2.10	0.85
2:J:31:ILE:HD12	2:J:32:TYR:N	1.91	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:110:ILE:HD11	2:J:118:VAL:N	1.91	0.85
2:J:250:ALA:HB1	2:J:251:PRO:HD2	1.57	0.85
1:A:52:GLN:HE22	1:A:71:LEU:N	1.73	0.85
1:A:482:ASP:OD1	1:A:788:HIS:CD2	2.29	0.85
1:A:513:SER:HB3	1:A:520:MET:CE	2.06	0.85
1:B:746:ILE:HG23	1:B:1182:ASP:CB	2.05	0.85
1:C:734:LEU:HD11	1:C:738:HIS:CD2	2.12	0.85
1:D:568:GLU:C	1:D:569:ILE:HD13	1.96	0.85
1:E:828:LEU:CD2	1:E:1172:SER:HB2	2.07	0.85
1:E:1438:ARG:HD2	2:K:377:ARG:N	1.90	0.85
1:F:746:ILE:HG23	1:F:1182:ASP:CB	2.05	0.85
2:G:92:GLU:HG2	2:G:128:ASN:CG	1.95	0.85
2:H:31:ILE:HD12	2:H:32:TYR:N	1.91	0.85
2:H:110:ILE:HD11	2:H:118:VAL:N	1.91	0.85
2:H:197:LYS:HE2	2:H:275:ASP:H	1.40	0.85
2:I:443:ILE:HD12	2:I:444:VAL:N	1.92	0.85
2:J:92:GLU:HG2	2:J:128:ASN:CG	1.95	0.85
2:J:388:PHE:CD2	2:J:390:VAL:HG13	2.10	0.85
2:K:197:LYS:HE2	2:K:275:ASP:H	1.40	0.85
1:A:782:ARG:O	2:J:57:VAL:CG2	2.24	0.85
1:B:1227:GLU:CD	1:D:876:ASN:CB	2.45	0.85
1:D:1227:GLU:OE2	1:F:876:ASN:CG	2.15	0.85
1:F:652:THR:HG21	1:F:703:GLY:HA2	1.59	0.85
1:F:780:ARG:CG	2:I:51:GLY:O	2.24	0.85
1:F:1047:MET:HG2	1:F:1186:ARG:NH2	1.91	0.85
2:G:324:ARG:HA	2:G:346:TRP:CD2	2.12	0.85
2:H:430:LYS:HE2	2:H:440:ALA:HB2	1.57	0.85
2:I:110:ILE:HD11	2:I:118:VAL:N	1.91	0.85
2:K:92:GLU:HG2	2:K:128:ASN:CG	1.95	0.85
1:A:950:THR:HG22	1:A:952:MET:H	1.42	0.85
1:B:1115:VAL:O	1:B:1115:VAL:CG1	2.22	0.85
1:B:1128:PHE:CZ	1:B:1130:GLY:HA3	2.11	0.85
2:H:186:LEU:HD11	2:H:200:VAL:HB	1.57	0.85
2:I:271:VAL:HG21	2:I:285:LEU:HG	1.59	0.85
2:J:324:ARG:HA	2:J:346:TRP:CD2	2.12	0.85
1:A:704:LEU:O	1:A:706:LYS:N	2.10	0.84
1:B:30:HIS:HD2	1:B:31:ARG:HG3	1.38	0.84
1:C:482:ASP:OD1	1:C:788:HIS:HD2	1.59	0.84
1:C:1425:LYS:HD3	1:C:1447:TRP:CE2	2.12	0.84
1:D:843:VAL:HG12	1:D:844:GLU:N	1.92	0.84
1:D:1047:MET:HG2	1:D:1186:ARG:NH2	1.91	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:704:LEU:O	1:E:706:LYS:N	2.10	0.84
1:E:746:ILE:HG23	1:E:1182:ASP:HB3	1.58	0.84
2:G:80:ALA:HB3	2:G:127:ILE:CG1	2.05	0.84
2:J:80:ALA:HB3	2:J:127:ILE:CD1	2.05	0.84
2:J:443:ILE:HD12	2:J:444:VAL:N	1.92	0.84
1:A:113:ASN:C	1:A:113:ASN:ND2	2.26	0.84
1:A:724:ASN:H	1:A:724:ASN:HD22	1.25	0.84
1:A:782:ARG:HD3	2:J:53:PRO:HD3	1.56	0.84
1:C:782:ARG:O	2:K:57:VAL:CG2	2.24	0.84
1:C:828:LEU:CD2	1:C:1172:SER:HB2	2.07	0.84
1:E:515:ARG:HH22	1:E:966:ILE:HB	1.41	0.84
1:E:838:VAL:HG12	1:E:839:PRO:N	1.92	0.84
1:E:1338:ALA:O	1:E:1340:GLY:N	2.08	0.84
1:F:782:ARG:CD	2:I:53:PRO:HD2	1.99	0.84
2:G:166:LEU:HA	2:G:169:LYS:HE2	1.58	0.84
2:G:186:LEU:HD11	2:G:200:VAL:HB	1.57	0.84
2:I:430:LYS:HE2	2:I:440:ALA:HB2	1.58	0.84
1:A:6:ILE:HG12	1:A:364:ILE:HG23	1.57	0.84
1:A:342:VAL:HG11	1:A:390:MET:HE2	1.59	0.84
1:A:877:ARG:CG	1:C:1229:MET:HA	2.05	0.84
1:A:1425:LYS:HD3	1:A:1447:TRP:CE2	2.12	0.84
1:A:1438:ARG:HD2	2:L:377:ARG:N	1.90	0.84
1:B:52:GLN:HE22	1:B:71:LEU:H	1.24	0.84
1:D:1263:HIS:CE1	1:F:899:ASN:O	2.30	0.84
1:F:218:THR:HG21	1:F:221:LEU:HG	1.56	0.84
2:G:423:LEU:HD21	2:G:443:ILE:CD1	2.07	0.84
2:H:220:VAL:HG23	8:H:484:FAD:H62A	1.40	0.84
2:I:54:PHE:HB3	2:I:107:ASN:HB3	1.60	0.84
2:J:197:LYS:HE2	2:J:275:ASP:H	1.40	0.84
2:K:31:ILE:HD12	2:K:32:TYR:N	1.91	0.84
2:K:132:TRP:CD1	2:K:202:ARG:HD2	2.12	0.84
2:L:443:ILE:HD12	2:L:444:VAL:N	1.92	0.84
1:A:838:VAL:CG1	1:A:839:PRO:CD	2.56	0.84
1:B:876:ASN:CB	1:F:1227:GLU:CD	2.45	0.84
1:C:825:LEU:HD11	1:C:1186:ARG:HH12	1.40	0.84
1:E:588:ARG:O	1:E:592:GLU:HG3	1.78	0.84
1:F:1128:PHE:CZ	1:F:1130:GLY:HA3	2.11	0.84
2:G:303:ASP:O	2:G:307:THR:HG22	1.76	0.84
2:L:324:ARG:HA	2:L:346:TRP:CD2	2.12	0.84
1:A:182:MET:HE3	1:A:217:PRO:C	1.97	0.84
1:A:825:LEU:HD11	1:A:1186:ARG:HH12	1.41	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:182:MET:HE3	1:B:217:PRO:C	1.97	0.84
1:B:1263:HIS:NE2	1:D:900:GLY:CA	2.17	0.84
1:C:515:ARG:HH22	1:C:966:ILE:HB	1.42	0.84
1:C:731:SER:HA	1:C:748:GLY:H	1.42	0.84
1:C:828:LEU:HD22	1:C:1172:SER:HB2	1.57	0.84
1:E:825:LEU:HD11	1:E:1186:ARG:HH12	1.41	0.84
2:I:324:ARG:HA	2:I:346:TRP:CD2	2.12	0.84
2:J:132:TRP:CD1	2:J:202:ARG:HD2	2.12	0.84
2:K:54:PHE:HB3	2:K:107:ASN:HB3	1.60	0.84
1:A:876:ASN:HB2	1:C:1227:GLU:OE1	1.78	0.84
1:B:253:HIS:CE1	1:B:254:PRO:HD2	2.11	0.84
1:B:568:GLU:C	1:B:569:ILE:HD13	1.96	0.84
1:C:409:HIS:O	1:C:412:THR:HB	1.76	0.84
1:C:746:ILE:HG23	1:C:1182:ASP:HB3	1.58	0.84
1:C:826:ARG:HG2	1:C:826:ARG:NH1	1.83	0.84
1:D:253:HIS:CE1	1:D:254:PRO:HD2	2.11	0.84
1:E:290:THR:HG23	1:E:292:PRO:HD2	1.56	0.84
1:E:372:VAL:HG12	1:E:372:VAL:O	1.74	0.84
1:E:482:ASP:OD1	1:E:788:HIS:CD2	2.29	0.84
1:F:52:GLN:HE22	1:F:71:LEU:HB2	1.42	0.84
2:G:31:ILE:HD12	2:G:32:TYR:N	1.91	0.84
2:H:54:PHE:HB3	2:H:107:ASN:HB3	1.60	0.84
2:I:303:ASP:O	2:I:307:THR:HG22	1.76	0.84
2:I:449:LEU:HD23	2:I:452:TRP:CG	2.13	0.84
2:J:423:LEU:HD21	2:J:443:ILE:CD1	2.07	0.84
2:J:449:LEU:HD23	2:J:452:TRP:CG	2.13	0.84
2:L:132:TRP:CD1	2:L:202:ARG:HD2	2.12	0.84
2:L:449:LEU:HD23	2:L:452:TRP:CG	2.13	0.84
1:A:142:GLU:CD	1:A:142:GLU:H	1.80	0.84
1:A:235:ASN:HD22	1:A:235:ASN:C	1.80	0.84
1:A:828:LEU:CD2	1:A:1172:SER:HB2	2.07	0.84
1:A:937:LYS:HE3	1:A:1033:SER:HB2	1.59	0.84
1:A:1227:GLU:OE1	1:E:876:ASN:HB2	1.78	0.84
1:B:899:ASN:C	1:F:1263:HIS:HE1	1.79	0.84
1:B:1047:MET:HG2	1:B:1186:ARG:NH2	1.91	0.84
1:C:513:SER:HB3	1:C:520:MET:CE	2.06	0.84
1:C:838:VAL:CG1	1:C:839:PRO:CD	2.55	0.84
1:C:932:VAL:O	1:C:933:ALA:HB2	1.78	0.84
2:G:250:ALA:HB1	2:G:251:PRO:HD2	1.57	0.84
2:H:166:LEU:HA	2:H:169:LYS:HE2	1.58	0.84
2:H:250:ALA:HB1	2:H:251:PRO:HD2	1.57	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:449:LEU:HD21	2:I:451:VAL:CG1	2.08	0.84
2:L:220:VAL:HG23	8:L:484:FAD:H62A	1.40	0.84
2:L:242:VAL:HG12	2:L:403:PRO:CD	2.07	0.84
2:L:281:GLU:HG3	2:L:284:SER:H	1.39	0.84
1:A:588:ARG:O	1:A:592:GLU:HG3	1.78	0.84
1:C:584:ASP:OD1	1:C:584:ASP:N	2.04	0.84
1:C:659:ILE:HG21	1:C:716:ILE:HD11	1.59	0.84
1:D:30:HIS:HD2	1:D:31:ARG:HG3	1.38	0.84
1:E:659:ILE:HG21	1:E:716:ILE:HD11	1.59	0.84
1:E:731:SER:HA	1:E:748:GLY:H	1.42	0.84
1:E:782:ARG:O	2:L:57:VAL:CG2	2.24	0.84
2:H:449:LEU:HD21	2:H:451:VAL:CG1	2.08	0.84
2:I:132:TRP:CD1	2:I:202:ARG:HD2	2.12	0.84
2:I:197:LYS:HE2	2:I:275:ASP:H	1.40	0.84
2:J:54:PHE:HB3	2:J:107:ASN:HB3	1.60	0.84
2:J:449:LEU:HD21	2:J:451:VAL:CG1	2.08	0.84
1:A:828:LEU:HD22	1:A:1172:SER:HB2	1.57	0.84
1:A:900:GLY:HA2	1:C:1263:HIS:NE2	1.91	0.84
1:E:724:ASN:ND2	1:E:724:ASN:H	1.73	0.84
2:G:242:VAL:HG12	2:G:403:PRO:CD	2.07	0.84
2:H:443:ILE:HD12	2:H:444:VAL:N	1.92	0.84
2:H:449:LEU:HD23	2:H:452:TRP:CG	2.13	0.84
2:J:271:VAL:HG21	2:J:285:LEU:HG	1.59	0.84
2:K:186:LEU:HD11	2:K:200:VAL:HB	1.57	0.84
2:K:449:LEU:HD21	2:K:451:VAL:CG1	2.08	0.84
2:L:303:ASP:O	2:L:307:THR:HG22	1.76	0.84
2:L:423:LEU:HD21	2:L:443:ILE:CD1	2.07	0.84
2:L:430:LYS:HE2	2:L:440:ALA:HB2	1.57	0.84
1:A:227:MET:HE3	1:A:282:GLU:HA	1.57	0.84
1:A:734:LEU:HD11	1:A:738:HIS:CD2	2.12	0.84
1:C:729:GLY:O	1:C:748:GLY:HA3	1.78	0.84
1:C:937:LYS:HE3	1:C:1033:SER:HB2	1.59	0.84
1:D:1115:VAL:O	1:D:1115:VAL:CG1	2.22	0.84
1:E:838:VAL:CG1	1:E:839:PRO:CD	2.55	0.84
1:F:777:GLY:O	1:F:788:HIS:HE1	1.60	0.84
2:G:304:CYS:HA	2:G:307:THR:CG2	2.08	0.84
2:H:242:VAL:HG12	2:H:403:PRO:CD	2.07	0.84
2:H:304:CYS:HA	2:H:307:THR:CG2	2.08	0.84
2:H:350:PRO:HB2	2:H:373:ASP:N	1.93	0.84
2:K:304:CYS:HA	2:K:307:THR:CG2	2.08	0.84
2:K:324:ARG:HA	2:K:346:TRP:CD2	2.12	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:K:449:LEU:HD23	2:K:452:TRP:CG	2.13	0.84
2:L:271:VAL:HG21	2:L:285:LEU:HG	1.59	0.84
2:L:304:CYS:HA	2:L:307:THR:CG2	2.08	0.84
1:A:310:PRO:HG3	1:A:404:ARG:HH22	1.43	0.83
1:B:652:THR:HG21	1:B:703:GLY:HA2	1.59	0.83
1:B:1228:LYS:HB3	1:D:901:ASP:OD1	1.76	0.83
1:C:982:GLN:HE22	1:C:1240:ARG:HD2	1.43	0.83
1:D:182:MET:HE2	1:D:217:PRO:CB	1.83	0.83
1:D:1349:ARG:CG	1:D:1349:ARG:NH1	2.34	0.83
1:F:113:ASN:C	1:F:113:ASN:HD22	1.78	0.83
2:G:449:LEU:HD23	2:G:452:TRP:CG	2.13	0.83
2:K:220:VAL:HG23	8:K:484:FAD:H62A	1.41	0.83
2:K:350:PRO:HB2	2:K:373:ASP:N	1.93	0.83
1:A:982:GLN:HE22	1:A:1240:ARG:HD2	1.43	0.83
1:B:1227:GLU:OE2	1:D:876:ASN:CG	2.15	0.83
1:B:1442:GLU:CG	2:H:374:ALA:O	2.26	0.83
1:C:102:TYR:CE2	1:C:144:PHE:HE1	1.89	0.83
1:C:142:GLU:CD	1:C:142:GLU:H	1.80	0.83
1:C:838:VAL:HG12	1:C:839:PRO:N	1.92	0.83
1:C:1447:TRP:CE2	1:C:1451:VAL:CG2	2.61	0.83
1:F:501:GLN:HE21	1:F:653:HIS:HD2	0.90	0.83
2:G:350:PRO:HB2	2:G:373:ASP:N	1.93	0.83
2:L:54:PHE:HB3	2:L:107:ASN:HB3	1.60	0.83
1:C:464:ILE:HD11	1:C:779:TYR:CZ	2.13	0.83
1:C:876:ASN:HB2	1:E:1227:GLU:OE1	1.78	0.83
1:E:526:LEU:N	1:E:526:LEU:CD1	2.40	0.83
2:G:54:PHE:HB3	2:G:107:ASN:HB3	1.60	0.83
2:G:132:TRP:CD1	2:G:202:ARG:HD2	2.12	0.83
1:A:459:GLU:O	1:A:463:LEU:HB2	1.78	0.83
1:A:464:ILE:HD11	1:A:779:TYR:CZ	2.13	0.83
1:A:1447:TRP:CE2	1:A:1451:VAL:CG2	2.61	0.83
1:E:1115:VAL:O	1:E:1115:VAL:CG1	2.24	0.83
1:E:1425:LYS:HD3	1:E:1447:TRP:CE2	2.12	0.83
2:G:415:LEU:HG	2:G:432:THR:HG23	1.61	0.83
2:K:423:LEU:HD21	2:K:443:ILE:CD1	2.07	0.83
1:A:59:VAL:HG22	1:A:105:TYR:HD2	1.44	0.83
1:C:459:GLU:O	1:C:463:LEU:HB2	1.78	0.83
1:D:777:GLY:O	1:D:788:HIS:HE1	1.60	0.83
1:E:235:ASN:HD22	1:E:235:ASN:C	1.80	0.83
1:E:342:VAL:HG11	1:E:390:MET:HE2	1.59	0.83
1:E:459:GLU:O	1:E:463:LEU:HB2	1.78	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:782:ARG:HD3	2:L:53:PRO:CD	2.05	0.83
1:F:843:VAL:HG12	1:F:844:GLU:N	1.92	0.83
2:G:443:ILE:HD12	2:G:444:VAL:N	1.92	0.83
2:I:281:GLU:HG3	2:I:284:SER:H	1.39	0.83
2:J:242:VAL:HG12	2:J:403:PRO:CD	2.07	0.83
2:L:350:PRO:HB2	2:L:373:ASP:N	1.93	0.83
2:L:449:LEU:HD21	2:L:451:VAL:CG1	2.08	0.83
1:B:783:LYS:HE2	2:G:57:VAL:HG12	1.60	0.83
1:D:52:GLN:HE22	1:D:71:LEU:HB2	1.42	0.83
1:E:430:VAL:CG1	1:E:554:GLU:HB2	2.08	0.83
2:H:324:ARG:HA	2:H:346:TRP:CD2	2.12	0.83
2:K:443:ILE:HD12	2:K:444:VAL:N	1.92	0.83
1:A:526:LEU:N	1:A:526:LEU:CD1	2.40	0.83
1:B:417:ASP:O	1:B:418:LYS:C	2.13	0.83
1:B:777:GLY:O	1:B:788:HIS:HE1	1.60	0.83
1:F:973:ASP:OD2	1:F:1298:LYS:HE3	1.79	0.83
1:F:1047:MET:CG	1:F:1186:ARG:CZ	2.56	0.83
2:G:71:LEU:HD22	2:G:71:LEU:O	1.79	0.83
2:H:153:ILE:CD1	8:H:484:FAD:H2A	2.08	0.83
2:I:153:ILE:CD1	8:I:484:FAD:H2A	2.08	0.83
2:I:415:LEU:HG	2:I:432:THR:HG23	1.61	0.83
2:K:71:LEU:HD22	2:K:71:LEU:O	1.79	0.83
2:K:166:LEU:HA	2:K:169:LYS:HE2	1.58	0.83
2:L:141:THR:HB	2:L:142:PRO:HD2	1.61	0.83
1:A:364:ILE:HD12	1:A:374:ILE:HD11	1.60	0.83
1:D:182:MET:HE3	1:D:217:PRO:C	1.99	0.83
1:E:464:ILE:HD11	1:E:779:TYR:CZ	2.13	0.83
1:E:1447:TRP:CE2	1:E:1451:VAL:CG2	2.61	0.83
2:G:153:ILE:CD1	8:G:484:FAD:H2A	2.08	0.83
2:G:207:LEU:HD12	2:G:207:LEU:O	1.79	0.83
2:I:242:VAL:HG12	2:I:403:PRO:CD	2.07	0.83
2:I:423:LEU:HD21	2:I:443:ILE:CD1	2.07	0.83
2:J:132:TRP:HA	2:J:202:ARG:NH1	1.94	0.83
2:L:71:LEU:HD22	2:L:71:LEU:O	1.79	0.83
2:L:415:LEU:HG	2:L:432:THR:HG23	1.61	0.83
1:A:1388:THR:CG2	1:A:1388:THR:O	2.27	0.83
1:B:1229:MET:CA	1:D:877:ARG:HG3	2.03	0.83
1:E:982:GLN:HE22	1:E:1240:ARG:HD2	1.43	0.83
2:H:71:LEU:HD22	2:H:71:LEU:O	1.79	0.83
2:H:132:TRP:HA	2:H:202:ARG:NH1	1.94	0.83
2:H:207:LEU:O	2:H:207:LEU:HD12	1.79	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:186:LEU:CD2	2:J:195:LEU:HD21	2.04	0.83
2:K:242:VAL:HG12	2:K:403:PRO:CD	2.07	0.83
2:K:271:VAL:HG21	2:K:285:LEU:HG	1.59	0.83
2:K:383:ILE:HD12	2:K:386:SER:H	1.44	0.83
2:L:153:ILE:CD1	8:L:484:FAD:H2A	2.08	0.83
1:A:253:HIS:CG	1:A:254:PRO:CD	2.52	0.83
1:A:515:ARG:HH22	1:A:966:ILE:HB	1.41	0.83
1:A:1062:ARG:NH2	1:A:1088:GLU:OE2	2.12	0.83
1:B:843:VAL:HG12	1:B:844:GLU:N	1.92	0.83
1:D:253:HIS:CD2	1:D:254:PRO:HD2	2.14	0.83
1:E:670:LEU:HD22	1:E:670:LEU:O	1.78	0.83
1:E:1062:ARG:NH2	1:E:1088:GLU:OE2	2.12	0.83
2:G:449:LEU:HD21	2:G:451:VAL:CG1	2.08	0.83
2:H:465:HIS:CE1	2:H:469:LYS:HE3	2.14	0.83
2:I:153:ILE:CG2	2:I:238:VAL:HA	2.09	0.83
2:J:430:LYS:HE2	2:J:440:ALA:HB2	1.58	0.83
2:J:465:HIS:CE1	2:J:469:LYS:HE3	2.14	0.83
2:K:141:THR:HB	2:K:142:PRO:HD2	1.61	0.83
2:K:153:ILE:CD1	8:K:484:FAD:H2A	2.08	0.83
2:K:465:HIS:CE1	2:K:469:LYS:HE3	2.14	0.83
1:A:1391:MET:CE	1:A:1458:VAL:CG2	2.56	0.82
1:B:1263:HIS:HE1	1:D:899:ASN:C	1.79	0.82
1:C:342:VAL:HG11	1:C:390:MET:HE2	1.59	0.82
1:D:787:ARG:NH1	1:D:821:PRO:HG2	1.93	0.82
1:D:1442:GLU:CG	2:I:374:ALA:O	2.26	0.82
1:F:253:HIS:CD2	1:F:254:PRO:HD2	2.14	0.82
1:F:787:ARG:NH1	1:F:821:PRO:HG2	1.94	0.82
2:H:271:VAL:HG21	2:H:285:LEU:HG	1.59	0.82
2:H:383:ILE:HD12	2:H:386:SER:H	1.44	0.82
2:I:304:CYS:HA	2:I:307:THR:CG2	2.08	0.82
1:D:1370:GLY:N	1:D:1389:GLY:O	2.12	0.82
2:G:271:VAL:HG21	2:G:285:LEU:HG	1.59	0.82
2:H:150:VAL:HG13	2:H:173:VAL:HA	1.62	0.82
2:I:383:ILE:HD12	2:I:386:SER:H	1.44	0.82
2:J:350:PRO:HB2	2:J:373:ASP:N	1.93	0.82
1:A:659:ILE:HG21	1:A:716:ILE:HD11	1.59	0.82
1:A:838:VAL:HG12	1:A:839:PRO:N	1.92	0.82
1:B:746:ILE:C	1:B:747:SER:O	2.16	0.82
1:C:397:SER:HB2	1:C:399:LYS:HG3	1.61	0.82
1:C:430:VAL:CG1	1:C:554:GLU:HB2	2.08	0.82
1:C:588:ARG:O	1:C:592:GLU:HG3	1.78	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:452:GLN:NE2	1:E:764:THR:CG2	2.42	0.82
1:E:729:GLY:O	1:E:748:GLY:HA3	1.78	0.82
1:F:782:ARG:O	2:I:57:VAL:HG23	1.70	0.82
2:G:321:ARG:HD3	2:G:322:ARG:N	1.95	0.82
2:I:429:THR:HG21	2:I:431:MET:HE1	1.60	0.82
2:J:153:ILE:CG2	2:J:238:VAL:HA	2.09	0.82
2:J:304:CYS:HA	2:J:307:THR:CG2	2.08	0.82
2:J:415:LEU:HG	2:J:432:THR:HG23	1.61	0.82
2:K:132:TRP:HA	2:K:202:ARG:NH1	1.94	0.82
2:L:150:VAL:HG13	2:L:173:VAL:HA	1.62	0.82
2:L:207:LEU:O	2:L:207:LEU:HD12	1.79	0.82
1:B:1438:ARG:NE	2:H:376:GLY:O	2.13	0.82
1:E:59:VAL:HG22	1:E:105:TYR:HD2	1.44	0.82
1:E:142:GLU:CD	1:E:142:GLU:H	1.80	0.82
1:F:1442:GLU:CG	2:G:374:ALA:O	2.26	0.82
2:G:132:TRP:HA	2:G:202:ARG:NH1	1.94	0.82
2:G:465:HIS:CE1	2:G:469:LYS:HE3	2.14	0.82
2:H:430:LYS:HD3	2:H:460:ALA:HB2	1.62	0.82
2:I:350:PRO:HB2	2:I:373:ASP:N	1.93	0.82
2:K:321:ARG:HD3	2:K:322:ARG:N	1.95	0.82
1:F:426:LEU:HD11	1:F:558:MET:HG3	1.62	0.82
1:F:1370:GLY:N	1:F:1389:GLY:O	2.12	0.82
2:H:423:LEU:HD21	2:H:443:ILE:CD1	2.07	0.82
2:I:186:LEU:CD2	2:I:195:LEU:HD21	2.04	0.82
2:K:150:VAL:HG13	2:K:173:VAL:HA	1.62	0.82
2:K:207:LEU:HD12	2:K:207:LEU:O	1.79	0.82
2:L:153:ILE:CG2	2:L:238:VAL:HA	2.09	0.82
1:B:734:LEU:HD12	1:B:738:HIS:HD2	1.43	0.82
1:C:434:SER:OG	1:C:438:GLU:OE2	1.97	0.82
1:D:52:GLN:HE22	1:D:71:LEU:H	1.24	0.82
1:D:973:ASP:OD2	1:D:1298:LYS:HE3	1.79	0.82
1:E:724:ASN:H	1:E:724:ASN:HD22	1.25	0.82
1:F:52:GLN:HE22	1:F:71:LEU:H	1.25	0.82
1:F:182:MET:CE	1:F:217:PRO:HB3	1.95	0.82
2:I:150:VAL:HG13	2:I:173:VAL:HA	1.62	0.82
2:J:153:ILE:CD1	8:J:484:FAD:H2A	2.08	0.82
2:L:465:HIS:CE1	2:L:469:LYS:HE3	2.14	0.82
1:A:452:GLN:NE2	1:A:764:THR:CG2	2.42	0.82
1:C:670:LEU:HD22	1:C:670:LEU:O	1.78	0.82
1:E:434:SER:OG	1:E:438:GLU:OE2	1.97	0.82
2:G:93:ILE:CD1	2:G:195:LEU:HD22	2.09	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:150:VAL:HG13	2:G:173:VAL:HA	1.62	0.82
2:G:153:ILE:CG2	2:G:238:VAL:HA	2.09	0.82
2:J:43:GLN:HE22	2:J:119:THR:HG23	1.45	0.82
2:K:415:LEU:HG	2:K:432:THR:HG23	1.61	0.82
2:L:406:LEU:HD23	2:L:407:PRO:CD	2.10	0.82
1:A:670:LEU:O	1:A:670:LEU:HD22	1.78	0.82
1:B:710:LYS:CG	1:B:939:GLY:HA3	2.10	0.82
1:B:787:ARG:NH1	1:B:821:PRO:HG2	1.94	0.82
1:C:746:ILE:HG21	1:C:1182:ASP:N	1.94	0.82
1:C:1062:ARG:NH2	1:C:1088:GLU:OE2	2.12	0.82
1:E:426:LEU:CD2	1:E:543:LEU:HB3	2.09	0.82
1:E:912:SER:HB2	1:E:968:PRO:HD2	1.62	0.82
1:E:932:VAL:O	1:E:933:ALA:HB2	1.78	0.82
2:I:207:LEU:HD12	2:I:207:LEU:O	1.79	0.82
2:I:465:HIS:CE1	2:I:469:LYS:HE3	2.14	0.82
1:A:426:LEU:CD2	1:A:543:LEU:HB3	2.09	0.82
1:A:729:GLY:O	1:A:748:GLY:HA3	1.78	0.82
1:B:299:VAL:O	1:B:299:VAL:CG1	2.28	0.82
1:B:430:VAL:HG11	1:B:554:GLU:HB2	1.61	0.82
1:C:950:THR:HG22	1:C:952:MET:H	1.42	0.82
1:D:1062:ARG:O	1:D:1062:ARG:CG	2.26	0.82
1:E:266:VAL:O	1:E:279:THR:CG2	2.28	0.82
1:E:364:ILE:HD12	1:E:374:ILE:HD11	1.60	0.82
2:G:220:VAL:HG23	8:G:484:FAD:H62A	1.41	0.82
2:H:110:ILE:CD1	2:H:118:VAL:HG13	2.10	0.82
2:J:150:VAL:HG13	2:J:173:VAL:HA	1.62	0.82
2:J:201:GLU:HG3	2:J:205:LYS:HE2	1.62	0.82
2:J:207:LEU:HD12	2:J:207:LEU:O	1.79	0.82
2:K:93:ILE:CD1	2:K:195:LEU:HD22	2.09	0.82
2:K:365:VAL:HG22	2:K:366:ARG:HG3	1.62	0.82
2:K:430:LYS:HD3	2:K:460:ALA:HB2	1.62	0.82
1:A:266:VAL:O	1:A:279:THR:CG2	2.28	0.82
1:D:652:THR:HG21	1:D:703:GLY:HA2	1.59	0.82
1:D:959:SER:HA	1:D:1369:THR:HG21	1.61	0.82
1:D:1047:MET:CG	1:D:1186:ARG:CZ	2.56	0.82
1:D:1184:ASN:HB3	1:D:1185:PRO:CD	2.10	0.82
2:G:406:LEU:HD23	2:G:407:PRO:CD	2.10	0.82
2:H:415:LEU:HG	2:H:432:THR:HG23	1.61	0.82
2:I:71:LEU:HD22	2:I:71:LEU:O	1.79	0.82
2:J:110:ILE:CD1	2:J:118:VAL:HG13	2.10	0.82
2:J:220:VAL:HG23	8:J:484:FAD:H62A	1.41	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:430:LYS:HD3	2:J:460:ALA:HB2	1.62	0.82
2:L:132:TRP:HA	2:L:202:ARG:NH1	1.94	0.82
2:L:201:GLU:HG3	2:L:205:LYS:HE2	1.62	0.82
2:L:321:ARG:HD3	2:L:322:ARG:N	1.95	0.82
1:A:746:ILE:HG23	1:A:1182:ASP:HB3	1.58	0.81
1:B:1047:MET:CG	1:B:1186:ARG:CZ	2.56	0.81
1:B:1263:HIS:CE1	1:D:900:GLY:HA2	2.09	0.81
1:B:1370:GLY:N	1:B:1389:GLY:O	2.12	0.81
1:C:1388:THR:O	1:C:1388:THR:CG2	2.27	0.81
1:C:1391:MET:HE2	1:C:1458:VAL:CG2	2.02	0.81
2:G:43:GLN:NE2	2:G:119:THR:HG23	1.95	0.81
2:H:186:LEU:CD2	2:H:195:LEU:HD21	2.04	0.81
2:L:93:ILE:CD1	2:L:195:LEU:HD22	2.09	0.81
1:B:782:ARG:CD	2:G:53:PRO:HD2	1.99	0.81
1:B:1062:ARG:O	1:B:1062:ARG:CG	2.26	0.81
1:B:1349:ARG:NH1	1:B:1349:ARG:CG	2.34	0.81
1:B:1388:THR:CG2	1:B:1388:THR:O	2.29	0.81
1:C:235:ASN:HD22	1:C:235:ASN:C	1.80	0.81
1:E:139:VAL:CG1	1:E:140:SER:H	1.90	0.81
1:E:1388:THR:CG2	1:E:1388:THR:O	2.27	0.81
1:E:1391:MET:CE	1:E:1458:VAL:CG2	2.56	0.81
1:F:240:ASN:HD21	1:F:327:TRP:HA	1.45	0.81
1:F:783:LYS:HE2	2:I:57:VAL:HG12	1.60	0.81
1:F:974:ILE:HD11	1:F:983:LEU:HD12	1.62	0.81
2:G:200:VAL:HA	2:G:203:ARG:CD	2.11	0.81
2:H:365:VAL:HG22	2:H:366:ARG:HG3	1.62	0.81
2:I:141:THR:HB	2:I:142:PRO:HD2	1.61	0.81
2:L:322:ARG:HA	2:L:349:ALA:O	1.80	0.81
2:L:383:ILE:HD12	2:L:386:SER:H	1.44	0.81
1:A:397:SER:HB2	1:A:399:LYS:HG3	1.61	0.81
1:A:746:ILE:HG21	1:A:1182:ASP:N	1.94	0.81
1:A:932:VAL:O	1:A:933:ALA:HB2	1.78	0.81
1:B:52:GLN:HE22	1:B:71:LEU:HB2	1.42	0.81
1:B:240:ASN:HD21	1:B:327:TRP:HA	1.45	0.81
1:C:266:VAL:O	1:C:279:THR:CG2	2.28	0.81
1:C:364:ILE:HD12	1:C:374:ILE:HD11	1.60	0.81
1:C:447:LEU:HD12	1:C:451:GLN:HG3	1.62	0.81
1:C:1391:MET:CE	1:C:1458:VAL:CG2	2.56	0.81
1:D:1263:HIS:CE1	1:F:900:GLY:HA2	2.09	0.81
1:E:584:ASP:OD1	1:E:584:ASP:N	2.04	0.81
1:E:937:LYS:HE3	1:E:1033:SER:HB2	1.59	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1471:HIS:O	1:F:1472:LEU:HB2	1.80	0.81
2:G:322:ARG:HA	2:G:349:ALA:O	1.80	0.81
2:H:93:ILE:CD1	2:H:195:LEU:HD22	2.09	0.81
2:I:43:GLN:HE22	2:I:119:THR:HG23	1.45	0.81
2:I:200:VAL:HA	2:I:203:ARG:CD	2.11	0.81
2:I:201:GLU:HG3	2:I:205:LYS:HE2	1.62	0.81
2:I:322:ARG:HA	2:I:349:ALA:O	1.80	0.81
2:J:71:LEU:HD22	2:J:71:LEU:O	1.79	0.81
2:J:200:VAL:HA	2:J:203:ARG:CD	2.11	0.81
2:K:153:ILE:CG2	2:K:238:VAL:HA	2.09	0.81
2:K:322:ARG:HA	2:K:349:ALA:O	1.80	0.81
2:L:43:GLN:NE2	2:L:119:THR:HG23	1.95	0.81
1:A:434:SER:OG	1:A:438:GLU:OE2	1.97	0.81
1:B:1184:ASN:HB3	1:B:1185:PRO:CD	2.10	0.81
1:D:1317:THR:CG2	1:D:1318:ASN:N	2.44	0.81
1:E:113:ASN:ND2	1:E:113:ASN:C	2.26	0.81
2:H:321:ARG:HD3	2:H:322:ARG:N	1.95	0.81
2:H:429:THR:HG21	2:H:431:MET:HE1	1.63	0.81
2:I:93:ILE:CD1	2:I:195:LEU:HD22	2.09	0.81
2:I:110:ILE:CD1	2:I:118:VAL:HG13	2.10	0.81
2:I:132:TRP:HA	2:I:202:ARG:NH1	1.94	0.81
2:I:319:LEU:HB2	2:I:345:ILE:HD11	1.62	0.81
1:A:430:VAL:CG1	1:A:554:GLU:HB2	2.08	0.81
1:A:531:ASN:OD1	1:A:533:LEU:HB2	1.81	0.81
1:A:950:THR:HG22	1:A:952:MET:N	1.95	0.81
1:B:974:ILE:HD11	1:B:983:LEU:HD12	1.62	0.81
1:D:240:ASN:HD21	1:D:327:TRP:HA	1.45	0.81
1:D:815:GLU:HA	1:D:815:GLU:OE1	1.80	0.81
1:D:1388:THR:CG2	1:D:1388:THR:O	2.29	0.81
1:E:950:THR:HG22	1:E:952:MET:H	1.42	0.81
1:F:866:GLU:OE2	1:F:1125:ARG:NH2	2.14	0.81
2:H:141:THR:HB	2:H:142:PRO:HD2	1.61	0.81
2:J:321:ARG:HD3	2:J:322:ARG:N	1.95	0.81
1:A:447:LEU:HD12	1:A:451:GLN:HG3	1.62	0.81
1:B:782:ARG:CZ	2:G:51:GLY:CA	1.75	0.81
1:C:452:GLN:NE2	1:C:764:THR:CG2	2.42	0.81
1:D:417:ASP:O	1:D:418:LYS:C	2.13	0.81
1:D:1438:ARG:NE	2:I:376:GLY:O	2.13	0.81
1:E:531:ASN:OD1	1:E:533:LEU:HB2	1.81	0.81
1:F:1388:THR:CG2	1:F:1388:THR:O	2.29	0.81
2:I:220:VAL:HG23	8:I:484:FAD:H62A	1.41	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:93:ILE:CD1	2:J:195:LEU:HD22	2.09	0.81
2:J:322:ARG:HD3	2:J:349:ALA:O	1.81	0.81
2:L:319:LEU:HB2	2:L:345:ILE:HD11	1.62	0.81
1:E:290:THR:HG22	1:E:291:ALA:N	1.95	0.81
1:F:430:VAL:HG11	1:F:554:GLU:HB2	1.61	0.81
2:G:141:THR:HB	2:G:142:PRO:HD2	1.61	0.81
2:H:43:GLN:HE22	2:H:119:THR:HG23	1.45	0.81
2:I:322:ARG:HD3	2:I:349:ALA:O	1.81	0.81
2:K:43:GLN:NE2	2:K:119:THR:HG23	1.95	0.81
2:K:110:ILE:CD1	2:K:118:VAL:HG13	2.10	0.81
2:L:322:ARG:HD3	2:L:349:ALA:O	1.81	0.81
1:C:526:LEU:HD12	1:C:526:LEU:H	1.44	0.81
1:F:1438:ARG:NE	2:G:376:GLY:O	2.13	0.81
2:H:43:GLN:NE2	2:H:119:THR:HG23	1.95	0.81
2:H:153:ILE:CG2	2:H:238:VAL:HA	2.09	0.81
2:I:321:ARG:HD3	2:I:322:ARG:N	1.95	0.81
2:J:267:THR:HG21	2:J:286:ASN:ND2	1.96	0.81
2:J:418:THR:HB	2:J:424:LEU:CD1	2.11	0.81
1:A:1376:LEU:HB3	1:A:1439:PHE:HE1	1.45	0.81
1:B:182:MET:HE2	1:B:217:PRO:CB	1.80	0.81
1:C:531:ASN:OD1	1:C:533:LEU:HB2	1.81	0.81
1:C:950:THR:HG22	1:C:952:MET:N	1.95	0.81
1:D:430:VAL:HG11	1:D:554:GLU:HB2	1.61	0.81
1:D:746:ILE:C	1:D:747:SER:O	2.16	0.81
1:E:537:GLU:HG3	1:E:538:THR:N	1.92	0.81
2:G:201:GLU:HG3	2:G:205:LYS:HE2	1.62	0.81
2:H:267:THR:HG21	2:H:286:ASN:ND2	1.96	0.81
1:A:746:ILE:CG2	1:A:1182:ASP:N	2.43	0.81
1:F:734:LEU:HD12	1:F:738:HIS:HD2	1.43	0.81
2:G:322:ARG:HD3	2:G:349:ALA:O	1.81	0.81
2:G:365:VAL:HG22	2:G:366:ARG:HG3	1.62	0.81
2:H:201:GLU:HG3	2:H:205:LYS:HE2	1.62	0.81
2:K:267:THR:HG21	2:K:286:ASN:ND2	1.96	0.81
1:A:526:LEU:HD12	1:A:526:LEU:H	1.44	0.80
1:A:1322:ILE:HG23	1:A:1323:ILE:HG23	1.63	0.80
1:C:295:LYS:HZ3	1:C:299:VAL:HG12	1.46	0.80
1:C:405:GLU:H	1:C:405:GLU:CD	1.81	0.80
1:D:299:VAL:O	1:D:299:VAL:CG1	2.28	0.80
1:D:302:ALA:HA	1:D:347:ARG:HH12	1.46	0.80
1:E:317:ILE:HG22	1:E:321:ASN:HD21	1.47	0.80
1:E:405:GLU:H	1:E:405:GLU:CD	1.81	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1376:LEU:HB3	1:E:1439:PHE:HE1	1.45	0.80
2:G:383:ILE:HD12	2:G:386:SER:H	1.44	0.80
2:H:418:THR:HB	2:H:424:LEU:CD1	2.11	0.80
2:I:267:THR:HG21	2:I:286:ASN:ND2	1.96	0.80
2:I:430:LYS:HD3	2:I:460:ALA:HB2	1.62	0.80
2:J:406:LEU:HD23	2:J:407:PRO:CD	2.10	0.80
2:L:43:GLN:HE22	2:L:119:THR:HG23	1.45	0.80
2:L:200:VAL:HA	2:L:203:ARG:CD	2.10	0.80
1:A:405:GLU:H	1:A:405:GLU:CD	1.81	0.80
1:A:973:ASP:OD2	1:A:1298:LYS:HE3	1.81	0.80
1:B:253:HIS:CD2	1:B:254:PRO:HD2	2.14	0.80
1:B:900:GLY:HA2	1:F:1263:HIS:CE1	2.09	0.80
1:E:1322:ILE:HG23	1:E:1323:ILE:HG23	1.63	0.80
1:F:1184:ASN:HB3	1:F:1185:PRO:CD	2.10	0.80
2:J:423:LEU:CD2	2:J:443:ILE:HD13	2.11	0.80
2:K:200:VAL:HA	2:K:203:ARG:CD	2.11	0.80
1:A:317:ILE:HG22	1:A:321:ASN:HD21	1.47	0.80
1:B:447:LEU:HD21	1:B:674:ALA:HA	1.64	0.80
1:C:426:LEU:CD2	1:C:543:LEU:HB3	2.09	0.80
1:E:973:ASP:OD2	1:E:1298:LYS:HE3	1.81	0.80
1:E:1008:THR:CG2	1:E:1009:ILE:N	2.44	0.80
2:G:267:THR:HG21	2:G:286:ASN:ND2	1.96	0.80
2:H:322:ARG:HA	2:H:349:ALA:O	1.80	0.80
2:H:423:LEU:CD2	2:H:443:ILE:HD13	2.11	0.80
2:K:321:ARG:HB2	2:K:351:GLU:HA	1.64	0.80
1:A:290:THR:HG22	1:A:291:ALA:N	1.96	0.80
1:B:218:THR:HG22	1:B:218:THR:O	1.82	0.80
1:C:1184:ASN:HB3	1:C:1185:PRO:CD	2.11	0.80
1:D:734:LEU:HD12	1:D:738:HIS:HD2	1.43	0.80
1:F:302:ALA:HA	1:F:347:ARG:HH12	1.46	0.80
1:F:652:THR:CG2	1:F:703:GLY:CA	2.59	0.80
2:H:200:VAL:HA	2:H:203:ARG:CD	2.10	0.80
2:H:434:MET:HB2	2:H:437:VAL:CG1	2.12	0.80
2:I:429:THR:HG21	2:I:431:MET:CE	2.12	0.80
2:K:406:LEU:HD23	2:K:407:PRO:CD	2.10	0.80
1:A:375:ASP:OD2	1:A:377:THR:CB	2.26	0.80
1:A:959:SER:HA	1:A:1369:THR:HG23	1.62	0.80
1:A:1229:MET:CA	1:E:877:ARG:HG3	2.11	0.80
1:C:230:HIS:HE1	1:C:234:ILE:HG13	1.46	0.80
1:D:242:ASN:ND2	1:D:242:ASN:H	1.79	0.80
1:E:397:SER:HB2	1:E:399:LYS:HG3	1.61	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1062:ARG:O	1:F:1062:ARG:CG	2.26	0.80
2:G:110:ILE:CD1	2:G:118:VAL:HG13	2.10	0.80
2:J:203:ARG:CZ	2:J:203:ARG:HB3	2.11	0.80
2:J:319:LEU:HB2	2:J:345:ILE:HD11	1.62	0.80
2:K:306:ARG:O	2:K:309:ILE:HG12	1.82	0.80
2:K:429:THR:HG21	2:K:431:MET:CE	2.12	0.80
1:A:501:GLN:HE21	1:A:653:HIS:HD2	1.30	0.80
1:A:875:MET:HE2	1:A:1139:PHE:CZ	2.15	0.80
1:B:242:ASN:ND2	1:B:242:ASN:H	1.79	0.80
1:D:652:THR:CG2	1:D:703:GLY:CA	2.59	0.80
1:D:783:LYS:HE2	2:H:57:VAL:HG12	1.60	0.80
1:D:963:VAL:CG1	1:D:964:MET:N	2.45	0.80
1:E:447:LEU:HD12	1:E:451:GLN:HG3	1.62	0.80
2:G:161:ALA:HB2	2:G:454:ILE:HG12	1.64	0.80
2:G:430:LYS:HD3	2:G:460:ALA:HB2	1.62	0.80
2:I:43:GLN:NE2	2:I:119:THR:HG23	1.95	0.80
2:K:201:GLU:HG3	2:K:205:LYS:HE2	1.62	0.80
2:K:418:THR:HB	2:K:424:LEU:CD1	2.11	0.80
2:L:110:ILE:CD1	2:L:118:VAL:HG13	2.10	0.80
1:B:973:ASP:OD2	1:B:1298:LYS:HE3	1.79	0.80
1:C:59:VAL:HG22	1:C:105:TYR:HD2	1.44	0.80
1:C:912:SER:HB2	1:C:968:PRO:HD2	1.62	0.80
1:C:1376:LEU:HB3	1:C:1439:PHE:HE1	1.45	0.80
2:G:69:LEU:HD12	2:G:69:LEU:O	1.82	0.80
2:H:322:ARG:HD3	2:H:349:ALA:O	1.81	0.80
2:H:331:GLN:HA	2:H:334:VAL:CG2	2.12	0.80
2:J:43:GLN:NE2	2:J:119:THR:HG23	1.95	0.80
2:J:322:ARG:HA	2:J:349:ALA:O	1.80	0.80
2:J:383:ILE:HD12	2:J:386:SER:H	1.44	0.80
1:A:912:SER:HB2	1:A:968:PRO:HD2	1.62	0.80
1:C:1322:ILE:HG23	1:C:1323:ILE:HG23	1.63	0.80
1:D:426:LEU:HD11	1:D:558:MET:HG3	1.61	0.80
1:D:1471:HIS:O	1:D:1472:LEU:HB2	1.80	0.80
1:E:454:PHE:CG	1:E:648:GLU:HB2	2.17	0.80
1:E:875:MET:HE2	1:E:1139:PHE:CZ	2.17	0.80
1:E:950:THR:HG22	1:E:952:MET:N	1.95	0.80
1:F:959:SER:HA	1:F:1369:THR:HG21	1.61	0.80
2:G:319:LEU:HB2	2:G:345:ILE:HD11	1.62	0.80
2:H:161:ALA:HB2	2:H:454:ILE:HG12	1.64	0.80
2:J:123:VAL:O	2:J:127:ILE:HG22	1.82	0.80
2:J:141:THR:HB	2:J:142:PRO:HD2	1.61	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:365:VAL:HG22	2:J:366:ARG:HG3	1.62	0.80
2:J:429:THR:HG21	2:J:431:MET:CE	2.12	0.80
1:A:877:ARG:HG3	1:C:1229:MET:CA	2.11	0.80
1:D:974:ILE:HD11	1:D:983:LEU:HD12	1.62	0.80
1:F:582:LEU:H	1:F:755:GLN:HE22	1.30	0.80
1:F:1039:LYS:O	1:F:1040:PHE:HD1	1.63	0.80
2:G:306:ARG:O	2:G:309:ILE:HG12	1.82	0.80
2:I:92:GLU:HB2	2:I:203:ARG:CZ	2.12	0.80
2:J:306:ARG:O	2:J:309:ILE:HG12	1.82	0.80
2:J:450:VAL:HG12	8:J:484:FAD:O2	1.82	0.80
2:K:423:LEU:CD2	2:K:443:ILE:HD13	2.11	0.80
2:L:321:ARG:HB2	2:L:351:GLU:HA	1.64	0.80
1:B:466:HIS:CE1	1:B:684:PHE:CE1	2.70	0.80
1:B:555:PHE:CD1	1:B:555:PHE:C	2.55	0.80
1:B:899:ASN:O	1:F:1263:HIS:ND1	2.15	0.80
1:B:900:GLY:CA	1:F:1263:HIS:NE2	2.17	0.80
1:B:1039:LYS:O	1:B:1040:PHE:HD1	1.63	0.80
1:B:1121:ASP:OD2	1:B:1124:LEU:HB2	1.82	0.80
1:B:1263:HIS:ND1	1:D:899:ASN:O	2.15	0.80
1:D:37:ASP:OD2	1:D:40:THR:HB	1.82	0.80
1:D:235:ASN:HD22	1:D:236:THR:N	1.81	0.80
1:D:824:GLN:O	1:D:827:ASP:HB2	1.81	0.80
1:D:1114:PRO:O	2:H:112:GLN:HA	1.82	0.80
1:E:310:PRO:HG3	1:E:404:ARG:HH22	1.43	0.80
1:F:582:LEU:H	1:F:755:GLN:NE2	1.80	0.80
1:F:1121:ASP:OD2	1:F:1124:LEU:HB2	1.82	0.80
2:H:306:ARG:O	2:H:309:ILE:HG12	1.82	0.80
2:J:92:GLU:HB2	2:J:203:ARG:CZ	2.12	0.80
2:K:319:LEU:HB2	2:K:345:ILE:HD11	1.62	0.80
2:K:322:ARG:HD3	2:K:349:ALA:O	1.81	0.80
2:L:267:THR:HG21	2:L:286:ASN:ND2	1.96	0.80
2:L:365:VAL:HG22	2:L:366:ARG:HG3	1.62	0.80
1:B:582:LEU:H	1:B:755:GLN:HE22	1.30	0.79
1:B:746:ILE:CG2	1:B:1182:ASP:N	2.37	0.79
1:B:815:GLU:OE1	1:B:815:GLU:HA	1.80	0.79
1:B:877:ARG:HG3	1:F:1229:MET:CA	2.03	0.79
1:B:959:SER:HA	1:B:1369:THR:HG21	1.61	0.79
1:D:447:LEU:HD21	1:D:674:ALA:HA	1.64	0.79
1:D:866:GLU:OE2	1:D:1125:ARG:NH2	2.14	0.79
1:D:1131:THR:HB	1:D:1134:LYS:HG3	1.65	0.79
2:G:288:ALA:HB2	2:G:311:GLN:OE1	1.83	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:450:VAL:HG12	8:G:484:FAD:O2	1.82	0.79
2:I:203:ARG:CZ	2:I:203:ARG:HB3	2.11	0.79
2:I:365:VAL:HG22	2:I:366:ARG:HG3	1.62	0.79
2:J:69:LEU:HD12	2:J:69:LEU:O	1.82	0.79
2:L:288:ALA:HB2	2:L:311:GLN:OE1	1.82	0.79
2:L:450:VAL:HG12	8:L:484:FAD:O2	1.81	0.79
1:A:787:ARG:HH12	1:A:821:PRO:HB2	1.47	0.79
1:B:426:LEU:HD11	1:B:558:MET:HG3	1.62	0.79
1:B:963:VAL:CG1	1:B:964:MET:N	2.45	0.79
1:C:746:ILE:CG2	1:C:1182:ASP:N	2.43	0.79
1:C:876:ASN:CB	1:E:1227:GLU:OE1	2.31	0.79
1:D:565:THR:CG2	1:D:602:THR:HB	2.13	0.79
1:D:782:ARG:O	2:H:57:VAL:HG23	1.70	0.79
1:D:1263:HIS:ND1	1:F:899:ASN:O	2.15	0.79
1:E:974:ILE:HD11	1:E:983:LEU:CD1	2.13	0.79
1:E:1184:ASN:HB3	1:E:1185:PRO:CD	2.11	0.79
1:F:466:HIS:CE1	1:F:684:PHE:CE1	2.70	0.79
2:K:69:LEU:HD12	2:K:69:LEU:O	1.82	0.79
2:K:434:MET:HB2	2:K:437:VAL:CG1	2.12	0.79
2:L:394:LEU:HD22	2:L:396:ILE:HD12	1.65	0.79
1:A:1401:LEU:HD12	1:A:1401:LEU:C	2.03	0.79
1:B:37:ASP:OD2	1:B:40:THR:HB	1.82	0.79
1:B:310:PRO:HG3	1:B:404:ARG:HH22	1.45	0.79
1:B:778:PHE:CZ	1:B:1039:LYS:HD2	2.18	0.79
1:C:317:ILE:HG22	1:C:321:ASN:HD21	1.47	0.79
1:E:90:ARG:NH1	1:E:129:GLU:OE1	2.16	0.79
1:F:1131:THR:HB	1:F:1134:LYS:HG3	1.64	0.79
2:H:92:GLU:HB2	2:H:203:ARG:CZ	2.12	0.79
2:H:375:THR:HG22	2:H:377:ARG:H	1.47	0.79
2:H:450:VAL:HG12	8:H:484:FAD:O2	1.81	0.79
2:I:406:LEU:HD23	2:I:407:PRO:CD	2.10	0.79
2:K:288:ALA:HB2	2:K:311:GLN:OE1	1.83	0.79
2:L:92:GLU:HB2	2:L:203:ARG:CZ	2.12	0.79
2:L:375:THR:HG22	2:L:377:ARG:H	1.47	0.79
1:A:1008:THR:CG2	1:A:1009:ILE:N	2.44	0.79
1:A:1227:GLU:OE1	1:E:876:ASN:CB	2.31	0.79
1:B:1114:PRO:O	2:G:112:GLN:HA	1.82	0.79
1:B:1317:THR:CG2	1:B:1318:ASN:N	2.44	0.79
1:B:1471:HIS:O	1:B:1472:LEU:HB2	1.80	0.79
1:C:454:PHE:CG	1:C:648:GLU:HB2	2.17	0.79
1:C:973:ASP:OD2	1:C:1298:LYS:HE3	1.82	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1008:THR:CG2	1:C:1009:ILE:N	2.44	0.79
1:C:1401:LEU:HD12	1:C:1401:LEU:C	2.03	0.79
1:D:710:LYS:CG	1:D:939:GLY:HA3	2.10	0.79
1:F:815:GLU:OE1	1:F:815:GLU:HA	1.80	0.79
2:G:43:GLN:HE22	2:G:119:THR:HG23	1.45	0.79
2:G:203:ARG:HB3	2:G:203:ARG:CZ	2.11	0.79
2:G:429:THR:HG21	2:G:431:MET:CE	2.12	0.79
2:I:123:VAL:O	2:I:127:ILE:HG22	1.82	0.79
2:I:288:ALA:HB2	2:I:311:GLN:OE1	1.83	0.79
2:L:430:LYS:HD3	2:L:460:ALA:HB2	1.62	0.79
2:L:434:MET:HB2	2:L:437:VAL:CG1	2.12	0.79
1:A:230:HIS:HE1	1:A:234:ILE:HG13	1.46	0.79
1:A:515:ARG:HD2	1:A:1367:TYR:HE1	1.46	0.79
1:B:302:ALA:HA	1:B:347:ARG:HH12	1.46	0.79
1:C:959:SER:HA	1:C:1369:THR:HG23	1.63	0.79
1:F:565:THR:CG2	1:F:602:THR:HB	2.13	0.79
2:G:375:THR:HG22	2:G:377:ARG:H	1.47	0.79
2:G:394:LEU:HD22	2:G:396:ILE:HD12	1.65	0.79
2:H:123:VAL:O	2:H:127:ILE:HG22	1.82	0.79
2:H:429:THR:HG21	2:H:431:MET:CE	2.12	0.79
2:I:375:THR:HG22	2:I:377:ARG:H	1.47	0.79
2:K:203:ARG:HB3	2:K:203:ARG:CZ	2.11	0.79
2:L:153:ILE:CD1	8:L:484:FAD:C2A	2.61	0.79
2:L:203:ARG:CZ	2:L:203:ARG:HB3	2.11	0.79
2:L:429:THR:HG21	2:L:431:MET:CE	2.12	0.79
1:A:139:VAL:CG1	1:A:140:SER:H	1.90	0.79
1:D:582:LEU:H	1:D:755:GLN:NE2	1.80	0.79
1:D:1047:MET:HG2	1:D:1186:ARG:NH1	1.97	0.79
1:D:1121:ASP:OD2	1:D:1124:LEU:HB2	1.82	0.79
1:F:778:PHE:CZ	1:F:1039:LYS:HD2	2.18	0.79
2:G:92:GLU:HB2	2:G:203:ARG:CZ	2.12	0.79
2:I:394:LEU:HD22	2:I:396:ILE:HD12	1.65	0.79
2:J:321:ARG:HB2	2:J:351:GLU:CG	2.13	0.79
2:J:331:GLN:HA	2:J:334:VAL:CG2	2.12	0.79
2:J:375:THR:HG22	2:J:377:ARG:H	1.47	0.79
2:L:69:LEU:O	2:L:69:LEU:HD12	1.82	0.79
2:L:465:HIS:O	2:L:469:LYS:HG2	1.83	0.79
1:A:930:ILE:HD13	1:A:983:LEU:HD13	1.65	0.79
1:C:1114:PRO:HA	2:K:112:GLN:C	1.74	0.79
1:D:466:HIS:CE1	1:D:684:PHE:CE1	2.70	0.79
1:D:555:PHE:C	1:D:555:PHE:CD1	2.55	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:230:HIS:HE1	1:E:234:ILE:HG13	1.45	0.79
1:E:959:SER:HA	1:E:1369:THR:HG23	1.62	0.79
1:F:37:ASP:OD2	1:F:40:THR:HB	1.82	0.79
2:I:450:VAL:HG12	8:I:484:FAD:O2	1.81	0.79
2:K:321:ARG:HB2	2:K:351:GLU:CG	2.13	0.79
1:A:47:HIS:CE1	1:A:176:SER:HB3	2.18	0.79
1:A:580:GLU:O	1:A:584:ASP:OD1	2.01	0.79
1:B:565:THR:CG2	1:B:602:THR:HB	2.12	0.79
1:B:1318:ASN:H	1:B:1318:ASN:HD22	1.30	0.79
1:C:139:VAL:CG1	1:C:140:SER:H	1.90	0.79
1:D:310:PRO:HG3	1:D:404:ARG:HH22	1.45	0.79
1:E:501:GLN:HE21	1:E:653:HIS:HD2	1.30	0.79
1:E:1401:LEU:HD12	1:E:1401:LEU:C	2.03	0.79
1:F:1114:PRO:O	2:I:112:GLN:HA	1.82	0.79
2:H:288:ALA:HB2	2:H:311:GLN:OE1	1.82	0.79
2:H:321:ARG:HB2	2:H:351:GLU:HA	1.64	0.79
2:I:71:LEU:HD21	2:I:76:ARG:CB	2.12	0.79
2:J:92:GLU:OE1	2:J:199:VAL:HG22	1.83	0.79
2:J:161:ALA:HB2	2:J:454:ILE:HG12	1.64	0.79
1:A:182:MET:HE3	1:A:217:PRO:HB3	1.60	0.79
1:A:1290:GLY:O	1:A:1291:ASP:HB3	1.82	0.79
1:B:582:LEU:H	1:B:755:GLN:NE2	1.80	0.79
1:E:526:LEU:HD12	1:E:526:LEU:H	1.44	0.79
1:F:447:LEU:HD21	1:F:674:ALA:HA	1.64	0.79
1:F:746:ILE:CG2	1:F:1182:ASP:N	2.37	0.79
2:G:92:GLU:OE1	2:G:199:VAL:HG22	1.83	0.79
2:G:321:ARG:HB2	2:G:351:GLU:CG	2.13	0.79
2:I:434:MET:HB2	2:I:437:VAL:CG1	2.12	0.79
2:J:71:LEU:HD21	2:J:76:ARG:CB	2.12	0.79
2:K:153:ILE:CD1	8:K:484:FAD:C2A	2.61	0.79
2:K:161:ALA:HB2	2:K:454:ILE:HG12	1.64	0.79
2:K:429:THR:HG21	2:K:431:MET:HE1	1.65	0.79
2:L:71:LEU:CD2	2:L:76:ARG:HB2	2.13	0.79
1:A:551:THR:OG1	1:A:554:GLU:HG2	1.83	0.79
1:B:1131:THR:HB	1:B:1134:LYS:HG3	1.65	0.79
1:B:1227:GLU:HA	1:D:900:GLY:O	1.83	0.79
1:D:582:LEU:H	1:D:755:GLN:HE22	1.30	0.79
1:E:515:ARG:CD	1:E:1367:TYR:HE1	1.96	0.79
1:F:1047:MET:HG2	1:F:1186:ARG:NH1	1.97	0.79
2:G:123:VAL:O	2:G:127:ILE:HG22	1.82	0.79
2:H:319:LEU:HB2	2:H:345:ILE:HD11	1.62	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:153:ILE:CD1	8:I:484:FAD:C2A	2.61	0.79
2:K:71:LEU:CD2	2:K:76:ARG:HB2	2.13	0.79
2:K:92:GLU:HB2	2:K:203:ARG:CZ	2.12	0.79
1:B:235:ASN:HD22	1:B:236:THR:N	1.81	0.78
1:B:982:GLN:HE22	1:B:1240:ARG:HD2	1.48	0.78
1:C:47:HIS:CE1	1:C:176:SER:HB3	2.17	0.78
1:C:930:ILE:HD13	1:C:983:LEU:HD13	1.65	0.78
1:D:982:GLN:HE22	1:D:1240:ARG:HD2	1.48	0.78
1:E:1438:ARG:HB3	2:K:376:GLY:N	1.84	0.78
1:F:824:GLN:O	1:F:827:ASP:HB2	1.82	0.78
1:F:963:VAL:CG1	1:F:964:MET:N	2.45	0.78
1:F:1318:ASN:H	1:F:1318:ASN:HD22	1.30	0.78
2:H:71:LEU:HD21	2:H:76:ARG:CB	2.12	0.78
2:I:71:LEU:CD2	2:I:76:ARG:HB2	2.13	0.78
2:I:321:ARG:HB2	2:I:351:GLU:HA	1.64	0.78
2:I:351:GLU:N	2:I:372:ALA:HB3	1.99	0.78
1:A:113:ASN:HD21	1:A:115:ASP:H	1.31	0.78
1:A:974:ILE:HD11	1:A:983:LEU:CD1	2.13	0.78
1:A:1401:LEU:CD1	1:A:1405:ILE:HB	2.13	0.78
1:B:266:VAL:HG12	1:B:279:THR:CG2	2.14	0.78
1:B:900:GLY:O	1:F:1227:GLU:HA	1.83	0.78
1:E:47:HIS:CE1	1:E:176:SER:HB3	2.18	0.78
1:F:430:VAL:CG1	1:F:554:GLU:HB3	2.02	0.78
1:F:950:THR:CG2	1:F:952:MET:H	1.97	0.78
2:G:153:ILE:CD1	8:G:484:FAD:C2A	2.61	0.78
2:J:434:MET:HB2	2:J:437:VAL:CG1	2.12	0.78
2:K:349:ALA:HB3	2:K:350:PRO:HD3	1.66	0.78
2:K:450:VAL:HG12	8:K:484:FAD:O2	1.81	0.78
1:A:454:PHE:CG	1:A:648:GLU:HB2	2.17	0.78
1:C:310:PRO:HG3	1:C:404:ARG:HH22	1.43	0.78
1:C:580:GLU:O	1:C:584:ASP:OD1	2.01	0.78
1:E:704:LEU:O	1:E:705:LEU:C	2.20	0.78
1:E:746:ILE:CG2	1:E:1182:ASP:N	2.43	0.78
1:F:1317:THR:CG2	1:F:1318:ASN:N	2.44	0.78
2:G:418:THR:HB	2:G:424:LEU:CD1	2.11	0.78
2:H:92:GLU:OE1	2:H:199:VAL:HG22	1.83	0.78
2:H:351:GLU:N	2:H:372:ALA:HB3	1.99	0.78
2:I:306:ARG:O	2:I:309:ILE:HG12	1.82	0.78
2:K:331:GLN:HA	2:K:334:VAL:CG2	2.12	0.78
2:L:71:LEU:HD21	2:L:76:ARG:CB	2.12	0.78
1:A:450:ARG:O	1:A:452:GLN:N	2.17	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:876:ASN:CB	1:C:1227:GLU:OE1	2.31	0.78
1:A:1043:LEU:HD23	1:A:1044:PRO:HD2	1.66	0.78
1:B:260:MET:O	1:B:263:LEU:HB2	1.84	0.78
1:B:824:GLN:O	1:B:827:ASP:HB2	1.82	0.78
1:D:218:THR:HG22	1:D:218:THR:O	1.82	0.78
1:D:522:LEU:HD21	1:D:705:LEU:CD2	2.14	0.78
1:D:778:PHE:CZ	1:D:1039:LYS:HD2	2.18	0.78
1:E:447:LEU:HD21	1:E:674:ALA:CA	2.13	0.78
1:F:242:ASN:ND2	1:F:242:ASN:H	1.79	0.78
1:F:1449:ARG:CB	1:F:1449:ARG:NH1	1.80	0.78
2:G:71:LEU:HG	2:G:79:GLU:CB	2.14	0.78
2:G:465:HIS:O	2:G:469:LYS:HG2	1.83	0.78
2:H:71:LEU:CD2	2:H:76:ARG:HB2	2.13	0.78
2:H:406:LEU:HD23	2:H:407:PRO:CD	2.10	0.78
2:J:349:ALA:HB3	2:J:350:PRO:HD3	1.66	0.78
2:J:351:GLU:N	2:J:372:ALA:HB3	1.99	0.78
1:B:531:ASN:OD1	1:B:533:LEU:HB2	1.83	0.78
1:C:182:MET:HE3	1:C:217:PRO:HB2	0.99	0.78
1:C:290:THR:HG22	1:C:291:ALA:N	1.96	0.78
1:D:260:MET:O	1:D:263:LEU:HB2	1.84	0.78
1:E:450:ARG:O	1:E:452:GLN:N	2.17	0.78
1:F:235:ASN:HD22	1:F:236:THR:N	1.81	0.78
1:F:266:VAL:HG12	1:F:279:THR:CG2	2.14	0.78
1:F:982:GLN:HE22	1:F:1240:ARG:HD2	1.48	0.78
2:G:321:ARG:HB2	2:G:351:GLU:HA	1.64	0.78
2:G:331:GLN:HA	2:G:334:VAL:CG2	2.12	0.78
2:I:92:GLU:OE1	2:I:199:VAL:HG22	1.83	0.78
2:I:465:HIS:O	2:I:469:LYS:HG2	1.83	0.78
2:J:394:LEU:HD22	2:J:396:ILE:HD12	1.65	0.78
2:K:43:GLN:HE22	2:K:119:THR:HG23	1.45	0.78
2:K:351:GLU:N	2:K:372:ALA:HB3	1.99	0.78
2:L:123:VAL:O	2:L:127:ILE:HG22	1.82	0.78
2:L:306:ARG:O	2:L:309:ILE:HG12	1.82	0.78
2:L:331:GLN:HA	2:L:334:VAL:CG2	2.12	0.78
1:A:90:ARG:NH1	1:A:129:GLU:OE1	2.16	0.78
1:B:1047:MET:HG2	1:B:1186:ARG:NH1	1.97	0.78
1:C:253:HIS:CG	1:C:254:PRO:CD	2.52	0.78
1:C:501:GLN:HE21	1:C:653:HIS:HD2	1.30	0.78
1:C:1401:LEU:CD1	1:C:1405:ILE:HB	2.13	0.78
1:D:266:VAL:HG12	1:D:279:THR:CG2	2.14	0.78
1:D:746:ILE:CG2	1:D:1182:ASP:N	2.37	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1401:LEU:CD1	1:E:1405:ILE:HB	2.13	0.78
1:F:782:ARG:O	2:I:57:VAL:HG21	1.84	0.78
2:G:434:MET:HB2	2:G:437:VAL:CG1	2.12	0.78
2:H:69:LEU:O	2:H:69:LEU:HD12	1.82	0.78
2:H:349:ALA:HB3	2:H:350:PRO:HD3	1.66	0.78
2:I:321:ARG:HB2	2:I:351:GLU:CG	2.13	0.78
2:L:161:ALA:HB2	2:L:454:ILE:HG12	1.64	0.78
1:B:866:GLU:OE2	1:B:1125:ARG:NH2	2.14	0.78
1:C:528:ASN:HB3	1:C:542:LEU:HD22	1.66	0.78
1:C:877:ARG:HG3	1:E:1229:MET:CA	2.11	0.78
1:E:113:ASN:HD21	1:E:115:ASP:H	1.31	0.78
1:E:746:ILE:HG21	1:E:1182:ASP:N	1.94	0.78
1:F:310:PRO:HG3	1:F:404:ARG:HH22	1.45	0.78
1:F:531:ASN:OD1	1:F:533:LEU:HB2	1.83	0.78
2:G:321:ARG:CA	2:G:351:GLU:HA	2.14	0.78
2:J:71:LEU:CD2	2:J:76:ARG:HB2	2.13	0.78
1:A:447:LEU:HD13	1:A:670:LEU:HD21	1.65	0.78
1:B:746:ILE:O	1:B:747:SER:C	2.22	0.78
1:C:1043:LEU:HD23	1:C:1044:PRO:HD2	1.66	0.78
1:E:551:THR:OG1	1:E:554:GLU:HG2	1.83	0.78
2:G:71:LEU:CD2	2:G:76:ARG:HB2	2.13	0.78
2:G:349:ALA:HB3	2:G:350:PRO:HD3	1.66	0.78
2:H:321:ARG:HB2	2:H:351:GLU:CG	2.13	0.78
2:I:317:LYS:CG	2:I:345:ILE:HD12	2.14	0.78
2:I:331:GLN:HA	2:I:334:VAL:CG2	2.12	0.78
2:K:317:LYS:CG	2:K:345:ILE:HD12	2.14	0.78
2:L:92:GLU:OE1	2:L:199:VAL:HG22	1.83	0.78
2:L:321:ARG:HB2	2:L:351:GLU:CG	2.13	0.78
1:B:652:THR:CG2	1:B:703:GLY:CA	2.59	0.78
1:C:90:ARG:NH1	1:C:129:GLU:OE1	2.16	0.78
1:E:930:ILE:HD13	1:E:983:LEU:HD13	1.65	0.78
1:F:218:THR:HG22	1:F:218:THR:O	1.82	0.78
2:G:71:LEU:HD21	2:G:76:ARG:CB	2.12	0.78
2:G:317:LYS:CG	2:G:345:ILE:HD12	2.14	0.78
2:H:203:ARG:CZ	2:H:203:ARG:HB3	2.11	0.78
2:H:465:HIS:O	2:H:469:LYS:HG2	1.83	0.78
2:K:152:VAL:CG1	2:K:175:VAL:HA	2.12	0.78
2:K:375:THR:HG22	2:K:377:ARG:H	1.47	0.78
2:L:144:ARG:HB3	2:L:169:LYS:O	1.84	0.78
2:L:351:GLU:N	2:L:372:ALA:HB3	1.99	0.78
1:C:213:THR:HB	1:C:1008:THR:HG23	1.66	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:450:ARG:O	1:C:452:GLN:N	2.17	0.78
1:C:551:THR:OG1	1:C:554:GLU:HG2	1.83	0.78
1:D:950:THR:CG2	1:D:952:MET:H	1.96	0.78
1:E:580:GLU:O	1:E:584:ASP:OD1	2.01	0.78
2:I:161:ALA:HB2	2:I:454:ILE:HG12	1.64	0.78
2:K:394:LEU:HD22	2:K:396:ILE:HD12	1.65	0.78
1:B:522:LEU:HD21	1:B:705:LEU:CD2	2.14	0.77
1:C:1290:GLY:O	1:C:1291:ASP:HB3	1.82	0.77
1:D:584:ASP:OD1	1:D:584:ASP:N	2.14	0.77
1:D:782:ARG:O	2:H:57:VAL:HG21	1.84	0.77
1:E:875:MET:HE1	1:E:1139:PHE:HE2	1.34	0.77
2:G:353:PHE:C	2:G:369:LEU:HD23	2.05	0.77
2:I:71:LEU:HG	2:I:79:GLU:CB	2.13	0.77
2:J:71:LEU:HG	2:J:79:GLU:CB	2.14	0.77
2:J:225:SER:CB	2:J:227:PRO:HD2	2.14	0.77
2:K:71:LEU:HD21	2:K:76:ARG:CB	2.12	0.77
1:B:572:THR:CG2	1:B:573:PHE:N	2.47	0.77
1:B:584:ASP:OD1	1:B:584:ASP:N	2.14	0.77
1:B:782:ARG:O	2:G:57:VAL:HG21	1.84	0.77
1:C:236:THR:CG2	1:C:328:ASP:N	2.45	0.77
1:C:447:LEU:HD21	1:C:674:ALA:CA	2.13	0.77
1:C:447:LEU:HD13	1:C:670:LEU:HD21	1.65	0.77
1:C:595:ASP:O	1:C:596:ALA:C	2.20	0.77
1:D:1131:THR:HG22	1:D:1134:LYS:H	1.49	0.77
1:E:1395:TYR:CE1	1:E:1397:LEU:HD21	2.20	0.77
1:F:522:LEU:HD21	1:F:705:LEU:CD2	2.14	0.77
2:G:144:ARG:HB3	2:G:169:LYS:O	1.84	0.77
2:G:319:LEU:CA	2:G:345:ILE:HD11	2.15	0.77
2:G:351:GLU:N	2:G:372:ALA:HB3	1.99	0.77
2:I:225:SER:CB	2:I:227:PRO:HD2	2.14	0.77
2:J:288:ALA:HB2	2:J:311:GLN:OE1	1.83	0.77
2:K:123:VAL:O	2:K:127:ILE:HG22	1.82	0.77
1:A:24:ALA:HB1	1:A:207:TYR:CE2	2.19	0.77
1:A:528:ASN:HB3	1:A:542:LEU:HD22	1.66	0.77
1:C:704:LEU:O	1:C:705:LEU:C	2.20	0.77
1:E:595:ASP:O	1:E:596:ALA:C	2.20	0.77
1:E:890:ASP:O	1:E:893:ARG:HB2	1.84	0.77
1:F:555:PHE:CD1	1:F:555:PHE:C	2.55	0.77
1:F:746:ILE:O	1:F:747:SER:C	2.22	0.77
2:G:164:GLU:OE1	2:G:207:LEU:HA	1.85	0.77
2:H:317:LYS:CG	2:H:345:ILE:HD12	2.14	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:317:LYS:HE3	2:I:345:ILE:CG2	2.15	0.77
2:J:317:LYS:HE3	2:J:345:ILE:CG2	2.15	0.77
2:J:353:PHE:C	2:J:369:LEU:HD23	2.05	0.77
1:A:177:ILE:HD13	1:A:179:TYR:HE1	1.49	0.77
1:B:1263:HIS:CE1	1:D:900:GLY:N	2.20	0.77
2:H:164:GLU:OE1	2:H:207:LEU:HA	1.85	0.77
2:H:394:LEU:HD22	2:H:396:ILE:HD12	1.65	0.77
2:I:353:PHE:CZ	2:I:370:GLY:HA3	2.19	0.77
2:J:430:LYS:HD2	2:J:456:ASP:O	1.85	0.77
2:K:353:PHE:CZ	2:K:370:GLY:HA3	2.19	0.77
1:A:1114:PRO:HA	2:J:112:GLN:C	1.74	0.77
1:B:249:THR:HG22	1:B:250:ARG:HG2	1.67	0.77
1:C:787:ARG:HH12	1:C:821:PRO:HB2	1.47	0.77
1:D:1039:LYS:O	1:D:1040:PHE:HD1	1.63	0.77
2:G:181:ARG:CG	2:G:187:VAL:HG11	2.15	0.77
2:I:69:LEU:O	2:I:69:LEU:HD12	1.82	0.77
2:I:353:PHE:C	2:I:369:LEU:HD23	2.05	0.77
2:J:164:GLU:OE1	2:J:207:LEU:HA	1.85	0.77
2:K:182:MET:HE2	2:K:216:PRO:HG3	1.66	0.77
2:K:465:HIS:O	2:K:469:LYS:HG2	1.83	0.77
2:L:317:LYS:HE3	2:L:345:ILE:CG2	2.15	0.77
2:L:353:PHE:C	2:L:369:LEU:HD23	2.05	0.77
2:L:418:THR:HB	2:L:424:LEU:CD1	2.11	0.77
2:L:423:LEU:CD2	2:L:443:ILE:HD13	2.11	0.77
1:A:1184:ASN:HB3	1:A:1185:PRO:CD	2.11	0.77
1:B:985:TYR:HE1	1:B:1207:VAL:HG13	1.50	0.77
1:D:746:ILE:O	1:D:747:SER:C	2.22	0.77
1:D:826:ARG:HG2	1:D:826:ARG:NH1	1.99	0.77
1:F:249:THR:HG22	1:F:250:ARG:HG2	1.67	0.77
1:F:580:GLU:O	1:F:584:ASP:OD1	2.03	0.77
2:G:321:ARG:CB	2:G:351:GLU:HG2	2.15	0.77
2:H:144:ARG:HB3	2:H:169:LYS:O	1.84	0.77
2:I:321:ARG:CB	2:I:351:GLU:HG2	2.15	0.77
2:I:349:ALA:HB3	2:I:350:PRO:HD3	1.66	0.77
2:J:144:ARG:HB3	2:J:169:LYS:O	1.84	0.77
2:J:465:HIS:O	2:J:469:LYS:HG2	1.83	0.77
2:L:164:GLU:OE1	2:L:207:LEU:HA	1.85	0.77
2:L:317:LYS:CG	2:L:345:ILE:HD12	2.14	0.77
2:L:430:LYS:HD2	2:L:456:ASP:O	1.85	0.77
1:A:447:LEU:HD21	1:A:674:ALA:CA	2.13	0.77
1:A:1228:LYS:HB3	1:E:901:ASP:OD1	1.85	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1395:TYR:CE1	1:A:1397:LEU:HD21	2.20	0.77
1:D:1227:GLU:HA	1:F:900:GLY:O	1.83	0.77
1:E:782:ARG:NE	2:L:53:PRO:HD3	2.00	0.77
1:E:1317:THR:HG22	1:E:1318:ASN:N	2.00	0.77
2:H:353:PHE:C	2:H:369:LEU:HD23	2.05	0.77
2:I:430:LYS:HD2	2:I:456:ASP:O	1.85	0.77
2:J:321:ARG:HB2	2:J:351:GLU:HA	1.64	0.77
2:J:350:PRO:HD2	2:J:374:ALA:N	2.00	0.77
2:K:71:LEU:HG	2:K:79:GLU:CB	2.13	0.77
2:K:92:GLU:OE1	2:K:199:VAL:HG22	1.83	0.77
2:K:321:ARG:CB	2:K:351:GLU:HG2	2.15	0.77
2:K:353:PHE:C	2:K:369:LEU:HD23	2.05	0.77
2:L:71:LEU:HG	2:L:79:GLU:CB	2.13	0.77
1:A:704:LEU:O	1:A:705:LEU:C	2.20	0.77
1:B:1131:THR:HG22	1:B:1134:LYS:H	1.49	0.77
1:D:531:ASN:OD1	1:D:533:LEU:HB2	1.83	0.77
1:F:1102:CYS:HG	6:F:2476:F3S:FE1	0.99	0.77
2:G:430:LYS:HD2	2:G:456:ASP:O	1.85	0.77
2:H:71:LEU:HG	2:H:79:GLU:CB	2.13	0.77
2:K:319:LEU:CA	2:K:345:ILE:HD11	2.15	0.77
2:K:321:ARG:CA	2:K:351:GLU:HA	2.14	0.77
2:L:321:ARG:CB	2:L:351:GLU:HG2	2.15	0.77
1:B:580:GLU:O	1:B:584:ASP:OD1	2.03	0.77
1:B:731:SER:CA	1:B:748:GLY:H	1.98	0.77
1:D:826:ARG:NH1	1:D:1046:GLU:OE2	2.18	0.77
1:F:1105:VAL:HG23	2:I:54:PHE:CE1	2.20	0.77
2:H:350:PRO:HD2	2:H:374:ALA:N	2.00	0.77
2:I:144:ARG:HB3	2:I:169:LYS:O	1.84	0.77
1:B:417:ASP:C	1:B:419:TRP:N	2.38	0.77
1:C:901:ASP:OD1	1:E:1228:LYS:HB3	1.85	0.77
1:C:1220:ARG:HG3	1:C:1224:GLU:HG3	1.67	0.77
1:D:505:GLN:NE2	1:D:1001:VAL:H	1.83	0.77
1:D:782:ARG:CD	2:H:53:PRO:HD2	1.99	0.77
1:E:528:ASN:HB3	1:E:542:LEU:HD22	1.66	0.77
1:E:1290:GLY:O	1:E:1291:ASP:HB3	1.82	0.77
1:F:731:SER:CA	1:F:748:GLY:H	1.98	0.77
1:F:1043:LEU:HD23	1:F:1044:PRO:HD2	1.67	0.77
2:H:225:SER:CB	2:H:227:PRO:HD2	2.14	0.77
2:H:353:PHE:CZ	2:H:370:GLY:HA3	2.19	0.77
2:I:164:GLU:OE1	2:I:207:LEU:HA	1.85	0.77
2:J:321:ARG:CB	2:J:351:GLU:HG2	2.15	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:353:PHE:CZ	2:L:370:GLY:HA3	2.19	0.77
1:A:182:MET:CE	1:A:217:PRO:C	2.54	0.76
1:A:207:TYR:N	1:A:207:TYR:CD1	2.54	0.76
1:A:213:THR:HB	1:A:1008:THR:HG23	1.66	0.76
1:A:959:SER:HA	1:A:1369:THR:HG21	1.67	0.76
1:B:1105:VAL:HG23	2:G:54:PHE:CE1	2.20	0.76
1:D:515:ARG:HD2	1:D:1367:TYR:HE1	1.49	0.76
1:D:572:THR:CG2	1:D:573:PHE:N	2.47	0.76
1:D:820:ARG:HB3	1:D:821:PRO:CD	2.15	0.76
1:D:985:TYR:HE1	1:D:1207:VAL:HG13	1.50	0.76
1:F:153:ARG:NH2	1:F:263:LEU:O	2.18	0.76
1:F:985:TYR:HE1	1:F:1207:VAL:HG13	1.50	0.76
2:G:97:ILE:HD11	2:G:450:VAL:CG1	2.15	0.76
2:G:423:LEU:CD2	2:G:443:ILE:HD13	2.11	0.76
2:H:97:ILE:HD11	2:H:450:VAL:CG1	2.15	0.76
2:H:430:LYS:HD2	2:H:456:ASP:O	1.85	0.76
2:I:97:ILE:HD11	2:I:450:VAL:CG1	2.15	0.76
2:K:181:ARG:CG	2:K:187:VAL:HG11	2.15	0.76
1:A:781:PHE:O	2:J:52:VAL:HB	1.85	0.76
1:A:1356:VAL:HG22	1:A:1374:VAL:HG21	1.67	0.76
1:B:820:ARG:HB3	1:B:821:PRO:CD	2.16	0.76
1:B:1043:LEU:HD23	1:B:1044:PRO:HD2	1.67	0.76
1:B:1445:ASN:HB2	2:H:373:ASP:OD2	1.86	0.76
1:D:1084:MET:SD	1:D:1168:LEU:HD21	2.25	0.76
1:E:787:ARG:HH12	1:E:821:PRO:HB2	1.47	0.76
1:F:1131:THR:HG22	1:F:1134:LYS:H	1.49	0.76
2:I:350:PRO:HD2	2:I:374:ALA:N	2.00	0.76
2:K:97:ILE:HD11	2:K:450:VAL:CG1	2.15	0.76
2:K:110:ILE:CG1	2:K:117:ALA:HA	2.16	0.76
2:L:319:LEU:CA	2:L:345:ILE:HD11	2.15	0.76
2:L:349:ALA:HB3	2:L:350:PRO:HD3	1.66	0.76
1:A:505:GLN:HE21	1:A:1001:VAL:H	1.33	0.76
1:B:826:ARG:NH1	1:B:1046:GLU:OE2	2.18	0.76
1:C:182:MET:CE	1:C:217:PRO:C	2.54	0.76
1:C:950:THR:CG2	1:C:951:GLU:H	1.98	0.76
1:D:1318:ASN:HD22	1:D:1318:ASN:H	1.30	0.76
1:E:24:ALA:HB1	1:E:207:TYR:CE2	2.19	0.76
1:E:182:MET:CE	1:E:217:PRO:C	2.54	0.76
1:E:1356:VAL:HG22	1:E:1374:VAL:HG21	1.67	0.76
2:G:353:PHE:CZ	2:G:370:GLY:HA3	2.19	0.76
2:H:153:ILE:CD1	8:H:484:FAD:C2A	2.61	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:97:ILE:HD11	2:J:450:VAL:CG1	2.15	0.76
2:J:353:PHE:CZ	2:J:370:GLY:HA3	2.19	0.76
1:A:782:ARG:NE	2:J:53:PRO:HD3	2.00	0.76
1:A:890:ASP:O	1:A:893:ARG:HB2	1.84	0.76
1:C:643:ASN:HB3	1:C:665:THR:CG2	2.16	0.76
1:E:236:THR:CG2	1:E:328:ASP:N	2.45	0.76
1:F:426:LEU:CD1	1:F:558:MET:HG3	2.16	0.76
2:G:110:ILE:CG1	2:G:117:ALA:HA	2.16	0.76
2:G:418:THR:HA	2:G:424:LEU:HD21	1.67	0.76
2:H:110:ILE:CG1	2:H:117:ALA:HA	2.15	0.76
2:H:181:ARG:CG	2:H:187:VAL:HG11	2.15	0.76
2:H:317:LYS:HE3	2:H:345:ILE:CG2	2.15	0.76
2:J:321:ARG:CA	2:J:351:GLU:HA	2.14	0.76
2:K:164:GLU:OE1	2:K:207:LEU:HA	1.85	0.76
2:L:299:ASP:HA	2:L:333:GLU:OE2	1.86	0.76
1:A:413:LEU:O	1:A:414:LYS:HD2	1.85	0.76
1:B:551:THR:OG1	1:B:554:GLU:HG2	1.85	0.76
1:B:782:ARG:HD3	2:G:53:PRO:CD	2.10	0.76
1:B:826:ARG:HG2	1:B:826:ARG:NH1	1.99	0.76
1:C:298:LEU:HD23	1:C:324:MET:HG2	1.68	0.76
1:C:824:GLN:CA	1:C:824:GLN:HE21	1.99	0.76
1:D:551:THR:OG1	1:D:554:GLU:HG2	1.85	0.76
1:E:298:LEU:HD23	1:E:324:MET:HG2	1.68	0.76
1:E:643:ASN:HB3	1:E:665:THR:CG2	2.16	0.76
1:F:1084:MET:SD	1:F:1168:LEU:HD21	2.25	0.76
2:G:244:LYS:HD2	2:G:404:GLU:CB	2.13	0.76
2:H:316:VAL:HB	2:H:342:VAL:HG22	1.68	0.76
2:I:146:LEU:O	2:I:171:TYR:HA	1.86	0.76
2:J:181:ARG:CG	2:J:187:VAL:HG11	2.15	0.76
2:K:144:ARG:HB3	2:K:169:LYS:O	1.84	0.76
2:L:321:ARG:CA	2:L:351:GLU:HA	2.14	0.76
1:A:450:ARG:O	1:A:453:ALA:N	2.19	0.76
1:A:824:GLN:CA	1:A:824:GLN:HE21	1.99	0.76
1:B:505:GLN:NE2	1:B:1001:VAL:H	1.83	0.76
1:B:783:LYS:CA	2:G:57:VAL:HG23	1.96	0.76
1:B:950:THR:CG2	1:B:952:MET:H	1.96	0.76
1:C:113:ASN:HD21	1:C:115:ASP:H	1.31	0.76
1:C:177:ILE:HD13	1:C:179:TYR:HE1	1.49	0.76
1:C:734:LEU:HD11	1:C:738:HIS:HD2	1.46	0.76
1:D:153:ARG:NH2	1:D:263:LEU:O	2.18	0.76
1:D:658:LEU:HD23	1:D:666:VAL:HG21	1.67	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:734:LEU:HD11	1:E:738:HIS:HD2	1.46	0.76
1:E:829:LEU:HD13	1:E:1168:LEU:HD13	1.67	0.76
1:F:299:VAL:O	1:F:299:VAL:CG1	2.28	0.76
2:H:358:VAL:HG22	2:H:365:VAL:CG1	2.16	0.76
2:I:152:VAL:CG1	2:I:175:VAL:HA	2.12	0.76
2:I:321:ARG:CA	2:I:351:GLU:HA	2.14	0.76
2:I:350:PRO:HG3	2:I:380:PRO:HG3	1.68	0.76
2:I:418:THR:HB	2:I:424:LEU:CD1	2.11	0.76
2:K:316:VAL:HB	2:K:342:VAL:HG22	1.68	0.76
2:K:350:PRO:HG3	2:K:380:PRO:HG3	1.68	0.76
2:L:97:ILE:HD11	2:L:450:VAL:CG1	2.15	0.76
2:L:350:PRO:HG3	2:L:380:PRO:HG3	1.68	0.76
1:C:781:PHE:O	2:K:52:VAL:HB	1.85	0.76
1:D:249:THR:HG22	1:D:250:ARG:HG2	1.67	0.76
1:D:782:ARG:CZ	2:H:51:GLY:CA	1.75	0.76
1:D:1043:LEU:HD23	1:D:1044:PRO:HD2	1.67	0.76
1:D:1105:VAL:HG23	2:H:54:PHE:CE1	2.20	0.76
1:E:1220:ARG:HG3	1:E:1224:GLU:HG3	1.67	0.76
1:F:572:THR:CG2	1:F:573:PHE:N	2.47	0.76
2:G:317:LYS:HE3	2:G:345:ILE:CG2	2.15	0.76
2:K:302:MET:CE	2:K:333:GLU:HG3	2.16	0.76
1:A:950:THR:CG2	1:A:951:GLU:H	1.98	0.76
1:B:426:LEU:CD1	1:B:558:MET:HG3	2.16	0.76
1:C:24:ALA:HB1	1:C:207:TYR:CE2	2.19	0.76
1:C:536:ASP:OD1	1:C:538:THR:HG22	1.85	0.76
1:C:890:ASP:O	1:C:893:ARG:HB2	1.84	0.76
1:C:974:ILE:HD11	1:C:983:LEU:CD1	2.13	0.76
1:D:580:GLU:O	1:D:584:ASP:OD1	2.03	0.76
1:E:260:MET:O	1:E:263:LEU:N	2.19	0.76
1:E:959:SER:HA	1:E:1369:THR:HG21	1.67	0.76
1:E:1043:LEU:HD23	1:E:1044:PRO:HD2	1.66	0.76
1:F:260:MET:O	1:F:263:LEU:HB2	1.84	0.76
1:F:529:LEU:HD23	1:F:529:LEU:N	1.92	0.76
1:F:658:LEU:HD23	1:F:666:VAL:HG21	1.67	0.76
2:G:316:VAL:HB	2:G:342:VAL:HG22	1.68	0.76
2:H:302:MET:CE	2:H:333:GLU:HG3	2.16	0.76
2:H:321:ARG:CB	2:H:351:GLU:HG2	2.15	0.76
2:H:350:PRO:HG3	2:H:380:PRO:HG3	1.68	0.76
2:J:146:LEU:O	2:J:171:TYR:HA	1.86	0.76
2:J:153:ILE:CD1	8:J:484:FAD:C2A	2.61	0.76
2:J:317:LYS:CG	2:J:345:ILE:HD12	2.14	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:K:146:LEU:O	2:K:171:TYR:HA	1.86	0.76
2:L:225:SER:CB	2:L:227:PRO:HD2	2.14	0.76
1:A:452:GLN:CG	1:A:765:ALA:HB2	2.16	0.76
1:A:829:LEU:HD13	1:A:1168:LEU:HD13	1.67	0.76
1:C:959:SER:HA	1:C:1369:THR:HG21	1.67	0.76
1:E:452:GLN:CG	1:E:765:ALA:HB2	2.16	0.76
1:F:505:GLN:NE2	1:F:1001:VAL:H	1.83	0.76
1:F:826:ARG:NH1	1:F:1046:GLU:OE2	2.18	0.76
2:H:132:TRP:CD1	2:H:202:ARG:HB2	2.21	0.76
2:I:302:MET:CE	2:I:333:GLU:HG3	2.16	0.76
2:K:350:PRO:HD2	2:K:374:ALA:N	2.00	0.76
2:L:110:ILE:CG1	2:L:117:ALA:HA	2.15	0.76
1:A:1374:VAL:O	1:A:1375:ILE:CG1	2.34	0.76
1:B:375:ASP:OD2	1:B:377:THR:HB	1.86	0.76
1:C:900:GLY:HA3	1:E:1263:HIS:CD2	2.20	0.76
1:D:731:SER:CA	1:D:748:GLY:H	1.98	0.76
1:E:213:THR:HB	1:E:1008:THR:HG23	1.66	0.76
1:E:1391:MET:HE2	1:E:1458:VAL:CG2	2.03	0.76
2:G:132:TRP:CD1	2:G:202:ARG:HB2	2.21	0.76
2:G:350:PRO:HG3	2:G:380:PRO:HG3	1.68	0.76
2:H:321:ARG:CA	2:H:351:GLU:HA	2.14	0.76
2:I:181:ARG:CG	2:I:187:VAL:HG11	2.15	0.76
2:J:319:LEU:CA	2:J:345:ILE:HD11	2.15	0.76
2:K:299:ASP:HA	2:K:333:GLU:OE2	1.86	0.76
1:A:901:ASP:OD1	1:C:1228:LYS:HB3	1.85	0.75
1:C:413:LEU:O	1:C:414:LYS:HD2	1.85	0.75
1:D:1102:CYS:HG	6:D:2476:F3S:FE1	1.01	0.75
1:D:1445:ASN:HB2	2:I:373:ASP:OD2	1.86	0.75
1:E:447:LEU:HD13	1:E:670:LEU:HD21	1.65	0.75
1:E:536:ASP:OD1	1:E:538:THR:HG22	1.85	0.75
1:E:1374:VAL:O	1:E:1375:ILE:CG1	2.34	0.75
1:F:710:LYS:CG	1:F:939:GLY:HA3	2.10	0.75
2:G:146:LEU:O	2:G:171:TYR:HA	1.86	0.75
2:G:302:MET:CE	2:G:333:GLU:HG3	2.16	0.75
2:J:299:ASP:HA	2:J:333:GLU:OE2	1.86	0.75
2:J:302:MET:CE	2:J:333:GLU:HG3	2.16	0.75
2:J:316:VAL:HB	2:J:342:VAL:HG22	1.68	0.75
2:J:418:THR:HA	2:J:424:LEU:HD21	1.67	0.75
2:K:358:VAL:HG22	2:K:365:VAL:CG1	2.16	0.75
2:L:181:ARG:CG	2:L:187:VAL:HG11	2.15	0.75
1:A:515:ARG:CD	1:A:1367:TYR:HE1	1.96	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:153:ARG:NH2	1:B:263:LEU:O	2.18	0.75
1:B:522:LEU:HD21	1:B:705:LEU:HD21	1.68	0.75
1:C:452:GLN:CG	1:C:765:ALA:HB2	2.16	0.75
1:C:1356:VAL:HG22	1:C:1374:VAL:HG21	1.67	0.75
1:C:1374:VAL:O	1:C:1375:ILE:CG1	2.34	0.75
1:C:1395:TYR:CE1	1:C:1397:LEU:HD21	2.20	0.75
2:H:295:LEU:HD22	2:H:319:LEU:HB3	1.69	0.75
2:H:319:LEU:CA	2:H:345:ILE:HD11	2.15	0.75
2:J:44:ALA:CA	2:J:69:LEU:HD11	2.17	0.75
1:A:236:THR:CG2	1:A:328:ASP:N	2.45	0.75
1:A:536:ASP:OD1	1:A:538:THR:HG22	1.85	0.75
1:C:526:LEU:N	1:C:526:LEU:CD1	2.40	0.75
1:C:782:ARG:NE	2:K:53:PRO:HD3	2.00	0.75
1:C:875:MET:HE1	1:C:1139:PHE:CD2	2.20	0.75
1:C:1413:GLN:HG3	1:C:1414:ARG:O	1.87	0.75
1:E:443:ASP:O	1:E:445:ALA:N	2.20	0.75
1:E:643:ASN:HB3	1:E:665:THR:HG22	1.68	0.75
2:I:319:LEU:CA	2:I:345:ILE:HD11	2.15	0.75
2:J:110:ILE:CG1	2:J:117:ALA:HA	2.16	0.75
2:L:291:HIS:NE2	2:L:293:VAL:HG23	2.02	0.75
2:L:302:MET:CE	2:L:333:GLU:HG3	2.16	0.75
1:A:643:ASN:HB3	1:A:665:THR:CG2	2.16	0.75
1:C:826:ARG:NH1	1:C:1046:GLU:OE2	2.19	0.75
1:C:1317:THR:HG22	1:C:1318:ASN:N	2.00	0.75
1:D:175:ARG:HH11	1:D:175:ARG:HG3	1.52	0.75
1:D:375:ASP:OD2	1:D:377:THR:HB	1.86	0.75
1:E:826:ARG:NH1	1:E:1046:GLU:OE2	2.19	0.75
1:F:551:THR:OG1	1:F:554:GLU:HG2	1.85	0.75
1:F:820:ARG:HB3	1:F:821:PRO:CD	2.16	0.75
1:F:826:ARG:HG2	1:F:826:ARG:NH1	1.99	0.75
2:G:152:VAL:CG1	2:G:175:VAL:HA	2.12	0.75
2:G:225:SER:CB	2:G:227:PRO:HD2	2.14	0.75
2:G:299:ASP:HA	2:G:333:GLU:OE2	1.86	0.75
2:H:44:ALA:CA	2:H:69:LEU:HD11	2.17	0.75
2:H:418:THR:HA	2:H:424:LEU:HD21	1.67	0.75
2:I:44:ALA:CA	2:I:69:LEU:HD11	2.17	0.75
2:I:100:GLN:HB3	2:I:105:GLU:CG	2.17	0.75
2:J:132:TRP:CD1	2:J:202:ARG:HB2	2.21	0.75
2:J:358:VAL:HG22	2:J:365:VAL:CG1	2.16	0.75
2:K:225:SER:CB	2:K:227:PRO:HD2	2.14	0.75
2:K:430:LYS:HD2	2:K:456:ASP:O	1.85	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:146:LEU:O	2:L:171:TYR:HA	1.86	0.75
1:A:999:LYS:HG3	1:A:1022:LEU:CD2	2.17	0.75
1:A:1394:VAL:HG12	1:A:1394:VAL:O	1.87	0.75
1:B:236:THR:HG21	1:B:328:ASP:N	2.00	0.75
1:C:260:MET:O	1:C:263:LEU:N	2.19	0.75
1:C:443:ASP:O	1:C:445:ALA:N	2.20	0.75
1:C:643:ASN:HB3	1:C:665:THR:HG22	1.68	0.75
1:D:529:LEU:N	1:D:529:LEU:HD23	1.92	0.75
1:D:704:LEU:O	1:D:705:LEU:C	2.25	0.75
1:F:452:GLN:CG	1:F:765:ALA:HB2	2.17	0.75
1:F:1445:ASN:HB2	2:G:373:ASP:OD2	1.86	0.75
2:I:110:ILE:CG1	2:I:117:ALA:HA	2.16	0.75
2:K:295:LEU:HD22	2:K:319:LEU:HB3	1.69	0.75
1:A:1317:THR:HG22	1:A:1318:ASN:N	2.00	0.75
1:D:452:GLN:CG	1:D:765:ALA:HB2	2.17	0.75
1:E:375:ASP:OD2	1:E:377:THR:CB	2.26	0.75
2:G:201:GLU:O	2:G:205:LYS:HD3	1.87	0.75
2:G:295:LEU:HD22	2:G:319:LEU:HB3	1.69	0.75
2:G:388:PHE:HD2	2:G:390:VAL:HG13	1.52	0.75
2:J:100:GLN:HB3	2:J:105:GLU:CG	2.17	0.75
2:K:44:ALA:CA	2:K:69:LEU:HD11	2.17	0.75
2:K:201:GLU:O	2:K:205:LYS:HD3	1.87	0.75
2:K:306:ARG:HD3	2:K:336:HIS:HB3	1.69	0.75
2:L:44:ALA:CA	2:L:69:LEU:HD11	2.17	0.75
2:L:132:TRP:CD1	2:L:202:ARG:HB2	2.21	0.75
2:L:295:LEU:HD22	2:L:319:LEU:HB3	1.69	0.75
2:L:350:PRO:HD2	2:L:374:ALA:N	2.00	0.75
1:A:260:MET:O	1:A:263:LEU:N	2.19	0.75
1:A:595:ASP:O	1:A:596:ALA:C	2.20	0.75
1:A:1220:ARG:HG3	1:A:1224:GLU:HG3	1.67	0.75
1:A:1413:GLN:HG3	1:A:1414:ARG:O	1.87	0.75
1:B:704:LEU:O	1:B:705:LEU:C	2.25	0.75
1:B:1084:MET:SD	1:B:1168:LEU:HD21	2.25	0.75
1:C:139:VAL:HG11	1:C:143:GLN:CB	2.17	0.75
1:C:450:ARG:O	1:C:453:ALA:N	2.19	0.75
1:C:780:ARG:HB3	2:K:51:GLY:C	2.07	0.75
1:E:413:LEU:O	1:E:414:LYS:HD2	1.85	0.75
1:E:515:ARG:HD2	1:E:1367:TYR:HE1	1.46	0.75
1:E:862:ALA:O	1:E:1118:CYS:CB	2.35	0.75
1:F:317:ILE:HG22	1:F:321:ASN:HD21	1.52	0.75
1:F:438:GLU:OE1	1:F:672:GLN:NE2	2.20	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:317:LYS:HG3	2:G:345:ILE:HD12	1.68	0.75
2:K:132:TRP:CD1	2:K:202:ARG:HB2	2.21	0.75
2:K:291:HIS:NE2	2:K:293:VAL:HG23	2.02	0.75
1:A:139:VAL:HG11	1:A:143:GLN:CB	2.17	0.75
1:C:60:LYS:O	1:C:63:GLY:N	2.19	0.75
2:G:80:ALA:CB	2:G:127:ILE:HG12	2.17	0.75
2:G:291:HIS:NE2	2:G:293:VAL:HG23	2.02	0.75
1:A:780:ARG:HB3	2:J:51:GLY:C	2.07	0.75
1:B:139:VAL:CG1	1:B:143:GLN:CB	2.65	0.75
1:B:175:ARG:HG3	1:B:175:ARG:HH11	1.52	0.75
1:C:513:SER:CB	1:C:520:MET:CE	2.64	0.75
1:D:426:LEU:CD1	1:D:558:MET:HG3	2.16	0.75
1:E:1394:VAL:HG12	1:E:1394:VAL:O	1.87	0.75
2:G:44:ALA:CA	2:G:69:LEU:HD11	2.17	0.75
2:H:306:ARG:HD3	2:H:336:HIS:HB3	1.69	0.75
2:J:350:PRO:HG3	2:J:380:PRO:HG3	1.68	0.75
2:J:451:VAL:HA	2:J:454:ILE:CG2	2.17	0.75
2:L:418:THR:HA	2:L:424:LEU:HD21	1.67	0.75
1:A:536:ASP:OD1	1:A:536:ASP:C	2.25	0.74
1:B:59:VAL:CG2	1:B:105:TYR:CD2	2.70	0.74
1:D:1084:MET:SD	1:D:1168:LEU:CD2	2.75	0.74
1:E:450:ARG:O	1:E:453:ALA:N	2.19	0.74
1:E:999:LYS:HG3	1:E:1022:LEU:CD2	2.17	0.74
1:F:182:MET:HE3	1:F:217:PRO:C	2.07	0.74
1:F:375:ASP:OD2	1:F:377:THR:HB	1.86	0.74
2:G:358:VAL:HG22	2:G:365:VAL:CG1	2.16	0.74
2:G:367:ILE:HD13	2:G:368:HIS:N	2.02	0.74
2:I:80:ALA:CB	2:I:127:ILE:HG12	2.17	0.74
2:I:299:ASP:HA	2:I:333:GLU:OE2	1.86	0.74
2:J:317:LYS:HG3	2:J:345:ILE:HD12	1.68	0.74
2:K:317:LYS:HE3	2:K:345:ILE:CG2	2.15	0.74
1:A:298:LEU:HD23	1:A:324:MET:HG2	1.68	0.74
1:A:826:ARG:NH1	1:A:1046:GLU:OE2	2.19	0.74
1:A:900:GLY:HA2	1:C:1226:GLY:O	1.87	0.74
1:D:522:LEU:HD21	1:D:705:LEU:HD21	1.68	0.74
1:E:528:ASN:CB	1:E:542:LEU:HD22	2.17	0.74
1:E:727:ALA:HB3	1:E:744:SER:HB2	1.69	0.74
1:E:824:GLN:CA	1:E:824:GLN:HE21	1.99	0.74
1:E:950:THR:CG2	1:E:951:GLU:H	1.98	0.74
1:E:1394:VAL:HG11	1:E:1401:LEU:CD2	2.17	0.74
1:F:139:VAL:CG1	1:F:143:GLN:CB	2.65	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:746:ILE:C	1:F:747:SER:O	2.16	0.74
1:F:787:ARG:HH12	1:F:821:PRO:CG	2.00	0.74
2:G:350:PRO:HD2	2:G:374:ALA:N	2.00	0.74
2:H:451:VAL:HA	2:H:454:ILE:CG2	2.17	0.74
2:I:132:TRP:CD1	2:I:202:ARG:HB2	2.21	0.74
2:I:295:LEU:HD22	2:I:319:LEU:HB3	1.69	0.74
2:I:423:LEU:CD2	2:I:443:ILE:HD13	2.11	0.74
2:I:451:VAL:HA	2:I:454:ILE:CG2	2.17	0.74
2:L:80:ALA:CB	2:L:127:ILE:HG12	2.17	0.74
2:L:100:GLN:HB3	2:L:105:GLU:CG	2.17	0.74
1:A:536:ASP:OD1	1:A:536:ASP:O	2.05	0.74
1:A:824:GLN:HA	1:A:824:GLN:NE2	2.01	0.74
1:A:902:ASN:HB2	1:C:1227:GLU:HG3	1.59	0.74
1:A:1131:THR:HB	1:A:1134:LYS:HG3	1.68	0.74
1:B:731:SER:HA	1:B:747:SER:CA	2.17	0.74
1:B:1289:MET:CE	1:B:1289:MET:HB2	2.17	0.74
1:C:862:ALA:O	1:C:1118:CYS:CB	2.35	0.74
1:C:1131:THR:HG22	1:C:1133:GLU:N	2.02	0.74
1:C:1394:VAL:HG12	1:C:1394:VAL:O	1.87	0.74
1:E:207:TYR:N	1:E:207:TYR:CD1	2.54	0.74
1:E:728:ILE:HD12	1:E:1047:MET:CE	2.17	0.74
1:F:405:GLU:H	1:F:405:GLU:CD	1.90	0.74
1:F:838:VAL:HG12	1:F:839:PRO:N	2.02	0.74
2:G:92:GLU:HG2	2:G:128:ASN:ND2	2.03	0.74
2:H:146:LEU:O	2:H:171:TYR:HA	1.86	0.74
2:I:291:HIS:NE2	2:I:293:VAL:HG23	2.02	0.74
2:I:418:THR:HA	2:I:424:LEU:HD21	1.67	0.74
2:I:469:LYS:HD2	2:I:476:VAL:HB	1.69	0.74
2:L:92:GLU:HG2	2:L:128:ASN:ND2	2.03	0.74
2:L:367:ILE:HD13	2:L:368:HIS:N	2.02	0.74
1:A:734:LEU:HD11	1:A:738:HIS:HD2	1.46	0.74
1:A:877:ARG:CG	1:C:1230:GLN:N	2.51	0.74
1:A:900:GLY:HA3	1:C:1263:HIS:CD2	2.20	0.74
1:C:207:TYR:CD1	1:C:207:TYR:N	2.54	0.74
1:C:877:ARG:CG	1:E:1230:GLN:N	2.50	0.74
1:C:999:LYS:HG3	1:C:1022:LEU:CD2	2.17	0.74
1:C:1425:LYS:HD3	1:C:1447:TRP:NE1	2.03	0.74
1:D:731:SER:HA	1:D:747:SER:CA	2.17	0.74
1:D:1289:MET:CE	1:D:1289:MET:HB2	2.17	0.74
1:F:536:ASP:OD1	1:F:536:ASP:C	2.25	0.74
2:G:182:MET:CE	2:G:216:PRO:HG3	2.17	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:295:LEU:HD22	2:J:319:LEU:HB3	1.69	0.74
2:J:306:ARG:HD3	2:J:336:HIS:HB3	1.69	0.74
2:K:80:ALA:CB	2:K:127:ILE:HG12	2.17	0.74
2:K:182:MET:CE	2:K:216:PRO:HG3	2.17	0.74
2:K:317:LYS:HG3	2:K:345:ILE:HD12	1.68	0.74
2:L:316:VAL:HB	2:L:342:VAL:HG22	1.68	0.74
1:A:1263:HIS:CD2	1:E:900:GLY:HA3	2.20	0.74
1:A:1394:VAL:HG11	1:A:1401:LEU:CD2	2.17	0.74
1:B:317:ILE:HG22	1:B:321:ASN:HD21	1.52	0.74
1:B:658:LEU:HD23	1:B:666:VAL:HG21	1.67	0.74
1:C:515:ARG:HD2	1:C:1367:TYR:CZ	2.22	0.74
1:C:536:ASP:OD1	1:C:536:ASP:O	2.05	0.74
1:C:829:LEU:HD13	1:C:1168:LEU:HD13	1.67	0.74
1:E:731:SER:CA	1:E:748:GLY:H	2.01	0.74
1:E:824:GLN:HA	1:E:824:GLN:NE2	2.01	0.74
1:F:584:ASP:OD1	1:F:584:ASP:N	2.14	0.74
2:G:451:VAL:HA	2:G:454:ILE:CG2	2.17	0.74
2:K:186:LEU:HD21	2:K:200:VAL:HB	1.69	0.74
1:A:295:LYS:CE	1:A:299:VAL:HG12	2.18	0.74
1:A:513:SER:CB	1:A:520:MET:CE	2.64	0.74
1:A:731:SER:CA	1:A:748:GLY:H	2.01	0.74
1:C:731:SER:CA	1:C:748:GLY:H	2.01	0.74
1:D:438:GLU:OE1	1:D:672:GLN:NE2	2.20	0.74
1:E:1460:LYS:O	1:E:1462:MET:N	2.21	0.74
2:H:197:LYS:CE	2:H:275:ASP:H	2.01	0.74
2:H:201:GLU:O	2:H:205:LYS:HD3	1.87	0.74
2:H:291:HIS:NE2	2:H:293:VAL:HG23	2.02	0.74
2:H:317:LYS:HG3	2:H:345:ILE:HD12	1.68	0.74
2:H:367:ILE:HD13	2:H:368:HIS:N	2.02	0.74
2:H:430:LYS:HE2	2:H:456:ASP:HB3	1.69	0.74
2:I:358:VAL:HG22	2:I:365:VAL:CG1	2.16	0.74
2:J:367:ILE:HD13	2:J:368:HIS:N	2.02	0.74
2:K:244:LYS:HD2	2:K:404:GLU:CB	2.13	0.74
2:K:367:ILE:HD13	2:K:368:HIS:N	2.02	0.74
2:K:388:PHE:HD2	2:K:390:VAL:HG13	1.52	0.74
2:K:430:LYS:HE2	2:K:456:ASP:HB3	1.69	0.74
1:A:290:THR:CG2	1:A:291:ALA:N	2.51	0.74
1:B:787:ARG:HH12	1:B:821:PRO:CG	2.00	0.74
1:C:900:GLY:HA2	1:E:1226:GLY:O	1.87	0.74
1:D:59:VAL:CG2	1:D:105:TYR:CD2	2.70	0.74
1:D:139:VAL:CG1	1:D:143:GLN:CB	2.65	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:753:GLY:O	1:D:754:ILE:C	2.25	0.74
1:D:787:ARG:HH12	1:D:821:PRO:CG	2.00	0.74
1:E:1131:THR:HB	1:E:1134:LYS:HG3	1.68	0.74
1:F:59:VAL:CG2	1:F:105:TYR:CD2	2.70	0.74
1:F:783:LYS:HE2	2:I:57:VAL:CG1	2.17	0.74
2:G:144:ARG:HD3	2:G:465:HIS:CE1	2.23	0.74
2:H:299:ASP:HA	2:H:333:GLU:OE2	1.86	0.74
2:I:92:GLU:HG2	2:I:128:ASN:ND2	2.03	0.74
2:K:92:GLU:HG2	2:K:128:ASN:ND2	2.03	0.74
2:K:454:ILE:HD13	2:K:454:ILE:O	1.88	0.74
2:L:358:VAL:HG22	2:L:365:VAL:CG1	2.16	0.74
2:L:469:LYS:HD2	2:L:476:VAL:HB	1.69	0.74
1:A:515:ARG:HD2	1:A:1367:TYR:CZ	2.22	0.74
1:A:728:ILE:HD12	1:A:1047:MET:CE	2.17	0.74
1:A:1230:GLN:N	1:E:877:ARG:CG	2.51	0.74
1:B:452:GLN:CG	1:B:765:ALA:HB2	2.17	0.74
1:B:959:SER:HA	1:B:1369:THR:HG23	1.69	0.74
1:B:1084:MET:SD	1:B:1168:LEU:CD2	2.75	0.74
1:C:528:ASN:CB	1:C:542:LEU:HD22	2.18	0.74
1:C:727:ALA:HB3	1:C:744:SER:HB2	1.69	0.74
1:C:728:ILE:HD12	1:C:1047:MET:CE	2.17	0.74
1:D:317:ILE:HG22	1:D:321:ASN:HD21	1.52	0.74
1:E:1131:THR:HG22	1:E:1133:GLU:N	2.02	0.74
1:E:1413:GLN:HG3	1:E:1414:ARG:O	1.87	0.74
1:F:146:LEU:HD12	1:F:146:LEU:O	1.88	0.74
1:F:602:THR:C	1:F:640:THR:CG2	2.56	0.74
1:F:746:ILE:HG22	1:F:747:SER:O	1.88	0.74
2:G:306:ARG:HD3	2:G:336:HIS:HB3	1.69	0.74
2:H:132:TRP:HD1	2:H:202:ARG:HD2	1.53	0.74
2:I:316:VAL:HB	2:I:342:VAL:HG22	1.68	0.74
2:I:317:LYS:HG3	2:I:345:ILE:HD12	1.68	0.74
2:I:367:ILE:HD13	2:I:368:HIS:N	2.02	0.74
2:J:80:ALA:CB	2:J:127:ILE:HG12	2.17	0.74
2:J:257:ASN:CG	2:J:394:LEU:HA	2.08	0.74
2:K:197:LYS:CE	2:K:275:ASP:H	2.01	0.74
2:K:262:LEU:HB2	2:K:401:PHE:HE2	1.53	0.74
2:K:469:LYS:HD2	2:K:476:VAL:HB	1.69	0.74
2:L:145:GLU:OE1	2:L:469:LYS:HA	1.88	0.74
2:L:388:PHE:HD2	2:L:390:VAL:HG13	1.52	0.74
1:A:443:ASP:O	1:A:445:ALA:N	2.20	0.74
1:B:780:ARG:HH21	1:B:1105:VAL:HG23	1.53	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:465:LEU:C	1:C:465:LEU:HD12	2.08	0.74
1:D:146:LEU:O	1:D:146:LEU:HD12	1.88	0.74
1:D:746:ILE:HG22	1:D:747:SER:O	1.88	0.74
1:E:177:ILE:HD13	1:E:179:TYR:HE1	1.49	0.74
1:E:536:ASP:OD1	1:E:536:ASP:O	2.05	0.74
1:F:450:ARG:O	1:F:453:ALA:N	2.20	0.74
1:F:1131:THR:HG22	1:F:1133:GLU:N	2.03	0.74
1:F:1289:MET:CE	1:F:1289:MET:HB2	2.17	0.74
2:G:164:GLU:HB2	2:G:207:LEU:HD22	1.70	0.74
2:H:145:GLU:OE1	2:H:469:LYS:HA	1.88	0.74
2:I:144:ARG:HD3	2:I:465:HIS:CE1	2.23	0.74
2:J:71:LEU:HD11	2:J:76:ARG:O	1.88	0.74
2:J:100:GLN:HE21	2:J:100:GLN:HA	1.53	0.74
2:J:145:GLU:OE1	2:J:469:LYS:HA	1.88	0.74
2:K:257:ASN:CG	2:K:394:LEU:HA	2.08	0.74
1:B:602:THR:C	1:B:640:THR:CG2	2.56	0.74
1:C:1131:THR:HB	1:C:1134:LYS:HG3	1.68	0.74
1:E:465:LEU:C	1:E:465:LEU:HD12	2.08	0.74
1:F:731:SER:HA	1:F:747:SER:CA	2.17	0.74
2:G:201:GLU:HG3	2:G:205:LYS:CE	2.18	0.74
2:G:430:LYS:HE2	2:G:456:ASP:HB3	1.69	0.74
2:I:71:LEU:HD11	2:I:76:ARG:O	1.88	0.74
2:I:100:GLN:HA	2:I:100:GLN:HE21	1.53	0.74
2:I:186:LEU:HD21	2:I:200:VAL:HB	1.69	0.74
2:K:144:ARG:HD3	2:K:465:HIS:CE1	2.23	0.74
1:A:643:ASN:HB3	1:A:665:THR:HG22	1.68	0.73
1:A:1425:LYS:HD3	1:A:1447:TRP:NE1	2.03	0.73
1:B:536:ASP:OD1	1:B:536:ASP:C	2.25	0.73
1:B:1076:GLY:HA3	1:B:1145:GLU:CG	2.17	0.73
1:C:781:PHE:CD2	2:K:57:VAL:HG21	2.23	0.73
1:C:824:GLN:HA	1:C:824:GLN:NE2	2.01	0.73
1:D:820:ARG:CB	1:D:821:PRO:CD	2.66	0.73
1:E:536:ASP:OD1	1:E:536:ASP:C	2.25	0.73
1:E:643:ASN:HD22	1:E:665:THR:CB	2.01	0.73
1:F:214:ASN:O	1:F:1015:LYS:HE2	1.88	0.73
1:F:1084:MET:SD	1:F:1168:LEU:CD2	2.75	0.73
2:G:197:LYS:CE	2:G:275:ASP:H	2.01	0.73
2:H:100:GLN:HB3	2:H:105:GLU:CG	2.17	0.73
2:H:366:ARG:HE	2:H:391:GLN:CG	2.01	0.73
2:H:454:ILE:HD13	2:H:454:ILE:O	1.88	0.73
2:I:277:VAL:HG12	2:I:279:ALA:N	2.03	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:186:LEU:HD21	2:J:200:VAL:HB	1.69	0.73
2:J:197:LYS:CE	2:J:275:ASP:H	2.01	0.73
2:J:469:LYS:HD2	2:J:476:VAL:HB	1.69	0.73
2:K:418:THR:HA	2:K:424:LEU:HD21	1.67	0.73
2:L:277:VAL:HG12	2:L:279:ALA:N	2.03	0.73
2:L:317:LYS:HG3	2:L:345:ILE:HD12	1.68	0.73
1:A:189:THR:HG22	1:A:190:THR:N	2.04	0.73
1:A:643:ASN:HD22	1:A:665:THR:CB	2.01	0.73
1:C:355:TYR:C	1:C:355:TYR:CD1	2.61	0.73
1:D:511:ILE:HG22	1:D:512:ASP:N	2.03	0.73
1:D:959:SER:HA	1:D:1369:THR:HG23	1.69	0.73
1:F:522:LEU:HD21	1:F:705:LEU:HD21	1.68	0.73
1:F:875:MET:HE1	1:F:1139:PHE:CE2	2.22	0.73
2:G:454:ILE:HD13	2:G:454:ILE:O	1.88	0.73
2:H:165:GLU:HB3	2:H:169:LYS:NZ	2.03	0.73
2:I:145:GLU:OE1	2:I:469:LYS:HA	1.88	0.73
2:I:257:ASN:CG	2:I:394:LEU:HA	2.08	0.73
2:J:164:GLU:HB2	2:J:207:LEU:HD22	1.70	0.73
2:J:454:ILE:O	2:J:454:ILE:HD13	1.88	0.73
2:K:451:VAL:HA	2:K:454:ILE:CG2	2.17	0.73
2:L:144:ARG:HD3	2:L:465:HIS:CE1	2.23	0.73
2:L:201:GLU:O	2:L:205:LYS:HD3	1.87	0.73
1:A:528:ASN:CB	1:A:542:LEU:HD22	2.18	0.73
1:C:227:MET:HE2	1:C:282:GLU:HG2	1.68	0.73
1:C:342:VAL:HG13	1:C:392:ALA:HB2	1.69	0.73
1:C:643:ASN:HD22	1:C:665:THR:CB	2.01	0.73
1:D:405:GLU:H	1:D:405:GLU:CD	1.90	0.73
1:D:838:VAL:HG12	1:D:839:PRO:N	2.02	0.73
1:E:515:ARG:HD2	1:E:1367:TYR:CZ	2.22	0.73
1:E:1401:LEU:HD11	1:E:1405:ILE:HB	1.71	0.73
1:F:465:LEU:O	1:F:465:LEU:HD12	1.89	0.73
1:F:780:ARG:NH2	1:F:1105:VAL:HG23	2.04	0.73
2:G:257:ASN:CG	2:G:394:LEU:HA	2.08	0.73
2:H:469:LYS:HD2	2:H:476:VAL:HB	1.69	0.73
2:I:109:VAL:HG22	7:I:483:SF4:S2	2.28	0.73
2:J:277:VAL:HG12	2:J:279:ALA:N	2.03	0.73
2:J:319:LEU:HA	2:J:345:ILE:HD11	1.70	0.73
2:L:451:VAL:HA	2:L:454:ILE:CG2	2.17	0.73
1:A:850:ARG:HH11	1:A:850:ARG:HG3	1.53	0.73
1:A:1401:LEU:HD11	1:A:1405:ILE:HB	1.71	0.73
1:B:829:LEU:HD13	1:B:1168:LEU:HD13	1.70	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1131:THR:HG22	1:B:1133:GLU:N	2.03	0.73
1:C:985:TYR:HE1	1:C:1207:VAL:HG13	1.53	0.73
1:D:214:ASN:O	1:D:1015:LYS:HE2	1.88	0.73
1:D:602:THR:C	1:D:640:THR:CG2	2.56	0.73
1:E:464:ILE:CD1	1:E:779:TYR:CE1	2.71	0.73
1:E:985:TYR:HE1	1:E:1207:VAL:HG13	1.53	0.73
1:F:783:LYS:CE	2:I:57:VAL:CG1	2.36	0.73
2:G:109:VAL:HG22	7:G:483:SF4:S2	2.29	0.73
2:G:145:GLU:OE1	2:G:469:LYS:HA	1.88	0.73
2:H:378:GLN:O	2:H:380:PRO:HD3	1.89	0.73
2:I:264:TYR:OH	2:I:308:ALA:HA	1.89	0.73
2:I:366:ARG:HE	2:I:391:GLN:CG	2.01	0.73
2:J:132:TRP:HD1	2:J:202:ARG:HD2	1.53	0.73
2:K:132:TRP:HD1	2:K:202:ARG:HD2	1.53	0.73
2:K:201:GLU:HG3	2:K:205:LYS:CE	2.18	0.73
2:K:378:GLN:O	2:K:380:PRO:HD3	1.89	0.73
2:L:109:VAL:HG22	7:L:483:SF4:S2	2.29	0.73
2:L:430:LYS:HE2	2:L:456:ASP:HB3	1.69	0.73
1:A:727:ALA:HB3	1:A:744:SER:HB2	1.69	0.73
1:A:1263:HIS:NE2	1:E:900:GLY:HA2	1.91	0.73
1:B:438:GLU:OE1	1:B:672:GLN:NE2	2.20	0.73
1:C:295:LYS:CE	1:C:299:VAL:HG12	2.18	0.73
1:C:902:ASN:HB2	1:E:1227:GLU:HG3	1.59	0.73
1:C:1460:LYS:O	1:C:1462:MET:N	2.21	0.73
1:D:782:ARG:HD3	2:H:53:PRO:CD	2.10	0.73
1:D:783:LYS:CA	2:H:57:VAL:HG23	1.96	0.73
1:D:1131:THR:HG22	1:D:1133:GLU:N	2.03	0.73
1:D:1369:THR:HG22	1:D:1369:THR:O	1.89	0.73
1:F:820:ARG:CB	1:F:821:PRO:CD	2.67	0.73
1:F:959:SER:HA	1:F:1369:THR:HG23	1.69	0.73
1:F:1113:CYS:O	1:F:1115:VAL:N	2.22	0.73
2:G:262:LEU:HB2	2:G:401:PHE:HE2	1.53	0.73
2:H:71:LEU:HD11	2:H:76:ARG:O	1.88	0.73
2:H:92:GLU:HG2	2:H:128:ASN:ND2	2.03	0.73
2:H:244:LYS:HD2	2:H:404:GLU:CB	2.13	0.73
2:H:322:ARG:HD2	2:H:349:ALA:HB1	1.71	0.73
2:I:182:MET:CE	2:I:216:PRO:HG3	2.17	0.73
2:I:416:LYS:HE3	2:I:433:ASN:ND2	2.04	0.73
2:J:416:LYS:HE3	2:J:433:ASN:ND2	2.04	0.73
2:K:165:GLU:HB3	2:K:169:LYS:NZ	2.03	0.73
2:L:100:GLN:HA	2:L:100:GLN:HE21	1.53	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:186:LEU:HD21	2:L:200:VAL:HB	1.69	0.73
1:B:405:GLU:H	1:B:405:GLU:CD	1.90	0.73
1:C:505:GLN:HE21	1:C:1001:VAL:H	1.33	0.73
1:D:450:ARG:O	1:D:453:ALA:N	2.20	0.73
1:D:665:THR:HG22	1:D:665:THR:O	1.89	0.73
1:E:1447:TRP:CZ2	1:E:1451:VAL:HG22	2.24	0.73
2:G:91:PRO:HD2	2:G:203:ARG:NH2	2.04	0.73
2:G:469:LYS:HD2	2:G:476:VAL:HB	1.69	0.73
2:H:92:GLU:HG2	2:H:128:ASN:OD1	1.89	0.73
2:H:109:VAL:HG22	7:H:483:SF4:S2	2.29	0.73
2:I:201:GLU:O	2:I:205:LYS:HD3	1.87	0.73
2:I:257:ASN:ND2	2:I:364:ALA:HB3	2.04	0.73
2:I:306:ARG:HD3	2:I:336:HIS:HB3	1.69	0.73
2:I:319:LEU:HA	2:I:345:ILE:HD11	1.70	0.73
2:I:322:ARG:HD2	2:I:349:ALA:HB1	1.71	0.73
2:J:165:GLU:HB3	2:J:169:LYS:NZ	2.03	0.73
2:J:291:HIS:NE2	2:J:293:VAL:HG23	2.02	0.73
2:J:388:PHE:HD2	2:J:390:VAL:HG13	1.52	0.73
2:K:186:LEU:CD1	2:K:200:VAL:HB	2.19	0.73
2:L:164:GLU:HB2	2:L:207:LEU:HD22	1.70	0.73
2:L:383:ILE:HD13	2:L:385:GLY:H	1.54	0.73
1:A:355:TYR:CD1	1:A:355:TYR:C	2.61	0.73
1:A:464:ILE:CD1	1:A:779:TYR:CE1	2.71	0.73
1:A:862:ALA:O	1:A:1118:CYS:CB	2.35	0.73
1:C:290:THR:CG2	1:C:291:ALA:N	2.51	0.73
1:C:850:ARG:HH11	1:C:850:ARG:HG3	1.53	0.73
1:F:52:GLN:NE2	1:F:71:LEU:H	1.87	0.73
1:F:731:SER:HA	1:F:748:GLY:N	2.04	0.73
1:F:780:ARG:HH21	1:F:1105:VAL:HG23	1.53	0.73
1:F:1076:GLY:CA	1:F:1145:GLU:HG2	2.18	0.73
1:F:1417:VAL:HG12	1:F:1419:HIS:H	1.54	0.73
2:G:100:GLN:HB3	2:G:105:GLU:CG	2.17	0.73
2:G:186:LEU:CD1	2:G:200:VAL:HB	2.19	0.73
2:G:366:ARG:HE	2:G:391:GLN:CG	2.01	0.73
2:H:100:GLN:HA	2:H:100:GLN:HE21	1.53	0.73
2:H:144:ARG:HD3	2:H:465:HIS:CE1	2.23	0.73
2:H:182:MET:CE	2:H:216:PRO:HG3	2.17	0.73
2:H:262:LEU:HB2	2:H:401:PHE:HE2	1.53	0.73
2:I:91:PRO:HD2	2:I:203:ARG:NH2	2.04	0.73
2:K:100:GLN:HB3	2:K:105:GLU:CG	2.17	0.73
2:L:257:ASN:ND2	2:L:364:ALA:HB3	2.04	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:264:TYR:OH	2:L:308:ALA:HA	1.89	0.73
1:A:60:LYS:O	1:A:63:GLY:N	2.19	0.73
1:A:609:GLU:OE2	1:A:645:ARG:HD3	1.88	0.73
1:A:1131:THR:HG22	1:A:1133:GLU:N	2.02	0.73
1:B:214:ASN:O	1:B:1015:LYS:HE2	1.88	0.73
1:B:450:ARG:O	1:B:453:ALA:N	2.20	0.73
1:C:1394:VAL:HG11	1:C:1401:LEU:CD2	2.17	0.73
1:D:52:GLN:NE2	1:D:71:LEU:H	1.87	0.73
1:D:295:LYS:HD2	1:D:390:MET:CE	2.19	0.73
1:D:1417:VAL:HG12	1:D:1419:HIS:H	1.54	0.73
1:E:780:ARG:HB3	2:L:51:GLY:C	2.07	0.73
1:F:493:ARG:NH2	1:F:786:ASP:OD1	2.21	0.73
2:I:207:LEU:HG	2:I:212:VAL:HG11	1.70	0.73
2:I:307:THR:O	2:I:310:ARG:HB2	1.88	0.73
2:I:388:PHE:HD2	2:I:390:VAL:HG13	1.52	0.73
2:I:430:LYS:HE2	2:I:456:ASP:HB3	1.69	0.73
2:J:92:GLU:HG2	2:J:128:ASN:ND2	2.03	0.73
2:J:264:TYR:OH	2:J:308:ALA:HA	1.89	0.73
2:K:277:VAL:HG12	2:K:279:ALA:N	2.03	0.73
1:A:1226:GLY:O	1:E:900:GLY:HA2	1.87	0.73
1:A:1460:LYS:O	1:A:1462:MET:N	2.21	0.73
1:C:609:GLU:OE2	1:C:645:ARG:HD3	1.88	0.73
1:D:780:ARG:HH21	1:D:1105:VAL:HG23	1.53	0.73
1:D:829:LEU:HD13	1:D:1168:LEU:HD13	1.70	0.73
1:E:295:LYS:CE	1:E:299:VAL:HG12	2.18	0.73
1:E:342:VAL:HG13	1:E:392:ALA:HB2	1.69	0.73
1:E:724:ASN:ND2	1:E:724:ASN:N	2.37	0.73
1:F:175:ARG:HG3	1:F:175:ARG:HH11	1.52	0.73
1:F:417:ASP:C	1:F:419:TRP:N	2.38	0.73
1:F:838:VAL:CG1	1:F:839:PRO:HD2	2.19	0.73
2:G:277:VAL:HG12	2:G:279:ALA:N	2.03	0.73
2:G:307:THR:O	2:G:310:ARG:HB2	1.88	0.73
2:G:320:TYR:HB2	2:G:346:TRP:CD1	2.24	0.73
2:I:164:GLU:HB2	2:I:207:LEU:HD22	1.70	0.73
2:I:454:ILE:HD13	2:I:454:ILE:O	1.88	0.73
2:J:109:VAL:HG22	7:J:483:SF4:S2	2.29	0.73
2:J:201:GLU:O	2:J:205:LYS:HD3	1.87	0.73
2:J:371:VAL:HG21	2:J:386:SER:HB3	1.71	0.73
2:K:307:THR:O	2:K:310:ARG:HB2	1.88	0.73
1:A:782:ARG:HG3	2:J:52:VAL:HA	0.89	0.73
1:B:525:ARG:HG2	1:B:542:LEU:HD13	1.71	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1113:CYS:O	1:B:1115:VAL:N	2.22	0.73
1:D:891:PRO:HA	1:D:894:PHE:CE2	2.24	0.73
1:E:139:VAL:HG11	1:E:143:GLN:CB	2.17	0.73
1:E:1425:LYS:HD3	1:E:1447:TRP:NE1	2.03	0.73
2:G:322:ARG:HG3	2:G:323:ASP:N	2.04	0.73
2:H:277:VAL:HG12	2:H:279:ALA:N	2.03	0.73
2:H:322:ARG:HG3	2:H:323:ASP:N	2.04	0.73
2:I:371:VAL:HG21	2:I:386:SER:HB3	1.71	0.73
2:J:91:PRO:HD2	2:J:203:ARG:NH2	2.04	0.73
2:J:307:THR:O	2:J:310:ARG:HB2	1.88	0.73
2:K:366:ARG:HE	2:K:391:GLN:CG	2.01	0.73
2:K:371:VAL:HG21	2:K:386:SER:HB3	1.71	0.73
2:L:91:PRO:HD2	2:L:203:ARG:NH2	2.04	0.73
2:L:225:SER:O	2:L:229:LEU:HD12	1.89	0.73
2:L:306:ARG:HD3	2:L:336:HIS:HB3	1.69	0.73
1:A:102:TYR:CD2	1:A:144:PHE:HE1	2.06	0.72
1:A:342:VAL:HG13	1:A:392:ALA:HB2	1.69	0.72
1:B:731:SER:HA	1:B:748:GLY:N	2.04	0.72
1:C:1317:THR:HG23	1:C:1358:GLU:OE1	1.88	0.72
1:D:536:ASP:OD1	1:D:536:ASP:C	2.25	0.72
1:E:1062:ARG:O	1:E:1062:ARG:HG3	1.89	0.72
2:G:207:LEU:HG	2:G:212:VAL:HG11	1.70	0.72
2:J:201:GLU:HG3	2:J:205:LYS:CE	2.18	0.72
2:J:207:LEU:HG	2:J:212:VAL:HG11	1.70	0.72
2:J:257:ASN:ND2	2:J:364:ALA:HB3	2.04	0.72
2:J:322:ARG:HG3	2:J:323:ASP:N	2.04	0.72
2:K:109:VAL:HG22	7:K:483:SF4:S2	2.28	0.72
2:L:201:GLU:HG3	2:L:205:LYS:CE	2.18	0.72
1:B:780:ARG:NH2	1:B:1105:VAL:HG23	2.03	0.72
1:B:783:LYS:HE2	2:G:57:VAL:CG1	2.17	0.72
1:D:1449:ARG:CB	1:D:1449:ARG:NH1	1.80	0.72
1:F:891:PRO:HA	1:F:894:PHE:CE2	2.24	0.72
2:G:257:ASN:ND2	2:G:364:ALA:HB3	2.04	0.72
2:H:186:LEU:CD1	2:H:200:VAL:HB	2.19	0.72
2:H:186:LEU:HD21	2:H:200:VAL:HB	1.69	0.72
2:H:201:GLU:HG3	2:H:205:LYS:CE	2.18	0.72
2:H:264:TYR:OH	2:H:308:ALA:HA	1.89	0.72
2:H:307:THR:O	2:H:310:ARG:HB2	1.88	0.72
2:H:319:LEU:HA	2:H:345:ILE:HD11	1.70	0.72
2:J:366:ARG:HE	2:J:391:GLN:CG	2.01	0.72
2:K:320:TYR:HB2	2:K:346:TRP:CD1	2.24	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:132:TRP:HD1	2:L:202:ARG:HD2	1.53	0.72
2:L:186:LEU:CD1	2:L:200:VAL:HB	2.19	0.72
2:L:307:THR:O	2:L:310:ARG:HB2	1.88	0.72
1:A:465:LEU:C	1:A:465:LEU:HD12	2.08	0.72
1:B:295:LYS:NZ	1:B:299:VAL:O	2.17	0.72
1:B:465:LEU:O	1:B:465:LEU:HD12	1.89	0.72
1:B:1184:ASN:O	1:B:1187:LEU:N	2.22	0.72
1:C:536:ASP:OD1	1:C:536:ASP:C	2.25	0.72
1:E:290:THR:CG2	1:E:291:ALA:N	2.51	0.72
1:E:573:PHE:HB2	1:E:574:PRO:HD2	1.71	0.72
1:E:781:PHE:CD2	2:L:57:VAL:HG21	2.23	0.72
2:G:92:GLU:HG2	2:G:128:ASN:OD1	1.89	0.72
2:G:186:LEU:HD21	2:G:200:VAL:HB	1.69	0.72
2:H:80:ALA:CB	2:H:127:ILE:HG12	2.17	0.72
2:H:257:ASN:CG	2:H:394:LEU:HA	2.08	0.72
2:I:201:GLU:HG3	2:I:205:LYS:CE	2.18	0.72
2:I:327:MET:HB2	2:I:346:TRP:HH2	1.54	0.72
2:I:378:GLN:O	2:I:380:PRO:HD3	1.89	0.72
2:I:383:ILE:HD13	2:I:385:GLY:H	1.54	0.72
2:J:144:ARG:HD3	2:J:465:HIS:CE1	2.23	0.72
2:J:152:VAL:CG1	2:J:175:VAL:HA	2.12	0.72
2:K:92:GLU:HG2	2:K:128:ASN:OD1	1.89	0.72
2:L:454:ILE:HD13	2:L:454:ILE:O	1.88	0.72
1:A:1438:ARG:HB3	2:L:376:GLY:N	1.84	0.72
1:B:838:VAL:HG12	1:B:839:PRO:N	2.02	0.72
1:B:838:VAL:CG1	1:B:839:PRO:HD2	2.19	0.72
1:D:780:ARG:NH2	1:D:1105:VAL:HG23	2.04	0.72
1:D:1369:THR:C	1:D:1389:GLY:O	2.28	0.72
1:E:976:SER:OG	1:E:978:GLU:HG3	1.90	0.72
1:F:665:THR:HG22	1:F:665:THR:O	1.89	0.72
2:G:378:GLN:O	2:G:380:PRO:HD3	1.89	0.72
2:H:320:TYR:HB2	2:H:346:TRP:CD1	2.24	0.72
2:H:371:VAL:HG21	2:H:386:SER:HB3	1.71	0.72
2:J:430:LYS:HE2	2:J:456:ASP:HB3	1.69	0.72
2:K:145:GLU:OE1	2:K:469:LYS:HA	1.88	0.72
2:K:319:LEU:HA	2:K:345:ILE:HD11	1.70	0.72
2:K:322:ARG:HD2	2:K:349:ALA:HB1	1.71	0.72
2:L:152:VAL:HG13	2:L:175:VAL:CA	2.15	0.72
2:L:197:LYS:CE	2:L:275:ASP:H	2.01	0.72
2:L:320:TYR:HB2	2:L:346:TRP:CD1	2.24	0.72
2:L:416:LYS:HE3	2:L:433:ASN:ND2	2.04	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:520:MET:HE1	1:A:705:LEU:HB3	1.71	0.72
1:C:464:ILE:CD1	1:C:779:TYR:CE1	2.71	0.72
1:D:1113:CYS:O	1:D:1115:VAL:N	2.22	0.72
1:E:1221:PRO:HB2	1:E:1229:MET:CE	2.09	0.72
1:F:290:THR:CG2	1:F:292:PRO:CD	2.68	0.72
1:F:782:ARG:CZ	2:I:51:GLY:CA	1.75	0.72
2:G:100:GLN:HE21	2:G:100:GLN:HA	1.53	0.72
2:G:165:GLU:HB3	2:G:169:LYS:NZ	2.03	0.72
2:G:371:VAL:HG21	2:G:386:SER:HB3	1.71	0.72
2:H:71:LEU:CG	2:H:79:GLU:HB2	2.20	0.72
2:H:164:GLU:HB2	2:H:207:LEU:HD22	1.70	0.72
2:H:353:PHE:CD1	2:H:382:VAL:HG12	2.25	0.72
2:I:186:LEU:CD1	2:I:200:VAL:HB	2.19	0.72
2:I:197:LYS:CE	2:I:275:ASP:H	2.01	0.72
2:I:244:LYS:HD2	2:I:404:GLU:CB	2.13	0.72
2:J:31:ILE:HD13	2:J:336:HIS:NE2	2.05	0.72
2:K:416:LYS:HE3	2:K:433:ASN:ND2	2.04	0.72
2:L:257:ASN:CG	2:L:394:LEU:HA	2.08	0.72
1:A:573:PHE:HB2	1:A:574:PRO:HD2	1.71	0.72
1:B:223:GLN:HB3	1:B:224:PRO:HA	1.72	0.72
1:C:454:PHE:HE2	1:C:647:ALA:CB	2.03	0.72
1:C:1376:LEU:N	1:C:1376:LEU:CD2	2.33	0.72
1:D:465:LEU:HD12	1:D:465:LEU:O	1.89	0.72
1:D:1164:ARG:NH1	1:D:1166:ASP:OD2	2.23	0.72
1:E:513:SER:CB	1:E:520:MET:CE	2.64	0.72
1:F:511:ILE:HG22	1:F:512:ASP:N	2.03	0.72
1:F:603:HIS:N	1:F:640:THR:HG22	2.05	0.72
1:F:1076:GLY:HA3	1:F:1145:GLU:CG	2.17	0.72
2:H:423:LEU:HD22	2:H:423:LEU:H	1.55	0.72
2:I:165:GLU:HB3	2:I:169:LYS:NZ	2.03	0.72
2:I:439:ALA:HB1	2:I:443:ILE:HD11	1.72	0.72
2:J:182:MET:CE	2:J:216:PRO:HG3	2.17	0.72
2:J:262:LEU:HB2	2:J:401:PHE:HE2	1.53	0.72
2:K:71:LEU:HD11	2:K:76:ARG:O	1.88	0.72
2:L:71:LEU:HD11	2:L:76:ARG:O	1.88	0.72
2:L:71:LEU:CG	2:L:79:GLU:HB2	2.20	0.72
2:L:182:MET:CE	2:L:216:PRO:HG3	2.17	0.72
1:B:1369:THR:C	1:B:1389:GLY:O	2.28	0.72
1:C:96:GLU:HA	1:C:96:GLU:OE1	1.88	0.72
1:D:290:THR:CG2	1:D:292:PRO:CD	2.68	0.72
1:D:781:PHE:CE2	1:D:791:GLU:HB3	2.25	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1289:MET:H	1:E:1289:MET:CE	2.03	0.72
1:F:1369:THR:C	1:F:1389:GLY:O	2.28	0.72
2:H:416:LYS:HE3	2:H:433:ASN:ND2	2.04	0.72
2:J:186:LEU:CD1	2:J:200:VAL:HB	2.19	0.72
2:J:378:GLN:O	2:J:380:PRO:HD3	1.89	0.72
2:K:305:VAL:HG13	2:K:316:VAL:HG11	1.72	0.72
2:K:353:PHE:CD1	2:K:382:VAL:HG12	2.25	0.72
2:L:165:GLU:HB3	2:L:169:LYS:NZ	2.03	0.72
2:L:322:ARG:HD2	2:L:349:ALA:HB1	1.71	0.72
2:L:378:GLN:O	2:L:380:PRO:HD3	1.89	0.72
2:L:383:ILE:HD13	2:L:385:GLY:N	2.05	0.72
1:A:985:TYR:HE1	1:A:1207:VAL:HG13	1.53	0.72
1:B:146:LEU:HD12	1:B:146:LEU:O	1.88	0.72
1:B:842:GLU:HB3	1:B:1156:ARG:HD3	1.72	0.72
1:B:999:LYS:HG2	1:B:1022:LEU:HD23	1.72	0.72
1:C:375:ASP:OD2	1:C:377:THR:CB	2.26	0.72
1:C:1356:VAL:HG11	1:C:1431:HIS:HB2	1.71	0.72
1:C:1401:LEU:HD11	1:C:1405:ILE:HB	1.71	0.72
1:D:417:ASP:C	1:D:419:TRP:N	2.38	0.72
1:D:603:HIS:N	1:D:640:THR:HG22	2.05	0.72
1:D:842:GLU:HB3	1:D:1156:ARG:HD3	1.72	0.72
1:D:1076:GLY:CA	1:D:1145:GLU:HG2	2.18	0.72
1:E:1317:THR:HG23	1:E:1358:GLU:OE1	1.88	0.72
1:F:223:GLN:HB3	1:F:224:PRO:HA	1.72	0.72
1:F:515:ARG:HD2	1:F:1367:TYR:HE1	1.49	0.72
2:G:383:ILE:HD13	2:G:385:GLY:H	1.54	0.72
2:H:305:VAL:HG13	2:H:316:VAL:HG11	1.72	0.72
2:H:383:ILE:HD13	2:H:385:GLY:N	2.05	0.72
2:I:31:ILE:HD13	2:I:336:HIS:NE2	2.05	0.72
2:J:305:VAL:HG13	2:J:316:VAL:HG11	1.72	0.72
2:J:423:LEU:H	2:J:423:LEU:HD22	1.55	0.72
2:K:257:ASN:ND2	2:K:364:ALA:HB3	2.04	0.72
1:A:976:SER:OG	1:A:978:GLU:HG3	1.90	0.72
1:A:1260:GLN:OE1	1:E:899:ASN:OD1	2.08	0.72
1:B:511:ILE:HG22	1:B:512:ASP:N	2.03	0.72
1:B:1369:THR:HG22	1:B:1369:THR:O	1.89	0.72
1:B:1417:VAL:HG12	1:B:1419:HIS:H	1.54	0.72
1:C:918:THR:HG23	1:C:1256:MET:SD	2.30	0.72
1:C:1289:MET:CE	1:C:1289:MET:H	2.03	0.72
1:C:1447:TRP:CZ2	1:C:1451:VAL:HG22	2.24	0.72
1:D:493:ARG:NH2	1:D:786:ASP:OD1	2.21	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:525:ARG:HG2	1:D:542:LEU:HD13	1.71	0.72
1:D:731:SER:HA	1:D:748:GLY:N	2.04	0.72
1:E:355:TYR:CD1	1:E:355:TYR:C	2.61	0.72
1:E:734:LEU:HD12	1:E:738:HIS:HD2	1.54	0.72
1:F:829:LEU:HD13	1:F:1168:LEU:HD13	1.70	0.72
2:H:257:ASN:ND2	2:H:364:ALA:HB3	2.04	0.72
2:H:469:LYS:HZ3	2:H:476:VAL:HA	1.54	0.72
2:I:305:VAL:HG13	2:I:316:VAL:HG11	1.72	0.72
2:J:439:ALA:HB1	2:J:443:ILE:HD11	1.72	0.72
2:K:100:GLN:HA	2:K:100:GLN:HE21	1.53	0.72
1:A:1227:GLU:HG3	1:E:902:ASN:HB2	1.59	0.72
1:B:218:THR:CG2	1:B:221:LEU:HG	2.20	0.72
1:B:500:ARG:NH2	1:B:1040:PHE:HA	2.05	0.72
1:B:1212:ASP:O	1:B:1216:VAL:HG23	1.90	0.72
1:C:189:THR:HG22	1:C:190:THR:N	2.04	0.72
1:D:3:VAL:HG22	1:D:231:ASN:HB2	1.72	0.72
1:E:189:THR:HG22	1:E:190:THR:N	2.04	0.72
1:F:236:THR:HG21	1:F:328:ASP:N	2.00	0.72
1:F:500:ARG:NH2	1:F:1040:PHE:HA	2.05	0.72
1:F:525:ARG:HG2	1:F:542:LEU:HD13	1.71	0.72
2:G:71:LEU:HD11	2:G:76:ARG:O	1.88	0.72
2:G:71:LEU:CG	2:G:79:GLU:HB2	2.20	0.72
2:G:416:LYS:HE3	2:G:433:ASN:ND2	2.04	0.72
2:H:225:SER:O	2:H:229:LEU:HD12	1.89	0.72
2:J:225:SER:O	2:J:229:LEU:HD12	1.89	0.72
2:K:207:LEU:HG	2:K:212:VAL:HG11	1.70	0.72
2:L:353:PHE:CD1	2:L:382:VAL:HG12	2.25	0.72
1:A:290:THR:HG22	1:A:292:PRO:N	2.05	0.71
1:B:52:GLN:NE2	1:B:71:LEU:H	1.87	0.71
1:B:588:ARG:O	1:B:592:GLU:CG	2.38	0.71
1:B:958:HIS:O	1:B:1369:THR:HG22	1.90	0.71
1:C:102:TYR:CD2	1:C:144:PHE:HE1	2.06	0.71
1:C:875:MET:HE2	1:C:1139:PHE:CZ	2.24	0.71
1:E:60:LYS:O	1:E:63:GLY:N	2.19	0.71
1:F:731:SER:HA	1:F:747:SER:HA	1.71	0.71
1:F:1164:ARG:NH1	1:F:1166:ASP:OD2	2.23	0.71
2:G:264:TYR:OH	2:G:308:ALA:HA	1.89	0.71
2:H:31:ILE:HD13	2:H:336:HIS:NE2	2.05	0.71
2:I:225:SER:O	2:I:229:LEU:HD12	1.89	0.71
2:J:383:ILE:HD13	2:J:385:GLY:H	1.54	0.71
2:K:322:ARG:HG3	2:K:323:ASP:N	2.04	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:K:383:ILE:HD13	2:K:385:GLY:N	2.05	0.71
2:L:244:LYS:HD2	2:L:404:GLU:CB	2.13	0.71
2:L:262:LEU:HB2	2:L:401:PHE:HE2	1.53	0.71
2:L:371:VAL:HG21	2:L:386:SER:HB3	1.71	0.71
1:A:781:PHE:CD2	2:J:57:VAL:HG21	2.23	0.71
1:A:899:ASN:OD1	1:C:1260:GLN:OE1	2.08	0.71
1:A:1104:MET:C	2:J:54:PHE:HZ	1.91	0.71
1:A:1289:MET:H	1:A:1289:MET:CE	2.03	0.71
1:A:1447:TRP:CZ2	1:A:1451:VAL:HG22	2.24	0.71
1:B:891:PRO:HA	1:B:894:PHE:CE2	2.24	0.71
1:C:782:ARG:CB	2:K:56:GLN:NE2	2.38	0.71
1:D:353:MET:HG2	1:D:385:LEU:HD23	1.72	0.71
1:E:102:TYR:CD2	1:E:144:PHE:HE1	2.06	0.71
1:E:1131:THR:HG23	1:E:1133:GLU:OE1	1.90	0.71
1:F:704:LEU:O	1:F:705:LEU:C	2.25	0.71
2:H:388:PHE:HD2	2:H:390:VAL:HG13	1.52	0.71
2:I:320:TYR:HB2	2:I:346:TRP:CD1	2.24	0.71
2:K:152:VAL:HG13	2:K:175:VAL:CA	2.15	0.71
2:K:264:TYR:OH	2:K:308:ALA:HA	1.89	0.71
2:L:31:ILE:HD13	2:L:336:HIS:NE2	2.05	0.71
2:L:92:GLU:HG2	2:L:128:ASN:OD1	1.89	0.71
1:A:724:ASN:ND2	1:A:724:ASN:N	2.36	0.71
1:A:1131:THR:HG23	1:A:1133:GLU:OE1	1.90	0.71
1:B:782:ARG:HG2	2:G:53:PRO:HD2	0.77	0.71
1:B:1164:ARG:NH1	1:B:1166:ASP:OD2	2.23	0.71
1:D:218:THR:CG2	1:D:221:LEU:HG	2.20	0.71
1:D:242:ASN:HD22	1:D:242:ASN:N	1.87	0.71
1:D:1253:LYS:O	1:D:1253:LYS:HG3	1.91	0.71
1:E:782:ARG:HG3	2:L:52:VAL:HA	0.89	0.71
1:F:459:GLU:O	1:F:463:LEU:HB2	1.91	0.71
1:F:781:PHE:CE2	1:F:791:GLU:HB3	2.25	0.71
1:F:842:GLU:HB3	1:F:1156:ARG:HD3	1.72	0.71
1:F:875:MET:CE	1:F:1139:PHE:CE2	2.73	0.71
1:F:1369:THR:HG22	1:F:1369:THR:O	1.89	0.71
2:G:220:VAL:CG2	8:G:484:FAD:C6A	2.68	0.71
2:G:353:PHE:CD1	2:G:382:VAL:HG12	2.25	0.71
2:J:322:ARG:HD2	2:J:349:ALA:HB1	1.71	0.71
2:J:353:PHE:CD1	2:J:382:VAL:HG12	2.25	0.71
2:K:164:GLU:HB2	2:K:207:LEU:HD22	1.70	0.71
2:L:440:ALA:CB	2:L:456:ASP:HB3	2.19	0.71
1:B:493:ARG:NH2	1:B:786:ASP:OD1	2.21	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:781:PHE:CE2	1:B:791:GLU:HB3	2.25	0.71
1:B:875:MET:CE	1:B:1139:PHE:CE2	2.73	0.71
1:B:1253:LYS:O	1:B:1253:LYS:HG3	1.91	0.71
1:C:1438:ARG:NE	2:J:376:GLY:C	2.44	0.71
1:D:1053:HIS:ND1	1:D:1062:ARG:NH1	2.39	0.71
1:D:1212:ASP:O	1:D:1216:VAL:HG23	1.90	0.71
1:E:218:THR:HG21	1:E:221:LEU:HG	1.73	0.71
1:E:850:ARG:HH11	1:E:850:ARG:HG3	1.53	0.71
2:G:305:VAL:HG13	2:G:316:VAL:HG11	1.72	0.71
2:G:423:LEU:HD22	2:G:423:LEU:H	1.55	0.71
2:H:91:PRO:HD2	2:H:203:ARG:NH2	2.04	0.71
2:I:92:GLU:HG2	2:I:128:ASN:OD1	1.89	0.71
2:I:383:ILE:HD13	2:I:385:GLY:N	2.05	0.71
2:I:440:ALA:CB	2:I:456:ASP:HB3	2.19	0.71
2:J:144:ARG:HD2	2:J:169:LYS:HB3	1.73	0.71
2:J:320:TYR:HB2	2:J:346:TRP:CD1	2.24	0.71
2:J:383:ILE:HD13	2:J:385:GLY:N	2.05	0.71
2:K:71:LEU:CG	2:K:79:GLU:HB2	2.20	0.71
2:K:91:PRO:HD2	2:K:203:ARG:NH2	2.04	0.71
2:K:96:ARG:HG3	2:K:97:ILE:HG23	1.73	0.71
2:L:366:ARG:HE	2:L:391:GLN:CG	2.01	0.71
1:B:746:ILE:HG22	1:B:747:SER:O	1.88	0.71
1:C:1230:GLN:NE2	1:C:1267:ARG:HD3	2.05	0.71
1:D:223:GLN:HB3	1:D:224:PRO:HA	1.72	0.71
1:D:236:THR:HG21	1:D:328:ASP:N	2.00	0.71
2:I:322:ARG:HG3	2:I:323:ASP:N	2.04	0.71
2:J:96:ARG:HG3	2:J:97:ILE:HG23	1.73	0.71
2:L:327:MET:HB2	2:L:346:TRP:HH2	1.54	0.71
1:A:454:PHE:HE2	1:A:647:ALA:CB	2.03	0.71
1:A:838:VAL:CG1	1:A:839:PRO:N	2.53	0.71
1:A:1230:GLN:NE2	1:A:1267:ARG:HD3	2.05	0.71
1:B:182:MET:HE3	1:B:217:PRO:HB3	1.52	0.71
1:B:242:ASN:HD22	1:B:242:ASN:N	1.87	0.71
1:B:319:TYR:O	1:B:322:SER:OG	2.09	0.71
1:B:353:MET:HG2	1:B:385:LEU:HD23	1.72	0.71
1:D:459:GLU:O	1:D:463:LEU:HB2	1.91	0.71
1:D:1184:ASN:O	1:D:1187:LEU:N	2.22	0.71
1:F:588:ARG:O	1:F:592:GLU:CG	2.38	0.71
2:G:225:SER:O	2:G:229:LEU:HD12	1.89	0.71
2:I:262:LEU:HB2	2:I:401:PHE:HE2	1.53	0.71
2:J:220:VAL:CG2	8:J:484:FAD:C6A	2.68	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1131:THR:HG23	1:C:1133:GLU:OE1	1.89	0.71
1:E:1230:GLN:NE2	1:E:1267:ARG:HD3	2.05	0.71
1:F:242:ASN:ND2	1:F:242:ASN:N	2.37	0.71
1:F:782:ARG:HG2	2:I:53:PRO:HD2	0.77	0.71
2:G:132:TRP:HD1	2:G:202:ARG:HD2	1.53	0.71
2:H:383:ILE:HD13	2:H:385:GLY:H	1.54	0.71
2:K:225:SER:O	2:K:229:LEU:HD12	1.89	0.71
2:L:207:LEU:HG	2:L:212:VAL:HG11	1.70	0.71
2:L:305:VAL:HG13	2:L:316:VAL:HG11	1.72	0.71
2:L:319:LEU:HA	2:L:345:ILE:HD11	1.70	0.71
2:L:439:ALA:HB1	2:L:443:ILE:HD11	1.72	0.71
1:A:96:GLU:HA	1:A:96:GLU:OE1	1.89	0.71
1:A:1356:VAL:HG11	1:A:1431:HIS:HB2	1.71	0.71
1:B:3:VAL:HG22	1:B:231:ASN:HB2	1.72	0.71
1:B:1114:PRO:HA	2:G:112:GLN:C	1.84	0.71
1:C:997:THR:HG22	1:C:998:VAL:N	2.05	0.71
1:D:319:TYR:O	1:D:322:SER:OG	2.09	0.71
1:D:731:SER:HA	1:D:747:SER:HA	1.71	0.71
1:D:838:VAL:CG1	1:D:839:PRO:HD2	2.19	0.71
1:E:290:THR:HG22	1:E:292:PRO:N	2.05	0.71
1:E:918:THR:HG23	1:E:1256:MET:SD	2.30	0.71
1:E:1114:PRO:HA	2:L:112:GLN:C	1.74	0.71
1:F:88:ALA:O	1:F:92:ILE:HG13	1.91	0.71
1:F:958:HIS:O	1:F:1369:THR:HG22	1.90	0.71
2:G:238:VAL:HG23	2:G:439:ALA:CB	2.21	0.71
2:H:220:VAL:CG2	8:H:484:FAD:C6A	2.68	0.71
2:H:238:VAL:HG23	2:H:439:ALA:CB	2.21	0.71
2:J:92:GLU:HG2	2:J:128:ASN:OD1	1.89	0.71
2:J:264:TYR:HE2	2:J:307:THR:CG2	2.04	0.71
2:J:350:PRO:C	2:J:372:ALA:HB3	2.11	0.71
2:L:220:VAL:CG2	8:L:484:FAD:C6A	2.68	0.71
1:B:665:THR:HG22	1:B:665:THR:O	1.89	0.71
1:B:731:SER:HA	1:B:747:SER:HA	1.71	0.71
1:B:1047:MET:CE	1:B:1186:ARG:NH2	2.44	0.71
1:C:734:LEU:HD12	1:C:738:HIS:HD2	1.54	0.71
1:D:88:ALA:O	1:D:92:ILE:HG13	1.91	0.71
1:D:802:VAL:HG23	1:D:1137:ASN:HB2	1.73	0.71
1:E:997:THR:HG22	1:E:998:VAL:N	2.05	0.71
1:F:1212:ASP:O	1:F:1216:VAL:HG23	1.90	0.71
2:G:350:PRO:C	2:G:372:ALA:HB3	2.11	0.71
2:G:383:ILE:HD13	2:G:385:GLY:N	2.05	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:144:ARG:HD2	2:H:169:LYS:HB3	1.73	0.71
2:I:264:TYR:HE2	2:I:307:THR:CG2	2.04	0.71
2:I:366:ARG:HD3	2:I:389:THR:OG1	1.91	0.71
2:I:423:LEU:H	2:I:423:LEU:HD22	1.55	0.71
2:J:366:ARG:HD3	2:J:389:THR:OG1	1.91	0.71
2:K:238:VAL:HG23	2:K:439:ALA:CB	2.21	0.71
2:K:350:PRO:C	2:K:372:ALA:HB3	2.12	0.71
1:A:918:THR:HG23	1:A:1256:MET:SD	2.30	0.71
1:B:802:VAL:HG23	1:B:1137:ASN:HB2	1.73	0.71
1:B:1076:GLY:CA	1:B:1145:GLU:HG2	2.18	0.71
1:D:500:ARG:NH2	1:D:1040:PHE:HA	2.05	0.71
1:D:603:HIS:N	1:D:640:THR:CG2	2.54	0.71
1:E:253:HIS:H	1:E:260:MET:HE1	1.56	0.71
1:F:593:THR:O	1:F:597:VAL:HG23	1.91	0.71
1:F:603:HIS:N	1:F:640:THR:CG2	2.54	0.71
1:F:1053:HIS:CE1	1:F:1062:ARG:HH11	2.08	0.71
1:F:1289:MET:HB2	1:F:1289:MET:HE3	1.71	0.71
2:I:353:PHE:CD1	2:I:382:VAL:HG12	2.25	0.71
2:K:31:ILE:HD13	2:K:336:HIS:NE2	2.05	0.71
2:K:423:LEU:HD22	2:K:423:LEU:H	1.55	0.71
2:K:478:VAL:HG23	2:K:479:ALA:H	1.56	0.71
2:L:350:PRO:C	2:L:372:ALA:HB3	2.12	0.71
1:A:183:PHE:CE1	1:A:188:LEU:HA	2.26	0.70
1:B:295:LYS:NZ	1:B:299:VAL:HG12	2.06	0.70
1:B:1170:GLN:O	1:B:1170:GLN:CG	2.39	0.70
1:C:218:THR:HG21	1:C:221:LEU:HG	1.73	0.70
1:C:1062:ARG:O	1:C:1062:ARG:HG3	1.90	0.70
1:D:593:THR:O	1:D:597:VAL:HG23	1.91	0.70
1:D:1053:HIS:CE1	1:D:1062:ARG:HH11	2.08	0.70
1:E:838:VAL:CG1	1:E:839:PRO:N	2.53	0.70
1:F:266:VAL:O	1:F:279:THR:CG2	2.39	0.70
1:F:1184:ASN:O	1:F:1187:LEU:N	2.22	0.70
1:F:1394:VAL:HG12	1:F:1394:VAL:O	1.91	0.70
2:G:326:ASN:O	2:G:328:PRO:HD3	1.91	0.70
2:H:207:LEU:HG	2:H:212:VAL:HG11	1.70	0.70
2:I:71:LEU:CG	2:I:79:GLU:HB2	2.20	0.70
2:I:144:ARG:HD2	2:I:169:LYS:HB3	1.73	0.70
2:J:244:LYS:HD2	2:J:404:GLU:CB	2.13	0.70
2:K:321:ARG:CB	2:K:351:GLU:HA	2.21	0.70
1:A:1062:ARG:O	1:A:1062:ARG:HG3	1.89	0.70
1:B:907:ILE:HG23	1:B:927:GLU:HG2	1.73	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1039:LYS:C	1:B:1040:PHE:CD1	2.65	0.70
1:C:177:ILE:HD13	1:C:179:TYR:CE1	2.27	0.70
1:C:573:PHE:HB2	1:C:574:PRO:HD2	1.71	0.70
1:C:724:ASN:ND2	1:C:724:ASN:N	2.36	0.70
1:C:838:VAL:CG1	1:C:839:PRO:N	2.53	0.70
1:C:976:SER:OG	1:C:978:GLU:HG3	1.90	0.70
1:D:59:VAL:HG21	1:D:105:TYR:CD2	2.26	0.70
1:D:1170:GLN:O	1:D:1170:GLN:CG	2.39	0.70
1:E:96:GLU:HA	1:E:96:GLU:OE1	1.89	0.70
1:E:609:GLU:OE2	1:E:645:ARG:HD3	1.88	0.70
1:F:295:LYS:NZ	1:F:299:VAL:HG12	2.06	0.70
1:F:802:VAL:HG23	1:F:1137:ASN:HB2	1.73	0.70
2:G:31:ILE:HD13	2:G:336:HIS:NE2	2.05	0.70
2:G:144:ARG:HD2	2:G:169:LYS:HB3	1.73	0.70
2:G:319:LEU:HA	2:G:345:ILE:HD11	1.70	0.70
2:H:152:VAL:HG13	2:H:175:VAL:CA	2.15	0.70
2:H:264:TYR:HE2	2:H:307:THR:CG2	2.04	0.70
2:K:264:TYR:HE2	2:K:307:THR:CG2	2.04	0.70
2:K:326:ASN:O	2:K:328:PRO:HD3	1.91	0.70
2:L:238:VAL:HG23	2:L:439:ALA:CB	2.21	0.70
1:A:501:GLN:HE21	1:A:653:HIS:CD2	2.10	0.70
1:B:266:VAL:O	1:B:279:THR:CG2	2.39	0.70
1:B:593:THR:O	1:B:597:VAL:HG23	1.91	0.70
1:B:739:PHE:O	1:B:740:PRO:O	2.10	0.70
1:C:899:ASN:OD1	1:E:1260:GLN:OE1	2.08	0.70
1:D:1348:VAL:O	1:D:1348:VAL:HG13	1.91	0.70
1:E:1438:ARG:HB3	2:K:375:THR:CA	2.14	0.70
2:G:194:LYS:HD2	2:G:306:ARG:HH21	1.57	0.70
2:G:321:ARG:CB	2:G:351:GLU:HA	2.21	0.70
2:G:417:VAL:HG12	2:G:418:THR:O	1.92	0.70
2:I:96:ARG:HG3	2:I:97:ILE:HG23	1.73	0.70
2:I:350:PRO:C	2:I:372:ALA:HB3	2.12	0.70
2:K:197:LYS:HG2	2:K:273:LEU:HD12	1.73	0.70
2:L:152:VAL:CG1	2:L:175:VAL:HA	2.12	0.70
2:L:264:TYR:HE2	2:L:307:THR:CG2	2.04	0.70
2:L:326:ASN:O	2:L:328:PRO:HD3	1.91	0.70
1:A:997:THR:HG22	1:A:998:VAL:N	2.05	0.70
1:A:1362:SER:HA	1:A:1380:GLY:HA3	1.74	0.70
1:B:59:VAL:HG21	1:B:105:TYR:CD2	2.26	0.70
1:B:242:ASN:ND2	1:B:242:ASN:N	2.37	0.70
1:B:454:PHE:CE2	1:B:647:ALA:HB3	2.27	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:603:HIS:N	1:B:640:THR:CG2	2.54	0.70
1:B:820:ARG:CB	1:B:821:PRO:CD	2.66	0.70
1:B:1053:HIS:ND1	1:B:1062:ARG:NH1	2.39	0.70
1:C:140:SER:O	1:C:143:GLN:N	2.24	0.70
1:C:1362:SER:HA	1:C:1380:GLY:HA3	1.74	0.70
1:D:242:ASN:ND2	1:D:242:ASN:N	2.37	0.70
1:D:266:VAL:O	1:D:279:THR:CG2	2.39	0.70
1:E:454:PHE:HE2	1:E:647:ALA:CB	2.03	0.70
1:E:875:MET:HE1	1:E:1139:PHE:CD2	2.26	0.70
1:F:295:LYS:HD2	1:F:390:MET:CE	2.19	0.70
1:F:353:MET:HG2	1:F:385:LEU:HD23	1.72	0.70
2:H:34:ARG:HG3	2:H:125:LYS:HE2	1.74	0.70
2:H:194:LYS:HD2	2:H:306:ARG:HH21	1.57	0.70
2:I:420:TRP:HB2	2:I:422:THR:HG22	1.73	0.70
2:J:34:ARG:HG3	2:J:125:LYS:HE2	1.73	0.70
2:J:238:VAL:HG23	2:J:439:ALA:CB	2.21	0.70
2:K:194:LYS:HD2	2:K:306:ARG:HH21	1.57	0.70
2:L:322:ARG:HG3	2:L:323:ASP:N	2.04	0.70
2:L:423:LEU:HD22	2:L:423:LEU:H	1.55	0.70
1:A:253:HIS:H	1:A:260:MET:HE1	1.56	0.70
1:B:465:LEU:HD12	1:B:465:LEU:C	2.12	0.70
1:C:501:GLN:HE21	1:C:653:HIS:CD2	2.10	0.70
1:D:389:GLU:CB	1:D:403:ASP:OD2	2.40	0.70
1:D:588:ARG:O	1:D:592:GLU:CG	2.38	0.70
1:D:875:MET:CE	1:D:1139:PHE:CE2	2.73	0.70
1:E:295:LYS:HZ3	1:E:299:VAL:HG12	1.54	0.70
1:E:1076:GLY:HA3	1:E:1145:GLU:CG	2.22	0.70
1:F:218:THR:CG2	1:F:221:LEU:HG	2.20	0.70
1:F:242:ASN:HD22	1:F:242:ASN:N	1.87	0.70
2:G:478:VAL:HG23	2:G:479:ALA:H	1.56	0.70
2:H:197:LYS:HG2	2:H:273:LEU:HD12	1.73	0.70
2:H:406:LEU:HD22	2:H:406:LEU:H	1.57	0.70
2:I:34:ARG:HG3	2:I:125:LYS:HE2	1.73	0.70
2:I:132:TRP:HD1	2:I:202:ARG:HD2	1.53	0.70
2:I:220:VAL:CG2	8:I:484:FAD:C6A	2.68	0.70
2:J:406:LEU:H	2:J:406:LEU:HD22	1.57	0.70
2:K:220:VAL:CG2	8:K:484:FAD:C6A	2.68	0.70
2:K:368:HIS:CE1	2:K:387:GLU:HG3	2.27	0.70
2:K:406:LEU:H	2:K:406:LEU:HD22	1.57	0.70
2:K:439:ALA:HB1	2:K:443:ILE:HD11	1.72	0.70
1:B:1053:HIS:CE1	1:B:1062:ARG:HH11	2.08	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:985:TYR:CE1	1:D:1207:VAL:HG13	2.27	0.70
1:E:1356:VAL:HG11	1:E:1431:HIS:HB2	1.71	0.70
1:F:3:VAL:HG22	1:F:231:ASN:HB2	1.72	0.70
1:F:732:ARG:H	1:F:747:SER:HB3	1.57	0.70
2:G:96:ARG:HG3	2:G:97:ILE:HG23	1.73	0.70
2:G:322:ARG:HD2	2:G:349:ALA:HB1	1.71	0.70
2:H:271:VAL:HG11	2:H:284:SER:C	2.12	0.70
2:I:197:LYS:HG2	2:I:273:LEU:HD12	1.73	0.70
1:A:140:SER:O	1:A:143:GLN:N	2.24	0.70
1:B:88:ALA:O	1:B:92:ILE:HG13	1.91	0.70
1:B:459:GLU:O	1:B:463:LEU:HB2	1.91	0.70
1:B:1121:ASP:OD1	1:B:1122:ASP:N	2.25	0.70
1:D:794:VAL:HG12	1:D:795:ILE:N	2.07	0.70
1:D:907:ILE:HG23	1:D:927:GLU:HG2	1.73	0.70
1:E:501:GLN:HE21	1:E:653:HIS:CD2	2.10	0.70
1:F:1053:HIS:ND1	1:F:1062:ARG:NH1	2.39	0.70
1:F:1105:VAL:HG13	1:F:1107:GLN:HG3	1.74	0.70
2:H:302:MET:HE1	2:H:333:GLU:HG3	1.73	0.70
2:J:90:PHE:CD2	2:J:203:ARG:HG3	2.27	0.70
2:J:440:ALA:CB	2:J:456:ASP:HB3	2.19	0.70
2:K:417:VAL:HG12	2:K:418:THR:O	1.92	0.70
2:L:477:ALA:O	2:L:478:VAL:HG13	1.92	0.70
1:A:177:ILE:HD13	1:A:179:TYR:CE1	2.27	0.70
1:A:218:THR:HG21	1:A:221:LEU:HG	1.73	0.70
1:B:302:ALA:HB2	1:B:347:ARG:NH1	2.07	0.70
1:B:1394:VAL:HG12	1:B:1394:VAL:O	1.91	0.70
1:C:902:ASN:ND2	1:E:1227:GLU:HG3	2.07	0.70
1:C:974:ILE:CD1	1:C:983:LEU:HD12	2.19	0.70
1:F:454:PHE:CE2	1:F:647:ALA:HB3	2.27	0.70
1:F:604:VAL:HG23	1:F:640:THR:HG21	1.73	0.70
1:F:780:ARG:HG2	2:I:51:GLY:O	1.92	0.70
1:F:794:VAL:HG12	1:F:795:ILE:N	2.07	0.70
1:F:1414:ARG:NH2	1:F:1455:TRP:CZ2	2.60	0.70
2:G:406:LEU:H	2:G:406:LEU:HD22	1.57	0.70
2:G:420:TRP:HB2	2:G:422:THR:HG22	1.73	0.70
2:G:440:ALA:CB	2:G:456:ASP:HB3	2.19	0.70
2:H:77:LEU:HA	2:H:127:ILE:CD1	2.22	0.70
2:I:90:PHE:CD2	2:I:203:ARG:HG3	2.27	0.70
2:I:238:VAL:HG23	2:I:439:ALA:CB	2.21	0.70
2:J:420:TRP:HB2	2:J:422:THR:HG22	1.73	0.70
2:J:469:LYS:HZ3	2:J:476:VAL:HA	1.57	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:K:366:ARG:HD3	2:K:389:THR:OG1	1.91	0.70
2:K:420:TRP:HB2	2:K:422:THR:HG22	1.73	0.70
2:K:477:ALA:O	2:K:478:VAL:HG13	1.92	0.70
2:L:197:LYS:HG2	2:L:273:LEU:HD12	1.73	0.70
1:B:107:TRP:N	1:B:107:TRP:CD1	2.59	0.70
1:B:932:VAL:O	1:B:933:ALA:HB2	1.92	0.70
1:C:183:PHE:CE1	1:C:188:LEU:HA	2.26	0.70
1:C:1104:MET:C	2:K:54:PHE:HZ	1.91	0.70
1:D:604:VAL:HG23	1:D:640:THR:HG21	1.73	0.70
1:D:739:PHE:O	1:D:740:PRO:O	2.10	0.70
1:E:140:SER:O	1:E:143:GLN:N	2.24	0.70
1:E:183:PHE:CE1	1:E:188:LEU:HA	2.26	0.70
1:E:781:PHE:O	2:L:52:VAL:HB	1.85	0.70
2:G:100:GLN:CB	2:G:105:GLU:HG2	2.22	0.70
2:G:271:VAL:HG11	2:G:284:SER:C	2.12	0.70
2:I:477:ALA:O	2:I:478:VAL:HG13	1.92	0.70
2:J:100:GLN:CB	2:J:105:GLU:HG2	2.22	0.70
2:L:77:LEU:HA	2:L:127:ILE:CD1	2.22	0.70
2:L:417:VAL:HG12	2:L:418:THR:O	1.92	0.70
1:B:1449:ARG:CB	1:B:1449:ARG:NH1	1.80	0.70
1:D:447:LEU:CD1	1:D:451:GLN:HG3	2.22	0.70
1:E:1338:ALA:HB3	1:E:1357:VAL:HG22	1.74	0.70
1:F:985:TYR:CE1	1:F:1207:VAL:HG13	2.27	0.70
2:G:295:LEU:O	2:G:398:ALA:HB3	1.92	0.70
2:G:366:ARG:HD3	2:G:389:THR:OG1	1.91	0.70
2:H:179:TYR:CB	2:H:181:ARG:HH12	2.05	0.70
2:H:321:ARG:CB	2:H:351:GLU:HA	2.21	0.70
2:J:271:VAL:HG11	2:J:284:SER:C	2.12	0.70
2:K:241:GLY:N	2:K:443:ILE:HG23	2.07	0.70
2:L:144:ARG:HD2	2:L:169:LYS:HB3	1.73	0.70
2:L:194:LYS:HD2	2:L:306:ARG:HH21	1.57	0.70
2:L:478:VAL:HG23	2:L:479:ALA:H	1.56	0.70
1:A:113:ASN:HD22	1:A:114:VAL:N	1.89	0.69
1:B:290:THR:CG2	1:B:292:PRO:CD	2.68	0.69
1:B:499:PHE:HE1	1:B:742:MET:HE1	1.57	0.69
1:B:603:HIS:N	1:B:640:THR:HG22	2.05	0.69
1:B:1090:PHE:N	1:B:1090:PHE:CD1	2.60	0.69
1:B:1414:ARG:NH2	1:B:1455:TRP:CZ2	2.60	0.69
1:C:290:THR:HG22	1:C:292:PRO:N	2.05	0.69
1:C:413:LEU:O	1:C:414:LYS:CD	2.40	0.69
1:C:1076:GLY:HA3	1:C:1145:GLU:CG	2.22	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:732:ARG:H	1:D:747:SER:HB3	1.57	0.69
1:E:515:ARG:NE	1:E:1367:TYR:CE1	2.60	0.69
1:F:302:ALA:HB2	1:F:347:ARG:NH1	2.07	0.69
2:G:264:TYR:HE2	2:G:307:THR:CG2	2.04	0.69
2:H:418:THR:HG21	2:H:422:THR:HG23	1.74	0.69
2:H:477:ALA:O	2:H:478:VAL:HG13	1.92	0.69
2:H:478:VAL:HG23	2:H:479:ALA:H	1.56	0.69
2:I:326:ASN:O	2:I:328:PRO:HD3	1.91	0.69
2:J:368:HIS:CE1	2:J:387:GLU:HG3	2.27	0.69
2:K:271:VAL:HG11	2:K:284:SER:C	2.12	0.69
2:K:383:ILE:HD13	2:K:385:GLY:H	1.54	0.69
2:L:121:GLY:O	2:L:125:LYS:HD3	1.92	0.69
2:L:321:ARG:CB	2:L:351:GLU:HA	2.21	0.69
2:L:366:ARG:HD3	2:L:389:THR:OG1	1.91	0.69
1:A:59:VAL:HG21	1:A:105:TYR:CE2	2.27	0.69
1:A:1438:ARG:NE	2:L:376:GLY:C	2.44	0.69
1:C:113:ASN:HD22	1:C:114:VAL:N	1.89	0.69
1:C:240:ASN:HD21	1:C:327:TRP:HA	1.58	0.69
1:C:515:ARG:NE	1:C:1367:TYR:CE1	2.60	0.69
1:C:1221:PRO:CG	1:C:1229:MET:CE	2.70	0.69
1:D:958:HIS:O	1:D:1369:THR:HG22	1.90	0.69
1:D:1053:HIS:CE1	1:D:1062:ARG:NH1	2.60	0.69
1:D:1394:VAL:O	1:D:1394:VAL:HG12	1.91	0.69
1:E:177:ILE:HD13	1:E:179:TYR:CE1	2.27	0.69
1:E:1438:ARG:NE	2:K:376:GLY:C	2.44	0.69
1:F:312:ASN:OD1	1:F:312:ASN:N	2.25	0.69
1:F:319:TYR:O	1:F:322:SER:OG	2.09	0.69
1:F:1053:HIS:CE1	1:F:1062:ARG:NH1	2.60	0.69
2:I:271:VAL:HG11	2:I:284:SER:C	2.12	0.69
2:J:241:GLY:N	2:J:443:ILE:HG23	2.07	0.69
2:K:34:ARG:HG3	2:K:125:LYS:HE2	1.73	0.69
2:L:321:ARG:C	2:L:351:GLU:HA	2.13	0.69
1:A:734:LEU:HD12	1:A:738:HIS:HD2	1.54	0.69
1:A:1076:GLY:HA3	1:A:1145:GLU:CG	2.22	0.69
1:B:1059:ASN:N	1:B:1059:ASN:HD22	1.91	0.69
1:C:461:MET:HE1	1:C:465:LEU:HD23	1.74	0.69
1:D:295:LYS:NZ	1:D:299:VAL:HG12	2.06	0.69
1:D:454:PHE:CE2	1:D:647:ALA:HB3	2.26	0.69
1:D:985:TYR:CE1	1:D:1207:VAL:CG1	2.75	0.69
1:E:1104:MET:C	2:L:54:PHE:HZ	1.91	0.69
1:E:1121:ASP:OD2	1:E:1124:LEU:HB2	1.93	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1221:PRO:CG	1:E:1229:MET:CE	2.70	0.69
1:F:447:LEU:CD1	1:F:451:GLN:HG3	2.22	0.69
1:F:739:PHE:O	1:F:740:PRO:O	2.10	0.69
2:G:197:LYS:HE2	2:G:275:ASP:N	2.08	0.69
2:H:90:PHE:CD2	2:H:203:ARG:HG3	2.27	0.69
2:H:121:GLY:O	2:H:125:LYS:HD3	1.92	0.69
2:H:241:GLY:N	2:H:443:ILE:HG23	2.07	0.69
2:J:121:GLY:O	2:J:125:LYS:HD3	1.92	0.69
2:J:477:ALA:O	2:J:478:VAL:HG13	1.92	0.69
2:K:77:LEU:HA	2:K:127:ILE:CD1	2.22	0.69
2:K:144:ARG:HD2	2:K:169:LYS:HB3	1.73	0.69
2:K:179:TYR:CB	2:K:181:ARG:HH12	2.05	0.69
2:L:271:VAL:HG11	2:L:284:SER:C	2.12	0.69
2:L:449:LEU:CD1	2:L:451:VAL:HG12	2.22	0.69
1:A:496:HIS:O	1:A:653:HIS:HE1	1.76	0.69
1:A:1317:THR:HG23	1:A:1358:GLU:OE1	1.88	0.69
1:A:1338:ALA:HB3	1:A:1357:VAL:HG22	1.74	0.69
1:B:309:THR:HB	1:B:314:LYS:HE3	1.74	0.69
1:D:426:LEU:HD22	1:D:543:LEU:HB3	1.73	0.69
1:D:782:ARG:N	2:H:52:VAL:HB	2.07	0.69
1:D:1039:LYS:C	1:D:1040:PHE:CD1	2.65	0.69
1:F:419:TRP:O	1:F:540:THR:HG21	1.92	0.69
2:G:121:GLY:O	2:G:125:LYS:HD3	1.92	0.69
2:G:327:MET:HB2	2:G:346:TRP:HH2	1.54	0.69
2:G:368:HIS:CE1	2:G:387:GLU:HG3	2.27	0.69
2:G:439:ALA:HB1	2:G:443:ILE:HD11	1.72	0.69
2:H:180:ASP:O	2:H:182:MET:HE1	1.93	0.69
2:I:121:GLY:O	2:I:125:LYS:HD3	1.92	0.69
2:I:122:SER:HA	2:I:125:LYS:HE3	1.75	0.69
2:J:321:ARG:CB	2:J:351:GLU:HA	2.21	0.69
2:L:180:ASP:O	2:L:182:MET:HE1	1.93	0.69
1:A:515:ARG:NE	1:A:1367:TYR:CE1	2.60	0.69
1:A:1415:ILE:HG21	1:A:1421:GLU:HB2	1.75	0.69
1:C:208:HIS:CE1	1:C:223:GLN:OE1	2.45	0.69
1:C:414:LYS:HB3	1:C:415:PRO:CD	2.23	0.69
1:C:496:HIS:O	1:C:653:HIS:HE1	1.76	0.69
1:C:746:ILE:HG23	1:C:1182:ASP:H	1.54	0.69
1:C:1121:ASP:OD2	1:C:1124:LEU:HB2	1.93	0.69
1:D:528:ASN:C	1:D:529:LEU:HD23	2.13	0.69
1:D:999:LYS:HG2	1:D:1022:LEU:HD23	1.72	0.69
1:E:496:HIS:O	1:E:653:HIS:HE1	1.76	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:96:ARG:HA	2:H:125:LYS:HD2	1.75	0.69
2:H:96:ARG:HG3	2:H:97:ILE:HG23	1.73	0.69
2:H:322:ARG:HD2	2:H:326:ASN:HD21	1.58	0.69
2:H:350:PRO:C	2:H:372:ALA:HB3	2.12	0.69
2:H:439:ALA:HB1	2:H:443:ILE:HD11	1.72	0.69
2:J:165:GLU:OE2	2:J:458:ARG:HA	1.92	0.69
2:J:179:TYR:CB	2:J:181:ARG:HH12	2.05	0.69
2:K:77:LEU:HA	2:K:127:ILE:HD11	1.75	0.69
2:K:121:GLY:O	2:K:125:LYS:HD3	1.92	0.69
2:K:418:THR:HG21	2:K:422:THR:HG23	1.74	0.69
2:L:122:SER:HA	2:L:125:LYS:HE3	1.75	0.69
2:L:197:LYS:HE2	2:L:275:ASP:N	2.07	0.69
2:L:321:ARG:HB2	2:L:351:GLU:CA	2.23	0.69
1:A:208:HIS:CE1	1:A:223:GLN:OE1	2.45	0.69
1:A:414:LYS:HB3	1:A:415:PRO:CD	2.23	0.69
1:A:974:ILE:CD1	1:A:983:LEU:HD12	2.19	0.69
1:B:604:VAL:HG23	1:B:640:THR:HG21	1.73	0.69
1:B:1008:THR:CG2	1:B:1009:ILE:N	2.55	0.69
1:B:1053:HIS:CE1	1:B:1062:ARG:NH1	2.60	0.69
1:B:1112:THR:O	2:G:112:GLN:NE2	2.19	0.69
1:D:780:ARG:HG2	2:H:51:GLY:O	1.92	0.69
1:D:1112:THR:O	2:H:112:GLN:NE2	2.19	0.69
1:D:1414:ARG:NH2	1:D:1455:TRP:CZ2	2.60	0.69
1:E:113:ASN:HD22	1:E:114:VAL:N	1.89	0.69
1:E:208:HIS:CE1	1:E:223:GLN:OE1	2.45	0.69
1:F:59:VAL:HG21	1:F:105:TYR:CD2	2.27	0.69
1:F:465:LEU:HD12	1:F:465:LEU:C	2.12	0.69
1:F:753:GLY:O	1:F:754:ILE:C	2.25	0.69
1:F:1090:PHE:N	1:F:1090:PHE:CD1	2.60	0.69
1:F:1121:ASP:OD1	1:F:1122:ASP:N	2.25	0.69
1:F:1253:LYS:O	1:F:1253:LYS:HG3	1.91	0.69
1:F:1348:VAL:O	1:F:1348:VAL:HG13	1.92	0.69
2:G:477:ALA:O	2:G:478:VAL:HG13	1.92	0.69
2:H:321:ARG:C	2:H:351:GLU:HA	2.13	0.69
2:H:366:ARG:HD3	2:H:389:THR:OG1	1.91	0.69
2:I:165:GLU:OE2	2:I:458:ARG:HA	1.92	0.69
2:J:77:LEU:HA	2:J:127:ILE:HD11	1.75	0.69
2:J:77:LEU:HA	2:J:127:ILE:CD1	2.22	0.69
2:J:197:LYS:HE2	2:J:275:ASP:N	2.08	0.69
2:J:326:ASN:O	2:J:328:PRO:HD3	1.91	0.69
2:K:319:LEU:CB	2:K:345:ILE:HD11	2.23	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:K:321:ARG:HA	2:K:352:GLY:N	2.08	0.69
2:K:322:ARG:HD2	2:K:326:ASN:HD21	1.58	0.69
2:K:451:VAL:HA	2:K:454:ILE:HG22	1.75	0.69
1:A:358:THR:HB	1:A:360:ASP:OD1	1.92	0.69
1:A:1019:ASP:OD2	1:A:1204:ARG:HB2	1.92	0.69
1:A:1311:THR:CG2	1:A:1312:SER:N	2.55	0.69
1:C:313:HIS:O	1:C:317:ILE:HG13	1.93	0.69
1:D:302:ALA:HB2	1:D:347:ARG:NH1	2.07	0.69
1:D:782:ARG:HH21	2:H:51:GLY:CA	0.99	0.69
1:E:240:ASN:HD21	1:E:327:TRP:HA	1.58	0.69
1:E:253:HIS:CE1	1:E:254:PRO:CD	2.62	0.69
1:F:528:ASN:C	1:F:529:LEU:HD23	2.13	0.69
1:F:734:LEU:HD12	1:F:738:HIS:CD2	2.25	0.69
1:F:875:MET:HE1	1:F:1139:PHE:CD2	2.27	0.69
1:F:1059:ASN:N	1:F:1059:ASN:HD22	1.91	0.69
2:G:321:ARG:HB2	2:G:351:GLU:CA	2.23	0.69
2:G:451:VAL:HA	2:G:454:ILE:HG22	1.75	0.69
2:H:295:LEU:O	2:H:398:ALA:HB3	1.92	0.69
2:I:77:LEU:HA	2:I:127:ILE:CD1	2.22	0.69
2:I:321:ARG:HA	2:I:352:GLY:N	2.08	0.69
2:I:322:ARG:HD2	2:I:326:ASN:HD21	1.58	0.69
2:J:302:MET:HE1	2:J:333:GLU:HG3	1.74	0.69
2:J:322:ARG:HD2	2:J:326:ASN:HD21	1.58	0.69
2:L:90:PHE:CD2	2:L:203:ARG:HG3	2.27	0.69
2:L:220:VAL:CG2	8:L:484:FAD:N1A	2.56	0.69
2:L:406:LEU:HD22	2:L:406:LEU:H	1.57	0.69
2:L:420:TRP:HB2	2:L:422:THR:HG22	1.73	0.69
1:A:313:HIS:O	1:A:317:ILE:HG13	1.93	0.69
1:A:345:MET:CG	1:A:346:ASP:N	2.55	0.69
1:A:1276:LEU:HD12	1:A:1277:GLY:N	2.08	0.69
1:B:426:LEU:HD22	1:B:543:LEU:HB3	1.73	0.69
1:B:1054:GLN:O	1:B:1057:THR:N	2.26	0.69
1:B:1438:ARG:HD2	2:H:377:ARG:N	1.49	0.69
1:C:9:ILE:HG13	1:C:361:GLY:O	1.93	0.69
1:C:442:MET:HE1	1:C:447:LEU:HA	1.75	0.69
1:D:419:TRP:O	1:D:540:THR:HG21	1.92	0.69
1:D:783:LYS:HE2	2:H:57:VAL:CG1	2.17	0.69
1:D:932:VAL:O	1:D:933:ALA:HB2	1.92	0.69
1:D:1105:VAL:HG13	1:D:1107:GLN:HG3	1.74	0.69
1:D:1121:ASP:OD1	1:D:1122:ASP:N	2.25	0.69
1:D:1447:TRP:CE2	1:D:1451:VAL:HG22	2.28	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1449:ARG:O	1:D:1452:THR:HB	1.93	0.69
1:E:8:ALA:HA	1:E:362:LEU:HD12	1.75	0.69
1:E:413:LEU:O	1:E:414:LYS:CD	2.40	0.69
1:E:442:MET:HE1	1:E:447:LEU:HA	1.75	0.69
1:E:1221:PRO:HG2	1:E:1229:MET:CE	2.23	0.69
1:E:1276:LEU:HD12	1:E:1277:GLY:N	2.08	0.69
1:E:1311:THR:CG2	1:E:1312:SER:N	2.55	0.69
1:E:1388:THR:O	1:E:1388:THR:HG22	1.93	0.69
1:F:426:LEU:HD22	1:F:543:LEU:HB3	1.73	0.69
1:F:442:MET:HG3	1:F:673:GLU:OE2	1.93	0.69
1:F:1447:TRP:CE2	1:F:1451:VAL:HG22	2.28	0.69
2:G:179:TYR:CB	2:G:181:ARG:HH12	2.05	0.69
2:G:241:GLY:N	2:G:443:ILE:HG23	2.07	0.69
2:G:319:LEU:CB	2:G:345:ILE:HD11	2.23	0.69
2:G:321:ARG:C	2:G:351:GLU:HA	2.13	0.69
2:H:321:ARG:HA	2:H:352:GLY:N	2.08	0.69
2:H:326:ASN:O	2:H:328:PRO:HD3	1.91	0.69
2:H:368:HIS:CE1	2:H:387:GLU:HG3	2.27	0.69
2:H:420:TRP:HB2	2:H:422:THR:HG22	1.73	0.69
2:I:77:LEU:HA	2:I:127:ILE:HD11	1.75	0.69
2:I:295:LEU:O	2:I:398:ALA:HB3	1.92	0.69
2:I:321:ARG:C	2:I:351:GLU:HA	2.13	0.69
2:I:368:HIS:CE1	2:I:387:GLU:HG3	2.27	0.69
2:I:406:LEU:HD22	2:I:406:LEU:H	1.57	0.69
2:J:194:LYS:HD2	2:J:306:ARG:HH21	1.57	0.69
2:J:197:LYS:HG2	2:J:273:LEU:HD12	1.73	0.69
2:J:321:ARG:HA	2:J:352:GLY:N	2.08	0.69
2:J:417:VAL:HG12	2:J:418:THR:O	1.92	0.69
2:J:418:THR:HG21	2:J:422:THR:HG23	1.74	0.69
2:J:451:VAL:HA	2:J:454:ILE:HG22	1.75	0.69
2:K:90:PHE:CD2	2:K:203:ARG:HG3	2.27	0.69
2:K:321:ARG:C	2:K:351:GLU:HA	2.13	0.69
2:K:449:LEU:CD1	2:K:451:VAL:HG12	2.22	0.69
2:K:469:LYS:HZ3	2:K:476:VAL:HA	1.57	0.69
2:L:96:ARG:HG3	2:L:97:ILE:HG23	1.73	0.69
2:L:100:GLN:CB	2:L:105:GLU:HG2	2.22	0.69
2:L:368:HIS:CE1	2:L:387:GLU:HG3	2.27	0.69
1:A:1221:PRO:CG	1:A:1229:MET:CE	2.70	0.69
1:A:1221:PRO:HG2	1:A:1229:MET:CE	2.23	0.69
1:B:528:ASN:C	1:B:529:LEU:HD23	2.13	0.69
1:B:603:HIS:CA	1:B:640:THR:CG2	2.71	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1289:MET:HB2	1:B:1289:MET:HE3	1.73	0.69
1:D:1054:GLN:O	1:D:1057:THR:N	2.26	0.69
1:E:728:ILE:HD12	1:E:1047:MET:HE3	1.75	0.69
1:F:782:ARG:HD3	2:I:53:PRO:CD	2.09	0.69
1:F:1039:LYS:C	1:F:1040:PHE:CD1	2.65	0.69
2:G:44:ALA:HA	2:G:69:LEU:CD1	2.22	0.69
2:G:77:LEU:HA	2:G:127:ILE:CD1	2.22	0.69
2:G:302:MET:HE1	2:G:333:GLU:HG3	1.74	0.69
2:H:319:LEU:CB	2:H:345:ILE:HD11	2.23	0.69
2:H:440:ALA:CB	2:H:456:ASP:HB3	2.19	0.69
2:I:417:VAL:HG12	2:I:418:THR:O	1.92	0.69
2:J:71:LEU:CG	2:J:79:GLU:HB2	2.20	0.69
2:J:96:ARG:HA	2:J:125:LYS:HD2	1.75	0.69
2:K:165:GLU:OE2	2:K:458:ARG:HA	1.92	0.69
2:L:321:ARG:HA	2:L:352:GLY:N	2.08	0.69
1:A:447:LEU:CD1	1:A:451:GLN:HG3	2.23	0.69
1:A:985:TYR:CE1	1:A:1207:VAL:HG13	2.28	0.69
1:B:780:ARG:HG2	2:G:51:GLY:O	1.92	0.69
1:B:985:TYR:CE1	1:B:1207:VAL:CG1	2.75	0.69
1:B:1449:ARG:O	1:B:1452:THR:HB	1.93	0.69
1:F:907:ILE:HG23	1:F:927:GLU:HG2	1.73	0.69
2:G:220:VAL:CG2	8:G:484:FAD:N1A	2.56	0.69
2:G:321:ARG:HA	2:G:352:GLY:N	2.08	0.69
2:H:165:GLU:OE2	2:H:458:ARG:HA	1.92	0.69
2:J:319:LEU:CB	2:J:345:ILE:HD11	2.23	0.69
2:J:478:VAL:HG23	2:J:479:ALA:H	1.56	0.69
2:L:34:ARG:HG3	2:L:125:LYS:HE2	1.74	0.69
2:L:179:TYR:CB	2:L:181:ARG:HH12	2.05	0.69
1:A:295:LYS:HZ3	1:A:299:VAL:HG12	1.57	0.68
1:A:454:PHE:CD2	1:A:648:GLU:HB2	2.28	0.68
1:B:515:ARG:HD2	1:B:1367:TYR:HE1	1.49	0.68
1:B:794:VAL:HG12	1:B:795:ILE:N	2.07	0.68
1:C:152:ARG:O	1:C:156:GLU:HB2	1.94	0.68
1:C:1311:THR:CG2	1:C:1312:SER:N	2.55	0.68
1:D:386:GLY:O	1:D:389:GLU:HG3	1.93	0.68
1:D:602:THR:C	1:D:640:THR:HG22	2.14	0.68
1:E:414:LYS:HB3	1:E:415:PRO:CD	2.23	0.68
1:F:728:ILE:HD12	1:F:1047:MET:HE1	1.75	0.68
1:F:985:TYR:CE1	1:F:1207:VAL:CG1	2.75	0.68
2:H:77:LEU:HA	2:H:127:ILE:HD11	1.75	0.68
2:H:90:PHE:HB3	2:H:93:ILE:HG21	1.76	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:179:TYR:CB	2:I:181:ARG:HH12	2.05	0.68
2:I:194:LYS:HD2	2:I:306:ARG:HH21	1.57	0.68
2:I:241:GLY:N	2:I:443:ILE:HG23	2.07	0.68
2:J:122:SER:HA	2:J:125:LYS:HE3	1.75	0.68
2:K:327:MET:HB2	2:K:346:TRP:HH2	1.54	0.68
2:L:71:LEU:HD21	2:L:76:ARG:O	1.93	0.68
2:L:322:ARG:HD2	2:L:326:ASN:HD21	1.58	0.68
1:A:1289:MET:H	1:A:1289:MET:HE3	1.58	0.68
1:A:1449:ARG:HB2	1:A:1449:ARG:CZ	2.19	0.68
1:B:295:LYS:HD2	1:B:390:MET:CE	2.19	0.68
1:B:389:GLU:CB	1:B:403:ASP:OD2	2.40	0.68
1:B:1105:VAL:HG13	1:B:1107:GLN:HG3	1.74	0.68
1:C:358:THR:HB	1:C:360:ASP:OD1	1.92	0.68
1:C:479:MET:HG3	1:C:1104:MET:HE3	1.75	0.68
1:C:1317:THR:HG21	1:C:1358:GLU:OE1	1.92	0.68
1:D:211:TYR:HD1	1:D:212:SER:H	1.42	0.68
1:D:950:THR:CG2	1:D:951:GLU:H	2.06	0.68
1:E:985:TYR:CE1	1:E:1207:VAL:HG13	2.28	0.68
1:F:602:THR:C	1:F:640:THR:HG22	2.14	0.68
1:F:932:VAL:O	1:F:933:ALA:HB2	1.92	0.68
1:F:1388:THR:O	1:F:1388:THR:HG22	1.94	0.68
1:F:1449:ARG:O	1:F:1452:THR:HB	1.93	0.68
2:G:418:THR:HG21	2:G:422:THR:HG23	1.74	0.68
2:H:417:VAL:HG12	2:H:418:THR:O	1.92	0.68
2:I:321:ARG:HB2	2:I:351:GLU:CA	2.23	0.68
2:I:321:ARG:CB	2:I:351:GLU:HA	2.21	0.68
2:I:451:VAL:HA	2:I:454:ILE:HG22	1.75	0.68
2:J:148:LEU:HB3	2:J:234:VAL:HG21	1.75	0.68
2:J:295:LEU:O	2:J:398:ALA:HB3	1.92	0.68
2:J:449:LEU:CD1	2:J:451:VAL:HG12	2.22	0.68
2:K:96:ARG:HA	2:K:125:LYS:HD2	1.75	0.68
2:K:440:ALA:CB	2:K:456:ASP:HB3	2.19	0.68
2:L:295:LEU:O	2:L:398:ALA:HB3	1.92	0.68
1:A:152:ARG:O	1:A:156:GLU:HB2	1.94	0.68
1:A:253:HIS:CE1	1:A:254:PRO:CD	2.62	0.68
1:A:746:ILE:HG23	1:A:1182:ASP:H	1.54	0.68
1:A:1388:THR:O	1:A:1388:THR:HG22	1.93	0.68
1:B:419:TRP:O	1:B:540:THR:HG21	1.92	0.68
1:B:447:LEU:CD1	1:B:451:GLN:HG3	2.22	0.68
1:B:1102:CYS:HG	6:B:2476:F3S:FE1	1.09	0.68
1:C:8:ALA:HA	1:C:362:LEU:HD12	1.75	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1019:ASP:OD2	1:C:1204:ARG:HB2	1.93	0.68
1:C:1412:PHE:HA	1:C:1456:GLN:O	1.94	0.68
1:D:454:PHE:HE2	1:D:647:ALA:HB3	1.58	0.68
1:D:731:SER:O	1:D:735:VAL:HG23	1.93	0.68
1:E:52:GLN:HE22	1:E:71:LEU:HB2	1.59	0.68
1:E:208:HIS:CD2	1:E:209:GLN:O	2.46	0.68
1:F:113:ASN:HD22	1:F:114:VAL:N	1.91	0.68
1:F:182:MET:CE	1:F:217:PRO:C	2.62	0.68
2:G:90:PHE:CD2	2:G:203:ARG:HG3	2.27	0.68
2:G:449:LEU:CD1	2:G:451:VAL:HG12	2.22	0.68
2:K:44:ALA:HA	2:K:69:LEU:CD1	2.22	0.68
1:A:1121:ASP:OD2	1:A:1124:LEU:HB2	1.92	0.68
1:B:529:LEU:HD23	1:B:529:LEU:N	1.92	0.68
1:B:1388:THR:O	1:B:1388:THR:HG22	1.94	0.68
1:C:447:LEU:CD1	1:C:451:GLN:HG3	2.23	0.68
1:C:454:PHE:CD2	1:C:648:GLU:HB2	2.28	0.68
1:C:985:TYR:CE1	1:C:1207:VAL:HG13	2.28	0.68
1:D:417:ASP:C	1:D:419:TRP:H	1.96	0.68
1:D:465:LEU:HD12	1:D:465:LEU:C	2.12	0.68
1:F:309:THR:HB	1:F:314:LYS:HE3	1.74	0.68
2:G:122:SER:HA	2:G:125:LYS:HE3	1.75	0.68
2:I:197:LYS:HE2	2:I:275:ASP:N	2.08	0.68
2:I:317:LYS:HE3	2:I:345:ILE:CG1	2.24	0.68
2:J:249:LYS:HE2	2:J:258:ILE:CD1	2.24	0.68
2:J:317:LYS:HE3	2:J:345:ILE:CG1	2.24	0.68
2:J:321:ARG:C	2:J:351:GLU:HA	2.13	0.68
2:K:181:ARG:C	2:K:182:MET:HE3	2.14	0.68
2:K:295:LEU:O	2:K:398:ALA:HB3	1.92	0.68
1:A:413:LEU:O	1:A:414:LYS:CD	2.40	0.68
1:A:461:MET:HE1	1:A:465:LEU:HD23	1.76	0.68
1:A:732:ARG:H	1:A:747:SER:CB	2.07	0.68
1:B:731:SER:O	1:B:735:VAL:HG23	1.93	0.68
1:B:1442:GLU:OE2	2:H:375:THR:CA	2.42	0.68
1:B:1447:TRP:CE2	1:B:1451:VAL:HG22	2.28	0.68
1:C:59:VAL:HG21	1:C:105:TYR:CE2	2.27	0.68
1:D:182:MET:CE	1:D:217:PRO:C	2.62	0.68
1:D:515:ARG:CD	1:D:1367:TYR:HE1	2.04	0.68
1:D:1059:ASN:N	1:D:1059:ASN:HD22	1.91	0.68
1:D:1090:PHE:N	1:D:1090:PHE:CD1	2.60	0.68
1:E:122:ASN:OD1	1:E:125:ARG:NH1	2.25	0.68
1:E:447:LEU:HD12	1:E:447:LEU:C	2.14	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:447:LEU:CD1	1:E:451:GLN:HG3	2.23	0.68
1:E:454:PHE:CD2	1:E:648:GLU:HB2	2.28	0.68
1:E:505:GLN:HE21	1:E:1001:VAL:H	1.33	0.68
1:E:1019:ASP:OD2	1:E:1204:ARG:HB2	1.93	0.68
1:F:731:SER:O	1:F:735:VAL:HG23	1.93	0.68
1:F:1112:THR:O	2:I:112:GLN:NE2	2.19	0.68
2:G:34:ARG:HG3	2:G:125:LYS:HE2	1.73	0.68
2:H:148:LEU:HB3	2:H:234:VAL:HG21	1.75	0.68
2:H:152:VAL:CG1	2:H:175:VAL:HA	2.12	0.68
2:I:71:LEU:HD21	2:I:76:ARG:O	1.93	0.68
2:I:478:VAL:HG23	2:I:479:ALA:H	1.56	0.68
2:K:148:LEU:HB3	2:K:234:VAL:CG2	2.24	0.68
2:K:321:ARG:HB2	2:K:351:GLU:CA	2.23	0.68
2:L:148:LEU:HB3	2:L:234:VAL:CG2	2.24	0.68
2:L:241:GLY:N	2:L:443:ILE:HG23	2.07	0.68
1:A:240:ASN:HD21	1:A:327:TRP:HA	1.58	0.68
1:A:896:PRO:HB3	1:C:1227:GLU:N	2.08	0.68
1:A:1227:GLU:N	1:E:896:PRO:HB3	2.08	0.68
1:B:122:ASN:OD1	1:B:125:ARG:NH1	2.26	0.68
1:B:732:ARG:H	1:B:747:SER:HB3	1.57	0.68
1:B:753:GLY:O	1:B:754:ILE:C	2.25	0.68
1:B:783:LYS:CE	2:G:57:VAL:CG1	2.36	0.68
1:B:1348:VAL:O	1:B:1348:VAL:HG13	1.91	0.68
1:C:52:GLN:HE22	1:C:71:LEU:HB2	1.59	0.68
1:C:426:LEU:HD23	1:C:426:LEU:H	1.59	0.68
1:C:1221:PRO:HG2	1:C:1229:MET:CE	2.23	0.68
1:E:9:ILE:HG13	1:E:361:GLY:O	1.93	0.68
1:E:102:TYR:CD2	1:E:144:PHE:CE1	2.82	0.68
1:E:414:LYS:HB3	1:E:415:PRO:HD3	1.76	0.68
1:E:913:GLY:HA2	1:E:1349:ARG:HD3	1.76	0.68
2:G:146:LEU:HD23	2:G:147:GLY:N	2.09	0.68
2:G:322:ARG:HD2	2:G:326:ASN:HD21	1.58	0.68
2:I:148:LEU:HB3	2:I:234:VAL:HG21	1.75	0.68
2:I:249:LYS:HE2	2:I:258:ILE:CD1	2.24	0.68
2:J:90:PHE:HB3	2:J:93:ILE:HG21	1.76	0.68
2:L:249:LYS:HE2	2:L:258:ILE:CD1	2.24	0.68
1:C:289:ARG:NH2	1:C:532:ILE:O	2.27	0.68
1:D:442:MET:HG3	1:D:673:GLU:OE2	1.93	0.68
1:D:826:ARG:HG2	1:D:1046:GLU:OE2	1.93	0.68
1:E:310:PRO:CG	1:E:404:ARG:NH2	2.56	0.68
1:F:107:TRP:N	1:F:107:TRP:CD1	2.59	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1054:GLN:O	1:F:1057:THR:N	2.26	0.68
2:G:68:TRP:CZ3	2:G:84:SER:HB3	2.29	0.68
2:G:165:GLU:OE2	2:G:458:ARG:HA	1.92	0.68
2:G:197:LYS:HG2	2:G:273:LEU:HD12	1.73	0.68
2:G:469:LYS:HZ3	2:G:476:VAL:HA	1.58	0.68
2:H:148:LEU:HB3	2:H:234:VAL:CG2	2.24	0.68
2:I:319:LEU:CB	2:I:345:ILE:HD11	2.23	0.68
2:I:449:LEU:CD1	2:I:451:VAL:HG12	2.22	0.68
2:J:180:ASP:O	2:J:182:MET:HE1	1.93	0.68
2:L:165:GLU:OE2	2:L:458:ARG:HA	1.92	0.68
2:L:448:SER:H	2:L:452:TRP:HZ3	1.42	0.68
1:A:426:LEU:HD23	1:A:426:LEU:H	1.59	0.68
1:A:1227:GLU:HG3	1:E:902:ASN:ND2	2.07	0.68
1:B:454:PHE:HE2	1:B:647:ALA:HB3	1.58	0.68
1:C:172:LEU:O	1:C:172:LEU:HG	1.94	0.68
1:C:447:LEU:HD12	1:C:447:LEU:C	2.14	0.68
1:C:1276:LEU:HD12	1:C:1277:GLY:N	2.08	0.68
1:C:1438:ARG:HB3	2:J:375:THR:CA	2.14	0.68
1:D:295:LYS:HZ3	1:D:299:VAL:HG12	1.58	0.68
1:E:358:THR:HB	1:E:360:ASP:OD1	1.92	0.68
1:E:387:PRO:HD3	1:E:1344:GLU:CD	2.15	0.68
1:E:661:VAL:HG12	1:E:661:VAL:O	1.94	0.68
1:E:1412:PHE:HA	1:E:1456:GLN:O	1.94	0.68
1:E:1415:ILE:HG21	1:E:1421:GLU:HB2	1.75	0.68
1:F:1114:PRO:O	2:I:112:GLN:CA	2.41	0.68
2:G:152:VAL:HG13	2:G:175:VAL:CA	2.15	0.68
2:G:180:ASP:O	2:G:182:MET:HE1	1.93	0.68
2:H:146:LEU:HD23	2:H:147:GLY:N	2.09	0.68
2:H:317:LYS:HE3	2:H:345:ILE:CG1	2.24	0.68
2:I:148:LEU:HB3	2:I:234:VAL:CG2	2.24	0.68
2:L:96:ARG:HD3	2:L:195:LEU:HA	1.75	0.68
2:L:317:LYS:HE3	2:L:345:ILE:CG1	2.24	0.68
1:B:250:ARG:O	1:B:531:ASN:ND2	2.27	0.68
1:B:417:ASP:C	1:B:419:TRP:H	1.96	0.68
1:B:602:THR:C	1:B:640:THR:HG22	2.14	0.68
1:B:901:ASP:CG	1:F:1228:LYS:HD3	2.15	0.68
1:B:1114:PRO:O	2:G:112:GLN:CA	2.41	0.68
1:C:208:HIS:CD2	1:C:209:GLN:O	2.46	0.68
1:D:122:ASN:OD1	1:D:125:ARG:NH1	2.26	0.68
1:D:236:THR:CG2	1:D:328:ASP:N	2.52	0.68
1:D:522:LEU:CD2	1:D:705:LEU:HD21	2.24	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1076:GLY:HA3	1:D:1145:GLU:CG	2.17	0.68
1:E:1362:SER:HA	1:E:1380:GLY:HA3	1.74	0.68
1:E:1458:VAL:HG13	1:E:1459:PRO:HD2	1.76	0.68
1:F:250:ARG:O	1:F:531:ASN:ND2	2.27	0.68
2:G:96:ARG:HA	2:G:125:LYS:HD2	1.75	0.68
2:G:290:LYS:HD3	2:G:393:ASP:OD2	1.94	0.68
2:H:71:LEU:HD21	2:H:76:ARG:O	1.93	0.68
2:I:97:ILE:HD11	2:I:450:VAL:HG11	1.76	0.68
2:J:148:LEU:HB3	2:J:234:VAL:CG2	2.24	0.68
2:K:100:GLN:CB	2:K:105:GLU:HG2	2.22	0.68
2:L:68:TRP:CZ3	2:L:84:SER:HB3	2.29	0.68
2:L:97:ILE:HD11	2:L:450:VAL:HG11	1.76	0.68
1:A:52:GLN:HE22	1:A:71:LEU:HB2	1.59	0.68
1:A:248:GLU:HA	1:A:251:MET:CG	2.22	0.68
1:A:506:VAL:HG11	1:A:980:LEU:HD22	1.76	0.68
1:A:1458:VAL:HG13	1:A:1459:PRO:HD2	1.76	0.68
1:B:826:ARG:HG2	1:B:1046:GLU:OE2	1.93	0.68
1:C:1338:ALA:HB3	1:C:1357:VAL:HG22	1.74	0.68
1:D:1114:PRO:O	2:H:112:GLN:CA	2.41	0.68
1:E:313:HIS:O	1:E:317:ILE:HG13	1.93	0.68
1:E:461:MET:HE1	1:E:465:LEU:HD23	1.75	0.68
1:F:211:TYR:HD1	1:F:212:SER:H	1.42	0.68
1:F:1170:GLN:O	1:F:1170:GLN:CG	2.39	0.68
2:H:322:ARG:CD	2:H:349:ALA:HB1	2.24	0.68
2:H:451:VAL:HA	2:H:454:ILE:HG22	1.75	0.68
2:J:71:LEU:HD21	2:J:76:ARG:O	1.93	0.68
2:J:97:ILE:HD11	2:J:450:VAL:HG11	1.76	0.68
2:J:321:ARG:HB2	2:J:351:GLU:CA	2.23	0.68
2:J:371:VAL:CG2	2:J:386:SER:HB3	2.24	0.68
2:K:68:TRP:CZ3	2:K:84:SER:HB3	2.29	0.68
2:K:197:LYS:HE2	2:K:275:ASP:N	2.08	0.68
2:L:319:LEU:CB	2:L:345:ILE:HD11	2.23	0.68
1:A:208:HIS:CD2	1:A:209:GLN:O	2.46	0.67
1:A:461:MET:CE	1:A:465:LEU:HD23	2.24	0.67
1:A:918:THR:HG22	1:A:920:GLU:H	1.59	0.67
1:B:113:ASN:HD22	1:B:114:VAL:N	1.91	0.67
1:B:522:LEU:CD2	1:B:705:LEU:HD21	2.24	0.67
1:B:768:GLU:HG2	1:B:769:GLU:N	2.09	0.67
1:C:414:LYS:HB3	1:C:415:PRO:HD3	1.76	0.67
1:C:777:GLY:O	1:C:788:HIS:HE1	1.77	0.67
1:E:172:LEU:O	1:E:172:LEU:HG	1.94	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:386:GLY:O	1:F:389:GLU:HG3	1.93	0.67
2:G:148:LEU:HB3	2:G:234:VAL:CG2	2.24	0.67
2:G:317:LYS:HE3	2:G:345:ILE:CG1	2.24	0.67
2:H:100:GLN:CB	2:H:105:GLU:HG2	2.22	0.67
2:H:449:LEU:CD1	2:H:451:VAL:HG12	2.22	0.67
2:I:322:ARG:CD	2:I:349:ALA:HB1	2.24	0.67
2:L:96:ARG:HA	2:L:125:LYS:HD2	1.75	0.67
2:L:148:LEU:HB3	2:L:234:VAL:HG21	1.75	0.67
2:L:418:THR:HG21	2:L:422:THR:HG23	1.74	0.67
1:A:1394:VAL:HG11	1:A:1401:LEU:HD22	1.76	0.67
1:B:266:VAL:HG12	1:B:279:THR:HG23	1.76	0.67
1:B:985:TYR:CE1	1:B:1207:VAL:HG13	2.27	0.67
1:C:387:PRO:HD3	1:C:1344:GLU:CD	2.15	0.67
1:C:1466:LEU:O	1:C:1467:GLU:C	2.33	0.67
1:D:250:ARG:O	1:D:531:ASN:ND2	2.27	0.67
1:D:309:THR:HB	1:D:314:LYS:HE3	1.74	0.67
1:E:426:LEU:HD23	1:E:426:LEU:H	1.59	0.67
1:E:479:MET:HG3	1:E:1104:MET:HE3	1.76	0.67
1:E:732:ARG:H	1:E:747:SER:CB	2.07	0.67
1:F:843:VAL:CG1	1:F:844:GLU:N	2.58	0.67
1:F:1114:PRO:HA	2:I:112:GLN:C	1.84	0.67
2:G:77:LEU:HA	2:G:127:ILE:HD11	1.75	0.67
2:H:97:ILE:HD11	2:H:450:VAL:HG11	1.76	0.67
2:H:321:ARG:HB2	2:H:351:GLU:CA	2.23	0.67
2:I:96:ARG:HD3	2:I:195:LEU:HA	1.75	0.67
2:J:181:ARG:CD	2:J:187:VAL:HG11	2.25	0.67
1:A:8:ALA:HA	1:A:362:LEU:HD12	1.75	0.67
1:A:9:ILE:HG13	1:A:361:GLY:O	1.93	0.67
1:B:732:ARG:H	1:B:747:SER:CB	2.07	0.67
1:C:4:GLY:HA3	1:C:207:TYR:CZ	2.29	0.67
1:C:299:VAL:O	1:C:299:VAL:CG1	2.43	0.67
1:C:732:ARG:H	1:C:747:SER:CB	2.07	0.67
1:C:824:GLN:CA	1:C:824:GLN:NE2	2.57	0.67
1:D:107:TRP:CD1	1:D:107:TRP:N	2.59	0.67
1:D:732:ARG:H	1:D:747:SER:CB	2.07	0.67
1:D:782:ARG:HG2	2:H:53:PRO:HD2	0.77	0.67
1:E:1394:VAL:HG11	1:E:1401:LEU:HD22	1.76	0.67
1:F:139:VAL:CG1	1:F:143:GLN:HB2	2.25	0.67
1:F:253:HIS:N	1:F:260:MET:HE1	2.07	0.67
1:F:603:HIS:CA	1:F:640:THR:CG2	2.71	0.67
2:G:175:VAL:CG1	2:G:214:TYR:HA	2.23	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:448:SER:H	2:G:452:TRP:HZ3	1.42	0.67
2:H:153:ILE:HG23	2:H:238:VAL:HA	1.76	0.67
2:K:71:LEU:HD21	2:K:76:ARG:O	1.93	0.67
2:K:153:ILE:HG23	2:K:238:VAL:HA	1.76	0.67
2:K:249:LYS:HE2	2:K:258:ILE:CD1	2.24	0.67
2:K:317:LYS:HE3	2:K:345:ILE:CG1	2.24	0.67
2:L:451:VAL:HA	2:L:454:ILE:HG22	1.75	0.67
1:A:4:GLY:HA3	1:A:207:TYR:CZ	2.29	0.67
1:A:414:LYS:HB3	1:A:415:PRO:HD3	1.76	0.67
1:A:512:ASP:OD2	1:A:1367:TYR:OH	2.13	0.67
1:A:1105:VAL:HG13	1:A:1107:GLN:HG3	1.76	0.67
1:A:1220:ARG:N	1:A:1221:PRO:HD2	2.10	0.67
1:A:1438:ARG:HB3	2:L:375:THR:CA	2.14	0.67
1:B:478:SER:O	1:B:1106:ARG:NH1	2.28	0.67
1:C:1220:ARG:N	1:C:1221:PRO:HD2	2.10	0.67
1:E:152:ARG:O	1:E:156:GLU:HB2	1.94	0.67
1:E:359:THR:HG23	1:E:378:GLN:O	1.94	0.67
1:E:1194:GLU:HB2	1:F:115:ASP:OD2	1.95	0.67
1:F:1442:GLU:OE2	2:G:375:THR:CA	2.42	0.67
2:H:96:ARG:HD3	2:H:195:LEU:HA	1.75	0.67
2:H:290:LYS:HD3	2:H:393:ASP:OD2	1.94	0.67
2:J:96:ARG:HD3	2:J:195:LEU:HA	1.75	0.67
2:J:290:LYS:HD3	2:J:393:ASP:OD2	1.94	0.67
2:K:122:SER:HA	2:K:125:LYS:HE3	1.75	0.67
2:K:165:GLU:HB3	2:K:169:LYS:HZ3	1.59	0.67
2:L:44:ALA:HA	2:L:69:LEU:CD1	2.22	0.67
2:L:77:LEU:HA	2:L:127:ILE:HD11	1.75	0.67
2:L:146:LEU:HD23	2:L:147:GLY:N	2.09	0.67
2:L:322:ARG:CD	2:L:349:ALA:HB1	2.24	0.67
1:A:139:VAL:HG11	1:A:143:GLN:HB3	1.77	0.67
1:A:299:VAL:O	1:A:299:VAL:CG1	2.43	0.67
1:A:499:PHE:HE2	1:A:742:MET:HE1	1.58	0.67
1:B:442:MET:HG3	1:B:673:GLU:OE2	1.93	0.67
1:B:447:LEU:HD12	1:B:451:GLN:CG	2.23	0.67
1:C:515:ARG:HD2	1:C:1367:TYR:HE1	1.46	0.67
1:C:896:PRO:HB3	1:E:1227:GLU:N	2.08	0.67
1:C:1388:THR:O	1:C:1388:THR:HG22	1.93	0.67
1:C:1394:VAL:HG11	1:C:1401:LEU:HD22	1.76	0.67
1:D:559:ARG:HD2	1:D:605:ILE:CD1	2.25	0.67
1:D:838:VAL:CG1	1:D:839:PRO:CD	2.73	0.67
1:E:37:ASP:OD1	1:E:37:ASP:C	2.33	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:289:ARG:NH2	1:E:532:ILE:O	2.27	0.67
1:E:461:MET:CE	1:E:465:LEU:HD23	2.24	0.67
1:E:777:GLY:O	1:E:788:HIS:HE1	1.77	0.67
1:E:1466:LEU:O	1:E:1467:GLU:C	2.33	0.67
2:G:249:LYS:HE2	2:G:258:ILE:CD1	2.24	0.67
2:H:249:LYS:HE2	2:H:258:ILE:CD1	2.24	0.67
2:H:259:VAL:HG21	2:H:264:TYR:CB	2.14	0.67
2:I:96:ARG:HA	2:I:125:LYS:HD2	1.75	0.67
2:I:371:VAL:CG2	2:I:386:SER:HB3	2.24	0.67
2:K:322:ARG:CD	2:K:349:ALA:HB1	2.24	0.67
2:K:331:GLN:O	2:K:334:VAL:HG23	1.95	0.67
2:L:371:VAL:CG2	2:L:386:SER:HB3	2.24	0.67
1:A:960:THR:CG2	1:A:963:VAL:CG2	2.73	0.67
1:A:1466:LEU:O	1:A:1467:GLU:C	2.33	0.67
1:B:1058:LEU:HD22	1:B:1058:LEU:O	1.95	0.67
1:C:359:THR:HG23	1:C:378:GLN:O	1.95	0.67
1:C:1144:GLU:O	1:C:1144:GLU:HG3	1.95	0.67
1:C:1194:GLU:HB2	1:D:115:ASP:OD2	1.95	0.67
1:C:1458:VAL:HG13	1:C:1459:PRO:HD2	1.76	0.67
1:D:734:LEU:HD12	1:D:738:HIS:CD2	2.25	0.67
1:D:1442:GLU:OE2	2:I:375:THR:CA	2.42	0.67
2:I:68:TRP:CZ3	2:I:84:SER:HB3	2.29	0.67
2:J:331:GLN:O	2:J:334:VAL:HG23	1.95	0.67
2:L:290:LYS:HD3	2:L:393:ASP:OD2	1.94	0.67
1:A:289:ARG:NH2	1:A:532:ILE:O	2.27	0.67
1:A:661:VAL:HG12	1:A:661:VAL:O	1.94	0.67
1:B:139:VAL:CG1	1:B:143:GLN:HB2	2.25	0.67
1:C:461:MET:CE	1:C:465:LEU:HD23	2.24	0.67
1:C:746:ILE:HG22	1:C:747:SER:N	2.09	0.67
1:C:1105:VAL:HG13	1:C:1107:GLN:HG3	1.76	0.67
1:D:266:VAL:HG12	1:D:279:THR:HG23	1.76	0.67
1:D:302:ALA:CA	1:D:347:ARG:HH12	2.08	0.67
1:D:478:SER:O	1:D:1106:ARG:NH1	2.28	0.67
1:F:999:LYS:HG2	1:F:1022:LEU:HD23	1.72	0.67
2:G:331:GLN:O	2:G:334:VAL:HG23	1.95	0.67
2:G:371:VAL:CG2	2:G:386:SER:HB3	2.24	0.67
2:H:68:TRP:CZ3	2:H:84:SER:HB3	2.29	0.67
2:H:122:SER:HA	2:H:125:LYS:HE3	1.75	0.67
2:H:165:GLU:HB3	2:H:169:LYS:HZ3	1.59	0.67
2:I:181:ARG:HD3	2:I:187:VAL:CB	2.25	0.67
2:I:290:LYS:HD3	2:I:393:ASP:OD2	1.94	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:471:LYS:HA	2:J:471:LYS:CE	2.23	0.67
2:K:148:LEU:HB3	2:K:234:VAL:HG21	1.75	0.67
2:K:220:VAL:CG2	8:K:484:FAD:N1A	2.56	0.67
1:A:447:LEU:HD12	1:A:447:LEU:C	2.14	0.67
1:A:1317:THR:HG21	1:A:1358:GLU:OE1	1.92	0.67
1:B:98:LEU:O	1:B:101:GLY:N	2.25	0.67
1:B:211:TYR:HD1	1:B:212:SER:H	1.42	0.67
1:B:666:VAL:CG1	1:B:667:ASN:N	2.58	0.67
1:B:1102:CYS:SG	6:B:2476:F3S:S2	2.93	0.67
1:C:139:VAL:HG11	1:C:143:GLN:HB3	1.77	0.67
1:D:113:ASN:HD22	1:D:114:VAL:N	1.92	0.67
1:D:693:MET:HA	1:D:693:MET:HE3	1.76	0.67
1:D:843:VAL:CG1	1:D:844:GLU:N	2.58	0.67
1:E:452:GLN:HG3	1:E:765:ALA:HB2	1.77	0.67
1:E:850:ARG:HH11	1:E:850:ARG:CG	2.08	0.67
1:F:478:SER:O	1:F:1106:ARG:NH1	2.28	0.67
1:F:826:ARG:HG2	1:F:1046:GLU:OE2	1.93	0.67
2:G:71:LEU:HD21	2:G:76:ARG:O	1.93	0.67
2:G:368:HIS:ND1	2:G:387:GLU:HG3	2.09	0.67
2:H:300:THR:HA	8:H:484:FAD:HM73	1.77	0.67
2:I:181:ARG:CD	2:I:187:VAL:HG11	2.25	0.67
2:J:448:SER:H	2:J:452:TRP:HZ3	1.42	0.67
2:K:146:LEU:HD23	2:K:147:GLY:N	2.09	0.67
2:L:410:PHE:O	2:L:413:PRO:HD2	1.95	0.67
1:A:387:PRO:HD3	1:A:1344:GLU:CD	2.14	0.67
1:B:386:GLY:O	1:B:389:GLU:HG3	1.93	0.67
1:B:838:VAL:CG1	1:B:839:PRO:CD	2.73	0.67
1:C:454:PHE:HE2	1:C:647:ALA:HB3	1.58	0.67
1:C:515:ARG:CD	1:C:1367:TYR:HE1	1.96	0.67
1:C:782:ARG:CB	2:K:53:PRO:HD2	2.19	0.67
1:C:850:ARG:HH11	1:C:850:ARG:CG	2.08	0.67
1:E:336:THR:OG1	1:E:337:ASP:O	2.13	0.67
1:E:746:ILE:HG22	1:E:747:SER:N	2.09	0.67
1:F:122:ASN:OD1	1:F:125:ARG:NH1	2.26	0.67
1:F:782:ARG:N	2:I:52:VAL:HB	2.07	0.67
2:G:451:VAL:O	2:G:454:ILE:HG23	1.95	0.67
2:H:331:GLN:O	2:H:334:VAL:HG23	1.95	0.67
2:H:448:SER:H	2:H:452:TRP:HZ3	1.42	0.67
2:I:300:THR:HA	8:I:484:FAD:HM73	1.77	0.67
2:J:295:LEU:CD2	2:J:319:LEU:HB3	2.25	0.67
2:J:300:THR:HA	8:J:484:FAD:HM73	1.77	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:410:PHE:O	2:J:413:PRO:HD2	1.95	0.67
2:K:97:ILE:HD11	2:K:450:VAL:HG11	1.76	0.67
2:K:448:SER:H	2:K:452:TRP:HZ3	1.42	0.67
1:A:454:PHE:HE2	1:A:647:ALA:HB3	1.58	0.67
1:A:1297:GLY:O	1:A:1328:LEU:HA	1.95	0.67
1:B:746:ILE:HD11	1:B:1186:ARG:NH2	2.10	0.67
1:C:746:ILE:O	1:C:747:SER:O	2.13	0.67
1:C:1415:ILE:HG21	1:C:1421:GLU:HB2	1.75	0.67
1:D:139:VAL:CG1	1:D:143:GLN:HB2	2.25	0.67
1:D:253:HIS:N	1:D:260:MET:HE1	2.07	0.67
1:E:918:THR:HG22	1:E:920:GLU:H	1.59	0.67
1:E:1105:VAL:HG13	1:E:1107:GLN:HG3	1.76	0.67
1:F:522:LEU:CD2	1:F:705:LEU:HD21	2.24	0.67
1:F:768:GLU:HG2	1:F:769:GLU:N	2.09	0.67
1:F:960:THR:HG22	1:F:963:VAL:HG23	1.77	0.67
2:G:220:VAL:CG2	8:G:484:FAD:N6A	2.55	0.67
2:H:44:ALA:HA	2:H:69:LEU:CD1	2.22	0.67
2:H:220:VAL:CG2	8:H:484:FAD:N1A	2.56	0.67
2:I:418:THR:HG21	2:I:422:THR:HG23	1.74	0.67
2:J:68:TRP:CZ3	2:J:84:SER:HB3	2.29	0.67
2:J:181:ARG:HD3	2:J:187:VAL:CB	2.25	0.67
2:L:49:GLN:NE2	2:L:69:LEU:HG	2.10	0.67
2:L:153:ILE:HG23	2:L:238:VAL:HA	1.76	0.67
1:A:902:ASN:ND2	1:C:1227:GLU:HG3	2.07	0.66
1:A:1412:PHE:HA	1:A:1456:GLN:O	1.94	0.66
1:B:236:THR:CG2	1:B:328:ASP:N	2.52	0.66
1:B:843:VAL:CG1	1:B:844:GLU:N	2.58	0.66
1:C:918:THR:HG22	1:C:920:GLU:H	1.59	0.66
1:C:1311:THR:HG23	1:C:1312:SER:H	1.60	0.66
1:D:454:PHE:HE2	1:D:647:ALA:CB	2.09	0.66
1:D:603:HIS:CA	1:D:640:THR:CG2	2.71	0.66
1:D:1228:LYS:HD3	1:F:901:ASP:CG	2.15	0.66
1:E:4:GLY:HA3	1:E:207:TYR:CZ	2.29	0.66
1:E:454:PHE:CE2	1:E:647:ALA:HB3	2.31	0.66
1:E:1144:GLU:O	1:E:1144:GLU:HG3	1.95	0.66
1:F:950:THR:CG2	1:F:951:GLU:H	2.07	0.66
2:G:96:ARG:HD3	2:G:195:LEU:HA	1.75	0.66
2:G:148:LEU:HB3	2:G:234:VAL:HG21	1.75	0.66
2:G:244:LYS:CE	2:G:404:GLU:HB3	2.24	0.66
2:I:180:ASP:O	2:I:182:MET:HE1	1.95	0.66
2:K:295:LEU:CD2	2:K:319:LEU:HB3	2.25	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:181:ARG:HD3	2:L:187:VAL:CB	2.25	0.66
2:L:186:LEU:CD2	2:L:200:VAL:HB	2.25	0.66
1:A:37:ASP:OD1	1:A:37:ASP:C	2.33	0.66
1:B:734:LEU:HD12	1:B:738:HIS:CD2	2.25	0.66
1:C:248:GLU:HA	1:C:251:MET:CG	2.22	0.66
1:D:289:ARG:NH2	1:D:532:ILE:O	2.28	0.66
1:D:909:GLN:NE2	1:D:929:GLU:OE1	2.28	0.66
1:D:960:THR:HG22	1:D:963:VAL:HG23	1.77	0.66
1:E:59:VAL:HG21	1:E:105:TYR:CE2	2.27	0.66
1:F:732:ARG:H	1:F:747:SER:CB	2.08	0.66
1:F:782:ARG:HH21	2:I:51:GLY:CA	0.99	0.66
2:H:220:VAL:CG2	8:H:484:FAD:N6A	2.55	0.66
2:I:410:PHE:O	2:I:413:PRO:HD2	1.95	0.66
2:J:153:ILE:HG23	2:J:238:VAL:HA	1.76	0.66
2:J:322:ARG:CD	2:J:349:ALA:HB1	2.24	0.66
2:K:181:ARG:CD	2:K:187:VAL:HG11	2.25	0.66
2:L:242:VAL:CG1	2:L:403:PRO:HD3	2.21	0.66
1:A:913:GLY:HA2	1:A:1349:ARG:HD3	1.76	0.66
1:A:1227:GLU:OE2	1:E:902:ASN:ND2	2.28	0.66
1:B:572:THR:HG21	1:B:615:ARG:HB3	1.78	0.66
1:C:251:MET:HB2	1:C:533:LEU:HD12	1.78	0.66
1:C:728:ILE:HD12	1:C:1047:MET:HE3	1.76	0.66
1:C:960:THR:CG2	1:C:963:VAL:CG2	2.73	0.66
1:D:1102:CYS:SG	6:D:2476:F3S:S2	2.93	0.66
1:E:381:GLU:CD	1:E:402:ARG:NH1	2.49	0.66
1:E:454:PHE:HE2	1:E:647:ALA:HB3	1.58	0.66
1:E:506:VAL:HG11	1:E:980:LEU:HD22	1.75	0.66
1:E:1221:PRO:HD2	1:E:1229:MET:HE1	1.78	0.66
1:F:515:ARG:HD2	1:F:1367:TYR:CZ	2.31	0.66
2:G:153:ILE:HG23	2:G:238:VAL:HA	1.76	0.66
2:H:371:VAL:CG2	2:H:386:SER:HB3	2.24	0.66
2:I:186:LEU:CD2	2:I:200:VAL:HB	2.25	0.66
2:I:451:VAL:O	2:I:454:ILE:HG23	1.95	0.66
2:K:290:LYS:HD3	2:K:393:ASP:OD2	1.94	0.66
2:K:368:HIS:ND1	2:K:387:GLU:HG3	2.09	0.66
2:K:418:THR:HG23	2:K:422:THR:HG23	1.77	0.66
2:K:451:VAL:O	2:K:454:ILE:HG23	1.95	0.66
2:L:295:LEU:CD2	2:L:319:LEU:HB3	2.25	0.66
2:L:368:HIS:ND1	2:L:387:GLU:HG3	2.10	0.66
1:A:62:ILE:HG22	1:A:62:ILE:O	1.96	0.66
1:A:172:LEU:O	1:A:172:LEU:HG	1.94	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:354:ARG:NH2	1:A:1292:ALA:O	2.29	0.66
1:B:559:ARG:HD2	1:B:605:ILE:HD13	1.78	0.66
1:B:693:MET:HA	1:B:693:MET:HE3	1.78	0.66
1:E:960:THR:CG2	1:E:963:VAL:CG2	2.73	0.66
1:F:302:ALA:CA	1:F:347:ARG:HH12	2.08	0.66
1:F:417:ASP:C	1:F:419:TRP:H	1.96	0.66
2:G:90:PHE:HB3	2:G:93:ILE:HG21	1.76	0.66
2:G:418:THR:HG23	2:G:422:THR:HG23	1.77	0.66
2:I:244:LYS:CE	2:I:404:GLU:HB3	2.24	0.66
2:I:290:LYS:HG2	2:I:291:HIS:H	1.61	0.66
2:I:331:GLN:O	2:I:334:VAL:HG23	1.95	0.66
2:J:451:VAL:O	2:J:454:ILE:HG23	1.95	0.66
2:L:300:THR:HA	8:L:484:FAD:HM73	1.77	0.66
2:L:418:THR:HG23	2:L:422:THR:HG23	1.77	0.66
1:A:317:ILE:HG22	1:A:321:ASN:ND2	2.11	0.66
1:A:731:SER:HA	1:A:748:GLY:N	2.11	0.66
1:A:850:ARG:HH11	1:A:850:ARG:CG	2.08	0.66
1:A:902:ASN:ND2	1:C:1227:GLU:OE2	2.28	0.66
1:A:1194:GLU:HB2	1:B:115:ASP:OD2	1.95	0.66
1:B:908:LYS:HD2	1:B:921:TYR:CD1	2.31	0.66
1:C:102:TYR:CD2	1:C:144:PHE:CE1	2.82	0.66
1:C:454:PHE:CE2	1:C:647:ALA:HB3	2.31	0.66
1:D:113:ASN:ND2	1:D:113:ASN:C	2.49	0.66
1:D:496:HIS:ND1	1:D:654:TYR:HD1	1.93	0.66
1:D:1109:HIS:ND1	1:D:1109:HIS:N	2.43	0.66
1:F:559:ARG:HD2	1:F:605:ILE:CD1	2.25	0.66
1:F:746:ILE:HD11	1:F:1186:ARG:NH2	2.10	0.66
1:F:781:PHE:CE2	2:I:57:VAL:HG21	2.31	0.66
2:G:186:LEU:CD2	2:G:200:VAL:HB	2.25	0.66
2:I:242:VAL:CG1	2:I:403:PRO:HD3	2.21	0.66
2:J:49:GLN:NE2	2:J:69:LEU:HG	2.10	0.66
2:J:244:LYS:CE	2:J:404:GLU:HB3	2.24	0.66
2:L:244:LYS:CE	2:L:404:GLU:HB3	2.25	0.66
1:A:777:GLY:O	1:A:788:HIS:HE1	1.77	0.66
1:B:253:HIS:N	1:B:260:MET:HE1	2.07	0.66
1:B:302:ALA:CA	1:B:347:ARG:HH12	2.08	0.66
1:B:461:MET:CE	1:B:465:LEU:HD23	2.25	0.66
1:B:496:HIS:ND1	1:B:654:TYR:HD1	1.93	0.66
1:B:1228:LYS:HD3	1:D:901:ASP:CG	2.15	0.66
1:C:381:GLU:CD	1:C:402:ARG:NH1	2.49	0.66
1:D:461:MET:CE	1:D:465:LEU:HD23	2.26	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1058:LEU:HD22	1:D:1058:LEU:O	1.95	0.66
1:E:62:ILE:HG22	1:E:62:ILE:O	1.96	0.66
1:E:511:ILE:HG22	1:E:512:ASP:H	1.61	0.66
1:E:731:SER:HA	1:E:748:GLY:N	2.11	0.66
1:E:746:ILE:O	1:E:747:SER:O	2.13	0.66
1:E:1220:ARG:N	1:E:1221:PRO:HD2	2.10	0.66
1:F:295:LYS:NZ	1:F:299:VAL:O	2.17	0.66
1:F:909:GLN:NE2	1:F:929:GLU:OE1	2.28	0.66
2:G:95:GLY:O	2:G:125:LYS:HD2	1.96	0.66
2:G:97:ILE:HD11	2:G:450:VAL:HG11	1.76	0.66
2:I:295:LEU:CD2	2:I:319:LEU:HB3	2.25	0.66
2:I:368:HIS:ND1	2:I:387:GLU:HG3	2.09	0.66
2:K:49:GLN:NE2	2:K:69:LEU:HG	2.10	0.66
2:K:165:GLU:CD	2:K:458:ARG:HA	2.16	0.66
2:K:244:LYS:CE	2:K:404:GLU:HB3	2.24	0.66
2:K:259:VAL:HG21	2:K:264:TYR:CB	2.14	0.66
2:K:321:ARG:HH21	2:K:351:GLU:CG	2.09	0.66
2:L:331:GLN:O	2:L:334:VAL:HG23	1.95	0.66
2:L:469:LYS:HZ3	2:L:476:VAL:HA	1.60	0.66
1:A:359:THR:HG23	1:A:378:GLN:O	1.94	0.66
1:A:902:ASN:CG	1:C:1227:GLU:CG	2.63	0.66
1:A:1104:MET:C	2:J:54:PHE:CZ	2.67	0.66
1:C:1230:GLN:NE2	1:C:1267:ARG:CD	2.59	0.66
1:E:1003:ARG:HH11	1:E:1003:ARG:HG3	1.61	0.66
1:F:236:THR:CG2	1:F:328:ASP:N	2.52	0.66
1:F:289:ARG:NH2	1:F:532:ILE:O	2.28	0.66
1:F:389:GLU:CB	1:F:403:ASP:OD2	2.40	0.66
1:F:454:PHE:HE2	1:F:647:ALA:HB3	1.58	0.66
1:F:777:GLY:HA3	2:I:52:VAL:HG12	1.77	0.66
1:F:838:VAL:CG1	1:F:839:PRO:CD	2.73	0.66
2:G:181:ARG:CD	2:G:187:VAL:HG11	2.25	0.66
2:G:410:PHE:O	2:G:413:PRO:HD2	1.95	0.66
2:H:410:PHE:O	2:H:413:PRO:HD2	1.95	0.66
2:H:471:LYS:HA	2:H:471:LYS:CE	2.23	0.66
2:I:90:PHE:HB3	2:I:93:ILE:HG21	1.76	0.66
2:J:290:LYS:CG	2:J:291:HIS:H	2.09	0.66
2:J:368:HIS:ND1	2:J:387:GLU:HG3	2.09	0.66
2:K:95:GLY:O	2:K:125:LYS:HD2	1.96	0.66
2:K:96:ARG:HD3	2:K:195:LEU:HA	1.75	0.66
2:K:371:VAL:CG2	2:K:386:SER:HB3	2.24	0.66
2:L:220:VAL:CG2	8:L:484:FAD:N6A	2.55	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:102:TYR:CD2	1:A:144:PHE:CE1	2.82	0.66
1:C:310:PRO:CG	1:C:404:ARG:NH2	2.56	0.66
1:C:506:VAL:HG11	1:C:980:LEU:HD22	1.75	0.66
1:C:731:SER:HA	1:C:748:GLY:N	2.11	0.66
1:C:1297:GLY:O	1:C:1328:LEU:HA	1.95	0.66
1:D:746:ILE:HD11	1:D:1186:ARG:NH2	2.10	0.66
1:D:908:LYS:HD2	1:D:921:TYR:CD1	2.31	0.66
1:E:746:ILE:HG23	1:E:1182:ASP:H	1.54	0.66
1:F:461:MET:CE	1:F:465:LEU:HD23	2.25	0.66
2:G:49:GLN:HA	2:G:49:GLN:OE1	1.96	0.66
2:G:268:SER:O	2:G:271:VAL:HG23	1.96	0.66
2:H:167:ARG:HD3	2:H:210:ALA:O	1.96	0.66
2:H:186:LEU:CD2	2:H:200:VAL:HB	2.25	0.66
2:H:244:LYS:CE	2:H:404:GLU:HB3	2.25	0.66
2:H:290:LYS:CG	2:H:291:HIS:H	2.09	0.66
2:H:327:MET:HB2	2:H:346:TRP:HH2	1.54	0.66
2:I:418:THR:HG23	2:I:422:THR:HG23	1.77	0.66
2:J:186:LEU:CD2	2:J:200:VAL:HB	2.25	0.66
2:K:249:LYS:HG3	2:K:258:ILE:HD11	1.78	0.66
2:K:290:LYS:CG	2:K:291:HIS:H	2.09	0.66
2:L:268:SER:O	2:L:271:VAL:HG23	1.96	0.66
1:A:381:GLU:CD	1:A:402:ARG:NH1	2.49	0.66
1:A:875:MET:HE1	1:A:1139:PHE:CD2	2.27	0.66
1:A:1431:HIS:O	1:A:1435:THR:HG22	1.95	0.66
1:B:559:ARG:HD2	1:B:605:ILE:CD1	2.25	0.66
1:B:704:LEU:C	1:B:706:LYS:N	2.49	0.66
1:C:146:LEU:HD12	1:C:146:LEU:C	2.17	0.66
1:C:913:GLY:HA2	1:C:1349:ARG:HD3	1.76	0.66
1:D:447:LEU:HD12	1:D:451:GLN:CG	2.22	0.66
1:D:1263:HIS:NE2	1:F:900:GLY:HA2	2.10	0.66
1:D:1388:THR:O	1:D:1388:THR:HG22	1.94	0.66
1:E:317:ILE:HG22	1:E:321:ASN:ND2	2.11	0.66
1:E:317:ILE:O	1:E:321:ASN:ND2	2.29	0.66
1:E:1104:MET:C	2:L:54:PHE:CZ	2.67	0.66
1:E:1297:GLY:O	1:E:1328:LEU:HA	1.95	0.66
1:E:1317:THR:HG21	1:E:1358:GLU:OE1	1.92	0.66
1:F:454:PHE:HE2	1:F:647:ALA:CB	2.09	0.66
1:F:559:ARG:HD2	1:F:605:ILE:HD13	1.78	0.66
1:F:1058:LEU:HD22	1:F:1058:LEU:O	1.95	0.66
1:F:1102:CYS:SG	6:F:2476:F3S:S2	2.93	0.66
1:F:1413:GLN:HG3	1:F:1414:ARG:O	1.96	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:165:GLU:CD	2:G:458:ARG:HA	2.16	0.66
2:G:295:LEU:CD2	2:G:319:LEU:HB3	2.25	0.66
2:G:322:ARG:CD	2:G:349:ALA:HB1	2.24	0.66
2:H:295:LEU:CD2	2:H:319:LEU:HB3	2.25	0.66
2:I:165:GLU:CD	2:I:458:ARG:HA	2.16	0.66
2:J:152:VAL:HG13	2:J:175:VAL:CA	2.15	0.66
2:J:167:ARG:HD3	2:J:210:ALA:O	1.96	0.66
2:K:181:ARG:HD3	2:K:187:VAL:CB	2.25	0.66
2:K:186:LEU:CD2	2:K:200:VAL:HB	2.25	0.66
2:L:49:GLN:HA	2:L:49:GLN:OE1	1.96	0.66
2:L:181:ARG:CD	2:L:187:VAL:HG11	2.25	0.66
2:L:290:LYS:HG2	2:L:291:HIS:H	1.61	0.66
1:A:824:GLN:CA	1:A:824:GLN:NE2	2.57	0.66
1:B:289:ARG:NH2	1:B:532:ILE:O	2.28	0.66
1:B:780:ARG:NH2	1:B:1105:VAL:CG2	2.59	0.66
1:C:62:ILE:HG22	1:C:62:ILE:O	1.96	0.66
1:C:1207:VAL:HG13	1:C:1208:PRO:HD2	1.77	0.66
1:C:1431:HIS:O	1:C:1435:THR:HG22	1.95	0.66
1:D:666:VAL:CG1	1:D:667:ASN:N	2.58	0.66
1:E:102:TYR:HE2	1:E:144:PHE:CE1	2.13	0.66
1:E:824:GLN:CA	1:E:824:GLN:NE2	2.57	0.66
1:E:1376:LEU:N	1:E:1376:LEU:CD2	2.33	0.66
1:F:666:VAL:CG1	1:F:667:ASN:N	2.58	0.66
1:F:1131:THR:HB	1:F:1134:LYS:CG	2.26	0.66
1:F:1401:LEU:C	1:F:1401:LEU:CD1	2.55	0.66
2:G:321:ARG:HH21	2:G:351:GLU:CG	2.09	0.66
2:H:181:ARG:CD	2:H:187:VAL:HG11	2.25	0.66
2:H:197:LYS:HE2	2:H:275:ASP:N	2.07	0.66
2:H:249:LYS:HG3	2:H:258:ILE:HD11	1.78	0.66
2:I:153:ILE:HG23	2:I:238:VAL:HA	1.76	0.66
2:J:44:ALA:HA	2:J:69:LEU:CD1	2.22	0.66
2:J:59:CYS:SG	2:J:61:VAL:HG13	2.36	0.66
2:J:290:LYS:HG2	2:J:291:HIS:H	1.61	0.66
2:K:175:VAL:CG1	2:K:214:TYR:HA	2.23	0.66
2:L:95:GLY:O	2:L:125:LYS:HD2	1.96	0.66
2:L:132:TRP:HD1	2:L:202:ARG:HB2	1.60	0.66
1:A:1144:GLU:O	1:A:1144:GLU:HG3	1.95	0.65
1:A:1230:GLN:NE2	1:A:1267:ARG:CD	2.59	0.65
1:B:909:GLN:NE2	1:B:929:GLU:OE1	2.28	0.65
1:C:354:ARG:NH2	1:C:1292:ALA:O	2.29	0.65
1:C:661:VAL:O	1:C:661:VAL:HG12	1.94	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:902:ASN:ND2	1:E:1227:GLU:OE2	2.28	0.65
1:D:499:PHE:HE1	1:D:742:MET:HE1	1.60	0.65
1:D:875:MET:HE1	1:D:1139:PHE:CE2	2.31	0.65
1:E:512:ASP:OD2	1:E:1367:TYR:OH	2.12	0.65
1:E:1230:GLN:NE2	1:E:1267:ARG:CD	2.59	0.65
1:F:1164:ARG:HD2	1:F:1166:ASP:OD1	1.96	0.65
2:G:165:GLU:OE1	2:G:458:ARG:HA	1.97	0.65
2:H:49:GLN:NE2	2:H:69:LEU:HG	2.10	0.65
2:I:59:CYS:SG	2:I:61:VAL:HG13	2.37	0.65
2:I:165:GLU:OE1	2:I:458:ARG:HA	1.96	0.65
2:I:301:ALA:HA	2:I:304:CYS:SG	2.36	0.65
2:J:249:LYS:HG3	2:J:258:ILE:HD11	1.78	0.65
2:J:337:ALA:O	2:J:340:GLU:HB2	1.97	0.65
2:K:300:THR:HA	8:K:484:FAD:HM73	1.77	0.65
2:K:345:ILE:H	2:K:345:ILE:CD1	2.09	0.65
2:L:321:ARG:HH21	2:L:351:GLU:CG	2.09	0.65
1:A:336:THR:OG1	1:A:337:ASP:O	2.13	0.65
1:A:746:ILE:O	1:A:747:SER:O	2.13	0.65
1:A:781:PHE:HE2	2:J:57:VAL:HG11	1.61	0.65
1:B:452:GLN:HG3	1:B:765:ALA:HB2	1.78	0.65
1:B:454:PHE:HE2	1:B:647:ALA:CB	2.09	0.65
1:C:37:ASP:OD1	1:C:37:ASP:C	2.33	0.65
1:C:317:ILE:O	1:C:321:ASN:ND2	2.29	0.65
1:C:1396:ASP:OD1	1:C:1396:ASP:C	2.34	0.65
1:D:52:GLN:HE22	1:D:71:LEU:CB	2.09	0.65
1:D:450:ARG:O	1:D:451:GLN:C	2.35	0.65
1:D:1164:ARG:HD2	1:D:1166:ASP:OD1	1.96	0.65
1:D:1401:LEU:N	1:D:1402:PRO:CD	2.59	0.65
1:E:354:ARG:NH2	1:E:1292:ALA:O	2.28	0.65
1:E:420:VAL:HA	1:E:540:THR:HG21	1.78	0.65
1:F:499:PHE:HE1	1:F:742:MET:HE1	1.61	0.65
1:F:1438:ARG:NE	2:G:376:GLY:C	2.28	0.65
2:G:290:LYS:CG	2:G:291:HIS:H	2.09	0.65
2:H:156:GLY:O	2:H:160:LEU:HD12	1.97	0.65
2:H:290:LYS:HG2	2:H:291:HIS:H	1.61	0.65
2:H:304:CYS:HA	2:H:307:THR:HG22	1.78	0.65
2:H:418:THR:HG23	2:H:422:THR:HG23	1.77	0.65
2:H:451:VAL:O	2:H:454:ILE:HG23	1.95	0.65
2:I:44:ALA:HA	2:I:69:LEU:CD1	2.22	0.65
2:I:49:GLN:NE2	2:I:69:LEU:HG	2.10	0.65
2:I:448:SER:H	2:I:452:TRP:HZ3	1.42	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:207:LEU:CG	2:J:212:VAL:HG11	2.26	0.65
2:J:220:VAL:CG2	8:J:484:FAD:N1A	2.56	0.65
2:K:410:PHE:O	2:K:413:PRO:HD2	1.95	0.65
2:L:304:CYS:HA	2:L:307:THR:HG22	1.78	0.65
2:L:451:VAL:O	2:L:454:ILE:HG23	1.95	0.65
1:A:491:LYS:NZ	1:A:785:GLY:HA3	2.11	0.65
1:A:782:ARG:CB	2:J:53:PRO:HD2	2.19	0.65
1:A:1396:ASP:OD1	1:A:1396:ASP:C	2.34	0.65
1:B:657:VAL:O	1:B:658:LEU:C	2.32	0.65
1:C:253:HIS:CE1	1:C:254:PRO:CD	2.62	0.65
1:C:336:THR:OG1	1:C:337:ASP:O	2.13	0.65
1:C:359:THR:HG23	1:C:378:GLN:HB3	1.79	0.65
1:C:452:GLN:HG3	1:C:765:ALA:HB2	1.77	0.65
1:C:491:LYS:NZ	1:C:785:GLY:HA3	2.11	0.65
1:D:704:LEU:C	1:D:706:LYS:N	2.49	0.65
1:E:781:PHE:HE2	2:L:57:VAL:HG11	1.61	0.65
1:F:572:THR:HG21	1:F:615:ARG:HB3	1.78	0.65
1:F:820:ARG:HB3	1:F:821:PRO:HD2	1.78	0.65
1:F:1401:LEU:N	1:F:1402:PRO:CD	2.59	0.65
2:G:304:CYS:HA	2:G:307:THR:HG22	1.78	0.65
2:H:95:GLY:O	2:H:125:LYS:HD2	1.96	0.65
2:H:181:ARG:HD3	2:H:187:VAL:CB	2.25	0.65
2:H:301:ALA:HA	2:H:304:CYS:SG	2.37	0.65
2:H:368:HIS:ND1	2:H:387:GLU:HG3	2.10	0.65
2:I:145:GLU:OE1	2:I:472:ALA:HB2	1.97	0.65
2:J:165:GLU:CD	2:J:458:ARG:HA	2.16	0.65
2:J:301:ALA:HA	2:J:304:CYS:SG	2.37	0.65
2:K:290:LYS:HG2	2:K:291:HIS:H	1.61	0.65
1:A:122:ASN:OD1	1:A:125:ARG:NH1	2.25	0.65
1:A:1062:ARG:O	1:A:1062:ARG:CG	2.43	0.65
1:A:1207:VAL:HG13	1:A:1208:PRO:HD2	1.77	0.65
1:A:1311:THR:HG23	1:A:1312:SER:H	1.60	0.65
1:B:782:ARG:HA	2:G:53:PRO:O	1.97	0.65
1:B:960:THR:HG22	1:B:963:VAL:HG23	1.77	0.65
1:C:511:ILE:HG22	1:C:512:ASP:H	1.61	0.65
1:D:657:VAL:O	1:D:658:LEU:C	2.32	0.65
1:E:139:VAL:HG11	1:E:143:GLN:HB3	1.77	0.65
1:E:216:PHE:CZ	1:F:81:ILE:HD13	2.32	0.65
1:E:299:VAL:O	1:E:299:VAL:CG1	2.43	0.65
1:E:520:MET:HE1	1:E:705:LEU:HB3	1.79	0.65
2:H:345:ILE:H	2:H:345:ILE:CD1	2.09	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:100:GLN:CB	2:I:105:GLU:HG2	2.22	0.65
2:J:156:GLY:O	2:J:160:LEU:HD12	1.97	0.65
2:L:90:PHE:HB3	2:L:93:ILE:HG21	1.76	0.65
2:L:145:GLU:OE1	2:L:472:ALA:HB2	1.97	0.65
2:L:165:GLU:CD	2:L:458:ARG:HA	2.16	0.65
1:A:251:MET:HB2	1:A:533:LEU:HD12	1.78	0.65
1:A:253:HIS:ND1	1:A:254:PRO:N	2.45	0.65
1:A:317:ILE:O	1:A:321:ASN:ND2	2.29	0.65
1:A:896:PRO:HG3	1:C:1225:GLU:HB3	1.78	0.65
1:B:515:ARG:HD2	1:B:1367:TYR:CZ	2.31	0.65
1:B:777:GLY:HA3	2:G:52:VAL:HG12	1.77	0.65
1:B:1227:GLU:OE2	1:D:902:ASN:ND2	2.29	0.65
1:B:1413:GLN:HG3	1:B:1414:ARG:O	1.96	0.65
1:C:253:HIS:H	1:C:260:MET:HE1	1.61	0.65
1:C:781:PHE:HE2	2:K:57:VAL:HG11	1.61	0.65
1:C:843:VAL:CG1	1:C:844:GLU:N	2.59	0.65
1:D:559:ARG:HD2	1:D:605:ILE:HD13	1.78	0.65
1:D:777:GLY:HA3	2:H:52:VAL:HG12	1.77	0.65
1:D:1131:THR:HB	1:D:1134:LYS:CG	2.26	0.65
1:D:1227:GLU:OE2	1:F:902:ASN:ND2	2.29	0.65
1:F:266:VAL:HG12	1:F:279:THR:HG23	1.76	0.65
1:F:450:ARG:O	1:F:451:GLN:C	2.35	0.65
1:F:1274:GLN:HE21	1:F:1293:ASN:HB3	1.61	0.65
2:G:49:GLN:NE2	2:G:69:LEU:HG	2.10	0.65
2:G:181:ARG:HD3	2:G:187:VAL:CB	2.25	0.65
2:H:49:GLN:HA	2:H:49:GLN:OE1	1.96	0.65
2:H:59:CYS:SG	2:H:61:VAL:HG13	2.36	0.65
2:I:268:SER:O	2:I:271:VAL:HG23	1.96	0.65
2:J:145:GLU:OE1	2:J:472:ALA:HB2	1.97	0.65
2:J:165:GLU:OE1	2:J:458:ARG:HA	1.97	0.65
2:K:59:CYS:SG	2:K:61:VAL:HG13	2.37	0.65
2:K:165:GLU:OE1	2:K:458:ARG:HA	1.96	0.65
2:K:167:ARG:NH2	2:K:170:GLY:HA2	2.12	0.65
1:A:420:VAL:HA	1:A:540:THR:HG21	1.78	0.65
1:A:452:GLN:HG3	1:A:765:ALA:HB2	1.77	0.65
1:A:1225:GLU:HB3	1:E:896:PRO:HG3	1.78	0.65
1:B:782:ARG:HH21	2:G:51:GLY:CA	0.99	0.65
1:B:1221:PRO:HB2	1:B:1229:MET:HE2	1.77	0.65
1:C:621:ILE:HG13	1:C:658:LEU:HD13	1.79	0.65
1:C:1003:ARG:HG3	1:C:1003:ARG:HH11	1.61	0.65
1:D:56:LYS:HG2	1:D:71:LEU:HD22	1.79	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1274:GLN:HE21	1:D:1293:ASN:HB3	1.61	0.65
1:E:1431:HIS:O	1:E:1435:THR:HG22	1.95	0.65
1:F:447:LEU:HD12	1:F:451:GLN:CG	2.23	0.65
1:F:908:LYS:HD2	1:F:921:TYR:CD1	2.31	0.65
2:G:290:LYS:HG2	2:G:291:HIS:H	1.61	0.65
2:G:300:THR:HA	8:G:484:FAD:HM73	1.77	0.65
2:H:165:GLU:CD	2:H:458:ARG:HA	2.16	0.65
2:H:337:ALA:O	2:H:340:GLU:HB2	1.96	0.65
2:I:95:GLY:O	2:I:125:LYS:HD2	1.96	0.65
2:I:156:GLY:O	2:I:160:LEU:HD12	1.97	0.65
2:I:167:ARG:HD3	2:I:210:ALA:O	1.96	0.65
2:I:304:CYS:HA	2:I:307:THR:HG22	1.78	0.65
2:J:268:SER:O	2:J:271:VAL:HG23	1.96	0.65
2:K:268:SER:O	2:K:271:VAL:HG23	1.96	0.65
2:L:301:ALA:HA	2:L:304:CYS:SG	2.37	0.65
1:A:643:ASN:HD22	1:A:665:THR:CG2	2.10	0.65
1:A:1395:TYR:CE1	1:A:1397:LEU:CD2	2.80	0.65
1:B:113:ASN:HD22	1:B:115:ASP:H	1.41	0.65
1:B:902:ASN:ND2	1:F:1227:GLU:OE2	2.29	0.65
1:C:216:PHE:CZ	1:D:81:ILE:HD13	2.32	0.65
1:D:572:THR:HG21	1:D:615:ARG:HB3	1.78	0.65
1:D:780:ARG:NH2	1:D:1105:VAL:CG2	2.59	0.65
1:D:781:PHE:CE2	2:H:57:VAL:HG21	2.31	0.65
1:D:1008:THR:CG2	1:D:1009:ILE:N	2.55	0.65
1:E:782:ARG:CB	2:L:56:GLN:NE2	2.38	0.65
1:E:1291:ASP:OD1	1:E:1291:ASP:C	2.35	0.65
1:E:1396:ASP:OD1	1:E:1396:ASP:C	2.34	0.65
2:G:345:ILE:H	2:G:345:ILE:CD1	2.09	0.65
2:H:167:ARG:NH2	2:H:170:GLY:HA2	2.12	0.65
2:I:49:GLN:HA	2:I:49:GLN:OE1	1.96	0.65
2:I:199:VAL:O	2:I:203:ARG:HD2	1.97	0.65
2:I:207:LEU:CG	2:I:212:VAL:HG11	2.27	0.65
2:I:264:TYR:HE2	2:I:307:THR:HG23	1.61	0.65
2:I:469:LYS:HZ3	2:I:476:VAL:HA	1.62	0.65
2:J:49:GLN:OE1	2:J:49:GLN:HA	1.96	0.65
2:K:132:TRP:HD1	2:K:202:ARG:HB2	1.60	0.65
2:K:167:ARG:HD3	2:K:210:ALA:O	1.96	0.65
2:K:301:ALA:HA	2:K:304:CYS:SG	2.36	0.65
2:L:38:GLU:HA	2:L:126:TYR:CZ	2.32	0.65
2:L:59:CYS:SG	2:L:61:VAL:HG13	2.36	0.65
1:A:146:LEU:HD12	1:A:146:LEU:C	2.16	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:310:PRO:CG	1:A:404:ARG:NH2	2.56	0.65
1:A:777:GLY:HA3	2:J:52:VAL:HG12	1.79	0.65
1:A:1003:ARG:HH11	1:A:1003:ARG:HG3	1.61	0.65
1:A:1227:GLU:CG	1:E:902:ASN:CG	2.63	0.65
1:B:990:ILE:O	1:B:990:ILE:HG13	1.97	0.65
1:C:302:ALA:HA	1:C:347:ARG:HH12	1.62	0.65
1:C:643:ASN:HD22	1:C:665:THR:CG2	2.10	0.65
1:D:768:GLU:HG2	1:D:769:GLU:N	2.09	0.65
1:D:1047:MET:CE	1:D:1186:ARG:NH2	2.44	0.65
1:E:94:GLU:O	1:E:95:THR:C	2.35	0.65
1:E:452:GLN:HG3	1:E:764:THR:HG22	1.79	0.65
1:E:843:VAL:CG1	1:E:844:GLU:N	2.59	0.65
1:E:1050:SER:O	1:E:1054:GLN:HG3	1.97	0.65
1:E:1395:TYR:CE1	1:E:1397:LEU:CD2	2.80	0.65
2:G:59:CYS:SG	2:G:61:VAL:HG13	2.36	0.65
2:H:321:ARG:HH21	2:H:351:GLU:CG	2.09	0.65
2:I:146:LEU:HD23	2:I:147:GLY:N	2.09	0.65
2:I:229:LEU:O	2:I:233:HIS:HB2	1.97	0.65
2:I:290:LYS:CG	2:I:291:HIS:H	2.09	0.65
2:J:229:LEU:O	2:J:233:HIS:HB2	1.97	0.65
2:K:337:ALA:O	2:K:340:GLU:HB2	1.97	0.65
2:L:267:THR:HG21	2:L:286:ASN:HD21	1.61	0.65
2:L:337:ALA:O	2:L:340:GLU:HB2	1.96	0.65
1:B:609:GLU:O	1:B:611:MET:N	2.30	0.65
1:B:693:MET:HA	1:B:693:MET:CE	2.27	0.65
1:B:781:PHE:CE2	2:G:57:VAL:HG21	2.31	0.65
1:B:1394:VAL:HG11	1:B:1401:LEU:HD22	1.79	0.65
1:C:317:ILE:HG22	1:C:321:ASN:ND2	2.11	0.65
1:C:902:ASN:CG	1:E:1227:GLU:CG	2.63	0.65
1:C:1221:PRO:HD2	1:C:1229:MET:HE1	1.77	0.65
1:D:602:THR:C	1:D:640:THR:HG23	2.17	0.65
2:G:38:GLU:HA	2:G:126:TYR:CZ	2.32	0.65
2:G:167:ARG:NH2	2:G:170:GLY:HA2	2.12	0.65
2:H:132:TRP:HD1	2:H:202:ARG:HB2	1.60	0.65
2:H:267:THR:HG21	2:H:286:ASN:HD21	1.61	0.65
2:I:38:GLU:HA	2:I:126:TYR:CZ	2.32	0.65
2:J:95:GLY:O	2:J:125:LYS:HD2	1.96	0.65
2:J:304:CYS:HA	2:J:307:THR:HG22	1.78	0.65
2:K:49:GLN:HA	2:K:49:GLN:OE1	1.96	0.65
2:K:145:GLU:OE1	2:K:472:ALA:HB2	1.97	0.65
2:K:156:GLY:O	2:K:160:LEU:HD12	1.97	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:199:VAL:O	2:L:203:ARG:HD2	1.97	0.65
1:A:216:PHE:CZ	1:B:81:ILE:HD13	2.32	0.65
1:A:454:PHE:CE2	1:A:647:ALA:HB3	2.30	0.65
1:A:958:HIS:ND1	1:A:958:HIS:N	2.45	0.65
1:B:52:GLN:HE22	1:B:71:LEU:CB	2.09	0.65
1:C:452:GLN:HG3	1:C:764:THR:HG22	1.79	0.65
1:C:515:ARG:HD3	1:C:1367:TYR:CE1	2.31	0.65
1:C:1395:TYR:CE1	1:C:1397:LEU:CD2	2.80	0.65
1:D:218:THR:HG22	1:D:221:LEU:H	1.62	0.65
1:D:295:LYS:NZ	1:D:299:VAL:O	2.17	0.65
1:D:492:TYR:OH	1:D:648:GLU:OE2	2.14	0.65
1:D:820:ARG:HB3	1:D:821:PRO:HD2	1.78	0.65
1:E:1112:THR:O	1:E:1114:PRO:HD3	1.97	0.65
1:E:1207:VAL:HG13	1:E:1208:PRO:HD2	1.77	0.65
1:F:52:GLN:HE22	1:F:71:LEU:CB	2.09	0.65
1:F:452:GLN:HG3	1:F:765:ALA:HB2	1.78	0.65
2:G:249:LYS:HG3	2:G:258:ILE:HD11	1.78	0.65
2:G:301:ALA:HA	2:G:304:CYS:SG	2.37	0.65
2:H:207:LEU:CG	2:H:212:VAL:HG11	2.26	0.65
2:J:38:GLU:HA	2:J:126:TYR:CZ	2.32	0.65
2:J:321:ARG:HH21	2:J:351:GLU:CG	2.09	0.65
2:K:267:THR:HG21	2:K:286:ASN:HD21	1.61	0.65
2:L:156:GLY:O	2:L:160:LEU:HD12	1.97	0.65
2:L:165:GLU:O	2:L:169:LYS:HD3	1.97	0.65
1:A:1112:THR:O	1:A:1114:PRO:HD3	1.97	0.64
1:B:56:LYS:HG2	1:B:71:LEU:HD22	1.79	0.64
1:B:538:THR:HG23	1:B:538:THR:O	1.97	0.64
1:B:1164:ARG:HB3	1:B:1167:LEU:HD12	1.80	0.64
1:C:74:GLY:CA	1:C:172:LEU:HD13	2.27	0.64
1:D:609:GLU:O	1:D:611:MET:N	2.30	0.64
1:D:947:PHE:O	1:D:947:PHE:HD1	1.80	0.64
1:E:146:LEU:HD12	1:E:146:LEU:C	2.16	0.64
1:E:491:LYS:NZ	1:E:785:GLY:HA3	2.11	0.64
1:E:515:ARG:HD3	1:E:1367:TYR:CE1	2.31	0.64
1:F:254:PRO:HG2	1:F:255:ALA:N	2.10	0.64
1:F:609:GLU:O	1:F:611:MET:N	2.30	0.64
2:G:220:VAL:HG23	8:G:484:FAD:C6A	2.27	0.64
2:I:319:LEU:HA	2:I:345:ILE:CD1	2.28	0.64
2:I:321:ARG:HH21	2:I:351:GLU:CG	2.09	0.64
2:I:337:ALA:O	2:I:340:GLU:HB2	1.97	0.64
2:J:186:LEU:CD2	2:J:195:LEU:HD11	2.27	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:K:180:ASP:O	2:K:182:MET:HE1	1.96	0.64
2:L:165:GLU:OE1	2:L:458:ARG:HA	1.96	0.64
2:L:167:ARG:HD3	2:L:210:ALA:O	1.96	0.64
2:L:220:VAL:HG23	8:L:484:FAD:C6A	2.27	0.64
2:L:229:LEU:O	2:L:233:HIS:HB2	1.97	0.64
1:A:359:THR:HG23	1:A:378:GLN:HB3	1.79	0.64
1:B:782:ARG:N	2:G:52:VAL:HB	2.07	0.64
1:B:1131:THR:HB	1:B:1134:LYS:CG	2.26	0.64
1:C:420:VAL:HA	1:C:540:THR:HG21	1.78	0.64
1:C:426:LEU:CD1	1:C:558:MET:HG3	2.28	0.64
1:C:1222:LEU:C	1:C:1222:LEU:HD12	2.16	0.64
1:D:782:ARG:HA	2:H:53:PRO:O	1.97	0.64
1:D:1394:VAL:HG11	1:D:1401:LEU:HD22	1.79	0.64
1:D:1413:GLN:HG3	1:D:1414:ARG:O	1.96	0.64
1:E:182:MET:HE3	1:E:217:PRO:HB3	1.68	0.64
1:E:515:ARG:NH2	1:E:966:ILE:HB	2.13	0.64
1:E:985:TYR:CE1	1:E:1207:VAL:CG1	2.80	0.64
1:E:1349:ARG:HH11	1:E:1349:ARG:HG2	1.62	0.64
1:F:409:HIS:O	1:F:412:THR:HB	1.98	0.64
1:F:780:ARG:NH2	1:F:1105:VAL:CG2	2.59	0.64
1:F:782:ARG:HA	2:I:53:PRO:O	1.97	0.64
2:H:229:LEU:O	2:H:233:HIS:HB2	1.97	0.64
2:I:350:PRO:HG3	2:I:380:PRO:CG	2.28	0.64
2:J:167:ARG:NH2	2:J:170:GLY:HA2	2.12	0.64
2:J:199:VAL:O	2:J:203:ARG:HD2	1.97	0.64
2:K:186:LEU:CD2	2:K:195:LEU:HD11	2.27	0.64
2:K:207:LEU:CG	2:K:212:VAL:HG11	2.27	0.64
2:L:264:TYR:HE2	2:L:307:THR:HG23	1.61	0.64
1:A:985:TYR:CE1	1:A:1207:VAL:CG1	2.80	0.64
1:B:182:MET:CE	1:B:217:PRO:C	2.62	0.64
1:B:296:MET:O	1:B:297:MET:C	2.33	0.64
1:C:209:GLN:HG3	1:C:210:ARG:N	2.13	0.64
1:C:453:ALA:O	1:C:761:GLN:HG3	1.98	0.64
1:D:443:ASP:OD2	1:D:445:ALA:HB3	1.98	0.64
1:E:426:LEU:HD11	1:E:558:MET:HG3	1.79	0.64
1:E:958:HIS:ND1	1:E:958:HIS:N	2.45	0.64
1:E:1442:GLU:HA	2:K:373:ASP:OD2	1.97	0.64
1:F:98:LEU:O	1:F:101:GLY:N	2.25	0.64
2:G:354:THR:HA	2:G:369:LEU:HG	1.80	0.64
2:G:416:LYS:HE3	2:G:433:ASN:CG	2.18	0.64
2:H:38:GLU:HA	2:H:126:TYR:CZ	2.32	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:165:GLU:OE1	2:H:458:ARG:HA	1.96	0.64
2:H:268:SER:O	2:H:271:VAL:HG23	1.96	0.64
2:I:238:VAL:HG22	2:I:438:PHE:O	1.98	0.64
2:J:146:LEU:HD23	2:J:147:GLY:N	2.09	0.64
2:J:238:VAL:HG22	2:J:438:PHE:O	1.98	0.64
2:K:181:ARG:O	2:K:182:MET:HE3	1.95	0.64
2:K:220:VAL:CG2	8:K:484:FAD:N6A	2.55	0.64
2:K:416:LYS:HE3	2:K:433:ASN:CG	2.18	0.64
2:L:317:LYS:HE3	2:L:345:ILE:HD12	1.79	0.64
2:L:319:LEU:HA	2:L:345:ILE:CD1	2.28	0.64
1:A:64:HIS:CE1	1:B:1173:ARG:HH12	2.15	0.64
1:A:302:ALA:HA	1:A:347:ARG:HH12	1.62	0.64
1:C:47:HIS:HE1	1:C:176:SER:HB3	1.62	0.64
1:C:64:HIS:CE1	1:D:1173:ARG:HH12	2.15	0.64
1:D:1164:ARG:HB3	1:D:1167:LEU:HD12	1.80	0.64
1:E:777:GLY:HA3	2:L:52:VAL:HG12	1.79	0.64
1:F:443:ASP:OD2	1:F:445:ALA:HB3	1.98	0.64
1:F:1135:VAL:O	1:F:1136:VAL:C	2.33	0.64
2:H:242:VAL:CG1	2:H:403:PRO:HD3	2.21	0.64
2:H:354:THR:HA	2:H:369:LEU:HG	1.80	0.64
2:I:220:VAL:CG2	8:I:484:FAD:N6A	2.55	0.64
2:I:249:LYS:HG3	2:I:258:ILE:HD11	1.78	0.64
2:I:267:THR:HG21	2:I:286:ASN:HD21	1.61	0.64
2:J:165:GLU:O	2:J:169:LYS:HD3	1.97	0.64
2:J:319:LEU:HA	2:J:345:ILE:CD1	2.28	0.64
2:J:345:ILE:H	2:J:345:ILE:CD1	2.09	0.64
2:K:38:GLU:HA	2:K:126:TYR:CZ	2.32	0.64
2:K:229:LEU:O	2:K:233:HIS:HB2	1.97	0.64
2:K:304:CYS:HA	2:K:307:THR:HG22	1.78	0.64
1:A:227:MET:CE	1:A:282:GLU:HG2	2.28	0.64
1:A:453:ALA:O	1:A:761:GLN:HG3	1.98	0.64
1:A:621:ILE:HG13	1:A:658:LEU:HD13	1.79	0.64
1:A:902:ASN:HD22	1:C:1227:GLU:CG	2.09	0.64
1:A:1050:SER:O	1:A:1054:GLN:HG3	1.97	0.64
1:A:1291:ASP:OD1	1:A:1291:ASP:C	2.35	0.64
1:A:1349:ARG:HH11	1:A:1349:ARG:HG2	1.62	0.64
1:B:1164:ARG:HD2	1:B:1166:ASP:OD1	1.96	0.64
1:C:675:ILE:O	1:C:678:ARG:HB2	1.98	0.64
1:C:1291:ASP:OD1	1:C:1291:ASP:C	2.35	0.64
1:E:248:GLU:HA	1:E:251:MET:CG	2.22	0.64
1:E:251:MET:HB2	1:E:533:LEU:HD12	1.78	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:731:SER:HA	1:E:747:SER:HB2	1.80	0.64
1:E:815:GLU:HA	1:E:815:GLU:OE1	1.98	0.64
1:F:56:LYS:HG2	1:F:71:LEU:HD22	1.79	0.64
1:F:496:HIS:ND1	1:F:654:TYR:HD1	1.93	0.64
2:G:167:ARG:HD3	2:G:210:ALA:O	1.96	0.64
2:H:145:GLU:OE1	2:H:472:ALA:HB2	1.97	0.64
2:H:281:GLU:HG3	2:H:284:SER:N	2.11	0.64
2:H:408:ASN:O	2:H:411:ASP:HB3	1.98	0.64
2:I:165:GLU:O	2:I:169:LYS:HD3	1.97	0.64
1:A:74:GLY:CA	1:A:172:LEU:HD13	2.27	0.64
1:A:369:THR:HG22	1:A:1293:ASN:HD21	1.62	0.64
1:A:452:GLN:HG3	1:A:764:THR:HG22	1.79	0.64
1:B:569:ILE:HD13	1:B:569:ILE:N	2.12	0.64
1:C:52:GLN:CD	1:C:71:LEU:H	2.01	0.64
1:C:746:ILE:HG22	1:C:747:SER:O	1.97	0.64
1:C:985:TYR:CE1	1:C:1207:VAL:CG1	2.80	0.64
1:C:1447:TRP:CD2	1:C:1451:VAL:HG22	2.33	0.64
1:D:1289:MET:HB2	1:D:1289:MET:HE3	1.80	0.64
1:E:253:HIS:ND1	1:E:254:PRO:N	2.45	0.64
1:E:302:ALA:HA	1:E:347:ARG:HH12	1.62	0.64
1:E:1113:CYS:SG	6:E:2476:F3S:FE3	1.89	0.64
1:F:990:ILE:O	1:F:990:ILE:HG13	1.97	0.64
1:F:1164:ARG:HB3	1:F:1167:LEU:HD12	1.79	0.64
2:G:145:GLU:OE1	2:G:472:ALA:HB2	1.97	0.64
2:G:242:VAL:CG1	2:G:403:PRO:HD3	2.21	0.64
2:G:259:VAL:HG21	2:G:264:TYR:CB	2.14	0.64
2:I:132:TRP:HD1	2:I:202:ARG:HB2	1.60	0.64
2:I:152:VAL:HG13	2:I:175:VAL:CA	2.15	0.64
2:I:220:VAL:CG2	8:I:484:FAD:N1A	2.56	0.64
2:I:416:LYS:HE3	2:I:433:ASN:CG	2.18	0.64
2:J:264:TYR:HE2	2:J:307:THR:HG23	1.61	0.64
2:J:327:MET:HB2	2:J:346:TRP:HH2	1.54	0.64
2:J:350:PRO:HG3	2:J:380:PRO:CG	2.28	0.64
2:K:317:LYS:HE3	2:K:345:ILE:HD12	1.79	0.64
2:L:290:LYS:CG	2:L:291:HIS:H	2.09	0.64
1:A:52:GLN:HE22	1:A:71:LEU:CB	2.11	0.64
1:A:248:GLU:O	1:A:250:ARG:N	2.31	0.64
1:A:442:MET:HE1	1:A:447:LEU:HA	1.79	0.64
1:A:662:GLY:O	1:A:720:ARG:HD3	1.98	0.64
1:A:1108:CYS:SG	6:A:2476:F3S:FE4	1.90	0.64
1:A:1393:TYR:O	1:A:1394:VAL:CG2	2.44	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:602:THR:C	1:B:640:THR:HG23	2.17	0.64
1:B:885:GLY:C	1:B:887:GLY:H	2.01	0.64
1:C:896:PRO:HG3	1:E:1225:GLU:HB3	1.78	0.64
1:C:902:ASN:CG	1:E:1227:GLU:CD	2.57	0.64
1:C:1050:SER:O	1:C:1054:GLN:HG3	1.97	0.64
1:C:1442:GLU:HA	2:J:373:ASP:OD2	1.97	0.64
1:D:482:ASP:OD1	1:D:788:HIS:HD2	1.81	0.64
1:E:359:THR:HG23	1:E:378:GLN:HB3	1.79	0.64
1:E:675:ILE:O	1:E:678:ARG:HB2	1.98	0.64
1:E:1438:ARG:HB3	2:K:375:THR:HA	1.80	0.64
1:F:453:ALA:O	1:F:761:GLN:HG3	1.97	0.64
1:F:515:ARG:CD	1:F:1367:TYR:HE1	2.04	0.64
1:F:657:VAL:O	1:F:658:LEU:C	2.32	0.64
1:F:745:ARG:O	1:F:746:ILE:HG13	1.98	0.64
2:G:77:LEU:O	2:G:127:ILE:HD11	1.98	0.64
2:G:229:LEU:O	2:G:233:HIS:HB2	1.97	0.64
2:G:408:ASN:O	2:G:411:ASP:HB3	1.98	0.64
2:H:146:LEU:HD22	2:H:146:LEU:H	1.63	0.64
2:H:309:ILE:HD11	2:H:340:GLU:OE2	1.98	0.64
2:H:319:LEU:HA	2:H:345:ILE:CD1	2.28	0.64
2:I:220:VAL:HG23	8:I:484:FAD:C6A	2.27	0.64
2:J:408:ASN:O	2:J:411:ASP:HB3	1.98	0.64
2:K:146:LEU:HD22	2:K:146:LEU:H	1.63	0.64
2:K:165:GLU:O	2:K:169:LYS:HD3	1.97	0.64
1:A:426:LEU:CD1	1:A:558:MET:HG3	2.28	0.64
1:A:1221:PRO:CB	1:A:1229:MET:CE	2.73	0.64
1:B:877:ARG:CG	1:F:1230:GLN:N	2.61	0.64
1:B:950:THR:CG2	1:B:951:GLU:H	2.06	0.64
1:B:1401:LEU:N	1:B:1402:PRO:CD	2.59	0.64
1:D:409:HIS:O	1:D:412:THR:HB	1.98	0.64
1:E:369:THR:HG22	1:E:1293:ASN:HD21	1.62	0.64
1:E:662:GLY:O	1:E:720:ARG:HD3	1.98	0.64
1:E:1374:VAL:O	1:E:1375:ILE:HG13	1.98	0.64
1:F:266:VAL:O	1:F:279:THR:HG23	1.98	0.64
2:G:238:VAL:HG22	2:G:438:PHE:O	1.98	0.64
2:G:267:THR:HG21	2:G:286:ASN:HD21	1.61	0.64
2:G:319:LEU:HA	2:G:345:ILE:CD1	2.28	0.64
2:G:337:ALA:O	2:G:340:GLU:HB2	1.97	0.64
2:G:353:PHE:CE1	2:G:370:GLY:HA3	2.33	0.64
2:H:351:GLU:HB3	2:H:353:PHE:HB3	1.80	0.64
2:J:351:GLU:HB3	2:J:353:PHE:HB3	1.80	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:77:LEU:O	2:L:127:ILE:HD11	1.98	0.64
2:L:249:LYS:HG3	2:L:258:ILE:HD11	1.78	0.64
2:L:350:PRO:HG3	2:L:380:PRO:CG	2.28	0.64
2:L:353:PHE:CE1	2:L:370:GLY:HA3	2.33	0.64
2:L:416:LYS:HE3	2:L:433:ASN:CG	2.18	0.64
1:A:94:GLU:O	1:A:95:THR:C	2.35	0.64
1:A:386:GLY:O	1:A:389:GLU:HG3	1.98	0.64
1:A:746:ILE:HG22	1:A:747:SER:N	2.09	0.64
1:B:260:MET:O	1:B:263:LEU:N	2.31	0.64
1:C:345:MET:CE	1:C:385:LEU:HB2	2.28	0.64
1:C:662:GLY:O	1:C:720:ARG:HD3	1.98	0.64
1:C:815:GLU:HA	1:C:815:GLU:OE1	1.98	0.64
1:C:902:ASN:HD22	1:E:1227:GLU:CG	2.09	0.64
1:C:1112:THR:O	1:C:1114:PRO:HD3	1.97	0.64
1:C:1113:CYS:SG	6:C:2476:F3S:FE3	1.89	0.64
1:D:515:ARG:HD2	1:D:1367:TYR:CZ	2.31	0.64
1:D:555:PHE:HD1	1:D:556:ARG:N	1.96	0.64
1:D:693:MET:HA	1:D:693:MET:CE	2.27	0.64
1:D:783:LYS:CE	2:H:57:VAL:CG1	2.36	0.64
1:D:1131:THR:HG22	1:D:1134:LYS:N	2.12	0.64
1:D:1369:THR:CG2	1:D:1369:THR:O	2.46	0.64
1:E:426:LEU:CD1	1:E:558:MET:HG3	2.28	0.64
1:E:621:ILE:HG13	1:E:658:LEU:HD13	1.79	0.64
1:E:1311:THR:HG23	1:E:1312:SER:H	1.60	0.64
1:F:602:THR:C	1:F:640:THR:HG23	2.17	0.64
1:F:693:MET:HA	1:F:693:MET:CE	2.27	0.64
2:G:120:ILE:O	2:G:123:VAL:HG23	1.98	0.64
2:G:165:GLU:O	2:G:169:LYS:HD3	1.97	0.64
2:G:178:ARG:HB2	2:G:219:GLU:OE1	1.98	0.64
2:G:207:LEU:CG	2:G:212:VAL:HG11	2.26	0.64
2:I:167:ARG:NH2	2:I:170:GLY:HA2	2.12	0.64
2:I:408:ASN:O	2:I:411:ASP:HB3	1.98	0.64
2:K:153:ILE:HD11	8:K:484:FAD:N1A	2.13	0.64
2:K:350:PRO:HG3	2:K:380:PRO:CG	2.28	0.64
2:K:351:GLU:HB3	2:K:353:PHE:HB3	1.80	0.64
2:K:471:LYS:HA	2:K:471:LYS:CE	2.23	0.64
2:L:207:LEU:CG	2:L:212:VAL:HG11	2.26	0.64
2:L:238:VAL:HG22	2:L:438:PHE:O	1.98	0.64
1:A:312:ASN:OD1	1:A:312:ASN:N	2.22	0.64
1:B:947:PHE:HD1	1:B:947:PHE:O	1.80	0.64
1:B:1131:THR:HG22	1:B:1134:LYS:N	2.12	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:122:ASN:OD1	1:C:125:ARG:NH1	2.25	0.64
1:C:386:GLY:O	1:C:389:GLU:HG3	1.98	0.64
1:C:777:GLY:HA3	2:K:52:VAL:HG12	1.79	0.64
1:C:1108:CYS:SG	6:C:2476:F3S:FE4	1.90	0.64
1:C:1349:ARG:HH11	1:C:1349:ARG:HG2	1.62	0.64
1:D:59:VAL:HG22	1:D:105:TYR:CD2	2.33	0.64
1:D:98:LEU:O	1:D:101:GLY:N	2.25	0.64
1:E:52:GLN:HE22	1:E:71:LEU:CB	2.11	0.64
1:E:74:GLY:CA	1:E:172:LEU:HD13	2.28	0.64
1:F:1131:THR:HG22	1:F:1134:LYS:N	2.12	0.64
1:F:1394:VAL:HG11	1:F:1401:LEU:HD22	1.79	0.64
1:F:1447:TRP:O	1:F:1451:VAL:HG23	1.98	0.64
2:G:199:VAL:O	2:G:203:ARG:HD2	1.97	0.64
2:H:321:ARG:HA	2:H:352:GLY:H	1.63	0.64
2:H:416:LYS:HE3	2:H:433:ASN:CG	2.18	0.64
2:I:153:ILE:HD11	8:I:484:FAD:N1A	2.13	0.64
2:J:418:THR:HG23	2:J:422:THR:HG23	1.77	0.64
2:K:238:VAL:HG22	2:K:438:PHE:O	1.98	0.64
2:K:408:ASN:O	2:K:411:ASP:HB3	1.98	0.64
2:L:167:ARG:NH2	2:L:170:GLY:HA2	2.12	0.64
2:L:281:GLU:HG3	2:L:284:SER:N	2.11	0.64
2:L:408:ASN:O	2:L:411:ASP:HB3	1.98	0.64
2:L:418:THR:CA	2:L:424:LEU:HD21	2.28	0.64
1:A:426:LEU:HD11	1:A:558:MET:HG3	1.79	0.63
1:B:139:VAL:CG1	1:B:140:SER:N	2.35	0.63
1:B:782:ARG:NH2	2:G:51:GLY:HA3	0.97	0.63
1:B:1369:THR:CG2	1:B:1369:THR:O	2.46	0.63
1:C:1450:GLU:OE1	1:C:1453:LYS:NZ	2.24	0.63
1:E:64:HIS:CE1	1:F:1173:ARG:HH12	2.15	0.63
1:E:465:LEU:HD12	1:E:465:LEU:O	1.98	0.63
1:E:1164:ARG:NH1	1:E:1166:ASP:OD2	2.31	0.63
1:E:1282:GLN:HA	1:E:1302:GLY:O	1.98	0.63
1:F:482:ASP:OD1	1:F:788:HIS:HD2	1.81	0.63
1:F:782:ARG:NH2	2:I:51:GLY:HA3	0.97	0.63
1:F:947:PHE:HD1	1:F:947:PHE:O	1.80	0.63
2:G:146:LEU:HD22	2:G:146:LEU:H	1.63	0.63
2:G:156:GLY:O	2:G:160:LEU:HD12	1.97	0.63
2:G:321:ARG:HA	2:G:352:GLY:H	1.62	0.63
2:H:77:LEU:O	2:H:127:ILE:HD11	1.98	0.63
2:H:181:ARG:HB3	2:H:181:ARG:NH1	2.14	0.63
2:H:238:VAL:HG22	2:H:438:PHE:O	1.98	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:178:ARG:HB2	2:I:219:GLU:OE1	1.98	0.63
2:I:186:LEU:CD2	2:I:195:LEU:HD11	2.27	0.63
2:I:302:MET:CE	2:I:334:VAL:HA	2.28	0.63
2:K:319:LEU:HA	2:K:345:ILE:CD1	2.28	0.63
2:L:181:ARG:HB3	2:L:181:ARG:NH1	2.14	0.63
1:A:465:LEU:HD12	1:A:465:LEU:O	1.98	0.63
1:A:746:ILE:HG22	1:A:747:SER:O	1.97	0.63
1:A:1395:TYR:CZ	1:A:1397:LEU:HD21	2.34	0.63
1:B:254:PRO:HG2	1:B:255:ALA:N	2.10	0.63
1:B:409:HIS:O	1:B:412:THR:HB	1.98	0.63
1:B:555:PHE:HD1	1:B:556:ARG:N	1.96	0.63
1:B:1274:GLN:HE21	1:B:1293:ASN:HB3	1.61	0.63
1:C:30:HIS:HE1	1:C:368:GLU:OE1	1.81	0.63
1:C:52:GLN:HE22	1:C:71:LEU:CB	2.11	0.63
1:C:370:GLY:HA3	1:C:1237:ASN:HB3	1.80	0.63
1:C:1164:ARG:NH1	1:C:1166:ASP:OD2	2.31	0.63
1:D:37:ASP:OD1	1:D:37:ASP:C	2.37	0.63
1:D:353:MET:HG2	1:D:385:LEU:CD2	2.29	0.63
1:D:453:ALA:O	1:D:761:GLN:HG3	1.97	0.63
1:E:30:HIS:HE1	1:E:368:GLU:OE1	1.81	0.63
1:E:52:GLN:CD	1:E:71:LEU:H	2.01	0.63
1:E:386:GLY:O	1:E:389:GLU:HG3	1.98	0.63
1:E:491:LYS:O	1:E:492:TYR:C	2.35	0.63
1:E:643:ASN:HD22	1:E:665:THR:CG2	2.10	0.63
1:F:59:VAL:HG22	1:F:105:TYR:CD2	2.33	0.63
1:F:218:THR:HG22	1:F:221:LEU:H	1.62	0.63
1:F:1369:THR:CG2	1:F:1369:THR:O	2.46	0.63
2:H:165:GLU:O	2:H:169:LYS:HD3	1.97	0.63
2:J:317:LYS:HE3	2:J:345:ILE:HD12	1.79	0.63
2:K:309:ILE:HD11	2:K:340:GLU:OE2	1.98	0.63
2:L:153:ILE:HD11	8:L:484:FAD:N1A	2.13	0.63
2:L:302:MET:CE	2:L:334:VAL:HA	2.28	0.63
1:A:479:MET:HG3	1:A:1104:MET:HE3	1.79	0.63
1:A:491:LYS:O	1:A:492:TYR:C	2.35	0.63
1:A:728:ILE:HD12	1:A:1047:MET:HE3	1.81	0.63
1:A:1113:CYS:SG	6:A:2476:F3S:FE3	1.89	0.63
1:A:1220:ARG:HB3	1:A:1221:PRO:HD3	1.81	0.63
1:C:466:HIS:ND1	1:C:678:ARG:NH1	2.46	0.63
1:C:958:HIS:N	1:C:958:HIS:ND1	2.45	0.63
1:D:113:ASN:HD22	1:D:115:ASP:H	1.41	0.63
1:E:227:MET:CE	1:E:282:GLU:HG2	2.28	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:248:GLU:O	1:E:250:ARG:N	2.31	0.63
1:E:958:HIS:O	1:E:1369:THR:HG21	1.99	0.63
1:E:1108:CYS:SG	6:E:2476:F3S:FE4	1.90	0.63
2:G:153:ILE:HD11	8:G:484:FAD:N1A	2.13	0.63
2:G:317:LYS:HE3	2:G:345:ILE:HD12	1.79	0.63
2:H:175:VAL:CG1	2:H:214:TYR:HA	2.23	0.63
2:H:178:ARG:HB2	2:H:219:GLU:OE1	1.98	0.63
2:H:199:VAL:O	2:H:203:ARG:HD2	1.97	0.63
2:H:264:TYR:HE2	2:H:307:THR:HG23	1.61	0.63
2:H:350:PRO:HG3	2:H:380:PRO:CG	2.28	0.63
2:I:120:ILE:O	2:I:123:VAL:HG23	1.98	0.63
2:I:317:LYS:HE3	2:I:345:ILE:HD12	1.79	0.63
2:J:95:GLY:C	2:J:125:LYS:HD2	2.19	0.63
2:J:146:LEU:H	2:J:146:LEU:HD22	1.63	0.63
2:J:354:THR:HA	2:J:369:LEU:HG	1.80	0.63
2:K:77:LEU:O	2:K:127:ILE:HD11	1.98	0.63
2:K:418:THR:CA	2:K:424:LEU:HD21	2.28	0.63
2:L:120:ILE:O	2:L:123:VAL:HG23	1.98	0.63
1:A:728:ILE:HD12	1:A:1047:MET:HE1	1.81	0.63
1:A:1222:LEU:C	1:A:1222:LEU:HD12	2.16	0.63
1:B:443:ASP:OD2	1:B:445:ALA:HB3	1.97	0.63
1:B:450:ARG:O	1:B:451:GLN:C	2.35	0.63
1:B:1447:TRP:O	1:B:1451:VAL:HG23	1.98	0.63
1:C:248:GLU:O	1:C:250:ARG:N	2.31	0.63
1:C:958:HIS:O	1:C:1369:THR:HG21	1.99	0.63
1:C:1007:GLY:O	1:C:1010:ALA:HB3	1.99	0.63
1:D:782:ARG:NH2	2:H:51:GLY:HA3	0.97	0.63
1:D:875:MET:HE1	1:D:1139:PHE:CD2	2.33	0.63
1:E:209:GLN:HG3	1:E:210:ARG:N	2.13	0.63
1:E:643:ASN:HD22	1:E:665:THR:HB	1.63	0.63
1:E:746:ILE:HG22	1:E:747:SER:O	1.97	0.63
1:E:891:PRO:HB3	1:E:894:PHE:CE2	2.34	0.63
1:E:1289:MET:H	1:E:1289:MET:HE3	1.63	0.63
1:F:52:GLN:HE22	1:F:71:LEU:N	1.96	0.63
2:G:144:ARG:NH1	2:G:169:LYS:HA	2.14	0.63
2:G:181:ARG:HB3	2:G:181:ARG:NH1	2.14	0.63
2:G:309:ILE:HD11	2:G:340:GLU:OE2	1.98	0.63
2:G:351:GLU:HB3	2:G:353:PHE:HB3	1.80	0.63
2:G:418:THR:CA	2:G:424:LEU:HD21	2.28	0.63
2:I:92:GLU:OE2	2:I:202:ARG:HD3	1.99	0.63
2:I:144:ARG:NH1	2:I:169:LYS:HA	2.14	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:181:ARG:NH1	2:I:181:ARG:HB3	2.14	0.63
2:I:236:VAL:HG23	2:I:437:VAL:HA	1.80	0.63
2:I:309:ILE:HD11	2:I:340:GLU:OE2	1.98	0.63
2:J:242:VAL:CG1	2:J:403:PRO:HD3	2.21	0.63
2:J:281:GLU:HG3	2:J:284:SER:N	2.11	0.63
2:K:318:CYS:O	2:K:345:ILE:HD13	1.99	0.63
2:L:144:ARG:NH1	2:L:169:LYS:HA	2.14	0.63
2:L:241:GLY:H	2:L:443:ILE:HG23	1.64	0.63
2:L:309:ILE:HD11	2:L:340:GLU:OE2	1.98	0.63
1:A:370:GLY:HA3	1:A:1237:ASN:HB3	1.79	0.63
1:B:492:TYR:OH	1:B:648:GLU:OE2	2.14	0.63
1:B:528:ASN:CB	1:B:542:LEU:HD22	2.29	0.63
1:B:745:ARG:O	1:B:746:ILE:HG13	1.98	0.63
1:B:820:ARG:HB3	1:B:821:PRO:HD2	1.78	0.63
1:B:1466:LEU:O	1:B:1467:GLU:C	2.37	0.63
1:C:295:LYS:HD3	1:C:295:LYS:C	2.19	0.63
1:C:603:HIS:HA	1:C:640:THR:HG22	1.81	0.63
1:D:339:ARG:HG3	1:D:396:GLN:HG3	1.80	0.63
1:E:370:GLY:HA3	1:E:1237:ASN:HB3	1.79	0.63
1:F:113:ASN:HD22	1:F:115:ASP:H	1.41	0.63
1:F:353:MET:HE2	1:F:366:GLY:O	1.99	0.63
2:G:179:TYR:HB2	2:G:181:ARG:HH12	1.64	0.63
2:G:302:MET:CE	2:G:334:VAL:HA	2.28	0.63
2:H:153:ILE:HD11	8:H:484:FAD:N1A	2.13	0.63
2:I:95:GLY:C	2:I:125:LYS:HD2	2.19	0.63
2:I:418:THR:CA	2:I:424:LEU:HD21	2.28	0.63
2:J:92:GLU:OE2	2:J:202:ARG:HD3	1.99	0.63
2:J:181:ARG:HB3	2:J:181:ARG:NH1	2.14	0.63
2:J:416:LYS:HE3	2:J:433:ASN:CG	2.18	0.63
2:J:431:MET:HG2	2:J:438:PHE:CE2	2.34	0.63
2:K:199:VAL:O	2:K:203:ARG:HD2	1.97	0.63
2:K:354:THR:HA	2:K:369:LEU:HG	1.80	0.63
1:A:30:HIS:HE1	1:A:368:GLU:OE1	1.81	0.63
1:A:52:GLN:CD	1:A:71:LEU:H	2.01	0.63
1:A:143:GLN:C	1:A:143:GLN:HE21	2.01	0.63
1:A:978:GLU:O	1:A:981:ALA:HB3	1.99	0.63
1:A:1227:GLU:CG	1:E:902:ASN:HD22	2.09	0.63
1:A:1442:GLU:HA	2:L:373:ASP:OD2	1.97	0.63
1:B:37:ASP:OD1	1:B:37:ASP:C	2.37	0.63
1:B:236:THR:HG22	1:B:328:ASP:H	1.62	0.63
1:B:266:VAL:O	1:B:279:THR:HG23	1.98	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:116:ILE:HD13	1:C:190:THR:CG2	2.29	0.63
1:C:227:MET:CE	1:C:282:GLU:HG2	2.28	0.63
1:C:253:HIS:ND1	1:C:254:PRO:N	2.45	0.63
1:C:1435:THR:HG23	1:C:1437:SER:H	1.63	0.63
1:D:152:ARG:O	1:D:156:GLU:HB2	1.99	0.63
1:D:355:TYR:C	1:D:355:TYR:CD1	2.72	0.63
1:D:452:GLN:HG3	1:D:765:ALA:HB2	1.78	0.63
1:E:116:ILE:HD13	1:E:190:THR:CG2	2.29	0.63
1:E:295:LYS:HD3	1:E:295:LYS:C	2.19	0.63
1:E:974:ILE:CD1	1:E:983:LEU:HD12	2.19	0.63
1:E:1221:PRO:CG	1:E:1229:MET:HE1	2.28	0.63
1:F:442:MET:HE3	1:F:446:GLU:HB3	1.81	0.63
2:G:182:MET:O	2:G:187:VAL:HG21	1.99	0.63
2:G:186:LEU:CD2	2:G:195:LEU:HD11	2.27	0.63
2:G:197:LYS:HB3	2:G:273:LEU:HG	1.81	0.63
2:G:431:MET:HG2	2:G:438:PHE:CE2	2.34	0.63
2:H:95:GLY:C	2:H:125:LYS:HD2	2.19	0.63
2:H:186:LEU:CD2	2:H:195:LEU:HD11	2.27	0.63
2:I:318:CYS:O	2:I:345:ILE:HD13	1.99	0.63
2:J:178:ARG:HB2	2:J:219:GLU:OE1	1.98	0.63
2:K:92:GLU:OE2	2:K:202:ARG:HD3	1.99	0.63
2:K:144:ARG:NH1	2:K:169:LYS:HA	2.14	0.63
2:L:186:LEU:CD2	2:L:195:LEU:HD11	2.27	0.63
2:L:197:LYS:HB3	2:L:273:LEU:HG	1.81	0.63
2:L:431:MET:HG2	2:L:438:PHE:CE2	2.34	0.63
1:B:510:PRO:HD2	1:B:970:PRO:HB3	1.81	0.63
1:B:643:ASN:HB3	1:B:665:THR:CG2	2.29	0.63
1:B:1131:THR:CG2	1:B:1133:GLU:HB2	2.29	0.63
1:C:143:GLN:C	1:C:143:GLN:HE21	2.01	0.63
1:C:511:ILE:CG2	1:C:512:ASP:N	2.59	0.63
1:C:515:ARG:NH2	1:C:966:ILE:HB	2.13	0.63
1:C:891:PRO:HB3	1:C:894:PHE:CE2	2.34	0.63
1:D:439:PRO:HG2	1:D:439:PRO:O	1.99	0.63
1:D:728:ILE:HD12	1:D:1047:MET:HE1	1.77	0.63
1:D:1389:GLY:HA2	1:D:1459:PRO:HG2	1.81	0.63
1:E:1007:GLY:O	1:E:1010:ALA:HB3	1.99	0.63
1:E:1417:VAL:HG12	1:E:1419:HIS:H	1.64	0.63
1:F:353:MET:HG2	1:F:385:LEU:CD2	2.29	0.63
1:F:643:ASN:HB3	1:F:665:THR:CG2	2.29	0.63
2:G:92:GLU:OE2	2:G:202:ARG:HD3	1.99	0.63
2:G:241:GLY:H	2:G:443:ILE:HG23	1.64	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:144:ARG:NH1	2:H:169:LYS:HA	2.14	0.63
2:H:182:MET:O	2:H:187:VAL:HG21	1.99	0.63
2:H:302:MET:CE	2:H:334:VAL:HA	2.28	0.63
2:H:317:LYS:HE3	2:H:345:ILE:HD12	1.79	0.63
2:J:144:ARG:NH1	2:J:169:LYS:HA	2.14	0.63
2:J:165:GLU:HB3	2:J:169:LYS:HZ3	1.62	0.63
2:J:321:ARG:HA	2:J:352:GLY:H	1.62	0.63
2:K:90:PHE:HB3	2:K:93:ILE:HG21	1.76	0.63
2:K:153:ILE:O	2:K:239:ALA:HB3	1.99	0.63
2:K:178:ARG:HB2	2:K:219:GLU:OE1	1.98	0.63
2:L:165:GLU:HB3	2:L:169:LYS:HZ3	1.62	0.63
2:L:179:TYR:HB2	2:L:181:ARG:HH12	1.64	0.63
2:L:182:MET:O	2:L:187:VAL:HG21	1.99	0.63
2:L:318:CYS:O	2:L:345:ILE:HD13	1.99	0.63
1:A:80:ARG:HD3	1:A:125:ARG:O	1.98	0.63
1:A:345:MET:CE	1:A:385:LEU:HB2	2.28	0.63
1:A:403:ASP:OD2	1:A:407:LYS:NZ	2.32	0.63
1:A:675:ILE:O	1:A:678:ARG:HB2	1.98	0.63
1:A:815:GLU:HA	1:A:815:GLU:OE1	1.98	0.63
1:C:1008:THR:HG22	1:C:1009:ILE:H	1.64	0.63
1:C:1062:ARG:O	1:C:1062:ARG:CG	2.44	0.63
1:C:1282:GLN:HA	1:C:1302:GLY:O	1.98	0.63
1:C:1374:VAL:O	1:C:1375:ILE:HG13	1.98	0.63
1:D:745:ARG:O	1:D:746:ILE:HG13	1.98	0.63
1:D:990:ILE:O	1:D:990:ILE:HG13	1.97	0.63
1:E:80:ARG:HD3	1:E:125:ARG:O	1.98	0.63
1:E:782:ARG:HG3	2:L:52:VAL:CB	2.18	0.63
1:E:1447:TRP:CD2	1:E:1451:VAL:HG22	2.33	0.63
1:F:447:LEU:HD21	1:F:674:ALA:CA	2.29	0.63
1:F:492:TYR:OH	1:F:648:GLU:OE2	2.14	0.63
1:F:1131:THR:CG2	1:F:1133:GLU:HB2	2.29	0.63
1:F:1466:LEU:O	1:F:1467:GLU:C	2.37	0.63
2:G:264:TYR:HE2	2:G:307:THR:HG23	1.61	0.63
2:H:353:PHE:CE1	2:H:370:GLY:HA3	2.33	0.63
2:H:449:LEU:HB3	2:H:452:TRP:CE3	2.34	0.63
2:I:182:MET:O	2:I:187:VAL:HG21	1.99	0.63
2:I:259:VAL:HG21	2:I:264:TYR:CB	2.14	0.63
2:J:179:TYR:HB2	2:J:181:ARG:HH12	1.64	0.63
2:J:182:MET:O	2:J:187:VAL:HG21	1.99	0.63
2:K:181:ARG:HB3	2:K:181:ARG:NH1	2.14	0.63
2:K:197:LYS:HB3	2:K:273:LEU:HG	1.81	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:K:281:GLU:HG3	2:K:284:SER:N	2.11	0.63
2:K:302:MET:CE	2:K:334:VAL:HA	2.28	0.63
2:L:186:LEU:HD11	2:L:200:VAL:CB	2.28	0.63
1:A:116:ILE:HD13	1:A:190:THR:CG2	2.29	0.63
1:A:1221:PRO:CG	1:A:1229:MET:HE2	2.28	0.63
1:B:152:ARG:O	1:B:156:GLU:HB2	1.99	0.63
1:B:515:ARG:CD	1:B:1367:TYR:HE1	2.04	0.63
1:C:24:ALA:CB	1:C:207:TYR:CE2	2.82	0.63
1:C:369:THR:HG22	1:C:1293:ASN:HD21	1.62	0.63
1:C:493:ARG:NH2	1:C:786:ASP:OD1	2.32	0.63
1:C:693:MET:O	1:C:694:ALA:C	2.37	0.63
1:C:938:PRO:HG2	1:C:1041:ALA:HB1	1.81	0.63
1:C:1220:ARG:HB3	1:C:1221:PRO:HD3	1.81	0.63
1:C:1221:PRO:HB2	1:C:1229:MET:CE	2.09	0.63
1:C:1375:ILE:C	1:C:1376:LEU:HD23	2.19	0.63
1:D:538:THR:O	1:D:538:THR:HG23	1.97	0.63
1:D:1159:ASN:O	1:D:1161:VAL:N	2.32	0.63
1:E:312:ASN:OD1	1:E:312:ASN:N	2.22	0.63
1:E:345:MET:CE	1:E:385:LEU:HB2	2.28	0.63
1:E:746:ILE:HG23	1:E:1182:ASP:CB	2.29	0.63
1:F:249:THR:O	1:F:249:THR:HG23	1.98	0.63
1:F:464:ILE:CD1	1:F:779:TYR:CZ	2.81	0.63
1:F:555:PHE:HD1	1:F:556:ARG:N	1.96	0.63
1:F:782:ARG:NH2	2:I:51:GLY:HA2	0.72	0.63
1:F:1112:THR:O	1:F:1114:PRO:HD3	1.99	0.63
2:G:153:ILE:O	2:G:239:ALA:HB3	1.99	0.63
2:G:281:GLU:HG3	2:G:284:SER:N	2.11	0.63
2:H:236:VAL:HG23	2:H:437:VAL:HA	1.80	0.63
2:H:431:MET:HG2	2:H:438:PHE:CE2	2.34	0.63
2:I:77:LEU:O	2:I:127:ILE:HD11	1.98	0.63
2:I:146:LEU:H	2:I:146:LEU:HD22	1.63	0.63
2:J:132:TRP:HD1	2:J:202:ARG:HB2	1.60	0.63
2:J:175:VAL:CG1	2:J:214:TYR:HA	2.23	0.63
2:J:236:VAL:HG23	2:J:437:VAL:HA	1.80	0.63
2:J:302:MET:CE	2:J:334:VAL:HA	2.28	0.63
2:K:95:GLY:C	2:K:125:LYS:HD2	2.19	0.63
2:K:182:MET:O	2:K:187:VAL:HG21	1.99	0.63
2:K:302:MET:HE1	2:K:333:GLU:HG3	1.80	0.63
2:L:146:LEU:HD22	2:L:146:LEU:H	1.63	0.63
2:L:302:MET:HE1	2:L:333:GLU:HG3	1.78	0.63
1:A:746:ILE:HG23	1:A:1182:ASP:CB	2.29	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:902:ASN:CG	1:C:1227:GLU:CD	2.57	0.62
1:A:1007:GLY:O	1:A:1010:ALA:HB3	1.99	0.62
1:A:1164:ARG:NH1	1:A:1166:ASP:OD2	2.31	0.62
1:A:1282:GLN:HA	1:A:1302:GLY:O	1.98	0.62
1:A:1300:LEU:HD12	1:A:1301:SER:H	1.64	0.62
1:A:1376:LEU:HB3	1:A:1439:PHE:CE1	2.32	0.62
1:B:453:ALA:O	1:B:761:GLN:HG3	1.97	0.62
1:B:482:ASP:OD1	1:B:788:HIS:HD2	1.81	0.62
1:B:1442:GLU:OE2	2:H:374:ALA:C	2.37	0.62
1:C:94:GLU:O	1:C:95:THR:C	2.35	0.62
1:C:746:ILE:C	1:C:747:SER:O	2.35	0.62
1:C:1300:LEU:HD12	1:C:1301:SER:H	1.64	0.62
1:D:52:GLN:HE22	1:D:71:LEU:N	1.96	0.62
1:D:351:ARG:HA	1:D:351:ARG:HE	1.64	0.62
1:D:1105:VAL:HA	2:H:54:PHE:CE1	2.34	0.62
1:D:1466:LEU:O	1:D:1467:GLU:C	2.37	0.62
1:E:450:ARG:O	1:E:451:GLN:C	2.37	0.62
1:E:695:ASN:O	1:E:696:TYR:C	2.37	0.62
1:E:978:GLU:O	1:E:981:ALA:HB3	1.99	0.62
1:F:439:PRO:HG2	1:F:439:PRO:O	1.99	0.62
1:F:538:THR:HG23	1:F:538:THR:O	1.97	0.62
1:F:569:ILE:HD13	1:F:569:ILE:N	2.12	0.62
1:F:1442:GLU:OE2	2:G:374:ALA:C	2.38	0.62
2:G:449:LEU:HB3	2:G:452:TRP:CE3	2.34	0.62
2:H:153:ILE:O	2:H:239:ALA:HB3	1.99	0.62
2:I:179:TYR:HB2	2:I:181:ARG:HH12	1.64	0.62
2:I:431:MET:HG2	2:I:438:PHE:CE2	2.34	0.62
2:J:153:ILE:O	2:J:239:ALA:HB3	1.99	0.62
2:J:350:PRO:CD	2:J:374:ALA:HB2	2.29	0.62
2:L:92:GLU:OE2	2:L:202:ARG:HD3	1.99	0.62
2:L:95:GLY:C	2:L:125:LYS:HD2	2.19	0.62
2:L:236:VAL:HG23	2:L:437:VAL:HA	1.80	0.62
2:L:317:LYS:HE3	2:L:345:ILE:HG21	1.81	0.62
2:L:354:THR:HA	2:L:369:LEU:HG	1.80	0.62
1:A:1227:GLU:CG	1:E:902:ASN:ND2	2.62	0.62
1:C:403:ASP:OD2	1:C:407:LYS:NZ	2.32	0.62
1:C:446:GLU:O	1:C:447:LEU:C	2.36	0.62
1:C:465:LEU:HD12	1:C:465:LEU:O	1.98	0.62
1:C:643:ASN:HD22	1:C:665:THR:HB	1.64	0.62
1:D:235:ASN:HD21	1:D:328:ASP:HB3	1.64	0.62
1:D:254:PRO:HG2	1:D:255:ALA:N	2.10	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:143:GLN:C	1:E:143:GLN:HE21	2.01	0.62
1:E:1435:THR:HG23	1:E:1437:SER:H	1.63	0.62
2:G:186:LEU:HD11	2:G:200:VAL:CB	2.28	0.62
2:G:220:VAL:HG22	8:G:484:FAD:C6A	2.29	0.62
2:G:318:CYS:O	2:G:345:ILE:HD13	1.99	0.62
2:G:350:PRO:HG3	2:G:380:PRO:CG	2.28	0.62
2:H:92:GLU:OE2	2:H:202:ARG:HD3	1.99	0.62
2:I:350:PRO:CD	2:I:374:ALA:HB2	2.29	0.62
2:I:351:GLU:HB3	2:I:353:PHE:HB3	1.80	0.62
2:J:153:ILE:HD11	8:J:484:FAD:N1A	2.13	0.62
2:J:353:PHE:CE1	2:J:370:GLY:HA3	2.33	0.62
2:J:478:VAL:HG23	2:J:479:ALA:N	2.14	0.62
2:K:220:VAL:HG23	8:K:484:FAD:C6A	2.27	0.62
2:K:236:VAL:HG23	2:K:437:VAL:HA	1.80	0.62
2:K:321:ARG:HA	2:K:352:GLY:H	1.62	0.62
2:K:449:LEU:HB3	2:K:452:TRP:CE3	2.34	0.62
2:L:350:PRO:CD	2:L:374:ALA:HB2	2.30	0.62
1:A:731:SER:HA	1:A:747:SER:HB2	1.80	0.62
1:A:1374:VAL:O	1:A:1375:ILE:HG13	1.98	0.62
1:B:74:GLY:CA	1:B:172:LEU:HD13	2.30	0.62
1:B:218:THR:HG22	1:B:221:LEU:H	1.62	0.62
1:B:423:THR:OG1	1:B:540:THR:HG22	2.00	0.62
1:B:658:LEU:HD23	1:B:666:VAL:CG2	2.29	0.62
1:C:902:ASN:ND2	1:E:1227:GLU:CG	2.62	0.62
1:C:1221:PRO:CG	1:C:1229:MET:HE1	2.28	0.62
1:C:1289:MET:H	1:C:1289:MET:HE3	1.64	0.62
1:D:260:MET:O	1:D:263:LEU:N	2.31	0.62
1:D:1290:GLY:O	1:D:1291:ASP:HB3	1.99	0.62
1:E:227:MET:HE2	1:E:282:GLU:HG2	1.81	0.62
1:E:732:ARG:NH1	1:F:94:GLU:OE2	2.28	0.62
1:E:1395:TYR:CZ	1:E:1397:LEU:HD21	2.34	0.62
1:F:146:LEU:HD12	1:F:146:LEU:C	2.19	0.62
1:F:528:ASN:CB	1:F:542:LEU:HD22	2.29	0.62
1:F:1389:GLY:HA2	1:F:1459:PRO:HG2	1.81	0.62
2:G:63:ASN:HA	2:G:87:THR:HG21	1.82	0.62
2:H:92:GLU:OE2	2:H:202:ARG:HB3	2.00	0.62
2:H:197:LYS:HB3	2:H:273:LEU:HG	1.81	0.62
2:I:353:PHE:CE1	2:I:370:GLY:HA3	2.33	0.62
2:I:449:LEU:HB3	2:I:452:TRP:CE3	2.34	0.62
2:K:305:VAL:HG11	2:K:342:VAL:HG21	1.82	0.62
2:L:178:ARG:HB2	2:L:219:GLU:OE1	1.98	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:515:ARG:NH2	1:A:966:ILE:HB	2.13	0.62
1:A:643:ASN:HD22	1:A:665:THR:HB	1.63	0.62
1:A:782:ARG:CG	2:J:56:GLN:HE21	2.13	0.62
1:A:1417:VAL:HG12	1:A:1419:HIS:H	1.64	0.62
1:A:1435:THR:HG23	1:A:1437:SER:H	1.63	0.62
1:A:1449:ARG:NH1	1:A:1449:ARG:CB	2.14	0.62
1:C:695:ASN:O	1:C:696:TYR:C	2.37	0.62
1:C:1376:LEU:HB3	1:C:1439:PHE:CE1	2.32	0.62
1:D:266:VAL:O	1:D:279:THR:HG23	1.98	0.62
1:D:528:ASN:CB	1:D:542:LEU:HD22	2.29	0.62
1:D:643:ASN:HB3	1:D:665:THR:CG2	2.29	0.62
1:D:885:GLY:C	1:D:887:GLY:H	2.01	0.62
1:D:1131:THR:CG2	1:D:1133:GLU:HB2	2.29	0.62
1:D:1135:VAL:O	1:D:1136:VAL:C	2.33	0.62
1:E:643:ASN:HD22	1:E:665:THR:HG21	1.65	0.62
1:E:1221:PRO:HG2	1:E:1229:MET:HE1	1.81	0.62
1:F:37:ASP:OD1	1:F:37:ASP:C	2.37	0.62
1:F:152:ARG:O	1:F:156:GLU:HB2	1.99	0.62
1:F:227:MET:HE2	1:F:282:GLU:HG2	1.82	0.62
1:F:339:ARG:HG3	1:F:396:GLN:HG3	1.80	0.62
1:F:658:LEU:HD23	1:F:666:VAL:CG2	2.29	0.62
1:F:1290:GLY:O	1:F:1291:ASP:HB3	1.99	0.62
2:H:478:VAL:HG23	2:H:479:ALA:N	2.14	0.62
2:J:309:ILE:HD11	2:J:340:GLU:OE2	1.98	0.62
2:K:92:GLU:OE2	2:K:202:ARG:HB3	2.00	0.62
2:K:186:LEU:HD11	2:K:200:VAL:CB	2.28	0.62
2:L:71:LEU:C	2:L:71:LEU:HD13	2.20	0.62
1:A:891:PRO:HB3	1:A:894:PHE:CE2	2.34	0.62
1:B:1105:VAL:HA	2:G:54:PHE:CE1	2.34	0.62
1:B:1159:ASN:O	1:B:1161:VAL:N	2.32	0.62
1:B:1228:LYS:HD3	1:D:901:ASP:OD1	2.00	0.62
1:C:293:MET:HG2	1:C:410:LEU:HD23	1.82	0.62
1:C:731:SER:HA	1:C:747:SER:HB2	1.80	0.62
1:C:908:LYS:HE2	1:C:924:GLN:O	2.00	0.62
1:C:1109:HIS:ND1	1:C:1109:HIS:N	2.45	0.62
1:D:423:THR:OG1	1:D:540:THR:HG22	2.00	0.62
1:D:510:PRO:HD2	1:D:970:PRO:HB3	1.81	0.62
1:D:602:THR:O	1:D:640:THR:HG22	1.99	0.62
1:D:938:PRO:O	1:D:939:GLY:C	2.35	0.62
1:E:453:ALA:O	1:E:761:GLN:HG3	1.98	0.62
1:E:782:ARG:CB	2:L:53:PRO:HD2	2.19	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1171:VAL:HG12	1:E:1171:VAL:O	2.00	0.62
1:F:296:MET:O	1:F:297:MET:C	2.33	0.62
1:F:1105:VAL:HA	2:I:54:PHE:HE1	1.64	0.62
2:G:71:LEU:HD13	2:G:71:LEU:C	2.20	0.62
2:G:134:GLN:HB3	2:G:136:TRP:CD1	2.35	0.62
2:G:350:PRO:CD	2:G:374:ALA:HB2	2.29	0.62
2:H:90:PHE:HA	2:H:203:ARG:HH21	1.64	0.62
2:I:345:ILE:H	2:I:345:ILE:CD1	2.09	0.62
2:J:77:LEU:O	2:J:127:ILE:HD11	1.98	0.62
2:K:264:TYR:HE2	2:K:307:THR:HG23	1.61	0.62
2:K:431:MET:HG2	2:K:438:PHE:CE2	2.34	0.62
1:A:47:HIS:HE1	1:A:176:SER:HB3	1.63	0.62
1:A:394:ASP:OD1	1:A:394:ASP:C	2.37	0.62
1:A:884:SER:OG	1:A:885:GLY:N	2.33	0.62
1:B:146:LEU:HD12	1:B:146:LEU:C	2.19	0.62
1:B:171:SER:OG	1:B:177:ILE:HA	2.00	0.62
1:B:351:ARG:HA	1:B:351:ARG:HE	1.64	0.62
1:B:515:ARG:NE	1:B:1367:TYR:CE1	2.68	0.62
1:B:782:ARG:NH2	2:G:51:GLY:HA2	0.72	0.62
1:B:900:GLY:HA2	1:F:1263:HIS:NE2	2.10	0.62
1:B:1389:GLY:HA2	1:B:1459:PRO:HG2	1.81	0.62
1:C:312:ASN:OD1	1:C:312:ASN:N	2.22	0.62
1:C:512:ASP:OD2	1:C:1367:TYR:OH	2.12	0.62
1:C:978:GLU:O	1:C:981:ALA:HB3	1.99	0.62
1:C:1104:MET:C	2:K:54:PHE:CZ	2.67	0.62
1:C:1395:TYR:CZ	1:C:1397:LEU:HD21	2.34	0.62
1:C:1438:ARG:HB3	2:J:375:THR:HA	1.80	0.62
1:D:518:ARG:NH2	1:D:1382:ASN:HD22	1.98	0.62
1:D:569:ILE:HD13	1:D:569:ILE:N	2.12	0.62
1:D:1230:GLN:N	1:F:877:ARG:CG	2.61	0.62
1:E:57:ASP:O	1:E:60:LYS:N	2.32	0.62
1:E:1220:ARG:HB3	1:E:1221:PRO:HD3	1.81	0.62
1:F:74:GLY:CA	1:F:172:LEU:HD13	2.30	0.62
1:F:295:LYS:HZ3	1:F:299:VAL:HG12	1.64	0.62
2:G:99:PRO:HD2	2:G:449:LEU:HD13	1.82	0.62
2:G:317:LYS:HE3	2:G:345:ILE:HG21	1.81	0.62
2:H:63:ASN:HA	2:H:87:THR:HG21	1.82	0.62
2:H:71:LEU:HD22	2:H:71:LEU:C	2.20	0.62
2:H:71:LEU:C	2:H:71:LEU:HD13	2.20	0.62
2:H:350:PRO:CD	2:H:374:ALA:HB2	2.30	0.62
2:H:418:THR:CA	2:H:424:LEU:HD21	2.28	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:69:LEU:O	2:I:72:THR:HG23	2.00	0.62
2:I:317:LYS:HE3	2:I:345:ILE:HG21	1.81	0.62
2:J:120:ILE:O	2:J:123:VAL:HG23	1.98	0.62
2:J:241:GLY:H	2:J:443:ILE:HG23	1.64	0.62
2:J:449:LEU:HB3	2:J:452:TRP:CE3	2.34	0.62
2:L:134:GLN:HB3	2:L:136:TRP:CD1	2.35	0.62
1:A:57:ASP:O	1:A:60:LYS:N	2.32	0.62
1:A:603:HIS:HA	1:A:640:THR:HG22	1.81	0.62
1:A:1221:PRO:HD2	1:A:1229:MET:HE1	1.79	0.62
1:A:1227:GLU:CD	1:E:902:ASN:CG	2.57	0.62
1:B:339:ARG:HG3	1:B:396:GLN:HG3	1.80	0.62
1:B:355:TYR:CD1	1:B:355:TYR:C	2.72	0.62
1:B:1105:VAL:HG23	2:G:54:PHE:HE1	1.64	0.62
1:C:491:LYS:O	1:C:492:TYR:C	2.35	0.62
1:C:520:MET:HE1	1:C:705:LEU:HB3	1.82	0.62
1:D:464:ILE:CD1	1:D:779:TYR:CZ	2.81	0.62
1:D:658:LEU:HD23	1:D:666:VAL:CG2	2.29	0.62
1:D:1112:THR:O	1:D:1114:PRO:HD3	1.99	0.62
1:E:24:ALA:CB	1:E:207:TYR:CE2	2.82	0.62
1:E:908:LYS:HE2	1:E:924:GLN:O	1.99	0.62
1:E:1222:LEU:C	1:E:1222:LEU:HD12	2.16	0.62
1:F:235:ASN:HD21	1:F:328:ASP:HB3	1.64	0.62
1:F:236:THR:HG22	1:F:328:ASP:H	1.62	0.62
1:F:260:MET:O	1:F:263:LEU:N	2.31	0.62
1:F:295:LYS:CD	1:F:390:MET:HE3	2.22	0.62
1:F:482:ASP:OD1	1:F:788:HIS:CD2	2.53	0.62
1:F:704:LEU:C	1:F:706:LYS:N	2.49	0.62
2:H:69:LEU:O	2:H:72:THR:HG23	2.00	0.62
2:H:186:LEU:HD11	2:H:200:VAL:CB	2.28	0.62
2:H:197:LYS:HD3	2:H:274:GLY:N	2.15	0.62
2:H:220:VAL:HG23	8:H:484:FAD:C6A	2.27	0.62
2:I:281:GLU:HG3	2:I:284:SER:N	2.11	0.62
2:I:305:VAL:HG11	2:I:342:VAL:HG21	1.82	0.62
2:I:321:ARG:HA	2:I:352:GLY:H	1.62	0.62
2:I:354:THR:HA	2:I:369:LEU:HG	1.80	0.62
2:J:63:ASN:HA	2:J:87:THR:HG21	1.82	0.62
2:K:197:LYS:HD3	2:K:274:GLY:N	2.15	0.62
2:L:197:LYS:HD3	2:L:274:GLY:N	2.15	0.62
2:L:259:VAL:HG21	2:L:264:TYR:CB	2.14	0.62
2:L:351:GLU:HB3	2:L:353:PHE:HB3	1.80	0.62
2:L:434:MET:HB2	2:L:437:VAL:HG12	1.82	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:209:GLN:HG3	1:A:210:ARG:N	2.13	0.62
1:A:1356:VAL:HG22	1:A:1374:VAL:CG2	2.30	0.62
1:B:780:ARG:NH1	2:G:50:CYS:CB	2.54	0.62
1:B:918:THR:HG22	1:B:921:TYR:N	2.13	0.62
1:B:976:SER:OG	1:B:978:GLU:HG3	2.00	0.62
1:B:1218:ASP:OD1	1:D:851:LYS:NZ	2.33	0.62
1:B:1290:GLY:O	1:B:1291:ASP:HB3	1.99	0.62
1:C:182:MET:HE3	1:C:217:PRO:HB3	1.67	0.62
1:C:426:LEU:HD11	1:C:558:MET:HG3	1.79	0.62
1:C:643:ASN:HD22	1:C:665:THR:HG21	1.65	0.62
1:D:394:ASP:OD1	1:D:394:ASP:C	2.38	0.62
1:D:479:MET:HG3	1:D:1104:MET:CE	2.30	0.62
1:E:493:ARG:NH2	1:E:786:ASP:OD1	2.32	0.62
1:E:884:SER:OG	1:E:885:GLY:N	2.33	0.62
1:F:602:THR:O	1:F:640:THR:HG22	1.99	0.62
2:G:430:LYS:HD2	2:G:460:ALA:HB2	1.82	0.62
2:I:197:LYS:HB3	2:I:273:LEU:HG	1.81	0.62
2:I:258:ILE:HA	2:I:395:VAL:HG23	1.82	0.62
2:I:478:VAL:HG23	2:I:479:ALA:N	2.14	0.62
2:K:69:LEU:O	2:K:72:THR:HG23	2.00	0.62
2:K:90:PHE:HA	2:K:203:ARG:HH21	1.64	0.62
2:K:179:TYR:HB2	2:K:181:ARG:HH12	1.64	0.62
2:K:353:PHE:CE1	2:K:370:GLY:HA3	2.33	0.62
2:L:317:LYS:CE	2:L:345:ILE:HD12	2.30	0.62
1:A:293:MET:HG2	1:A:410:LEU:HD23	1.82	0.62
1:A:295:LYS:C	1:A:295:LYS:HD3	2.19	0.62
1:A:515:ARG:HD3	1:A:1367:TYR:CE1	2.31	0.62
1:B:602:THR:O	1:B:640:THR:HG22	1.99	0.62
1:B:657:VAL:HG12	1:B:658:LEU:N	2.15	0.62
1:B:877:ARG:HD3	1:F:1230:GLN:HB2	1.82	0.62
1:C:1171:VAL:O	1:C:1171:VAL:HG12	2.00	0.62
1:C:1417:VAL:HG12	1:C:1419:HIS:H	1.64	0.62
1:D:442:MET:HE3	1:D:446:GLU:HB3	1.82	0.62
1:D:482:ASP:OD1	1:D:788:HIS:CD2	2.53	0.62
1:D:1210:THR:HG22	1:D:1211:LEU:N	2.09	0.62
1:D:1227:GLU:OE1	1:F:876:ASN:HB2	2.00	0.62
1:D:1228:LYS:HD3	1:F:901:ASP:OD1	2.00	0.62
1:F:479:MET:HG3	1:F:1104:MET:CE	2.30	0.62
1:F:1109:HIS:ND1	1:F:1109:HIS:N	2.44	0.62
2:H:241:GLY:H	2:H:443:ILE:HG23	1.64	0.62
2:I:71:LEU:C	2:I:71:LEU:HD13	2.20	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:99:PRO:HD2	2:I:449:LEU:HD13	1.82	0.62
2:K:120:ILE:O	2:K:123:VAL:HG23	1.98	0.62
2:K:241:GLY:H	2:K:443:ILE:HG23	1.64	0.62
2:K:350:PRO:CD	2:K:374:ALA:HB2	2.29	0.62
2:L:99:PRO:HD2	2:L:449:LEU:HD13	1.82	0.62
2:L:153:ILE:O	2:L:239:ALA:HB3	1.99	0.62
2:L:286:ASN:O	2:L:311:GLN:HB2	2.00	0.62
2:L:394:LEU:CD2	2:L:396:ILE:HD12	2.30	0.62
2:L:449:LEU:HB3	2:L:452:TRP:CE3	2.34	0.62
1:A:1171:VAL:HG12	1:A:1171:VAL:O	2.00	0.62
1:A:1438:ARG:HB3	2:L:375:THR:HA	1.80	0.62
1:B:901:ASP:OD1	1:F:1228:LYS:HD3	2.00	0.62
1:C:57:ASP:O	1:C:60:LYS:N	2.32	0.62
1:C:80:ARG:HD3	1:C:125:ARG:O	1.98	0.62
1:D:1105:VAL:HA	2:H:54:PHE:HE1	1.64	0.62
1:D:1442:GLU:OE2	2:I:374:ALA:C	2.37	0.62
1:E:403:ASP:OD2	1:E:407:LYS:NZ	2.32	0.62
1:F:227:MET:HE2	1:F:282:GLU:CG	2.29	0.62
1:F:518:ARG:NH2	1:F:1382:ASN:HD22	1.98	0.62
1:F:521:SER:OG	1:F:522:LEU:N	2.33	0.62
1:F:1131:THR:CG2	1:F:1133:GLU:OE1	2.42	0.62
2:G:349:ALA:HB3	2:G:374:ALA:HB2	1.82	0.62
2:G:415:LEU:HG	2:G:432:THR:HG21	1.82	0.62
2:H:99:PRO:HD2	2:H:449:LEU:HD13	1.82	0.62
2:H:120:ILE:O	2:H:123:VAL:HG23	1.98	0.62
2:H:318:CYS:O	2:H:345:ILE:HD13	1.99	0.62
2:I:153:ILE:O	2:I:239:ALA:HB3	1.99	0.62
2:I:286:ASN:O	2:I:311:GLN:HB2	2.00	0.62
2:I:394:LEU:CD2	2:I:396:ILE:HD12	2.30	0.62
2:J:71:LEU:HD22	2:J:71:LEU:C	2.20	0.62
2:J:267:THR:HG21	2:J:286:ASN:HD21	1.61	0.62
2:J:318:CYS:O	2:J:345:ILE:HD13	1.99	0.62
2:J:418:THR:CA	2:J:424:LEU:HD21	2.28	0.62
2:K:349:ALA:HB3	2:K:374:ALA:HB2	1.82	0.62
1:A:291:ALA:HB3	1:A:292:PRO:CD	2.27	0.61
1:A:295:LYS:HZ1	1:A:299:VAL:HG12	1.65	0.61
1:A:782:ARG:NE	2:J:53:PRO:CD	2.59	0.61
1:A:1375:ILE:C	1:A:1376:LEU:HD23	2.19	0.61
1:B:235:ASN:HD21	1:B:328:ASP:HB3	1.64	0.61
1:B:439:PRO:HG2	1:B:439:PRO:O	1.99	0.61
1:B:876:ASN:HB2	1:F:1227:GLU:OE1	2.00	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:957:ARG:HH11	1:B:965:LEU:HD12	1.65	0.61
1:C:970:PRO:O	1:C:970:PRO:HG2	2.00	0.61
1:C:1401:LEU:HD11	1:C:1405:ILE:HD12	1.82	0.61
1:D:171:SER:OG	1:D:177:ILE:HA	2.00	0.61
1:D:794:VAL:HG21	1:D:817:VAL:HG23	1.82	0.61
1:E:938:PRO:HG2	1:E:1041:ALA:HB1	1.81	0.61
1:F:355:TYR:C	1:F:355:TYR:CD1	2.72	0.61
1:F:510:PRO:HD2	1:F:970:PRO:HB3	1.81	0.61
1:F:657:VAL:HG12	1:F:658:LEU:N	2.15	0.61
2:G:92:GLU:OE2	2:G:202:ARG:HB3	2.00	0.61
2:G:95:GLY:C	2:G:125:LYS:HD2	2.19	0.61
2:H:134:GLN:HB3	2:H:136:TRP:CD1	2.35	0.61
2:H:179:TYR:HB2	2:H:181:ARG:HH12	1.64	0.61
2:H:305:VAL:HG11	2:H:342:VAL:HG21	1.82	0.61
2:H:317:LYS:CE	2:H:345:ILE:HD12	2.30	0.61
2:J:92:GLU:OE2	2:J:202:ARG:HB3	2.00	0.61
2:J:99:PRO:HD2	2:J:449:LEU:HD13	1.82	0.61
2:J:134:GLN:HB3	2:J:136:TRP:CD1	2.35	0.61
2:J:220:VAL:HG23	8:J:484:FAD:C6A	2.27	0.61
2:J:258:ILE:HA	2:J:395:VAL:HG23	1.82	0.61
2:K:71:LEU:C	2:K:71:LEU:HD13	2.20	0.61
2:L:69:LEU:O	2:L:72:THR:HG23	2.00	0.61
2:L:258:ILE:HA	2:L:395:VAL:HG23	1.82	0.61
1:A:24:ALA:CB	1:A:207:TYR:CE2	2.82	0.61
1:A:1227:GLU:CD	1:E:876:ASN:HB3	2.21	0.61
1:B:417:ASP:O	1:B:420:VAL:N	2.33	0.61
1:B:794:VAL:HG21	1:B:817:VAL:HG23	1.82	0.61
1:B:1227:GLU:OE1	1:D:876:ASN:HB2	2.00	0.61
1:C:423:THR:OG1	1:C:540:THR:HG22	2.00	0.61
1:D:1447:TRP:O	1:D:1451:VAL:HG23	1.98	0.61
1:E:235:ASN:C	1:E:235:ASN:ND2	2.52	0.61
1:E:443:ASP:O	1:E:444:LYS:C	2.39	0.61
1:E:531:ASN:O	1:E:532:ILE:C	2.38	0.61
1:E:782:ARG:CG	2:L:56:GLN:HE21	2.13	0.61
1:E:1062:ARG:O	1:E:1062:ARG:CG	2.43	0.61
1:F:243:TRP:HA	1:F:243:TRP:CE3	2.35	0.61
1:F:1105:VAL:HA	2:I:54:PHE:CE1	2.34	0.61
1:F:1121:ASP:OD1	1:F:1123:LYS:N	2.34	0.61
2:G:236:VAL:HG23	2:G:437:VAL:HA	1.80	0.61
2:G:434:MET:HB2	2:G:437:VAL:HG12	1.82	0.61
2:H:258:ILE:HA	2:H:395:VAL:HG23	1.82	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:415:LEU:HG	2:I:432:THR:HG21	1.82	0.61
2:J:71:LEU:C	2:J:71:LEU:HD13	2.20	0.61
2:J:197:LYS:HB3	2:J:273:LEU:HG	1.81	0.61
2:J:317:LYS:HE3	2:J:345:ILE:HG21	1.81	0.61
2:K:99:PRO:HD2	2:K:449:LEU:HD13	1.82	0.61
2:K:415:LEU:HG	2:K:432:THR:HG21	1.82	0.61
2:L:349:ALA:HB3	2:L:374:ALA:HB2	1.82	0.61
1:A:938:PRO:HG2	1:A:1041:ALA:HB1	1.81	0.61
1:A:1109:HIS:ND1	1:A:1109:HIS:N	2.45	0.61
1:A:1447:TRP:CD2	1:A:1451:VAL:HG22	2.33	0.61
1:B:353:MET:HG2	1:B:385:LEU:CD2	2.29	0.61
1:B:442:MET:HE3	1:B:446:GLU:HB3	1.81	0.61
1:B:1112:THR:O	1:B:1114:PRO:HD3	1.99	0.61
1:B:1221:PRO:HD2	1:B:1229:MET:CE	2.26	0.61
1:C:320:CYS:O	1:C:323:VAL:N	2.33	0.61
1:C:782:ARG:CG	2:K:56:GLN:HE21	2.13	0.61
1:C:1393:TYR:O	1:C:1394:VAL:CG2	2.44	0.61
1:D:976:SER:OG	1:D:978:GLU:HG3	2.00	0.61
1:D:1383:PHE:O	1:D:1384:ALA:HB3	2.00	0.61
1:F:279:THR:HG22	1:F:280:VAL:N	2.16	0.61
1:F:394:ASP:C	1:F:394:ASP:OD1	2.38	0.61
1:F:423:THR:OG1	1:F:540:THR:HG22	2.00	0.61
2:G:153:ILE:HG12	2:G:220:VAL:CG1	2.30	0.61
2:G:417:VAL:C	2:G:424:LEU:HD22	2.21	0.61
2:H:49:GLN:HE22	2:H:69:LEU:HG	1.65	0.61
2:H:327:MET:HB2	2:H:346:TRP:HZ2	1.65	0.61
2:H:349:ALA:HB3	2:H:374:ALA:HB2	1.82	0.61
2:I:63:ASN:HA	2:I:87:THR:HG21	1.82	0.61
2:I:181:ARG:HD3	2:I:187:VAL:HB	1.83	0.61
2:I:349:ALA:HB3	2:I:374:ALA:HB2	1.82	0.61
2:J:49:GLN:HE22	2:J:69:LEU:HG	1.65	0.61
2:J:286:ASN:O	2:J:311:GLN:HB2	2.00	0.61
2:J:305:VAL:HG11	2:J:342:VAL:HG21	1.82	0.61
2:J:394:LEU:CD2	2:J:396:ILE:HD12	2.30	0.61
2:J:417:VAL:C	2:J:424:LEU:HD22	2.21	0.61
2:K:63:ASN:HA	2:K:87:THR:HG21	1.82	0.61
2:K:71:LEU:HD22	2:K:71:LEU:C	2.20	0.61
2:K:317:LYS:HE3	2:K:345:ILE:HG21	1.81	0.61
2:K:478:VAL:HG23	2:K:479:ALA:N	2.14	0.61
1:A:423:THR:OG1	1:A:540:THR:HG22	2.00	0.61
1:B:59:VAL:HG22	1:B:105:TYR:CD2	2.33	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:521:SER:OG	1:B:522:LEU:N	2.33	0.61
1:C:450:ARG:O	1:C:451:GLN:C	2.37	0.61
1:C:782:ARG:HG3	2:K:52:VAL:CB	2.18	0.61
1:C:876:ASN:HB3	1:E:1227:GLU:CD	2.21	0.61
1:C:1356:VAL:HG22	1:C:1374:VAL:CG2	2.30	0.61
1:C:1395:TYR:CE2	1:C:1443:ILE:HD13	2.36	0.61
1:D:74:GLY:CA	1:D:172:LEU:HD13	2.30	0.61
1:D:119:GLU:O	1:D:120:LYS:C	2.39	0.61
1:D:296:MET:O	1:D:297:MET:C	2.33	0.61
1:D:515:ARG:NE	1:D:1367:TYR:CE1	2.68	0.61
1:D:1121:ASP:OD1	1:D:1123:LYS:N	2.33	0.61
1:D:1218:ASP:OD1	1:F:851:LYS:NZ	2.33	0.61
1:D:1401:LEU:N	1:D:1402:PRO:HD2	2.15	0.61
1:E:47:HIS:HE1	1:E:176:SER:HB3	1.63	0.61
1:E:423:THR:OG1	1:E:540:THR:HG22	2.00	0.61
1:E:446:GLU:O	1:E:447:LEU:C	2.36	0.61
1:E:511:ILE:CG2	1:E:512:ASP:N	2.59	0.61
1:E:693:MET:O	1:E:694:ALA:C	2.37	0.61
1:E:1300:LEU:HD12	1:E:1301:SER:H	1.64	0.61
1:F:885:GLY:C	1:F:887:GLY:H	2.01	0.61
1:F:957:ARG:HH11	1:F:965:LEU:HD12	1.65	0.61
1:F:1383:PHE:O	1:F:1384:ALA:HB3	2.00	0.61
2:G:132:TRP:HD1	2:G:202:ARG:HB2	1.60	0.61
2:G:165:GLU:HB3	2:G:169:LYS:HZ3	1.65	0.61
2:I:92:GLU:OE2	2:I:202:ARG:HB3	2.00	0.61
2:I:96:ARG:HH21	2:I:199:VAL:HG21	1.66	0.61
2:J:69:LEU:O	2:J:72:THR:HG23	2.00	0.61
2:J:181:ARG:HD3	2:J:187:VAL:HB	1.83	0.61
2:K:242:VAL:CG1	2:K:403:PRO:HD3	2.21	0.61
2:K:271:VAL:CG2	2:K:285:LEU:HG	2.31	0.61
2:K:383:ILE:HD12	2:K:386:SER:N	2.16	0.61
2:L:153:ILE:HG12	2:L:220:VAL:CG1	2.31	0.61
1:A:643:ASN:HD22	1:A:665:THR:HG21	1.65	0.61
1:A:1395:TYR:CE2	1:A:1443:ILE:HD13	2.36	0.61
1:A:1450:GLU:OE1	1:A:1453:LYS:NZ	2.24	0.61
1:B:450:ARG:O	1:B:452:GLN:N	2.34	0.61
1:B:482:ASP:OD1	1:B:788:HIS:CD2	2.53	0.61
1:C:45:GLY:HA2	1:C:180:LYS:HA	1.81	0.61
1:C:143:GLN:HE21	1:C:143:GLN:CA	2.14	0.61
1:C:629:THR:O	1:C:630:HIS:C	2.37	0.61
1:C:672:GLN:HG3	1:C:693:MET:HE1	1.79	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:780:ARG:CG	2:K:51:GLY:O	2.48	0.61
1:C:884:SER:OG	1:C:885:GLY:N	2.33	0.61
1:C:1442:GLU:HG3	2:J:374:ALA:O	2.01	0.61
1:D:146:LEU:HD12	1:D:146:LEU:C	2.19	0.61
1:D:572:THR:HG22	1:D:573:PHE:N	2.16	0.61
1:D:806:SER:OG	1:D:809:THR:N	2.31	0.61
1:D:957:ARG:HH11	1:D:965:LEU:HD12	1.65	0.61
1:E:1356:VAL:HG22	1:E:1374:VAL:CG2	2.30	0.61
1:E:1391:MET:HE1	1:E:1458:VAL:CG2	2.30	0.61
1:E:1424:LEU:HD23	1:E:1428:ILE:HG13	1.83	0.61
1:F:806:SER:OG	1:F:809:THR:N	2.31	0.61
1:F:908:LYS:HD2	1:F:921:TYR:CE1	2.36	0.61
2:G:271:VAL:HG13	2:G:281:GLU:HG2	1.83	0.61
2:H:383:ILE:HD12	2:H:386:SER:N	2.16	0.61
2:I:207:LEU:CD1	2:I:212:VAL:HG11	2.31	0.61
2:J:271:VAL:HG13	2:J:281:GLU:HG2	1.83	0.61
2:J:349:ALA:HB3	2:J:374:ALA:HB2	1.82	0.61
2:K:153:ILE:HG12	2:K:220:VAL:CG1	2.30	0.61
2:K:207:LEU:CD1	2:K:212:VAL:HG11	2.31	0.61
2:L:96:ARG:HH21	2:L:199:VAL:HG21	1.66	0.61
2:L:175:VAL:CG1	2:L:214:TYR:HA	2.23	0.61
2:L:271:VAL:HG13	2:L:281:GLU:HG2	1.83	0.61
1:A:45:GLY:HA2	1:A:180:LYS:HA	1.81	0.61
1:A:531:ASN:O	1:A:532:ILE:C	2.38	0.61
1:B:479:MET:HG3	1:B:1104:MET:CE	2.30	0.61
1:B:851:LYS:NZ	1:F:1218:ASP:OD1	2.33	0.61
1:B:1121:ASP:OD1	1:B:1123:LYS:N	2.33	0.61
1:C:351:ARG:HA	1:C:351:ARG:HE	1.66	0.61
1:E:603:HIS:HA	1:E:640:THR:HG22	1.81	0.61
1:F:1084:MET:SD	1:F:1168:LEU:HD23	2.41	0.61
2:G:69:LEU:O	2:G:72:THR:HG23	2.00	0.61
2:G:96:ARG:HH21	2:G:199:VAL:HG21	1.66	0.61
2:I:241:GLY:H	2:I:443:ILE:HG23	1.64	0.61
2:I:349:ALA:CB	2:I:350:PRO:HD3	2.31	0.61
2:I:434:MET:HB2	2:I:437:VAL:HG12	1.82	0.61
2:J:197:LYS:HD3	2:J:274:GLY:N	2.15	0.61
2:K:134:GLN:HB3	2:K:136:TRP:CD1	2.35	0.61
1:A:102:TYR:HE2	1:A:144:PHE:CE1	2.12	0.61
1:A:107:TRP:N	1:A:107:TRP:CD1	2.69	0.61
1:A:450:ARG:O	1:A:451:GLN:C	2.37	0.61
1:A:511:ILE:HG22	1:A:512:ASP:H	1.61	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1114:PRO:HG3	2:J:109:VAL:O	2.01	0.61
1:B:102:TYR:CE1	1:B:144:PHE:CE1	2.89	0.61
1:B:447:LEU:HD21	1:B:674:ALA:CA	2.29	0.61
1:B:653:HIS:O	1:B:654:TYR:C	2.39	0.61
1:B:1230:GLN:HB2	1:D:877:ARG:HD3	1.82	0.61
1:E:293:MET:HG2	1:E:410:LEU:HD23	1.82	0.61
1:E:320:CYS:O	1:E:323:VAL:N	2.33	0.61
1:E:1376:LEU:HB3	1:E:1439:PHE:CE1	2.32	0.61
1:F:351:ARG:HA	1:F:351:ARG:HE	1.64	0.61
1:F:794:VAL:HG21	1:F:817:VAL:HG23	1.82	0.61
2:G:394:LEU:CD2	2:G:396:ILE:HD12	2.30	0.61
2:G:478:VAL:HG23	2:G:479:ALA:N	2.14	0.61
2:H:207:LEU:CD1	2:H:212:VAL:HG11	2.31	0.61
2:I:447:ALA:HB1	2:I:452:TRP:HE3	1.65	0.61
2:K:286:ASN:O	2:K:311:GLN:HB2	2.00	0.61
2:K:317:LYS:CE	2:K:345:ILE:HD12	2.30	0.61
2:K:383:ILE:CD1	2:K:386:SER:H	2.12	0.61
2:L:90:PHE:HA	2:L:203:ARG:HH21	1.64	0.61
2:L:92:GLU:OE2	2:L:202:ARG:HB3	2.00	0.61
2:L:220:VAL:HG22	8:L:484:FAD:C6A	2.29	0.61
2:L:430:LYS:HD2	2:L:460:ALA:HB2	1.82	0.61
2:L:478:VAL:HG23	2:L:479:ALA:N	2.14	0.61
1:A:466:HIS:ND1	1:A:678:ARG:NH1	2.46	0.61
1:A:525:ARG:C	1:A:526:LEU:HD12	2.20	0.61
1:A:565:THR:CG2	1:A:602:THR:HB	2.31	0.61
1:A:782:ARG:CB	2:J:56:GLN:NE2	2.38	0.61
1:A:876:ASN:HB3	1:C:1227:GLU:CD	2.21	0.61
1:A:970:PRO:HG2	1:A:970:PRO:O	2.00	0.61
1:A:1424:LEU:HD23	1:A:1428:ILE:HG13	1.83	0.61
1:B:249:THR:O	1:B:249:THR:HG23	1.98	0.61
1:C:107:TRP:N	1:C:107:TRP:CD1	2.69	0.61
1:C:312:ASN:HB2	1:C:411:ALA:HB1	1.83	0.61
1:C:572:THR:CG2	1:C:615:ARG:HB3	2.31	0.61
1:D:526:LEU:HD12	1:D:526:LEU:H	1.66	0.61
1:D:691:LYS:HG3	1:D:691:LYS:O	2.00	0.61
1:D:1114:PRO:HA	2:H:112:GLN:C	1.84	0.61
1:E:351:ARG:HA	1:E:351:ARG:HE	1.66	0.61
1:E:1076:GLY:CA	1:E:1145:GLU:HG2	2.29	0.61
1:F:447:LEU:HD12	1:F:447:LEU:C	2.21	0.61
1:F:782:ARG:N	2:I:52:VAL:CB	2.64	0.61
1:F:1159:ASN:O	1:F:1161:VAL:N	2.32	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:197:LYS:HD3	2:G:274:GLY:N	2.15	0.61
2:H:220:VAL:HG22	8:H:484:FAD:C6A	2.29	0.61
2:H:286:ASN:O	2:H:311:GLN:HB2	2.00	0.61
2:H:302:MET:HE3	2:H:334:VAL:HA	1.83	0.61
2:H:317:LYS:HE3	2:H:345:ILE:HG21	1.81	0.61
2:H:349:ALA:CB	2:H:350:PRO:HD3	2.31	0.61
2:H:383:ILE:CD1	2:H:386:SER:H	2.12	0.61
2:I:49:GLN:HE22	2:I:69:LEU:HG	1.65	0.61
2:I:71:LEU:HD22	2:I:71:LEU:C	2.20	0.61
2:I:134:GLN:HB3	2:I:136:TRP:CD1	2.35	0.61
2:I:417:VAL:C	2:I:424:LEU:HD22	2.21	0.61
2:J:317:LYS:CE	2:J:345:ILE:HD12	2.30	0.61
2:J:350:PRO:HG3	2:J:380:PRO:CB	2.31	0.61
2:K:174:HIS:HE1	2:K:215:HIS:CB	2.14	0.61
2:K:258:ILE:HA	2:K:395:VAL:HG23	1.82	0.61
2:L:71:LEU:HD22	2:L:71:LEU:C	2.20	0.61
2:L:345:ILE:H	2:L:345:ILE:CD1	2.09	0.61
2:L:349:ALA:CB	2:L:350:PRO:HD3	2.31	0.61
2:L:417:VAL:C	2:L:424:LEU:HD22	2.21	0.61
1:B:908:LYS:HD2	1:B:921:TYR:CE1	2.36	0.61
1:C:355:TYR:CD1	1:C:355:TYR:O	2.54	0.61
1:C:394:ASP:OD1	1:C:394:ASP:C	2.37	0.61
1:C:1311:THR:CG2	1:C:1312:SER:H	2.14	0.61
1:D:249:THR:HG23	1:D:249:THR:O	1.98	0.61
1:D:447:LEU:HD12	1:D:447:LEU:C	2.22	0.61
1:D:625:GLY:O	1:D:626:ALA:C	2.39	0.61
1:D:781:PHE:O	2:H:52:VAL:HB	1.92	0.61
1:E:780:ARG:NH1	2:L:50:CYS:CB	2.56	0.61
1:E:1348:VAL:O	1:E:1348:VAL:HG13	1.99	0.61
1:F:976:SER:OG	1:F:978:GLU:HG3	2.00	0.61
2:G:350:PRO:HG3	2:G:380:PRO:CB	2.31	0.61
2:H:153:ILE:HG12	2:H:220:VAL:CG1	2.31	0.61
2:H:174:HIS:HE1	2:H:215:HIS:CB	2.14	0.61
2:H:181:ARG:HD3	2:H:187:VAL:HB	1.83	0.61
2:H:271:VAL:HG13	2:H:281:GLU:HG2	1.83	0.61
2:H:350:PRO:HG3	2:H:380:PRO:CB	2.31	0.61
2:I:90:PHE:HA	2:I:203:ARG:HH21	1.64	0.61
2:I:153:ILE:HG12	2:I:220:VAL:CG1	2.30	0.61
2:I:415:LEU:HD22	2:I:416:LYS:O	2.01	0.61
2:J:174:HIS:HE1	2:J:215:HIS:CB	2.14	0.61
2:K:47:CYS:HB2	2:K:69:LEU:HD21	1.83	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:K:349:ALA:CB	2:K:350:PRO:HD3	2.31	0.61
2:L:181:ARG:HD3	2:L:187:VAL:HB	1.83	0.61
2:L:383:ILE:CD1	2:L:386:SER:H	2.12	0.61
2:L:416:LYS:HG3	2:L:433:ASN:HD22	1.66	0.61
2:L:447:ALA:HB1	2:L:452:TRP:HE3	1.65	0.61
1:A:320:CYS:O	1:A:323:VAL:N	2.33	0.61
1:A:446:GLU:O	1:A:447:LEU:C	2.36	0.61
1:A:908:LYS:HE2	1:A:924:GLN:O	2.00	0.61
1:A:1090:PHE:CD1	1:A:1090:PHE:N	2.69	0.61
1:B:499:PHE:HE1	1:B:742:MET:CE	2.14	0.61
1:B:1169:HIS:ND1	1:B:1169:HIS:N	2.49	0.61
1:B:1401:LEU:N	1:B:1402:PRO:HD2	2.16	0.61
1:C:443:ASP:O	1:C:444:LYS:C	2.39	0.61
1:C:499:PHE:HE2	1:C:742:MET:HE1	1.65	0.61
1:C:531:ASN:O	1:C:532:ILE:C	2.38	0.61
1:C:902:ASN:CA	1:E:1227:GLU:HG2	2.23	0.61
1:C:1221:PRO:HG2	1:C:1229:MET:HE1	1.81	0.61
1:D:780:ARG:NH1	2:H:50:CYS:CB	2.54	0.61
1:D:1230:GLN:HB2	1:F:877:ARG:HD3	1.82	0.61
1:E:704:LEU:C	1:E:706:LYS:N	2.54	0.61
1:F:102:TYR:CE1	1:F:144:PHE:CE1	2.89	0.61
1:F:572:THR:HG22	1:F:573:PHE:N	2.16	0.61
2:G:71:LEU:HD22	2:G:71:LEU:C	2.20	0.61
2:H:417:VAL:C	2:H:424:LEU:HD22	2.21	0.61
2:I:271:VAL:HG13	2:I:281:GLU:HG2	1.83	0.61
2:J:90:PHE:HA	2:J:203:ARG:HH21	1.64	0.61
2:J:336:HIS:O	2:J:340:GLU:HG2	2.01	0.61
2:J:415:LEU:HD22	2:J:416:LYS:O	2.01	0.61
2:L:63:ASN:HA	2:L:87:THR:HG21	1.82	0.61
2:L:321:ARG:HA	2:L:352:GLY:H	1.63	0.61
1:A:355:TYR:CD1	1:A:355:TYR:O	2.54	0.60
1:A:403:ASP:CG	1:A:407:LYS:NZ	2.54	0.60
1:A:782:ARG:HG3	2:J:52:VAL:CB	2.18	0.60
1:A:1348:VAL:O	1:A:1348:VAL:HG13	1.99	0.60
1:B:119:GLU:O	1:B:120:LYS:C	2.39	0.60
1:B:1009:ILE:O	1:B:1010:ALA:C	2.37	0.60
1:B:1230:GLN:N	1:D:877:ARG:CG	2.61	0.60
1:C:355:TYR:C	1:C:355:TYR:HD1	2.03	0.60
1:C:565:THR:CG2	1:C:602:THR:HB	2.31	0.60
1:D:243:TRP:CE3	1:D:243:TRP:HA	2.35	0.60
1:D:417:ASP:O	1:D:420:VAL:N	2.33	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:249:THR:CG2	1:E:250:ARG:HG2	2.31	0.60
1:E:295:LYS:HD3	1:E:295:LYS:O	2.00	0.60
1:E:732:ARG:H	1:E:747:SER:HB3	1.65	0.60
1:E:1375:ILE:C	1:E:1376:LEU:HD23	2.19	0.60
1:F:1131:THR:HG21	1:F:1133:GLU:HB2	1.83	0.60
1:F:1169:HIS:ND1	1:F:1169:HIS:N	2.49	0.60
2:G:258:ILE:HA	2:G:395:VAL:HG23	1.82	0.60
2:G:302:MET:HE3	2:G:334:VAL:HA	1.83	0.60
2:G:471:LYS:HA	2:G:471:LYS:CE	2.23	0.60
2:H:271:VAL:CG2	2:H:285:LEU:HG	2.31	0.60
2:I:165:GLU:HB3	2:I:169:LYS:HZ3	1.65	0.60
2:I:175:VAL:CG1	2:I:214:TYR:HA	2.23	0.60
2:I:197:LYS:HD3	2:I:274:GLY:N	2.15	0.60
2:J:153:ILE:HG12	2:J:220:VAL:CG1	2.30	0.60
2:J:220:VAL:HG22	8:J:484:FAD:C6A	2.29	0.60
2:J:383:ILE:HD12	2:J:386:SER:N	2.16	0.60
2:K:46:ARG:CZ	2:K:118:VAL:HA	2.32	0.60
2:K:96:ARG:HH21	2:K:199:VAL:HG21	1.66	0.60
2:K:336:HIS:O	2:K:340:GLU:HG2	2.01	0.60
2:L:305:VAL:HG11	2:L:342:VAL:HG21	1.82	0.60
1:A:364:ILE:CD1	1:A:374:ILE:HD11	2.30	0.60
1:A:746:ILE:C	1:A:747:SER:O	2.35	0.60
1:A:780:ARG:CG	2:J:51:GLY:O	2.48	0.60
1:A:842:GLU:HB3	1:A:1156:ARG:HD3	1.84	0.60
1:B:142:GLU:CD	1:B:142:GLU:H	2.05	0.60
1:B:312:ASN:HB2	1:B:411:ALA:HB1	1.83	0.60
1:B:394:ASP:OD1	1:B:394:ASP:C	2.38	0.60
1:B:989:GLN:O	1:B:1245:ARG:HD3	2.01	0.60
1:B:1210:THR:HG22	1:B:1211:LEU:N	2.09	0.60
1:B:1212:ASP:CG	1:B:1243:GLY:H	2.04	0.60
1:C:531:ASN:HB3	1:C:534:ASP:HB2	1.83	0.60
1:C:781:PHE:CE2	2:K:57:VAL:CG2	2.82	0.60
1:C:1391:MET:HE1	1:C:1458:VAL:CG2	2.31	0.60
1:D:142:GLU:CD	1:D:142:GLU:H	2.05	0.60
1:D:227:MET:HE2	1:D:282:GLU:HG2	1.83	0.60
1:D:227:MET:HE2	1:D:282:GLU:CG	2.31	0.60
1:D:908:LYS:HD2	1:D:921:TYR:CE1	2.36	0.60
1:E:259:HIS:O	1:E:260:MET:C	2.39	0.60
1:E:531:ASN:HB3	1:E:534:ASP:HB2	1.83	0.60
1:E:734:LEU:HD12	1:E:734:LEU:C	2.21	0.60
1:E:1311:THR:CG2	1:E:1312:SER:H	2.14	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1442:GLU:HG3	2:K:374:ALA:O	2.01	0.60
1:F:142:GLU:CD	1:F:142:GLU:H	2.05	0.60
1:F:171:SER:OG	1:F:177:ILE:HA	2.00	0.60
1:F:515:ARG:NE	1:F:1367:TYR:CE1	2.68	0.60
2:G:317:LYS:CE	2:G:345:ILE:HD12	2.30	0.60
2:G:383:ILE:HD12	2:G:386:SER:N	2.16	0.60
2:I:186:LEU:HD11	2:I:200:VAL:CB	2.28	0.60
2:J:439:ALA:HB1	2:J:443:ILE:CD1	2.32	0.60
2:K:271:VAL:HG13	2:K:281:GLU:HG2	1.83	0.60
2:K:350:PRO:HG3	2:K:380:PRO:CB	2.31	0.60
2:L:350:PRO:HG3	2:L:380:PRO:CB	2.31	0.60
1:A:295:LYS:HD3	1:A:295:LYS:O	2.00	0.60
1:A:547:SER:C	1:A:549:VAL:H	2.05	0.60
1:A:1227:GLU:OE2	1:E:902:ASN:CG	2.40	0.60
1:A:1311:THR:CG2	1:A:1312:SER:H	2.14	0.60
1:B:52:GLN:HE22	1:B:71:LEU:N	1.96	0.60
1:B:782:ARG:O	2:G:57:VAL:HG23	1.70	0.60
1:C:208:HIS:CD2	1:C:208:HIS:C	2.74	0.60
1:C:403:ASP:CG	1:C:407:LYS:NZ	2.54	0.60
1:D:450:ARG:O	1:D:452:GLN:N	2.34	0.60
1:D:782:ARG:N	2:H:52:VAL:CB	2.64	0.60
1:D:1084:MET:SD	1:D:1168:LEU:HD23	2.41	0.60
1:D:1212:ASP:CG	1:D:1243:GLY:H	2.04	0.60
1:E:295:LYS:HE2	1:E:299:VAL:CG1	2.31	0.60
1:E:603:HIS:CA	1:E:640:THR:HG22	2.32	0.60
1:E:970:PRO:HG2	1:E:970:PRO:O	2.00	0.60
1:E:1090:PHE:CD1	1:E:1090:PHE:N	2.69	0.60
1:E:1114:PRO:HG3	2:L:109:VAL:O	2.01	0.60
1:F:417:ASP:O	1:F:420:VAL:N	2.33	0.60
1:F:450:ARG:O	1:F:452:GLN:N	2.34	0.60
2:G:181:ARG:HD3	2:G:187:VAL:HB	1.83	0.60
2:G:197:LYS:HD3	2:G:274:GLY:H	1.67	0.60
2:G:383:ILE:CD1	2:G:386:SER:H	2.12	0.60
2:H:96:ARG:HH21	2:H:199:VAL:HG21	1.66	0.60
2:H:336:HIS:O	2:H:340:GLU:HG2	2.01	0.60
2:H:434:MET:HB2	2:H:437:VAL:HG12	1.82	0.60
2:I:46:ARG:CZ	2:I:118:VAL:HA	2.32	0.60
2:I:361:GLY:O	2:I:362:VAL:HB	2.01	0.60
2:K:181:ARG:HD3	2:K:187:VAL:HB	1.83	0.60
2:K:197:LYS:HD3	2:K:274:GLY:H	1.67	0.60
1:A:260:MET:O	1:A:263:LEU:HB2	2.02	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:351:ARG:HA	1:A:351:ARG:HE	1.65	0.60
1:A:493:ARG:NH2	1:A:786:ASP:OD1	2.32	0.60
1:A:629:THR:O	1:A:630:HIS:C	2.37	0.60
1:A:731:SER:O	1:A:735:VAL:HG23	2.02	0.60
1:B:243:TRP:HA	1:B:243:TRP:CE3	2.35	0.60
1:B:397:SER:HB2	1:B:399:LYS:HG3	1.84	0.60
1:B:464:ILE:CD1	1:B:779:TYR:CZ	2.81	0.60
1:B:518:ARG:NH2	1:B:1382:ASN:HD22	1.98	0.60
1:B:625:GLY:O	1:B:626:ALA:C	2.39	0.60
1:B:930:ILE:HD13	1:B:983:LEU:HD13	1.83	0.60
1:C:603:HIS:CA	1:C:640:THR:HG22	2.32	0.60
1:C:743:VAL:CG1	1:C:745:ARG:HG3	2.32	0.60
1:C:902:ASN:CG	1:E:1227:GLU:OE2	2.40	0.60
1:C:1114:PRO:HG3	2:K:109:VAL:O	2.01	0.60
1:D:102:TYR:CE1	1:D:144:PHE:CE1	2.89	0.60
1:D:225:PHE:HB3	1:D:278:ASP:OD2	2.02	0.60
1:D:312:ASN:HB2	1:D:411:ALA:HB1	1.83	0.60
1:D:499:PHE:HE1	1:D:742:MET:CE	2.14	0.60
1:D:521:SER:OG	1:D:522:LEU:N	2.33	0.60
1:D:594:GLU:OE1	1:D:598:ARG:NH2	2.34	0.60
1:E:45:GLY:HA2	1:E:180:LYS:HA	1.81	0.60
1:E:260:MET:O	1:E:263:LEU:HB2	2.02	0.60
1:E:761:GLN:O	1:E:764:THR:HB	2.02	0.60
1:E:781:PHE:CE2	2:L:57:VAL:HG11	2.37	0.60
1:E:1395:TYR:CE2	1:E:1443:ILE:HD13	2.36	0.60
1:F:670:LEU:HD22	1:F:670:LEU:O	2.01	0.60
2:G:90:PHE:HA	2:G:203:ARG:HH21	1.64	0.60
2:G:167:ARG:HH21	2:G:170:GLY:HA2	1.67	0.60
2:G:207:LEU:CD1	2:G:212:VAL:HG11	2.31	0.60
2:I:271:VAL:CG2	2:I:285:LEU:HG	2.31	0.60
2:I:317:LYS:CE	2:I:345:ILE:HD12	2.30	0.60
2:I:336:HIS:O	2:I:340:GLU:HG2	2.01	0.60
2:J:46:ARG:CZ	2:J:118:VAL:HA	2.32	0.60
2:J:96:ARG:HH21	2:J:199:VAL:HG21	1.66	0.60
2:J:291:HIS:HE1	2:J:317:LYS:HB3	1.67	0.60
2:J:415:LEU:HG	2:J:432:THR:HG21	1.82	0.60
2:K:394:LEU:CD2	2:K:396:ILE:HD12	2.30	0.60
2:L:174:HIS:HE1	2:L:215:HIS:CB	2.14	0.60
1:A:572:THR:CG2	1:A:615:ARG:HB3	2.31	0.60
1:A:902:ASN:ND2	1:C:1227:GLU:CG	2.62	0.60
1:A:982:GLN:NE2	1:A:1240:ARG:HD2	2.16	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1432:VAL:HG22	1:A:1440:ALA:HB3	1.83	0.60
1:B:446:GLU:O	1:B:447:LEU:C	2.40	0.60
1:C:364:ILE:CD1	1:C:374:ILE:HD11	2.30	0.60
1:C:377:THR:HG22	1:C:378:GLN:HG3	1.84	0.60
1:C:704:LEU:C	1:C:706:LYS:N	2.54	0.60
1:C:1090:PHE:N	1:C:1090:PHE:CD1	2.69	0.60
1:D:120:LYS:HE2	1:D:120:LYS:CA	2.31	0.60
1:D:183:PHE:CE1	1:D:188:LEU:HA	2.37	0.60
1:D:857:GLY:O	4:D:2474:FMN:C4A	2.50	0.60
1:D:1131:THR:CG2	1:D:1133:GLU:OE1	2.42	0.60
1:E:355:TYR:CD1	1:E:355:TYR:O	2.54	0.60
1:E:780:ARG:CG	2:L:51:GLY:O	2.48	0.60
1:E:1170:GLN:OE1	1:E:1183:LEU:HB2	2.01	0.60
1:F:24:ALA:O	1:F:26:LYS:N	2.34	0.60
2:G:416:LYS:HG3	2:G:433:ASN:HD22	1.66	0.60
2:H:197:LYS:HD3	2:H:274:GLY:H	1.67	0.60
2:H:394:LEU:CD2	2:H:396:ILE:HD12	2.30	0.60
2:I:47:CYS:HB2	2:I:69:LEU:HD21	1.83	0.60
2:I:416:LYS:HG3	2:I:433:ASN:HD22	1.66	0.60
2:J:267:THR:O	2:J:271:VAL:HG22	2.01	0.60
2:K:417:VAL:C	2:K:424:LEU:HD22	2.21	0.60
2:L:207:LEU:CD1	2:L:212:VAL:HG11	2.31	0.60
2:L:283:GLY:O	2:L:284:SER:HB3	2.01	0.60
1:A:316:LEU:O	1:A:319:TYR:HB3	2.02	0.60
1:A:377:THR:HG22	1:A:378:GLN:HG3	1.84	0.60
1:A:575:VAL:HG13	1:A:759:LEU:HD22	1.84	0.60
1:A:731:SER:N	1:A:748:GLY:H	2.00	0.60
1:B:279:THR:HG22	1:B:280:VAL:N	2.16	0.60
1:B:570:ASP:O	1:B:588:ARG:NH2	2.34	0.60
1:B:572:THR:HG22	1:B:573:PHE:N	2.16	0.60
1:B:1105:VAL:HA	2:G:54:PHE:HE1	1.64	0.60
1:C:652:THR:HG21	1:C:703:GLY:HA3	1.84	0.60
1:C:731:SER:O	1:C:735:VAL:HG23	2.02	0.60
1:C:950:THR:HG23	1:C:951:GLU:H	1.66	0.60
1:C:1221:PRO:CD	1:C:1229:MET:HE1	2.32	0.60
1:C:1424:LEU:HD23	1:C:1428:ILE:HG13	1.83	0.60
1:D:782:ARG:NE	2:H:53:PRO:HD3	2.17	0.60
1:D:913:GLY:CA	1:D:1349:ARG:HD3	2.27	0.60
1:D:918:THR:HG22	1:D:921:TYR:N	2.13	0.60
1:E:107:TRP:N	1:E:107:TRP:CD1	2.69	0.60
1:E:377:THR:HG22	1:E:378:GLN:HG3	1.84	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:731:SER:N	1:E:748:GLY:H	2.00	0.60
1:E:842:GLU:HB3	1:E:1156:ARG:HD3	1.84	0.60
1:E:1438:ARG:NE	2:K:376:GLY:O	2.35	0.60
1:F:499:PHE:HE1	1:F:742:MET:CE	2.14	0.60
2:G:174:HIS:HE1	2:G:215:HIS:CB	2.14	0.60
2:G:295:LEU:CD2	2:G:319:LEU:HD13	2.32	0.60
2:G:336:HIS:O	2:G:340:GLU:HG2	2.01	0.60
2:H:415:LEU:HD22	2:H:416:LYS:O	2.01	0.60
2:I:256:GLY:O	2:I:257:ASN:HB2	2.01	0.60
2:I:291:HIS:HE1	2:I:317:LYS:HB3	1.67	0.60
2:I:430:LYS:HD2	2:I:460:ALA:HB2	1.82	0.60
2:J:47:CYS:HB2	2:J:69:LEU:HD21	1.83	0.60
2:J:197:LYS:HD3	2:J:274:GLY:H	1.67	0.60
2:K:49:GLN:HE22	2:K:69:LEU:HG	1.65	0.60
2:L:47:CYS:HB2	2:L:69:LEU:HD21	1.83	0.60
2:L:415:LEU:HD22	2:L:416:LYS:O	2.01	0.60
1:A:312:ASN:HB2	1:A:411:ALA:HB1	1.83	0.60
1:A:843:VAL:CG1	1:A:844:GLU:N	2.59	0.60
1:A:1401:LEU:HD11	1:A:1405:ILE:HD12	1.82	0.60
1:B:193:PRO:O	1:B:194:ASP:C	2.40	0.60
1:B:572:THR:HG23	1:B:573:PHE:N	2.16	0.60
1:C:295:LYS:HE2	1:C:299:VAL:CG1	2.31	0.60
1:C:731:SER:N	1:C:748:GLY:H	2.00	0.60
1:D:353:MET:HE2	1:D:366:GLY:O	2.02	0.60
1:D:1131:THR:HG21	1:D:1133:GLU:HB2	1.83	0.60
1:E:316:LEU:O	1:E:319:TYR:HB3	2.02	0.60
1:E:525:ARG:C	1:E:526:LEU:HD12	2.21	0.60
1:E:565:THR:CG2	1:E:602:THR:HB	2.31	0.60
1:F:113:ASN:ND2	1:F:113:ASN:C	2.49	0.60
1:F:780:ARG:NH1	2:I:50:CYS:CB	2.54	0.60
1:F:930:ILE:HD13	1:F:983:LEU:HD13	1.83	0.60
1:F:1401:LEU:N	1:F:1402:PRO:HD2	2.16	0.60
2:I:439:ALA:HB1	2:I:443:ILE:CD1	2.32	0.60
2:J:327:MET:HB2	2:J:346:TRP:HZ2	1.65	0.60
1:A:259:HIS:O	1:A:260:MET:C	2.39	0.60
1:A:443:ASP:O	1:A:444:LYS:C	2.39	0.60
1:A:734:LEU:HD12	1:A:734:LEU:C	2.21	0.60
1:A:902:ASN:CG	1:C:1227:GLU:OE2	2.40	0.60
1:A:1227:GLU:HG2	1:E:902:ASN:CA	2.23	0.60
1:B:120:LYS:HE2	1:B:120:LYS:CA	2.31	0.60
1:C:208:HIS:CE1	1:C:223:GLN:CD	2.75	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:260:MET:O	1:C:263:LEU:HB2	2.02	0.60
1:C:547:SER:C	1:C:549:VAL:H	2.05	0.60
1:C:876:ASN:HB3	1:E:1227:GLU:OE2	2.02	0.60
1:C:1315:LEU:HB3	1:C:1320:ASN:HD22	1.67	0.60
1:C:1348:VAL:O	1:C:1348:VAL:HG13	1.99	0.60
1:D:24:ALA:O	1:D:26:LYS:N	2.34	0.60
1:D:390:MET:HG3	1:D:406:LEU:HD23	1.84	0.60
1:D:447:LEU:HD21	1:D:674:ALA:CA	2.29	0.60
1:E:208:HIS:CE1	1:E:223:GLN:CD	2.75	0.60
1:E:515:ARG:NE	1:E:1367:TYR:HE1	1.99	0.60
1:E:1401:LEU:HD11	1:E:1405:ILE:HD12	1.82	0.60
1:F:266:VAL:O	1:F:279:THR:HG21	2.01	0.60
1:F:625:GLY:O	1:F:626:ALA:C	2.39	0.60
1:F:653:HIS:O	1:F:654:TYR:C	2.39	0.60
1:F:1212:ASP:CG	1:F:1243:GLY:H	2.04	0.60
2:G:203:ARG:HB3	2:G:203:ARG:NH1	2.17	0.60
2:H:267:THR:O	2:H:271:VAL:HG22	2.01	0.60
2:H:302:MET:HG3	2:H:333:GLU:CD	2.22	0.60
2:I:267:THR:O	2:I:271:VAL:HG22	2.01	0.60
2:I:302:MET:HG3	2:I:333:GLU:CD	2.22	0.60
2:J:202:ARG:HH21	2:J:206:LEU:HD11	1.67	0.60
2:J:226:LEU:HD21	2:J:434:MET:SD	2.42	0.60
2:J:271:VAL:CG2	2:J:285:LEU:HG	2.31	0.60
2:K:302:MET:HG3	2:K:333:GLU:CD	2.22	0.60
2:K:416:LYS:HG3	2:K:433:ASN:HD22	1.66	0.60
2:L:46:ARG:CZ	2:L:118:VAL:HA	2.32	0.60
2:L:167:ARG:HH21	2:L:170:GLY:HA2	1.67	0.60
2:L:291:HIS:HE1	2:L:317:LYS:HB3	1.67	0.60
1:A:208:HIS:CE1	1:A:223:GLN:CD	2.75	0.60
1:A:295:LYS:HE2	1:A:299:VAL:CG1	2.31	0.60
1:A:652:THR:HG21	1:A:703:GLY:HA3	1.84	0.60
1:B:322:SER:O	1:B:528:ASN:ND2	2.35	0.60
1:B:1084:MET:SD	1:B:1168:LEU:HD23	2.41	0.60
1:B:1131:THR:HG21	1:B:1133:GLU:HB2	1.83	0.60
1:C:1438:ARG:NE	2:J:376:GLY:O	2.35	0.60
1:D:312:ASN:OD1	1:D:312:ASN:N	2.25	0.60
1:D:322:SER:O	1:D:528:ASN:ND2	2.35	0.60
1:D:490:ASP:CG	1:D:787:ARG:HH21	2.06	0.60
1:D:508:ASN:HB2	1:D:509:PRO:HD2	1.84	0.60
1:D:1009:ILE:O	1:D:1010:ALA:C	2.37	0.60
1:E:189:THR:CG2	1:E:190:THR:N	2.63	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:253:HIS:CE1	1:E:254:PRO:CG	2.85	0.60
1:E:572:THR:CG2	1:E:615:ARG:HB3	2.31	0.60
1:E:575:VAL:HG13	1:E:759:LEU:HD22	1.84	0.60
1:F:397:SER:HB2	1:F:399:LYS:HG3	1.84	0.60
2:G:283:GLY:O	2:G:284:SER:HB3	2.02	0.60
2:G:286:ASN:O	2:G:311:GLN:HB2	2.00	0.60
2:H:68:TRP:CE3	2:H:84:SER:HB3	2.37	0.60
2:H:257:ASN:HD22	2:H:364:ALA:HB3	1.67	0.60
2:H:439:ALA:HB1	2:H:443:ILE:CD1	2.31	0.60
2:I:68:TRP:CE3	2:I:84:SER:HB3	2.37	0.60
2:J:207:LEU:O	2:J:210:ALA:HB3	2.02	0.60
2:J:207:LEU:CD1	2:J:212:VAL:HG11	2.31	0.60
2:K:295:LEU:CD2	2:K:319:LEU:HD13	2.32	0.60
2:K:415:LEU:HD22	2:K:416:LYS:O	2.01	0.60
2:K:434:MET:HB2	2:K:437:VAL:HG12	1.82	0.60
2:L:256:GLY:O	2:L:257:ASN:HB2	2.01	0.60
2:L:267:THR:O	2:L:271:VAL:HG22	2.01	0.60
1:A:208:HIS:CD2	1:A:208:HIS:C	2.74	0.60
1:A:479:MET:HG3	1:A:1104:MET:SD	2.42	0.60
1:A:531:ASN:HB3	1:A:534:ASP:HB2	1.83	0.60
1:A:732:ARG:NH1	1:B:94:GLU:OE2	2.28	0.60
1:A:743:VAL:CG1	1:A:745:ARG:HG3	2.31	0.60
1:A:781:PHE:CE2	2:J:57:VAL:HG11	2.37	0.60
1:B:508:ASN:HB2	1:B:509:PRO:HD2	1.84	0.60
1:B:1383:PHE:O	1:B:1384:ALA:HB3	2.00	0.60
1:C:227:MET:HE2	1:C:282:GLU:CG	2.31	0.60
1:C:1076:GLY:CA	1:C:1145:GLU:HG2	2.29	0.60
1:C:1131:THR:HB	1:C:1134:LYS:CG	2.32	0.60
1:D:447:LEU:CD1	1:D:451:GLN:CG	2.80	0.60
1:D:653:HIS:O	1:D:654:TYR:C	2.39	0.60
1:D:930:ILE:HD13	1:D:983:LEU:HD13	1.84	0.60
1:E:369:THR:HG23	1:E:370:GLY:N	2.17	0.60
1:E:394:ASP:OD1	1:E:394:ASP:C	2.37	0.60
1:E:1008:THR:HG22	1:E:1009:ILE:H	1.64	0.60
1:E:1374:VAL:O	1:E:1375:ILE:HG12	2.01	0.60
1:F:183:PHE:CE1	1:F:188:LEU:HA	2.37	0.60
1:F:1105:VAL:HG23	2:I:54:PHE:HE1	1.64	0.60
2:H:202:ARG:HH21	2:H:206:LEU:HD11	1.67	0.60
2:I:202:ARG:HH21	2:I:206:LEU:HD11	1.67	0.60
2:I:207:LEU:O	2:I:210:ALA:HB3	2.02	0.60
2:I:350:PRO:HG3	2:I:380:PRO:CB	2.31	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:166:LEU:CD2	2:J:461:ALA:HB1	2.31	0.60
2:J:302:MET:HE3	2:J:334:VAL:HA	1.83	0.60
2:J:349:ALA:CB	2:J:350:PRO:HD3	2.31	0.60
2:J:434:MET:HB2	2:J:437:VAL:HG12	1.82	0.60
2:K:257:ASN:HD22	2:K:364:ALA:HB3	1.67	0.60
2:K:283:GLY:O	2:K:284:SER:HB3	2.02	0.60
2:L:203:ARG:HB3	2:L:203:ARG:NH1	2.17	0.60
1:A:876:ASN:HB3	1:C:1227:GLU:OE2	2.02	0.59
1:A:1412:PHE:N	1:A:1412:PHE:CD1	2.70	0.59
1:B:149:TYR:CD2	1:B:286:ARG:HG3	2.37	0.59
1:B:670:LEU:HD22	1:B:670:LEU:O	2.01	0.59
1:B:1263:HIS:NE2	1:D:900:GLY:HA2	2.10	0.59
1:C:182:MET:CE	1:C:217:PRO:HB3	2.27	0.59
1:C:607:THR:HB	1:C:645:ARG:HB2	1.84	0.59
1:C:732:ARG:NH1	1:D:94:GLU:OE2	2.28	0.59
1:C:734:LEU:HD12	1:C:734:LEU:C	2.21	0.59
1:C:1170:GLN:OE1	1:C:1183:LEU:HB2	2.01	0.59
1:D:279:THR:HG22	1:D:280:VAL:N	2.16	0.59
1:D:1052:VAL:O	1:D:1053:HIS:C	2.38	0.59
1:D:1336:LEU:HB3	1:D:1355:VAL:HG13	1.84	0.59
1:E:208:HIS:CD2	1:E:208:HIS:C	2.74	0.59
1:E:364:ILE:CD1	1:E:374:ILE:HD11	2.30	0.59
1:E:731:SER:O	1:E:735:VAL:HG23	2.02	0.59
1:E:743:VAL:CG1	1:E:745:ARG:HG3	2.32	0.59
1:E:1375:ILE:HG22	1:E:1375:ILE:O	2.02	0.59
1:F:120:LYS:HE2	1:F:120:LYS:CA	2.31	0.59
1:F:490:ASP:CG	1:F:787:ARG:HH21	2.06	0.59
1:F:691:LYS:O	1:F:691:LYS:HG3	2.00	0.59
2:G:47:CYS:HB2	2:G:69:LEU:HD21	1.83	0.59
2:G:100:GLN:HA	2:G:100:GLN:NE2	2.17	0.59
2:H:47:CYS:HB2	2:H:69:LEU:HD21	1.83	0.59
2:H:291:HIS:HE1	2:H:317:LYS:HB3	1.67	0.59
2:I:167:ARG:HH21	2:I:170:GLY:HA2	1.67	0.59
2:J:190:ILE:HG23	2:J:191:PRO:HD2	1.84	0.59
2:J:383:ILE:CD1	2:J:386:SER:H	2.12	0.59
2:K:226:LEU:HD21	2:K:434:MET:SD	2.42	0.59
2:K:267:THR:O	2:K:271:VAL:HG22	2.01	0.59
2:L:226:LEU:HD21	2:L:434:MET:SD	2.42	0.59
1:A:189:THR:CG2	1:A:190:THR:N	2.63	0.59
1:A:355:TYR:C	1:A:355:TYR:HD1	2.03	0.59
1:A:932:VAL:O	1:A:933:ALA:CB	2.45	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1227:GLU:OE2	1:E:876:ASN:HB3	2.02	0.59
1:B:24:ALA:O	1:B:26:LYS:N	2.34	0.59
1:B:447:LEU:HD12	1:B:447:LEU:C	2.22	0.59
1:B:806:SER:OG	1:B:809:THR:N	2.31	0.59
1:B:1132:PRO:O	1:B:1136:VAL:HG23	2.02	0.59
1:C:102:TYR:HE2	1:C:144:PHE:CE1	2.13	0.59
1:C:295:LYS:HD3	1:C:295:LYS:O	2.00	0.59
1:C:525:ARG:C	1:C:526:LEU:HD12	2.20	0.59
1:C:826:ARG:NH1	1:C:826:ARG:CG	2.58	0.59
1:D:1274:GLN:NE2	1:D:1293:ASN:HB3	2.17	0.59
1:E:139:VAL:CG1	1:E:143:GLN:HB2	2.32	0.59
1:E:312:ASN:HB2	1:E:411:ALA:HB1	1.83	0.59
1:E:403:ASP:CG	1:E:407:LYS:NZ	2.54	0.59
1:E:950:THR:HG23	1:E:951:GLU:H	1.66	0.59
1:F:225:PHE:HB3	1:F:278:ASP:OD2	2.02	0.59
1:F:938:PRO:O	1:F:940:GLU:N	2.36	0.59
2:G:46:ARG:CZ	2:G:118:VAL:HA	2.32	0.59
2:G:267:THR:O	2:G:271:VAL:HG22	2.01	0.59
2:G:302:MET:HG3	2:G:333:GLU:CD	2.22	0.59
2:H:32:TYR:HE2	2:H:194:LYS:HB3	1.67	0.59
2:I:449:LEU:HD23	2:I:452:TRP:CD2	2.37	0.59
2:J:302:MET:HG3	2:J:333:GLU:CD	2.22	0.59
2:K:68:TRP:CE3	2:K:84:SER:HB3	2.37	0.59
2:K:297:GLY:HA2	2:K:320:TYR:CE1	2.38	0.59
2:L:197:LYS:HD3	2:L:274:GLY:H	1.67	0.59
2:L:415:LEU:HG	2:L:432:THR:HG21	1.82	0.59
2:L:471:LYS:HA	2:L:471:LYS:CE	2.23	0.59
1:A:208:HIS:ND1	1:A:223:GLN:OE1	2.35	0.59
1:A:249:THR:CG2	1:A:250:ARG:HG2	2.31	0.59
1:A:369:THR:HG23	1:A:370:GLY:N	2.17	0.59
1:A:693:MET:O	1:A:694:ALA:C	2.37	0.59
1:A:1442:GLU:HG3	2:L:374:ALA:O	2.01	0.59
1:B:183:PHE:CE1	1:B:188:LEU:HA	2.37	0.59
1:B:295:LYS:CD	1:B:390:MET:HE3	2.20	0.59
1:B:691:LYS:O	1:B:691:LYS:HG3	2.00	0.59
1:B:1171:VAL:HG12	1:B:1171:VAL:O	2.02	0.59
1:C:359:THR:HG23	1:C:378:GLN:CA	2.33	0.59
1:C:1374:VAL:O	1:C:1375:ILE:HG12	2.01	0.59
1:D:559:ARG:NH1	1:D:568:GLU:OE2	2.35	0.59
1:E:466:HIS:CE1	1:E:684:PHE:CE1	2.91	0.59
1:F:149:TYR:CD2	1:F:286:ARG:HG3	2.37	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:182:MET:CE	1:F:217:PRO:CA	2.58	0.59
1:F:461:MET:HE1	1:F:465:LEU:HD23	1.84	0.59
1:F:857:GLY:O	4:F:2474:FMN:C4A	2.50	0.59
1:F:1171:VAL:HG12	1:F:1171:VAL:O	2.02	0.59
2:G:226:LEU:HD21	2:G:434:MET:SD	2.42	0.59
2:G:297:GLY:HA2	2:G:320:TYR:CE1	2.37	0.59
2:G:415:LEU:HD22	2:G:416:LYS:O	2.01	0.59
2:H:207:LEU:O	2:H:210:ALA:HB3	2.02	0.59
2:H:416:LYS:HG3	2:H:433:ASN:HD22	1.66	0.59
2:I:77:LEU:HD21	2:I:126:TYR:CE2	2.38	0.59
2:I:174:HIS:HE1	2:I:215:HIS:CB	2.14	0.59
2:I:383:ILE:HD12	2:I:386:SER:N	2.16	0.59
2:J:416:LYS:HG3	2:J:433:ASN:HD22	1.66	0.59
2:J:430:LYS:CE	2:J:440:ALA:HB2	2.32	0.59
2:K:77:LEU:HD21	2:K:126:TYR:CE2	2.38	0.59
2:K:203:ARG:HB3	2:K:203:ARG:NH1	2.17	0.59
2:K:238:VAL:HG23	2:K:439:ALA:HA	1.85	0.59
2:K:256:GLY:O	2:K:257:ASN:HB2	2.01	0.59
2:K:449:LEU:HD23	2:K:452:TRP:CD2	2.37	0.59
2:L:49:GLN:HE22	2:L:69:LEU:HG	1.65	0.59
2:L:166:LEU:CD2	2:L:461:ALA:HB1	2.31	0.59
2:L:271:VAL:CG2	2:L:285:LEU:HG	2.31	0.59
1:A:150:ILE:HG22	1:A:150:ILE:O	2.02	0.59
1:A:732:ARG:H	1:A:747:SER:HB3	1.65	0.59
1:A:914:ARG:NH2	1:A:973:ASP:OD1	2.36	0.59
1:A:950:THR:HG23	1:A:951:GLU:H	1.66	0.59
1:A:1438:ARG:NE	2:L:376:GLY:O	2.35	0.59
1:B:312:ASN:OD1	1:B:312:ASN:N	2.25	0.59
1:B:573:PHE:HB2	1:B:574:PRO:HD2	1.85	0.59
1:B:1274:GLN:NE2	1:B:1293:ASN:HB3	2.17	0.59
4:B:2474:FMN:O4'	4:B:2474:FMN:C1'	2.10	0.59
1:C:223:GLN:HB3	1:C:224:PRO:HA	1.85	0.59
1:C:761:GLN:O	1:C:764:THR:HB	2.02	0.59
1:D:446:GLU:O	1:D:447:LEU:C	2.40	0.59
1:D:989:GLN:O	1:D:1245:ARG:HD3	2.01	0.59
1:E:479:MET:HG3	1:E:1104:MET:SD	2.42	0.59
1:F:119:GLU:O	1:F:120:LYS:C	2.39	0.59
1:F:918:THR:HG22	1:F:921:TYR:N	2.13	0.59
2:G:49:GLN:HE22	2:G:69:LEU:HG	1.65	0.59
2:G:420:TRP:HB2	2:G:422:THR:CG2	2.33	0.59
2:G:447:ALA:HB1	2:G:452:TRP:HE3	1.65	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:283:GLY:O	2:H:284:SER:HB3	2.01	0.59
2:H:297:GLY:HA2	2:H:320:TYR:CE1	2.37	0.59
2:I:203:ARG:HB3	2:I:203:ARG:NH1	2.17	0.59
2:J:186:LEU:HD11	2:J:200:VAL:CB	2.28	0.59
2:J:238:VAL:HG23	2:J:439:ALA:HA	1.85	0.59
2:J:257:ASN:HD22	2:J:364:ALA:HB3	1.67	0.59
2:J:430:LYS:HD2	2:J:460:ALA:HB2	1.82	0.59
2:K:32:TYR:HE2	2:K:194:LYS:HB3	1.67	0.59
2:L:69:LEU:HD12	2:L:69:LEU:C	2.23	0.59
2:L:202:ARG:HH21	2:L:206:LEU:HD11	1.67	0.59
2:L:366:ARG:NE	2:L:391:GLN:HG2	2.14	0.59
2:L:387:GLU:HG2	2:L:388:PHE:N	2.17	0.59
1:A:1170:GLN:OE1	1:A:1183:LEU:HB2	2.01	0.59
1:B:266:VAL:O	1:B:279:THR:HG21	2.01	0.59
1:B:490:ASP:CG	1:B:787:ARG:HH21	2.06	0.59
1:B:499:PHE:CE1	1:B:742:MET:HE1	2.36	0.59
1:B:559:ARG:NH1	1:B:568:GLU:OE2	2.35	0.59
1:C:1307:VAL:HG12	1:C:1322:ILE:CD1	2.33	0.59
1:D:397:SER:HB2	1:D:399:LYS:HG3	1.84	0.59
1:E:918:THR:CG2	1:E:1256:MET:SD	2.91	0.59
1:E:1075:THR:CG2	1:E:1076:GLY:N	2.66	0.59
1:E:1388:THR:O	1:E:1388:THR:HG23	2.01	0.59
1:F:322:SER:O	1:F:528:ASN:ND2	2.35	0.59
1:F:390:MET:HG3	1:F:406:LEU:HD23	1.84	0.59
1:F:958:HIS:O	1:F:1369:THR:CG2	2.51	0.59
2:G:77:LEU:HD21	2:G:126:TYR:CE2	2.38	0.59
2:G:189:GLY:O	2:G:265:LEU:HD13	2.03	0.59
2:G:387:GLU:HG2	2:G:388:PHE:N	2.17	0.59
2:G:439:ALA:HB1	2:G:443:ILE:CD1	2.32	0.59
2:H:46:ARG:CZ	2:H:118:VAL:HA	2.32	0.59
2:H:238:VAL:HG23	2:H:439:ALA:HA	1.84	0.59
2:H:365:VAL:CG2	2:H:366:ARG:HG3	2.31	0.59
2:H:415:LEU:HG	2:H:432:THR:HG21	1.82	0.59
2:I:225:SER:HB3	2:I:227:PRO:CD	2.23	0.59
2:J:256:GLY:O	2:J:257:ASN:HB2	2.01	0.59
2:J:361:GLY:O	2:J:362:VAL:HB	2.01	0.59
2:K:167:ARG:HH21	2:K:170:GLY:HA2	1.67	0.59
2:K:202:ARG:HH21	2:K:206:LEU:HD11	1.67	0.59
2:K:212:VAL:HG22	2:K:214:TYR:CE1	2.38	0.59
2:L:100:GLN:HA	2:L:100:GLN:NE2	2.17	0.59
2:L:295:LEU:CD2	2:L:319:LEU:HD13	2.32	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:336:HIS:O	2:L:340:GLU:HG2	2.01	0.59
1:A:761:GLN:O	1:A:764:THR:HB	2.02	0.59
1:B:225:PHE:HB3	1:B:278:ASP:OD2	2.02	0.59
1:B:248:GLU:HA	1:B:251:MET:HG2	1.84	0.59
1:D:1105:VAL:HG23	2:H:54:PHE:HE1	1.64	0.59
1:D:1132:PRO:O	1:D:1136:VAL:HG23	2.02	0.59
1:D:1420:TYR:O	1:D:1422:SER:N	2.36	0.59
1:E:150:ILE:HG22	1:E:150:ILE:O	2.02	0.59
1:E:208:HIS:ND1	1:E:223:GLN:OE1	2.35	0.59
1:F:312:ASN:HB2	1:F:411:ALA:HB1	1.83	0.59
1:F:508:ASN:HB2	1:F:509:PRO:HD2	1.84	0.59
1:F:560:ASP:O	1:F:562:MET:N	2.36	0.59
1:F:572:THR:HG23	1:F:573:PHE:N	2.16	0.59
1:F:989:GLN:O	1:F:1245:ARG:HD3	2.01	0.59
1:F:1132:PRO:O	1:F:1136:VAL:HG23	2.02	0.59
1:F:1336:LEU:HB3	1:F:1355:VAL:HG13	1.84	0.59
1:F:1420:TYR:O	1:F:1422:SER:N	2.36	0.59
1:F:1442:GLU:OE2	2:G:375:THR:N	2.36	0.59
2:G:202:ARG:HH21	2:G:206:LEU:HD11	1.67	0.59
2:G:256:GLY:O	2:G:257:ASN:HB2	2.01	0.59
2:G:291:HIS:HE1	2:G:317:LYS:HB3	1.67	0.59
2:G:316:VAL:CB	2:G:342:VAL:HG22	2.33	0.59
2:H:190:ILE:HG23	2:H:191:PRO:HD2	1.84	0.59
2:H:203:ARG:HB3	2:H:203:ARG:NH1	2.17	0.59
2:H:291:HIS:HE1	2:H:317:LYS:CB	2.16	0.59
2:H:449:LEU:HD23	2:H:452:TRP:CD2	2.38	0.59
2:I:197:LYS:HD3	2:I:274:GLY:H	1.67	0.59
2:J:295:LEU:CD2	2:J:319:LEU:HD13	2.32	0.59
2:J:449:LEU:HD23	2:J:452:TRP:CD2	2.38	0.59
2:K:69:LEU:HD12	2:K:69:LEU:C	2.23	0.59
2:K:291:HIS:HE1	2:K:317:LYS:CB	2.16	0.59
2:L:68:TRP:CE3	2:L:84:SER:HB3	2.37	0.59
2:L:189:GLY:O	2:L:265:LEU:HD13	2.03	0.59
2:L:207:LEU:O	2:L:210:ALA:HB3	2.02	0.59
2:L:302:MET:HG3	2:L:333:GLU:CD	2.22	0.59
2:L:430:LYS:CE	2:L:440:ALA:HB2	2.32	0.59
1:B:447:LEU:CD1	1:B:451:GLN:CG	2.80	0.59
1:B:560:ASP:O	1:B:562:MET:N	2.36	0.59
1:B:1442:GLU:OE2	2:H:375:THR:N	2.36	0.59
1:C:115:ASP:OD2	1:D:1194:GLU:HB2	2.02	0.59
1:C:732:ARG:H	1:C:747:SER:HB3	1.65	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:950:THR:CG2	1:C:952:MET:H	2.15	0.59
1:C:1412:PHE:N	1:C:1412:PHE:CD1	2.70	0.59
1:D:560:ASP:O	1:D:562:MET:N	2.36	0.59
1:D:869:GLY:O	1:D:873:VAL:HG23	2.03	0.59
1:D:1442:GLU:OE2	2:I:375:THR:N	2.36	0.59
1:E:359:THR:HG23	1:E:378:GLN:CA	2.33	0.59
1:E:1221:PRO:CD	1:E:1229:MET:HE1	2.32	0.59
1:F:447:LEU:CD1	1:F:451:GLN:CG	2.80	0.59
1:F:559:ARG:NH1	1:F:568:GLU:OE2	2.35	0.59
1:F:782:ARG:HB3	2:I:53:PRO:HD2	1.80	0.59
2:G:68:TRP:HD1	2:G:69:LEU:N	2.01	0.59
2:G:238:VAL:HG23	2:G:439:ALA:HA	1.85	0.59
2:G:238:VAL:CG2	2:G:439:ALA:HB2	2.33	0.59
2:G:257:ASN:HD22	2:G:364:ALA:HB3	1.67	0.59
2:H:69:LEU:HD12	2:H:69:LEU:C	2.23	0.59
2:H:77:LEU:HD21	2:H:126:TYR:CE2	2.38	0.59
2:H:100:GLN:HA	2:H:100:GLN:NE2	2.17	0.59
2:H:226:LEU:HD21	2:H:434:MET:SD	2.42	0.59
2:I:68:TRP:HD1	2:I:69:LEU:N	2.01	0.59
2:I:166:LEU:CD2	2:I:461:ALA:HB1	2.31	0.59
2:I:226:LEU:HD21	2:I:434:MET:SD	2.42	0.59
2:I:471:LYS:HA	2:I:471:LYS:CE	2.23	0.59
2:J:167:ARG:HH21	2:J:170:GLY:HA2	1.67	0.59
2:J:416:LYS:HB2	2:J:416:LYS:HZ2	1.68	0.59
2:J:447:ALA:HB1	2:J:452:TRP:HE3	1.65	0.59
1:A:115:ASP:OD2	1:B:1194:GLU:HB2	2.02	0.59
1:A:663:ALA:O	1:A:720:ARG:NE	2.36	0.59
1:A:704:LEU:C	1:A:706:LYS:N	2.54	0.59
1:B:857:GLY:O	4:B:2474:FMN:C4A	2.50	0.59
1:B:947:PHE:O	1:B:947:PHE:CD1	2.56	0.59
1:B:1420:TYR:O	1:B:1422:SER:N	2.36	0.59
1:C:479:MET:HG3	1:C:1104:MET:SD	2.42	0.59
1:C:663:ALA:O	1:C:720:ARG:NE	2.36	0.59
1:C:1425:LYS:HE2	1:C:1447:TRP:CD1	2.38	0.59
1:D:913:GLY:HA2	1:D:1349:ARG:CD	2.27	0.59
1:E:24:ALA:O	1:E:26:LYS:N	2.36	0.59
1:E:1412:PHE:N	1:E:1412:PHE:CD1	2.70	0.59
1:E:1425:LYS:HE2	1:E:1447:TRP:CD1	2.38	0.59
1:F:850:ARG:O	1:F:853:PHE:HB2	2.03	0.59
1:F:869:GLY:O	1:F:873:VAL:HG23	2.03	0.59
1:F:947:PHE:O	1:F:947:PHE:CD1	2.56	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1221:PRO:HD2	1:F:1229:MET:CE	2.26	0.59
2:G:291:HIS:HE1	2:G:317:LYS:CB	2.16	0.59
2:I:238:VAL:HG23	2:I:439:ALA:HA	1.85	0.59
2:I:288:ALA:HB3	2:I:311:GLN:HG3	1.85	0.59
2:J:360:THR:HG22	2:J:365:VAL:CG1	2.33	0.59
2:K:238:VAL:CG2	2:K:439:ALA:HB2	2.33	0.59
2:K:302:MET:HE3	2:K:334:VAL:HA	1.85	0.59
2:L:32:TYR:HE2	2:L:194:LYS:HB3	1.67	0.59
2:L:316:VAL:CB	2:L:342:VAL:HG22	2.33	0.59
2:L:420:TRP:HB2	2:L:422:THR:CG2	2.33	0.59
1:A:253:HIS:CE1	1:A:254:PRO:CG	2.85	0.59
1:A:1076:GLY:CA	1:A:1145:GLU:HG2	2.28	0.59
1:A:1307:VAL:HG12	1:A:1322:ILE:CD1	2.33	0.59
1:A:1425:LYS:HE2	1:A:1447:TRP:CD1	2.38	0.59
1:B:938:PRO:O	1:B:939:GLY:C	2.35	0.59
1:B:1135:VAL:O	1:B:1136:VAL:C	2.33	0.59
1:C:249:THR:HG22	1:C:250:ARG:HG2	1.85	0.59
1:C:253:HIS:CE1	1:C:254:PRO:CG	2.85	0.59
1:C:259:HIS:O	1:C:260:MET:C	2.39	0.59
1:C:345:MET:CE	1:C:385:LEU:CB	2.81	0.59
1:C:824:GLN:HE21	1:C:824:GLN:HA	1.66	0.59
1:C:842:GLU:HB3	1:C:1156:ARG:HD3	1.84	0.59
1:D:113:ASN:HD21	1:D:115:ASP:H	1.47	0.59
1:D:149:TYR:CD2	1:D:286:ARG:HG3	2.38	0.59
1:D:303:LEU:HD11	1:D:314:LYS:HG2	1.85	0.59
1:D:499:PHE:CE1	1:D:742:MET:HE1	2.38	0.59
1:D:958:HIS:O	1:D:1369:THR:CG2	2.51	0.59
1:D:1221:PRO:HB2	1:D:1229:MET:HE2	1.83	0.59
1:E:345:MET:CE	1:E:385:LEU:CB	2.81	0.59
1:E:447:LEU:HD13	1:E:670:LEU:CD2	2.33	0.59
1:E:825:LEU:HD12	1:E:1186:ARG:NH1	2.13	0.59
1:E:893:ARG:HG2	1:E:903:TRP:HB2	1.85	0.59
1:E:1307:VAL:HG12	1:E:1322:ILE:CD1	2.33	0.59
1:F:570:ASP:O	1:F:588:ARG:NH2	2.34	0.59
2:G:349:ALA:CB	2:G:350:PRO:HD3	2.31	0.59
2:G:365:VAL:CG2	2:G:366:ARG:HG3	2.31	0.59
2:H:196:GLU:O	2:H:199:VAL:HB	2.03	0.59
2:H:212:VAL:HG22	2:H:214:TYR:CE1	2.38	0.59
2:J:32:TYR:HE2	2:J:194:LYS:HB3	1.67	0.59
2:J:68:TRP:CE3	2:J:84:SER:HB3	2.37	0.59
2:J:77:LEU:HD21	2:J:126:TYR:CE2	2.38	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:291:HIS:CE1	2:J:317:LYS:HB3	2.38	0.59
2:K:288:ALA:HB3	2:K:311:GLN:HG3	1.85	0.59
2:K:291:HIS:CE1	2:K:317:LYS:HB3	2.38	0.59
2:L:196:GLU:O	2:L:199:VAL:HB	2.03	0.59
2:L:238:VAL:CG2	2:L:439:ALA:HB2	2.33	0.59
2:L:302:MET:HE3	2:L:334:VAL:HA	1.84	0.59
1:A:875:MET:HE1	1:A:1139:PHE:HE2	1.34	0.59
1:B:303:LEU:HD11	1:B:314:LYS:HG2	1.85	0.59
1:B:782:ARG:NE	2:G:53:PRO:HD3	2.17	0.59
1:C:150:ILE:HG22	1:C:150:ILE:O	2.02	0.59
1:C:316:LEU:O	1:C:319:TYR:HB3	2.02	0.59
1:C:782:ARG:NE	2:K:53:PRO:CD	2.60	0.59
1:C:875:MET:HE1	1:C:1139:PHE:HE2	1.30	0.59
1:D:1169:HIS:N	1:D:1169:HIS:ND1	2.49	0.59
1:E:629:THR:O	1:E:630:HIS:C	2.37	0.59
1:E:652:THR:HG21	1:E:703:GLY:HA3	1.84	0.59
1:E:823:MET:O	1:E:824:GLN:NE2	2.36	0.59
1:E:1038:ILE:HG22	1:E:1038:ILE:O	2.02	0.59
1:E:1315:LEU:HB3	1:E:1320:ASN:HD22	1.67	0.59
1:E:1393:TYR:O	1:E:1394:VAL:CG2	2.44	0.59
1:E:1432:VAL:HG22	1:E:1440:ALA:HB3	1.83	0.59
1:F:782:ARG:CB	2:I:56:GLN:NE2	2.41	0.59
1:F:1420:TYR:OH	1:F:1466:LEU:HD22	2.03	0.59
2:G:68:TRP:CE3	2:G:84:SER:HB3	2.37	0.59
2:G:196:GLU:O	2:G:199:VAL:HB	2.03	0.59
2:G:212:VAL:HG22	2:G:214:TYR:CE1	2.38	0.59
2:G:360:THR:HG22	2:G:365:VAL:CG1	2.33	0.59
2:H:291:HIS:CE1	2:H:317:LYS:HB3	2.38	0.59
2:H:360:THR:HG22	2:H:365:VAL:CG1	2.33	0.59
2:I:220:VAL:HG22	8:I:484:FAD:C6A	2.29	0.59
2:I:383:ILE:CD1	2:I:386:SER:H	2.12	0.59
2:I:387:GLU:HG2	2:I:388:PHE:N	2.18	0.59
2:J:196:GLU:O	2:J:199:VAL:HB	2.03	0.59
2:J:203:ARG:HB3	2:J:203:ARG:NH1	2.17	0.59
2:J:283:GLY:O	2:J:284:SER:HB3	2.02	0.59
2:J:291:HIS:HE1	2:J:317:LYS:CB	2.16	0.59
2:K:277:VAL:HG12	2:K:279:ALA:H	1.68	0.59
2:K:316:VAL:CB	2:K:342:VAL:HG22	2.33	0.59
2:K:365:VAL:CG2	2:K:366:ARG:HG3	2.31	0.59
2:K:439:ALA:HB1	2:K:443:ILE:CD1	2.32	0.59
2:L:34:ARG:O	2:L:122:SER:HB2	2.03	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:68:TRP:HD1	2:L:69:LEU:N	2.01	0.59
2:L:383:ILE:HD12	2:L:386:SER:N	2.16	0.59
2:L:439:ALA:HB1	2:L:443:ILE:CD1	2.31	0.59
1:A:511:ILE:CG2	1:A:512:ASP:N	2.59	0.58
1:A:603:HIS:CA	1:A:640:THR:HG22	2.32	0.58
1:B:227:MET:HE2	1:B:282:GLU:HG2	1.84	0.58
1:B:390:MET:HG3	1:B:406:LEU:HD23	1.84	0.58
1:B:938:PRO:O	1:B:940:GLU:N	2.36	0.58
1:C:781:PHE:CE2	2:K:57:VAL:HG11	2.37	0.58
1:C:1432:VAL:HG22	1:C:1440:ALA:HB3	1.84	0.58
1:D:838:VAL:CG1	1:D:839:PRO:N	2.66	0.58
1:D:850:ARG:O	1:D:853:PHE:HB2	2.03	0.58
1:E:244:MET:O	1:E:246:ALA:N	2.36	0.58
1:E:295:LYS:HZ1	1:E:299:VAL:HG12	1.68	0.58
1:E:355:TYR:C	1:E:355:TYR:HD1	2.03	0.58
1:F:643:ASN:HB3	1:F:665:THR:HG21	1.85	0.58
2:G:153:ILE:HG12	2:G:220:VAL:CG2	2.33	0.58
2:G:432:THR:HG22	2:G:434:MET:N	2.15	0.58
2:H:286:ASN:HB2	2:H:311:GLN:HE22	1.68	0.58
2:H:295:LEU:CD2	2:H:319:LEU:HD13	2.32	0.58
2:H:316:VAL:CB	2:H:342:VAL:HG22	2.33	0.58
2:I:271:VAL:CG1	2:I:281:GLU:HG2	2.33	0.58
2:J:286:ASN:HB2	2:J:311:GLN:HE22	1.68	0.58
2:J:432:THR:HG22	2:J:434:MET:N	2.15	0.58
2:K:68:TRP:HD1	2:K:69:LEU:N	2.01	0.58
2:K:100:GLN:HA	2:K:100:GLN:NE2	2.17	0.58
2:K:189:GLY:O	2:K:265:LEU:HD13	2.03	0.58
2:K:207:LEU:O	2:K:210:ALA:HB3	2.02	0.58
2:K:291:HIS:HE1	2:K:317:LYS:HB3	1.67	0.58
2:K:361:GLY:O	2:K:362:VAL:HB	2.01	0.58
2:L:291:HIS:HD2	2:L:392:ALA:CB	2.16	0.58
2:L:360:THR:HG22	2:L:365:VAL:CG1	2.33	0.58
1:A:218:THR:HG22	1:A:221:LEU:H	1.69	0.58
1:A:447:LEU:HD13	1:A:670:LEU:CD2	2.33	0.58
1:A:918:THR:CG2	1:A:1256:MET:SD	2.91	0.58
1:B:643:ASN:HB3	1:B:665:THR:HG21	1.85	0.58
1:C:249:THR:CG2	1:C:250:ARG:HG2	2.31	0.58
1:C:1075:THR:CG2	1:C:1076:GLY:N	2.66	0.58
1:D:31:ARG:NH1	1:D:368:GLU:OE1	2.37	0.58
1:D:248:GLU:HA	1:D:251:MET:HG2	1.85	0.58
1:D:938:PRO:O	1:D:940:GLU:N	2.36	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1171:VAL:HG12	1:D:1171:VAL:O	2.02	0.58
1:D:1221:PRO:HD2	1:D:1229:MET:CE	2.26	0.58
1:E:330:PRO:HA	1:E:350:LEU:HB2	1.84	0.58
1:E:781:PHE:CE2	2:L:57:VAL:CG2	2.83	0.58
1:E:982:GLN:NE2	1:E:1240:ARG:HD2	2.16	0.58
2:G:207:LEU:O	2:G:210:ALA:HB3	2.02	0.58
2:H:166:LEU:CD2	2:H:461:ALA:HB1	2.31	0.58
2:H:256:GLY:O	2:H:257:ASN:HB2	2.01	0.58
2:I:291:HIS:CE1	2:I:317:LYS:HB3	2.38	0.58
2:I:291:HIS:HD2	2:I:392:ALA:CB	2.16	0.58
2:I:417:VAL:HG11	2:I:421:GLY:HA2	1.86	0.58
2:K:271:VAL:CG1	2:K:281:GLU:HG2	2.33	0.58
2:K:286:ASN:HB2	2:K:311:GLN:HE22	1.68	0.58
2:L:190:ILE:HG23	2:L:191:PRO:HD2	1.84	0.58
2:L:297:GLY:HA2	2:L:320:TYR:CE1	2.37	0.58
1:A:24:ALA:O	1:A:26:LYS:N	2.36	0.58
1:A:102:TYR:HA	1:A:136:ASN:OD1	2.04	0.58
1:B:31:ARG:NH1	1:B:368:GLU:OE1	2.37	0.58
1:C:145:GLU:O	1:C:146:LEU:C	2.41	0.58
1:C:244:MET:O	1:C:246:ALA:N	2.36	0.58
1:C:330:PRO:HA	1:C:350:LEU:HB2	1.84	0.58
1:C:466:HIS:CE1	1:C:684:PHE:CE1	2.91	0.58
1:C:914:ARG:NH2	1:C:973:ASP:OD1	2.35	0.58
1:C:1114:PRO:CG	2:K:109:VAL:O	2.51	0.58
1:C:1425:LYS:CD	1:C:1447:TRP:CE2	2.86	0.58
1:C:1442:GLU:CG	2:J:374:ALA:O	2.51	0.58
1:D:40:THR:HG22	1:D:40:THR:O	2.04	0.58
1:D:484:PRO:HG3	1:D:823:MET:HG3	1.85	0.58
1:D:551:THR:O	1:D:554:GLU:HG2	2.03	0.58
1:D:657:VAL:HG12	1:D:658:LEU:N	2.15	0.58
1:D:1420:TYR:OH	1:D:1466:LEU:HD22	2.03	0.58
1:E:115:ASP:OD2	1:F:1194:GLU:HB2	2.02	0.58
1:E:139:VAL:CG1	1:E:143:GLN:CB	2.81	0.58
1:E:531:ASN:O	1:E:533:LEU:N	2.37	0.58
1:E:607:THR:HB	1:E:645:ARG:HB2	1.84	0.58
1:E:894:PHE:CD2	1:E:924:GLN:HG3	2.39	0.58
1:F:589:ILE:HD12	1:F:627:VAL:HG23	1.85	0.58
1:F:838:VAL:CG1	1:F:839:PRO:N	2.66	0.58
2:G:34:ARG:O	2:G:122:SER:HB2	2.03	0.58
2:G:190:ILE:HG23	2:G:191:PRO:HD2	1.84	0.58
2:G:286:ASN:HB2	2:G:311:GLN:HE22	1.68	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:291:HIS:CE1	2:G:317:LYS:HB3	2.38	0.58
2:G:302:MET:HE1	2:G:334:VAL:N	2.19	0.58
2:G:449:LEU:HD23	2:G:452:TRP:CD2	2.38	0.58
2:H:387:GLU:HG2	2:H:388:PHE:N	2.17	0.58
2:H:430:LYS:HD2	2:H:460:ALA:HB2	1.82	0.58
2:I:34:ARG:O	2:I:122:SER:HB2	2.03	0.58
2:I:69:LEU:HD12	2:I:69:LEU:C	2.23	0.58
2:I:277:VAL:HG12	2:I:279:ALA:H	1.68	0.58
2:J:271:VAL:CG1	2:J:281:GLU:HG2	2.33	0.58
2:J:291:HIS:HD2	2:J:392:ALA:CB	2.16	0.58
2:K:37:ASP:OD1	2:K:38:GLU:HG2	2.03	0.58
2:K:178:ARG:HD3	2:K:219:GLU:OE1	2.04	0.58
2:K:429:THR:HG21	2:K:431:MET:HE2	1.85	0.58
2:L:153:ILE:HG12	2:L:220:VAL:CG2	2.34	0.58
1:A:359:THR:HG23	1:A:378:GLN:CA	2.33	0.58
1:A:466:HIS:CE1	1:A:684:PHE:CE1	2.91	0.58
1:A:570:ASP:OD1	1:A:572:THR:HB	2.04	0.58
1:A:823:MET:O	1:A:824:GLN:NE2	2.36	0.58
1:A:958:HIS:O	1:A:1369:THR:HG21	1.99	0.58
1:B:40:THR:HG22	1:B:40:THR:O	2.03	0.58
1:B:505:GLN:NE2	1:B:1000:LEU:CB	2.59	0.58
1:B:1420:TYR:OH	1:B:1466:LEU:HD22	2.02	0.58
1:C:218:THR:HG22	1:C:221:LEU:H	1.69	0.58
1:C:823:MET:O	1:C:824:GLN:NE2	2.36	0.58
1:C:876:ASN:HB3	1:E:1227:GLU:OE1	2.03	0.58
1:D:4:GLY:HA3	1:D:207:TYR:CZ	2.39	0.58
1:E:249:THR:HG22	1:E:250:ARG:HG2	1.85	0.58
1:E:914:ARG:NH2	1:E:973:ASP:OD1	2.36	0.58
1:E:1114:PRO:CG	2:L:109:VAL:O	2.51	0.58
1:F:193:PRO:O	1:F:194:ASP:C	2.40	0.58
1:F:303:LEU:HD11	1:F:314:LYS:HG2	1.85	0.58
1:F:1222:LEU:H	1:F:1229:MET:HE2	1.68	0.58
2:G:69:LEU:HD12	2:G:69:LEU:C	2.23	0.58
2:G:166:LEU:CD2	2:G:461:ALA:HB1	2.31	0.58
2:G:361:GLY:O	2:G:362:VAL:HB	2.01	0.58
2:H:302:MET:HE1	2:H:334:VAL:N	2.18	0.58
2:I:196:GLU:O	2:I:199:VAL:HB	2.03	0.58
2:I:212:VAL:HG22	2:I:214:TYR:CE1	2.38	0.58
2:J:277:VAL:HG12	2:J:279:ALA:H	1.68	0.58
2:J:297:GLY:HA2	2:J:320:TYR:CE1	2.37	0.58
2:J:302:MET:HE1	2:J:334:VAL:N	2.19	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:K:196:GLU:O	2:K:199:VAL:HB	2.03	0.58
2:L:71:LEU:CD1	2:L:80:ALA:H	2.17	0.58
2:L:77:LEU:HD21	2:L:126:TYR:CE2	2.38	0.58
2:L:178:ARG:HD3	2:L:219:GLU:OE1	2.04	0.58
1:A:913:GLY:O	1:A:915:PHE:N	2.35	0.58
1:B:4:GLY:HA3	1:B:207:TYR:CZ	2.39	0.58
1:B:782:ARG:HH21	2:G:51:GLY:HA3	0.69	0.58
1:B:1366:GLU:CG	1:B:1367:TYR:CD2	2.84	0.58
1:C:24:ALA:O	1:C:26:LYS:N	2.36	0.58
1:C:89:CYS:O	1:C:93:VAL:HG23	2.03	0.58
1:C:531:ASN:O	1:C:533:LEU:N	2.37	0.58
1:C:918:THR:CG2	1:C:1256:MET:SD	2.91	0.58
1:D:461:MET:HE1	1:D:465:LEU:HD23	1.85	0.58
1:D:573:PHE:HB2	1:D:574:PRO:HD2	1.85	0.58
1:D:838:VAL:O	1:D:1151:ALA:HB1	2.04	0.58
1:E:145:GLU:O	1:E:146:LEU:C	2.41	0.58
1:E:570:ASP:O	1:E:572:THR:N	2.37	0.58
1:E:1425:LYS:CD	1:E:1447:TRP:CE2	2.86	0.58
1:F:248:GLU:O	1:F:250:ARG:N	2.37	0.58
1:F:648:GLU:O	1:F:648:GLU:CG	2.51	0.58
1:F:660:GLY:HA2	1:F:721:GLY:H	1.68	0.58
1:F:1221:PRO:HB2	1:F:1229:MET:HE2	1.85	0.58
2:G:181:ARG:O	2:G:182:MET:HE3	2.03	0.58
2:H:167:ARG:HH21	2:H:170:GLY:HA2	1.67	0.58
2:H:238:VAL:CG2	2:H:439:ALA:HB2	2.33	0.58
2:H:361:GLY:O	2:H:362:VAL:HB	2.01	0.58
2:I:37:ASP:OD1	2:I:38:GLU:HG2	2.03	0.58
2:I:190:ILE:HG23	2:I:191:PRO:HD2	1.84	0.58
2:I:283:GLY:O	2:I:284:SER:HB3	2.02	0.58
2:I:297:GLY:HA2	2:I:320:TYR:CE1	2.38	0.58
2:J:100:GLN:HA	2:J:100:GLN:NE2	2.17	0.58
2:J:316:VAL:CB	2:J:342:VAL:HG22	2.33	0.58
2:J:365:VAL:CG2	2:J:366:ARG:HG3	2.31	0.58
2:K:360:THR:HG22	2:K:365:VAL:CG1	2.33	0.58
2:L:37:ASP:OD1	2:L:38:GLU:HG2	2.03	0.58
2:L:212:VAL:HG22	2:L:214:TYR:CE1	2.38	0.58
2:L:238:VAL:HG23	2:L:439:ALA:HA	1.84	0.58
1:A:5:PHE:O	1:A:365:GLY:N	2.34	0.58
1:A:56:LYS:O	1:A:57:ASP:C	2.42	0.58
1:A:139:VAL:CG1	1:A:143:GLN:HB2	2.32	0.58
1:A:244:MET:O	1:A:246:ALA:N	2.36	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1038:ILE:HG22	1:A:1038:ILE:O	2.02	0.58
1:A:1315:LEU:HB3	1:A:1320:ASN:HD22	1.67	0.58
1:B:353:MET:HE2	1:B:366:GLY:O	2.03	0.58
1:B:461:MET:HE1	1:B:465:LEU:HD23	1.85	0.58
1:B:660:GLY:HA2	1:B:721:GLY:H	1.68	0.58
1:B:782:ARG:N	2:G:52:VAL:CB	2.64	0.58
1:B:838:VAL:O	1:B:1151:ALA:HB1	2.04	0.58
1:B:1228:LYS:H	1:D:901:ASP:HA	1.69	0.58
1:C:139:VAL:CG1	1:C:143:GLN:HB2	2.32	0.58
1:C:208:HIS:ND1	1:C:223:GLN:OE1	2.35	0.58
1:C:570:ASP:O	1:C:572:THR:N	2.37	0.58
1:C:734:LEU:HD12	1:C:734:LEU:O	2.04	0.58
1:C:897:ASP:OD1	1:C:897:ASP:C	2.42	0.58
1:C:1356:VAL:HG11	1:C:1431:HIS:CG	2.38	0.58
1:C:1447:TRP:CD2	1:C:1451:VAL:CG2	2.87	0.58
1:D:570:ASP:O	1:D:588:ARG:NH2	2.34	0.58
1:D:643:ASN:HB3	1:D:665:THR:HG21	1.85	0.58
1:D:670:LEU:HD22	1:D:670:LEU:O	2.01	0.58
1:D:782:ARG:HB3	2:H:53:PRO:HD2	1.80	0.58
1:E:143:GLN:HE21	1:E:143:GLN:CA	2.14	0.58
1:E:746:ILE:C	1:E:747:SER:O	2.35	0.58
1:E:1442:GLU:CG	2:K:374:ALA:O	2.51	0.58
2:I:32:TYR:HE2	2:I:194:LYS:HB3	1.67	0.58
2:I:153:ILE:HG12	2:I:220:VAL:CG2	2.33	0.58
2:I:189:GLY:O	2:I:265:LEU:HD13	2.03	0.58
2:J:288:ALA:HB3	2:J:311:GLN:HG3	1.85	0.58
2:K:153:ILE:HG12	2:K:220:VAL:CG2	2.33	0.58
2:L:175:VAL:HG12	2:L:213:ILE:O	2.04	0.58
1:B:850:ARG:O	1:B:853:PHE:HB2	2.03	0.58
1:B:958:HIS:O	1:B:1369:THR:CG2	2.51	0.58
1:C:76:VAL:HG13	1:C:129:GLU:O	2.04	0.58
1:C:558:MET:O	1:C:560:ASP:N	2.36	0.58
1:C:575:VAL:HG13	1:C:759:LEU:HD22	1.84	0.58
1:D:193:PRO:O	1:D:194:ASP:C	2.40	0.58
1:D:248:GLU:O	1:D:250:ARG:N	2.37	0.58
1:D:780:ARG:HB3	2:H:51:GLY:C	2.24	0.58
1:D:947:PHE:O	1:D:947:PHE:CD1	2.56	0.58
1:E:89:CYS:O	1:E:93:VAL:HG23	2.03	0.58
1:E:1131:THR:HB	1:E:1134:LYS:CG	2.32	0.58
1:E:1251:THR:OG1	1:E:1281:VAL:HG11	2.04	0.58
1:E:1356:VAL:HG11	1:E:1431:HIS:CG	2.38	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:78:LEU:HB3	1:F:79:PRO:HD2	1.86	0.58
1:F:551:THR:O	1:F:554:GLU:HG2	2.03	0.58
1:F:780:ARG:HB3	2:I:51:GLY:C	2.24	0.58
1:F:938:PRO:O	1:F:939:GLY:C	2.35	0.58
2:G:114:THR:HG23	2:G:115:HIS:H	1.69	0.58
2:G:175:VAL:HG12	2:G:213:ILE:O	2.04	0.58
2:G:271:VAL:CG1	2:G:281:GLU:HG2	2.33	0.58
2:G:288:ALA:HB3	2:G:311:GLN:HG3	1.85	0.58
2:H:114:THR:HG23	2:H:115:HIS:H	1.69	0.58
2:I:71:LEU:CD1	2:I:80:ALA:H	2.17	0.58
2:I:257:ASN:ND2	2:I:394:LEU:HA	2.19	0.58
2:I:286:ASN:HB2	2:I:311:GLN:HE22	1.68	0.58
2:J:387:GLU:HG2	2:J:388:PHE:N	2.17	0.58
2:J:417:VAL:HG11	2:J:421:GLY:HA2	1.85	0.58
2:K:257:ASN:ND2	2:K:394:LEU:HA	2.19	0.58
2:K:420:TRP:HB2	2:K:422:THR:CG2	2.33	0.58
1:A:76:VAL:HG13	1:A:129:GLU:O	2.04	0.58
1:A:251:MET:SD	1:A:532:ILE:HD11	2.44	0.58
1:A:345:MET:CE	1:A:385:LEU:CB	2.81	0.58
1:A:515:ARG:NE	1:A:1367:TYR:HE1	1.99	0.58
1:A:607:THR:HB	1:A:645:ARG:HB2	1.84	0.58
1:A:695:ASN:O	1:A:696:TYR:C	2.37	0.58
1:A:1131:THR:HB	1:A:1134:LYS:CG	2.32	0.58
1:A:1221:PRO:CG	1:A:1229:MET:HE1	2.34	0.58
1:A:1227:GLU:OE1	1:E:876:ASN:HB3	2.04	0.58
1:B:845:SER:O	1:B:848:ALA:HB3	2.04	0.58
1:C:102:TYR:HA	1:C:136:ASN:OD1	2.04	0.58
1:C:570:ASP:OD1	1:C:572:THR:HB	2.04	0.58
1:D:660:GLY:HA2	1:D:721:GLY:H	1.68	0.58
1:E:177:ILE:CD1	1:E:179:TYR:HE1	2.17	0.58
2:H:99:PRO:HD2	2:H:449:LEU:CD1	2.34	0.58
2:H:207:LEU:HD12	2:H:207:LEU:C	2.24	0.58
2:H:420:TRP:HB2	2:H:422:THR:CG2	2.33	0.58
2:H:447:ALA:HB1	2:H:452:TRP:HE3	1.65	0.58
2:I:295:LEU:CD2	2:I:319:LEU:HD13	2.32	0.58
2:I:316:VAL:CB	2:I:342:VAL:HG22	2.33	0.58
2:J:34:ARG:O	2:J:122:SER:HB2	2.03	0.58
2:J:68:TRP:HD1	2:J:69:LEU:N	2.01	0.58
2:J:212:VAL:HG22	2:J:214:TYR:CE1	2.38	0.58
2:L:257:ASN:HD22	2:L:364:ALA:HB3	1.67	0.58
2:L:286:ASN:HB2	2:L:311:GLN:HE22	1.68	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:291:HIS:HE1	2:L:317:LYS:CB	2.16	0.58
2:L:361:GLY:O	2:L:362:VAL:HB	2.01	0.58
2:L:449:LEU:HD23	2:L:452:TRP:CD2	2.38	0.58
1:A:61:VAL:CG1	1:A:61:VAL:O	2.51	0.58
1:A:143:GLN:HE21	1:A:143:GLN:CA	2.14	0.58
1:A:582:LEU:HB3	1:A:755:GLN:HE21	1.69	0.58
1:A:826:ARG:HH11	1:A:826:ARG:CG	1.97	0.58
1:A:894:PHE:CD2	1:A:924:GLN:HG3	2.39	0.58
1:A:1356:VAL:HG11	1:A:1431:HIS:CG	2.38	0.58
1:A:1375:ILE:HG22	1:A:1375:ILE:O	2.02	0.58
1:B:113:ASN:HD21	1:B:115:ASP:H	1.47	0.58
1:B:551:THR:O	1:B:554:GLU:HG2	2.03	0.58
1:B:838:VAL:CG1	1:B:839:PRO:N	2.66	0.58
1:C:782:ARG:CB	2:K:52:VAL:HA	2.26	0.58
1:C:982:GLN:NE2	1:C:1240:ARG:HD2	2.16	0.58
1:C:1038:ILE:HG22	1:C:1038:ILE:O	2.02	0.58
1:C:1388:THR:O	1:C:1388:THR:HG23	2.01	0.58
1:D:1222:LEU:H	1:D:1229:MET:HE2	1.68	0.58
1:E:296:MET:O	1:E:297:MET:C	2.40	0.58
1:E:558:MET:O	1:E:560:ASP:N	2.36	0.58
1:F:40:THR:HG22	1:F:40:THR:O	2.03	0.58
2:G:32:TYR:HE2	2:G:194:LYS:HB3	1.67	0.58
2:G:49:GLN:OE1	2:G:66:PRO:HA	2.04	0.58
2:G:71:LEU:CD1	2:G:80:ALA:H	2.17	0.58
2:G:77:LEU:HD22	2:G:130:THR:OG1	2.04	0.58
2:G:99:PRO:HD2	2:G:449:LEU:CD1	2.34	0.58
2:H:49:GLN:OE1	2:H:66:PRO:HA	2.04	0.58
2:H:90:PHE:HB3	2:H:93:ILE:HG22	1.86	0.58
2:H:418:THR:HG22	2:H:422:THR:O	2.04	0.58
2:I:108:CYS:SG	2:I:118:VAL:HG22	2.44	0.58
2:I:238:VAL:CG2	2:I:439:ALA:HB2	2.33	0.58
2:I:420:TRP:HB2	2:I:422:THR:CG2	2.33	0.58
2:K:220:VAL:HG22	8:K:484:FAD:C6A	2.29	0.58
2:K:387:GLU:HG2	2:K:388:PHE:N	2.18	0.58
1:A:45:GLY:HA3	1:A:224:PRO:HD2	1.85	0.58
1:A:249:THR:HG22	1:A:250:ARG:HG2	1.85	0.58
1:A:296:MET:O	1:A:297:MET:C	2.40	0.58
1:A:330:PRO:HA	1:A:350:LEU:HB2	1.84	0.58
1:A:419:TRP:O	1:A:422:ASN:HB2	2.04	0.58
1:A:531:ASN:O	1:A:533:LEU:N	2.37	0.58
1:A:570:ASP:O	1:A:572:THR:N	2.37	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:625:GLY:O	1:A:626:ALA:C	2.42	0.58
1:A:1447:TRP:CD2	1:A:1451:VAL:CG2	2.87	0.58
1:B:248:GLU:O	1:B:250:ARG:N	2.37	0.58
1:B:1220:ARG:N	1:B:1221:PRO:CD	2.67	0.58
1:C:369:THR:HG23	1:C:370:GLY:N	2.17	0.58
1:C:582:LEU:O	1:C:585:ALA:HB3	2.03	0.58
1:C:1375:ILE:HG22	1:C:1375:ILE:O	2.02	0.58
1:C:1449:ARG:NH1	1:C:1449:ARG:CB	2.14	0.58
1:D:266:VAL:O	1:D:279:THR:HG21	2.01	0.58
1:D:1368:MET:HB3	1:D:1387:MET:HG3	1.86	0.58
1:E:236:THR:HG23	1:E:240:ASN:HD21	1.69	0.58
1:E:547:SER:C	1:E:549:VAL:H	2.05	0.58
1:E:782:ARG:NE	2:L:53:PRO:CD	2.60	0.58
1:E:1285:LYS:HA	1:E:1304:THR:O	2.04	0.58
1:E:1447:TRP:CD2	1:E:1451:VAL:CG2	2.87	0.58
1:F:248:GLU:HA	1:F:251:MET:HG2	1.85	0.58
1:F:484:PRO:HG3	1:F:823:MET:HG3	1.85	0.58
1:F:573:PHE:HB2	1:F:574:PRO:HD2	1.85	0.58
1:F:594:GLU:OE1	1:F:598:ARG:NH2	2.34	0.58
1:F:757:LYS:HE2	1:F:1176:GLU:OE2	2.04	0.58
1:F:845:SER:O	1:F:848:ALA:HB3	2.04	0.58
1:F:997:THR:HG22	1:F:998:VAL:N	2.19	0.58
1:F:1368:MET:HB3	1:F:1387:MET:HG3	1.86	0.58
2:G:271:VAL:CG2	2:G:285:LEU:HG	2.31	0.58
2:H:37:ASP:OD1	2:H:38:GLU:HG2	2.03	0.58
2:H:77:LEU:HD22	2:H:130:THR:OG1	2.04	0.58
2:H:175:VAL:HG12	2:H:213:ILE:O	2.04	0.58
2:H:189:GLY:O	2:H:265:LEU:HD13	2.03	0.58
2:I:178:ARG:HD3	2:I:219:GLU:OE1	2.04	0.58
2:I:257:ASN:HD22	2:I:364:ALA:HB3	1.67	0.58
2:J:69:LEU:HD12	2:J:69:LEU:C	2.23	0.58
2:J:257:ASN:ND2	2:J:394:LEU:HA	2.19	0.58
2:J:420:TRP:HB2	2:J:422:THR:CG2	2.33	0.58
2:K:34:ARG:O	2:K:122:SER:HB2	2.03	0.58
2:K:108:CYS:SG	2:K:118:VAL:HG22	2.44	0.58
2:L:271:VAL:CG1	2:L:281:GLU:HG2	2.33	0.58
2:L:417:VAL:HG11	2:L:421:GLY:HA2	1.86	0.58
1:A:227:MET:HE2	1:A:282:GLU:HG2	1.85	0.57
1:A:319:TYR:O	1:A:322:SER:OG	2.17	0.57
1:A:780:ARG:NH1	2:J:50:CYS:CB	2.56	0.57
1:A:1282:GLN:CA	1:A:1302:GLY:O	2.52	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1442:GLU:CG	2:L:374:ALA:O	2.51	0.57
1:B:227:MET:HE2	1:B:282:GLU:CG	2.34	0.57
1:B:607:THR:HB	1:B:645:ARG:HB2	1.86	0.57
1:B:869:GLY:O	1:B:873:VAL:HG23	2.03	0.57
1:B:1318:ASN:H	1:B:1318:ASN:ND2	2.01	0.57
1:C:319:TYR:O	1:C:322:SER:OG	2.17	0.57
1:C:494:GLY:O	1:C:495:LEU:C	2.42	0.57
1:C:582:LEU:HB3	1:C:755:GLN:HE21	1.69	0.57
1:C:746:ILE:HG23	1:C:1182:ASP:CB	2.29	0.57
1:D:589:ILE:HD12	1:D:627:VAL:HG23	1.85	0.57
1:D:1220:ARG:N	1:D:1221:PRO:CD	2.67	0.57
1:D:1247:SER:OG	1:D:1280:ALA:HA	2.05	0.57
1:D:1291:ASP:OD1	1:D:1291:ASP:C	2.42	0.57
1:D:1442:GLU:HA	2:I:373:ASP:OD2	2.04	0.57
1:E:223:GLN:HB3	1:E:224:PRO:HA	1.85	0.57
1:E:236:THR:HG23	1:E:240:ASN:ND2	2.19	0.57
1:E:260:MET:O	1:E:263:LEU:CB	2.52	0.57
1:E:582:LEU:HB3	1:E:755:GLN:HE21	1.69	0.57
1:E:663:ALA:O	1:E:720:ARG:NE	2.36	0.57
1:F:113:ASN:HD21	1:F:115:ASP:H	1.47	0.57
1:F:528:ASN:HB2	1:F:542:LEU:HD22	1.85	0.57
1:F:838:VAL:O	1:F:1151:ALA:HB1	2.04	0.57
2:G:138:LYS:HE3	2:G:164:GLU:OE2	2.04	0.57
2:G:305:VAL:HG11	2:G:342:VAL:HG21	1.82	0.57
2:H:271:VAL:CG1	2:H:281:GLU:HG2	2.33	0.57
2:J:37:ASP:OD1	2:J:38:GLU:HG2	2.03	0.57
2:J:49:GLN:OE1	2:J:66:PRO:HA	2.04	0.57
2:J:132:TRP:HD1	2:J:202:ARG:CD	2.17	0.57
2:J:238:VAL:CG2	2:J:439:ALA:HB2	2.33	0.57
2:K:99:PRO:HD2	2:K:449:LEU:CD1	2.34	0.57
2:K:321:ARG:HD3	2:K:322:ARG:HB2	1.86	0.57
2:L:99:PRO:HD2	2:L:449:LEU:CD1	2.34	0.57
2:L:138:LYS:HE3	2:L:164:GLU:OE2	2.04	0.57
2:L:365:VAL:CG2	2:L:366:ARG:HG3	2.31	0.57
1:A:139:VAL:CG1	1:A:143:GLN:CB	2.81	0.57
1:A:1008:THR:HG22	1:A:1009:ILE:H	1.64	0.57
1:A:1114:PRO:CG	2:J:109:VAL:O	2.51	0.57
1:B:78:LEU:HB3	1:B:79:PRO:HD2	1.86	0.57
1:B:1109:HIS:ND1	1:B:1109:HIS:N	2.44	0.57
1:C:57:ASP:O	1:C:58:HIS:C	2.41	0.57
1:C:260:MET:O	1:C:263:LEU:CB	2.52	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:457:THR:O	1:C:460:ASP:HB2	2.04	0.57
1:C:1446:ASP:O	1:C:1447:TRP:C	2.42	0.57
1:D:1:CYS:SG	1:D:211:TYR:HB2	2.45	0.57
1:D:648:GLU:O	1:D:648:GLU:CG	2.51	0.57
1:E:76:VAL:HG13	1:E:129:GLU:O	2.04	0.57
1:E:447:LEU:HD12	1:E:447:LEU:O	2.04	0.57
1:E:897:ASP:OD1	1:E:897:ASP:C	2.42	0.57
1:E:957:ARG:HD2	1:E:965:LEU:HD12	1.87	0.57
1:F:1055:VAL:O	1:F:1056:LEU:C	2.41	0.57
2:G:37:ASP:OD1	2:G:38:GLU:HG2	2.03	0.57
2:G:277:VAL:HG12	2:G:279:ALA:H	1.68	0.57
2:G:291:HIS:HD2	2:G:392:ALA:CB	2.16	0.57
2:H:34:ARG:O	2:H:122:SER:HB2	2.03	0.57
2:H:68:TRP:HD1	2:H:69:LEU:N	2.01	0.57
2:H:288:ALA:HB3	2:H:311:GLN:HG3	1.85	0.57
2:I:138:LYS:HE3	2:I:164:GLU:OE2	2.04	0.57
2:I:291:HIS:HE1	2:I:317:LYS:CB	2.16	0.57
2:K:138:LYS:HE3	2:K:164:GLU:OE2	2.04	0.57
2:K:418:THR:HG22	2:K:422:THR:O	2.04	0.57
2:K:447:ALA:HB1	2:K:452:TRP:HE3	1.65	0.57
2:L:108:CYS:SG	2:L:118:VAL:HG22	2.44	0.57
2:L:288:ALA:HB3	2:L:311:GLN:HG3	1.85	0.57
1:A:223:GLN:HB3	1:A:224:PRO:HA	1.85	0.57
1:A:606:LEU:C	1:A:607:THR:HG22	2.24	0.57
1:A:897:ASP:OD1	1:A:897:ASP:C	2.42	0.57
1:A:1212:ASP:CG	1:A:1243:GLY:H	2.07	0.57
1:A:1374:VAL:O	1:A:1375:ILE:HG12	2.01	0.57
1:B:780:ARG:HB3	2:G:51:GLY:C	2.24	0.57
1:B:1052:VAL:O	1:B:1053:HIS:C	2.38	0.57
1:B:1251:THR:OG1	1:B:1281:VAL:HG11	2.05	0.57
1:C:250:ARG:NH1	1:C:530:GLY:HA2	2.20	0.57
1:C:625:GLY:O	1:C:626:ALA:C	2.42	0.57
1:C:876:ASN:CB	1:E:1227:GLU:CD	2.73	0.57
1:C:876:ASN:CB	1:E:1227:GLU:OE2	2.52	0.57
1:C:894:PHE:CD2	1:C:924:GLN:HG3	2.39	0.57
1:C:1285:LYS:HA	1:C:1304:THR:O	2.04	0.57
1:D:52:GLN:NE2	1:D:71:LEU:HB2	2.17	0.57
1:D:236:THR:HG22	1:D:328:ASP:H	1.62	0.57
1:D:757:LYS:HE2	1:D:1176:GLU:OE2	2.04	0.57
1:D:845:SER:O	1:D:848:ALA:HB3	2.04	0.57
1:D:1121:ASP:OD1	1:D:1121:ASP:C	2.42	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1251:THR:OG1	1:D:1281:VAL:HG11	2.05	0.57
1:E:218:THR:HG22	1:E:221:LEU:H	1.69	0.57
1:E:419:TRP:O	1:E:422:ASN:HB2	2.04	0.57
1:E:1282:GLN:CA	1:E:1302:GLY:O	2.52	0.57
1:F:4:GLY:HA3	1:F:207:TYR:CZ	2.39	0.57
1:F:37:ASP:OD1	1:F:38:GLY:N	2.38	0.57
1:F:526:LEU:HD12	1:F:526:LEU:H	1.66	0.57
1:F:666:VAL:HG12	1:F:667:ASN:N	2.19	0.57
1:F:693:MET:HA	1:F:693:MET:HE3	1.85	0.57
1:F:731:SER:N	1:F:748:GLY:H	2.02	0.57
1:F:782:ARG:NE	2:I:53:PRO:HD3	2.17	0.57
2:H:108:CYS:SG	2:H:118:VAL:HG22	2.44	0.57
2:I:99:PRO:HD2	2:I:449:LEU:CD1	2.34	0.57
2:I:132:TRP:HD1	2:I:202:ARG:CD	2.17	0.57
2:I:360:THR:HG22	2:I:365:VAL:CG1	2.33	0.57
2:J:418:THR:HG22	2:J:422:THR:O	2.04	0.57
2:K:291:HIS:HD2	2:K:392:ALA:CB	2.16	0.57
2:K:417:VAL:HG11	2:K:421:GLY:HA2	1.86	0.57
2:L:114:THR:HG23	2:L:115:HIS:H	1.69	0.57
1:A:260:MET:O	1:A:263:LEU:CB	2.52	0.57
1:A:582:LEU:O	1:A:585:ALA:HB3	2.03	0.57
1:A:652:THR:CG2	1:A:703:GLY:HA3	2.35	0.57
1:A:876:ASN:CB	1:C:1227:GLU:OE2	2.52	0.57
1:B:387:PRO:CD	1:B:1344:GLU:OE2	2.47	0.57
1:B:648:GLU:O	1:B:648:GLU:CG	2.51	0.57
1:B:739:PHE:C	1:B:740:PRO:O	2.43	0.57
1:B:757:LYS:HE2	1:B:1176:GLU:OE2	2.04	0.57
1:C:56:LYS:O	1:C:57:ASP:C	2.42	0.57
1:C:447:LEU:HD12	1:C:447:LEU:O	2.04	0.57
1:C:515:ARG:NE	1:C:1367:TYR:HE1	1.99	0.57
1:C:1282:GLN:CA	1:C:1302:GLY:O	2.52	0.57
1:D:295:LYS:HE2	1:D:299:VAL:CG1	2.35	0.57
1:D:537:GLU:HG3	1:D:538:THR:N	2.08	0.57
1:D:1055:VAL:O	1:D:1056:LEU:C	2.41	0.57
1:E:102:TYR:HA	1:E:136:ASN:OD1	2.04	0.57
1:E:250:ARG:NH1	1:E:530:GLY:HA2	2.20	0.57
1:E:582:LEU:O	1:E:585:ALA:HB3	2.03	0.57
1:F:31:ARG:NH1	1:F:368:GLU:OE1	2.37	0.57
1:F:1274:GLN:NE2	1:F:1293:ASN:HB3	2.17	0.57
1:F:1291:ASP:OD1	1:F:1291:ASP:C	2.42	0.57
2:H:43:GLN:CD	2:H:119:THR:HG23	2.25	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:153:ILE:HG12	2:H:220:VAL:CG2	2.34	0.57
2:H:291:HIS:HD2	2:H:392:ALA:CB	2.16	0.57
2:I:114:THR:HG23	2:I:115:HIS:H	1.69	0.57
2:J:71:LEU:CD1	2:J:80:ALA:H	2.17	0.57
2:J:321:ARG:HB2	2:J:351:GLU:CB	2.35	0.57
2:K:43:GLN:CD	2:K:119:THR:HG23	2.25	0.57
2:K:430:LYS:HD2	2:K:460:ALA:HB2	1.82	0.57
2:K:430:LYS:CE	2:K:440:ALA:HB2	2.32	0.57
2:K:449:LEU:HD11	2:K:451:VAL:CG1	2.31	0.57
1:A:457:THR:O	1:A:460:ASP:HB2	2.04	0.57
1:A:893:ARG:HG2	1:A:903:TRP:HB2	1.85	0.57
1:A:950:THR:CG2	1:A:952:MET:H	2.15	0.57
1:B:1:CYS:SG	1:B:211:TYR:HB2	2.45	0.57
1:B:997:THR:HG22	1:B:998:VAL:N	2.19	0.57
1:B:1336:LEU:HB3	1:B:1355:VAL:HG13	1.84	0.57
1:C:139:VAL:HG12	1:C:143:GLN:HB2	1.87	0.57
1:C:236:THR:HG23	1:C:240:ASN:HD21	1.69	0.57
1:C:293:MET:HG2	1:C:410:LEU:CD2	2.35	0.57
1:C:606:LEU:C	1:C:607:THR:HG22	2.24	0.57
1:C:1251:THR:OG1	1:C:1281:VAL:HG11	2.04	0.57
1:D:116:ILE:HD13	1:D:190:THR:CG2	2.35	0.57
1:D:1228:LYS:H	1:F:901:ASP:HA	1.69	0.57
1:D:1366:GLU:CG	1:D:1367:TYR:CD2	2.84	0.57
1:D:1438:ARG:NE	2:I:376:GLY:C	2.29	0.57
1:E:251:MET:SD	1:E:532:ILE:HD11	2.44	0.57
1:E:606:LEU:C	1:E:607:THR:HG22	2.24	0.57
1:E:1446:ASP:O	1:E:1447:TRP:C	2.41	0.57
1:F:235:ASN:ND2	1:F:328:ASP:O	2.38	0.57
1:F:513:SER:CB	1:F:520:MET:HE1	2.23	0.57
2:G:178:ARG:HD3	2:G:219:GLU:OE1	2.04	0.57
2:H:132:TRP:HD1	2:H:202:ARG:CD	2.17	0.57
2:I:100:GLN:HA	2:I:100:GLN:NE2	2.17	0.57
2:I:321:ARG:HB2	2:I:351:GLU:CB	2.35	0.57
2:I:365:VAL:CG2	2:I:366:ARG:HG3	2.31	0.57
2:I:416:LYS:HZ2	2:I:416:LYS:HB2	1.69	0.57
2:J:100:GLN:C	2:J:105:GLU:HG2	2.25	0.57
2:J:153:ILE:HG12	2:J:220:VAL:CG2	2.33	0.57
2:K:71:LEU:CD1	2:K:80:ALA:H	2.17	0.57
2:K:100:GLN:C	2:K:105:GLU:HG2	2.25	0.57
2:K:175:VAL:HG12	2:K:213:ILE:O	2.04	0.57
2:K:190:ILE:HG23	2:K:191:PRO:HD2	1.84	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:49:GLN:OE1	2:L:66:PRO:HA	2.04	0.57
2:L:77:LEU:HD22	2:L:130:THR:OG1	2.04	0.57
1:A:89:CYS:O	1:A:93:VAL:HG23	2.03	0.57
1:A:558:MET:O	1:A:560:ASP:N	2.36	0.57
1:B:484:PRO:HG3	1:B:823:MET:HG3	1.85	0.57
1:B:731:SER:N	1:B:748:GLY:H	2.02	0.57
1:B:1122:ASP:O	1:B:1126:GLN:HG3	2.05	0.57
1:C:102:TYR:CE2	1:C:144:PHE:CD1	2.93	0.57
1:C:957:ARG:HD2	1:C:965:LEU:HD12	1.87	0.57
1:D:80:ARG:HD3	1:D:125:ARG:O	2.05	0.57
1:D:607:THR:HB	1:D:645:ARG:HB2	1.86	0.57
1:D:918:THR:O	1:D:919:ALA:C	2.43	0.57
1:D:997:THR:HG22	1:D:998:VAL:N	2.19	0.57
1:E:734:LEU:HD12	1:E:734:LEU:O	2.04	0.57
1:F:1009:ILE:O	1:F:1010:ALA:C	2.37	0.57
1:F:1210:THR:HG22	1:F:1211:LEU:N	2.09	0.57
1:F:1220:ARG:N	1:F:1221:PRO:CD	2.67	0.57
2:G:304:CYS:O	2:G:307:THR:HG23	2.05	0.57
2:H:100:GLN:C	2:H:105:GLU:HG2	2.25	0.57
2:H:110:ILE:HB	2:H:115:HIS:CE1	2.40	0.57
2:H:178:ARG:HD3	2:H:219:GLU:OE1	2.04	0.57
2:I:175:VAL:HG12	2:I:213:ILE:O	2.04	0.57
2:I:302:MET:HE1	2:I:333:GLU:HG3	1.85	0.57
2:J:114:THR:HG23	2:J:115:HIS:H	1.69	0.57
2:J:138:LYS:HE3	2:J:164:GLU:OE2	2.04	0.57
2:J:178:ARG:HD3	2:J:219:GLU:OE1	2.04	0.57
2:K:64:ASN:ND2	2:K:67:ASP:HB2	2.20	0.57
2:K:77:LEU:HD22	2:K:130:THR:OG1	2.04	0.57
2:L:64:ASN:ND2	2:L:67:ASP:HB2	2.20	0.57
2:L:291:HIS:CE1	2:L:317:LYS:HB3	2.38	0.57
2:L:321:ARG:HD3	2:L:322:ARG:HB2	1.86	0.57
1:A:250:ARG:NH1	1:A:530:GLY:HA2	2.20	0.57
1:A:876:ASN:CB	1:C:1227:GLU:CD	2.73	0.57
1:A:1388:THR:O	1:A:1388:THR:HG23	2.01	0.57
1:A:1446:ASP:O	1:A:1447:TRP:C	2.42	0.57
1:B:235:ASN:ND2	1:B:328:ASP:O	2.38	0.57
1:B:295:LYS:HZ3	1:B:299:VAL:HG12	1.69	0.57
1:B:797:THR:HG21	1:B:812:LYS:HG2	1.86	0.57
1:C:652:THR:CG2	1:C:703:GLY:HA3	2.34	0.57
1:C:706:LYS:O	1:C:707:ILE:C	2.43	0.57
1:C:787:ARG:HH12	1:C:821:PRO:CB	2.17	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:782:ARG:HH21	2:H:51:GLY:HA3	0.69	0.57
1:E:61:VAL:CG1	1:E:61:VAL:O	2.51	0.57
1:E:494:GLY:O	1:E:495:LEU:C	2.42	0.57
1:E:652:THR:CG2	1:E:703:GLY:HA3	2.35	0.57
1:E:838:VAL:HG12	1:E:839:PRO:CD	2.32	0.57
1:E:1288:VAL:HG12	1:E:1288:VAL:O	2.05	0.57
1:F:607:THR:HB	1:F:645:ARG:HB2	1.86	0.57
1:F:823:MET:O	1:F:824:GLN:NE2	2.37	0.57
1:F:1366:GLU:CG	1:F:1367:TYR:CD2	2.84	0.57
1:F:1442:GLU:HA	2:G:373:ASP:OD2	2.04	0.57
2:G:108:CYS:SG	2:G:118:VAL:HG22	2.44	0.57
2:G:320:TYR:CD2	2:G:346:TRP:CD2	2.92	0.57
2:H:71:LEU:CD1	2:H:80:ALA:H	2.17	0.57
2:H:320:TYR:CD2	2:H:346:TRP:CD2	2.93	0.57
2:H:321:ARG:HD3	2:H:322:ARG:HB2	1.86	0.57
2:I:89:ASN:OD1	2:I:164:GLU:HB3	2.05	0.57
2:J:89:ASN:OD1	2:J:164:GLU:HB3	2.05	0.57
2:J:108:CYS:SG	2:J:118:VAL:HG22	2.44	0.57
2:K:90:PHE:HB3	2:K:93:ILE:HG22	1.86	0.57
2:K:110:ILE:HB	2:K:115:HIS:CE1	2.40	0.57
2:K:207:LEU:HD12	2:K:207:LEU:C	2.24	0.57
2:K:302:MET:HE1	2:K:334:VAL:N	2.20	0.57
2:L:89:ASN:OD1	2:L:164:GLU:HB3	2.05	0.57
1:A:560:ASP:O	1:A:562:MET:N	2.38	0.57
1:A:1285:LYS:HA	1:A:1304:THR:O	2.04	0.57
1:B:594:GLU:OE1	1:B:598:ARG:NH2	2.34	0.57
1:B:1442:GLU:HA	2:H:373:ASP:OD2	2.04	0.57
1:C:246:ALA:O	1:C:247:HIS:C	2.42	0.57
1:C:251:MET:SD	1:C:532:ILE:HD11	2.44	0.57
1:C:547:SER:C	1:C:549:VAL:N	2.58	0.57
1:C:551:THR:HG23	1:C:554:GLU:OE2	2.05	0.57
1:C:560:ASP:O	1:C:562:MET:N	2.38	0.57
1:C:894:PHE:CE2	1:C:924:GLN:HG3	2.40	0.57
1:D:572:THR:HG23	1:D:573:PHE:N	2.16	0.57
1:E:45:GLY:HA3	1:E:224:PRO:HD2	1.85	0.57
1:E:102:TYR:CE2	1:E:144:PHE:CD1	2.93	0.57
1:E:562:MET:HE3	1:E:566:ALA:HB2	1.85	0.57
1:F:446:GLU:O	1:F:447:LEU:C	2.40	0.57
1:F:950:THR:HG23	1:F:951:GLU:H	1.69	0.57
2:H:277:VAL:HG12	2:H:279:ALA:H	1.68	0.57
2:H:417:VAL:HG11	2:H:421:GLY:HA2	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:430:LYS:CE	2:H:440:ALA:HB2	2.32	0.57
2:H:432:THR:HG22	2:H:434:MET:N	2.15	0.57
2:J:99:PRO:HD2	2:J:449:LEU:CD1	2.34	0.57
2:J:320:TYR:CD2	2:J:346:TRP:CD2	2.92	0.57
1:A:957:ARG:HD2	1:A:965:LEU:HD12	1.87	0.57
1:A:1075:THR:CG2	1:A:1076:GLY:N	2.66	0.57
1:B:589:ILE:HD12	1:B:627:VAL:HG23	1.85	0.57
1:B:1121:ASP:OD1	1:B:1121:ASP:C	2.42	0.57
1:B:1131:THR:CG2	1:B:1133:GLU:OE1	2.42	0.57
1:B:1438:ARG:NE	2:H:376:GLY:C	2.29	0.57
1:C:857:GLY:HA2	1:C:883:ASP:O	2.05	0.57
1:D:211:TYR:O	1:D:212:SER:HB3	2.04	0.57
1:D:777:GLY:O	1:D:788:HIS:CE1	2.51	0.57
1:E:57:ASP:O	1:E:58:HIS:C	2.41	0.57
1:E:291:ALA:HB3	1:E:292:PRO:CD	2.27	0.57
1:E:293:MET:HG2	1:E:410:LEU:CD2	2.35	0.57
1:E:457:THR:O	1:E:460:ASP:HB2	2.04	0.57
1:E:913:GLY:O	1:E:915:PHE:N	2.35	0.57
1:E:1335:LYS:HA	1:E:1354:THR:O	2.05	0.57
1:F:116:ILE:HD13	1:F:190:THR:CG2	2.35	0.57
1:F:797:THR:HG21	1:F:812:LYS:HG2	1.86	0.57
2:G:64:ASN:ND2	2:G:67:ASP:HB2	2.20	0.57
2:G:321:ARG:HB2	2:G:351:GLU:CB	2.35	0.57
2:G:366:ARG:NE	2:G:391:GLN:HG2	2.14	0.57
2:H:181:ARG:O	2:H:182:MET:HE3	2.04	0.57
2:I:321:ARG:O	2:I:351:GLU:HA	2.05	0.57
2:I:440:ALA:HB1	2:I:456:ASP:HB2	1.85	0.57
2:J:77:LEU:HD22	2:J:130:THR:OG1	2.04	0.57
2:J:110:ILE:HB	2:J:115:HIS:CE1	2.40	0.57
2:K:114:THR:HG23	2:K:115:HIS:H	1.69	0.57
2:K:432:THR:HG22	2:K:434:MET:N	2.15	0.57
1:A:149:TYR:O	1:A:150:ILE:C	2.42	0.57
1:A:447:LEU:HD12	1:A:447:LEU:O	2.04	0.57
1:A:781:PHE:CE2	2:J:57:VAL:CG2	2.82	0.57
1:A:825:LEU:HD12	1:A:1186:ARG:NH1	2.13	0.57
1:A:902:ASN:CA	1:C:1227:GLU:HG2	2.23	0.57
1:A:1227:GLU:OE2	1:E:876:ASN:CB	2.52	0.57
1:A:1335:LYS:HA	1:A:1354:THR:O	2.05	0.57
1:B:528:ASN:HB2	1:B:542:LEU:HD22	1.86	0.57
1:B:666:VAL:HG12	1:B:667:ASN:N	2.19	0.57
1:C:1335:LYS:HA	1:C:1354:THR:O	2.05	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:823:MET:O	1:D:824:GLN:NE2	2.37	0.57
1:D:1122:ASP:O	1:D:1126:GLN:HG3	2.05	0.57
1:E:531:ASN:C	1:E:533:LEU:N	2.57	0.57
1:E:570:ASP:OD1	1:E:572:THR:HB	2.04	0.57
1:F:1:CYS:SG	1:F:211:TYR:HB2	2.45	0.57
1:F:211:TYR:O	1:F:212:SER:HB3	2.04	0.57
2:G:418:THR:HG22	2:G:422:THR:O	2.04	0.57
2:H:304:CYS:O	2:H:307:THR:HG23	2.05	0.57
2:H:321:ARG:HB2	2:H:351:GLU:CB	2.35	0.57
2:I:64:ASN:ND2	2:I:67:ASP:HB2	2.20	0.57
2:I:304:CYS:O	2:I:307:THR:HG23	2.05	0.57
2:I:418:THR:HG22	2:I:422:THR:O	2.04	0.57
2:J:321:ARG:HD3	2:J:322:ARG:HB2	1.86	0.57
2:J:440:ALA:HB1	2:J:456:ASP:HB2	1.85	0.57
2:K:304:CYS:O	2:K:307:THR:HG23	2.05	0.57
2:L:100:GLN:C	2:L:105:GLU:HG2	2.25	0.57
2:L:320:TYR:CD2	2:L:346:TRP:CD2	2.93	0.57
2:L:418:THR:HG22	2:L:422:THR:O	2.04	0.57
1:A:1227:GLU:CD	1:E:876:ASN:CB	2.73	0.56
1:B:113:ASN:ND2	1:B:113:ASN:C	2.49	0.56
1:B:116:ILE:HD13	1:B:190:THR:CG2	2.35	0.56
1:B:209:GLN:HG3	1:B:210:ARG:N	2.20	0.56
1:B:728:ILE:HD12	1:B:1047:MET:HE1	1.82	0.56
1:B:1393:TYR:CD2	1:B:1424:LEU:HD12	2.40	0.56
4:B:2474:FMN:O4'	4:B:2474:FMN:H9	2.05	0.56
1:C:447:LEU:HD13	1:C:670:LEU:CD2	2.33	0.56
1:C:893:ARG:HG2	1:C:903:TRP:HB2	1.85	0.56
1:D:78:LEU:HB3	1:D:79:PRO:HD2	1.86	0.56
1:D:528:ASN:HB2	1:D:542:LEU:HD22	1.86	0.56
4:D:2474:FMN:O4'	4:D:2474:FMN:H9	2.05	0.56
1:E:560:ASP:O	1:E:562:MET:N	2.38	0.56
1:E:857:GLY:HA2	1:E:883:ASP:O	2.05	0.56
2:G:110:ILE:HB	2:G:115:HIS:CE1	2.40	0.56
2:I:49:GLN:OE1	2:I:66:PRO:HA	2.04	0.56
2:I:246:ARG:HD3	2:I:399:LEU:CB	2.33	0.56
2:I:320:TYR:CD2	2:I:346:TRP:CD2	2.92	0.56
2:I:321:ARG:HD3	2:I:322:ARG:HB2	1.86	0.56
2:J:175:VAL:HG12	2:J:213:ILE:O	2.04	0.56
2:K:49:GLN:OE1	2:K:66:PRO:HA	2.04	0.56
2:K:320:TYR:CD2	2:K:346:TRP:CD2	2.92	0.56
1:A:236:THR:HG23	1:A:240:ASN:HD21	1.69	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1251:THR:OG1	1:A:1281:VAL:HG11	2.04	0.56
1:B:950:THR:HG23	1:B:951:GLU:H	1.69	0.56
1:C:139:VAL:CG1	1:C:143:GLN:CB	2.81	0.56
1:C:711:MET:O	1:C:713:ILE:HG13	2.06	0.56
1:C:732:ARG:HD2	1:D:94:GLU:OE1	2.06	0.56
1:C:1212:ASP:CG	1:C:1243:GLY:H	2.07	0.56
1:C:1226:GLY:O	1:C:1227:GLU:O	2.23	0.56
1:D:513:SER:CB	1:D:520:MET:CE	2.79	0.56
1:D:731:SER:N	1:D:748:GLY:H	2.02	0.56
1:D:783:LYS:NZ	2:H:57:VAL:HG12	2.20	0.56
1:D:1348:VAL:O	1:D:1348:VAL:CG1	2.53	0.56
1:F:857:GLY:HA2	1:F:883:ASP:O	2.05	0.56
1:F:1121:ASP:OD1	1:F:1121:ASP:C	2.42	0.56
2:G:132:TRP:HD1	2:G:202:ARG:CD	2.17	0.56
2:G:174:HIS:ND1	2:G:213:ILE:HG22	2.21	0.56
2:G:264:TYR:O	2:G:267:THR:HG23	2.06	0.56
2:H:257:ASN:ND2	2:H:394:LEU:HA	2.19	0.56
2:I:100:GLN:C	2:I:105:GLU:HG2	2.25	0.56
2:I:207:LEU:HD12	2:I:207:LEU:C	2.24	0.56
2:I:358:VAL:HG13	2:I:365:VAL:HG13	1.87	0.56
2:J:259:VAL:HG21	2:J:264:TYR:CB	2.14	0.56
2:J:304:CYS:O	2:J:307:THR:HG23	2.05	0.56
2:K:89:ASN:OD1	2:K:164:GLU:HB3	2.05	0.56
2:L:43:GLN:CD	2:L:119:THR:HG23	2.25	0.56
2:L:132:TRP:HD1	2:L:202:ARG:CD	2.17	0.56
2:L:257:ASN:ND2	2:L:394:LEU:HA	2.19	0.56
2:L:304:CYS:O	2:L:307:THR:HG23	2.05	0.56
2:L:321:ARG:O	2:L:351:GLU:HA	2.05	0.56
1:A:139:VAL:HG12	1:A:143:GLN:HB2	1.87	0.56
1:A:182:MET:CE	1:A:217:PRO:HB3	2.27	0.56
1:A:235:ASN:C	1:A:235:ASN:ND2	2.52	0.56
1:A:250:ARG:NE	1:A:639:PHE:CE1	2.73	0.56
1:A:531:ASN:C	1:A:533:LEU:N	2.57	0.56
1:A:734:LEU:HD12	1:A:734:LEU:O	2.04	0.56
1:A:899:ASN:OD1	1:C:1260:GLN:CD	2.44	0.56
1:A:961:PRO:O	1:A:963:VAL:N	2.39	0.56
1:A:1131:THR:CG2	1:A:1133:GLU:OE1	2.54	0.56
1:A:1226:GLY:O	1:A:1227:GLU:O	2.23	0.56
1:A:1260:GLN:CD	1:E:899:ASN:OD1	2.44	0.56
1:B:3:VAL:CG2	1:B:231:ASN:HB2	2.36	0.56
1:B:148:LEU:HD22	1:B:172:LEU:HG	1.87	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:295:LYS:HE2	1:B:299:VAL:CG1	2.35	0.56
1:B:526:LEU:HD12	1:B:526:LEU:H	1.66	0.56
1:B:826:ARG:NH1	1:B:826:ARG:CG	2.67	0.56
1:B:901:ASP:HA	1:F:1228:LYS:H	1.69	0.56
1:B:1247:SER:OG	1:B:1280:ALA:HA	2.04	0.56
1:C:45:GLY:HA3	1:C:224:PRO:HD2	1.85	0.56
1:C:236:THR:HG23	1:C:240:ASN:ND2	2.19	0.56
1:C:746:ILE:O	1:C:747:SER:C	2.43	0.56
1:C:1010:ALA:HB2	1:C:1052:VAL:HG22	1.88	0.56
1:C:1163:GLY:O	1:C:1165:THR:N	2.39	0.56
1:C:1401:LEU:C	1:C:1401:LEU:CD1	2.73	0.56
1:D:235:ASN:ND2	1:D:328:ASP:O	2.38	0.56
1:D:239:GLY:O	1:D:243:TRP:CD1	2.59	0.56
1:D:950:THR:HG23	1:D:951:GLU:H	1.69	0.56
1:D:1159:ASN:C	1:D:1161:VAL:H	2.09	0.56
1:E:139:VAL:HG12	1:E:143:GLN:HB2	1.87	0.56
1:E:250:ARG:NE	1:E:639:PHE:CE1	2.73	0.56
1:E:430:VAL:HG11	1:E:554:GLU:HB2	1.88	0.56
1:E:551:THR:HG23	1:E:554:GLU:OE2	2.05	0.56
1:E:555:PHE:CD1	1:E:555:PHE:C	2.78	0.56
1:E:710:LYS:CG	1:E:939:GLY:HA3	2.34	0.56
1:E:711:MET:O	1:E:713:ILE:HG13	2.06	0.56
1:E:787:ARG:HH12	1:E:821:PRO:CB	2.17	0.56
1:E:961:PRO:O	1:E:963:VAL:N	2.39	0.56
1:E:969:PRO:HD2	1:E:970:PRO:HD2	1.88	0.56
1:E:1226:GLY:O	1:E:1227:GLU:O	2.23	0.56
1:F:239:GLY:O	1:F:243:TRP:CD1	2.59	0.56
1:F:466:HIS:HB3	1:F:467:PRO:HD3	1.87	0.56
1:F:505:GLN:NE2	1:F:1000:LEU:CB	2.59	0.56
1:F:1047:MET:HE2	1:F:1186:ARG:NH2	1.97	0.56
1:F:1247:SER:OG	1:F:1280:ALA:HA	2.04	0.56
1:F:1251:THR:OG1	1:F:1281:VAL:HG11	2.05	0.56
1:F:1348:VAL:O	1:F:1348:VAL:CG1	2.53	0.56
2:G:43:GLN:CD	2:G:119:THR:HG23	2.25	0.56
2:G:100:GLN:C	2:G:105:GLU:HG2	2.25	0.56
2:G:430:LYS:CE	2:G:440:ALA:HB2	2.32	0.56
2:H:127:ILE:HG23	2:H:128:ASN:H	1.70	0.56
2:H:225:SER:HB3	2:H:227:PRO:CD	2.23	0.56
2:H:250:ALA:HB1	2:H:251:PRO:CD	2.33	0.56
2:I:43:GLN:CD	2:I:119:THR:HG23	2.25	0.56
2:I:110:ILE:HB	2:I:115:HIS:CE1	2.40	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:127:ILE:HG23	2:I:128:ASN:H	1.70	0.56
2:I:174:HIS:ND1	2:I:213:ILE:HG22	2.21	0.56
2:I:350:PRO:HD3	2:I:374:ALA:HB2	1.88	0.56
2:J:43:GLN:CD	2:J:119:THR:HG23	2.25	0.56
2:J:127:ILE:HG23	2:J:128:ASN:H	1.70	0.56
2:J:174:HIS:ND1	2:J:213:ILE:HG22	2.21	0.56
2:J:207:LEU:HD12	2:J:207:LEU:C	2.24	0.56
2:J:246:ARG:HD3	2:J:399:LEU:CB	2.33	0.56
2:J:250:ALA:HB1	2:J:251:PRO:CD	2.33	0.56
2:K:127:ILE:HG23	2:K:128:ASN:H	1.70	0.56
2:K:132:TRP:HD1	2:K:202:ARG:CD	2.17	0.56
2:K:322:ARG:HD3	2:K:349:ALA:C	2.26	0.56
2:L:246:ARG:HD3	2:L:399:LEU:CB	2.33	0.56
2:L:321:ARG:HB2	2:L:351:GLU:CB	2.35	0.56
2:L:358:VAL:HG11	2:L:366:ARG:HB2	1.88	0.56
2:L:440:ALA:HB1	2:L:456:ASP:HB2	1.85	0.56
1:A:896:PRO:CB	1:C:1226:GLY:C	2.74	0.56
1:B:782:ARG:HB3	2:G:53:PRO:HD2	1.80	0.56
1:C:5:PHE:O	1:C:365:GLY:N	2.34	0.56
1:D:739:PHE:C	1:D:740:PRO:O	2.43	0.56
4:D:2474:FMN:O4'	4:D:2474:FMN:C1'	2.10	0.56
1:E:182:MET:CE	1:E:217:PRO:HB3	2.27	0.56
1:E:937:LYS:HE3	1:E:1033:SER:CB	2.34	0.56
1:E:1336:LEU:HB3	1:E:1355:VAL:HG13	1.88	0.56
1:E:1400:SER:O	1:E:1401:LEU:C	2.44	0.56
1:F:777:GLY:CA	2:I:52:VAL:HG13	2.12	0.56
1:F:1322:ILE:HG23	1:F:1323:ILE:HG23	1.88	0.56
1:F:1366:GLU:HG2	1:F:1367:TYR:CE2	2.41	0.56
1:F:1388:THR:O	1:F:1388:THR:HG23	2.06	0.56
2:G:257:ASN:ND2	2:G:394:LEU:HA	2.19	0.56
2:G:321:ARG:HD3	2:G:322:ARG:HB2	1.86	0.56
2:G:322:ARG:HD3	2:G:349:ALA:C	2.26	0.56
2:G:322:ARG:CD	2:G:326:ASN:HD21	2.19	0.56
2:G:410:PHE:C	2:G:413:PRO:HD2	2.26	0.56
2:I:302:MET:HE3	2:I:334:VAL:HA	1.87	0.56
2:J:64:ASN:ND2	2:J:67:ASP:HB2	2.20	0.56
2:J:264:TYR:O	2:J:267:THR:HG23	2.06	0.56
2:J:418:THR:HG1	2:J:420:TRP:HD1	1.52	0.56
2:K:166:LEU:CD2	2:K:461:ALA:HB1	2.31	0.56
2:K:410:PHE:C	2:K:413:PRO:HD2	2.26	0.56
2:L:302:MET:HE1	2:L:334:VAL:N	2.19	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:409:HIS:O	1:A:413:LEU:HD23	2.06	0.56
1:A:969:PRO:HD2	1:A:970:PRO:HD2	1.88	0.56
1:A:1226:GLY:C	1:E:896:PRO:CB	2.74	0.56
1:A:1425:LYS:CD	1:A:1447:TRP:CE2	2.86	0.56
1:B:211:TYR:O	1:B:212:SER:HB3	2.04	0.56
1:B:513:SER:CB	1:B:520:MET:CE	2.79	0.56
1:B:570:ASP:OD1	1:B:572:THR:N	2.38	0.56
1:B:1159:ASN:C	1:B:1161:VAL:H	2.09	0.56
1:B:1348:VAL:O	1:B:1348:VAL:CG1	2.53	0.56
1:C:15:ARG:HD2	1:C:200:PHE:O	2.05	0.56
1:C:235:ASN:ND2	1:C:236:THR:N	2.38	0.56
1:C:555:PHE:C	1:C:555:PHE:CD1	2.78	0.56
1:C:969:PRO:HD2	1:C:970:PRO:HD2	1.88	0.56
1:D:209:GLN:HG3	1:D:210:ARG:N	2.20	0.56
1:D:515:ARG:NH2	1:D:966:ILE:HB	2.16	0.56
1:D:1093:GLY:O	1:D:1096:SER:N	2.39	0.56
1:D:1322:ILE:HG23	1:D:1323:ILE:HG23	1.88	0.56
1:D:1393:TYR:CD2	1:D:1424:LEU:HD12	2.40	0.56
1:E:15:ARG:HD2	1:E:200:PHE:O	2.06	0.56
1:E:672:GLN:HG3	1:E:693:MET:HE1	1.85	0.56
1:E:711:MET:O	1:E:713:ILE:N	2.39	0.56
1:E:728:ILE:HD12	1:E:1047:MET:HE1	1.86	0.56
1:E:732:ARG:HD2	1:F:94:GLU:OE1	2.06	0.56
1:E:894:PHE:CE2	1:E:924:GLN:HG3	2.40	0.56
1:F:739:PHE:C	1:F:740:PRO:O	2.43	0.56
1:F:1122:ASP:O	1:F:1126:GLN:HG3	2.05	0.56
2:G:89:ASN:OD1	2:G:164:GLU:HB3	2.05	0.56
2:G:250:ALA:HB1	2:G:251:PRO:CD	2.33	0.56
2:G:321:ARG:O	2:G:351:GLU:HA	2.05	0.56
2:G:327:MET:HB2	2:G:346:TRP:HZ2	1.65	0.56
2:G:417:VAL:HG11	2:G:421:GLY:HA2	1.85	0.56
2:H:64:ASN:ND2	2:H:67:ASP:HB2	2.20	0.56
2:I:77:LEU:HD22	2:I:130:THR:OG1	2.04	0.56
2:I:322:ARG:HD3	2:I:349:ALA:C	2.26	0.56
2:J:321:ARG:O	2:J:351:GLU:HA	2.05	0.56
2:K:416:LYS:HE3	2:K:433:ASN:HB2	1.88	0.56
2:K:416:LYS:HZ2	2:K:433:ASN:HB2	1.71	0.56
2:L:277:VAL:HG12	2:L:279:ALA:H	1.68	0.56
1:A:102:TYR:CE2	1:A:144:PHE:CD1	2.93	0.56
1:A:235:ASN:ND2	1:A:236:THR:N	2.38	0.56
1:A:547:SER:C	1:A:549:VAL:N	2.58	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:838:VAL:HG12	1:A:839:PRO:CD	2.32	0.56
1:A:1010:ALA:HB2	1:A:1052:VAL:HG22	1.88	0.56
1:A:1054:GLN:O	1:A:1057:THR:N	2.39	0.56
1:A:1163:GLY:O	1:A:1165:THR:N	2.39	0.56
1:A:1288:VAL:HG12	1:A:1288:VAL:O	2.05	0.56
1:B:37:ASP:OD1	1:B:38:GLY:N	2.38	0.56
1:B:466:HIS:ND1	1:B:678:ARG:NH1	2.53	0.56
1:B:823:MET:O	1:B:824:GLN:NE2	2.37	0.56
1:B:1291:ASP:OD1	1:B:1291:ASP:C	2.42	0.56
1:C:291:ALA:HB3	1:C:292:PRO:CD	2.27	0.56
1:C:896:PRO:CB	1:E:1226:GLY:C	2.74	0.56
1:D:37:ASP:OD1	1:D:38:GLY:N	2.38	0.56
1:D:918:THR:HG23	1:D:1256:MET:CE	2.36	0.56
1:E:466:HIS:ND1	1:E:678:ARG:NH1	2.46	0.56
1:F:148:LEU:HD22	1:F:172:LEU:HG	1.87	0.56
1:F:913:GLY:HA2	1:F:1349:ARG:CD	2.27	0.56
1:F:1052:VAL:O	1:F:1053:HIS:C	2.38	0.56
1:F:1093:GLY:O	1:F:1096:SER:N	2.39	0.56
2:H:138:LYS:HE3	2:H:164:GLU:OE2	2.04	0.56
2:H:410:PHE:C	2:H:413:PRO:HD2	2.26	0.56
2:J:186:LEU:HD23	2:J:195:LEU:HD11	1.88	0.56
2:J:189:GLY:O	2:J:265:LEU:HD13	2.03	0.56
2:J:358:VAL:HG13	2:J:365:VAL:HG13	1.87	0.56
2:K:122:SER:HA	2:K:125:LYS:CE	2.36	0.56
2:K:305:VAL:HG22	2:K:316:VAL:HG11	1.88	0.56
2:K:322:ARG:CD	2:K:326:ASN:HD21	2.19	0.56
2:L:90:PHE:HB3	2:L:93:ILE:HG22	1.86	0.56
2:L:110:ILE:HB	2:L:115:HIS:CE1	2.40	0.56
2:L:174:HIS:ND1	2:L:213:ILE:HG22	2.21	0.56
2:L:322:ARG:HD3	2:L:349:ALA:C	2.26	0.56
1:A:57:ASP:O	1:A:58:HIS:C	2.41	0.56
1:A:392:ALA:O	1:A:400:LEU:CD1	2.53	0.56
1:A:1305:ILE:O	1:A:1336:LEU:HD12	2.06	0.56
1:B:913:GLY:HA2	1:B:1349:ARG:CD	2.27	0.56
1:B:1222:LEU:H	1:B:1229:MET:HE2	1.71	0.56
1:C:240:ASN:HB3	1:C:327:TRP:CZ2	2.41	0.56
1:D:449:ARG:HD3	1:D:765:ALA:O	2.06	0.56
1:D:1045:TRP:O	1:D:1046:GLU:C	2.44	0.56
1:D:1075:THR:HG23	1:D:1145:GLU:OE2	2.06	0.56
1:E:5:PHE:O	1:E:365:GLY:N	2.34	0.56
1:E:246:ALA:O	1:E:247:HIS:C	2.42	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:828:LEU:HD23	1:E:1172:SER:HB2	1.85	0.56
1:E:1113:CYS:HG	6:E:2476:F3S:FE3	1.23	0.56
1:E:1438:ARG:HG3	2:K:376:GLY:HA2	0.58	0.56
1:F:295:LYS:HE2	1:F:299:VAL:CG1	2.35	0.56
2:G:317:LYS:HE3	2:G:345:ILE:CD1	2.36	0.56
2:G:416:LYS:HZ2	2:G:433:ASN:HB2	1.71	0.56
2:H:122:SER:HA	2:H:125:LYS:CE	2.36	0.56
2:H:418:THR:CB	2:H:424:LEU:HD11	2.23	0.56
2:I:264:TYR:O	2:I:267:THR:HG23	2.06	0.56
2:I:317:LYS:HE3	2:I:345:ILE:CD1	2.36	0.56
2:K:174:HIS:ND1	2:K:213:ILE:HG22	2.21	0.56
2:K:186:LEU:HD23	2:K:195:LEU:HD11	1.88	0.56
2:K:321:ARG:HB2	2:K:351:GLU:CB	2.35	0.56
2:L:181:ARG:O	2:L:182:MET:HE3	2.06	0.56
2:L:322:ARG:CD	2:L:326:ASN:HD21	2.19	0.56
2:L:416:LYS:HE3	2:L:433:ASN:HB2	1.88	0.56
1:A:551:THR:HG23	1:A:554:GLU:OE2	2.05	0.56
1:A:621:ILE:HG12	1:A:657:VAL:CG1	2.36	0.56
1:A:1221:PRO:HG2	1:A:1229:MET:HE1	1.87	0.56
1:B:693:MET:O	1:B:694:ALA:C	2.45	0.56
1:B:875:MET:HE1	1:B:1139:PHE:CD2	2.40	0.56
1:B:902:ASN:CG	1:F:1227:GLU:OE2	2.42	0.56
1:C:419:TRP:O	1:C:422:ASN:HB2	2.04	0.56
1:D:466:HIS:ND1	1:D:678:ARG:NH1	2.53	0.56
1:D:513:SER:CB	1:D:520:MET:HE1	2.24	0.56
1:D:521:SER:C	1:D:522:LEU:HD23	2.26	0.56
1:D:570:ASP:OD1	1:D:572:THR:N	2.39	0.56
1:D:857:GLY:HA2	1:D:883:ASP:O	2.05	0.56
1:E:140:SER:O	1:E:141:ASP:C	2.44	0.56
1:E:677:GLU:C	1:E:677:GLU:OE1	2.44	0.56
1:E:1131:THR:CG2	1:E:1133:GLU:OE1	2.54	0.56
1:F:52:GLN:NE2	1:F:71:LEU:HB2	2.17	0.56
1:F:80:ARG:HD3	1:F:125:ARG:O	2.05	0.56
2:G:127:ILE:HG23	2:G:128:ASN:H	1.70	0.56
2:G:416:LYS:HE3	2:G:433:ASN:HB2	1.88	0.56
2:G:434:MET:HB2	2:G:437:VAL:HG11	1.87	0.56
2:I:432:THR:HG22	2:I:434:MET:N	2.15	0.56
2:J:358:VAL:HG11	2:J:366:ARG:HB2	1.88	0.56
2:K:264:TYR:O	2:K:267:THR:HG23	2.06	0.56
2:L:477:ALA:C	2:L:478:VAL:HG22	2.27	0.56
1:A:18:VAL:O	1:A:19:GLU:C	2.42	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:51:PRO:HG3	1:A:200:PHE:CE2	2.41	0.56
1:A:236:THR:HG23	1:A:240:ASN:ND2	2.19	0.56
1:A:293:MET:HG2	1:A:410:LEU:CD2	2.35	0.56
1:A:555:PHE:C	1:A:555:PHE:CD1	2.78	0.56
1:A:1221:PRO:CD	1:A:1229:MET:HE1	2.36	0.56
1:B:521:SER:C	1:B:522:LEU:HD23	2.26	0.56
1:B:913:GLY:CA	1:B:1349:ARG:HD3	2.27	0.56
1:B:918:THR:O	1:B:919:ALA:C	2.42	0.56
1:B:1055:VAL:O	1:B:1056:LEU:C	2.41	0.56
1:B:1322:ILE:HG23	1:B:1323:ILE:HG23	1.88	0.56
1:C:61:VAL:O	1:C:61:VAL:CG1	2.51	0.56
1:C:386:GLY:H	1:C:389:GLU:HG3	1.71	0.56
1:C:1053:HIS:CE1	1:C:1062:ARG:HH11	2.24	0.56
1:D:782:ARG:NH2	2:H:51:GLY:HA2	0.72	0.56
1:F:209:GLN:HG3	1:F:210:ARG:N	2.20	0.56
1:F:783:LYS:NZ	2:I:57:VAL:HG12	2.20	0.56
1:F:913:GLY:CA	1:F:1349:ARG:HD3	2.27	0.56
2:G:207:LEU:HD12	2:G:207:LEU:C	2.24	0.56
2:G:440:ALA:HB1	2:G:456:ASP:HB2	1.85	0.56
2:H:174:HIS:ND1	2:H:213:ILE:HG22	2.21	0.56
2:H:305:VAL:HG22	2:H:316:VAL:HG11	1.88	0.56
2:H:350:PRO:HD3	2:H:374:ALA:HB2	1.88	0.56
2:I:358:VAL:HG11	2:I:366:ARG:HB2	1.88	0.56
2:L:225:SER:HB3	2:L:227:PRO:CD	2.23	0.56
2:L:360:THR:HG22	2:L:365:VAL:HG11	1.88	0.56
2:L:410:PHE:C	2:L:413:PRO:HD2	2.26	0.56
2:L:449:LEU:HD11	2:L:451:VAL:CG1	2.31	0.56
1:A:37:ASP:OD2	1:A:40:THR:HB	2.06	0.56
1:A:171:SER:OG	1:A:177:ILE:HA	2.06	0.56
1:A:251:MET:HE3	1:A:533:LEU:HD11	1.86	0.56
1:A:894:PHE:CE2	1:A:924:GLN:HG3	2.40	0.56
1:A:1230:GLN:O	1:A:1231:LEU:HD23	2.06	0.56
1:B:348:ASN:HB2	1:B:350:LEU:HG	1.88	0.56
1:B:449:ARG:HD3	1:B:765:ALA:O	2.06	0.56
1:C:313:HIS:CD2	1:C:313:HIS:H	2.24	0.56
1:C:409:HIS:O	1:C:413:LEU:HD23	2.06	0.56
1:C:780:ARG:NH1	2:K:50:CYS:CB	2.56	0.56
1:C:913:GLY:O	1:C:915:PHE:N	2.35	0.56
1:C:1230:GLN:O	1:C:1231:LEU:HD23	2.06	0.56
1:D:797:THR:HG21	1:D:812:LYS:HG2	1.86	0.56
1:E:442:MET:HG2	1:E:446:GLU:HG2	1.88	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:706:LYS:O	1:E:707:ILE:C	2.43	0.56
1:F:162:GLU:HB3	1:F:164:ILE:HD12	1.88	0.56
1:F:466:HIS:ND1	1:F:678:ARG:NH1	2.53	0.56
1:F:1075:THR:HG23	1:F:1145:GLU:OE2	2.06	0.56
2:G:358:VAL:HG11	2:G:366:ARG:HB2	1.88	0.56
2:I:99:PRO:CD	2:I:449:LEU:HD13	2.36	0.56
2:J:416:LYS:HE3	2:J:433:ASN:HB2	1.88	0.56
2:K:45:ASN:HD21	2:K:45:ASN:N	2.04	0.56
2:K:96:ARG:HH21	2:K:199:VAL:CG2	2.19	0.56
2:K:225:SER:HB3	2:K:227:PRO:CD	2.23	0.56
2:K:238:VAL:HG23	2:K:439:ALA:HB2	1.87	0.56
2:K:250:ALA:HB1	2:K:251:PRO:CD	2.33	0.56
2:L:45:ASN:HD21	2:L:45:ASN:N	2.04	0.56
2:L:264:TYR:O	2:L:267:THR:HG23	2.06	0.56
1:A:15:ARG:HD2	1:A:200:PHE:O	2.05	0.55
1:A:706:LYS:O	1:A:707:ILE:C	2.43	0.55
1:A:828:LEU:HD23	1:A:1172:SER:HB2	1.85	0.55
1:A:1053:HIS:CE1	1:A:1062:ARG:HH11	2.24	0.55
1:A:1212:ASP:OD2	1:A:1243:GLY:C	2.44	0.55
1:B:1468:VAL:HG12	1:B:1468:VAL:O	2.07	0.55
1:C:51:PRO:HG3	1:C:200:PHE:CE2	2.41	0.55
1:C:155:ILE:O	1:C:159:VAL:HG23	2.07	0.55
1:C:813:TYR:O	1:C:816:GLN:HB2	2.06	0.55
1:C:902:ASN:CB	1:E:1227:GLU:OE2	2.53	0.55
1:C:1288:VAL:O	1:C:1288:VAL:HG12	2.05	0.55
1:D:3:VAL:CG2	1:D:231:ASN:HB2	2.36	0.55
1:D:116:ILE:HD13	1:D:190:THR:HG22	1.88	0.55
1:D:295:LYS:CB	1:D:390:MET:HE1	2.36	0.55
1:D:1068:ARG:NE	1:D:1089:GLU:OE1	2.38	0.55
1:E:409:HIS:O	1:E:413:LEU:HD23	2.06	0.55
1:E:1163:GLY:O	1:E:1165:THR:N	2.39	0.55
1:E:1212:ASP:CG	1:E:1243:GLY:H	2.08	0.55
1:E:1450:GLU:OE1	1:E:1453:LYS:NZ	2.24	0.55
1:F:782:ARG:HH21	2:I:51:GLY:HA3	0.69	0.55
1:F:918:THR:HG23	1:F:1256:MET:CE	2.36	0.55
2:G:186:LEU:HD23	2:G:195:LEU:HD11	1.88	0.55
2:H:89:ASN:OD1	2:H:164:GLU:HB3	2.05	0.55
2:H:322:ARG:CD	2:H:326:ASN:HD21	2.19	0.55
2:H:360:THR:HG22	2:H:365:VAL:HG11	1.88	0.55
2:H:450:VAL:O	2:H:454:ILE:HG22	2.06	0.55
2:I:90:PHE:HB3	2:I:93:ILE:HG22	1.86	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:302:MET:HE1	2:I:334:VAL:N	2.21	0.55
2:I:350:PRO:CG	2:I:380:PRO:HA	2.36	0.55
2:I:410:PHE:C	2:I:413:PRO:HD2	2.26	0.55
2:I:416:LYS:HE3	2:I:433:ASN:HB2	1.88	0.55
2:J:360:THR:HG22	2:J:365:VAL:HG11	1.88	0.55
2:K:321:ARG:O	2:K:351:GLU:HA	2.05	0.55
1:A:711:MET:O	1:A:713:ILE:N	2.39	0.55
1:A:857:GLY:HA2	1:A:883:ASP:O	2.05	0.55
1:B:466:HIS:HB3	1:B:467:PRO:HD3	1.87	0.55
1:B:777:GLY:O	1:B:788:HIS:CE1	2.51	0.55
1:B:875:MET:HE1	1:B:1139:PHE:CE2	2.42	0.55
1:B:918:THR:HG23	1:B:1256:MET:CE	2.36	0.55
1:B:1068:ARG:NE	1:B:1089:GLU:OE1	2.38	0.55
1:C:711:MET:O	1:C:713:ILE:N	2.39	0.55
1:C:728:ILE:HD12	1:C:1047:MET:HE1	1.85	0.55
1:C:1212:ASP:OD2	1:C:1243:GLY:C	2.44	0.55
1:C:1289:MET:H	1:C:1289:MET:HE2	1.72	0.55
1:C:1438:ARG:HG3	2:J:376:GLY:HA2	0.58	0.55
1:D:1093:GLY:O	1:D:1094:THR:C	2.45	0.55
1:E:35:ASP:HB3	1:E:37:ASP:H	1.71	0.55
1:E:37:ASP:OD2	1:E:40:THR:HB	2.06	0.55
1:E:240:ASN:HB3	1:E:327:TRP:CZ2	2.41	0.55
1:E:621:ILE:HG12	1:E:657:VAL:CG1	2.36	0.55
1:E:1054:GLN:O	1:E:1057:THR:N	2.39	0.55
1:F:3:VAL:CG2	1:F:231:ASN:HB2	2.36	0.55
1:F:449:ARG:HD3	1:F:765:ALA:O	2.06	0.55
1:F:499:PHE:CE1	1:F:742:MET:HE1	2.40	0.55
1:F:515:ARG:CZ	1:F:1367:TYR:HE1	2.20	0.55
1:F:521:SER:C	1:F:522:LEU:HD23	2.26	0.55
1:F:570:ASP:OD1	1:F:572:THR:N	2.38	0.55
2:H:416:LYS:HE3	2:H:433:ASN:HB2	1.88	0.55
2:I:250:ALA:CB	2:I:251:PRO:HD2	2.35	0.55
2:J:238:VAL:HG23	2:J:439:ALA:HB2	1.87	0.55
2:J:317:LYS:HE3	2:J:345:ILE:CD1	2.36	0.55
2:J:477:ALA:C	2:J:478:VAL:HG22	2.27	0.55
2:L:358:VAL:HG13	2:L:365:VAL:HG13	1.87	0.55
1:A:246:ALA:O	1:A:247:HIS:C	2.42	0.55
1:A:813:TYR:O	1:A:816:GLN:HB2	2.06	0.55
1:A:901:ASP:OD1	1:C:1228:LYS:HD3	2.06	0.55
1:A:937:LYS:HE3	1:A:1033:SER:CB	2.34	0.55
1:A:1263:HIS:CE1	1:E:900:GLY:HA2	2.31	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1401:LEU:C	1:A:1401:LEU:CD1	2.73	0.55
1:B:52:GLN:NE2	1:B:71:LEU:HB2	2.17	0.55
1:B:116:ILE:HD13	1:B:190:THR:HG22	1.88	0.55
1:B:239:GLY:O	1:B:243:TRP:CD1	2.59	0.55
1:B:783:LYS:NZ	2:G:57:VAL:HG12	2.20	0.55
1:B:857:GLY:HA2	1:B:883:ASP:O	2.05	0.55
1:B:1177:HIS:CD2	1:B:1177:HIS:H	2.25	0.55
1:B:1450:GLU:OE1	1:B:1453:LYS:NZ	2.23	0.55
1:C:573:PHE:HB2	1:C:574:PRO:CD	2.36	0.55
1:D:985:TYR:CD1	1:D:1207:VAL:HG11	2.42	0.55
1:E:193:PRO:O	1:E:194:ASP:C	2.43	0.55
1:E:1010:ALA:HB2	1:E:1052:VAL:HG22	1.88	0.55
1:E:1053:HIS:CE1	1:E:1062:ARG:HH11	2.24	0.55
1:E:1222:LEU:HD12	1:E:1222:LEU:O	2.07	0.55
1:E:1230:GLN:O	1:E:1231:LEU:HD23	2.06	0.55
1:E:1394:VAL:O	1:E:1394:VAL:CG1	2.55	0.55
1:F:235:ASN:HB3	1:F:508:ASN:ND2	2.22	0.55
1:F:828:LEU:HD22	1:F:1172:SER:CA	2.31	0.55
2:G:45:ASN:HD21	2:G:45:ASN:N	2.04	0.55
2:G:90:PHE:HB3	2:G:93:ILE:HG22	1.86	0.55
2:G:238:VAL:HG23	2:G:439:ALA:HB2	1.87	0.55
2:H:264:TYR:O	2:H:267:THR:HG23	2.06	0.55
2:H:321:ARG:O	2:H:351:GLU:HA	2.05	0.55
2:I:250:ALA:HB1	2:I:251:PRO:CD	2.33	0.55
2:I:322:ARG:CD	2:I:326:ASN:HD21	2.19	0.55
2:I:434:MET:HB2	2:I:437:VAL:HG11	1.87	0.55
2:I:450:VAL:O	2:I:454:ILE:HG22	2.07	0.55
2:J:174:HIS:HE1	2:J:215:HIS:HB3	1.72	0.55
2:J:450:VAL:O	2:J:454:ILE:HG22	2.07	0.55
2:K:317:LYS:HE3	2:K:345:ILE:CD1	2.36	0.55
2:K:350:PRO:HD3	2:K:374:ALA:HB2	1.88	0.55
2:L:317:LYS:HZ2	2:L:345:ILE:HG21	1.72	0.55
2:L:350:PRO:HD3	2:L:374:ALA:HB2	1.88	0.55
1:A:177:ILE:CD1	1:A:179:TYR:HE1	2.17	0.55
1:A:386:GLY:H	1:A:389:GLU:HG3	1.70	0.55
1:A:787:ARG:HH12	1:A:821:PRO:CB	2.17	0.55
1:A:1336:LEU:HB3	1:A:1355:VAL:HG13	1.88	0.55
1:A:1400:SER:O	1:A:1401:LEU:C	2.44	0.55
1:B:80:ARG:HD3	1:B:125:ARG:O	2.05	0.55
1:B:235:ASN:HB3	1:B:508:ASN:ND2	2.22	0.55
1:B:481:ASP:OD1	1:B:481:ASP:C	2.44	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:515:ARG:CZ	1:B:1367:TYR:HE1	2.20	0.55
1:B:571:ALA:HB2	1:B:606:LEU:CD2	2.37	0.55
1:B:1093:GLY:O	1:B:1096:SER:N	2.39	0.55
1:C:193:PRO:O	1:C:194:ASP:C	2.43	0.55
1:C:621:ILE:HG12	1:C:657:VAL:CG1	2.36	0.55
1:D:515:ARG:CZ	1:D:1367:TYR:HE1	2.20	0.55
1:D:1468:VAL:O	1:D:1468:VAL:HG12	2.07	0.55
1:E:51:PRO:HG3	1:E:200:PHE:CE2	2.41	0.55
1:E:629:THR:O	1:E:632:ILE:N	2.39	0.55
1:E:1026:ASN:CG	1:E:1027:SER:N	2.60	0.55
1:F:348:ASN:HB2	1:F:350:LEU:HG	1.89	0.55
1:F:710:LYS:HG2	1:F:939:GLY:CA	2.18	0.55
4:F:2474:FMN:O4'	4:F:2474:FMN:H9	2.05	0.55
2:G:360:THR:HG22	2:G:365:VAL:HG11	1.88	0.55
2:I:477:ALA:C	2:I:478:VAL:HG22	2.27	0.55
2:J:32:TYR:HE2	2:J:194:LYS:CB	2.20	0.55
2:J:99:PRO:CD	2:J:449:LEU:HD13	2.36	0.55
2:L:207:LEU:HD12	2:L:207:LEU:C	2.24	0.55
2:L:317:LYS:HE3	2:L:345:ILE:CD1	2.36	0.55
1:A:494:GLY:O	1:A:495:LEU:C	2.42	0.55
1:A:677:GLU:C	1:A:677:GLU:OE1	2.44	0.55
1:A:1228:LYS:HD3	1:E:901:ASP:OD1	2.06	0.55
1:B:746:ILE:CG2	1:B:1182:ASP:HB3	2.22	0.55
1:B:1326:THR:HG22	1:B:1329:TYR:HB2	1.88	0.55
1:B:1368:MET:HB3	1:B:1387:MET:HG3	1.86	0.55
1:C:1222:LEU:HD12	1:C:1222:LEU:O	2.07	0.55
1:D:295:LYS:CE	1:D:299:VAL:HG12	2.37	0.55
1:E:149:TYR:O	1:E:150:ILE:C	2.42	0.55
1:E:386:GLY:H	1:E:389:GLU:HG3	1.71	0.55
1:E:670:LEU:O	1:E:670:LEU:CD2	2.53	0.55
1:E:1212:ASP:OD2	1:E:1243:GLY:C	2.44	0.55
1:F:60:LYS:O	1:F:63:GLY:N	2.38	0.55
1:F:1159:ASN:C	1:F:1161:VAL:H	2.09	0.55
1:F:1393:TYR:CD2	1:F:1424:LEU:HD12	2.40	0.55
2:G:96:ARG:HH21	2:G:199:VAL:CG2	2.19	0.55
2:G:305:VAL:HG22	2:G:316:VAL:HG11	1.88	0.55
2:H:358:VAL:HG11	2:H:366:ARG:HB2	1.88	0.55
2:I:238:VAL:HG23	2:I:439:ALA:HB2	1.87	0.55
2:L:99:PRO:CD	2:L:449:LEU:HD13	2.37	0.55
2:L:415:LEU:CG	2:L:432:THR:HG23	2.34	0.55
1:A:573:PHE:HB2	1:A:574:PRO:CD	2.36	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:664:THR:HA	1:A:720:ARG:NE	2.22	0.55
1:A:732:ARG:HD2	1:B:94:GLU:OE1	2.05	0.55
1:A:876:ASN:HB3	1:C:1227:GLU:OE1	2.03	0.55
1:A:1356:VAL:HG11	1:A:1431:HIS:CB	2.37	0.55
1:A:1394:VAL:O	1:A:1394:VAL:CG1	2.55	0.55
1:B:675:ILE:O	1:B:678:ARG:HB2	2.07	0.55
1:B:1424:LEU:HD21	1:B:1428:ILE:HD11	1.89	0.55
1:B:1432:VAL:O	1:B:1433:THR:C	2.45	0.55
1:C:140:SER:O	1:C:141:ASP:C	2.44	0.55
1:C:442:MET:HG2	1:C:446:GLU:HG2	1.89	0.55
1:C:452:GLN:NE2	1:C:764:THR:HG21	2.21	0.55
1:C:901:ASP:OD1	1:E:1228:LYS:HD3	2.06	0.55
1:C:961:PRO:O	1:C:963:VAL:N	2.39	0.55
1:C:1336:LEU:HB3	1:C:1355:VAL:HG13	1.88	0.55
1:C:1387:MET:O	1:C:1387:MET:CG	2.41	0.55
1:D:466:HIS:HB3	1:D:467:PRO:HD3	1.87	0.55
1:E:1305:ILE:O	1:E:1336:LEU:HD12	2.06	0.55
1:F:1318:ASN:H	1:F:1318:ASN:ND2	2.01	0.55
2:G:246:ARG:HD3	2:G:399:LEU:CB	2.33	0.55
2:G:458:ARG:CZ	2:G:458:ARG:HB3	2.37	0.55
2:H:195:LEU:C	2:H:195:LEU:HD12	2.27	0.55
2:H:477:ALA:C	2:H:478:VAL:HG22	2.27	0.55
2:K:358:VAL:HG13	2:K:365:VAL:HG13	1.87	0.55
2:L:127:ILE:HG23	2:L:128:ASN:H	1.70	0.55
2:L:434:MET:HB2	2:L:437:VAL:HG11	1.87	0.55
1:C:447:LEU:CD2	1:C:674:ALA:HA	2.30	0.55
1:C:1356:VAL:HG11	1:C:1431:HIS:CB	2.37	0.55
1:D:348:ASN:HB2	1:D:350:LEU:HG	1.88	0.55
1:D:403:ASP:OD1	1:D:403:ASP:C	2.46	0.55
1:D:1424:LEU:HD21	1:D:1428:ILE:HD11	1.89	0.55
1:E:244:MET:O	1:E:245:LYS:C	2.44	0.55
1:E:443:ASP:O	1:E:446:GLU:N	2.28	0.55
1:E:846:ILE:O	1:E:847:THR:C	2.45	0.55
1:E:1438:ARG:O	1:E:1439:PHE:C	2.45	0.55
1:F:47:HIS:CE1	1:F:176:SER:HB3	2.42	0.55
2:G:32:TYR:HE2	2:G:194:LYS:CB	2.20	0.55
2:G:225:SER:HB3	2:G:227:PRO:CD	2.23	0.55
2:H:45:ASN:HD21	2:H:45:ASN:N	2.04	0.55
2:H:401:PHE:O	2:H:402:GLU:HG3	2.07	0.55
2:I:122:SER:HA	2:I:125:LYS:CE	2.36	0.55
2:J:350:PRO:HD3	2:J:374:ALA:HB2	1.88	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:K:195:LEU:C	2:K:195:LEU:HD12	2.27	0.55
2:K:358:VAL:HG11	2:K:366:ARG:HB2	1.88	0.55
2:K:429:THR:CB	2:K:431:MET:HE2	2.37	0.55
1:A:240:ASN:HB3	1:A:327:TRP:CZ2	2.41	0.55
1:A:251:MET:CE	1:A:533:LEU:HD11	2.37	0.55
1:A:824:GLN:HE21	1:A:824:GLN:HA	1.65	0.55
1:A:938:PRO:O	1:A:940:GLU:N	2.40	0.55
1:A:1222:LEU:HD12	1:A:1222:LEU:O	2.07	0.55
1:A:1226:GLY:CA	1:E:896:PRO:HG2	2.26	0.55
1:A:1438:ARG:O	1:A:1439:PHE:C	2.45	0.55
1:B:310:PRO:CG	1:B:404:ARG:NH2	2.66	0.55
1:B:985:TYR:CD1	1:B:1207:VAL:HG11	2.42	0.55
1:B:1366:GLU:HG2	1:B:1367:TYR:CE2	2.41	0.55
1:C:899:ASN:OD1	1:E:1260:GLN:CD	2.44	0.55
1:C:1054:GLN:O	1:C:1057:THR:N	2.39	0.55
1:C:1212:ASP:OD1	1:C:1243:GLY:N	2.24	0.55
1:D:47:HIS:CE1	1:D:176:SER:HB3	2.42	0.55
1:D:571:ALA:HB2	1:D:606:LEU:CD2	2.37	0.55
1:D:621:ILE:HG13	1:D:658:LEU:CD1	2.37	0.55
1:E:625:GLY:O	1:E:626:ALA:C	2.42	0.55
1:E:937:LYS:HB2	1:E:940:GLU:HG3	1.89	0.55
1:E:1356:VAL:HG11	1:E:1431:HIS:CB	2.36	0.55
1:E:1438:ARG:CZ	2:K:376:GLY:O	2.55	0.55
1:E:1449:ARG:NH1	1:E:1449:ARG:CB	2.14	0.55
1:F:295:LYS:CE	1:F:299:VAL:HG12	2.37	0.55
1:F:938:PRO:HG2	1:F:1041:ALA:HB1	1.88	0.55
2:G:127:ILE:HG23	2:G:128:ASN:N	2.22	0.55
2:G:450:VAL:O	2:G:454:ILE:HG22	2.07	0.55
2:G:477:ALA:C	2:G:478:VAL:HG22	2.27	0.55
2:H:162:ALA:HB3	2:H:237:LEU:HD12	1.89	0.55
2:H:186:LEU:HD23	2:H:195:LEU:HD11	1.88	0.55
2:H:238:VAL:HG23	2:H:439:ALA:HB2	1.87	0.55
2:H:322:ARG:HD3	2:H:349:ALA:C	2.26	0.55
2:H:449:LEU:HD11	2:H:451:VAL:CG1	2.31	0.55
2:I:195:LEU:C	2:I:195:LEU:HD12	2.27	0.55
2:I:320:TYR:HE2	2:I:344:PHE:HD2	1.55	0.55
2:I:430:LYS:CE	2:I:440:ALA:HB2	2.32	0.55
2:J:305:VAL:HG22	2:J:316:VAL:HG11	1.88	0.55
2:J:350:PRO:CG	2:J:380:PRO:HA	2.36	0.55
2:J:401:PHE:O	2:J:402:GLU:HG3	2.07	0.55
2:K:320:TYR:HE2	2:K:344:PHE:HD2	1.55	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:313:HIS:CD2	1:A:313:HIS:H	2.24	0.55
1:A:565:THR:HG22	1:A:602:THR:HB	1.89	0.55
1:A:711:MET:O	1:A:713:ILE:HG13	2.06	0.55
1:A:1026:ASN:CG	1:A:1027:SER:N	2.60	0.55
1:C:251:MET:CE	1:C:533:LEU:HD11	2.37	0.55
1:C:629:THR:O	1:C:632:ILE:N	2.39	0.55
1:C:1026:ASN:CG	1:C:1027:SER:N	2.59	0.55
1:C:1305:ILE:O	1:C:1336:LEU:HD12	2.06	0.55
1:D:731:SER:HB2	1:D:747:SER:HB2	1.89	0.55
1:D:744:SER:O	1:D:746:ILE:N	2.40	0.55
1:E:56:LYS:O	1:E:57:ASP:C	2.42	0.55
1:E:853:PHE:CE1	1:E:1079:ILE:HD13	2.42	0.55
1:F:776:GLY:O	1:F:782:ARG:HD2	2.07	0.55
1:F:1396:ASP:OD1	1:F:1396:ASP:C	2.45	0.55
2:G:350:PRO:CG	2:G:380:PRO:HA	2.36	0.55
2:G:358:VAL:HG13	2:G:365:VAL:HG13	1.87	0.55
2:G:415:LEU:CG	2:G:432:THR:HG23	2.34	0.55
2:H:127:ILE:HG23	2:H:128:ASN:N	2.22	0.55
2:H:207:LEU:HG	2:H:214:TYR:OH	2.07	0.55
2:H:317:LYS:HE3	2:H:345:ILE:CD1	2.36	0.55
2:H:320:TYR:HE2	2:H:344:PHE:HD2	1.55	0.55
2:J:195:LEU:C	2:J:195:LEU:HD12	2.27	0.55
2:J:322:ARG:HD3	2:J:349:ALA:C	2.26	0.55
2:K:99:PRO:CD	2:K:449:LEU:HD13	2.36	0.55
2:K:162:ALA:HB3	2:K:237:LEU:HD12	1.89	0.55
2:L:127:ILE:HG23	2:L:128:ASN:N	2.22	0.55
2:L:350:PRO:CG	2:L:380:PRO:HA	2.36	0.55
1:A:75:GLN:C	1:A:76:VAL:HG12	2.27	0.55
1:A:155:ILE:O	1:A:159:VAL:HG23	2.07	0.55
1:A:236:THR:OG1	1:A:718:SER:HB3	2.07	0.55
1:A:442:MET:HG2	1:A:446:GLU:HG2	1.88	0.55
1:A:556:ARG:O	1:A:557:ALA:C	2.44	0.55
1:A:843:VAL:HG12	1:A:844:GLU:H	1.70	0.55
1:B:47:HIS:CE1	1:B:176:SER:HB3	2.42	0.55
1:B:612:GLY:O	1:B:762:HIS:CE1	2.60	0.55
1:B:828:LEU:HD22	1:B:1172:SER:CA	2.31	0.55
1:C:677:GLU:C	1:C:677:GLU:OE1	2.44	0.55
1:C:828:LEU:HD23	1:C:1172:SER:HB2	1.85	0.55
1:C:1131:THR:CG2	1:C:1133:GLU:OE1	2.54	0.55
1:C:1221:PRO:CB	1:C:1229:MET:CE	2.73	0.55
1:C:1222:LEU:H	1:C:1229:MET:CE	2.20	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:676:ALA:O	1:D:677:GLU:C	2.45	0.55
1:D:776:GLY:O	1:D:782:ARG:HD2	2.07	0.55
1:D:938:PRO:HG2	1:D:1041:ALA:HB1	1.88	0.55
1:E:251:MET:HE3	1:E:533:LEU:HD11	1.89	0.55
1:E:813:TYR:O	1:E:816:GLN:HB2	2.06	0.55
2:G:320:TYR:CE2	2:G:344:PHE:HD2	2.25	0.55
2:G:350:PRO:HD3	2:G:374:ALA:HB2	1.88	0.55
2:G:469:LYS:NZ	2:G:476:VAL:HA	2.22	0.55
2:I:45:ASN:HD21	2:I:45:ASN:N	2.04	0.55
2:I:186:LEU:HD23	2:I:195:LEU:HD11	1.88	0.55
2:I:327:MET:HB2	2:I:346:TRP:HZ2	1.65	0.55
2:J:162:ALA:HB3	2:J:237:LEU:HD12	1.89	0.55
2:J:410:PHE:C	2:J:413:PRO:HD2	2.26	0.55
2:K:450:VAL:O	2:K:454:ILE:HG22	2.07	0.55
2:K:458:ARG:CZ	2:K:458:ARG:HB3	2.37	0.55
2:L:96:ARG:HH21	2:L:199:VAL:CG2	2.19	0.55
2:L:327:MET:HB2	2:L:346:TRP:HZ2	1.65	0.55
2:L:458:ARG:HB3	2:L:458:ARG:CZ	2.37	0.55
1:A:35:ASP:HB3	1:A:37:ASP:H	1.71	0.54
1:A:1375:ILE:O	1:A:1377:GLY:N	2.39	0.54
1:A:1376:LEU:CB	1:A:1439:PHE:HE1	2.19	0.54
1:B:1008:THR:HG22	1:B:1009:ILE:H	1.70	0.54
1:C:22:ILE:O	1:C:23:GLU:C	2.45	0.54
1:C:37:ASP:OD2	1:C:40:THR:HB	2.06	0.54
1:C:171:SER:OG	1:C:177:ILE:HA	2.07	0.54
1:C:826:ARG:HH11	1:C:826:ARG:CG	1.97	0.54
1:C:846:ILE:O	1:C:847:THR:C	2.45	0.54
1:D:223:GLN:HB3	1:D:224:PRO:CA	2.37	0.54
1:D:310:PRO:CG	1:D:404:ARG:NH2	2.66	0.54
1:E:22:ILE:O	1:E:23:GLU:C	2.45	0.54
1:E:155:ILE:O	1:E:159:VAL:HG23	2.07	0.54
1:E:319:TYR:O	1:E:322:SER:OG	2.17	0.54
1:E:547:SER:C	1:E:549:VAL:N	2.58	0.54
1:E:573:PHE:HB2	1:E:574:PRO:CD	2.36	0.54
1:E:746:ILE:O	1:E:747:SER:C	2.43	0.54
1:E:826:ARG:HG2	1:E:1046:GLU:OE2	2.07	0.54
1:E:950:THR:CG2	1:E:952:MET:H	2.15	0.54
1:F:403:ASP:OD1	1:F:403:ASP:C	2.46	0.54
1:F:612:GLY:O	1:F:762:HIS:CE1	2.60	0.54
1:F:731:SER:HB2	1:F:747:SER:HB2	1.89	0.54
2:G:162:ALA:CB	2:G:237:LEU:HD12	2.37	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:401:PHE:O	2:G:402:GLU:HG3	2.07	0.54
2:H:32:TYR:HE2	2:H:194:LYS:CB	2.20	0.54
2:H:358:VAL:HG13	2:H:365:VAL:HG13	1.87	0.54
2:I:127:ILE:HG23	2:I:128:ASN:N	2.22	0.54
2:J:225:SER:HB3	2:J:227:PRO:CD	2.23	0.54
2:J:320:TYR:HE2	2:J:344:PHE:HD2	1.55	0.54
2:K:321:ARG:HD3	2:K:322:ARG:CB	2.37	0.54
2:K:434:MET:HB2	2:K:437:VAL:HG11	1.87	0.54
2:K:469:LYS:NZ	2:K:476:VAL:HA	2.22	0.54
2:L:238:VAL:HG23	2:L:439:ALA:HB2	1.87	0.54
2:L:320:TYR:HE2	2:L:344:PHE:HD2	1.55	0.54
1:A:61:VAL:O	1:A:61:VAL:HG12	2.07	0.54
1:A:746:ILE:O	1:A:747:SER:C	2.43	0.54
1:A:853:PHE:CE1	1:A:1079:ILE:HD13	2.42	0.54
1:A:973:ASP:OD2	1:A:1298:LYS:CE	2.54	0.54
1:A:1435:THR:HG23	1:A:1437:SER:N	2.23	0.54
1:B:260:MET:O	1:B:263:LEU:CB	2.55	0.54
1:B:953:ILE:HG22	1:B:954:ALA:N	2.22	0.54
1:B:1050:SER:O	1:B:1051:GLU:C	2.46	0.54
1:C:75:GLN:C	1:C:76:VAL:HG12	2.27	0.54
1:C:236:THR:OG1	1:C:718:SER:HB3	2.07	0.54
1:C:249:THR:OG1	1:C:635:ASN:HB3	2.08	0.54
1:C:266:VAL:O	1:C:279:THR:HG23	2.08	0.54
1:C:1320:ASN:C	1:C:1341:GLN:HG3	2.28	0.54
1:D:666:VAL:HG12	1:D:667:ASN:N	2.19	0.54
1:D:720:ARG:C	1:D:722:GLY:H	2.11	0.54
1:D:1366:GLU:HG2	1:D:1367:TYR:CE2	2.41	0.54
1:E:236:THR:OG1	1:E:718:SER:HB3	2.07	0.54
1:E:468:MET:HG2	1:E:699:ALA:CB	2.38	0.54
1:E:499:PHE:HE2	1:E:742:MET:HE1	1.71	0.54
1:E:938:PRO:O	1:E:940:GLU:N	2.40	0.54
1:E:1221:PRO:CG	1:E:1229:MET:HE2	2.34	0.54
1:E:1307:VAL:HG12	1:E:1322:ILE:HD13	1.89	0.54
1:F:61:VAL:HG12	1:F:61:VAL:O	2.08	0.54
1:F:1077:ARG:O	1:F:1078:ASP:C	2.45	0.54
1:F:1326:THR:HG22	1:F:1329:TYR:HB2	1.88	0.54
2:G:122:SER:HA	2:G:125:LYS:CE	2.36	0.54
2:G:320:TYR:HE2	2:G:344:PHE:HD2	1.55	0.54
2:H:246:ARG:HD3	2:H:399:LEU:CB	2.33	0.54
2:H:321:ARG:HD3	2:H:322:ARG:CB	2.37	0.54
2:H:418:THR:N	2:H:424:LEU:HD22	2.23	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:366:ARG:NE	2:J:391:GLN:HG2	2.14	0.54
2:L:186:LEU:HD23	2:L:195:LEU:HD11	1.88	0.54
2:L:305:VAL:HG22	2:L:316:VAL:HG11	1.88	0.54
2:L:320:TYR:CE2	2:L:344:PHE:HD2	2.25	0.54
2:L:401:PHE:O	2:L:402:GLU:HG3	2.07	0.54
1:A:249:THR:OG1	1:A:635:ASN:HB3	2.08	0.54
1:A:629:THR:O	1:A:632:ILE:N	2.39	0.54
1:A:937:LYS:HB2	1:A:940:GLU:HG3	1.89	0.54
1:A:1220:ARG:N	1:A:1221:PRO:CD	2.71	0.54
1:A:1438:ARG:CZ	2:L:376:GLY:O	2.55	0.54
1:B:61:VAL:HG12	1:B:61:VAL:O	2.08	0.54
1:B:676:ALA:O	1:B:677:GLU:C	2.45	0.54
1:C:177:ILE:CD1	1:C:179:TYR:HE1	2.17	0.54
1:C:345:MET:HE1	1:C:385:LEU:HB2	1.90	0.54
1:C:572:THR:HG23	1:C:615:ARG:HB3	1.90	0.54
1:C:1300:LEU:HD12	1:C:1301:SER:N	2.22	0.54
1:C:1438:ARG:CZ	2:J:376:GLY:O	2.55	0.54
1:D:387:PRO:CD	1:D:1344:GLU:OE2	2.47	0.54
1:E:565:THR:HG22	1:E:602:THR:HB	1.89	0.54
1:E:1222:LEU:H	1:E:1229:MET:CE	2.20	0.54
1:F:136:ASN:OD1	1:F:136:ASN:N	2.38	0.54
2:G:195:LEU:C	2:G:195:LEU:HD12	2.27	0.54
2:G:321:ARG:HD3	2:G:322:ARG:CB	2.37	0.54
2:H:366:ARG:NE	2:H:391:GLN:HG2	2.14	0.54
2:H:440:ALA:HB1	2:H:456:ASP:HB2	1.85	0.54
2:I:174:HIS:HE1	2:I:215:HIS:HB3	1.72	0.54
2:I:305:VAL:HG22	2:I:316:VAL:HG11	1.88	0.54
2:I:401:PHE:O	2:I:402:GLU:HG3	2.07	0.54
2:K:110:ILE:HD11	2:K:117:ALA:C	2.28	0.54
2:K:174:HIS:HE1	2:K:215:HIS:HB3	1.72	0.54
2:K:320:TYR:CE2	2:K:344:PHE:HD2	2.25	0.54
2:K:360:THR:HG22	2:K:365:VAL:HG11	1.88	0.54
2:K:366:ARG:NE	2:K:391:GLN:HG2	2.14	0.54
2:K:401:PHE:O	2:K:402:GLU:HG3	2.07	0.54
2:L:54:PHE:HB3	2:L:107:ASN:CB	2.36	0.54
2:L:162:ALA:CB	2:L:237:LEU:HD12	2.37	0.54
2:L:418:THR:HG1	2:L:420:TRP:HD1	1.53	0.54
1:A:823:MET:C	1:A:824:GLN:HE21	2.10	0.54
1:A:846:ILE:O	1:A:847:THR:C	2.45	0.54
1:A:1222:LEU:H	1:A:1229:MET:CE	2.20	0.54
1:A:1369:THR:C	1:A:1389:GLY:O	2.46	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:162:GLU:HB3	1:B:164:ILE:HD12	1.88	0.54
1:B:555:PHE:C	1:B:555:PHE:HD1	2.11	0.54
1:B:1121:ASP:O	1:B:1125:ARG:HG3	2.08	0.54
1:D:820:ARG:CB	1:D:821:PRO:HD2	2.36	0.54
1:D:824:GLN:CA	1:D:824:GLN:HE21	2.20	0.54
1:D:857:GLY:O	4:D:2474:FMN:C10	2.56	0.54
1:D:1121:ASP:O	1:D:1125:ARG:HG3	2.08	0.54
1:F:529:LEU:HB3	1:F:638:THR:OG1	2.08	0.54
1:F:693:MET:O	1:F:694:ALA:C	2.45	0.54
1:F:743:VAL:CG1	1:F:745:ARG:HG3	2.38	0.54
1:F:820:ARG:CB	1:F:821:PRO:HD2	2.37	0.54
1:F:1131:THR:O	1:F:1134:LYS:N	2.41	0.54
1:F:1424:LEU:HD21	1:F:1428:ILE:HD11	1.89	0.54
2:G:110:ILE:HD11	2:G:117:ALA:C	2.28	0.54
2:H:99:PRO:CD	2:H:449:LEU:HD13	2.37	0.54
2:I:415:LEU:CG	2:I:432:THR:HG23	2.34	0.54
2:J:127:ILE:HG23	2:J:128:ASN:N	2.22	0.54
2:J:207:LEU:HG	2:J:214:TYR:OH	2.07	0.54
2:J:434:MET:HB2	2:J:437:VAL:HG11	1.87	0.54
2:K:418:THR:N	2:K:424:LEU:HD22	2.22	0.54
1:A:22:ILE:O	1:A:23:GLU:C	2.45	0.54
1:A:193:PRO:O	1:A:194:ASP:C	2.43	0.54
1:A:481:ASP:HB2	1:A:1038:ILE:O	2.08	0.54
1:A:1061:LEU:O	1:A:1064:ARG:HB2	2.08	0.54
1:A:1300:LEU:HD12	1:A:1301:SER:N	2.22	0.54
1:B:253:HIS:CE1	1:B:254:PRO:CD	2.88	0.54
1:B:857:GLY:O	4:B:2474:FMN:C10	2.56	0.54
1:B:1045:TRP:O	1:B:1046:GLU:C	2.44	0.54
1:B:1438:ARG:O	1:B:1439:PHE:C	2.45	0.54
1:C:35:ASP:HB3	1:C:37:ASP:H	1.71	0.54
1:C:149:TYR:O	1:C:150:ILE:C	2.42	0.54
1:C:250:ARG:NE	1:C:639:PHE:CE1	2.72	0.54
1:C:468:MET:HG2	1:C:699:ALA:CB	2.38	0.54
1:C:515:ARG:CZ	1:C:1367:TYR:HE1	2.20	0.54
1:C:938:PRO:O	1:C:940:GLU:N	2.40	0.54
1:D:675:ILE:O	1:D:678:ARG:HB2	2.07	0.54
1:D:1054:GLN:O	1:D:1057:THR:HB	2.08	0.54
1:E:171:SER:OG	1:E:177:ILE:HA	2.07	0.54
1:E:251:MET:CE	1:E:533:LEU:HD11	2.37	0.54
1:E:515:ARG:CZ	1:E:1367:TYR:HE1	2.20	0.54
1:E:823:MET:C	1:E:824:GLN:HE21	2.10	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1376:LEU:CB	1:E:1439:PHE:HE1	2.19	0.54
1:F:571:ALA:HB2	1:F:606:LEU:CD2	2.37	0.54
1:F:891:PRO:HA	1:F:894:PHE:CD2	2.43	0.54
2:H:96:ARG:HH21	2:H:199:VAL:CG2	2.19	0.54
2:H:458:ARG:HB3	2:H:458:ARG:CZ	2.37	0.54
2:I:32:TYR:HE2	2:I:194:LYS:CB	2.20	0.54
2:I:54:PHE:HB3	2:I:107:ASN:CB	2.36	0.54
2:I:418:THR:N	2:I:424:LEU:HD22	2.22	0.54
2:J:122:SER:HA	2:J:125:LYS:CE	2.36	0.54
2:J:322:ARG:CD	2:J:326:ASN:HD21	2.19	0.54
2:K:127:ILE:HG23	2:K:128:ASN:N	2.22	0.54
2:K:207:LEU:HG	2:K:214:TYR:OH	2.07	0.54
2:L:174:HIS:HE1	2:L:215:HIS:HB3	1.72	0.54
2:L:207:LEU:HG	2:L:214:TYR:OH	2.07	0.54
1:A:140:SER:O	1:A:141:ASP:C	2.44	0.54
1:A:145:GLU:O	1:A:146:LEU:C	2.41	0.54
1:A:230:HIS:CE1	1:A:234:ILE:HG13	2.35	0.54
1:A:443:ASP:O	1:A:446:GLU:N	2.28	0.54
1:A:515:ARG:CZ	1:A:1367:TYR:HE1	2.20	0.54
1:A:670:LEU:O	1:A:670:LEU:CD2	2.53	0.54
1:A:804:ASN:O	1:A:805:ASP:HB3	2.08	0.54
1:A:1111:ASN:OD1	1:A:1119:VAL:CG2	2.37	0.54
1:A:1302:GLY:HA2	1:A:1334:GLY:N	2.23	0.54
1:A:1387:MET:O	1:A:1387:MET:CG	2.41	0.54
1:A:1438:ARG:HG3	2:L:376:GLY:HA2	0.58	0.54
1:B:249:THR:OG1	1:B:635:ASN:HB3	2.08	0.54
1:B:621:ILE:HG13	1:B:658:LEU:CD1	2.37	0.54
1:B:720:ARG:C	1:B:722:GLY:H	2.11	0.54
1:B:897:ASP:OD1	1:B:897:ASP:C	2.46	0.54
1:B:1054:GLN:O	1:B:1057:THR:HB	2.08	0.54
1:B:1131:THR:O	1:B:1134:LYS:N	2.41	0.54
1:C:251:MET:HE3	1:C:533:LEU:HD11	1.89	0.54
1:C:643:ASN:ND2	1:C:665:THR:HB	2.23	0.54
1:C:1374:VAL:C	1:C:1375:ILE:HG13	2.28	0.54
1:D:249:THR:OG1	1:D:635:ASN:HB3	2.08	0.54
1:D:612:GLY:O	1:D:762:HIS:CE1	2.60	0.54
1:D:897:ASP:OD1	1:D:897:ASP:C	2.46	0.54
1:D:953:ILE:HG22	1:D:954:ALA:N	2.22	0.54
1:E:556:ARG:O	1:E:557:ALA:C	2.44	0.54
1:E:1061:LEU:O	1:E:1064:ARG:HB2	2.08	0.54
1:F:744:SER:O	1:F:746:ILE:N	2.40	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:985:TYR:CD1	1:F:1207:VAL:HG11	2.42	0.54
1:F:1114:PRO:HG3	2:I:109:VAL:O	2.06	0.54
1:F:1177:HIS:CD2	1:F:1177:HIS:H	2.25	0.54
2:H:97:ILE:HD11	2:H:450:VAL:CB	2.37	0.54
2:H:110:ILE:HD11	2:H:117:ALA:C	2.28	0.54
2:H:174:HIS:HE1	2:H:215:HIS:HB3	1.72	0.54
2:I:96:ARG:HH21	2:I:199:VAL:CG2	2.19	0.54
2:I:110:ILE:HG13	2:I:117:ALA:CA	2.35	0.54
2:J:96:ARG:HH21	2:J:199:VAL:CG2	2.19	0.54
2:J:110:ILE:HD11	2:J:117:ALA:C	2.28	0.54
2:J:458:ARG:CZ	2:J:458:ARG:HB3	2.37	0.54
2:K:350:PRO:CG	2:K:380:PRO:HA	2.36	0.54
2:L:195:LEU:C	2:L:195:LEU:HD12	2.27	0.54
1:A:447:LEU:CD2	1:A:674:ALA:HA	2.30	0.54
1:A:561:TYR:CD1	1:A:561:TYR:O	2.61	0.54
1:B:731:SER:HB2	1:B:747:SER:HB2	1.89	0.54
1:B:776:GLY:O	1:B:782:ARG:HD2	2.07	0.54
1:B:938:PRO:HG2	1:B:1041:ALA:HB1	1.88	0.54
1:B:1114:PRO:HG3	2:G:109:VAL:O	2.07	0.54
1:C:531:ASN:C	1:C:533:LEU:N	2.57	0.54
1:C:1093:GLY:O	1:C:1096:SER:N	2.41	0.54
1:C:1302:GLY:HA2	1:C:1334:GLY:N	2.23	0.54
1:D:148:LEU:HD22	1:D:172:LEU:HG	1.87	0.54
1:D:162:GLU:HB3	1:D:164:ILE:HD12	1.88	0.54
1:D:746:ILE:CG2	1:D:1182:ASP:HB3	2.22	0.54
1:D:826:ARG:HH11	1:D:826:ARG:CG	2.07	0.54
1:D:1114:PRO:HG3	2:H:109:VAL:O	2.07	0.54
1:D:1326:THR:HG22	1:D:1329:TYR:HB2	1.88	0.54
1:D:1396:ASP:OD1	1:D:1396:ASP:C	2.45	0.54
1:E:313:HIS:CD2	1:E:313:HIS:H	2.24	0.54
1:E:643:ASN:ND2	1:E:665:THR:HB	2.23	0.54
1:F:62:ILE:HG22	1:F:62:ILE:O	2.08	0.54
1:F:116:ILE:HD13	1:F:190:THR:HG22	1.88	0.54
1:F:481:ASP:OD1	1:F:481:ASP:C	2.43	0.54
1:F:675:ILE:O	1:F:678:ARG:HB2	2.07	0.54
1:F:824:GLN:HE21	1:F:824:GLN:CA	2.20	0.54
1:F:857:GLY:O	4:F:2474:FMN:C10	2.56	0.54
2:G:181:ARG:C	2:G:181:ARG:HD2	2.28	0.54
2:I:360:THR:HG22	2:I:365:VAL:HG11	1.88	0.54
2:I:469:LYS:NZ	2:I:476:VAL:HA	2.22	0.54
2:J:162:ALA:CB	2:J:237:LEU:HD12	2.37	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1304:THR:HG23	1:A:1335:LYS:HB2	1.90	0.54
1:A:1316:GLU:O	1:A:1317:THR:C	2.45	0.54
1:A:1438:ARG:CB	2:L:376:GLY:HA2	2.13	0.54
1:B:295:LYS:CE	1:B:299:VAL:HG12	2.37	0.54
1:B:403:ASP:OD1	1:B:403:ASP:C	2.46	0.54
1:B:529:LEU:HB3	1:B:638:THR:OG1	2.08	0.54
1:B:917:VAL:HG13	1:B:922:LEU:HD21	1.90	0.54
1:B:1075:THR:HG23	1:B:1145:GLU:OE2	2.06	0.54
1:C:1316:GLU:O	1:C:1317:THR:C	2.45	0.54
1:D:235:ASN:HB3	1:D:508:ASN:ND2	2.22	0.54
1:D:481:ASP:OD1	1:D:481:ASP:C	2.44	0.54
1:D:575:VAL:HG23	1:D:614:ALA:O	2.08	0.54
1:D:891:PRO:HA	1:D:894:PHE:CD2	2.43	0.54
1:E:481:ASP:HB2	1:E:1038:ILE:O	2.08	0.54
1:E:1302:GLY:HA2	1:E:1334:GLY:N	2.23	0.54
1:E:1435:THR:HG23	1:E:1437:SER:N	2.23	0.54
1:F:249:THR:OG1	1:F:635:ASN:HB3	2.08	0.54
1:F:897:ASP:OD1	1:F:897:ASP:C	2.45	0.54
1:F:1401:LEU:O	1:F:1401:LEU:CD1	2.38	0.54
1:F:1442:GLU:OE2	2:G:375:THR:HA	2.08	0.54
1:F:1470:VAL:O	1:F:1470:VAL:CG1	2.56	0.54
2:G:99:PRO:CD	2:G:449:LEU:HD13	2.36	0.54
2:H:350:PRO:CG	2:H:380:PRO:HA	2.36	0.54
2:H:429:THR:HG21	2:H:431:MET:HE2	1.88	0.54
2:I:97:ILE:HD11	2:I:450:VAL:CB	2.37	0.54
2:I:458:ARG:HB3	2:I:458:ARG:CZ	2.37	0.54
2:J:250:ALA:CB	2:J:251:PRO:HD2	2.35	0.54
2:K:477:ALA:C	2:K:478:VAL:HG22	2.27	0.54
2:L:450:VAL:O	2:L:454:ILE:HG22	2.06	0.54
1:A:67:PRO:HG3	1:A:105:TYR:OH	2.08	0.54
1:A:1077:ARG:O	1:A:1078:ASP:C	2.44	0.54
1:B:875:MET:HE2	1:B:1139:PHE:HE2	1.73	0.54
1:B:891:PRO:HA	1:B:894:PHE:CD2	2.43	0.54
1:B:1396:ASP:OD1	1:B:1396:ASP:C	2.45	0.54
1:B:1442:GLU:OE2	2:H:375:THR:HA	2.08	0.54
1:C:528:ASN:HB2	1:C:542:LEU:HD22	1.90	0.54
1:C:560:ASP:O	1:C:561:TYR:C	2.46	0.54
1:C:561:TYR:CD1	1:C:561:TYR:O	2.61	0.54
1:C:565:THR:HG22	1:C:602:THR:HB	1.89	0.54
1:C:937:LYS:HE3	1:C:1033:SER:CB	2.34	0.54
1:C:937:LYS:HB2	1:C:940:GLU:HG3	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1369:THR:C	1:C:1389:GLY:O	2.46	0.54
1:C:1376:LEU:CB	1:C:1439:PHE:HE1	2.19	0.54
1:E:230:HIS:CE1	1:E:234:ILE:HG13	2.35	0.54
1:E:345:MET:CG	1:E:346:ASP:N	2.55	0.54
1:E:664:THR:HA	1:E:720:ARG:NE	2.22	0.54
1:E:804:ASN:O	1:E:805:ASP:HB3	2.08	0.54
1:E:976:SER:O	1:E:979:ASP:HB2	2.08	0.54
1:E:1077:ARG:O	1:E:1078:ASP:C	2.44	0.54
1:F:447:LEU:HD11	1:F:451:GLN:NE2	2.23	0.54
1:F:917:VAL:HG13	1:F:922:LEU:HD21	1.90	0.54
1:F:1051:GLU:O	1:F:1052:VAL:C	2.46	0.54
1:F:1093:GLY:O	1:F:1094:THR:C	2.45	0.54
2:G:162:ALA:HB3	2:G:237:LEU:HD12	1.89	0.54
2:H:162:ALA:CB	2:H:237:LEU:HD12	2.37	0.54
2:H:181:ARG:HD2	2:H:181:ARG:C	2.28	0.54
2:H:320:TYR:CE2	2:H:344:PHE:HD2	2.25	0.54
2:I:110:ILE:HD11	2:I:117:ALA:C	2.28	0.54
2:I:153:ILE:HG21	2:I:238:VAL:HG12	1.90	0.54
2:I:162:ALA:CB	2:I:237:LEU:HD12	2.38	0.54
2:I:320:TYR:CE2	2:I:344:PHE:HD2	2.25	0.54
2:J:97:ILE:HD11	2:J:450:VAL:CB	2.37	0.54
2:J:97:ILE:CG1	2:J:450:VAL:HG11	2.38	0.54
2:J:181:ARG:C	2:J:181:ARG:HD2	2.28	0.54
2:K:97:ILE:HD11	2:K:450:VAL:CB	2.37	0.54
2:K:230:ARG:NH2	2:K:434:MET:HE1	2.23	0.54
2:L:32:TYR:HE2	2:L:194:LYS:CB	2.20	0.54
1:A:266:VAL:O	1:A:279:THR:HG23	2.08	0.54
1:A:452:GLN:NE2	1:A:764:THR:HG21	2.21	0.54
1:B:256:PHE:O	1:B:259:HIS:HB2	2.08	0.54
1:B:1077:ARG:O	1:B:1078:ASP:C	2.45	0.54
1:C:481:ASP:HB2	1:C:1038:ILE:O	2.08	0.54
1:C:481:ASP:OD1	1:C:481:ASP:C	2.44	0.54
1:C:664:THR:HA	1:C:720:ARG:NE	2.22	0.54
1:C:823:MET:C	1:C:824:GLN:HE21	2.10	0.54
1:C:1304:THR:HG23	1:C:1335:LYS:HB2	1.90	0.54
1:C:1307:VAL:HG12	1:C:1322:ILE:HD13	1.89	0.54
1:C:1427:LEU:O	1:C:1430:GLU:N	2.41	0.54
1:C:1438:ARG:O	1:C:1439:PHE:C	2.45	0.54
1:D:743:VAL:CG1	1:D:745:ARG:HG3	2.38	0.54
1:D:746:ILE:HG12	1:D:1182:ASP:O	2.08	0.54
1:D:1131:THR:O	1:D:1134:LYS:N	2.41	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1318:ASN:H	1:D:1318:ASN:ND2	2.01	0.54
1:E:302:ALA:HA	1:E:347:ARG:NH1	2.23	0.54
1:E:369:THR:HG22	1:E:1293:ASN:ND2	2.23	0.54
1:E:1316:GLU:O	1:E:1317:THR:C	2.45	0.54
1:F:513:SER:CB	1:F:520:MET:CE	2.79	0.54
1:F:621:ILE:HG13	1:F:658:LEU:CD1	2.38	0.54
1:F:953:ILE:HG22	1:F:954:ALA:N	2.22	0.54
1:F:978:GLU:HG3	1:F:979:ASP:H	1.73	0.54
1:F:1438:ARG:O	1:F:1439:PHE:C	2.45	0.54
2:G:238:VAL:HG23	2:G:439:ALA:CA	2.38	0.54
2:G:317:LYS:CE	2:G:345:ILE:HG21	2.38	0.54
2:G:317:LYS:NZ	2:G:345:ILE:HG21	2.23	0.54
2:H:230:ARG:NH2	2:H:434:MET:HE1	2.23	0.54
2:J:153:ILE:HG21	2:J:238:VAL:HG12	1.90	0.54
2:J:238:VAL:HG23	2:J:439:ALA:CA	2.38	0.54
2:J:317:LYS:NZ	2:J:345:ILE:HG21	2.23	0.54
2:K:32:TYR:HE2	2:K:194:LYS:CB	2.20	0.54
2:K:418:THR:CB	2:K:424:LEU:HD11	2.23	0.54
2:L:317:LYS:NZ	2:L:345:ILE:HG21	2.23	0.54
1:A:244:MET:O	1:A:245:LYS:C	2.44	0.53
1:A:708:MET:O	1:A:710:LYS:N	2.41	0.53
1:B:978:GLU:HG3	1:B:979:ASP:H	1.73	0.53
1:C:61:VAL:O	1:C:61:VAL:HG12	2.07	0.53
1:C:269:VAL:HG23	1:C:270:GLY:N	2.22	0.53
1:C:976:SER:O	1:C:979:ASP:HB2	2.08	0.53
1:D:256:PHE:O	1:D:259:HIS:HB2	2.08	0.53
1:D:1177:HIS:CD2	1:D:1177:HIS:H	2.25	0.53
1:E:18:VAL:O	1:E:19:GLU:C	2.42	0.53
1:E:67:PRO:HG3	1:E:105:TYR:OH	2.08	0.53
1:E:75:GLN:C	1:E:76:VAL:HG12	2.27	0.53
1:E:1320:ASN:C	1:E:1341:GLN:HG3	2.28	0.53
1:E:1369:THR:C	1:E:1389:GLY:O	2.46	0.53
1:F:387:PRO:CD	1:F:1344:GLU:OE2	2.47	0.53
1:F:575:VAL:HG23	1:F:614:ALA:O	2.08	0.53
1:F:720:ARG:C	1:F:722:GLY:H	2.11	0.53
1:F:746:ILE:HG12	1:F:1182:ASP:O	2.08	0.53
1:F:1432:VAL:O	1:F:1433:THR:C	2.45	0.53
1:F:1470:VAL:O	1:F:1470:VAL:HG13	2.08	0.53
2:H:94:CYS:HB3	2:H:98:CYS:SG	2.48	0.53
2:H:97:ILE:CG1	2:H:450:VAL:HG11	2.38	0.53
2:I:97:ILE:CG1	2:I:450:VAL:HG11	2.38	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:320:TYR:CE2	2:J:344:PHE:HD2	2.25	0.53
2:J:418:THR:CB	2:J:424:LEU:HD11	2.23	0.53
2:J:418:THR:N	2:J:424:LEU:HD22	2.23	0.53
2:K:132:TRP:HA	2:K:202:ARG:CZ	2.39	0.53
2:K:145:GLU:OE2	2:K:171:TYR:HE1	1.91	0.53
2:K:186:LEU:HD21	2:K:195:LEU:HD11	1.91	0.53
2:L:110:ILE:HD11	2:L:117:ALA:C	2.28	0.53
1:A:631:LEU:HD13	1:A:636:LEU:HB3	1.90	0.53
1:B:443:ASP:O	1:B:445:ALA:N	2.41	0.53
1:B:824:GLN:HE21	1:B:824:GLN:CA	2.20	0.53
1:C:92:ILE:O	1:C:93:VAL:C	2.45	0.53
1:C:119:GLU:O	1:C:120:LYS:C	2.47	0.53
1:C:518:ARG:NH2	1:C:1382:ASN:HD22	2.06	0.53
1:C:804:ASN:O	1:C:805:ASP:HB3	2.08	0.53
1:C:853:PHE:CE1	1:C:1079:ILE:HD13	2.42	0.53
1:C:1316:GLU:O	1:C:1318:ASN:N	2.42	0.53
1:D:838:VAL:HG13	1:D:839:PRO:CD	2.31	0.53
1:D:1438:ARG:O	1:D:1439:PHE:C	2.45	0.53
1:D:1438:ARG:CD	2:I:377:ARG:N	2.41	0.53
1:E:561:TYR:CD1	1:E:561:TYR:O	2.61	0.53
1:E:1400:SER:O	1:E:1403:LEU:N	2.27	0.53
1:F:40:THR:O	1:F:40:THR:CG2	2.57	0.53
1:F:1233:TYR:O	1:F:1268:LEU:HA	2.09	0.53
2:G:132:TRP:HA	2:G:202:ARG:CZ	2.39	0.53
2:G:174:HIS:HE1	2:G:215:HIS:HB3	1.72	0.53
2:G:465:HIS:NE2	2:G:469:LYS:HE3	2.24	0.53
2:H:132:TRP:HA	2:H:202:ARG:CZ	2.39	0.53
2:H:238:VAL:HG23	2:H:439:ALA:CA	2.38	0.53
2:H:244:LYS:HG3	2:H:402:GLU:O	2.09	0.53
2:H:372:ALA:HB1	2:H:381:GLN:O	2.08	0.53
2:I:181:ARG:HD2	2:I:181:ARG:C	2.28	0.53
2:I:366:ARG:NE	2:I:391:GLN:HG2	2.14	0.53
2:J:249:LYS:HE2	2:J:258:ILE:HD11	1.90	0.53
2:J:321:ARG:HD3	2:J:322:ARG:CB	2.37	0.53
2:J:322:ARG:HD2	2:J:349:ALA:CB	2.38	0.53
2:J:372:ALA:HB1	2:J:381:GLN:O	2.08	0.53
2:J:469:LYS:NZ	2:J:476:VAL:HA	2.22	0.53
2:K:94:CYS:HB3	2:K:98:CYS:SG	2.49	0.53
2:K:327:MET:HB2	2:K:346:TRP:HZ2	1.65	0.53
1:A:1307:VAL:HG12	1:A:1322:ILE:HD13	1.89	0.53
1:B:575:VAL:HG23	1:B:614:ALA:O	2.08	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:744:SER:O	1:B:746:ILE:N	2.40	0.53
1:B:746:ILE:HG12	1:B:1182:ASP:O	2.08	0.53
1:B:1438:ARG:CZ	2:H:376:GLY:O	2.57	0.53
1:C:1310:THR:O	1:C:1313:SER:N	2.33	0.53
1:D:978:GLU:HG3	1:D:979:ASP:H	1.73	0.53
1:E:149:TYR:HE1	1:E:282:GLU:OE1	1.91	0.53
1:E:1300:LEU:HD12	1:E:1301:SER:N	2.22	0.53
1:E:1420:TYR:OH	1:E:1466:LEU:HD22	2.09	0.53
1:F:256:PHE:O	1:F:259:HIS:HB2	2.08	0.53
1:F:1054:GLN:O	1:F:1057:THR:HB	2.08	0.53
2:G:473:GLU:HG2	2:G:473:GLU:O	2.08	0.53
2:H:153:ILE:HG21	2:H:238:VAL:HG12	1.90	0.53
2:I:162:ALA:HB3	2:I:237:LEU:HD12	1.89	0.53
2:I:243:TYR:CE1	2:I:405:ASP:HB3	2.43	0.53
2:I:317:LYS:NZ	2:I:345:ILE:HG21	2.24	0.53
2:I:429:THR:HG21	2:I:431:MET:HE2	1.90	0.53
2:J:243:TYR:CE1	2:J:405:ASP:HB3	2.43	0.53
2:J:449:LEU:CD2	2:J:451:VAL:HG13	2.27	0.53
2:K:415:LEU:CG	2:K:432:THR:HG23	2.34	0.53
2:L:94:CYS:HB3	2:L:98:CYS:SG	2.48	0.53
2:L:97:ILE:CG1	2:L:450:VAL:HG11	2.38	0.53
2:L:122:SER:HA	2:L:125:LYS:CE	2.36	0.53
2:L:132:TRP:HA	2:L:202:ARG:CZ	2.39	0.53
2:L:162:ALA:HB3	2:L:237:LEU:HD12	1.89	0.53
2:L:317:LYS:CE	2:L:345:ILE:HG21	2.38	0.53
2:L:322:ARG:HG3	2:L:326:ASN:OD1	2.09	0.53
1:A:149:TYR:HE1	1:A:282:GLU:OE1	1.91	0.53
1:A:250:ARG:O	1:A:531:ASN:ND2	2.42	0.53
1:A:1121:ASP:OD1	1:A:1122:ASP:N	2.42	0.53
1:B:60:LYS:O	1:B:63:GLY:N	2.38	0.53
1:B:743:VAL:CG1	1:B:745:ARG:HG3	2.38	0.53
1:C:631:LEU:HD13	1:C:636:LEU:HB3	1.90	0.53
1:C:1435:THR:HG23	1:C:1437:SER:N	2.23	0.53
1:D:61:VAL:HG12	1:D:61:VAL:O	2.08	0.53
1:D:555:PHE:CD1	1:D:556:ARG:N	2.77	0.53
1:D:1131:THR:CG2	1:D:1133:GLU:N	2.72	0.53
1:D:1388:THR:O	1:D:1388:THR:HG23	2.06	0.53
1:E:481:ASP:OD1	1:E:481:ASP:C	2.44	0.53
1:E:708:MET:O	1:E:710:LYS:N	2.41	0.53
1:E:1057:THR:HG22	1:E:1190:VAL:HG11	1.91	0.53
1:E:1220:ARG:N	1:E:1221:PRO:CD	2.71	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1290:GLY:O	1:E:1291:ASP:CB	2.53	0.53
1:E:1304:THR:HG23	1:E:1335:LYS:HB2	1.89	0.53
1:E:1401:LEU:C	1:E:1401:LEU:CD1	2.73	0.53
1:F:602:THR:O	1:F:640:THR:CG2	2.56	0.53
1:F:1121:ASP:O	1:F:1125:ARG:HG3	2.08	0.53
2:G:322:ARG:HG3	2:G:326:ASN:OD1	2.09	0.53
2:G:372:ALA:HB1	2:G:381:GLN:O	2.08	0.53
2:H:243:TYR:CE1	2:H:405:ASP:HB3	2.43	0.53
2:H:429:THR:CB	2:H:431:MET:HE2	2.39	0.53
2:H:449:LEU:CD2	2:H:451:VAL:HG13	2.27	0.53
2:H:469:LYS:HZ3	2:H:476:VAL:CA	2.22	0.53
2:I:249:LYS:HE2	2:I:258:ILE:HD11	1.90	0.53
2:I:295:LEU:CD1	2:I:319:LEU:HD13	2.39	0.53
2:J:132:TRP:HA	2:J:202:ARG:CZ	2.39	0.53
2:K:440:ALA:HB1	2:K:456:ASP:HB2	1.85	0.53
2:K:473:GLU:HG2	2:K:473:GLU:O	2.09	0.53
1:A:105:TYR:HD1	1:A:105:TYR:H	1.57	0.53
1:A:522:LEU:CG	1:A:705:LEU:HD21	2.38	0.53
1:A:572:THR:CG2	1:A:615:ARG:NE	2.72	0.53
1:A:902:ASN:CB	1:C:1227:GLU:OE2	2.53	0.53
1:A:1093:GLY:O	1:A:1096:SER:N	2.41	0.53
1:A:1207:VAL:HG13	1:A:1208:PRO:CD	2.39	0.53
1:A:1320:ASN:C	1:A:1341:GLN:HG3	2.28	0.53
1:A:1374:VAL:C	1:A:1375:ILE:HG13	2.28	0.53
1:A:1420:TYR:OH	1:A:1466:LEU:HD22	2.09	0.53
1:B:349:GLY:HA3	1:B:387:PRO:HG3	1.90	0.53
1:B:602:THR:O	1:B:640:THR:CG2	2.56	0.53
1:C:18:VAL:O	1:C:19:GLU:C	2.42	0.53
1:C:105:TYR:H	1:C:105:TYR:HD1	1.57	0.53
1:C:149:TYR:HE1	1:C:282:GLU:OE1	1.91	0.53
1:C:250:ARG:O	1:C:531:ASN:ND2	2.42	0.53
1:C:253:HIS:ND1	1:C:254:PRO:CG	2.71	0.53
1:C:317:ILE:CG2	1:C:321:ASN:HD21	2.19	0.53
1:C:571:ALA:HB2	1:C:606:LEU:CD2	2.39	0.53
1:C:587:ARG:O	1:C:590:ARG:HB2	2.09	0.53
1:C:826:ARG:HG2	1:C:1046:GLU:OE2	2.07	0.53
1:C:1057:THR:HG22	1:C:1190:VAL:HG11	1.91	0.53
1:C:1121:ASP:OD1	1:C:1122:ASP:N	2.42	0.53
1:D:302:ALA:CA	1:D:347:ARG:NH1	2.72	0.53
1:D:526:LEU:N	1:D:526:LEU:CD1	2.64	0.53
1:D:629:THR:O	1:D:632:ILE:N	2.42	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1077:ARG:O	1:D:1078:ASP:C	2.45	0.53
1:D:1233:TYR:O	1:D:1268:LEU:HA	2.09	0.53
1:E:105:TYR:HD1	1:E:105:TYR:H	1.57	0.53
1:E:249:THR:OG1	1:E:635:ASN:HB3	2.07	0.53
1:E:496:HIS:O	1:E:653:HIS:CE1	2.61	0.53
1:E:518:ARG:NH2	1:E:1382:ASN:HD22	2.06	0.53
1:E:973:ASP:OD2	1:E:1298:LYS:CE	2.54	0.53
1:F:182:MET:HE2	1:F:217:PRO:CB	1.93	0.53
1:F:763:ALA:O	1:F:765:ALA:N	2.42	0.53
1:F:1468:VAL:O	1:F:1468:VAL:HG12	2.07	0.53
2:G:97:ILE:CG1	2:G:450:VAL:HG11	2.38	0.53
2:G:145:GLU:OE2	2:G:171:TYR:HE1	1.91	0.53
2:G:166:LEU:HD23	2:G:461:ALA:CB	2.36	0.53
2:H:317:LYS:NZ	2:H:345:ILE:HG21	2.23	0.53
2:H:465:HIS:NE2	2:H:469:LYS:HE3	2.24	0.53
2:H:469:LYS:NZ	2:H:476:VAL:HA	2.22	0.53
2:I:132:TRP:HA	2:I:202:ARG:CZ	2.39	0.53
2:I:238:VAL:HG23	2:I:439:ALA:CA	2.38	0.53
2:I:322:ARG:HG3	2:I:326:ASN:OD1	2.09	0.53
2:J:197:LYS:NZ	2:J:275:ASP:HB3	2.24	0.53
2:K:97:ILE:CG1	2:K:450:VAL:HG11	2.38	0.53
2:K:246:ARG:HD3	2:K:399:LEU:CB	2.33	0.53
2:L:49:GLN:HE22	2:L:69:LEU:CG	2.22	0.53
2:L:372:ALA:HB1	2:L:381:GLN:O	2.08	0.53
2:L:418:THR:N	2:L:424:LEU:HD22	2.23	0.53
2:L:469:LYS:NZ	2:L:476:VAL:HA	2.22	0.53
1:A:369:THR:HG22	1:A:1293:ASN:ND2	2.23	0.53
1:A:468:MET:HG2	1:A:699:ALA:CB	2.38	0.53
1:A:572:THR:HG23	1:A:615:ARG:HB3	1.90	0.53
1:A:643:ASN:ND2	1:A:665:THR:HB	2.22	0.53
1:A:659:ILE:HA	1:A:663:ALA:HB3	1.91	0.53
1:A:782:ARG:C	1:A:784:SER:H	2.12	0.53
1:A:976:SER:O	1:A:979:ASP:HB2	2.08	0.53
1:A:1143:ALA:O	1:A:1144:GLU:C	2.45	0.53
1:A:1310:THR:O	1:A:1313:SER:N	2.33	0.53
1:B:223:GLN:HB3	1:B:224:PRO:CA	2.37	0.53
1:B:447:LEU:HD11	1:B:451:GLN:NE2	2.23	0.53
1:B:1047:MET:HE2	1:B:1186:ARG:NH2	2.03	0.53
1:C:369:THR:HG22	1:C:1293:ASN:ND2	2.23	0.53
1:C:608:ASP:OD2	1:C:646:THR:HA	2.09	0.53
1:C:838:VAL:HG12	1:C:839:PRO:CD	2.32	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1220:ARG:N	1:C:1221:PRO:CD	2.71	0.53
1:C:1400:SER:O	1:C:1401:LEU:C	2.44	0.53
1:D:443:ASP:O	1:D:445:ALA:N	2.41	0.53
1:D:1229:MET:CA	1:F:877:ARG:CG	2.78	0.53
1:D:1438:ARG:CZ	2:I:376:GLY:O	2.57	0.53
1:D:1470:VAL:O	1:D:1470:VAL:CG1	2.56	0.53
1:E:269:VAL:HG23	1:E:270:GLY:N	2.22	0.53
1:E:1219:ALA:O	1:E:1220:ARG:C	2.47	0.53
1:F:574:PRO:HD3	1:F:615:ARG:HH12	1.74	0.53
1:F:615:ARG:HH11	1:F:615:ARG:HG2	1.73	0.53
1:F:1104:MET:C	2:I:54:PHE:CZ	2.81	0.53
2:G:94:CYS:HB3	2:G:98:CYS:SG	2.49	0.53
2:G:269:ASN:ND2	2:G:273:LEU:HD23	2.24	0.53
2:H:434:MET:HB2	2:H:437:VAL:HG11	1.87	0.53
2:I:317:LYS:HZ2	2:I:345:ILE:HG21	1.73	0.53
2:J:49:GLN:HE22	2:J:69:LEU:CG	2.22	0.53
2:J:94:CYS:HB3	2:J:98:CYS:SG	2.49	0.53
2:J:174:HIS:CE1	2:J:215:HIS:HB3	2.44	0.53
2:J:295:LEU:CD1	2:J:319:LEU:HD13	2.39	0.53
2:K:49:GLN:HE22	2:K:69:LEU:CG	2.22	0.53
2:K:249:LYS:HE2	2:K:258:ILE:HD11	1.90	0.53
2:K:322:ARG:HD2	2:K:349:ALA:CB	2.38	0.53
2:K:372:ALA:HB1	2:K:381:GLN:O	2.08	0.53
2:L:97:ILE:HD11	2:L:450:VAL:CB	2.37	0.53
2:L:238:VAL:HG23	2:L:439:ALA:CA	2.38	0.53
2:L:249:LYS:HE2	2:L:258:ILE:HD11	1.90	0.53
2:L:250:ALA:HB1	2:L:251:PRO:CD	2.33	0.53
2:L:269:ASN:ND2	2:L:273:LEU:HD23	2.24	0.53
2:L:432:THR:HG22	2:L:434:MET:N	2.15	0.53
1:A:253:HIS:CE1	1:A:254:PRO:HG2	2.44	0.53
1:A:518:ARG:NH2	1:A:1382:ASN:HD22	2.06	0.53
1:A:587:ARG:O	1:A:590:ARG:HB2	2.09	0.53
1:A:899:ASN:O	1:C:1263:HIS:CE1	2.62	0.53
1:B:628:HIS:O	1:B:629:THR:C	2.47	0.53
1:B:734:LEU:HD11	1:B:738:HIS:HD2	1.51	0.53
1:B:1093:GLY:O	1:B:1094:THR:C	2.45	0.53
1:C:73:VAL:O	1:C:172:LEU:HA	2.09	0.53
1:C:253:HIS:CE1	1:C:254:PRO:HG2	2.44	0.53
1:C:302:ALA:HA	1:C:347:ARG:NH1	2.23	0.53
1:C:443:ASP:O	1:C:446:GLU:N	2.28	0.53
1:C:1375:ILE:O	1:C:1377:GLY:N	2.39	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1016:ALA:O	1:E:1017:ASN:HB2	2.08	0.53
1:E:1093:GLY:O	1:E:1096:SER:N	2.41	0.53
1:E:1289:MET:H	1:E:1289:MET:HE2	1.73	0.53
1:F:505:GLN:NE2	1:F:1001:VAL:N	2.55	0.53
1:F:1050:SER:O	1:F:1051:GLU:C	2.46	0.53
2:G:60:PRO:HB2	2:G:451:VAL:HG22	1.90	0.53
2:G:418:THR:N	2:G:424:LEU:HD22	2.23	0.53
2:G:454:ILE:HD13	2:G:458:ARG:HG2	1.91	0.53
2:H:269:ASN:ND2	2:H:273:LEU:HD23	2.24	0.53
2:H:371:VAL:HG21	2:H:386:SER:CB	2.39	0.53
2:I:416:LYS:HB2	2:I:416:LYS:NZ	2.24	0.53
2:J:45:ASN:HD21	2:J:45:ASN:N	2.04	0.53
2:J:54:PHE:HB3	2:J:107:ASN:CB	2.36	0.53
2:K:181:ARG:C	2:K:181:ARG:HD2	2.28	0.53
2:L:174:HIS:CE1	2:L:215:HIS:HB3	2.44	0.53
2:L:276:THR:HG22	2:L:277:VAL:HG23	1.91	0.53
2:L:406:LEU:H	2:L:406:LEU:CD2	2.21	0.53
2:L:416:LYS:HZ2	2:L:416:LYS:HB2	1.73	0.53
1:A:119:GLU:O	1:A:120:LYS:C	2.47	0.53
1:A:729:GLY:C	1:A:748:GLY:HA3	2.29	0.53
1:A:1263:HIS:CE1	1:E:899:ASN:O	2.62	0.53
1:A:1391:MET:HE1	1:A:1458:VAL:CG2	2.37	0.53
1:A:1398:ASP:O	1:A:1399:ASP:C	2.47	0.53
1:B:1289:MET:CE	1:B:1289:MET:CB	2.87	0.53
1:B:1388:THR:O	1:B:1388:THR:HG23	2.06	0.53
1:C:67:PRO:HG3	1:C:105:TYR:OH	2.08	0.53
1:C:392:ALA:O	1:C:400:LEU:CD1	2.53	0.53
1:C:782:ARG:C	1:C:784:SER:H	2.12	0.53
1:C:1112:THR:O	2:K:112:GLN:NE2	2.40	0.53
1:D:602:THR:O	1:D:640:THR:CG2	2.56	0.53
1:D:615:ARG:HH11	1:D:615:ARG:HG2	1.73	0.53
1:E:253:HIS:ND1	1:E:254:PRO:CG	2.71	0.53
1:E:753:GLY:O	1:E:754:ILE:C	2.46	0.53
1:E:1121:ASP:OD1	1:E:1122:ASP:N	2.42	0.53
1:E:1375:ILE:O	1:E:1377:GLY:N	2.39	0.53
1:F:443:ASP:O	1:F:445:ALA:N	2.41	0.53
1:F:1068:ARG:NE	1:F:1089:GLU:OE1	2.38	0.53
2:G:174:HIS:CE1	2:G:215:HIS:HB3	2.44	0.53
2:G:207:LEU:HG	2:G:214:TYR:OH	2.07	0.53
2:G:416:LYS:HB2	2:G:416:LYS:NZ	2.24	0.53
2:H:145:GLU:OE2	2:H:171:TYR:HE1	1.91	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:404:GLU:O	2:H:404:GLU:HG3	2.09	0.53
2:H:443:ILE:HD12	2:H:444:VAL:CA	2.39	0.53
2:I:350:PRO:HG2	2:I:373:ASP:O	2.09	0.53
2:I:372:ALA:HB1	2:I:381:GLN:O	2.08	0.53
2:J:60:PRO:HB2	2:J:451:VAL:HG22	1.90	0.53
2:J:322:ARG:HG3	2:J:326:ASN:OD1	2.09	0.53
2:J:371:VAL:HG21	2:J:386:SER:CB	2.39	0.53
2:K:60:PRO:HB2	2:K:451:VAL:HG22	1.90	0.53
2:K:162:ALA:CB	2:K:237:LEU:HD12	2.38	0.53
2:K:238:VAL:HG23	2:K:439:ALA:CA	2.38	0.53
2:K:243:TYR:CE1	2:K:405:ASP:HB3	2.43	0.53
2:L:321:ARG:HD3	2:L:322:ARG:CB	2.37	0.53
2:L:454:ILE:HD13	2:L:458:ARG:HG2	1.91	0.53
1:A:92:ILE:O	1:A:93:VAL:C	2.45	0.53
1:A:317:ILE:CG2	1:A:321:ASN:HD21	2.19	0.53
1:A:496:HIS:O	1:A:653:HIS:CE1	2.61	0.53
1:A:1349:ARG:HH11	1:A:1349:ARG:CG	2.22	0.53
1:A:1400:SER:O	1:A:1403:LEU:N	2.27	0.53
1:B:1233:TYR:O	1:B:1268:LEU:HA	2.09	0.53
1:C:708:MET:O	1:C:710:LYS:N	2.41	0.53
1:C:932:VAL:O	1:C:933:ALA:CB	2.45	0.53
1:C:1016:ALA:O	1:C:1017:ASN:HB2	2.08	0.53
1:C:1375:ILE:HB	1:C:1394:VAL:HG22	1.91	0.53
1:D:1161:VAL:O	1:D:1161:VAL:CG1	2.57	0.53
1:D:1432:VAL:O	1:D:1433:THR:C	2.45	0.53
1:E:175:ARG:NH2	1:E:203:ASP:OD2	2.42	0.53
1:E:571:ALA:HB2	1:E:606:LEU:CD2	2.39	0.53
1:E:1155:PHE:N	1:E:1155:PHE:CD1	2.77	0.53
1:E:1207:VAL:HG13	1:E:1208:PRO:CD	2.39	0.53
1:E:1221:PRO:CB	1:E:1229:MET:CE	2.73	0.53
1:E:1316:GLU:O	1:E:1318:ASN:N	2.42	0.53
1:F:131:ILE:O	1:F:131:ILE:HG23	2.09	0.53
1:F:240:ASN:ND2	1:F:327:TRP:CD2	2.77	0.53
1:F:1131:THR:CG2	1:F:1133:GLU:N	2.72	0.53
2:G:244:LYS:HG3	2:G:402:GLU:O	2.08	0.53
2:H:197:LYS:NZ	2:H:275:ASP:HB3	2.24	0.53
2:H:350:PRO:HG2	2:H:373:ASP:O	2.09	0.53
2:I:60:PRO:HB2	2:I:451:VAL:HG22	1.90	0.53
2:I:322:ARG:HD2	2:I:349:ALA:CB	2.38	0.53
2:I:406:LEU:H	2:I:406:LEU:CD2	2.21	0.53
2:J:244:LYS:HG3	2:J:402:GLU:O	2.08	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:317:LYS:CE	2:J:345:ILE:HG21	2.38	0.53
2:K:292:VAL:HG22	2:K:394:LEU:CD1	2.30	0.53
2:K:317:LYS:CE	2:K:345:ILE:HG21	2.38	0.53
2:L:353:PHE:CE1	2:L:382:VAL:HG12	2.44	0.53
1:A:269:VAL:HG23	1:A:270:GLY:N	2.22	0.53
1:A:1316:GLU:O	1:A:1318:ASN:N	2.42	0.53
1:B:62:ILE:HG22	1:B:62:ILE:O	2.08	0.53
1:B:302:ALA:CA	1:B:347:ARG:NH1	2.72	0.53
1:B:615:ARG:HH11	1:B:615:ARG:HG2	1.73	0.53
1:B:763:ALA:O	1:B:765:ALA:N	2.42	0.53
1:B:1058:LEU:O	1:B:1058:LEU:CD2	2.57	0.53
1:C:753:GLY:O	1:C:754:ILE:C	2.46	0.53
1:C:1061:LEU:O	1:C:1064:ARG:HB2	2.08	0.53
1:C:1077:ARG:O	1:C:1078:ASP:C	2.44	0.53
1:D:62:ILE:HG22	1:D:62:ILE:O	2.08	0.53
1:D:447:LEU:HD11	1:D:451:GLN:NE2	2.23	0.53
1:D:529:LEU:HB3	1:D:638:THR:OG1	2.08	0.53
1:D:549:VAL:O	1:D:697:LYS:HE3	2.09	0.53
1:D:763:ALA:O	1:D:765:ALA:N	2.42	0.53
1:D:855:THR:HG22	1:D:855:THR:O	2.09	0.53
1:E:31:ARG:NH1	1:E:368:GLU:OE2	2.42	0.53
1:E:1374:VAL:C	1:E:1375:ILE:HG13	2.28	0.53
1:E:1391:MET:HE1	1:E:1458:VAL:HG21	1.90	0.53
1:E:1398:ASP:O	1:E:1399:ASP:C	2.47	0.53
1:F:528:ASN:HB3	1:F:542:LEU:HD22	1.91	0.53
1:F:1047:MET:CE	1:F:1186:ARG:NH2	2.44	0.53
2:G:97:ILE:HD11	2:G:450:VAL:CB	2.37	0.53
2:G:243:TYR:CE1	2:G:405:ASP:HB3	2.43	0.53
2:H:271:VAL:HG11	2:H:284:SER:O	2.09	0.53
2:H:317:LYS:CE	2:H:345:ILE:HG21	2.38	0.53
2:H:345:ILE:HD13	2:H:345:ILE:N	2.17	0.53
2:H:350:PRO:HD2	2:H:374:ALA:CA	2.39	0.53
2:I:71:LEU:HD13	2:I:72:THR:N	2.24	0.53
2:I:94:CYS:HB3	2:I:98:CYS:SG	2.49	0.53
2:I:197:LYS:NZ	2:I:275:ASP:HB3	2.24	0.53
2:I:317:LYS:CE	2:I:345:ILE:HG21	2.38	0.53
2:I:350:PRO:HD2	2:I:374:ALA:CA	2.40	0.53
2:I:454:ILE:HD13	2:I:458:ARG:HG2	1.91	0.53
2:J:71:LEU:HD13	2:J:72:THR:N	2.24	0.53
2:J:415:LEU:CG	2:J:432:THR:HG23	2.34	0.53
2:J:465:HIS:NE2	2:J:469:LYS:HE3	2.24	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:K:197:LYS:NZ	2:K:275:ASP:HB3	2.24	0.53
2:K:454:ILE:HD13	2:K:458:ARG:HG2	1.91	0.53
2:L:71:LEU:HD13	2:L:72:THR:N	2.24	0.53
2:L:77:LEU:CA	2:L:127:ILE:HD11	2.39	0.53
2:L:110:ILE:HG13	2:L:117:ALA:CA	2.35	0.53
2:L:145:GLU:OE2	2:L:171:TYR:HE1	1.91	0.53
2:L:181:ARG:HD2	2:L:181:ARG:C	2.28	0.53
2:L:186:LEU:HD21	2:L:195:LEU:HD11	1.91	0.53
2:L:295:LEU:CD1	2:L:319:LEU:HD13	2.39	0.53
2:L:473:GLU:HG2	2:L:473:GLU:O	2.08	0.53
1:A:218:THR:HG22	1:A:218:THR:O	2.08	0.52
1:A:753:GLY:O	1:A:754:ILE:C	2.46	0.52
1:A:1122:ASP:O	1:A:1126:GLN:HG3	2.09	0.52
1:B:574:PRO:HD3	1:B:615:ARG:HH12	1.74	0.52
1:B:1227:GLU:OE2	1:D:876:ASN:ND2	2.43	0.52
1:C:175:ARG:NH2	1:C:203:ASP:OD2	2.42	0.52
1:C:1122:ASP:O	1:C:1126:GLN:HG3	2.09	0.52
1:C:1219:ALA:O	1:C:1220:ARG:C	2.47	0.52
1:D:500:ARG:HD2	1:D:728:ILE:CG2	2.39	0.52
1:D:672:GLN:HG3	1:D:693:MET:SD	2.49	0.52
1:E:266:VAL:O	1:E:279:THR:HG23	2.08	0.52
1:E:631:LEU:HD13	1:E:636:LEU:HB3	1.90	0.52
1:E:1212:ASP:OD1	1:E:1243:GLY:N	2.24	0.52
1:E:1438:ARG:CB	2:K:376:GLY:H	1.95	0.52
1:F:484:PRO:HG3	1:F:823:MET:CG	2.39	0.52
1:F:830:GLU:HG2	1:F:831:LEU:N	2.24	0.52
2:G:249:LYS:HE2	2:G:258:ILE:HD11	1.90	0.52
2:G:350:PRO:HG2	2:G:373:ASP:O	2.09	0.52
2:G:445:ARG:HG2	2:G:445:ARG:O	2.09	0.52
2:H:97:ILE:CD1	2:H:450:VAL:HG11	2.39	0.52
2:H:295:LEU:CD1	2:H:319:LEU:HD13	2.39	0.52
2:I:174:HIS:CE1	2:I:215:HIS:HB3	2.44	0.52
2:I:207:LEU:HG	2:I:214:TYR:OH	2.07	0.52
2:J:144:ARG:HH11	2:J:169:LYS:HA	1.74	0.52
2:J:181:ARG:O	2:J:182:MET:HE3	2.09	0.52
2:J:269:ASN:ND2	2:J:273:LEU:HD23	2.24	0.52
2:J:404:GLU:O	2:J:404:GLU:HG3	2.09	0.52
2:J:443:ILE:HD12	2:J:444:VAL:CA	2.39	0.52
2:J:473:GLU:HG2	2:J:473:GLU:O	2.08	0.52
2:K:81:TYR:CZ	2:K:85:GLN:HG3	2.44	0.52
2:K:271:VAL:HG11	2:K:284:SER:O	2.09	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:K:465:HIS:NE2	2:K:469:LYS:HE3	2.24	0.52
1:A:227:MET:HE3	1:A:282:GLU:CG	2.38	0.52
1:B:40:THR:O	1:B:40:THR:CG2	2.57	0.52
1:B:100:PHE:O	1:B:137:LYS:CE	2.46	0.52
1:B:281:PHE:O	1:B:285:VAL:HG23	2.09	0.52
1:B:500:ARG:HD2	1:B:728:ILE:CG2	2.39	0.52
1:B:672:GLN:HG3	1:B:693:MET:SD	2.49	0.52
1:B:1003:ARG:HG3	1:B:1004:SER:N	2.24	0.52
1:B:1323:ILE:HD12	1:B:1327:VAL:HG21	1.91	0.52
1:C:430:VAL:HG11	1:C:554:GLU:HB2	1.88	0.52
1:C:660:GLY:HA2	1:C:721:GLY:H	1.74	0.52
1:C:729:GLY:C	1:C:748:GLY:HA3	2.29	0.52
1:C:1317:THR:CG2	1:C:1318:ASN:N	2.63	0.52
1:D:602:THR:O	1:D:640:THR:HA	2.09	0.52
1:D:830:GLU:HG2	1:D:831:LEU:N	2.24	0.52
1:D:917:VAL:HG13	1:D:922:LEU:HD21	1.90	0.52
1:D:1058:LEU:O	1:D:1058:LEU:CD2	2.57	0.52
1:E:389:GLU:HA	1:E:403:ASP:OD2	2.09	0.52
1:E:608:ASP:OD2	1:E:646:THR:HA	2.09	0.52
1:E:1007:GLY:N	1:E:1051:GLU:OE2	2.41	0.52
1:E:1375:ILE:HB	1:E:1394:VAL:HG22	1.91	0.52
1:E:1427:LEU:O	1:E:1430:GLU:N	2.42	0.52
1:F:281:PHE:O	1:F:285:VAL:HG23	2.09	0.52
1:F:302:ALA:CA	1:F:347:ARG:NH1	2.72	0.52
1:F:349:GLY:HA3	1:F:387:PRO:HG3	1.90	0.52
1:F:672:GLN:HG3	1:F:693:MET:SD	2.49	0.52
1:F:781:PHE:O	2:I:52:VAL:HB	1.92	0.52
1:F:1008:THR:HG22	1:F:1009:ILE:H	1.70	0.52
2:G:97:ILE:CD1	2:G:450:VAL:HG11	2.39	0.52
2:G:276:THR:HG22	2:G:277:VAL:HG23	1.91	0.52
2:G:322:ARG:HD3	2:G:349:ALA:CA	2.39	0.52
2:H:174:HIS:CE1	2:H:215:HIS:HB3	2.44	0.52
2:H:240:THR:HG1	8:H:484:FAD:C5A	2.23	0.52
2:H:322:ARG:HD2	2:H:349:ALA:CB	2.38	0.52
2:I:249:LYS:HE2	2:I:258:ILE:HD13	1.91	0.52
2:I:321:ARG:HD3	2:I:322:ARG:CB	2.37	0.52
2:K:89:ASN:C	2:K:91:PRO:HD3	2.30	0.52
2:K:322:ARG:HG3	2:K:326:ASN:OD1	2.09	0.52
2:K:443:ILE:HD12	2:K:444:VAL:CA	2.39	0.52
2:L:244:LYS:HG3	2:L:402:GLU:O	2.09	0.52
2:L:249:LYS:HE2	2:L:258:ILE:HD13	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:469:LYS:CD	2:L:476:VAL:HB	2.38	0.52
1:A:608:ASP:OD2	1:A:646:THR:HA	2.09	0.52
1:A:1135:VAL:O	1:A:1136:VAL:C	2.44	0.52
1:B:240:ASN:ND2	1:B:327:TRP:CD2	2.77	0.52
1:B:1470:VAL:O	1:B:1470:VAL:HG13	2.08	0.52
1:C:845:SER:O	1:C:848:ALA:HB3	2.10	0.52
1:C:1385:ALA:HB2	1:C:1406:ASN:HD22	1.74	0.52
1:D:1442:GLU:OE2	2:I:375:THR:HA	2.08	0.52
1:E:119:GLU:O	1:E:120:LYS:C	2.47	0.52
1:E:572:THR:CG2	1:E:615:ARG:NE	2.72	0.52
1:F:621:ILE:HG12	1:F:657:VAL:CG1	2.40	0.52
1:F:676:ALA:O	1:F:677:GLU:C	2.45	0.52
2:G:89:ASN:C	2:G:91:PRO:HD3	2.30	0.52
2:G:197:LYS:NZ	2:G:275:ASP:HB3	2.24	0.52
2:G:295:LEU:CD1	2:G:319:LEU:HD13	2.39	0.52
2:G:469:LYS:CD	2:G:476:VAL:HB	2.38	0.52
2:H:81:TYR:CZ	2:H:85:GLN:HG3	2.44	0.52
2:H:276:THR:HG22	2:H:277:VAL:HG23	1.91	0.52
2:H:473:GLU:HG2	2:H:473:GLU:O	2.08	0.52
2:I:215:HIS:CD2	2:I:218:PHE:CD1	2.98	0.52
2:I:249:LYS:HG3	2:I:258:ILE:CD1	2.39	0.52
2:K:153:ILE:HG21	2:K:238:VAL:HG12	1.90	0.52
2:K:174:HIS:CE1	2:K:215:HIS:HB3	2.44	0.52
2:K:244:LYS:HG3	2:K:402:GLU:O	2.08	0.52
2:K:317:LYS:NZ	2:K:345:ILE:HG21	2.24	0.52
2:L:45:ASN:HD21	2:L:45:ASN:H	1.57	0.52
2:L:89:ASN:C	2:L:91:PRO:HD3	2.30	0.52
2:L:153:ILE:HG21	2:L:238:VAL:HG12	1.90	0.52
2:L:349:ALA:HB3	2:L:350:PRO:CD	2.39	0.52
2:L:469:LYS:HD2	2:L:476:VAL:CB	2.39	0.52
1:A:302:ALA:HA	1:A:347:ARG:NH1	2.23	0.52
1:A:481:ASP:OD1	1:A:481:ASP:C	2.44	0.52
1:A:1290:GLY:O	1:A:1291:ASP:CB	2.53	0.52
1:A:1427:LEU:O	1:A:1430:GLU:N	2.42	0.52
1:B:549:VAL:O	1:B:697:LYS:HE3	2.10	0.52
1:B:830:GLU:HG2	1:B:831:LEU:N	2.24	0.52
1:B:1216:VAL:HG11	1:B:1249:MET:HE1	1.90	0.52
1:B:1452:THR:HG22	1:B:1453:LYS:HG3	1.91	0.52
1:C:594:GLU:O	1:C:595:ASP:C	2.48	0.52
1:C:659:ILE:HA	1:C:663:ALA:HB3	1.91	0.52
1:C:1011:ALA:O	1:C:1014:ALA:HB3	2.09	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1207:VAL:HG13	1:C:1208:PRO:CD	2.39	0.52
1:D:342:VAL:HG12	1:D:343:GLY:N	2.24	0.52
1:D:446:GLU:O	1:D:449:ARG:N	2.43	0.52
1:D:1326:THR:HG22	1:D:1326:THR:O	2.10	0.52
1:E:587:ARG:O	1:E:590:ARG:HB2	2.09	0.52
1:E:843:VAL:HG12	1:E:844:GLU:H	1.70	0.52
1:F:419:TRP:O	1:F:540:THR:CB	2.58	0.52
1:F:549:VAL:O	1:F:697:LYS:HE3	2.10	0.52
1:F:1406:ASN:OD1	1:F:1406:ASN:C	2.48	0.52
2:G:153:ILE:HG21	2:G:238:VAL:HG12	1.90	0.52
2:G:249:LYS:HE2	2:G:258:ILE:HD13	1.91	0.52
2:G:322:ARG:HD2	2:G:349:ALA:CB	2.38	0.52
2:H:322:ARG:HD3	2:H:349:ALA:CA	2.39	0.52
2:H:415:LEU:CG	2:H:432:THR:HG23	2.34	0.52
2:I:269:ASN:ND2	2:I:273:LEU:HD23	2.24	0.52
2:I:469:LYS:CD	2:I:476:VAL:HB	2.38	0.52
2:I:473:GLU:O	2:I:473:GLU:HG2	2.09	0.52
2:J:145:GLU:OE2	2:J:171:TYR:HE1	1.91	0.52
2:K:97:ILE:CD1	2:K:450:VAL:HG11	2.39	0.52
2:L:350:PRO:HG2	2:L:373:ASP:O	2.09	0.52
1:A:414:LYS:CB	1:A:415:PRO:CD	2.87	0.52
1:A:657:VAL:O	1:A:658:LEU:C	2.48	0.52
1:A:826:ARG:HG2	1:A:1046:GLU:OE2	2.07	0.52
1:A:1155:PHE:N	1:A:1155:PHE:CD1	2.77	0.52
1:B:419:TRP:O	1:B:540:THR:CB	2.58	0.52
1:B:536:ASP:OD1	1:B:536:ASP:O	2.28	0.52
1:B:602:THR:O	1:B:640:THR:HA	2.09	0.52
1:B:1326:THR:HG22	1:B:1326:THR:O	2.10	0.52
1:B:1406:ASN:OD1	1:B:1406:ASN:C	2.48	0.52
1:B:1420:TYR:O	1:B:1421:GLU:C	2.46	0.52
1:C:389:GLU:HA	1:C:403:ASP:OD2	2.09	0.52
1:C:782:ARG:HG2	2:K:53:PRO:HD2	0.55	0.52
1:C:843:VAL:HG12	1:C:844:GLU:H	1.70	0.52
1:D:60:LYS:O	1:D:63:GLY:N	2.38	0.52
1:D:485:ILE:O	1:D:488:LEU:N	2.43	0.52
1:D:846:ILE:O	1:D:847:THR:C	2.48	0.52
1:D:1222:LEU:C	1:D:1222:LEU:HD12	2.24	0.52
1:E:253:HIS:CE1	1:E:254:PRO:HG2	2.44	0.52
1:E:414:LYS:CB	1:E:415:PRO:CD	2.87	0.52
1:E:572:THR:HG23	1:E:615:ARG:HB3	1.90	0.52
1:E:1401:LEU:O	1:E:1401:LEU:CD1	2.53	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:223:GLN:HB3	1:F:224:PRO:CA	2.37	0.52
2:G:49:GLN:HE22	2:G:69:LEU:CG	2.22	0.52
2:G:215:HIS:CD2	2:G:218:PHE:CD1	2.98	0.52
2:G:249:LYS:HG3	2:G:258:ILE:CD1	2.39	0.52
2:H:186:LEU:HD21	2:H:195:LEU:HD11	1.91	0.52
2:I:145:GLU:OE2	2:I:171:TYR:HE1	1.91	0.52
2:I:244:LYS:HG3	2:I:402:GLU:O	2.08	0.52
2:I:443:ILE:HD12	2:I:444:VAL:CA	2.39	0.52
2:I:469:LYS:HD2	2:I:476:VAL:CB	2.39	0.52
2:J:249:LYS:HG3	2:J:258:ILE:CD1	2.39	0.52
2:J:454:ILE:HD13	2:J:458:ARG:HG2	1.91	0.52
2:K:68:TRP:HB2	2:K:80:ALA:HB1	1.91	0.52
2:K:144:ARG:HH11	2:K:169:LYS:HA	1.74	0.52
2:K:215:HIS:CD2	2:K:218:PHE:CD1	2.98	0.52
2:K:350:PRO:HD2	2:K:374:ALA:CA	2.40	0.52
2:K:350:PRO:HG2	2:K:373:ASP:O	2.09	0.52
2:L:243:TYR:CE1	2:L:405:ASP:HB3	2.43	0.52
1:A:660:GLY:HA2	1:A:721:GLY:H	1.74	0.52
1:A:731:SER:CA	1:A:747:SER:HB2	2.40	0.52
1:A:1057:THR:HG22	1:A:1190:VAL:HG11	1.91	0.52
1:A:1250:VAL:HG13	1:A:1254:PHE:HD2	1.75	0.52
1:B:520:MET:HE3	1:B:705:LEU:HB3	1.91	0.52
1:B:710:LYS:HG2	1:B:939:GLY:CA	2.18	0.52
1:B:855:THR:HG22	1:B:855:THR:O	2.09	0.52
1:B:1051:GLU:O	1:B:1052:VAL:C	2.46	0.52
1:B:1075:THR:CG2	1:B:1076:GLY:N	2.73	0.52
1:B:1219:ALA:HA	1:B:1229:MET:HE1	1.90	0.52
1:C:230:HIS:CE1	1:C:234:ILE:HG13	2.35	0.52
1:C:1155:PHE:N	1:C:1155:PHE:CD1	2.77	0.52
1:C:1420:TYR:OH	1:C:1466:LEU:HD22	2.09	0.52
1:C:1438:ARG:O	1:C:1440:ALA:N	2.42	0.52
1:D:136:ASN:OD1	1:D:136:ASN:N	2.38	0.52
1:D:443:ASP:O	1:D:446:GLU:N	2.40	0.52
1:D:484:PRO:HG3	1:D:823:MET:CG	2.39	0.52
1:D:574:PRO:HD3	1:D:615:ARG:HH12	1.74	0.52
1:D:693:MET:O	1:D:694:ALA:C	2.45	0.52
1:D:1227:GLU:OE2	1:F:876:ASN:ND2	2.43	0.52
1:D:1316:GLU:O	1:D:1317:THR:C	2.46	0.52
1:D:1323:ILE:HD12	1:D:1327:VAL:HG21	1.91	0.52
1:D:1420:TYR:O	1:D:1421:GLU:C	2.46	0.52
1:E:729:GLY:C	1:E:748:GLY:HA3	2.29	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:260:MET:O	1:F:263:LEU:CB	2.55	0.52
1:F:602:THR:O	1:F:640:THR:HA	2.09	0.52
1:F:1338:ALA:O	1:F:1340:GLY:N	2.43	0.52
1:F:1394:VAL:HG11	1:F:1401:LEU:CD2	2.40	0.52
1:F:1438:ARG:CZ	2:G:376:GLY:O	2.57	0.52
2:G:353:PHE:CE1	2:G:382:VAL:HG12	2.44	0.52
2:H:454:ILE:HD13	2:H:458:ARG:HG2	1.91	0.52
2:I:49:GLN:HE22	2:I:69:LEU:CG	2.22	0.52
2:I:97:ILE:HD11	2:I:450:VAL:HB	1.92	0.52
2:I:186:LEU:HD21	2:I:195:LEU:HD11	1.91	0.52
2:I:353:PHE:CE1	2:I:382:VAL:HG12	2.44	0.52
2:I:465:HIS:NE2	2:I:469:LYS:HE3	2.24	0.52
2:J:90:PHE:HB3	2:J:93:ILE:HG22	1.86	0.52
2:J:186:LEU:HD21	2:J:195:LEU:HD11	1.91	0.52
2:J:276:THR:HG22	2:J:277:VAL:HG23	1.91	0.52
2:J:449:LEU:HD11	2:J:451:VAL:CG1	2.31	0.52
2:K:102:ARG:C	2:K:103:LEU:HD23	2.30	0.52
2:K:295:LEU:CD1	2:K:319:LEU:HD13	2.39	0.52
2:L:60:PRO:HB2	2:L:451:VAL:HG22	1.90	0.52
2:L:97:ILE:CD1	2:L:450:VAL:HG11	2.39	0.52
2:L:215:HIS:CD2	2:L:218:PHE:CD1	2.98	0.52
2:L:445:ARG:HG2	2:L:445:ARG:O	2.10	0.52
1:A:31:ARG:NH1	1:A:368:GLU:OE2	2.42	0.52
1:A:571:ALA:HB2	1:A:606:LEU:CD2	2.39	0.52
1:B:342:VAL:HG12	1:B:343:GLY:N	2.24	0.52
1:B:1376:LEU:HB3	1:B:1439:PHE:HE2	1.75	0.52
1:B:1470:VAL:O	1:B:1470:VAL:CG1	2.56	0.52
1:C:414:LYS:CB	1:C:415:PRO:CD	2.87	0.52
1:C:572:THR:CG2	1:C:615:ARG:NE	2.72	0.52
1:D:349:GLY:HA3	1:D:387:PRO:HG3	1.90	0.52
1:D:875:MET:O	1:D:876:ASN:C	2.47	0.52
1:D:1438:ARG:O	1:D:1441:ALA:N	2.43	0.52
1:D:1452:THR:HG22	1:D:1453:LYS:HG3	1.91	0.52
1:E:73:VAL:O	1:E:172:LEU:HA	2.09	0.52
1:E:250:ARG:O	1:E:531:ASN:ND2	2.42	0.52
1:E:572:THR:CG2	1:E:573:PHE:N	2.73	0.52
1:E:731:SER:HA	1:E:747:SER:CA	2.40	0.52
1:E:731:SER:CA	1:E:747:SER:HB2	2.40	0.52
1:E:782:ARG:C	1:E:784:SER:H	2.12	0.52
1:E:1122:ASP:O	1:E:1126:GLN:HG3	2.09	0.52
1:F:500:ARG:HD2	1:F:728:ILE:CG2	2.39	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:918:THR:O	1:F:919:ALA:C	2.42	0.52
1:F:1401:LEU:HB3	1:F:1402:PRO:HD3	1.91	0.52
1:F:1447:TRP:CD2	1:F:1451:VAL:HG22	2.45	0.52
2:G:45:ASN:HD21	2:G:45:ASN:H	1.57	0.52
2:G:54:PHE:HB3	2:G:107:ASN:CB	2.36	0.52
2:G:144:ARG:HH11	2:G:169:LYS:HA	1.74	0.52
2:G:406:LEU:H	2:G:406:LEU:CD2	2.21	0.52
2:G:417:VAL:CG1	2:G:421:GLY:HA2	2.40	0.52
2:G:443:ILE:HD12	2:G:444:VAL:CA	2.39	0.52
2:H:60:PRO:HB2	2:H:451:VAL:HG22	1.90	0.52
2:H:71:LEU:HD13	2:H:72:THR:N	2.24	0.52
2:H:77:LEU:CA	2:H:127:ILE:HD11	2.39	0.52
2:H:249:LYS:HE2	2:H:258:ILE:HD11	1.90	0.52
2:H:320:TYR:CD2	2:H:346:TRP:CG	2.98	0.52
2:H:416:LYS:HZ2	2:H:416:LYS:HB2	1.75	0.52
2:H:417:VAL:CG1	2:H:421:GLY:HA2	2.40	0.52
2:I:77:LEU:CA	2:I:127:ILE:HD11	2.40	0.52
2:I:81:TYR:CZ	2:I:85:GLN:HG3	2.44	0.52
2:I:276:THR:HG22	2:I:277:VAL:HG23	1.91	0.52
2:I:404:GLU:O	2:I:404:GLU:HG3	2.09	0.52
2:I:445:ARG:HG2	2:I:445:ARG:O	2.09	0.52
2:J:416:LYS:HB2	2:J:416:LYS:NZ	2.24	0.52
2:K:322:ARG:HD3	2:K:349:ALA:CA	2.39	0.52
2:K:416:LYS:HB2	2:K:416:LYS:NZ	2.24	0.52
2:L:271:VAL:HG11	2:L:284:SER:O	2.09	0.52
2:L:278:GLU:CD	2:L:278:GLU:H	2.13	0.52
2:L:320:TYR:CD2	2:L:346:TRP:CG	2.98	0.52
2:L:322:ARG:HD3	2:L:349:ALA:CA	2.39	0.52
2:L:465:HIS:NE2	2:L:469:LYS:HE3	2.24	0.52
1:A:85:ALA:O	1:A:86:GLN:C	2.48	0.52
1:A:430:VAL:HG11	1:A:554:GLU:HB2	1.88	0.52
1:A:855:THR:HG22	1:A:855:THR:O	2.10	0.52
1:A:1011:ALA:O	1:A:1014:ALA:HB3	2.09	0.52
1:A:1113:CYS:O	1:A:1115:VAL:N	2.42	0.52
1:A:1438:ARG:O	1:A:1440:ALA:N	2.42	0.52
1:B:484:PRO:HG3	1:B:823:MET:CG	2.39	0.52
1:C:143:GLN:O	1:C:143:GLN:NE2	2.41	0.52
1:C:266:VAL:CG1	1:C:279:THR:HG23	2.33	0.52
1:C:1398:ASP:O	1:C:1399:ASP:C	2.47	0.52
1:D:710:LYS:HG2	1:D:939:GLY:CA	2.18	0.52
1:D:1470:VAL:O	1:D:1470:VAL:HG13	2.08	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:92:ILE:O	1:E:93:VAL:C	2.45	0.52
1:E:855:THR:HG22	1:E:855:THR:O	2.10	0.52
1:E:1354:THR:HA	1:E:1372:THR:O	2.10	0.52
1:F:175:ARG:HG3	1:F:175:ARG:NH1	2.23	0.52
1:F:537:GLU:HG3	1:F:538:THR:N	2.08	0.52
1:F:1420:TYR:O	1:F:1421:GLU:C	2.46	0.52
1:F:1428:ILE:HG22	1:F:1428:ILE:O	2.10	0.52
2:H:49:GLN:HE22	2:H:69:LEU:CG	2.22	0.52
2:H:144:ARG:HH11	2:H:169:LYS:HA	1.74	0.52
2:H:353:PHE:CE1	2:H:382:VAL:HG12	2.44	0.52
2:H:406:LEU:H	2:H:406:LEU:CD2	2.21	0.52
2:H:416:LYS:HZ2	2:H:433:ASN:HB2	1.75	0.52
2:J:97:ILE:CD1	2:J:450:VAL:HG11	2.39	0.52
2:J:320:TYR:CD2	2:J:346:TRP:CG	2.98	0.52
2:J:367:ILE:HD13	2:J:368:HIS:O	2.10	0.52
2:J:406:LEU:H	2:J:406:LEU:CD2	2.21	0.52
2:K:269:ASN:ND2	2:K:273:LEU:HD23	2.24	0.52
2:L:81:TYR:CZ	2:L:85:GLN:HG3	2.44	0.52
2:L:249:LYS:HG3	2:L:258:ILE:CD1	2.39	0.52
2:L:404:GLU:O	2:L:404:GLU:HG3	2.09	0.52
1:A:227:MET:CE	1:A:282:GLU:CG	2.88	0.52
1:A:432:THR:O	1:A:434:SER:N	2.43	0.52
1:B:528:ASN:HB3	1:B:542:LEU:HD22	1.91	0.52
1:B:1394:VAL:HG11	1:B:1401:LEU:CD2	2.40	0.52
1:C:94:GLU:HG2	1:C:104:ILE:HD13	1.92	0.52
1:C:432:THR:O	1:C:434:SER:N	2.43	0.52
1:C:731:SER:CA	1:C:747:SER:HB2	2.40	0.52
1:C:1349:ARG:HH11	1:C:1349:ARG:CG	2.22	0.52
1:C:1401:LEU:O	1:C:1401:LEU:CD1	2.53	0.52
1:D:131:ILE:O	1:D:131:ILE:HG23	2.09	0.52
1:D:240:ASN:ND2	1:D:327:TRP:CD2	2.77	0.52
1:D:781:PHE:CD2	2:H:57:VAL:HG21	2.45	0.52
1:D:1428:ILE:HG22	1:D:1428:ILE:O	2.10	0.52
1:E:392:ALA:O	1:E:400:LEU:CD1	2.53	0.52
1:E:432:THR:O	1:E:434:SER:N	2.43	0.52
1:E:560:ASP:O	1:E:561:TYR:C	2.46	0.52
1:E:1143:ALA:O	1:E:1144:GLU:C	2.45	0.52
1:F:253:HIS:CE1	1:F:254:PRO:CD	2.88	0.52
1:F:342:VAL:HG12	1:F:343:GLY:N	2.24	0.52
1:F:1146:VAL:O	1:F:1147:ARG:C	2.46	0.52
1:F:1161:VAL:CG1	1:F:1161:VAL:O	2.57	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:81:TYR:CZ	2:G:85:GLN:HG3	2.44	0.52
2:G:144:ARG:HG2	2:G:145:GLU:N	2.25	0.52
2:G:181:ARG:C	2:G:182:MET:HE3	2.30	0.52
2:H:215:HIS:CD2	2:H:218:PHE:CD1	2.98	0.52
2:I:102:ARG:C	2:I:103:LEU:HD23	2.30	0.52
2:I:271:VAL:HG11	2:I:284:SER:O	2.09	0.52
2:I:278:GLU:CD	2:I:278:GLU:H	2.13	0.52
2:I:320:TYR:CD2	2:I:346:TRP:CG	2.98	0.52
2:J:68:TRP:CZ3	2:J:84:SER:CB	2.93	0.52
2:J:97:ILE:HD11	2:J:450:VAL:HB	1.92	0.52
2:J:144:ARG:HG2	2:J:145:GLU:N	2.25	0.52
2:J:215:HIS:CD2	2:J:218:PHE:CD1	2.98	0.52
2:J:350:PRO:HG2	2:J:373:ASP:O	2.09	0.52
2:L:197:LYS:NZ	2:L:275:ASP:HB3	2.24	0.52
1:A:175:ARG:NH2	1:A:203:ASP:OD2	2.42	0.52
1:A:244:MET:HA	1:A:247:HIS:HB2	1.92	0.52
1:A:560:ASP:O	1:A:561:TYR:C	2.46	0.52
1:A:1274:GLN:HE21	1:A:1293:ASN:HB3	1.74	0.52
1:A:1375:ILE:HB	1:A:1394:VAL:HG22	1.91	0.52
1:B:505:GLN:NE2	1:B:1001:VAL:N	2.55	0.52
1:C:197:ASP:OD1	1:C:199:ARG:N	2.38	0.52
1:C:248:GLU:C	1:C:250:ARG:H	2.13	0.52
1:C:296:MET:O	1:C:297:MET:C	2.40	0.52
1:C:1354:THR:HA	1:C:1372:THR:O	2.10	0.52
1:C:1424:LEU:O	1:C:1425:LYS:C	2.48	0.52
1:D:1050:SER:O	1:D:1051:GLU:C	2.46	0.52
1:E:295:LYS:HE2	1:E:299:VAL:HG12	1.90	0.52
1:E:594:GLU:O	1:E:595:ASP:C	2.48	0.52
1:E:1113:CYS:O	1:E:1115:VAL:N	2.42	0.52
1:E:1438:ARG:O	1:E:1440:ALA:N	2.42	0.52
1:F:670:LEU:HD22	1:F:670:LEU:C	2.31	0.52
1:F:985:TYR:CE1	1:F:1207:VAL:HG11	2.45	0.52
1:F:1245:ARG:HG3	1:F:1245:ARG:O	2.10	0.52
1:F:1289:MET:CE	1:F:1289:MET:CB	2.87	0.52
2:G:186:LEU:HD21	2:G:195:LEU:HD11	1.91	0.52
2:G:320:TYR:CD2	2:G:346:TRP:CE2	2.98	0.52
2:H:68:TRP:HB2	2:H:80:ALA:HB1	1.91	0.52
2:H:89:ASN:C	2:H:91:PRO:HD3	2.30	0.52
2:H:278:GLU:CD	2:H:278:GLU:H	2.13	0.52
2:H:320:TYR:CD2	2:H:346:TRP:CE2	2.98	0.52
2:H:416:LYS:HB2	2:H:416:LYS:NZ	2.24	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:68:TRP:CZ3	2:I:84:SER:CB	2.93	0.52
2:I:144:ARG:HH11	2:I:169:LYS:HA	1.74	0.52
2:I:322:ARG:HD3	2:I:349:ALA:CA	2.39	0.52
2:J:45:ASN:HD21	2:J:45:ASN:H	1.57	0.52
2:J:89:ASN:C	2:J:91:PRO:HD3	2.30	0.52
2:K:96:ARG:NE	2:K:199:VAL:HG21	2.25	0.52
2:K:278:GLU:CD	2:K:278:GLU:H	2.13	0.52
2:K:371:VAL:HG21	2:K:386:SER:CB	2.39	0.52
2:L:317:LYS:HE3	2:L:345:ILE:CB	2.40	0.52
2:L:350:PRO:HD2	2:L:374:ALA:CA	2.39	0.52
2:L:443:ILE:HD12	2:L:444:VAL:CA	2.39	0.52
1:A:845:SER:O	1:A:848:ALA:HB3	2.10	0.51
1:A:1016:ALA:O	1:A:1017:ASN:HB2	2.08	0.51
1:A:1061:LEU:O	1:A:1063:HIS:N	2.43	0.51
1:B:485:ILE:O	1:B:486:ALA:C	2.48	0.51
1:B:1092:ILE:HG22	1:B:1092:ILE:O	2.10	0.51
1:C:31:ARG:NH1	1:C:368:GLU:OE2	2.43	0.51
1:C:235:ASN:C	1:C:235:ASN:ND2	2.52	0.51
1:C:1394:VAL:O	1:C:1394:VAL:CG1	2.55	0.51
1:D:281:PHE:O	1:D:285:VAL:HG23	2.09	0.51
1:D:419:TRP:O	1:D:540:THR:CB	2.58	0.51
1:D:679:HIS:NE2	1:D:687:MET:O	2.42	0.51
1:D:763:ALA:O	1:D:764:THR:C	2.48	0.51
1:D:828:LEU:HD22	1:D:1172:SER:CA	2.31	0.51
1:E:394:ASP:OD1	1:E:396:GLN:N	2.43	0.51
1:E:528:ASN:HB2	1:E:542:LEU:HD22	1.90	0.51
1:E:707:ILE:HA	1:E:710:LYS:HD2	1.92	0.51
1:E:826:ARG:NH1	1:E:826:ARG:CG	2.57	0.51
1:E:1135:VAL:O	1:E:1136:VAL:C	2.44	0.51
1:E:1417:VAL:CG1	1:E:1418:GLY:N	2.73	0.51
1:F:61:VAL:O	1:F:61:VAL:CG1	2.58	0.51
1:F:74:GLY:HA2	1:F:172:LEU:HD13	1.92	0.51
1:F:302:ALA:CB	1:F:347:ARG:NH1	2.73	0.51
1:F:485:ILE:O	1:F:486:ALA:C	2.48	0.51
1:F:629:THR:O	1:F:632:ILE:N	2.42	0.51
1:F:855:THR:HG22	1:F:855:THR:O	2.09	0.51
1:F:875:MET:O	1:F:876:ASN:C	2.47	0.51
1:F:1222:LEU:HD12	1:F:1222:LEU:C	2.24	0.51
1:F:1376:LEU:HB3	1:F:1439:PHE:HE2	1.75	0.51
2:G:317:LYS:HE3	2:G:345:ILE:CB	2.40	0.51
2:G:320:TYR:CD2	2:G:346:TRP:CG	2.98	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:96:ARG:NE	2:H:199:VAL:HG21	2.25	0.51
2:H:377:ARG:O	2:H:378:GLN:HB3	2.10	0.51
2:I:89:ASN:C	2:I:91:PRO:HD3	2.30	0.51
2:I:147:GLY:HA2	2:I:171:TYR:HD1	1.75	0.51
2:I:429:THR:CB	2:I:431:MET:HE2	2.40	0.51
2:J:71:LEU:CD2	2:J:79:GLU:HB2	2.40	0.51
2:J:81:TYR:CZ	2:J:85:GLN:HG3	2.44	0.51
2:J:350:PRO:HD2	2:J:374:ALA:CA	2.39	0.51
2:J:469:LYS:HD2	2:J:476:VAL:CB	2.39	0.51
2:K:249:LYS:HG3	2:K:258:ILE:CD1	2.39	0.51
2:K:353:PHE:CE1	2:K:382:VAL:HG12	2.44	0.51
1:A:24:ALA:O	1:A:27:ALA:N	2.27	0.51
1:A:94:GLU:HG2	1:A:104:ILE:HD13	1.92	0.51
1:A:294:VAL:O	1:A:295:LYS:C	2.47	0.51
1:A:731:SER:HA	1:A:747:SER:CA	2.40	0.51
1:A:896:PRO:HG2	1:C:1226:GLY:CA	2.26	0.51
1:B:136:ASN:OD1	1:B:136:ASN:N	2.38	0.51
1:B:621:ILE:HG12	1:B:657:VAL:CG1	2.40	0.51
1:B:1438:ARG:O	1:B:1441:ALA:N	2.43	0.51
1:C:312:ASN:HB2	1:C:411:ALA:CB	2.41	0.51
1:C:449:ARG:O	1:C:450:ARG:O	2.28	0.51
1:C:572:THR:CG2	1:C:573:PHE:N	2.73	0.51
1:C:707:ILE:HA	1:C:710:LYS:HD2	1.92	0.51
1:C:1113:CYS:O	1:C:1115:VAL:N	2.42	0.51
1:D:621:ILE:HG12	1:D:657:VAL:CG1	2.40	0.51
1:D:1075:THR:CG2	1:D:1076:GLY:N	2.73	0.51
1:D:1338:ALA:O	1:D:1340:GLY:N	2.43	0.51
1:D:1447:TRP:CD2	1:D:1451:VAL:HG22	2.45	0.51
1:E:244:MET:HA	1:E:247:HIS:HB2	1.92	0.51
1:E:248:GLU:C	1:E:250:ARG:H	2.13	0.51
1:E:447:LEU:CD2	1:E:674:ALA:HA	2.30	0.51
1:E:1011:ALA:O	1:E:1014:ALA:HB3	2.09	0.51
1:F:295:LYS:HE2	1:F:299:VAL:HG12	1.92	0.51
1:F:447:LEU:O	1:F:451:GLN:HG3	2.10	0.51
1:F:1432:VAL:O	1:F:1436:GLN:N	2.40	0.51
1:F:1438:ARG:O	1:F:1441:ALA:N	2.43	0.51
2:G:68:TRP:HB2	2:G:80:ALA:HB1	1.91	0.51
2:G:114:THR:HG23	2:G:115:HIS:N	2.26	0.51
2:G:174:HIS:HD2	2:G:176:TYR:CE1	2.29	0.51
2:G:350:PRO:HD2	2:G:374:ALA:CA	2.39	0.51
2:I:45:ASN:HD21	2:I:45:ASN:H	1.57	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:97:ILE:CD1	2:I:450:VAL:HG11	2.39	0.51
2:I:153:ILE:CG1	2:I:220:VAL:HG13	2.40	0.51
2:I:317:LYS:HE3	2:I:345:ILE:CB	2.40	0.51
2:I:349:ALA:HB3	2:I:350:PRO:CD	2.39	0.51
2:I:371:VAL:HG21	2:I:386:SER:CB	2.39	0.51
2:J:102:ARG:C	2:J:103:LEU:HD23	2.30	0.51
2:J:220:VAL:CG2	8:J:484:FAD:N6A	2.55	0.51
2:J:271:VAL:HG11	2:J:284:SER:O	2.09	0.51
2:J:317:LYS:HZ2	2:J:345:ILE:HG21	1.76	0.51
2:K:249:LYS:HE2	2:K:258:ILE:HD13	1.91	0.51
2:K:320:TYR:CD2	2:K:346:TRP:CG	2.98	0.51
2:L:114:THR:HG23	2:L:115:HIS:N	2.26	0.51
2:L:416:LYS:HB2	2:L:416:LYS:NZ	2.24	0.51
2:L:449:LEU:CD2	2:L:452:TRP:CD2	2.93	0.51
1:A:1226:GLY:HA3	1:E:896:PRO:HB2	1.93	0.51
1:A:1354:THR:HA	1:A:1372:THR:O	2.10	0.51
1:B:1161:VAL:CG1	1:B:1161:VAL:O	2.57	0.51
1:B:1229:MET:CA	1:D:877:ARG:CG	2.78	0.51
1:C:281:PHE:O	1:C:285:VAL:HG23	2.11	0.51
1:C:657:VAL:O	1:C:658:LEU:C	2.48	0.51
1:C:896:PRO:HB2	1:E:1226:GLY:HA3	1.93	0.51
1:C:1417:VAL:CG1	1:C:1418:GLY:N	2.73	0.51
1:D:40:THR:O	1:D:40:THR:CG2	2.57	0.51
1:D:61:VAL:O	1:D:61:VAL:CG1	2.58	0.51
1:D:496:HIS:O	1:D:653:HIS:HE1	1.94	0.51
1:E:209:GLN:HG3	1:E:210:ARG:H	1.76	0.51
1:E:893:ARG:HG2	1:E:903:TRP:CB	2.40	0.51
2:G:71:LEU:HD13	2:G:72:THR:N	2.24	0.51
2:G:96:ARG:NE	2:G:199:VAL:HG21	2.25	0.51
2:H:45:ASN:HD21	2:H:45:ASN:H	1.57	0.51
2:H:322:ARG:HG3	2:H:326:ASN:OD1	2.09	0.51
2:I:28:PHE:CZ	2:I:285:LEU:HD21	2.46	0.51
2:I:114:THR:HG23	2:I:115:HIS:N	2.26	0.51
2:I:144:ARG:HG2	2:I:145:GLU:N	2.25	0.51
2:I:449:LEU:CD2	2:I:451:VAL:HG13	2.27	0.51
2:J:147:GLY:HA2	2:J:171:TYR:HD1	1.75	0.51
2:J:174:HIS:HD2	2:J:176:TYR:CE1	2.29	0.51
2:J:278:GLU:CD	2:J:278:GLU:H	2.13	0.51
2:K:28:PHE:CZ	2:K:285:LEU:HD21	2.46	0.51
2:K:32:TYR:CE2	2:K:194:LYS:HB3	2.46	0.51
2:K:71:LEU:CD2	2:K:79:GLU:HB2	2.40	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:K:144:ARG:HG2	2:K:145:GLU:N	2.25	0.51
2:K:166:LEU:HD23	2:K:461:ALA:CB	2.36	0.51
2:K:320:TYR:CD2	2:K:346:TRP:CE2	2.98	0.51
2:L:97:ILE:HD11	2:L:450:VAL:HB	1.92	0.51
2:L:144:ARG:HH11	2:L:169:LYS:HA	1.74	0.51
2:L:174:HIS:HD2	2:L:176:TYR:CE1	2.29	0.51
2:L:290:LYS:HB3	2:L:393:ASP:OD2	2.11	0.51
2:L:377:ARG:O	2:L:378:GLN:HB3	2.10	0.51
1:A:73:VAL:O	1:A:172:LEU:HA	2.09	0.51
1:A:389:GLU:HA	1:A:403:ASP:OD2	2.09	0.51
1:A:404:ARG:CB	1:A:405:GLU:OE1	2.51	0.51
1:A:449:ARG:O	1:A:450:ARG:O	2.28	0.51
1:A:707:ILE:HA	1:A:710:LYS:HD2	1.92	0.51
1:A:776:GLY:O	1:A:782:ARG:HD2	2.10	0.51
1:A:1401:LEU:N	1:A:1402:PRO:HD2	2.26	0.51
1:B:496:HIS:O	1:B:653:HIS:HE1	1.94	0.51
1:B:781:PHE:CD2	2:G:57:VAL:HG21	2.45	0.51
1:B:1447:TRP:CD2	1:B:1451:VAL:HG22	2.45	0.51
1:C:556:ARG:O	1:C:557:ALA:C	2.44	0.51
1:C:763:ALA:O	1:C:767:ASN:HB2	2.11	0.51
1:C:776:GLY:O	1:C:782:ARG:HD2	2.11	0.51
1:C:899:ASN:O	1:E:1263:HIS:CE1	2.62	0.51
1:C:1274:GLN:HE21	1:C:1293:ASN:HB3	1.74	0.51
1:D:528:ASN:HB3	1:D:542:LEU:HD22	1.91	0.51
1:D:628:HIS:O	1:D:629:THR:C	2.47	0.51
1:D:985:TYR:CE1	1:D:1207:VAL:HG11	2.44	0.51
1:D:1406:ASN:OD1	1:D:1406:ASN:C	2.48	0.51
1:E:317:ILE:CG2	1:E:321:ASN:HD21	2.19	0.51
1:E:393:VAL:HG12	1:E:394:ASP:N	2.23	0.51
1:F:628:HIS:O	1:F:629:THR:C	2.47	0.51
1:F:1075:THR:CG2	1:F:1076:GLY:N	2.73	0.51
1:F:1452:THR:HG22	1:F:1453:LYS:HG3	1.91	0.51
2:G:91:PRO:HD2	2:G:203:ARG:HH22	1.76	0.51
2:G:317:LYS:HZ2	2:G:345:ILE:HG21	1.74	0.51
2:H:28:PHE:CZ	2:H:285:LEU:HD21	2.46	0.51
2:H:54:PHE:HB3	2:H:107:ASN:CB	2.36	0.51
2:H:350:PRO:HD2	2:H:374:ALA:HB2	1.93	0.51
2:I:174:HIS:HD2	2:I:176:TYR:CE1	2.29	0.51
2:I:417:VAL:CG1	2:I:421:GLY:HA2	2.40	0.51
2:J:114:THR:HG23	2:J:115:HIS:N	2.26	0.51
2:J:138:LYS:NZ	2:J:206:LEU:HB3	2.26	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:320:TYR:CD2	2:J:346:TRP:CE2	2.98	0.51
2:K:77:LEU:CA	2:K:127:ILE:HD11	2.40	0.51
2:K:174:HIS:HD2	2:K:176:TYR:CE1	2.29	0.51
2:K:350:PRO:HD2	2:K:374:ALA:HB2	1.92	0.51
2:K:445:ARG:HG2	2:K:445:ARG:O	2.09	0.51
2:L:28:PHE:CZ	2:L:285:LEU:HD21	2.46	0.51
2:L:71:LEU:CD2	2:L:79:GLU:HB2	2.40	0.51
2:L:174:HIS:CD2	2:L:176:TYR:CE1	2.99	0.51
2:L:350:PRO:HD2	2:L:374:ALA:HB2	1.93	0.51
1:A:394:ASP:OD1	1:A:396:GLN:N	2.43	0.51
1:A:594:GLU:O	1:A:595:ASP:C	2.48	0.51
1:B:5:PHE:CE2	1:B:365:GLY:HA3	2.45	0.51
1:B:269:VAL:HG23	1:B:270:GLY:N	2.21	0.51
1:B:485:ILE:O	1:B:488:LEU:N	2.43	0.51
1:B:696:TYR:CZ	1:B:700:ILE:CD1	2.94	0.51
1:B:782:ARG:CB	2:G:56:GLN:NE2	2.41	0.51
1:B:876:ASN:ND2	1:F:1227:GLU:OE2	2.43	0.51
1:B:1002:SER:HB2	1:B:1048:GLY:HA3	1.93	0.51
1:C:369:THR:O	1:C:371:MET:N	2.43	0.51
1:C:394:ASP:OD1	1:C:396:GLN:N	2.43	0.51
1:C:855:THR:HG22	1:C:855:THR:O	2.10	0.51
1:C:1061:LEU:O	1:C:1063:HIS:N	2.43	0.51
1:C:1220:ARG:HG3	1:C:1224:GLU:CG	2.38	0.51
1:D:5:PHE:CE2	1:D:365:GLY:HA3	2.45	0.51
1:D:494:GLY:O	1:D:495:LEU:C	2.48	0.51
1:E:353:MET:HE3	1:E:366:GLY:O	2.07	0.51
1:E:404:ARG:CB	1:E:405:GLU:OE1	2.51	0.51
1:E:659:ILE:HA	1:E:663:ALA:HB3	1.91	0.51
1:E:660:GLY:HA2	1:E:721:GLY:H	1.74	0.51
1:E:776:GLY:O	1:E:782:ARG:HD2	2.11	0.51
1:E:1112:THR:O	2:L:112:GLN:NE2	2.40	0.51
1:E:1274:GLN:HE21	1:E:1293:ASN:HB3	1.74	0.51
1:F:496:HIS:O	1:F:653:HIS:HE1	1.94	0.51
1:F:679:HIS:NE2	1:F:687:MET:O	2.42	0.51
1:F:1092:ILE:HG22	1:F:1092:ILE:O	2.10	0.51
2:G:102:ARG:C	2:G:103:LEU:HD23	2.30	0.51
2:G:197:LYS:HZ3	2:G:275:ASP:HB3	1.76	0.51
2:G:271:VAL:HG11	2:G:284:SER:O	2.09	0.51
2:G:469:LYS:HD2	2:G:476:VAL:CB	2.39	0.51
2:H:32:TYR:CE2	2:H:194:LYS:HB3	2.46	0.51
2:H:68:TRP:CZ3	2:H:84:SER:CB	2.93	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:71:LEU:CD2	2:I:79:GLU:HB2	2.40	0.51
2:I:449:LEU:CD2	2:I:452:TRP:CD2	2.93	0.51
2:J:197:LYS:HZ3	2:J:275:ASP:HB3	1.73	0.51
2:J:445:ARG:HG2	2:J:445:ARG:O	2.09	0.51
2:J:469:LYS:CD	2:J:476:VAL:HB	2.38	0.51
2:K:45:ASN:HD21	2:K:45:ASN:H	1.57	0.51
2:K:190:ILE:HG22	2:K:195:LEU:HB3	1.93	0.51
2:L:68:TRP:HB2	2:L:80:ALA:HB1	1.91	0.51
2:L:190:ILE:HG22	2:L:195:LEU:HB3	1.93	0.51
1:A:236:THR:HG22	1:A:328:ASP:N	2.26	0.51
1:A:248:GLU:C	1:A:250:ARG:H	2.13	0.51
1:A:572:THR:CG2	1:A:573:PHE:N	2.73	0.51
1:B:763:ALA:O	1:B:764:THR:C	2.48	0.51
1:B:1401:LEU:HB3	1:B:1402:PRO:HD3	1.91	0.51
1:C:670:LEU:O	1:C:670:LEU:CD2	2.53	0.51
1:C:1401:LEU:N	1:C:1402:PRO:HD2	2.26	0.51
1:D:302:ALA:CB	1:D:347:ARG:NH1	2.73	0.51
1:D:419:TRP:O	1:D:540:THR:CG2	2.59	0.51
1:D:1146:VAL:O	1:D:1147:ARG:C	2.46	0.51
1:D:1376:LEU:HB3	1:D:1439:PHE:HE2	1.75	0.51
1:E:227:MET:CE	1:E:282:GLU:CG	2.88	0.51
1:E:1385:ALA:HB2	1:E:1406:ASN:HD22	1.74	0.51
1:F:781:PHE:CD2	2:I:57:VAL:HG21	2.45	0.51
1:F:1058:LEU:O	1:F:1058:LEU:CD2	2.57	0.51
1:F:1316:GLU:O	1:F:1317:THR:C	2.46	0.51
2:G:71:LEU:CD2	2:G:79:GLU:HB2	2.40	0.51
2:G:201:GLU:O	2:G:204:VAL:HG13	2.11	0.51
2:G:230:ARG:NH2	2:G:434:MET:HE1	2.26	0.51
2:G:278:GLU:CD	2:G:278:GLU:H	2.13	0.51
2:H:250:ALA:CB	2:H:251:PRO:HD2	2.35	0.51
2:H:302:MET:HG3	2:H:333:GLU:OE2	2.11	0.51
2:H:445:ARG:HG2	2:H:445:ARG:O	2.10	0.51
2:I:32:TYR:CE2	2:I:194:LYS:CB	2.94	0.51
2:I:138:LYS:NZ	2:I:206:LEU:HB3	2.26	0.51
2:J:28:PHE:CZ	2:J:285:LEU:HD21	2.46	0.51
2:J:302:MET:HG3	2:J:333:GLU:OE2	2.11	0.51
2:K:276:THR:HG22	2:K:277:VAL:HG23	1.91	0.51
2:K:317:LYS:HE3	2:K:345:ILE:CB	2.40	0.51
2:K:367:ILE:HD13	2:K:368:HIS:O	2.10	0.51
2:K:417:VAL:CG1	2:K:421:GLY:HA2	2.40	0.51
2:L:96:ARG:NE	2:L:199:VAL:HG21	2.25	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:102:ARG:C	2:L:103:LEU:HD23	2.30	0.51
2:L:150:VAL:HG12	2:L:172:GLU:O	2.11	0.51
2:L:181:ARG:C	2:L:181:ARG:HH11	2.14	0.51
2:L:320:TYR:CD2	2:L:346:TRP:CE2	2.98	0.51
2:L:416:LYS:HZ2	2:L:433:ASN:HB2	1.76	0.51
1:A:139:VAL:CG1	1:A:140:SER:N	2.54	0.51
1:A:754:ILE:O	1:A:755:GLN:C	2.48	0.51
1:A:896:PRO:HB2	1:C:1226:GLY:HA3	1.93	0.51
1:B:254:PRO:O	1:B:257:GLY:N	2.37	0.51
1:B:295:LYS:HE2	1:B:299:VAL:HG12	1.92	0.51
1:B:351:ARG:HH12	1:B:978:GLU:CD	2.14	0.51
1:B:679:HIS:NE2	1:B:687:MET:O	2.42	0.51
1:B:704:LEU:C	1:B:706:LYS:H	2.14	0.51
1:B:1077:ARG:HG2	1:B:1078:ASP:N	2.26	0.51
1:B:1338:ALA:O	1:B:1340:GLY:N	2.43	0.51
1:C:236:THR:HG22	1:C:328:ASP:N	2.26	0.51
1:C:345:MET:CG	1:C:346:ASP:N	2.55	0.51
1:C:791:GLU:O	1:C:795:ILE:HG13	2.11	0.51
1:C:893:ARG:HG2	1:C:903:TRP:CB	2.40	0.51
1:C:973:ASP:OD2	1:C:1298:LYS:CE	2.54	0.51
1:C:1289:MET:HE2	1:C:1289:MET:N	2.26	0.51
1:D:485:ILE:O	1:D:486:ALA:C	2.48	0.51
1:D:621:ILE:HG13	1:D:658:LEU:HD12	1.93	0.51
1:D:696:TYR:CZ	1:D:700:ILE:CD1	2.94	0.51
1:D:1018:ALA:O	1:D:1065:VAL:HG23	2.11	0.51
1:D:1183:LEU:O	1:D:1187:LEU:HG	2.11	0.51
1:D:1245:ARG:O	1:D:1245:ARG:HG3	2.10	0.51
1:E:133:VAL:CG1	1:E:134:GLY:N	2.74	0.51
1:F:446:GLU:O	1:F:449:ARG:N	2.43	0.51
1:F:494:GLY:O	1:F:495:LEU:C	2.48	0.51
1:F:1045:TRP:O	1:F:1046:GLU:C	2.44	0.51
1:F:1323:ILE:HD12	1:F:1327:VAL:HG21	1.91	0.51
1:F:1326:THR:HG22	1:F:1326:THR:O	2.10	0.51
2:G:138:LYS:NZ	2:G:206:LEU:HB3	2.26	0.51
2:G:290:LYS:HB3	2:G:393:ASP:OD2	2.11	0.51
2:G:404:GLU:HG3	2:G:404:GLU:O	2.09	0.51
2:H:138:LYS:NZ	2:H:206:LEU:HB3	2.26	0.51
2:H:144:ARG:HG2	2:H:145:GLU:N	2.25	0.51
2:H:249:LYS:HG3	2:H:258:ILE:CD1	2.39	0.51
2:I:96:ARG:NE	2:I:199:VAL:HG21	2.25	0.51
2:I:174:HIS:CD2	2:I:176:TYR:CE1	2.99	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:388:PHE:CE2	2:I:390:VAL:HG13	2.46	0.51
2:J:317:LYS:HE3	2:J:345:ILE:CB	2.40	0.51
2:J:350:PRO:HD2	2:J:374:ALA:HB2	1.92	0.51
2:J:388:PHE:CE2	2:J:390:VAL:HG13	2.46	0.51
2:K:150:VAL:HG13	2:K:173:VAL:CA	2.38	0.51
2:L:32:TYR:CE2	2:L:194:LYS:CB	2.94	0.51
2:L:68:TRP:CZ3	2:L:84:SER:CB	2.93	0.51
2:L:153:ILE:CG1	2:L:220:VAL:HG13	2.40	0.51
2:L:302:MET:HG3	2:L:333:GLU:OE2	2.11	0.51
2:L:322:ARG:HD2	2:L:349:ALA:CB	2.38	0.51
2:L:416:LYS:HE3	2:L:433:ASN:CB	2.41	0.51
1:A:175:ARG:HH22	1:A:203:ASP:CG	2.14	0.51
1:A:359:THR:HG23	1:A:378:GLN:CB	2.41	0.51
1:A:957:ARG:HD2	1:A:965:LEU:CD1	2.41	0.51
1:A:1219:ALA:O	1:A:1220:ARG:C	2.47	0.51
1:B:494:GLY:O	1:B:495:LEU:C	2.48	0.51
1:B:629:THR:O	1:B:632:ILE:N	2.42	0.51
1:C:175:ARG:HH22	1:C:203:ASP:CG	2.14	0.51
1:C:496:HIS:O	1:C:653:HIS:CE1	2.61	0.51
1:C:731:SER:HA	1:C:747:SER:CA	2.40	0.51
1:C:754:ILE:O	1:C:755:GLN:C	2.48	0.51
1:C:957:ARG:HD2	1:C:965:LEU:CD1	2.41	0.51
1:C:1391:MET:HE1	1:C:1458:VAL:HG21	1.91	0.51
1:D:447:LEU:O	1:D:451:GLN:HG3	2.10	0.51
1:D:1003:ARG:HG3	1:D:1004:SER:N	2.24	0.51
1:D:1051:GLU:O	1:D:1052:VAL:C	2.46	0.51
1:E:159:VAL:HG21	1:E:167:PHE:CD2	2.46	0.51
1:E:452:GLN:NE2	1:E:764:THR:HG21	2.21	0.51
1:E:705:LEU:HD23	1:E:705:LEU:N	2.26	0.51
1:E:1061:LEU:O	1:E:1063:HIS:N	2.43	0.51
1:F:260:MET:O	1:F:261:GLN:C	2.48	0.51
1:F:569:ILE:HG22	1:F:589:ILE:HG22	1.93	0.51
1:F:1018:ALA:O	1:F:1065:VAL:HG23	2.11	0.51
1:F:1184:ASN:CB	1:F:1185:PRO:CD	2.80	0.51
2:G:181:ARG:C	2:G:181:ARG:HH11	2.14	0.51
2:G:190:ILE:HG22	2:G:195:LEU:HB3	1.93	0.51
2:G:377:ARG:O	2:G:378:GLN:HB3	2.10	0.51
2:H:181:ARG:C	2:H:182:MET:HE3	2.31	0.51
2:I:320:TYR:CD2	2:I:346:TRP:CE2	2.98	0.51
2:I:350:PRO:HD2	2:I:374:ALA:HB2	1.92	0.51
2:I:418:THR:CB	2:I:424:LEU:HD11	2.23	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:96:ARG:NE	2:J:199:VAL:HG21	2.25	0.51
2:J:353:PHE:CE1	2:J:382:VAL:HG12	2.44	0.51
2:J:377:ARG:O	2:J:378:GLN:HB3	2.10	0.51
2:K:97:ILE:HD11	2:K:450:VAL:HB	1.92	0.51
2:K:146:LEU:HD22	2:K:146:LEU:N	2.26	0.51
2:K:147:GLY:HA2	2:K:171:TYR:HD1	1.75	0.51
2:K:404:GLU:HG3	2:K:404:GLU:O	2.09	0.51
2:K:416:LYS:HE3	2:K:433:ASN:CB	2.41	0.51
2:L:415:LEU:CD2	2:L:432:THR:HG23	2.41	0.51
1:A:133:VAL:CG1	1:A:134:GLY:N	2.74	0.51
1:A:159:VAL:HG21	1:A:167:PHE:CD2	2.46	0.51
1:A:248:GLU:C	1:A:250:ARG:N	2.65	0.51
1:A:295:LYS:HE2	1:A:299:VAL:HG12	1.90	0.51
1:A:1227:GLU:OE2	1:E:902:ASN:CB	2.53	0.51
1:A:1385:ALA:HB2	1:A:1406:ASN:HD22	1.74	0.51
1:A:1424:LEU:O	1:A:1425:LYS:C	2.48	0.51
1:A:1438:ARG:CZ	2:L:376:GLY:C	2.80	0.51
1:B:131:ILE:O	1:B:131:ILE:HG23	2.09	0.51
1:B:236:THR:HG22	1:B:328:ASP:N	2.24	0.51
1:B:437:GLY:O	1:B:438:GLU:C	2.48	0.51
1:D:295:LYS:HE2	1:D:299:VAL:HG12	1.92	0.51
1:D:1077:ARG:HG2	1:D:1078:ASP:N	2.26	0.51
1:D:1092:ILE:HG22	1:D:1092:ILE:O	2.10	0.51
1:D:1207:VAL:HG13	1:D:1208:PRO:HD2	1.93	0.51
1:D:1401:LEU:HB3	1:D:1402:PRO:HD3	1.91	0.51
1:E:621:ILE:HG12	1:E:657:VAL:HG12	1.93	0.51
1:E:780:ARG:HB3	2:L:51:GLY:O	2.11	0.51
1:F:24:ALA:C	1:F:26:LYS:N	2.65	0.51
1:F:337:ASP:OD1	1:F:337:ASP:C	2.49	0.51
1:F:746:ILE:CG2	1:F:1182:ASP:HB3	2.22	0.51
2:G:134:GLN:CB	2:G:136:TRP:CD1	2.94	0.51
2:G:146:LEU:HD22	2:G:146:LEU:N	2.26	0.51
2:G:174:HIS:CD2	2:G:176:TYR:CE1	2.99	0.51
2:H:43:GLN:NE2	2:H:123:VAL:HG13	2.26	0.51
2:H:71:LEU:CD2	2:H:79:GLU:HB2	2.40	0.51
2:H:102:ARG:C	2:H:103:LEU:HD23	2.30	0.51
2:H:146:LEU:HD22	2:H:146:LEU:N	2.26	0.51
2:H:201:GLU:O	2:H:204:VAL:HG13	2.11	0.51
2:H:415:LEU:CD2	2:H:432:THR:HG23	2.41	0.51
2:H:449:LEU:CD2	2:H:452:TRP:CD2	2.93	0.51
2:I:367:ILE:HD13	2:I:368:HIS:O	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:415:LEU:CD2	2:I:432:THR:HG23	2.41	0.51
2:J:31:ILE:HD12	2:J:31:ILE:C	2.31	0.51
2:J:77:LEU:CA	2:J:127:ILE:HD11	2.39	0.51
2:J:90:PHE:CZ	2:J:160:LEU:CB	2.94	0.51
2:J:181:ARG:C	2:J:181:ARG:HH11	2.14	0.51
2:K:32:TYR:CE2	2:K:194:LYS:CB	2.94	0.51
2:K:77:LEU:HD21	2:K:126:TYR:CD2	2.46	0.51
2:K:150:VAL:HG12	2:K:172:GLU:O	2.11	0.51
2:K:377:ARG:O	2:K:378:GLN:HB3	2.10	0.51
2:K:469:LYS:CD	2:K:476:VAL:HB	2.38	0.51
2:L:90:PHE:CZ	2:L:160:LEU:CB	2.94	0.51
2:L:91:PRO:HD2	2:L:203:ARG:HH22	1.76	0.51
2:L:138:LYS:NZ	2:L:206:LEU:HB3	2.26	0.51
2:L:417:VAL:CG1	2:L:421:GLY:HA2	2.40	0.51
1:A:1:CYS:HB3	3:A:2473:OMT:CE	2.41	0.51
1:A:1:CYS:HB3	3:A:2473:OMT:HE3	1.93	0.51
1:B:197:ASP:OD1	1:B:199:ARG:HB2	2.12	0.51
1:B:911:ALA:O	1:B:912:SER:C	2.50	0.51
1:B:1183:LEU:O	1:B:1187:LEU:HG	2.11	0.51
1:C:159:VAL:HG21	1:C:167:PHE:CD2	2.46	0.51
1:C:207:TYR:N	1:C:207:TYR:HD1	2.08	0.51
1:C:244:MET:C	1:C:246:ALA:N	2.65	0.51
1:C:342:VAL:HG11	1:C:390:MET:CE	2.37	0.51
1:C:780:ARG:HB3	2:K:52:VAL:N	2.26	0.51
1:D:451:GLN:OE1	1:D:773:LEU:HD11	2.11	0.51
1:D:505:GLN:NE2	1:D:1000:LEU:CB	2.59	0.51
1:D:536:ASP:OD1	1:D:536:ASP:O	2.28	0.51
1:D:1460:LYS:O	1:D:1462:MET:N	2.44	0.51
1:E:175:ARG:HH22	1:E:203:ASP:CG	2.14	0.51
1:E:281:PHE:O	1:E:285:VAL:HG23	2.10	0.51
1:E:657:VAL:O	1:E:658:LEU:C	2.48	0.51
1:E:845:SER:O	1:E:848:ALA:HB3	2.10	0.51
1:E:1250:VAL:HG13	1:E:1254:PHE:HD2	1.75	0.51
1:E:1253:LYS:O	1:E:1253:LYS:HG3	2.11	0.51
1:E:1401:LEU:N	1:E:1402:PRO:HD2	2.26	0.51
1:E:1424:LEU:O	1:E:1425:LYS:C	2.49	0.51
1:E:1438:ARG:CZ	2:K:376:GLY:C	2.80	0.51
1:F:5:PHE:CE2	1:F:365:GLY:HA3	2.46	0.51
1:F:536:ASP:OD1	1:F:536:ASP:O	2.28	0.51
1:F:782:ARG:HH22	2:I:51:GLY:CA	1.16	0.51
2:G:28:PHE:CZ	2:G:285:LEU:HD21	2.46	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:32:TYR:CE2	2:G:194:LYS:HB3	2.46	0.51
2:G:77:LEU:HD21	2:G:126:TYR:CD2	2.46	0.51
2:G:416:LYS:HE3	2:G:433:ASN:CB	2.41	0.51
2:H:32:TYR:CE2	2:H:194:LYS:CB	2.94	0.51
2:H:77:LEU:HD21	2:H:126:TYR:CD2	2.46	0.51
2:H:90:PHE:CZ	2:H:160:LEU:CB	2.94	0.51
2:H:153:ILE:CG1	2:H:220:VAL:HG13	2.40	0.51
2:H:174:HIS:HD2	2:H:176:TYR:CE1	2.29	0.51
2:H:249:LYS:HE2	2:H:258:ILE:HD13	1.91	0.51
2:J:150:VAL:HG12	2:J:172:GLU:O	2.11	0.51
2:J:417:VAL:CG1	2:J:421:GLY:HA2	2.40	0.51
2:K:32:TYR:CD1	2:K:34:ARG:CD	2.94	0.51
2:K:71:LEU:HD13	2:K:72:THR:N	2.24	0.51
2:K:302:MET:HG3	2:K:333:GLU:OE2	2.11	0.51
2:K:331:GLN:HA	2:K:334:VAL:HG22	1.93	0.51
2:K:406:LEU:H	2:K:406:LEU:CD2	2.21	0.51
2:L:77:LEU:HD21	2:L:126:TYR:CD2	2.46	0.51
2:L:134:GLN:CB	2:L:136:TRP:CD1	2.94	0.51
2:L:166:LEU:HD23	2:L:461:ALA:CB	2.36	0.51
2:L:201:GLU:O	2:L:204:VAL:HG13	2.11	0.51
2:L:367:ILE:HD13	2:L:368:HIS:O	2.10	0.51
1:A:893:ARG:HG2	1:A:903:TRP:CB	2.40	0.50
1:A:997:THR:CG2	1:A:998:VAL:N	2.73	0.50
1:B:211:TYR:HD1	1:B:212:SER:N	2.08	0.50
1:B:838:VAL:HG12	1:B:839:PRO:CD	2.40	0.50
1:B:1131:THR:CG2	1:B:1133:GLU:N	2.72	0.50
1:C:339:ARG:HG3	1:C:396:GLN:HG3	1.93	0.50
1:C:359:THR:HG23	1:C:378:GLN:CB	2.41	0.50
1:C:526:LEU:H	1:C:526:LEU:CD1	2.17	0.50
1:C:1054:GLN:O	1:C:1055:VAL:C	2.49	0.50
1:D:511:ILE:CG2	1:D:512:ASP:N	2.74	0.50
1:D:556:ARG:O	1:D:557:ALA:C	2.48	0.50
1:D:1407:ASP:O	1:D:1408:GLU:C	2.50	0.50
1:E:30:HIS:ND1	1:E:1238:THR:HA	2.26	0.50
1:E:369:THR:O	1:E:371:MET:N	2.43	0.50
1:E:521:SER:OG	1:E:522:LEU:N	2.45	0.50
1:E:1349:ARG:HH11	1:E:1349:ARG:CG	2.22	0.50
1:F:485:ILE:O	1:F:488:LEU:N	2.43	0.50
1:F:864:SER:HG	1:F:867:ALA:H	1.59	0.50
1:F:1003:ARG:HG3	1:F:1004:SER:N	2.24	0.50
1:F:1088:GLU:HG2	1:F:1162:ILE:HD13	1.92	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:147:GLY:HA2	2:G:171:TYR:HD1	1.75	0.50
2:G:153:ILE:CG1	2:G:220:VAL:HG13	2.40	0.50
2:G:367:ILE:HD13	2:G:368:HIS:O	2.10	0.50
2:H:32:TYR:CD1	2:H:34:ARG:CD	2.94	0.50
2:H:97:ILE:HD11	2:H:450:VAL:HB	1.92	0.50
2:H:367:ILE:HD13	2:H:368:HIS:O	2.10	0.50
2:I:302:MET:HG3	2:I:333:GLU:OE2	2.11	0.50
2:J:201:GLU:O	2:J:204:VAL:HG13	2.11	0.50
2:J:322:ARG:HD3	2:J:349:ALA:CA	2.39	0.50
2:J:431:MET:CG	2:J:438:PHE:CE2	2.94	0.50
2:K:415:LEU:CD2	2:K:432:THR:HG23	2.41	0.50
2:L:429:THR:HG21	2:L:431:MET:HE2	1.93	0.50
1:A:143:GLN:O	1:A:143:GLN:NE2	2.41	0.50
1:A:339:ARG:HG3	1:A:396:GLN:HG3	1.93	0.50
1:A:509:PRO:HB3	1:A:975:TYR:HD1	1.77	0.50
1:A:1220:ARG:HG3	1:A:1224:GLU:CG	2.38	0.50
1:B:175:ARG:HG3	1:B:175:ARG:NH1	2.23	0.50
1:B:302:ALA:CB	1:B:347:ARG:NH1	2.73	0.50
1:B:1088:GLU:HG2	1:B:1162:ILE:HD13	1.92	0.50
1:C:1:CYS:HB3	3:C:2473:OMT:CE	2.41	0.50
1:C:244:MET:HA	1:C:247:HIS:HB2	1.92	0.50
1:C:1440:ALA:O	1:C:1443:ILE:N	2.42	0.50
1:D:850:ARG:HD2	1:D:878:ILE:HD12	1.93	0.50
1:D:1102:CYS:SG	6:D:2476:F3S:S1	3.06	0.50
1:D:1216:VAL:HG11	1:D:1249:MET:HE1	1.93	0.50
1:E:1:CYS:HB3	3:E:2473:OMT:HE3	1.93	0.50
1:E:94:GLU:HG2	1:E:104:ILE:HD13	1.92	0.50
1:E:243:TRP:HA	1:E:243:TRP:CE3	2.47	0.50
1:E:492:TYR:CG	1:E:761:GLN:HG2	2.47	0.50
1:E:1415:ILE:CG2	1:E:1421:GLU:HB2	2.41	0.50
1:F:846:ILE:O	1:F:847:THR:C	2.48	0.50
1:F:1077:ARG:HG2	1:F:1078:ASP:N	2.26	0.50
2:G:31:ILE:HD12	2:G:31:ILE:C	2.31	0.50
2:G:90:PHE:CZ	2:G:160:LEU:CB	2.94	0.50
2:G:449:LEU:CD2	2:G:452:TRP:CD2	2.93	0.50
2:H:174:HIS:CD2	2:H:176:TYR:CE1	2.99	0.50
2:H:388:PHE:CE2	2:H:390:VAL:HG13	2.46	0.50
2:I:77:LEU:HD21	2:I:126:TYR:CD2	2.46	0.50
2:I:90:PHE:CZ	2:I:160:LEU:CB	2.94	0.50
2:I:190:ILE:HG22	2:I:195:LEU:HB3	1.93	0.50
2:I:230:ARG:NH2	2:I:434:MET:HE1	2.26	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:32:TYR:CD1	2:J:34:ARG:CD	2.94	0.50
2:K:31:ILE:HD12	2:K:31:ILE:C	2.31	0.50
2:K:138:LYS:NZ	2:K:206:LEU:HB3	2.26	0.50
2:K:153:ILE:CG1	2:K:220:VAL:HG13	2.40	0.50
2:K:426:ASP:HB3	2:K:429:THR:OG1	2.12	0.50
1:A:142:GLU:CD	1:A:142:GLU:N	2.58	0.50
1:A:312:ASN:HB2	1:A:411:ALA:CB	2.41	0.50
1:A:621:ILE:HG12	1:A:657:VAL:HG12	1.93	0.50
1:A:1110:SER:C	1:A:1112:THR:HG23	2.32	0.50
1:A:1212:ASP:OD1	1:A:1243:GLY:N	2.24	0.50
1:B:37:ASP:OD1	1:B:39:LYS:N	2.34	0.50
1:B:61:VAL:O	1:B:61:VAL:CG1	2.58	0.50
1:B:236:THR:OG1	1:B:718:SER:HB3	2.12	0.50
1:B:985:TYR:CE1	1:B:1207:VAL:HG11	2.45	0.50
1:C:235:ASN:ND2	1:C:236:THR:HB	2.27	0.50
1:C:562:MET:HE3	1:C:566:ALA:HB2	1.92	0.50
1:C:1184:ASN:O	1:C:1187:LEU:N	2.44	0.50
1:D:337:ASP:OD1	1:D:337:ASP:C	2.49	0.50
1:D:782:ARG:HH22	2:H:51:GLY:CA	1.16	0.50
1:E:61:VAL:O	1:E:61:VAL:HG12	2.07	0.50
1:E:248:GLU:C	1:E:250:ARG:N	2.65	0.50
1:E:312:ASN:HB2	1:E:411:ALA:CB	2.41	0.50
1:E:791:GLU:O	1:E:795:ILE:HG13	2.11	0.50
1:F:911:ALA:O	1:F:912:SER:C	2.50	0.50
1:F:1002:SER:HB2	1:F:1048:GLY:HA3	1.93	0.50
1:F:1460:LYS:O	1:F:1462:MET:N	2.44	0.50
2:G:350:PRO:HD2	2:G:374:ALA:HB2	1.92	0.50
2:H:181:ARG:C	2:H:181:ARG:HH11	2.14	0.50
2:H:190:ILE:HG22	2:H:195:LEU:HB3	1.93	0.50
2:H:331:GLN:HA	2:H:334:VAL:HG22	1.93	0.50
2:I:181:ARG:C	2:I:181:ARG:HH11	2.14	0.50
2:I:286:ASN:HB2	2:I:311:GLN:NE2	2.26	0.50
2:I:290:LYS:HB3	2:I:393:ASP:OD2	2.11	0.50
2:I:426:ASP:HB3	2:I:429:THR:OG1	2.12	0.50
2:J:77:LEU:HD21	2:J:126:TYR:CD2	2.46	0.50
2:J:134:GLN:CB	2:J:136:TRP:CD1	2.94	0.50
2:J:153:ILE:CG1	2:J:220:VAL:HG13	2.40	0.50
2:J:249:LYS:HE2	2:J:258:ILE:HD13	1.91	0.50
2:K:90:PHE:CZ	2:K:160:LEU:CB	2.94	0.50
2:K:114:THR:HG23	2:K:115:HIS:N	2.26	0.50
2:L:144:ARG:HG2	2:L:145:GLU:N	2.25	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:388:PHE:CE2	2:L:390:VAL:HG13	2.46	0.50
2:L:426:ASP:HB3	2:L:429:THR:OG1	2.12	0.50
1:A:805:ASP:O	1:A:805:ASP:CG	2.49	0.50
1:A:896:PRO:HG2	1:C:1226:GLY:HA3	1.94	0.50
1:A:1054:GLN:O	1:A:1055:VAL:C	2.49	0.50
1:B:243:TRP:CD1	1:B:325:GLU:OE1	2.65	0.50
1:B:355:TYR:CD1	1:B:355:TYR:O	2.65	0.50
1:B:446:GLU:O	1:B:449:ARG:N	2.43	0.50
1:B:515:ARG:HD3	1:B:1367:TYR:CE1	2.40	0.50
1:B:1018:ALA:O	1:B:1065:VAL:HG23	2.11	0.50
1:B:1222:LEU:C	1:B:1222:LEU:HD12	2.24	0.50
1:B:1432:VAL:O	1:B:1436:GLN:N	2.40	0.50
1:C:105:TYR:N	1:C:105:TYR:CD1	2.80	0.50
1:C:652:THR:HG21	1:C:703:GLY:CA	2.41	0.50
1:C:731:SER:HB2	1:C:747:SER:HB2	1.94	0.50
1:C:1110:SER:C	1:C:1112:THR:HG23	2.32	0.50
1:D:175:ARG:HG3	1:D:175:ARG:NH1	2.23	0.50
1:D:1289:MET:CE	1:D:1289:MET:CB	2.87	0.50
1:D:1432:VAL:O	1:D:1436:GLN:N	2.40	0.50
1:E:294:VAL:O	1:E:295:LYS:C	2.47	0.50
1:E:309:THR:CG2	1:E:314:LYS:HG3	2.42	0.50
1:E:547:SER:OG	1:E:549:VAL:HB	2.11	0.50
1:E:706:LYS:NZ	1:E:940:GLU:OE1	2.40	0.50
1:E:957:ARG:HD2	1:E:965:LEU:CD1	2.41	0.50
1:F:503:PHE:N	1:F:503:PHE:CD1	2.79	0.50
1:F:696:TYR:CZ	1:F:700:ILE:CD1	2.94	0.50
1:F:763:ALA:O	1:F:764:THR:C	2.48	0.50
2:G:32:TYR:CE2	2:G:194:LYS:CB	2.94	0.50
2:G:32:TYR:CD1	2:G:34:ARG:CD	2.94	0.50
2:G:150:VAL:HG13	2:G:173:VAL:CA	2.38	0.50
2:G:150:VAL:HG12	2:G:172:GLU:O	2.11	0.50
2:G:175:VAL:HG11	2:G:214:TYR:CG	2.47	0.50
2:G:426:ASP:HB3	2:G:429:THR:OG1	2.12	0.50
2:G:449:LEU:HD11	2:G:451:VAL:CG1	2.31	0.50
2:H:77:LEU:HD22	2:H:130:THR:CG2	2.42	0.50
2:H:150:VAL:HG12	2:H:172:GLU:O	2.11	0.50
2:H:286:ASN:HB2	2:H:311:GLN:NE2	2.26	0.50
2:H:317:LYS:HE3	2:H:345:ILE:CB	2.40	0.50
2:I:150:VAL:HG12	2:I:172:GLU:O	2.11	0.50
2:J:43:GLN:NE2	2:J:123:VAL:HG13	2.26	0.50
2:J:77:LEU:HD22	2:J:130:THR:CG2	2.42	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:174:HIS:CD2	2:J:176:TYR:CE1	2.99	0.50
2:J:468:ALA:O	2:J:471:LYS:HB2	2.12	0.50
2:L:77:LEU:HD22	2:L:130:THR:CG2	2.42	0.50
2:L:249:LYS:O	2:L:250:ALA:HB3	2.11	0.50
1:A:47:HIS:HE1	1:A:176:SER:CB	2.25	0.50
1:A:1149:ILE:O	1:A:1149:ILE:CG2	2.59	0.50
1:A:1421:GLU:HG3	1:A:1451:VAL:HG11	1.94	0.50
1:B:452:GLN:HG3	1:B:764:THR:HG22	1.94	0.50
1:B:569:ILE:HG22	1:B:589:ILE:HG22	1.93	0.50
1:B:777:GLY:CA	2:G:52:VAL:HG11	2.37	0.50
1:B:1058:LEU:C	1:B:1059:ASN:HD22	2.14	0.50
1:B:1245:ARG:HG3	1:B:1245:ARG:O	2.10	0.50
1:C:30:HIS:ND1	1:C:1238:THR:HA	2.26	0.50
1:C:209:GLN:HG3	1:C:210:ARG:H	1.76	0.50
1:C:309:THR:CG2	1:C:314:LYS:HG3	2.42	0.50
1:C:353:MET:O	1:C:353:MET:HG3	2.11	0.50
1:C:509:PRO:HB3	1:C:975:TYR:HD1	1.77	0.50
1:C:706:LYS:NZ	1:C:940:GLU:OE1	2.40	0.50
1:C:798:LEU:O	1:C:802:VAL:HG22	2.12	0.50
1:C:1143:ALA:O	1:C:1144:GLU:C	2.45	0.50
1:C:1400:SER:O	1:C:1403:LEU:N	2.27	0.50
1:C:1415:ILE:CG2	1:C:1421:GLU:HB2	2.41	0.50
1:D:503:PHE:N	1:D:503:PHE:CD1	2.79	0.50
1:D:1058:LEU:C	1:D:1059:ASN:HD22	2.14	0.50
1:E:1:CYS:SG	1:E:211:TYR:HD2	2.35	0.50
1:E:442:MET:CE	1:E:447:LEU:HA	2.41	0.50
1:E:652:THR:HG21	1:E:703:GLY:CA	2.41	0.50
1:E:1317:THR:CG2	1:E:1318:ASN:N	2.63	0.50
1:E:1458:VAL:HG13	1:E:1459:PRO:CD	2.42	0.50
1:F:211:TYR:O	1:F:212:SER:CB	2.58	0.50
1:F:820:ARG:HB3	1:F:821:PRO:HD3	1.94	0.50
1:F:1102:CYS:SG	6:F:2476:F3S:S1	3.06	0.50
2:G:97:ILE:HD11	2:G:450:VAL:HB	1.92	0.50
2:G:249:LYS:CE	2:G:258:ILE:HD13	2.42	0.50
2:G:468:ALA:O	2:G:471:LYS:HB2	2.12	0.50
2:H:31:ILE:HD12	2:H:31:ILE:C	2.31	0.50
2:H:134:GLN:CB	2:H:136:TRP:CD1	2.94	0.50
2:H:150:VAL:HG13	2:H:173:VAL:CA	2.38	0.50
2:H:388:PHE:CE2	2:H:390:VAL:CG1	2.95	0.50
2:H:431:MET:CG	2:H:438:PHE:CE2	2.94	0.50
2:H:468:ALA:O	2:H:471:LYS:HB2	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:55:CYS:SG	2:I:65:ILE:HD12	2.52	0.50
2:I:377:ARG:O	2:I:378:GLN:HB3	2.10	0.50
2:J:68:TRP:HB2	2:J:80:ALA:HB1	1.91	0.50
2:J:449:LEU:CD2	2:J:452:TRP:CD2	2.93	0.50
2:L:331:GLN:HA	2:L:334:VAL:HG22	1.93	0.50
1:A:492:TYR:CG	1:A:761:GLN:HG2	2.47	0.50
1:A:521:SER:OG	1:A:522:LEU:N	2.45	0.50
1:A:528:ASN:HB2	1:A:542:LEU:HD22	1.90	0.50
1:A:672:GLN:HG3	1:A:693:MET:HE1	1.89	0.50
1:A:676:ALA:O	1:A:679:HIS:N	2.45	0.50
1:A:731:SER:HA	1:A:747:SER:CB	2.42	0.50
1:A:1230:GLN:HE21	1:A:1267:ARG:HD3	1.76	0.50
1:B:24:ALA:C	1:B:26:LYS:N	2.65	0.50
1:B:74:GLY:HA2	1:B:172:LEU:HD13	1.92	0.50
1:B:515:ARG:NH2	1:B:966:ILE:HB	2.16	0.50
1:B:621:ILE:HG13	1:B:658:LEU:HD12	1.93	0.50
1:B:651:ASP:OD1	1:B:651:ASP:N	2.38	0.50
1:B:1102:CYS:SG	6:B:2476:F3S:S1	3.06	0.50
1:B:1227:GLU:OE2	1:D:902:ASN:CG	2.42	0.50
1:B:1428:ILE:HG22	1:B:1428:ILE:O	2.10	0.50
1:C:24:ALA:C	1:C:26:LYS:N	2.65	0.50
1:C:228:LEU:HD22	1:C:278:ASP:HA	1.94	0.50
1:C:901:ASP:CG	1:E:1228:LYS:HD3	2.32	0.50
1:C:1135:VAL:O	1:C:1136:VAL:C	2.44	0.50
1:C:1253:LYS:O	1:C:1253:LYS:HG3	2.11	0.50
1:D:74:GLY:HA2	1:D:172:LEU:HD13	1.92	0.50
1:D:1088:GLU:HG2	1:D:1162:ILE:HD13	1.92	0.50
1:E:235:ASN:ND2	1:E:236:THR:HB	2.27	0.50
1:E:449:ARG:O	1:E:450:ARG:O	2.28	0.50
1:E:1220:ARG:HG3	1:E:1224:GLU:CG	2.38	0.50
1:F:452:GLN:HG3	1:F:764:THR:HG22	1.94	0.50
1:F:1113:CYS:O	1:F:1114:PRO:C	2.48	0.50
1:F:1236:ARG:C	1:F:1238:THR:H	2.15	0.50
2:G:415:LEU:CD2	2:G:432:THR:HG23	2.41	0.50
2:H:114:THR:HG23	2:H:115:HIS:N	2.26	0.50
2:H:249:LYS:CE	2:H:258:ILE:HD13	2.42	0.50
2:I:43:GLN:NE2	2:I:123:VAL:HG13	2.26	0.50
2:I:169:LYS:HZ3	2:I:461:ALA:HB1	1.77	0.50
2:J:32:TYR:CE2	2:J:194:LYS:HB3	2.46	0.50
2:J:190:ILE:HG22	2:J:195:LEU:HB3	1.93	0.50
2:J:200:VAL:O	2:J:204:VAL:HG12	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:367:ILE:HD12	2:J:369:LEU:HD11	1.93	0.50
2:J:416:LYS:HE3	2:J:433:ASN:CB	2.41	0.50
2:K:68:TRP:CZ3	2:K:84:SER:CB	2.93	0.50
2:K:249:LYS:CE	2:K:258:ILE:HD13	2.42	0.50
2:K:449:LEU:CD2	2:K:452:TRP:CD2	2.93	0.50
2:L:147:GLY:HA2	2:L:171:TYR:HD1	1.75	0.50
2:L:371:VAL:HG21	2:L:386:SER:CB	2.39	0.50
2:L:388:PHE:CE2	2:L:390:VAL:CG1	2.95	0.50
1:A:281:PHE:O	1:A:285:VAL:HG23	2.11	0.50
1:A:970:PRO:O	1:A:970:PRO:CG	2.60	0.50
1:A:1184:ASN:O	1:A:1187:LEU:N	2.44	0.50
1:A:1226:GLY:HA3	1:E:896:PRO:HG2	1.94	0.50
1:A:1401:LEU:O	1:A:1401:LEU:CD1	2.53	0.50
1:B:211:TYR:O	1:B:212:SER:CB	2.58	0.50
1:B:850:ARG:HD2	1:B:878:ILE:HD12	1.93	0.50
1:C:133:VAL:CG1	1:C:134:GLY:N	2.74	0.50
1:C:1250:VAL:HG13	1:C:1254:PHE:HD2	1.75	0.50
1:C:1318:ASN:HD22	1:C:1318:ASN:H	1.60	0.50
1:C:1417:VAL:HG12	1:C:1418:GLY:N	2.27	0.50
1:C:1421:GLU:HG3	1:C:1451:VAL:HG11	1.94	0.50
1:D:269:VAL:HG23	1:D:270:GLY:N	2.21	0.50
1:D:797:THR:HG23	1:D:812:LYS:HE2	1.94	0.50
1:D:949:VAL:C	1:D:950:THR:O	2.48	0.50
1:D:1002:SER:HB2	1:D:1048:GLY:HA3	1.93	0.50
1:E:24:ALA:C	1:E:26:LYS:N	2.65	0.50
1:E:339:ARG:HG3	1:E:396:GLN:HG3	1.93	0.50
1:F:355:TYR:CD1	1:F:355:TYR:O	2.65	0.50
2:G:68:TRP:CZ3	2:G:84:SER:CB	2.93	0.50
2:G:292:VAL:HG22	2:G:394:LEU:CD1	2.30	0.50
2:H:132:TRP:HD1	2:H:202:ARG:CB	2.24	0.50
2:H:147:GLY:HA2	2:H:171:TYR:HD1	1.75	0.50
2:I:31:ILE:HD12	2:I:31:ILE:C	2.31	0.50
2:I:91:PRO:HD2	2:I:203:ARG:HH22	1.76	0.50
2:I:200:VAL:O	2:I:204:VAL:HG12	2.12	0.50
2:J:32:TYR:CE2	2:J:194:LYS:CB	2.94	0.50
2:K:240:THR:HG1	8:K:484:FAD:C5A	2.24	0.50
2:K:290:LYS:HB3	2:K:393:ASP:OD2	2.11	0.50
2:K:388:PHE:CE2	2:K:390:VAL:CG1	2.95	0.50
2:K:434:MET:CB	2:K:437:VAL:HG12	2.42	0.50
2:K:468:ALA:O	2:K:471:LYS:HB2	2.12	0.50
2:L:32:TYR:CE2	2:L:194:LYS:HB3	2.46	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:43:GLN:NE2	2:L:123:VAL:HG13	2.26	0.50
2:L:146:LEU:HD22	2:L:146:LEU:N	2.26	0.50
1:A:1:CYS:SG	1:A:211:TYR:HD2	2.35	0.50
1:A:30:HIS:ND1	1:A:1238:THR:HA	2.26	0.50
1:A:547:SER:OG	1:A:549:VAL:HB	2.11	0.50
1:A:763:ALA:O	1:A:767:ASN:HB2	2.11	0.50
1:A:782:ARG:HG2	2:J:53:PRO:HD2	0.55	0.50
1:A:798:LEU:O	1:A:802:VAL:HG22	2.12	0.50
1:A:847:THR:HG21	1:C:1218:ASP:OD2	2.12	0.50
1:A:1253:LYS:O	1:A:1253:LYS:HG3	2.11	0.50
1:B:290:THR:CG2	1:B:291:ALA:N	2.75	0.50
1:B:782:ARG:HH22	2:G:51:GLY:CA	1.16	0.50
1:B:877:ARG:CG	1:F:1229:MET:CA	2.78	0.50
1:B:949:VAL:C	1:B:950:THR:O	2.48	0.50
1:C:1:CYS:HB3	3:C:2473:OMT:HE3	1.93	0.50
1:C:243:TRP:CE3	1:C:243:TRP:HA	2.47	0.50
1:C:547:SER:OG	1:C:549:VAL:HB	2.11	0.50
1:C:689:LEU:O	1:C:689:LEU:HG	2.11	0.50
1:C:969:PRO:HD2	1:C:970:PRO:CD	2.42	0.50
1:C:1054:GLN:O	1:C:1057:THR:HB	2.12	0.50
1:C:1442:GLU:OE2	2:J:374:ALA:C	2.50	0.50
1:D:243:TRP:CD1	1:D:325:GLU:OE1	2.65	0.50
1:D:704:LEU:C	1:D:706:LYS:H	2.14	0.50
1:D:875:MET:CE	1:D:1139:PHE:HE2	2.25	0.50
1:D:1104:MET:C	2:H:54:PHE:CZ	2.81	0.50
1:E:969:PRO:HD2	1:E:970:PRO:CD	2.42	0.50
1:F:243:TRP:CD1	1:F:325:GLU:OE1	2.65	0.50
1:F:351:ARG:HH12	1:F:978:GLU:CD	2.14	0.50
1:F:838:VAL:HG12	1:F:839:PRO:CD	2.40	0.50
1:F:1204:ARG:O	1:F:1206:GLU:N	2.45	0.50
2:G:366:ARG:HE	2:G:391:GLN:CD	2.15	0.50
2:G:371:VAL:HG21	2:G:386:SER:CB	2.39	0.50
2:H:290:LYS:HB3	2:H:393:ASP:OD2	2.11	0.50
2:H:479:ALA:O	2:H:480:ALA:HB3	2.12	0.50
2:K:77:LEU:HD22	2:K:130:THR:CG2	2.41	0.50
2:K:132:TRP:HD1	2:K:202:ARG:CB	2.24	0.50
2:K:174:HIS:CD2	2:K:176:TYR:CE1	2.99	0.50
2:K:201:GLU:O	2:K:204:VAL:HG13	2.11	0.50
2:L:286:ASN:HB2	2:L:311:GLN:NE2	2.26	0.50
1:A:209:GLN:HG3	1:A:210:ARG:H	1.76	0.50
1:A:901:ASP:CG	1:C:1228:LYS:HD3	2.32	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:111:PRO:C	1:B:112:ILE:HG23	2.33	0.50
1:B:447:LEU:O	1:B:451:GLN:HG3	2.10	0.50
1:B:451:GLN:OE1	1:B:773:LEU:HD11	2.11	0.50
1:B:503:PHE:N	1:B:503:PHE:CD1	2.79	0.50
1:B:556:ARG:O	1:B:557:ALA:C	2.48	0.50
1:B:670:LEU:HD22	1:B:670:LEU:C	2.31	0.50
1:B:979:ASP:O	1:B:980:LEU:C	2.49	0.50
1:B:1204:ARG:O	1:B:1206:GLU:N	2.45	0.50
1:B:1278:ALA:O	1:B:1279:PHE:HB2	2.12	0.50
1:C:1:CYS:SG	1:C:211:TYR:HD2	2.35	0.50
1:C:359:THR:HG23	1:C:378:GLN:C	2.32	0.50
1:C:359:THR:CG2	1:C:378:GLN:HA	2.42	0.50
1:C:1396:ASP:OD1	1:C:1396:ASP:O	2.30	0.50
1:D:111:PRO:C	1:D:112:ILE:HG23	2.33	0.50
1:D:351:ARG:HH12	1:D:978:GLU:CD	2.14	0.50
1:D:720:ARG:O	1:D:722:GLY:N	2.45	0.50
1:D:824:GLN:O	1:D:827:ASP:CB	2.58	0.50
1:E:1:CYS:HB3	3:E:2473:OMT:CE	2.41	0.50
1:E:484:PRO:HG3	1:E:823:MET:HG3	1.94	0.50
1:E:997:THR:CG2	1:E:998:VAL:N	2.73	0.50
1:F:630:HIS:O	1:F:631:LEU:C	2.49	0.50
1:F:1183:LEU:O	1:F:1187:LEU:HG	2.11	0.50
1:F:1435:THR:HG23	1:F:1437:SER:CB	2.42	0.50
2:G:43:GLN:NE2	2:G:123:VAL:HG13	2.26	0.50
2:G:388:PHE:CE2	2:G:390:VAL:CG1	2.95	0.50
2:G:479:ALA:O	2:G:480:ALA:HB3	2.12	0.50
2:H:93:ILE:HD12	2:H:96:ARG:HD2	1.94	0.50
2:H:134:GLN:HB3	2:H:136:TRP:NE1	2.26	0.50
2:H:249:LYS:O	2:H:250:ALA:HB3	2.11	0.50
2:H:317:LYS:HZ2	2:H:345:ILE:HG21	1.76	0.50
2:H:434:MET:CB	2:H:437:VAL:HG12	2.42	0.50
2:I:68:TRP:HB2	2:I:80:ALA:HB1	1.91	0.50
2:I:345:ILE:HD13	2:I:345:ILE:N	2.17	0.50
2:J:43:GLN:OE1	2:J:119:THR:HG23	2.12	0.50
2:J:132:TRP:HD1	2:J:202:ARG:CB	2.24	0.50
2:J:479:ALA:O	2:J:480:ALA:HB3	2.12	0.50
2:K:93:ILE:HD12	2:K:96:ARG:HD2	1.94	0.50
2:K:250:ALA:CB	2:K:251:PRO:HD2	2.35	0.50
2:K:286:ASN:HB2	2:K:311:GLN:NE2	2.26	0.50
2:K:317:LYS:HZ2	2:K:345:ILE:HG21	1.77	0.50
2:L:366:ARG:HE	2:L:391:GLN:CD	2.15	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:105:TYR:N	1:A:105:TYR:CD1	2.80	0.49
1:A:664:THR:HA	1:A:720:ARG:HE	1.77	0.49
1:A:1359:GLY:O	1:A:1360:CYS:CB	2.58	0.49
1:B:720:ARG:O	1:B:722:GLY:N	2.45	0.49
1:B:953:ILE:O	1:B:954:ALA:C	2.50	0.49
1:B:1316:GLU:O	1:B:1317:THR:C	2.46	0.49
1:B:1401:LEU:HD11	1:B:1405:ILE:HB	1.94	0.49
1:C:62:ILE:O	1:C:62:ILE:CG2	2.60	0.49
1:C:442:MET:CE	1:C:447:LEU:HA	2.41	0.49
1:C:621:ILE:HG12	1:C:657:VAL:HG12	1.93	0.49
1:C:676:ALA:O	1:C:679:HIS:N	2.45	0.49
1:C:705:LEU:HD23	1:C:705:LEU:N	2.26	0.49
1:C:731:SER:HA	1:C:747:SER:CB	2.42	0.49
1:D:236:THR:HG22	1:D:328:ASP:N	2.24	0.49
1:D:290:THR:O	1:D:294:VAL:HG23	2.12	0.49
1:D:452:GLN:HG3	1:D:764:THR:HG22	1.94	0.49
1:D:479:MET:HG3	1:D:1104:MET:SD	2.52	0.49
1:D:569:ILE:HG22	1:D:589:ILE:HG22	1.93	0.49
1:D:1394:VAL:HG11	1:D:1401:LEU:CD2	2.40	0.49
1:E:105:TYR:N	1:E:105:TYR:CD1	2.80	0.49
1:E:235:ASN:ND2	1:E:236:THR:N	2.38	0.49
1:E:353:MET:O	1:E:353:MET:HG3	2.11	0.49
1:E:454:PHE:CD2	1:E:648:GLU:HA	2.47	0.49
1:E:676:ALA:O	1:E:679:HIS:N	2.45	0.49
1:E:731:SER:HA	1:E:747:SER:CB	2.42	0.49
1:F:197:ASP:OD1	1:F:199:ARG:HB2	2.12	0.49
1:F:290:THR:CG2	1:F:291:ALA:N	2.75	0.49
1:F:430:VAL:HG22	1:F:557:ALA:HB3	1.94	0.49
1:F:451:GLN:OE1	1:F:773:LEU:HD11	2.11	0.49
1:F:515:ARG:NE	1:F:1367:TYR:HE1	2.09	0.49
1:F:720:ARG:O	1:F:722:GLY:N	2.45	0.49
1:F:780:ARG:NH2	2:I:54:PHE:CD1	2.78	0.49
2:G:55:CYS:SG	2:G:65:ILE:HD12	2.52	0.49
2:G:77:LEU:CA	2:G:127:ILE:HD11	2.39	0.49
2:H:166:LEU:HD23	2:H:461:ALA:CB	2.36	0.49
2:H:366:ARG:HE	2:H:391:GLN:CD	2.15	0.49
2:H:416:LYS:HE3	2:H:433:ASN:CB	2.41	0.49
2:I:132:TRP:HD1	2:I:202:ARG:CB	2.24	0.49
2:J:230:ARG:NH2	2:J:434:MET:HE1	2.27	0.49
2:J:388:PHE:CE2	2:J:390:VAL:CG1	2.95	0.49
2:J:415:LEU:HD22	2:J:416:LYS:N	2.27	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:K:43:GLN:NE2	2:K:123:VAL:HG13	2.26	0.49
2:K:181:ARG:C	2:K:181:ARG:HH11	2.14	0.49
2:K:349:ALA:HB3	2:K:350:PRO:CD	2.39	0.49
2:L:31:ILE:HD12	2:L:31:ILE:C	2.31	0.49
2:L:161:ALA:CB	2:L:454:ILE:HG12	2.40	0.49
1:A:21:GLY:O	1:A:22:ILE:C	2.49	0.49
1:A:116:ILE:HD13	1:A:190:THR:HG21	1.94	0.49
1:A:510:PRO:HD2	1:A:970:PRO:CB	2.34	0.49
1:B:1057:THR:HG22	1:B:1058:LEU:N	2.22	0.49
1:B:1104:MET:C	2:G:54:PHE:CZ	2.81	0.49
1:B:1211:LEU:HG	1:B:1215:ILE:HD11	1.94	0.49
1:C:454:PHE:CD2	1:C:648:GLU:HA	2.47	0.49
1:C:825:LEU:HD12	1:C:1186:ARG:NH1	2.13	0.49
1:C:847:THR:HG21	1:E:1218:ASP:OD2	2.12	0.49
1:C:896:PRO:HG2	1:E:1226:GLY:HA3	1.94	0.49
1:C:997:THR:CG2	1:C:998:VAL:N	2.73	0.49
1:C:1023:ILE:HD12	1:C:1023:ILE:N	2.27	0.49
1:C:1359:GLY:O	1:C:1360:CYS:HB3	2.12	0.49
1:C:1458:VAL:HG13	1:C:1459:PRO:CD	2.42	0.49
1:E:62:ILE:O	1:E:62:ILE:CG2	2.60	0.49
1:E:509:PRO:HB3	1:E:975:TYR:HD1	1.77	0.49
1:E:763:ALA:O	1:E:767:ASN:HB2	2.11	0.49
1:E:1023:ILE:HD12	1:E:1023:ILE:N	2.27	0.49
1:F:236:THR:OG1	1:F:718:SER:HB3	2.12	0.49
1:F:515:ARG:NH2	1:F:966:ILE:HB	2.16	0.49
1:F:1058:LEU:C	1:F:1059:ASN:HD22	2.14	0.49
2:G:77:LEU:HD22	2:G:130:THR:CG2	2.42	0.49
2:G:93:ILE:HD12	2:G:96:ARG:HD2	1.94	0.49
2:G:302:MET:HG3	2:G:333:GLU:OE2	2.11	0.49
2:G:415:LEU:HD23	2:G:432:THR:HG23	1.94	0.49
2:G:430:LYS:HG2	2:G:459:ASP:OD1	2.13	0.49
2:H:43:GLN:OE1	2:H:119:THR:HG23	2.12	0.49
2:H:415:LEU:HD22	2:H:416:LYS:N	2.27	0.49
2:H:426:ASP:HB3	2:H:429:THR:OG1	2.12	0.49
2:I:32:TYR:CD1	2:I:34:ARG:CD	2.94	0.49
2:I:77:LEU:HD22	2:I:130:THR:CG2	2.41	0.49
2:I:134:GLN:CB	2:I:136:TRP:CD1	2.94	0.49
2:I:201:GLU:O	2:I:204:VAL:HG13	2.11	0.49
2:I:259:VAL:O	2:I:396:ILE:HA	2.12	0.49
2:I:415:LEU:HD22	2:I:416:LYS:N	2.27	0.49
2:J:93:ILE:HD12	2:J:96:ARG:HD2	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:434:MET:CB	2:J:437:VAL:HG12	2.42	0.49
2:K:134:GLN:CB	2:K:136:TRP:CD1	2.94	0.49
2:K:479:ALA:O	2:K:480:ALA:HB3	2.12	0.49
2:L:32:TYR:CD1	2:L:34:ARG:CD	2.94	0.49
2:L:259:VAL:O	2:L:396:ILE:HA	2.12	0.49
2:L:292:VAL:HG22	2:L:394:LEU:CD1	2.30	0.49
2:L:468:ALA:O	2:L:471:LYS:HB2	2.12	0.49
1:A:207:TYR:N	1:A:207:TYR:HD1	2.08	0.49
1:A:243:TRP:HA	1:A:243:TRP:CE3	2.47	0.49
1:A:359:THR:HG23	1:A:378:GLN:C	2.32	0.49
1:A:369:THR:O	1:A:371:MET:N	2.43	0.49
1:A:492:TYR:C	1:A:492:TYR:CD1	2.86	0.49
1:A:1417:VAL:HG12	1:A:1418:GLY:N	2.27	0.49
1:B:290:THR:O	1:B:294:VAL:HG23	2.12	0.49
1:B:337:ASP:OD1	1:B:337:ASP:C	2.49	0.49
1:C:1149:ILE:O	1:C:1149:ILE:CG2	2.59	0.49
1:C:1368:MET:HB3	1:C:1387:MET:HG3	1.93	0.49
1:D:197:ASP:OD1	1:D:199:ARG:HB2	2.12	0.49
1:D:670:LEU:HD22	1:D:670:LEU:C	2.31	0.49
1:D:690:GLU:CD	1:D:690:GLU:H	2.15	0.49
1:D:911:ALA:O	1:D:912:SER:C	2.50	0.49
1:D:1204:ARG:O	1:D:1206:GLU:N	2.45	0.49
1:E:53:LYS:O	1:E:54:PHE:C	2.50	0.49
1:E:227:MET:HE3	1:E:282:GLU:CG	2.42	0.49
1:E:689:LEU:O	1:E:689:LEU:HG	2.11	0.49
1:E:731:SER:HB2	1:E:747:SER:HB2	1.94	0.49
1:E:824:GLN:HE21	1:E:824:GLN:HA	1.65	0.49
1:E:1243:GLY:O	1:E:1244:THR:C	2.49	0.49
1:F:249:THR:O	1:F:249:THR:CG2	2.55	0.49
1:F:295:LYS:CB	1:F:390:MET:HE1	2.41	0.49
1:F:302:ALA:HB2	1:F:347:ARG:HH11	1.76	0.49
1:F:310:PRO:CG	1:F:404:ARG:NH2	2.66	0.49
1:F:1278:ALA:O	1:F:1279:PHE:HB2	2.12	0.49
2:G:65:ILE:N	2:G:66:PRO:HD2	2.28	0.49
2:G:109:VAL:O	2:G:112:GLN:HG2	2.09	0.49
2:G:169:LYS:HZ3	2:G:461:ALA:HB1	1.77	0.49
2:G:266:THR:HG23	2:G:270:LYS:HZ2	1.76	0.49
2:G:431:MET:CG	2:G:438:PHE:CE2	2.94	0.49
2:H:174:HIS:HD2	2:H:176:TYR:CD1	2.30	0.49
2:H:212:VAL:CG2	2:H:214:TYR:CE1	2.95	0.49
2:H:259:VAL:O	2:H:396:ILE:HA	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:349:ALA:HB3	2:H:350:PRO:CD	2.39	0.49
2:I:93:ILE:HD12	2:I:96:ARG:HD2	1.94	0.49
2:I:226:LEU:N	2:I:227:PRO:HD2	2.28	0.49
2:I:249:LYS:O	2:I:250:ALA:HB3	2.11	0.49
2:J:174:HIS:HD2	2:J:176:TYR:CD1	2.30	0.49
2:J:249:LYS:CE	2:J:258:ILE:HD13	2.42	0.49
2:J:249:LYS:O	2:J:250:ALA:HB3	2.11	0.49
2:J:286:ASN:HB2	2:J:311:GLN:NE2	2.26	0.49
2:K:134:GLN:HB3	2:K:136:TRP:NE1	2.27	0.49
2:K:366:ARG:HE	2:K:391:GLN:CD	2.15	0.49
2:K:388:PHE:CE2	2:K:390:VAL:HG13	2.46	0.49
2:K:415:LEU:HD22	2:K:416:LYS:N	2.27	0.49
2:L:431:MET:CG	2:L:438:PHE:CE2	2.94	0.49
1:A:225:PHE:HB3	1:A:278:ASP:OD2	2.12	0.49
1:A:342:VAL:HG11	1:A:390:MET:CE	2.37	0.49
1:A:393:VAL:HG12	1:A:394:ASP:N	2.23	0.49
1:A:710:LYS:CG	1:A:939:GLY:HA3	2.34	0.49
1:A:791:GLU:O	1:A:795:ILE:HG13	2.11	0.49
1:A:877:ARG:CG	1:C:1229:MET:CA	2.80	0.49
1:A:960:THR:CG2	1:A:963:VAL:HG21	2.42	0.49
1:A:1023:ILE:HD12	1:A:1023:ILE:N	2.27	0.49
1:A:1228:LYS:HD3	1:E:901:ASP:CG	2.32	0.49
1:A:1368:MET:HB3	1:A:1387:MET:HG3	1.94	0.49
1:A:1415:ILE:CG2	1:A:1421:GLU:HB2	2.41	0.49
1:A:1417:VAL:CG1	1:A:1418:GLY:N	2.73	0.49
1:A:1442:GLU:OE2	2:L:374:ALA:C	2.50	0.49
1:B:260:MET:O	1:B:261:GLN:C	2.48	0.49
1:B:353:MET:CE	1:B:366:GLY:O	2.60	0.49
1:B:572:THR:CG2	1:B:615:ARG:HB3	2.42	0.49
1:B:820:ARG:CB	1:B:821:PRO:HD2	2.37	0.49
1:B:1207:VAL:HG13	1:B:1208:PRO:HD2	1.93	0.49
1:B:1407:ASP:O	1:B:1408:GLU:C	2.50	0.49
1:D:30:HIS:HD2	1:D:31:ARG:N	2.10	0.49
1:D:608:ASP:OD2	1:D:647:ALA:N	2.42	0.49
1:D:1184:ASN:O	1:D:1186:ARG:N	2.46	0.49
1:D:1227:GLU:OE2	1:F:902:ASN:CG	2.42	0.49
1:E:228:LEU:HD22	1:E:278:ASP:HA	1.94	0.49
1:E:345:MET:HE2	1:E:385:LEU:HB2	1.93	0.49
1:E:359:THR:HG23	1:E:378:GLN:C	2.32	0.49
1:E:359:THR:HG23	1:E:378:GLN:CB	2.41	0.49
1:E:636:LEU:O	1:E:637:ARG:C	2.50	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:780:ARG:HB3	2:L:52:VAL:N	2.26	0.49
1:E:1054:GLN:O	1:E:1057:THR:HB	2.12	0.49
1:E:1289:MET:HE2	1:E:1289:MET:N	2.28	0.49
1:F:111:PRO:C	1:F:112:ILE:HG23	2.33	0.49
1:F:402:ARG:O	1:F:403:ASP:C	2.51	0.49
1:F:556:ARG:O	1:F:557:ALA:C	2.48	0.49
1:F:777:GLY:O	1:F:788:HIS:CE1	2.51	0.49
1:F:868:HIS:O	1:F:869:GLY:C	2.50	0.49
1:F:1407:ASP:O	1:F:1408:GLU:C	2.50	0.49
2:G:43:GLN:OE1	2:G:119:THR:HG23	2.12	0.49
2:G:132:TRP:HD1	2:G:202:ARG:CB	2.24	0.49
2:G:134:GLN:HB3	2:G:136:TRP:NE1	2.26	0.49
2:G:200:VAL:O	2:G:204:VAL:HG12	2.12	0.49
2:G:286:ASN:HB2	2:G:311:GLN:NE2	2.26	0.49
2:G:388:PHE:CE2	2:G:390:VAL:HG13	2.46	0.49
2:H:257:ASN:O	2:H:394:LEU:HD23	2.12	0.49
2:H:469:LYS:CD	2:H:476:VAL:HB	2.38	0.49
2:I:249:LYS:CE	2:I:258:ILE:HD13	2.42	0.49
2:I:366:ARG:HE	2:I:391:GLN:CD	2.15	0.49
2:I:434:MET:CB	2:I:437:VAL:HG12	2.42	0.49
2:J:134:GLN:HB3	2:J:136:TRP:NE1	2.26	0.49
2:J:290:LYS:HB3	2:J:393:ASP:OD2	2.11	0.49
2:J:415:LEU:CD2	2:J:432:THR:HG23	2.41	0.49
2:J:430:LYS:HG2	2:J:459:ASP:OD1	2.13	0.49
2:K:418:THR:HG1	2:K:420:TRP:HD1	1.58	0.49
2:L:93:ILE:HD12	2:L:96:ARG:HD2	1.94	0.49
1:A:51:PRO:HG3	1:A:200:PHE:CD2	2.48	0.49
1:A:203:ASP:OD1	1:A:203:ASP:N	2.44	0.49
1:A:689:LEU:O	1:A:689:LEU:HG	2.11	0.49
1:A:780:ARG:HB3	2:J:51:GLY:O	2.11	0.49
1:A:969:PRO:HD2	1:A:970:PRO:CD	2.42	0.49
1:A:1218:ASP:OD2	1:E:847:THR:HG21	2.12	0.49
1:A:1359:GLY:O	1:A:1360:CYS:HB3	2.12	0.49
1:B:526:LEU:N	1:B:526:LEU:CD1	2.64	0.49
1:B:594:GLU:O	1:B:597:VAL:N	2.45	0.49
1:B:690:GLU:CD	1:B:690:GLU:H	2.15	0.49
1:B:780:ARG:NH2	2:G:54:PHE:CD1	2.78	0.49
1:B:797:THR:HG23	1:B:812:LYS:HE2	1.94	0.49
1:B:1146:VAL:O	1:B:1147:ARG:C	2.46	0.49
1:B:1184:ASN:O	1:B:1186:ARG:N	2.46	0.49
1:C:47:HIS:HE1	1:C:176:SER:CB	2.25	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:53:LYS:O	1:C:54:PHE:C	2.50	0.49
1:C:90:ARG:HB3	1:C:107:TRP:CH2	2.48	0.49
1:C:492:TYR:CG	1:C:761:GLN:HG2	2.47	0.49
1:C:877:ARG:CG	1:E:1229:MET:CA	2.80	0.49
1:D:236:THR:OG1	1:D:718:SER:HB3	2.12	0.49
1:D:355:TYR:CD1	1:D:355:TYR:O	2.65	0.49
1:D:430:VAL:HG22	1:D:557:ALA:HB3	1.94	0.49
1:D:589:ILE:O	1:D:593:THR:OG1	2.28	0.49
1:D:838:VAL:HG12	1:D:839:PRO:CD	2.39	0.49
1:D:991:ASN:OD1	1:D:991:ASN:C	2.50	0.49
1:E:21:GLY:O	1:E:22:ILE:C	2.49	0.49
1:E:90:ARG:HB3	1:E:107:TRP:CH2	2.48	0.49
1:E:754:ILE:O	1:E:755:GLN:C	2.48	0.49
1:E:798:LEU:O	1:E:802:VAL:HG22	2.12	0.49
1:E:1421:GLU:HG3	1:E:1451:VAL:HG11	1.94	0.49
1:F:242:ASN:HA	1:F:245:LYS:HG3	1.95	0.49
1:F:290:THR:O	1:F:294:VAL:HG23	2.12	0.49
1:F:353:MET:CE	1:F:366:GLY:O	2.60	0.49
1:F:704:LEU:C	1:F:706:LYS:H	2.14	0.49
1:F:810:PHE:O	1:F:813:TYR:HB3	2.13	0.49
1:F:978:GLU:O	1:F:981:ALA:HB3	2.13	0.49
1:F:1427:LEU:O	1:F:1430:GLU:N	2.46	0.49
2:G:302:MET:SD	2:G:333:GLU:HG3	2.53	0.49
2:G:415:LEU:HD22	2:G:416:LYS:N	2.27	0.49
2:G:418:THR:HG1	2:G:420:TRP:HD1	1.60	0.49
2:I:65:ILE:N	2:I:66:PRO:HD2	2.28	0.49
2:I:388:PHE:CE2	2:I:390:VAL:CG1	2.95	0.49
2:I:416:LYS:HE3	2:I:433:ASN:CB	2.41	0.49
2:I:431:MET:CG	2:I:438:PHE:CE2	2.94	0.49
2:I:454:ILE:HD13	2:I:454:ILE:C	2.33	0.49
2:I:479:ALA:O	2:I:480:ALA:HB3	2.12	0.49
2:J:302:MET:SD	2:J:333:GLU:HG3	2.53	0.49
2:K:55:CYS:SG	2:K:65:ILE:HD12	2.52	0.49
2:K:259:VAL:O	2:K:396:ILE:HA	2.12	0.49
2:K:431:MET:CG	2:K:438:PHE:CE2	2.94	0.49
2:K:432:THR:HB	2:K:437:VAL:HG13	1.95	0.49
2:L:92:GLU:HG3	2:L:203:ARG:HH12	1.78	0.49
2:L:132:TRP:HD1	2:L:202:ARG:CB	2.24	0.49
2:L:415:LEU:HD22	2:L:416:LYS:N	2.27	0.49
1:A:442:MET:CE	1:A:447:LEU:HA	2.41	0.49
1:A:652:THR:HG21	1:A:703:GLY:CA	2.41	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1075:THR:O	1:A:1076:GLY:C	2.50	0.49
1:B:211:TYR:CD1	1:B:212:SER:N	2.80	0.49
1:B:1417:VAL:HG12	1:B:1419:HIS:N	2.26	0.49
1:B:1460:LYS:O	1:B:1462:MET:N	2.44	0.49
1:C:83:LEU:O	1:C:84:ASP:C	2.50	0.49
1:C:643:ASN:HB3	1:C:665:THR:HG21	1.93	0.49
1:C:1441:ALA:O	1:C:1444:LEU:HB2	2.13	0.49
1:D:253:HIS:CE1	1:D:254:PRO:CD	2.88	0.49
1:D:260:MET:O	1:D:263:LEU:CB	2.55	0.49
1:D:864:SER:HG	1:D:867:ALA:H	1.60	0.49
1:D:979:ASP:O	1:D:980:LEU:C	2.49	0.49
1:D:1401:LEU:HD11	1:D:1405:ILE:HB	1.94	0.49
1:E:116:ILE:HD13	1:E:190:THR:HG21	1.94	0.49
1:E:359:THR:CG2	1:E:378:GLN:HA	2.42	0.49
1:E:970:PRO:O	1:E:970:PRO:CG	2.60	0.49
1:E:1075:THR:O	1:E:1076:GLY:C	2.50	0.49
1:F:594:GLU:O	1:F:597:VAL:N	2.45	0.49
2:G:71:LEU:HA	2:G:74:GLU:HG2	1.95	0.49
2:G:92:GLU:HG3	2:G:203:ARG:HH12	1.78	0.49
2:H:55:CYS:SG	2:H:65:ILE:HD12	2.52	0.49
2:H:302:MET:SD	2:H:333:GLU:HG3	2.53	0.49
2:H:320:TYR:HD2	2:H:346:TRP:CG	2.31	0.49
2:H:430:LYS:HG2	2:H:459:ASP:OD1	2.12	0.49
2:I:212:VAL:CG2	2:I:214:TYR:CE1	2.95	0.49
2:J:65:ILE:N	2:J:66:PRO:HD2	2.28	0.49
2:J:257:ASN:O	2:J:394:LEU:HD23	2.12	0.49
2:J:426:ASP:HB3	2:J:429:THR:OG1	2.12	0.49
2:K:43:GLN:OE1	2:K:119:THR:HG23	2.12	0.49
2:L:479:ALA:O	2:L:480:ALA:HB3	2.12	0.49
1:A:228:LEU:HD22	1:A:278:ASP:HA	1.94	0.49
1:A:359:THR:CG2	1:A:378:GLN:HA	2.42	0.49
1:B:260:MET:HE2	1:B:260:MET:HB2	1.75	0.49
1:B:479:MET:HG3	1:B:1104:MET:SD	2.52	0.49
1:B:868:HIS:O	1:B:869:GLY:C	2.50	0.49
1:B:875:MET:O	1:B:876:ASN:C	2.47	0.49
1:B:1228:LYS:HB2	1:D:900:GLY:C	2.33	0.49
1:C:110:VAL:O	1:C:112:ILE:HG23	2.13	0.49
1:C:484:PRO:HG3	1:C:823:MET:HG3	1.94	0.49
1:D:417:ASP:HA	1:D:420:VAL:HG12	1.94	0.49
1:D:505:GLN:NE2	1:D:1001:VAL:N	2.55	0.49
1:D:953:ILE:O	1:D:954:ALA:C	2.50	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:191:PHE:CE1	1:E:192:TYR:CE1	3.01	0.49
1:E:345:MET:HE2	1:E:385:LEU:CB	2.42	0.49
1:E:508:ASN:HB2	1:E:509:PRO:HD2	1.95	0.49
1:E:782:ARG:HG2	2:L:53:PRO:HD2	0.55	0.49
1:E:1068:ARG:NE	1:E:1089:GLU:OE1	2.39	0.49
1:E:1318:ASN:H	1:E:1318:ASN:HD22	1.60	0.49
1:E:1368:MET:HB3	1:E:1387:MET:HG3	1.94	0.49
1:E:1441:ALA:O	1:E:1444:LEU:HB2	2.13	0.49
1:F:430:VAL:HG13	1:F:554:GLU:CA	2.37	0.49
1:F:437:GLY:O	1:F:438:GLU:C	2.48	0.49
1:F:850:ARG:HD2	1:F:878:ILE:HD12	1.93	0.49
1:F:1163:GLY:O	1:F:1165:THR:N	2.45	0.49
2:G:212:VAL:CG2	2:G:214:TYR:CE1	2.95	0.49
2:G:259:VAL:O	2:G:396:ILE:HA	2.12	0.49
2:H:68:TRP:CD1	2:H:69:LEU:N	2.80	0.49
2:H:226:LEU:N	2:H:227:PRO:HD2	2.28	0.49
2:I:43:GLN:OE1	2:I:119:THR:HG23	2.12	0.49
2:I:257:ASN:O	2:I:394:LEU:HD23	2.12	0.49
2:J:331:GLN:HA	2:J:334:VAL:HG22	1.93	0.49
2:K:161:ALA:CB	2:K:454:ILE:HG12	2.40	0.49
2:K:302:MET:SD	2:K:333:GLU:HG3	2.53	0.49
2:L:43:GLN:OE1	2:L:119:THR:HG23	2.12	0.49
2:L:134:GLN:HB3	2:L:136:TRP:NE1	2.26	0.49
2:L:181:ARG:HD3	2:L:182:MET:O	2.13	0.49
2:L:200:VAL:O	2:L:204:VAL:HG12	2.12	0.49
2:L:226:LEU:N	2:L:227:PRO:HD2	2.28	0.49
2:L:415:LEU:HD23	2:L:432:THR:HG23	1.94	0.49
1:A:90:ARG:HB3	1:A:107:TRP:CH2	2.48	0.49
1:A:182:MET:HE1	1:A:217:PRO:C	2.30	0.49
1:A:484:PRO:HG3	1:A:823:MET:HG3	1.94	0.49
1:A:508:ASN:HB2	1:A:509:PRO:HD2	1.94	0.49
1:A:1440:ALA:O	1:A:1443:ILE:N	2.42	0.49
1:B:417:ASP:HA	1:B:420:VAL:HG12	1.95	0.49
1:B:1236:ARG:C	1:B:1238:THR:H	2.15	0.49
1:B:1435:THR:HG23	1:B:1437:SER:CB	2.42	0.49
1:C:499:PHE:HE2	1:C:742:MET:CE	2.26	0.49
1:C:521:SER:OG	1:C:522:LEU:N	2.45	0.49
1:C:1221:PRO:CG	1:C:1229:MET:HE2	2.34	0.49
1:C:1438:ARG:CZ	2:J:376:GLY:C	2.80	0.49
1:D:175:ARG:HH11	1:D:175:ARG:CG	2.19	0.49
1:D:476:ILE:HA	1:D:1034:PRO:HA	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:782:ARG:CB	2:H:56:GLN:NE2	2.41	0.49
1:D:810:PHE:O	1:D:813:TYR:HB3	2.13	0.49
1:E:15:ARG:HG3	1:E:19:GLU:HG3	1.94	0.49
1:E:110:VAL:HG12	1:E:111:PRO:N	2.28	0.49
1:E:1111:ASN:OD1	1:E:1119:VAL:CG2	2.37	0.49
1:F:419:TRP:O	1:F:540:THR:CG2	2.59	0.49
1:F:1184:ASN:O	1:F:1186:ARG:N	2.46	0.49
2:G:277:VAL:CG1	2:G:279:ALA:H	2.26	0.49
2:G:434:MET:CB	2:G:437:VAL:HG12	2.42	0.49
2:H:200:VAL:O	2:H:204:VAL:HG12	2.12	0.49
2:I:92:GLU:HG3	2:I:203:ARG:HH12	1.78	0.49
2:I:174:HIS:HD2	2:I:176:TYR:CD1	2.30	0.49
2:I:302:MET:SD	2:I:333:GLU:HG3	2.53	0.49
2:I:320:TYR:HD2	2:I:346:TRP:CG	2.31	0.49
2:I:353:PHE:CE1	2:I:370:GLY:CA	2.96	0.49
2:J:68:TRP:CD1	2:J:69:LEU:N	2.80	0.49
2:J:226:LEU:N	2:J:227:PRO:HD2	2.28	0.49
2:J:454:ILE:HD13	2:J:454:ILE:C	2.33	0.49
2:K:181:ARG:HD3	2:K:182:MET:O	2.13	0.49
2:K:200:VAL:O	2:K:204:VAL:HG12	2.12	0.49
2:K:212:VAL:CG2	2:K:214:TYR:CE1	2.95	0.49
2:K:249:LYS:O	2:K:250:ALA:HB3	2.11	0.49
2:K:257:ASN:O	2:K:394:LEU:HD23	2.12	0.49
2:K:345:ILE:HG12	2:K:345:ILE:O	2.13	0.49
2:K:353:PHE:CE1	2:K:370:GLY:CA	2.96	0.49
2:K:415:LEU:HD23	2:K:432:THR:HG23	1.94	0.49
2:K:449:LEU:CD2	2:K:452:TRP:CG	2.93	0.49
2:K:469:LYS:HD2	2:K:476:VAL:CB	2.39	0.49
2:L:55:CYS:SG	2:L:65:ILE:HD12	2.52	0.49
2:L:324:ARG:HA	2:L:346:TRP:CZ2	2.46	0.49
2:L:449:LEU:CD2	2:L:451:VAL:HG13	2.27	0.49
1:A:110:VAL:O	1:A:112:ILE:HG23	2.13	0.49
1:A:454:PHE:CD2	1:A:648:GLU:HA	2.47	0.49
1:A:466:HIS:HB3	1:A:467:PRO:HD3	1.94	0.49
1:A:661:VAL:O	1:A:661:VAL:CG1	2.61	0.49
1:A:917:VAL:HG13	1:A:922:LEU:HD21	1.95	0.49
1:A:1366:GLU:HG2	1:A:1367:TYR:CE2	2.47	0.49
1:B:901:ASP:OD2	1:F:1228:LYS:HD3	2.13	0.49
1:B:1113:CYS:O	1:B:1114:PRO:C	2.48	0.49
1:C:68:ASP:OD1	1:C:68:ASP:N	2.44	0.49
1:C:80:ARG:O	1:C:80:ARG:HG3	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:218:THR:HG22	1:C:218:THR:O	2.08	0.49
1:C:294:VAL:O	1:C:295:LYS:C	2.47	0.49
1:C:780:ARG:HB3	2:K:51:GLY:O	2.11	0.49
1:C:1075:THR:O	1:C:1076:GLY:C	2.50	0.49
1:C:1395:TYR:CD2	1:C:1443:ILE:HD13	2.48	0.49
1:C:1447:TRP:HA	1:C:1447:TRP:CE3	2.48	0.49
1:D:1211:LEU:HG	1:D:1215:ILE:HD11	1.94	0.49
1:D:1236:ARG:C	1:D:1238:THR:H	2.15	0.49
1:D:1427:LEU:O	1:D:1430:GLU:N	2.46	0.49
1:E:110:VAL:O	1:E:112:ILE:HG23	2.13	0.49
1:E:213:THR:O	1:E:214:ASN:ND2	2.43	0.49
1:E:550:LEU:HD13	1:E:555:PHE:HA	1.95	0.49
1:E:965:LEU:HA	1:E:965:LEU:HD23	1.33	0.49
1:E:1184:ASN:O	1:E:1187:LEU:N	2.44	0.49
1:E:1219:ALA:C	1:E:1221:PRO:HD2	2.34	0.49
1:E:1396:ASP:OD1	1:E:1396:ASP:O	2.30	0.49
1:E:1442:GLU:OE2	2:K:374:ALA:C	2.50	0.49
1:F:831:LEU:HD13	1:F:1084:MET:HE3	1.94	0.49
1:F:1057:THR:HG22	1:F:1058:LEU:N	2.22	0.49
2:G:250:ALA:CB	2:G:251:PRO:HD2	2.35	0.49
2:G:432:THR:HB	2:G:437:VAL:HG13	1.95	0.49
2:H:174:HIS:CD2	2:H:176:TYR:CZ	3.01	0.49
2:H:277:VAL:CG1	2:H:279:ALA:H	2.26	0.49
2:H:353:PHE:CE1	2:H:370:GLY:CA	2.96	0.49
2:H:367:ILE:HD12	2:H:369:LEU:HD11	1.93	0.49
2:I:468:ALA:O	2:I:471:LYS:HB2	2.12	0.49
2:J:55:CYS:SG	2:J:65:ILE:HD12	2.52	0.49
2:J:174:HIS:CD2	2:J:176:TYR:CZ	3.01	0.49
2:J:259:VAL:O	2:J:396:ILE:HA	2.12	0.49
2:J:345:ILE:O	2:J:345:ILE:HG12	2.13	0.49
2:L:71:LEU:HA	2:L:74:GLU:HG2	1.95	0.49
2:L:93:ILE:HD11	2:L:195:LEU:CD2	2.30	0.49
2:L:418:THR:CB	2:L:424:LEU:HD11	2.23	0.49
1:A:62:ILE:O	1:A:62:ILE:CG2	2.60	0.49
1:A:235:ASN:ND2	1:A:236:THR:HB	2.27	0.49
1:A:244:MET:C	1:A:246:ALA:N	2.65	0.49
1:A:353:MET:O	1:A:353:MET:HG3	2.11	0.49
1:A:780:ARG:HB3	2:J:52:VAL:N	2.26	0.49
1:A:1054:GLN:O	1:A:1057:THR:HB	2.12	0.49
1:A:1458:VAL:HG13	1:A:1459:PRO:CD	2.42	0.49
1:B:537:GLU:HG3	1:B:538:THR:N	2.08	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:978:GLU:O	1:B:981:ALA:HB3	2.13	0.49
1:C:225:PHE:HB3	1:C:278:ASP:OD2	2.12	0.49
1:C:250:ARG:NH2	1:C:639:PHE:CE1	2.79	0.49
1:C:491:LYS:HZ2	1:C:785:GLY:HA3	1.77	0.49
1:C:918:THR:O	1:C:919:ALA:C	2.51	0.49
1:D:211:TYR:HD1	1:D:212:SER:N	2.08	0.49
1:D:342:VAL:HG11	1:D:390:MET:HE2	1.95	0.49
1:D:452:GLN:CG	1:D:764:THR:HG22	2.43	0.49
1:E:51:PRO:HG3	1:E:200:PHE:CD2	2.48	0.49
1:E:83:LEU:O	1:E:84:ASP:C	2.50	0.49
1:E:463:LEU:HA	1:E:463:LEU:HD23	1.48	0.49
1:E:960:THR:CG2	1:E:963:VAL:HG21	2.42	0.49
1:E:1230:GLN:HE21	1:E:1267:ARG:HD3	1.76	0.49
1:F:110:VAL:CG2	1:F:130:GLN:HG3	2.43	0.49
1:F:269:VAL:HG23	1:F:270:GLY:N	2.21	0.49
1:F:389:GLU:CA	1:F:403:ASP:OD2	2.61	0.49
1:F:582:LEU:CB	1:F:755:GLN:HE21	2.26	0.49
1:F:991:ASN:OD1	1:F:991:ASN:C	2.50	0.49
1:F:1159:ASN:C	1:F:1161:VAL:N	2.66	0.49
2:G:450:VAL:HG13	2:G:451:VAL:N	2.28	0.49
2:H:345:ILE:HG12	2:H:345:ILE:O	2.13	0.49
2:H:432:THR:HB	2:H:437:VAL:HG13	1.95	0.49
2:I:32:TYR:CE2	2:I:194:LYS:HB3	2.46	0.49
2:I:68:TRP:CD1	2:I:69:LEU:N	2.80	0.49
2:I:134:GLN:HB3	2:I:136:TRP:NE1	2.27	0.49
2:I:197:LYS:HG2	2:I:273:LEU:CD1	2.43	0.49
2:I:449:LEU:HD11	2:I:451:VAL:CG1	2.31	0.49
2:J:212:VAL:CG2	2:J:214:TYR:CE1	2.95	0.49
2:J:320:TYR:HD2	2:J:346:TRP:CG	2.31	0.49
2:J:349:ALA:HB3	2:J:350:PRO:CD	2.39	0.49
2:K:174:HIS:HD2	2:K:176:TYR:CD1	2.30	0.49
2:K:174:HIS:CD2	2:K:176:TYR:CZ	3.01	0.49
2:K:197:LYS:HG2	2:K:273:LEU:CD1	2.43	0.49
2:L:249:LYS:CE	2:L:258:ILE:HD13	2.42	0.49
2:L:320:TYR:HD2	2:L:346:TRP:CG	2.31	0.49
2:L:430:LYS:HG2	2:L:459:ASP:OD1	2.12	0.49
2:L:454:ILE:HD13	2:L:454:ILE:C	2.33	0.49
1:A:53:LYS:O	1:A:54:PHE:C	2.50	0.48
1:A:452:GLN:NE2	1:A:764:THR:HG23	1.99	0.48
1:A:482:ASP:OD1	1:A:788:HIS:HB3	2.13	0.48
1:A:731:SER:HB2	1:A:747:SER:HB2	1.94	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:909:GLN:NE2	1:A:929:GLU:OE1	2.46	0.48
1:A:1369:THR:HG22	1:A:1369:THR:O	2.13	0.48
1:B:110:VAL:CG2	1:B:130:GLN:HG3	2.43	0.48
1:B:227:MET:HE3	1:B:282:GLU:CA	2.27	0.48
1:B:1159:ASN:C	1:B:1161:VAL:N	2.66	0.48
1:B:1163:GLY:O	1:B:1165:THR:N	2.45	0.48
1:C:244:MET:O	1:C:245:LYS:C	2.44	0.48
1:C:561:TYR:C	1:C:561:TYR:CD1	2.86	0.48
1:C:636:LEU:O	1:C:637:ARG:C	2.50	0.48
1:D:24:ALA:C	1:D:26:LYS:N	2.65	0.48
1:D:1228:LYS:HD3	1:F:901:ASP:OD2	2.13	0.48
1:D:1435:THR:HG23	1:D:1437:SER:CB	2.42	0.48
1:E:207:TYR:N	1:E:207:TYR:HD1	2.08	0.48
1:E:244:MET:C	1:E:246:ALA:N	2.65	0.48
1:E:466:HIS:HB3	1:E:467:PRO:HD3	1.94	0.48
1:E:513:SER:HB2	1:E:520:MET:CE	2.43	0.48
1:E:746:ILE:HG23	1:E:1182:ASP:N	2.21	0.48
1:E:909:GLN:NE2	1:E:929:GLU:OE1	2.46	0.48
1:E:1054:GLN:O	1:E:1055:VAL:C	2.49	0.48
1:E:1359:GLY:O	1:E:1360:CYS:CB	2.58	0.48
1:F:30:HIS:HD2	1:F:31:ARG:N	2.10	0.48
1:F:629:THR:O	1:F:630:HIS:C	2.50	0.48
1:F:979:ASP:O	1:F:980:LEU:C	2.49	0.48
1:F:1207:VAL:HG13	1:F:1208:PRO:HD2	1.93	0.48
2:G:174:HIS:CD2	2:G:176:TYR:CZ	3.01	0.48
2:G:226:LEU:N	2:G:227:PRO:HD2	2.28	0.48
2:K:430:LYS:HG2	2:K:459:ASP:OD1	2.13	0.48
2:L:429:THR:CB	2:L:431:MET:HE2	2.42	0.48
1:A:83:LEU:O	1:A:84:ASP:C	2.50	0.48
1:A:430:VAL:HG22	1:A:557:ALA:HB3	1.95	0.48
1:A:491:LYS:HZ1	1:A:785:GLY:HA3	1.76	0.48
1:A:537:GLU:C	1:A:539:GLN:H	2.15	0.48
1:A:705:LEU:HD23	1:A:705:LEU:N	2.26	0.48
1:A:900:GLY:C	1:C:1228:LYS:CB	2.82	0.48
1:A:1091:GLY:C	1:A:1092:ILE:HG13	2.34	0.48
1:A:1281:VAL:HA	1:A:1301:SER:O	2.13	0.48
1:A:1396:ASP:OD1	1:A:1396:ASP:O	2.30	0.48
1:B:430:VAL:HG22	1:B:557:ALA:HB3	1.94	0.48
1:B:728:ILE:CD1	1:B:1047:MET:CE	2.74	0.48
1:B:810:PHE:O	1:B:813:TYR:HB3	2.13	0.48
1:B:1310:THR:HG22	1:B:1311:THR:HG22	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:482:ASP:OD1	1:C:788:HIS:HB3	2.13	0.48
1:C:676:ALA:O	1:C:677:GLU:C	2.50	0.48
1:C:1070:ASP:OD1	1:C:1070:ASP:C	2.52	0.48
1:D:254:PRO:O	1:D:257:GLY:N	2.37	0.48
1:D:1059:ASN:O	1:D:1060:ARG:HB2	2.12	0.48
1:D:1159:ASN:C	1:D:1161:VAL:N	2.66	0.48
1:E:97:ILE:HD13	1:E:133:VAL:HG21	1.95	0.48
1:E:225:PHE:HB3	1:E:278:ASP:OD2	2.12	0.48
1:E:342:VAL:HG11	1:E:390:MET:CE	2.37	0.48
1:E:510:PRO:HD2	1:E:970:PRO:CB	2.34	0.48
1:E:537:GLU:C	1:E:539:GLN:H	2.15	0.48
1:E:672:GLN:CG	1:E:693:MET:CE	2.79	0.48
1:E:1030:THR:HG21	1:E:1033:SER:HB3	1.95	0.48
1:E:1108:CYS:SG	6:E:2476:F3S:S4	2.94	0.48
1:E:1236:ARG:C	1:E:1238:THR:H	2.17	0.48
1:F:211:TYR:HD1	1:F:212:SER:N	2.08	0.48
1:F:354:ARG:NH2	1:F:1292:ALA:O	2.46	0.48
1:F:953:ILE:O	1:F:954:ALA:C	2.50	0.48
1:F:1216:VAL:HG11	1:F:1249:MET:HE1	1.94	0.48
2:G:141:THR:HB	2:G:142:PRO:CD	2.40	0.48
2:G:181:ARG:HD3	2:G:182:MET:O	2.13	0.48
2:G:418:THR:CB	2:G:424:LEU:HD11	2.23	0.48
2:I:181:ARG:HD3	2:I:182:MET:O	2.13	0.48
2:I:450:VAL:HG13	2:I:451:VAL:N	2.28	0.48
2:J:324:ARG:HB3	2:J:324:ARG:NH1	2.28	0.48
2:K:320:TYR:HD2	2:K:346:TRP:CG	2.31	0.48
2:K:323:ASP:HB2	2:K:348:ALA:C	2.34	0.48
2:K:450:VAL:HG13	2:K:451:VAL:N	2.28	0.48
1:A:309:THR:CG2	1:A:314:LYS:HG3	2.42	0.48
1:A:734:LEU:HD12	1:A:738:HIS:CD2	2.41	0.48
1:A:918:THR:O	1:A:919:ALA:C	2.51	0.48
1:A:1007:GLY:N	1:A:1051:GLU:OE2	2.41	0.48
1:A:1057:THR:HG22	1:A:1058:LEU:N	2.28	0.48
1:A:1112:THR:O	2:J:112:GLN:NE2	2.40	0.48
1:A:1184:ASN:O	1:A:1186:ARG:N	2.46	0.48
1:A:1219:ALA:C	1:A:1221:PRO:HD2	2.34	0.48
1:A:1236:ARG:C	1:A:1238:THR:H	2.17	0.48
1:A:1318:ASN:H	1:A:1318:ASN:HD22	1.60	0.48
1:A:1441:ALA:O	1:A:1444:LEU:HB2	2.13	0.48
1:B:389:GLU:CA	1:B:403:ASP:OD2	2.61	0.48
1:B:419:TRP:O	1:B:540:THR:OG1	2.27	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:630:HIS:O	1:B:631:LEU:C	2.49	0.48
1:B:846:ILE:O	1:B:847:THR:C	2.48	0.48
1:C:538:THR:O	1:C:538:THR:HG23	2.13	0.48
1:C:633:ARG:NH2	1:C:737:GLU:O	2.39	0.48
1:C:858:MET:HA	4:C:2474:FMN:N5	2.29	0.48
1:C:949:VAL:C	1:C:950:THR:O	2.50	0.48
1:C:1230:GLN:HE21	1:C:1267:ARG:HD3	1.76	0.48
1:C:1236:ARG:C	1:C:1238:THR:N	2.67	0.48
1:C:1396:ASP:OD1	1:C:1399:ASP:N	2.47	0.48
1:D:868:HIS:O	1:D:869:GLY:C	2.50	0.48
1:D:1278:ALA:O	1:D:1279:PHE:HB2	2.12	0.48
1:F:419:TRP:O	1:F:540:THR:OG1	2.27	0.48
1:F:452:GLN:CG	1:F:764:THR:HG22	2.43	0.48
1:F:479:MET:HG3	1:F:1104:MET:SD	2.52	0.48
1:F:797:THR:HG23	1:F:812:LYS:HE2	1.94	0.48
1:F:949:VAL:C	1:F:950:THR:O	2.48	0.48
1:F:1211:LEU:HG	1:F:1215:ILE:HD11	1.94	0.48
1:F:1407:ASP:O	1:F:1409:SER:N	2.47	0.48
2:G:174:HIS:HD2	2:G:176:TYR:CD1	2.30	0.48
2:G:240:THR:HG1	8:G:484:FAD:C5A	2.26	0.48
2:G:249:LYS:O	2:G:250:ALA:HB3	2.11	0.48
2:G:257:ASN:O	2:G:394:LEU:HD23	2.12	0.48
2:G:454:ILE:HD13	2:G:454:ILE:C	2.33	0.48
2:H:65:ILE:N	2:H:66:PRO:HD2	2.28	0.48
2:H:181:ARG:HD3	2:H:182:MET:O	2.13	0.48
2:H:432:THR:HB	2:H:437:VAL:O	2.13	0.48
2:H:449:LEU:CD2	2:H:452:TRP:CG	2.93	0.48
2:I:146:LEU:HD22	2:I:146:LEU:N	2.26	0.48
2:I:415:LEU:HD23	2:I:432:THR:HG23	1.94	0.48
2:I:430:LYS:HG2	2:I:459:ASP:OD1	2.13	0.48
2:J:366:ARG:HE	2:J:391:GLN:CD	2.15	0.48
2:J:450:VAL:HG13	2:J:451:VAL:N	2.28	0.48
2:K:226:LEU:N	2:K:227:PRO:HD2	2.28	0.48
2:L:174:HIS:HD2	2:L:176:TYR:CD1	2.30	0.48
2:L:181:ARG:C	2:L:182:MET:HE3	2.34	0.48
2:L:257:ASN:O	2:L:394:LEU:HD23	2.12	0.48
2:L:277:VAL:CG1	2:L:279:ALA:H	2.26	0.48
1:A:24:ALA:C	1:A:26:LYS:N	2.65	0.48
1:A:87:GLU:O	1:A:90:ARG:N	2.47	0.48
1:A:1326:THR:HG22	1:A:1329:TYR:HB2	1.95	0.48
1:A:1395:TYR:CD2	1:A:1443:ILE:HD13	2.48	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:30:HIS:HD2	1:B:31:ARG:N	2.10	0.48
1:B:443:ASP:O	1:B:446:GLU:N	2.40	0.48
1:B:465:LEU:HD21	1:B:675:ILE:HG13	1.95	0.48
1:B:582:LEU:CB	1:B:755:GLN:HE21	2.26	0.48
1:B:900:GLY:C	1:F:1228:LYS:HB2	2.33	0.48
1:B:1008:THR:O	1:B:1011:ALA:HB3	2.14	0.48
1:B:1059:ASN:O	1:B:1060:ARG:HB2	2.12	0.48
1:B:1075:THR:O	1:B:1076:GLY:C	2.50	0.48
1:C:1091:GLY:C	1:C:1092:ILE:HG13	2.34	0.48
1:C:1281:VAL:HA	1:C:1301:SER:O	2.13	0.48
1:D:354:ARG:NH2	1:D:1292:ALA:O	2.46	0.48
1:D:582:LEU:CB	1:D:755:GLN:HE21	2.26	0.48
1:D:594:GLU:O	1:D:597:VAL:N	2.45	0.48
1:D:731:SER:HA	1:D:747:SER:CB	2.43	0.48
1:D:1131:THR:CG2	1:D:1133:GLU:H	2.27	0.48
1:E:54:PHE:HA	1:E:199:ARG:HD2	1.94	0.48
1:E:430:VAL:HG22	1:E:557:ALA:HB3	1.95	0.48
1:E:492:TYR:C	1:E:492:TYR:CD1	2.86	0.48
1:E:552:THR:HG22	1:E:552:THR:O	2.14	0.48
1:E:633:ARG:NH2	1:E:737:GLU:O	2.38	0.48
1:E:643:ASN:HB3	1:E:665:THR:HG21	1.93	0.48
1:E:858:MET:HA	4:E:2474:FMN:N5	2.29	0.48
1:E:1038:ILE:O	1:E:1038:ILE:CG2	2.61	0.48
1:E:1281:VAL:HA	1:E:1301:SER:O	2.13	0.48
1:E:1326:THR:HG22	1:E:1329:TYR:HB2	1.95	0.48
1:E:1359:GLY:O	1:E:1360:CYS:HB3	2.12	0.48
1:F:1310:THR:HG22	1:F:1311:THR:HG22	1.95	0.48
2:G:186:LEU:HD23	2:G:195:LEU:CG	2.43	0.48
2:G:323:ASP:HB2	2:G:348:ALA:C	2.34	0.48
2:I:240:THR:HG1	8:I:484:FAD:C5A	2.27	0.48
2:J:327:MET:HG2	2:J:334:VAL:HG11	1.96	0.48
2:J:345:ILE:HD13	2:J:345:ILE:N	2.17	0.48
2:J:469:LYS:HZ3	2:J:476:VAL:CA	2.24	0.48
2:K:54:PHE:CB	2:K:107:ASN:HB3	2.39	0.48
2:K:327:MET:HG2	2:K:334:VAL:HG11	1.96	0.48
2:K:469:LYS:HZ3	2:K:476:VAL:CA	2.26	0.48
2:L:432:THR:HB	2:L:437:VAL:HG13	1.95	0.48
1:A:54:PHE:HA	1:A:199:ARG:HD2	1.94	0.48
1:A:80:ARG:O	1:A:80:ARG:HG3	2.12	0.48
1:A:550:LEU:HD13	1:A:555:PHE:HA	1.95	0.48
1:A:631:LEU:N	1:A:631:LEU:HD23	2.29	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1374:VAL:C	1:A:1375:ILE:CG1	2.82	0.48
1:A:1447:TRP:HA	1:A:1447:TRP:CE3	2.48	0.48
1:B:290:THR:HG22	1:B:293:MET:H	1.78	0.48
1:B:347:ARG:HB2	1:B:347:ARG:HH11	1.79	0.48
1:B:354:ARG:NH2	1:B:1292:ALA:O	2.46	0.48
1:B:820:ARG:HB3	1:B:821:PRO:HD3	1.94	0.48
1:B:856:PRO:HB3	4:B:2474:FMN:H3'	1.95	0.48
1:C:54:PHE:HA	1:C:199:ARG:HD2	1.94	0.48
1:C:537:GLU:C	1:C:539:GLN:H	2.15	0.48
1:C:805:ASP:O	1:C:805:ASP:CG	2.49	0.48
1:C:1349:ARG:CG	1:C:1349:ARG:NH1	2.75	0.48
1:D:242:ASN:HA	1:D:245:LYS:HG3	1.95	0.48
1:D:260:MET:O	1:D:261:GLN:C	2.48	0.48
1:D:353:MET:CE	1:D:366:GLY:O	2.60	0.48
1:D:402:ARG:O	1:D:403:ASP:C	2.51	0.48
1:D:634:SER:O	1:D:635:ASN:C	2.52	0.48
1:D:978:GLU:O	1:D:981:ALA:HB3	2.13	0.48
1:E:522:LEU:CG	1:E:705:LEU:HD21	2.38	0.48
1:E:1052:VAL:O	1:E:1053:HIS:C	2.51	0.48
1:E:1110:SER:C	1:E:1112:THR:HG23	2.32	0.48
1:E:1395:TYR:CD2	1:E:1443:ILE:HD13	2.48	0.48
1:F:196:LEU:HA	1:F:196:LEU:HD23	1.55	0.48
1:F:290:THR:HG22	1:F:293:MET:H	1.78	0.48
1:F:746:ILE:CG2	1:F:1182:ASP:CB	2.86	0.48
1:F:1401:LEU:HD11	1:F:1405:ILE:HB	1.94	0.48
2:G:124:GLU:O	2:G:127:ILE:HG23	2.14	0.48
2:G:320:TYR:HD2	2:G:346:TRP:CG	2.31	0.48
2:G:331:GLN:HA	2:G:334:VAL:HG22	1.93	0.48
2:H:324:ARG:HB3	2:H:324:ARG:NH1	2.28	0.48
2:I:264:TYR:HD2	2:I:265:LEU:HD23	1.79	0.48
2:J:415:LEU:HD23	2:J:432:THR:HG23	1.94	0.48
2:K:65:ILE:N	2:K:66:PRO:HD2	2.28	0.48
2:K:68:TRP:CD1	2:K:69:LEU:N	2.80	0.48
2:K:92:GLU:HG3	2:K:203:ARG:HH12	1.78	0.48
2:K:186:LEU:HD23	2:K:195:LEU:CG	2.43	0.48
2:K:277:VAL:CG1	2:K:279:ALA:H	2.26	0.48
2:L:65:ILE:N	2:L:66:PRO:HD2	2.28	0.48
2:L:91:PRO:HD2	2:L:203:ARG:HH21	1.79	0.48
2:L:212:VAL:CG2	2:L:214:TYR:CE1	2.95	0.48
2:L:264:TYR:HD2	2:L:265:LEU:HD23	1.79	0.48
2:L:345:ILE:HG12	2:L:345:ILE:O	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:353:PHE:CE1	2:L:370:GLY:CA	2.96	0.48
2:L:434:MET:CB	2:L:437:VAL:HG12	2.42	0.48
1:A:345:MET:HE2	1:A:385:LEU:CB	2.43	0.48
1:A:858:MET:HA	4:A:2474:FMN:N5	2.29	0.48
1:A:876:ASN:CG	1:C:1227:GLU:OE2	2.52	0.48
1:B:295:LYS:CB	1:B:390:MET:HE1	2.44	0.48
1:B:698:LYS:O	1:B:698:LYS:HG2	2.13	0.48
1:B:1131:THR:CG2	1:B:1133:GLU:H	2.27	0.48
1:C:87:GLU:O	1:C:90:ARG:N	2.47	0.48
1:C:191:PHE:CE1	1:C:192:TYR:CE1	3.01	0.48
1:C:213:THR:O	1:C:214:ASN:ND2	2.43	0.48
1:C:466:HIS:HB3	1:C:467:PRO:HD3	1.94	0.48
1:C:917:VAL:HG13	1:C:922:LEU:HD21	1.95	0.48
1:C:960:THR:CG2	1:C:963:VAL:HG21	2.42	0.48
1:D:107:TRP:H	1:D:107:TRP:HD1	1.60	0.48
1:D:290:THR:HG22	1:D:293:MET:H	1.78	0.48
1:D:550:LEU:HB3	1:D:554:GLU:HG3	1.96	0.48
1:D:1163:GLY:O	1:D:1165:THR:N	2.45	0.48
1:E:52:GLN:NE2	1:E:71:LEU:HB2	2.27	0.48
1:E:266:VAL:CG1	1:E:279:THR:HG23	2.33	0.48
1:E:538:THR:O	1:E:538:THR:HG23	2.13	0.48
1:E:1396:ASP:OD1	1:E:1399:ASP:N	2.47	0.48
1:E:1417:VAL:HG12	1:E:1418:GLY:N	2.27	0.48
1:F:465:LEU:HD21	1:F:675:ILE:HG13	1.95	0.48
1:F:727:ALA:HB3	1:F:744:SER:HB2	1.95	0.48
1:F:1059:ASN:O	1:F:1060:ARG:HB2	2.12	0.48
2:G:85:GLN:CD	2:G:91:PRO:HG3	2.34	0.48
2:G:257:ASN:HD21	2:G:394:LEU:CA	2.27	0.48
2:G:367:ILE:HD13	2:G:368:HIS:C	2.34	0.48
2:G:432:THR:HB	2:G:437:VAL:O	2.13	0.48
2:H:323:ASP:HB2	2:H:348:ALA:C	2.34	0.48
2:H:454:ILE:HD13	2:H:454:ILE:C	2.33	0.48
2:I:124:GLU:O	2:I:127:ILE:HG23	2.14	0.48
2:I:327:MET:HG2	2:I:334:VAL:HG11	1.96	0.48
2:J:146:LEU:HD22	2:J:146:LEU:N	2.26	0.48
2:J:175:VAL:HG11	2:J:214:TYR:CG	2.47	0.48
2:K:153:ILE:HG12	2:K:220:VAL:HG22	1.96	0.48
2:K:330:SER:O	2:K:334:VAL:HG22	2.14	0.48
2:K:454:ILE:HD13	2:K:454:ILE:C	2.33	0.48
2:L:150:VAL:HG13	2:L:173:VAL:CA	2.38	0.48
2:L:302:MET:SD	2:L:333:GLU:HG3	2.53	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:323:ASP:HB2	2:L:348:ALA:C	2.34	0.48
1:A:15:ARG:HG3	1:A:19:GLU:HG3	1.94	0.48
1:A:74:GLY:HA2	1:A:172:LEU:HD13	1.96	0.48
1:A:509:PRO:O	1:A:509:PRO:HG2	2.14	0.48
1:A:538:THR:O	1:A:538:THR:HG23	2.13	0.48
1:A:636:LEU:O	1:A:637:ARG:C	2.50	0.48
1:A:1038:ILE:O	1:A:1038:ILE:CG2	2.61	0.48
1:A:1228:LYS:CB	1:E:900:GLY:C	2.82	0.48
1:A:1425:LYS:CE	1:A:1447:TRP:CD1	2.97	0.48
1:A:1447:TRP:O	1:A:1451:VAL:HG23	2.14	0.48
1:B:595:ASP:O	1:B:596:ALA:C	2.51	0.48
1:B:794:VAL:CG1	1:B:795:ILE:N	2.74	0.48
1:B:875:MET:HE3	1:B:880:ALA:HB3	1.95	0.48
1:B:953:ILE:O	1:B:955:ARG:N	2.47	0.48
1:B:1407:ASP:O	1:B:1409:SER:N	2.47	0.48
1:C:3:VAL:HG22	1:C:231:ASN:HB2	1.96	0.48
1:C:345:MET:HG2	1:C:349:GLY:HA2	1.95	0.48
1:C:876:ASN:CG	1:E:1227:GLU:OE2	2.52	0.48
1:C:900:GLY:C	1:E:1228:LYS:CB	2.82	0.48
1:C:1038:ILE:O	1:C:1038:ILE:CG2	2.61	0.48
1:C:1243:GLY:O	1:C:1246:LEU:N	2.47	0.48
1:D:302:ALA:HB2	1:D:347:ARG:HH11	1.76	0.48
1:D:389:GLU:CA	1:D:403:ASP:OD2	2.61	0.48
1:D:428:GLU:O	1:D:429:LEU:C	2.51	0.48
1:D:515:ARG:NE	1:D:1367:TYR:HE1	2.09	0.48
1:D:582:LEU:HB2	1:D:755:GLN:HE21	1.79	0.48
1:D:727:ALA:HB3	1:D:744:SER:HB2	1.95	0.48
1:E:68:ASP:OD1	1:E:68:ASP:N	2.44	0.48
1:E:561:TYR:CD1	1:E:561:TYR:C	2.86	0.48
1:E:1212:ASP:HB3	1:E:1245:ARG:HB3	1.96	0.48
1:F:476:ILE:HA	1:F:1034:PRO:HA	1.94	0.48
1:F:621:ILE:HG13	1:F:658:LEU:HD12	1.93	0.48
1:F:868:HIS:HB3	1:F:869:GLY:H	1.57	0.48
1:F:953:ILE:O	1:F:955:ARG:N	2.47	0.48
1:F:1131:THR:CG2	1:F:1133:GLU:H	2.27	0.48
2:G:91:PRO:HD2	2:G:203:ARG:HH21	1.79	0.48
2:H:145:GLU:O	2:H:145:GLU:HG2	2.12	0.48
2:H:175:VAL:HG11	2:H:214:TYR:CG	2.47	0.48
2:I:174:HIS:CD2	2:I:176:TYR:CZ	3.01	0.48
2:I:277:VAL:CG1	2:I:279:ALA:H	2.26	0.48
2:J:92:GLU:HG3	2:J:203:ARG:HH12	1.78	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:240:THR:HG1	8:J:484:FAD:C5A	2.26	0.48
2:J:353:PHE:CE1	2:J:370:GLY:CA	2.96	0.48
2:J:432:THR:HB	2:J:437:VAL:O	2.13	0.48
2:L:124:GLU:O	2:L:127:ILE:HG23	2.14	0.48
2:L:250:ALA:CB	2:L:251:PRO:HD2	2.35	0.48
2:L:257:ASN:HD21	2:L:394:LEU:CA	2.27	0.48
2:L:330:SER:O	2:L:334:VAL:HG22	2.14	0.48
1:A:97:ILE:HD13	1:A:133:VAL:HG21	1.95	0.48
1:A:191:PHE:CE1	1:A:192:TYR:CE1	3.01	0.48
1:A:345:MET:HE1	1:A:385:LEU:HB2	1.96	0.48
1:A:369:THR:CG2	1:A:370:GLY:N	2.76	0.48
1:A:479:MET:HG3	1:A:1104:MET:HE1	1.94	0.48
1:A:633:ARG:NH2	1:A:737:GLU:O	2.38	0.48
1:A:653:HIS:O	1:A:654:TYR:C	2.51	0.48
1:A:676:ALA:O	1:A:677:GLU:C	2.50	0.48
1:B:731:SER:HA	1:B:747:SER:CB	2.43	0.48
1:B:823:MET:C	1:B:824:GLN:HE21	2.17	0.48
1:B:1153:LEU:HA	1:B:1153:LEU:HD23	1.42	0.48
1:B:1325:ASN:O	1:B:1326:THR:HB	2.14	0.48
1:B:1427:LEU:O	1:B:1430:GLU:N	2.46	0.48
1:C:173:SER:HG	1:C:176:SER:H	1.61	0.48
1:C:227:MET:CE	1:C:282:GLU:CG	2.88	0.48
1:C:248:GLU:C	1:C:250:ARG:N	2.65	0.48
1:C:492:TYR:C	1:C:492:TYR:CD1	2.86	0.48
1:C:664:THR:HA	1:C:720:ARG:HE	1.77	0.48
1:C:1184:ASN:O	1:C:1186:ARG:N	2.46	0.48
1:C:1359:GLY:O	1:C:1360:CYS:CB	2.58	0.48
1:C:1369:THR:HG22	1:C:1369:THR:O	2.14	0.48
1:C:1425:LYS:CE	1:C:1447:TRP:CD1	2.97	0.48
1:D:110:VAL:CG2	1:D:130:GLN:HG3	2.43	0.48
1:D:1057:THR:HG22	1:D:1058:LEU:N	2.22	0.48
1:D:1204:ARG:O	1:D:1205:ASN:C	2.51	0.48
1:E:80:ARG:O	1:E:80:ARG:HG3	2.12	0.48
1:E:182:MET:CE	1:E:217:PRO:O	2.62	0.48
1:E:345:MET:HG2	1:E:349:GLY:HA2	1.95	0.48
1:E:1091:GLY:C	1:E:1092:ILE:HG13	2.34	0.48
1:E:1425:LYS:CE	1:E:1447:TRP:CD1	2.97	0.48
1:F:105:TYR:N	1:F:105:TYR:CD1	2.81	0.48
1:F:472:GLY:O	1:F:473:LYS:HG3	2.14	0.48
1:F:823:MET:C	1:F:824:GLN:HE21	2.16	0.48
1:F:1075:THR:O	1:F:1076:GLY:C	2.50	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1325:ASN:O	1:F:1326:THR:HB	2.14	0.48
1:F:1396:ASP:OD1	1:F:1396:ASP:O	2.32	0.48
2:G:110:ILE:HG13	2:G:117:ALA:CA	2.35	0.48
2:G:153:ILE:HG12	2:G:220:VAL:HG22	1.96	0.48
2:G:324:ARG:HA	2:G:346:TRP:CZ2	2.46	0.48
2:G:327:MET:HG2	2:G:334:VAL:HG11	1.96	0.48
2:G:455:ARG:O	2:G:458:ARG:HB2	2.14	0.48
2:H:71:LEU:HA	2:H:74:GLU:HG2	1.95	0.48
2:I:257:ASN:HD21	2:I:394:LEU:CA	2.27	0.48
2:I:324:ARG:NH1	2:I:324:ARG:HB3	2.28	0.48
2:J:71:LEU:HA	2:J:74:GLU:HG2	1.95	0.48
2:J:150:VAL:HG13	2:J:173:VAL:CA	2.38	0.48
2:J:153:ILE:HG12	2:J:220:VAL:HG22	1.96	0.48
2:J:197:LYS:HG2	2:J:273:LEU:CD1	2.43	0.48
2:J:264:TYR:HD2	2:J:265:LEU:HD23	1.79	0.48
2:K:85:GLN:CD	2:K:91:PRO:HG3	2.34	0.48
2:L:77:LEU:HD23	2:L:127:ILE:HD12	1.96	0.48
1:A:345:MET:HG2	1:A:349:GLY:HA2	1.95	0.48
1:A:1212:ASP:HB3	1:A:1245:ARG:HB3	1.96	0.48
1:B:452:GLN:CG	1:B:764:THR:HG22	2.43	0.48
1:B:474:GLU:O	1:B:475:ALA:C	2.52	0.48
1:C:15:ARG:HG3	1:C:19:GLU:HG3	1.94	0.48
1:C:110:VAL:HG12	1:C:111:PRO:N	2.28	0.48
1:C:369:THR:CG2	1:C:370:GLY:N	2.76	0.48
1:C:653:HIS:O	1:C:654:TYR:C	2.51	0.48
1:C:970:PRO:O	1:C:970:PRO:CG	2.60	0.48
1:C:1447:TRP:O	1:C:1451:VAL:HG23	2.14	0.48
1:D:780:ARG:NH2	2:H:54:PHE:CD1	2.78	0.48
1:D:856:PRO:HB3	4:D:2474:FMN:H3'	1.95	0.48
1:D:1105:VAL:HG22	1:D:1105:VAL:O	2.14	0.48
1:E:236:THR:HG22	1:E:328:ASP:N	2.26	0.48
1:E:485:ILE:HG12	1:E:488:LEU:HD12	1.95	0.48
1:E:509:PRO:HG2	1:E:509:PRO:O	2.14	0.48
1:E:917:VAL:HG13	1:E:922:LEU:HD21	1.95	0.48
1:E:1184:ASN:O	1:E:1186:ARG:N	2.46	0.48
1:F:515:ARG:HD3	1:F:1367:TYR:CE1	2.40	0.48
1:F:651:ASP:OD1	1:F:651:ASP:N	2.38	0.48
1:F:690:GLU:CD	1:F:690:GLU:H	2.15	0.48
2:G:241:GLY:CA	2:G:443:ILE:HG23	2.44	0.48
2:G:345:ILE:HG12	2:G:345:ILE:O	2.13	0.48
2:H:186:LEU:HD23	2:H:195:LEU:CG	2.43	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:327:MET:HG2	2:H:334:VAL:HG11	1.96	0.48
2:H:455:ARG:O	2:H:458:ARG:HB2	2.14	0.48
2:H:469:LYS:HD2	2:H:476:VAL:CB	2.39	0.48
2:I:460:ALA:O	2:I:464:ILE:HD12	2.14	0.48
2:J:77:LEU:HD23	2:J:127:ILE:HD12	1.96	0.48
2:J:91:PRO:HD2	2:J:203:ARG:HH22	1.76	0.48
2:J:110:ILE:HG13	2:J:117:ALA:CA	2.35	0.48
2:J:145:GLU:O	2:J:145:GLU:HG2	2.12	0.48
2:J:164:GLU:HB2	2:J:207:LEU:HD13	1.96	0.48
2:J:181:ARG:HD2	2:J:182:MET:N	2.29	0.48
2:J:323:ASP:HB2	2:J:348:ALA:C	2.34	0.48
2:K:367:ILE:HD12	2:K:369:LEU:HD11	1.93	0.48
2:K:432:THR:HB	2:K:437:VAL:O	2.13	0.48
2:L:148:LEU:CB	2:L:234:VAL:HG23	2.44	0.48
2:L:367:ILE:HD13	2:L:368:HIS:C	2.34	0.48
1:A:353:MET:CE	1:A:366:GLY:C	2.82	0.48
1:A:485:ILE:HG12	1:A:488:LEU:HD12	1.95	0.48
1:A:513:SER:HB2	1:A:520:MET:CE	2.43	0.48
1:A:561:TYR:CD1	1:A:561:TYR:C	2.86	0.48
1:A:746:ILE:HG23	1:A:1182:ASP:N	2.21	0.48
1:A:780:ARG:NH2	2:J:109:VAL:HG11	2.29	0.48
1:B:242:ASN:HA	1:B:245:LYS:HG3	1.95	0.48
1:B:472:GLY:O	1:B:473:LYS:HG3	2.14	0.48
1:B:476:ILE:HA	1:B:1034:PRO:HA	1.94	0.48
1:B:746:ILE:CG2	1:B:1182:ASP:CB	2.86	0.48
1:B:1228:LYS:HD3	1:D:901:ASP:OD2	2.13	0.48
1:C:51:PRO:HG3	1:C:200:PHE:CD2	2.48	0.48
1:C:97:ILE:HD13	1:C:133:VAL:HG21	1.95	0.48
1:C:442:MET:CE	1:C:447:LEU:CA	2.92	0.48
1:C:508:ASN:HB2	1:C:509:PRO:HD2	1.94	0.48
1:C:780:ARG:HH21	2:K:54:PHE:HD1	1.60	0.48
1:C:965:LEU:HA	1:C:965:LEU:HD23	1.33	0.48
1:C:1243:GLY:O	1:C:1244:THR:C	2.49	0.48
1:D:295:LYS:HB3	1:D:390:MET:HE1	1.96	0.48
1:D:452:GLN:HE21	1:D:764:THR:HG23	1.65	0.48
1:D:963:VAL:CG1	1:D:964:MET:H	2.25	0.48
1:D:1310:THR:HG22	1:D:1311:THR:HG22	1.95	0.48
1:E:218:THR:CG2	1:E:221:LEU:H	2.27	0.48
1:E:353:MET:CE	1:E:366:GLY:C	2.82	0.48
1:E:369:THR:CG2	1:E:370:GLY:N	2.76	0.48
1:E:429:LEU:O	1:E:429:LEU:HG	2.14	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:482:ASP:OD1	1:E:788:HIS:HB3	2.13	0.48
1:E:499:PHE:HE2	1:E:742:MET:CE	2.26	0.48
1:E:664:THR:HA	1:E:720:ARG:HE	1.77	0.48
1:E:918:THR:HG22	1:E:920:GLU:N	2.26	0.48
1:E:1243:GLY:O	1:E:1246:LEU:N	2.47	0.48
1:E:1374:VAL:C	1:E:1375:ILE:CG1	2.82	0.48
1:F:417:ASP:HA	1:F:420:VAL:HG12	1.95	0.48
1:F:572:THR:CG2	1:F:615:ARG:HB3	2.42	0.48
1:F:582:LEU:HB2	1:F:755:GLN:HE21	1.79	0.48
1:F:826:ARG:HD2	1:F:1078:ASP:OD1	2.14	0.48
1:F:1195:ASN:HD22	1:F:1195:ASN:H	1.62	0.48
2:G:68:TRP:CD1	2:G:69:LEU:N	2.80	0.48
2:G:145:GLU:O	2:G:145:GLU:HG2	2.12	0.48
2:H:153:ILE:HG12	2:H:220:VAL:HG22	1.96	0.48
2:H:174:HIS:NE2	2:H:176:TYR:CD2	2.82	0.48
2:H:264:TYR:HD2	2:H:265:LEU:HD23	1.79	0.48
2:H:321:ARG:HH11	2:H:322:ARG:CZ	2.27	0.48
2:I:330:SER:O	2:I:334:VAL:HG22	2.14	0.48
2:K:71:LEU:HA	2:K:74:GLU:HG2	1.95	0.48
2:K:257:ASN:HD21	2:K:394:LEU:CA	2.27	0.48
2:L:164:GLU:HB2	2:L:207:LEU:HD13	1.96	0.48
2:L:174:HIS:CD2	2:L:176:TYR:CZ	3.01	0.48
2:L:327:MET:HG2	2:L:334:VAL:HG11	1.96	0.48
1:A:9:ILE:O	1:A:398:GLY:HA2	2.14	0.47
1:A:182:MET:CE	1:A:217:PRO:O	2.62	0.47
1:A:286:ARG:HD3	1:A:286:ARG:HA	1.60	0.47
1:A:877:ARG:HD3	1:C:1230:GLN:CB	2.34	0.47
1:A:1243:GLY:O	1:A:1246:LEU:N	2.47	0.47
1:B:216:PHE:HA	1:B:217:PRO:HD3	1.76	0.47
1:B:235:ASN:HB3	1:B:508:ASN:HD21	1.79	0.47
1:B:582:LEU:HB2	1:B:755:GLN:HE21	1.79	0.47
1:B:766:TYR:C	1:B:768:GLU:H	2.18	0.47
1:B:1401:LEU:O	1:B:1401:LEU:CD1	2.38	0.47
1:C:522:LEU:CG	1:C:705:LEU:HD21	2.38	0.47
1:C:1117:VAL:HG12	1:C:1118:CYS:N	2.29	0.47
1:C:1219:ALA:C	1:C:1221:PRO:HD2	2.33	0.47
1:C:1414:ARG:NH2	1:C:1455:TRP:CZ2	2.82	0.47
1:D:211:TYR:O	1:D:212:SER:CB	2.58	0.47
1:D:465:LEU:HD21	1:D:675:ILE:HG13	1.95	0.47
1:D:704:LEU:O	1:D:707:ILE:N	2.47	0.47
1:D:953:ILE:O	1:D:955:ARG:N	2.47	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1075:THR:O	1:D:1076:GLY:C	2.50	0.47
1:D:1396:ASP:OD1	1:D:1396:ASP:O	2.32	0.47
1:E:9:ILE:O	1:E:398:GLY:HA2	2.14	0.47
1:E:218:THR:HG22	1:E:218:THR:O	2.08	0.47
1:E:498:PHE:CD1	1:E:498:PHE:N	2.82	0.47
1:E:661:VAL:O	1:E:661:VAL:CG1	2.61	0.47
1:E:990:ILE:HG23	1:E:991:ASN:N	2.29	0.47
1:F:428:GLU:O	1:F:429:LEU:C	2.51	0.47
1:F:856:PRO:HB3	4:F:2474:FMN:H3'	1.95	0.47
1:F:1068:ARG:NH2	1:F:1089:GLU:OE1	2.46	0.47
1:F:1105:VAL:HG22	1:F:1105:VAL:O	2.14	0.47
2:G:324:ARG:HB3	2:G:324:ARG:NH1	2.28	0.47
2:G:330:SER:O	2:G:334:VAL:HG22	2.14	0.47
2:G:353:PHE:CE1	2:G:370:GLY:CA	2.96	0.47
2:H:181:ARG:HD2	2:H:182:MET:N	2.29	0.47
2:H:330:SER:O	2:H:334:VAL:HG22	2.14	0.47
2:H:423:LEU:CD2	2:H:423:LEU:H	2.25	0.47
2:I:71:LEU:HA	2:I:74:GLU:HG2	1.95	0.47
2:I:148:LEU:CB	2:I:234:VAL:HG23	2.44	0.47
2:I:150:VAL:HG13	2:I:173:VAL:CA	2.38	0.47
2:I:153:ILE:HG12	2:I:220:VAL:HG22	1.96	0.47
2:I:175:VAL:HG11	2:I:214:TYR:CG	2.47	0.47
2:I:241:GLY:CA	2:I:443:ILE:HG23	2.44	0.47
2:J:144:ARG:HH11	2:J:169:LYS:CA	2.27	0.47
2:J:423:LEU:CD2	2:J:423:LEU:H	2.25	0.47
2:K:141:THR:HB	2:K:142:PRO:CD	2.40	0.47
2:K:174:HIS:NE2	2:K:176:TYR:CD2	2.82	0.47
2:L:450:VAL:HG13	2:L:451:VAL:N	2.28	0.47
2:L:460:ALA:O	2:L:464:ILE:HD12	2.14	0.47
1:A:214:ASN:O	1:A:1015:LYS:CE	2.53	0.47
1:A:429:LEU:O	1:A:429:LEU:HG	2.14	0.47
1:A:498:PHE:CD1	1:A:498:PHE:N	2.82	0.47
1:A:1030:THR:HG21	1:A:1033:SER:HB3	1.95	0.47
1:A:1227:GLU:OE2	1:E:876:ASN:CG	2.52	0.47
1:A:1326:THR:HG22	1:A:1326:THR:O	2.15	0.47
1:A:1414:ARG:NH2	1:A:1455:TRP:CZ2	2.82	0.47
1:B:162:GLU:CB	1:B:164:ILE:HD12	2.44	0.47
1:B:381:GLU:CD	1:B:402:ARG:NH1	2.67	0.47
1:B:814:SER:O	1:B:818:ASN:N	2.47	0.47
1:B:908:LYS:HB3	1:B:921:TYR:CZ	2.49	0.47
1:B:991:ASN:OD1	1:B:991:ASN:C	2.50	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1170:GLN:HB2	1:B:1183:LEU:HD12	1.96	0.47
1:B:1195:ASN:HD22	1:B:1195:ASN:H	1.62	0.47
1:B:1201:LEU:H	1:B:1201:LEU:HD22	1.79	0.47
1:C:429:LEU:O	1:C:429:LEU:HG	2.14	0.47
1:C:485:ILE:HG12	1:C:488:LEU:HD12	1.95	0.47
1:C:552:THR:HG22	1:C:552:THR:O	2.14	0.47
1:C:909:GLN:NE2	1:C:929:GLU:OE1	2.46	0.47
1:C:1214:ARG:O	1:C:1215:ILE:C	2.52	0.47
1:C:1326:THR:HG22	1:C:1329:TYR:HB2	1.95	0.47
1:D:189:THR:O	1:D:189:THR:HG23	2.15	0.47
1:D:474:GLU:O	1:D:475:ALA:C	2.52	0.47
1:D:1228:LYS:HB2	1:F:900:GLY:C	2.33	0.47
1:D:1407:ASP:O	1:D:1409:SER:N	2.47	0.47
1:E:87:GLU:O	1:E:90:ARG:N	2.47	0.47
1:E:231:ASN:HB3	1:E:332:ALA:HB3	1.96	0.47
1:E:871:LEU:O	1:E:872:ASN:C	2.52	0.47
1:F:698:LYS:HG2	1:F:698:LYS:O	2.13	0.47
1:F:912:SER:CB	1:F:968:PRO:O	2.63	0.47
1:F:1008:THR:O	1:F:1011:ALA:HB3	2.14	0.47
2:G:77:LEU:HD23	2:G:127:ILE:HD12	1.96	0.47
2:G:243:TYR:CZ	2:G:405:ASP:HB3	2.49	0.47
2:G:348:ALA:HB1	2:G:373:ASP:HA	1.97	0.47
2:H:77:LEU:HD23	2:H:127:ILE:HD12	1.96	0.47
2:H:91:PRO:HD2	2:H:203:ARG:HH22	1.76	0.47
2:H:92:GLU:HG3	2:H:203:ARG:HH12	1.78	0.47
2:H:153:ILE:HG12	2:H:220:VAL:HG11	1.97	0.47
2:H:161:ALA:CB	2:H:454:ILE:HG12	2.40	0.47
2:H:415:LEU:HD23	2:H:432:THR:HG23	1.94	0.47
2:H:450:VAL:HG13	2:H:451:VAL:N	2.28	0.47
2:I:85:GLN:CD	2:I:91:PRO:HG3	2.34	0.47
2:I:164:GLU:HB2	2:I:207:LEU:HD13	1.96	0.47
2:I:181:ARG:HD2	2:I:182:MET:N	2.29	0.47
2:I:323:ASP:HB2	2:I:348:ALA:C	2.34	0.47
2:I:345:ILE:HG12	2:I:345:ILE:O	2.13	0.47
2:I:416:LYS:HZ2	2:I:433:ASN:HB2	1.78	0.47
2:J:124:GLU:O	2:J:127:ILE:HG23	2.14	0.47
2:J:243:TYR:CZ	2:J:405:ASP:HB3	2.49	0.47
2:J:321:ARG:HH11	2:J:322:ARG:CZ	2.27	0.47
2:K:241:GLY:CA	2:K:443:ILE:HG23	2.44	0.47
2:K:243:TYR:CZ	2:K:405:ASP:HB3	2.49	0.47
2:K:321:ARG:HH11	2:K:322:ARG:CZ	2.27	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:K:367:ILE:HD13	2:K:368:HIS:C	2.34	0.47
2:L:68:TRP:CD1	2:L:69:LEU:N	2.80	0.47
2:L:197:LYS:HG2	2:L:273:LEU:CD1	2.43	0.47
2:L:324:ARG:NH1	2:L:324:ARG:HB3	2.28	0.47
1:A:136:ASN:OD1	1:A:136:ASN:N	2.47	0.47
1:A:218:THR:CG2	1:A:221:LEU:H	2.27	0.47
1:A:442:MET:CE	1:A:447:LEU:CA	2.92	0.47
1:A:877:ARG:CD	1:C:1230:GLN:HB2	2.33	0.47
1:A:1243:GLY:O	1:A:1244:THR:C	2.49	0.47
1:B:419:TRP:O	1:B:540:THR:CG2	2.59	0.47
1:B:533:LEU:HD23	1:B:533:LEU:HA	1.42	0.47
1:B:629:THR:O	1:B:630:HIS:C	2.50	0.47
1:B:792:GLY:O	1:B:793:GLY:C	2.51	0.47
1:B:1105:VAL:HG22	1:B:1105:VAL:O	2.14	0.47
1:B:1396:ASP:OD1	1:B:1396:ASP:O	2.32	0.47
1:C:9:ILE:O	1:C:398:GLY:HA2	2.14	0.47
1:C:87:GLU:O	1:C:88:ALA:C	2.53	0.47
1:C:1030:THR:HG21	1:C:1033:SER:HB3	1.95	0.47
1:C:1057:THR:HG22	1:C:1058:LEU:N	2.28	0.47
1:D:235:ASN:HB3	1:D:508:ASN:HD21	1.79	0.47
1:D:426:LEU:HD23	1:D:543:LEU:HB3	1.93	0.47
1:D:823:MET:C	1:D:824:GLN:HE21	2.17	0.47
1:D:826:ARG:HD2	1:D:1078:ASP:OD1	2.14	0.47
1:D:908:LYS:HB3	1:D:921:TYR:CZ	2.49	0.47
1:D:985:TYR:OH	1:D:1208:PRO:O	2.26	0.47
1:D:1184:ASN:N	1:D:1185:PRO:HD2	2.30	0.47
1:E:47:HIS:HE1	1:E:176:SER:CB	2.25	0.47
1:E:47:HIS:HB3	1:E:206:ILE:HB	1.96	0.47
1:E:74:GLY:HA2	1:E:172:LEU:HD13	1.96	0.47
1:E:85:ALA:O	1:E:86:GLN:C	2.48	0.47
1:E:370:GLY:CA	1:E:1237:ASN:HB3	2.45	0.47
1:E:918:THR:O	1:E:919:ALA:C	2.51	0.47
1:E:1326:THR:HG22	1:E:1326:THR:O	2.15	0.47
1:F:235:ASN:HB3	1:F:508:ASN:HD21	1.79	0.47
1:F:589:ILE:O	1:F:593:THR:OG1	2.28	0.47
1:F:731:SER:HA	1:F:747:SER:CB	2.43	0.47
2:G:365:VAL:HG22	2:G:366:ARG:CG	2.40	0.47
2:G:394:LEU:HD22	2:G:395:VAL:N	2.30	0.47
2:H:144:ARG:HH11	2:H:169:LYS:CA	2.27	0.47
2:H:365:VAL:HG22	2:H:366:ARG:CG	2.40	0.47
2:I:174:HIS:NE2	2:I:176:TYR:CD2	2.82	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:331:GLN:OE1	2:I:332:ARG:HD3	2.15	0.47
2:I:432:THR:HB	2:I:437:VAL:HG13	1.95	0.47
2:J:91:PRO:HD2	2:J:203:ARG:HH21	1.79	0.47
2:J:181:ARG:HD3	2:J:182:MET:O	2.13	0.47
2:J:257:ASN:HD21	2:J:394:LEU:CA	2.27	0.47
2:K:416:LYS:NZ	2:K:433:ASN:HB2	2.29	0.47
2:L:141:THR:HB	2:L:142:PRO:CD	2.40	0.47
1:A:31:ARG:HD2	1:A:368:GLU:OE2	2.15	0.47
1:A:110:VAL:HG12	1:A:111:PRO:N	2.28	0.47
1:A:251:MET:HB2	1:A:533:LEU:CD1	2.44	0.47
1:A:552:THR:HG22	1:A:552:THR:O	2.14	0.47
1:A:826:ARG:NH1	1:A:826:ARG:CG	2.57	0.47
1:A:871:LEU:O	1:A:872:ASN:C	2.52	0.47
1:A:1412:PHE:HD2	1:A:1455:TRP:CZ3	2.33	0.47
1:B:107:TRP:H	1:B:107:TRP:HD1	1.60	0.47
1:B:727:ALA:HB3	1:B:744:SER:HB2	1.95	0.47
1:B:912:SER:CB	1:B:968:PRO:O	2.62	0.47
1:B:1424:LEU:HD23	1:B:1428:ILE:HG13	1.96	0.47
1:C:9:ILE:HG13	1:C:361:GLY:C	2.35	0.47
1:C:316:LEU:O	1:C:317:ILE:C	2.53	0.47
1:C:513:SER:HB2	1:C:520:MET:CE	2.43	0.47
1:C:550:LEU:HD13	1:C:555:PHE:HA	1.95	0.47
1:C:896:PRO:CB	1:E:1226:GLY:CA	2.92	0.47
1:C:1428:ILE:HG22	1:C:1428:ILE:O	2.14	0.47
1:D:615:ARG:HG2	1:D:615:ARG:NH1	2.30	0.47
1:D:698:LYS:HG2	1:D:698:LYS:O	2.13	0.47
1:D:878:ILE:HG21	1:D:1136:VAL:HG13	1.97	0.47
1:D:1047:MET:O	1:D:1048:GLY:C	2.53	0.47
1:D:1184:ASN:CB	1:D:1185:PRO:HD3	2.30	0.47
1:D:1210:THR:CG2	1:D:1211:LEU:H	2.07	0.47
1:D:1325:ASN:O	1:D:1326:THR:HB	2.14	0.47
1:E:78:LEU:HD12	1:E:129:GLU:HG3	1.97	0.47
1:E:160:LYS:O	1:E:161:GLY:C	2.50	0.47
1:E:454:PHE:CD2	1:E:648:GLU:CA	2.97	0.47
1:E:782:ARG:CB	2:L:52:VAL:HA	2.26	0.47
1:E:1214:ARG:O	1:E:1215:ILE:C	2.52	0.47
1:E:1369:THR:HG22	1:E:1369:THR:O	2.13	0.47
1:E:1414:ARG:NH2	1:E:1455:TRP:CZ2	2.82	0.47
1:E:1447:TRP:HA	1:E:1447:TRP:CE3	2.48	0.47
1:F:117:ILE:HG23	1:F:117:ILE:HD13	1.35	0.47
1:F:634:SER:O	1:F:635:ASN:C	2.52	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1170:GLN:HB2	1:F:1183:LEU:HD12	1.95	0.47
2:G:316:VAL:CG1	2:G:342:VAL:HG22	2.45	0.47
2:G:321:ARG:HH11	2:G:322:ARG:CZ	2.27	0.47
2:H:164:GLU:HB2	2:H:207:LEU:HD13	1.96	0.47
2:H:243:TYR:CZ	2:H:405:ASP:HB3	2.49	0.47
2:H:350:PRO:CB	2:H:372:ALA:HB1	2.45	0.47
2:I:186:LEU:HD23	2:I:195:LEU:CG	2.43	0.47
2:J:85:GLN:CD	2:J:91:PRO:HG3	2.34	0.47
2:J:241:GLY:CA	2:J:443:ILE:HG23	2.44	0.47
2:J:277:VAL:CG1	2:J:279:ALA:H	2.26	0.47
2:J:432:THR:HB	2:J:437:VAL:HG13	1.95	0.47
2:K:264:TYR:HD2	2:K:265:LEU:HD23	1.79	0.47
2:K:394:LEU:HD22	2:K:395:VAL:N	2.30	0.47
2:L:394:LEU:HD22	2:L:395:VAL:N	2.30	0.47
1:A:78:LEU:HD12	1:A:129:GLU:HG3	1.97	0.47
1:A:160:LYS:O	1:A:161:GLY:C	2.50	0.47
1:A:227:MET:HE3	1:A:282:GLU:HG2	1.96	0.47
1:A:526:LEU:CD1	1:A:526:LEU:H	2.17	0.47
1:A:526:LEU:HB3	1:A:641:SER:HB3	1.97	0.47
1:A:938:PRO:O	1:A:939:GLY:C	2.53	0.47
1:A:1029:GLY:HA3	4:A:2474:FMN:HM81	1.97	0.47
1:A:1369:THR:CG2	1:A:1369:THR:O	2.63	0.47
1:A:1396:ASP:OD1	1:A:1399:ASP:N	2.47	0.47
1:B:525:ARG:HG3	1:B:544:GLN:HG3	1.97	0.47
1:B:878:ILE:HD13	1:B:878:ILE:HG21	1.66	0.47
1:C:182:MET:CE	1:C:217:PRO:O	2.62	0.47
1:C:454:PHE:CD2	1:C:648:GLU:CA	2.98	0.47
1:C:510:PRO:HD2	1:C:970:PRO:CB	2.34	0.47
1:C:918:THR:HG22	1:C:920:GLU:N	2.26	0.47
1:C:1412:PHE:HD2	1:C:1455:TRP:CZ3	2.33	0.47
1:D:37:ASP:OD1	1:D:39:LYS:N	2.34	0.47
1:D:59:VAL:HG22	1:D:105:TYR:HD2	1.78	0.47
1:D:211:TYR:CD1	1:D:212:SER:N	2.80	0.47
1:D:1008:THR:HG22	1:D:1009:ILE:H	1.70	0.47
1:D:1008:THR:O	1:D:1011:ALA:HB3	2.14	0.47
1:D:1077:ARG:CG	1:D:1078:ASP:N	2.77	0.47
1:D:1170:GLN:HB2	1:D:1183:LEU:HD12	1.95	0.47
1:D:1195:ASN:H	1:D:1195:ASN:HD22	1.62	0.47
1:D:1417:VAL:HG12	1:D:1419:HIS:N	2.26	0.47
1:E:526:LEU:HB3	1:E:641:SER:HB3	1.97	0.47
1:E:736:ALA:O	1:E:737:GLU:C	2.53	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:189:THR:O	1:F:189:THR:HG23	2.14	0.47
1:F:227:MET:HE2	1:F:282:GLU:HG3	1.96	0.47
1:F:728:ILE:CD1	1:F:1047:MET:CE	2.74	0.47
1:F:908:LYS:HB3	1:F:921:TYR:CZ	2.49	0.47
1:F:1216:VAL:HG11	1:F:1249:MET:CE	2.45	0.47
2:G:148:LEU:CB	2:G:234:VAL:HG23	2.44	0.47
2:G:264:TYR:HD2	2:G:265:LEU:HD23	1.79	0.47
2:G:349:ALA:HB3	2:G:350:PRO:CD	2.39	0.47
2:H:257:ASN:HD21	2:H:394:LEU:CA	2.27	0.47
2:H:297:GLY:HA2	2:H:320:TYR:HE1	1.80	0.47
2:I:144:ARG:HH11	2:I:169:LYS:CA	2.27	0.47
2:I:181:ARG:O	2:I:182:MET:HE3	2.14	0.47
2:I:182:MET:HE2	2:I:216:PRO:CG	2.28	0.47
2:I:394:LEU:HD22	2:I:395:VAL:N	2.30	0.47
2:J:174:HIS:NE2	2:J:176:TYR:CD2	2.82	0.47
2:J:297:GLY:HA2	2:J:320:TYR:HE1	1.80	0.47
2:K:324:ARG:HB3	2:K:324:ARG:NH1	2.28	0.47
2:L:63:ASN:HD21	2:L:83:VAL:HG12	1.79	0.47
2:L:153:ILE:HG12	2:L:220:VAL:HG22	1.96	0.47
2:L:166:LEU:O	2:L:169:LYS:HB2	2.15	0.47
2:L:416:LYS:NZ	2:L:433:ASN:HB2	2.29	0.47
1:A:68:ASP:OD1	1:A:68:ASP:N	2.44	0.47
1:A:266:VAL:CG1	1:A:279:THR:HG23	2.33	0.47
1:A:348:ASN:HB2	1:A:350:LEU:HG	1.96	0.47
1:A:468:MET:HG2	1:A:699:ALA:HB1	1.97	0.47
1:A:643:ASN:HB3	1:A:665:THR:HG21	1.93	0.47
1:A:990:ILE:HG23	1:A:991:ASN:N	2.29	0.47
1:A:1424:LEU:HD21	1:A:1428:ILE:HD11	1.97	0.47
1:B:150:ILE:HG21	1:B:259:HIS:CG	2.50	0.47
1:B:615:ARG:HG2	1:B:615:ARG:NH1	2.30	0.47
1:B:1128:PHE:CZ	1:B:1130:GLY:CA	2.93	0.47
1:C:218:THR:CG2	1:C:221:LEU:H	2.27	0.47
1:C:295:LYS:C	1:C:295:LYS:CD	2.83	0.47
1:C:456:LEU:HA	1:C:456:LEU:HD23	1.65	0.47
1:C:583:ARG:CZ	1:C:587:ARG:HH12	2.28	0.47
1:C:935:GLY:HA3	1:C:1025:GLY:O	2.15	0.47
1:C:1158:LEU:HD12	1:C:1158:LEU:HA	1.62	0.47
1:C:1366:GLU:HG2	1:C:1367:TYR:CE2	2.47	0.47
1:D:629:THR:O	1:D:630:HIS:C	2.51	0.47
1:D:820:ARG:HB3	1:D:821:PRO:HD3	1.94	0.47
1:D:1424:LEU:HD23	1:D:1428:ILE:HG13	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:31:ARG:HD2	1:E:368:GLU:OE2	2.15	0.47
1:E:316:LEU:O	1:E:317:ILE:C	2.53	0.47
1:E:446:GLU:O	1:E:449:ARG:N	2.48	0.47
1:E:636:LEU:C	1:E:638:THR:N	2.68	0.47
1:F:139:VAL:HG12	1:F:143:GLN:HB2	1.97	0.47
1:F:162:GLU:CB	1:F:164:ILE:HD12	2.44	0.47
1:F:447:LEU:CD1	1:F:451:GLN:CD	2.83	0.47
1:F:1010:ALA:HB2	1:F:1052:VAL:HG22	1.97	0.47
2:G:164:GLU:HB2	2:G:207:LEU:HD13	1.96	0.47
2:G:174:HIS:NE2	2:G:176:TYR:CD2	2.82	0.47
2:G:480:ALA:O	2:G:481:GLU:HB3	2.14	0.47
2:H:85:GLN:CD	2:H:91:PRO:HG3	2.34	0.47
2:H:197:LYS:HG2	2:H:273:LEU:CD1	2.43	0.47
2:I:243:TYR:CZ	2:I:405:ASP:HB3	2.49	0.47
2:I:455:ARG:O	2:I:458:ARG:HB2	2.14	0.47
2:J:153:ILE:HG12	2:J:220:VAL:HG11	1.97	0.47
2:J:186:LEU:HD23	2:J:195:LEU:CG	2.43	0.47
2:J:348:ALA:HB1	2:J:373:ASP:HA	1.97	0.47
2:J:367:ILE:HD13	2:J:368:HIS:C	2.34	0.47
2:J:455:ARG:O	2:J:458:ARG:HB2	2.14	0.47
2:K:54:PHE:HB3	2:K:107:ASN:CB	2.36	0.47
2:K:480:ALA:O	2:K:481:GLU:HB3	2.14	0.47
2:L:241:GLY:CA	2:L:443:ILE:HG23	2.44	0.47
2:L:348:ALA:HB1	2:L:373:ASP:HA	1.96	0.47
1:A:295:LYS:C	1:A:295:LYS:CD	2.83	0.47
1:A:386:GLY:N	1:A:389:GLU:OE2	2.48	0.47
1:A:446:GLU:O	1:A:449:ARG:N	2.48	0.47
1:A:454:PHE:CD2	1:A:648:GLU:CA	2.98	0.47
1:A:559:ARG:NH1	1:A:568:GLU:OE2	2.48	0.47
1:A:602:THR:C	1:A:640:THR:CG2	2.83	0.47
1:A:841:ASP:OD1	1:A:841:ASP:N	2.44	0.47
1:A:1149:ILE:O	1:A:1149:ILE:HG22	2.12	0.47
1:A:1391:MET:HE1	1:A:1458:VAL:HG21	1.97	0.47
1:A:1412:PHE:HD2	1:A:1455:TRP:CE3	2.33	0.47
1:A:1428:ILE:HG22	1:A:1428:ILE:O	2.14	0.47
1:B:189:THR:O	1:B:189:THR:HG23	2.15	0.47
1:B:402:ARG:O	1:B:403:ASP:C	2.51	0.47
1:B:477:GLY:O	1:B:478:SER:HB3	2.15	0.47
1:B:486:ALA:O	1:B:487:VAL:C	2.51	0.47
1:B:621:ILE:HG12	1:B:657:VAL:HG11	1.97	0.47
1:B:632:ILE:HG23	1:B:632:ILE:HD12	1.66	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:689:LEU:HA	1:B:689:LEU:HD12	0.98	0.47
1:B:878:ILE:HG21	1:B:1136:VAL:HG13	1.96	0.47
1:B:900:GLY:HA2	1:F:1226:GLY:O	2.15	0.47
1:B:1047:MET:O	1:B:1048:GLY:C	2.53	0.47
1:B:1068:ARG:NH2	1:B:1089:GLU:OE1	2.46	0.47
1:B:1077:ARG:CG	1:B:1078:ASP:N	2.77	0.47
1:B:1216:VAL:HG11	1:B:1249:MET:CE	2.45	0.47
1:C:52:GLN:NE2	1:C:71:LEU:CB	2.78	0.47
1:C:85:ALA:O	1:C:86:GLN:C	2.48	0.47
1:C:281:PHE:CZ	1:C:335:MET:HG2	2.50	0.47
1:C:317:ILE:C	1:C:321:ASN:HD22	2.18	0.47
1:C:335:MET:HE3	1:C:342:VAL:HB	1.96	0.47
1:C:348:ASN:HB2	1:C:350:LEU:HG	1.96	0.47
1:C:446:GLU:O	1:C:449:ARG:N	2.48	0.47
1:C:463:LEU:HD23	1:C:463:LEU:HA	1.48	0.47
1:C:531:ASN:C	1:C:533:LEU:H	2.18	0.47
1:C:602:THR:C	1:C:640:THR:CG2	2.83	0.47
1:C:631:LEU:HD23	1:C:631:LEU:N	2.29	0.47
1:C:990:ILE:HG23	1:C:991:ASN:N	2.29	0.47
1:C:1212:ASP:HB3	1:C:1245:ARG:HB3	1.96	0.47
1:C:1326:THR:HG22	1:C:1326:THR:O	2.15	0.47
1:C:1369:THR:CG2	1:C:1369:THR:O	2.63	0.47
1:C:1412:PHE:HD2	1:C:1455:TRP:CE3	2.33	0.47
1:D:515:ARG:HD3	1:D:1367:TYR:CE1	2.40	0.47
1:D:520:MET:HA	1:D:714:SER:O	2.15	0.47
1:D:630:HIS:O	1:D:631:LEU:C	2.49	0.47
1:D:814:SER:O	1:D:818:ASN:N	2.47	0.47
1:D:1047:MET:HE2	1:D:1186:ARG:NH2	1.99	0.47
1:D:1424:LEU:O	1:D:1425:LYS:C	2.53	0.47
1:E:242:ASN:H	1:E:242:ASN:HD22	1.61	0.47
1:E:281:PHE:CZ	1:E:335:MET:HG2	2.50	0.47
1:E:442:MET:CE	1:E:447:LEU:CA	2.92	0.47
1:E:468:MET:HG2	1:E:699:ALA:HB1	1.97	0.47
1:E:515:ARG:H	1:E:515:ARG:HG3	1.52	0.47
1:E:528:ASN:C	1:E:529:LEU:HD23	2.35	0.47
1:E:572:THR:HG22	1:E:615:ARG:NE	2.30	0.47
1:E:805:ASP:CG	1:E:805:ASP:O	2.49	0.47
1:E:805:ASP:O	1:E:805:ASP:OD1	2.33	0.47
1:E:826:ARG:HH11	1:E:826:ARG:CG	1.97	0.47
1:E:1029:GLY:HA3	4:E:2474:FMN:HM81	1.97	0.47
1:E:1149:ILE:O	1:E:1149:ILE:CG2	2.59	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1349:ARG:CG	1:E:1349:ARG:NH1	2.75	0.47
1:F:175:ARG:HH11	1:F:175:ARG:CG	2.20	0.47
1:F:227:MET:CE	1:F:282:GLU:CG	2.93	0.47
1:F:389:GLU:HA	1:F:403:ASP:OD2	2.15	0.47
1:F:443:ASP:O	1:F:446:GLU:N	2.40	0.47
1:F:474:GLU:O	1:F:475:ALA:C	2.52	0.47
1:F:486:ALA:O	1:F:487:VAL:C	2.51	0.47
1:F:704:LEU:O	1:F:707:ILE:N	2.47	0.47
2:G:90:PHE:CZ	2:G:160:LEU:HB2	2.50	0.47
2:G:166:LEU:O	2:G:169:LYS:HB2	2.15	0.47
2:G:229:LEU:HD22	2:G:236:VAL:CG1	2.45	0.47
2:G:350:PRO:HB3	2:G:372:ALA:HB1	1.97	0.47
2:G:416:LYS:NZ	2:G:433:ASN:HB2	2.29	0.47
2:H:90:PHE:CE1	2:H:160:LEU:HB2	2.50	0.47
2:H:316:VAL:CG1	2:H:342:VAL:HG22	2.45	0.47
2:H:367:ILE:HD13	2:H:368:HIS:C	2.34	0.47
2:I:49:GLN:HE22	2:I:69:LEU:CB	2.28	0.47
2:I:350:PRO:HB3	2:I:372:ALA:HB1	1.97	0.47
2:I:416:LYS:NZ	2:I:433:ASN:HB2	2.29	0.47
2:I:432:THR:HB	2:I:437:VAL:O	2.13	0.47
2:J:90:PHE:CZ	2:J:160:LEU:HB2	2.50	0.47
2:J:316:VAL:CG1	2:J:342:VAL:HG22	2.45	0.47
2:J:330:SER:O	2:J:334:VAL:HG22	2.14	0.47
2:J:331:GLN:OE1	2:J:332:ARG:HD3	2.15	0.47
2:J:350:PRO:CB	2:J:372:ALA:HB1	2.45	0.47
2:K:90:PHE:CE1	2:K:160:LEU:HB2	2.50	0.47
2:K:124:GLU:O	2:K:127:ILE:HG23	2.14	0.47
2:K:144:ARG:HH11	2:K:169:LYS:CA	2.27	0.47
2:K:181:ARG:HD2	2:K:182:MET:N	2.29	0.47
2:K:316:VAL:CG1	2:K:342:VAL:HG22	2.45	0.47
2:K:430:LYS:CE	2:K:456:ASP:HB3	2.43	0.47
2:K:455:ARG:O	2:K:458:ARG:HB2	2.14	0.47
2:L:108:CYS:SG	2:L:118:VAL:CG2	3.03	0.47
2:L:230:ARG:NH2	2:L:434:MET:HE1	2.29	0.47
2:L:316:VAL:CG1	2:L:342:VAL:HG22	2.45	0.47
2:L:331:GLN:OE1	2:L:332:ARG:HD3	2.15	0.47
2:L:350:PRO:CB	2:L:372:ALA:HB1	2.45	0.47
2:L:416:LYS:CE	2:L:433:ASN:HB2	2.45	0.47
2:L:432:THR:HB	2:L:437:VAL:O	2.13	0.47
1:A:87:GLU:O	1:A:88:ALA:C	2.53	0.47
1:A:736:ALA:O	1:A:737:GLU:C	2.53	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1226:GLY:CA	1:E:896:PRO:CB	2.92	0.47
1:A:1230:GLN:HB2	1:E:877:ARG:CD	2.33	0.47
1:A:1458:VAL:HA	1:A:1459:PRO:HD3	1.65	0.47
1:B:209:GLN:HG3	1:B:210:ARG:H	1.80	0.47
1:B:227:MET:CE	1:B:282:GLU:CG	2.93	0.47
1:B:511:ILE:CG2	1:B:512:ASP:N	2.74	0.47
1:B:572:THR:HG23	1:B:616:ALA:O	2.15	0.47
1:B:826:ARG:HD2	1:B:1078:ASP:OD1	2.14	0.47
1:B:1114:PRO:HB2	1:B:1115:VAL:HG23	1.97	0.47
1:C:74:GLY:HA2	1:C:172:LEU:HD13	1.96	0.47
1:C:116:ILE:HD13	1:C:190:THR:HG21	1.94	0.47
1:C:160:LYS:O	1:C:161:GLY:C	2.50	0.47
1:C:430:VAL:HG22	1:C:557:ALA:HB3	1.95	0.47
1:C:509:PRO:HG2	1:C:509:PRO:O	2.14	0.47
1:C:526:LEU:HB3	1:C:641:SER:HB3	1.97	0.47
1:C:710:LYS:CG	1:C:939:GLY:HA3	2.34	0.47
1:C:780:ARG:NH2	2:K:109:VAL:HG11	2.29	0.47
1:C:780:ARG:NH2	2:K:54:PHE:CD1	2.80	0.47
1:C:1007:GLY:N	1:C:1051:GLU:OE2	2.41	0.47
1:C:1029:GLY:HA3	4:C:2474:FMN:HM81	1.96	0.47
1:D:347:ARG:HH11	1:D:347:ARG:HB2	1.79	0.47
1:D:447:LEU:CD1	1:D:451:GLN:CD	2.83	0.47
1:D:1113:CYS:O	1:D:1114:PRO:C	2.48	0.47
1:D:1216:VAL:HG11	1:D:1249:MET:CE	2.45	0.47
1:E:335:MET:HE3	1:E:342:VAL:HB	1.97	0.47
1:E:583:ARG:CZ	1:E:587:ARG:HH12	2.28	0.47
1:E:602:THR:C	1:E:640:THR:CG2	2.83	0.47
1:E:603:HIS:N	1:E:640:THR:HG22	2.30	0.47
1:E:1424:LEU:HD21	1:E:1428:ILE:HD11	1.97	0.47
1:E:1432:VAL:O	1:E:1433:THR:C	2.53	0.47
1:F:393:VAL:HG12	1:F:394:ASP:N	2.29	0.47
1:F:608:ASP:OD2	1:F:647:ALA:N	2.41	0.47
1:F:1077:ARG:CG	1:F:1078:ASP:N	2.77	0.47
2:G:63:ASN:HD21	2:G:83:VAL:HG12	1.79	0.47
2:G:460:ALA:O	2:G:464:ILE:HD12	2.14	0.47
2:I:54:PHE:CB	2:I:107:ASN:HB3	2.39	0.47
2:I:77:LEU:HD23	2:I:127:ILE:HD12	1.96	0.47
2:I:197:LYS:HZ3	2:I:275:ASP:HB3	1.79	0.47
2:K:148:LEU:CB	2:K:234:VAL:HG23	2.44	0.47
2:K:348:ALA:HB1	2:K:373:ASP:HA	1.97	0.47
2:K:365:VAL:HG22	2:K:366:ARG:CG	2.40	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:49:GLN:HE22	2:L:69:LEU:CB	2.28	0.47
2:L:197:LYS:HZ3	2:L:275:ASP:HB3	1.78	0.47
2:L:243:TYR:CZ	2:L:405:ASP:HB3	2.49	0.47
1:A:572:THR:HG21	1:A:615:ARG:NE	2.30	0.47
1:A:606:LEU:C	1:A:607:THR:CG2	2.83	0.47
1:A:1229:MET:CA	1:E:877:ARG:CG	2.80	0.47
1:B:634:SER:O	1:B:635:ASN:C	2.52	0.47
1:B:773:LEU:H	1:B:773:LEU:HG	1.47	0.47
1:C:5:PHE:CE2	1:C:365:GLY:HA3	2.50	0.47
1:C:31:ARG:HD2	1:C:368:GLU:OE2	2.15	0.47
1:C:203:ASP:OD1	1:C:203:ASP:N	2.44	0.47
1:C:386:GLY:N	1:C:389:GLU:OE2	2.48	0.47
1:C:393:VAL:HG12	1:C:394:ASP:N	2.23	0.47
1:C:528:ASN:C	1:C:529:LEU:HD23	2.35	0.47
1:C:572:THR:HG21	1:C:615:ARG:NE	2.30	0.47
1:C:805:ASP:O	1:C:805:ASP:OD1	2.33	0.47
1:C:1424:LEU:HD21	1:C:1428:ILE:HD11	1.97	0.47
1:D:25:LEU:HD21	1:D:207:TYR:HB2	1.97	0.47
1:D:105:TYR:CD1	1:D:105:TYR:N	2.81	0.47
1:D:150:ILE:HG21	1:D:259:HIS:CG	2.50	0.47
1:D:235:ASN:HD22	1:D:235:ASN:C	2.18	0.47
1:D:389:GLU:HA	1:D:403:ASP:OD2	2.15	0.47
1:D:419:TRP:O	1:D:540:THR:OG1	2.27	0.47
1:D:472:GLY:O	1:D:473:LYS:HG3	2.14	0.47
1:D:477:GLY:O	1:D:478:SER:HB3	2.15	0.47
1:D:860:MET:HE2	1:D:860:MET:HB2	1.82	0.47
1:D:1212:ASP:OD2	1:D:1243:GLY:CA	2.63	0.47
1:E:348:ASN:HB2	1:E:350:LEU:HG	1.96	0.47
1:E:653:HIS:O	1:E:654:TYR:C	2.51	0.47
1:E:787:ARG:NH1	1:E:821:PRO:HB2	2.24	0.47
1:E:894:PHE:HD1	1:E:904:ASN:ND2	2.13	0.47
1:E:1412:PHE:HD2	1:E:1455:TRP:CE3	2.33	0.47
1:F:30:HIS:CE1	1:F:368:GLU:OE2	2.68	0.47
1:F:182:MET:HE1	1:F:217:PRO:C	2.35	0.47
1:F:236:THR:HG22	1:F:328:ASP:N	2.24	0.47
1:F:525:ARG:HG3	1:F:544:GLN:HG3	1.97	0.47
1:F:792:GLY:O	1:F:793:GLY:C	2.51	0.47
1:F:1424:LEU:HD22	1:F:1447:TRP:HH2	1.80	0.47
2:G:153:ILE:HG12	2:G:220:VAL:HG11	1.97	0.47
2:G:416:LYS:CE	2:G:433:ASN:HB2	2.45	0.47
2:G:449:LEU:CD2	2:G:452:TRP:CG	2.93	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:124:GLU:O	2:H:127:ILE:HG23	2.14	0.47
2:H:241:GLY:CA	2:H:443:ILE:HG23	2.44	0.47
2:H:394:LEU:HD22	2:H:395:VAL:N	2.30	0.47
2:H:432:THR:CG2	2:H:433:ASN:N	2.78	0.47
2:I:108:CYS:SG	2:I:118:VAL:CG2	3.03	0.47
2:I:229:LEU:HD22	2:I:236:VAL:CG1	2.45	0.47
2:I:423:LEU:CD2	2:I:423:LEU:H	2.25	0.47
2:I:423:LEU:HD22	2:I:423:LEU:N	2.28	0.47
2:J:148:LEU:CB	2:J:234:VAL:HG23	2.44	0.47
2:K:266:THR:HG23	2:K:270:LYS:HZ2	1.79	0.47
2:K:297:GLY:HA2	2:K:320:TYR:HE1	1.80	0.47
2:L:85:GLN:CD	2:L:91:PRO:HG3	2.34	0.47
2:L:90:PHE:CZ	2:L:160:LEU:HB2	2.50	0.47
2:L:174:HIS:NE2	2:L:176:TYR:CD2	2.82	0.47
2:L:229:LEU:HD22	2:L:236:VAL:CG1	2.45	0.47
2:L:432:THR:CG2	2:L:433:ASN:N	2.78	0.47
1:A:3:VAL:HG22	1:A:231:ASN:HB2	1.96	0.47
1:A:47:HIS:HB3	1:A:206:ILE:HB	1.96	0.47
1:A:191:PHE:HE1	1:A:192:TYR:CE1	2.33	0.47
1:A:657:VAL:HG12	1:A:658:LEU:N	2.30	0.47
1:A:850:ARG:O	1:A:853:PHE:HB2	2.15	0.47
1:A:918:THR:HG22	1:A:920:GLU:N	2.26	0.47
1:A:935:GLY:HA3	1:A:1025:GLY:O	2.15	0.47
1:A:1397:LEU:HD22	1:A:1453:LYS:HD2	1.98	0.47
1:B:496:HIS:CD2	1:B:497:HIS:HD2	2.33	0.47
1:B:550:LEU:HB3	1:B:554:GLU:HG3	1.96	0.47
1:B:704:LEU:O	1:B:707:ILE:N	2.47	0.47
1:B:824:GLN:NE2	1:B:824:GLN:HA	2.30	0.47
1:B:833:SER:OG	1:B:834:THR:N	2.48	0.47
1:B:1219:ALA:HA	1:B:1229:MET:CE	2.45	0.47
1:B:1357:VAL:CG1	1:B:1359:GLY:O	2.63	0.47
1:B:1424:LEU:HD22	1:B:1447:TRP:HH2	1.80	0.47
1:C:191:PHE:HE1	1:C:192:TYR:CE1	2.33	0.47
1:C:559:ARG:NH1	1:C:568:GLU:OE2	2.48	0.47
1:D:777:GLY:CA	2:H:52:VAL:HG11	2.37	0.47
1:D:1077:ARG:O	1:D:1079:ILE:N	2.48	0.47
1:E:5:PHE:CE2	1:E:365:GLY:HA3	2.50	0.47
1:E:81:ILE:HD13	1:F:216:PHE:CE1	2.50	0.47
1:E:143:GLN:O	1:E:143:GLN:NE2	2.41	0.47
1:E:631:LEU:N	1:E:631:LEU:HD23	2.29	0.47
1:E:940:GLU:O	1:E:969:PRO:HA	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1070:ASP:OD1	1:E:1070:ASP:C	2.52	0.47
1:E:1447:TRP:O	1:E:1451:VAL:HG23	2.14	0.47
1:F:30:HIS:CE1	1:F:1237:ASN:O	2.68	0.47
2:G:108:CYS:SG	2:G:118:VAL:CG2	3.03	0.47
2:G:358:VAL:CG1	2:G:366:ARG:HB2	2.44	0.47
2:G:432:THR:CG2	2:G:433:ASN:N	2.78	0.47
2:H:148:LEU:CB	2:H:234:VAL:HG23	2.44	0.47
2:H:362:VAL:O	2:H:362:VAL:HG12	2.15	0.47
2:H:418:THR:HG1	2:H:420:TRP:HD1	1.59	0.47
2:I:90:PHE:CZ	2:I:160:LEU:HB2	2.50	0.47
2:I:153:ILE:HG12	2:I:220:VAL:HG11	1.96	0.47
2:I:166:LEU:O	2:I:169:LYS:HB2	2.15	0.47
2:I:292:VAL:HG22	2:I:394:LEU:CD1	2.30	0.47
2:I:297:GLY:HA2	2:I:320:TYR:HE1	1.80	0.47
2:J:108:CYS:SG	2:J:118:VAL:CG2	3.03	0.47
2:J:207:LEU:O	2:J:212:VAL:HG12	2.15	0.47
2:J:350:PRO:HB3	2:J:372:ALA:HB1	1.97	0.47
2:J:460:ALA:O	2:J:464:ILE:HD12	2.14	0.47
2:K:153:ILE:HG12	2:K:220:VAL:HG11	1.96	0.47
2:K:197:LYS:HZ3	2:K:275:ASP:HB3	1.80	0.47
2:K:229:LEU:HD22	2:K:236:VAL:CG1	2.45	0.47
2:K:432:THR:CG2	2:K:433:ASN:N	2.78	0.47
2:L:153:ILE:HG12	2:L:220:VAL:HG11	1.97	0.47
2:L:181:ARG:HD2	2:L:182:MET:N	2.29	0.47
2:L:186:LEU:HD23	2:L:195:LEU:CG	2.43	0.47
2:L:405:ASP:OD1	2:L:407:PRO:HG2	2.15	0.47
2:L:449:LEU:CD2	2:L:452:TRP:CG	2.93	0.47
2:L:455:ARG:O	2:L:458:ARG:HB2	2.14	0.47
1:A:603:HIS:N	1:A:640:THR:HG22	2.30	0.46
1:A:672:GLN:O	1:A:673:GLU:C	2.52	0.46
1:A:899:ASN:O	1:C:1228:LYS:HB2	2.16	0.46
1:A:1070:ASP:OD1	1:A:1070:ASP:C	2.52	0.46
1:B:447:LEU:CD1	1:B:451:GLN:CD	2.83	0.46
1:B:520:MET:HA	1:B:714:SER:O	2.15	0.46
1:B:787:ARG:H	1:B:787:ARG:HG3	1.23	0.46
1:B:824:GLN:NE2	1:B:824:GLN:CA	2.78	0.46
1:B:871:LEU:O	1:B:872:ASN:C	2.53	0.46
1:B:1226:GLY:O	1:D:900:GLY:HA2	2.15	0.46
1:B:1424:LEU:O	1:B:1425:LYS:C	2.53	0.46
1:C:231:ASN:HB3	1:C:332:ALA:HB3	1.96	0.46
1:C:472:GLY:O	1:C:473:LYS:HG3	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:489:SER:OG	1:C:490:ASP:N	2.48	0.46
1:C:498:PHE:CD1	1:C:498:PHE:N	2.82	0.46
1:C:565:THR:HG22	1:C:565:THR:O	2.15	0.46
1:C:842:GLU:HG2	1:C:1156:ARG:HH11	1.80	0.46
1:C:953:ILE:O	1:C:956:LEU:HB2	2.15	0.46
1:D:85:ALA:O	1:D:86:GLN:C	2.53	0.46
1:D:209:GLN:HG3	1:D:210:ARG:H	1.80	0.46
1:D:496:HIS:CD2	1:D:497:HIS:HD2	2.33	0.46
1:D:912:SER:CB	1:D:968:PRO:O	2.63	0.46
1:D:1401:LEU:O	1:D:1401:LEU:CD1	2.38	0.46
1:E:52:GLN:O	1:E:56:LYS:HB2	2.16	0.46
1:E:345:MET:CE	1:E:385:LEU:HB3	2.45	0.46
1:E:353:MET:HG2	1:E:385:LEU:HD23	1.97	0.46
1:E:657:VAL:HG12	1:E:658:LEU:N	2.30	0.46
1:E:780:ARG:NH2	2:L:109:VAL:HG11	2.29	0.46
1:E:1149:ILE:O	1:E:1149:ILE:HG22	2.11	0.46
1:E:1156:ARG:O	1:E:1157:SER:CB	2.62	0.46
1:E:1236:ARG:C	1:E:1238:THR:N	2.67	0.46
1:E:1369:THR:CG2	1:E:1369:THR:O	2.63	0.46
1:E:1415:ILE:HG21	1:E:1421:GLU:CB	2.44	0.46
1:F:833:SER:OG	1:F:834:THR:N	2.48	0.46
1:F:842:GLU:HB3	1:F:1156:ARG:CD	2.43	0.46
1:F:1047:MET:O	1:F:1048:GLY:C	2.53	0.46
2:G:207:LEU:O	2:G:212:VAL:HG12	2.15	0.46
2:G:416:LYS:HZ2	2:G:416:LYS:HB2	1.80	0.46
2:H:218:PHE:HD2	2:H:223:ASP:OD2	1.98	0.46
2:H:331:GLN:OE1	2:H:332:ARG:HD3	2.15	0.46
2:H:405:ASP:OD1	2:H:407:PRO:HG2	2.15	0.46
2:H:416:LYS:NZ	2:H:433:ASN:HB2	2.29	0.46
2:I:207:LEU:O	2:I:212:VAL:HG12	2.15	0.46
2:I:316:VAL:CG1	2:I:342:VAL:HG22	2.45	0.46
2:I:321:ARG:HH11	2:I:322:ARG:CZ	2.27	0.46
2:I:358:VAL:CG1	2:I:366:ARG:HB2	2.44	0.46
2:J:77:LEU:CA	2:J:127:ILE:CD1	2.93	0.46
2:J:166:LEU:HD23	2:J:461:ALA:CB	2.36	0.46
2:J:394:LEU:HD22	2:J:395:VAL:N	2.30	0.46
2:K:164:GLU:HB2	2:K:207:LEU:HD13	1.96	0.46
2:K:166:LEU:O	2:K:169:LYS:HB2	2.15	0.46
2:K:358:VAL:CG1	2:K:366:ARG:HB2	2.44	0.46
2:K:362:VAL:HG12	2:K:362:VAL:O	2.15	0.46
2:L:77:LEU:CA	2:L:127:ILE:CD1	2.93	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:207:LEU:O	2:L:212:VAL:HG12	2.15	0.46
2:L:358:VAL:CG1	2:L:366:ARG:HB2	2.44	0.46
1:A:335:MET:HE3	1:A:342:VAL:HB	1.97	0.46
1:A:351:ARG:HH12	1:A:978:GLU:CD	2.19	0.46
1:A:353:MET:HG2	1:A:385:LEU:HD23	1.97	0.46
1:A:464:ILE:CD1	1:A:779:TYR:CZ	2.94	0.46
1:A:528:ASN:C	1:A:529:LEU:HD23	2.35	0.46
1:A:787:ARG:NH1	1:A:821:PRO:HB2	2.24	0.46
1:A:894:PHE:HD1	1:A:904:ASN:ND2	2.13	0.46
1:A:1117:VAL:HG12	1:A:1118:CYS:N	2.29	0.46
1:A:1201:LEU:HD12	1:A:1201:LEU:N	2.31	0.46
1:A:1236:ARG:C	1:A:1238:THR:N	2.67	0.46
1:B:30:HIS:CE1	1:B:1237:ASN:O	2.68	0.46
1:B:393:VAL:HG12	1:B:394:ASP:N	2.29	0.46
1:B:677:GLU:C	1:B:677:GLU:OE1	2.54	0.46
1:C:15:ARG:O	1:C:16:SER:C	2.53	0.46
1:C:345:MET:HE2	1:C:385:LEU:CB	2.45	0.46
1:C:404:ARG:CB	1:C:405:GLU:OE1	2.51	0.46
1:C:572:THR:HG22	1:C:615:ARG:NE	2.30	0.46
1:C:956:LEU:HA	1:C:956:LEU:HD23	1.70	0.46
1:C:1044:PRO:HG2	1:C:1047:MET:HE3	1.97	0.46
1:D:304:THR:CG2	1:D:518:ARG:HD2	2.46	0.46
1:D:572:THR:CG2	1:D:615:ARG:HB3	2.42	0.46
1:D:743:VAL:HG12	1:D:744:SER:N	2.30	0.46
1:D:842:GLU:HB3	1:D:1156:ARG:CD	2.43	0.46
1:D:1226:GLY:O	1:F:900:GLY:HA2	2.15	0.46
1:D:1229:MET:HB3	1:F:877:ARG:O	2.15	0.46
1:D:1357:VAL:CG1	1:D:1359:GLY:O	2.63	0.46
1:E:3:VAL:HG22	1:E:231:ASN:HB2	1.96	0.46
1:E:52:GLN:NE2	1:E:71:LEU:CB	2.78	0.46
1:E:87:GLU:O	1:E:88:ALA:C	2.53	0.46
1:E:228:LEU:HA	1:E:228:LEU:HD12	1.29	0.46
1:E:316:LEU:HD12	1:E:316:LEU:C	2.36	0.46
1:E:489:SER:OG	1:E:490:ASP:N	2.48	0.46
1:E:603:HIS:N	1:E:640:THR:CG2	2.78	0.46
1:E:683:LEU:HD23	1:E:683:LEU:HA	1.56	0.46
1:E:949:VAL:C	1:E:950:THR:O	2.50	0.46
1:F:211:TYR:CD1	1:F:212:SER:N	2.80	0.46
1:F:520:MET:HA	1:F:714:SER:O	2.15	0.46
1:F:550:LEU:HB3	1:F:554:GLU:HG3	1.96	0.46
1:F:878:ILE:HG21	1:F:1136:VAL:HG13	1.96	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1077:ARG:O	1:F:1079:ILE:N	2.48	0.46
1:F:1357:VAL:CG1	1:F:1359:GLY:O	2.63	0.46
2:G:89:ASN:H	2:G:89:ASN:HD22	1.64	0.46
2:G:181:ARG:HD2	2:G:182:MET:N	2.29	0.46
2:G:218:PHE:HD2	2:G:223:ASP:OD2	1.98	0.46
2:H:109:VAL:O	2:H:112:GLN:HG2	2.09	0.46
2:H:358:VAL:CG1	2:H:366:ARG:HB2	2.44	0.46
2:H:430:LYS:CE	2:H:456:ASP:HB3	2.43	0.46
2:I:405:ASP:OD1	2:I:407:PRO:HG2	2.16	0.46
2:I:472:ALA:O	2:I:473:GLU:HB3	2.15	0.46
2:J:49:GLN:HE22	2:J:69:LEU:CB	2.28	0.46
2:J:229:LEU:HD22	2:J:236:VAL:CG1	2.45	0.46
2:K:460:ALA:O	2:K:464:ILE:HD12	2.14	0.46
2:L:175:VAL:HG11	2:L:214:TYR:CG	2.47	0.46
1:A:12:LYS:HA	1:A:13:PRO:HD3	1.72	0.46
1:A:231:ASN:HB3	1:A:332:ALA:HB3	1.96	0.46
1:A:248:GLU:OE2	1:A:266:VAL:N	2.44	0.46
1:A:489:SER:OG	1:A:490:ASP:N	2.48	0.46
1:A:572:THR:HG22	1:A:615:ARG:NE	2.30	0.46
1:A:1075:THR:HG22	1:A:1077:ARG:N	2.30	0.46
1:A:1214:ARG:O	1:A:1215:ILE:C	2.52	0.46
1:B:227:MET:CE	1:B:282:GLU:HG2	2.44	0.46
1:B:302:ALA:HB2	1:B:347:ARG:HH11	1.76	0.46
1:B:417:ASP:HA	1:B:420:VAL:CG1	2.46	0.46
1:B:777:GLY:C	2:G:52:VAL:CG1	2.83	0.46
1:B:877:ARG:O	1:F:1229:MET:HB3	2.15	0.46
1:C:12:LYS:HA	1:C:13:PRO:HD3	1.72	0.46
1:C:136:ASN:OD1	1:C:136:ASN:N	2.47	0.46
1:C:242:ASN:HD22	1:C:242:ASN:H	1.61	0.46
1:C:746:ILE:HG23	1:C:1182:ASP:N	2.21	0.46
1:C:871:LEU:O	1:C:872:ASN:C	2.52	0.46
1:C:899:ASN:O	1:E:1228:LYS:HB2	2.16	0.46
1:C:1068:ARG:NE	1:C:1089:GLU:OE1	2.39	0.46
1:C:1290:GLY:O	1:C:1291:ASP:CB	2.53	0.46
1:C:1383:PHE:O	1:C:1384:ALA:HB3	2.15	0.46
1:D:30:HIS:CE1	1:D:1237:ASN:O	2.68	0.46
1:D:30:HIS:CE1	1:D:368:GLU:OE2	2.68	0.46
1:D:162:GLU:CB	1:D:164:ILE:HD12	2.44	0.46
1:D:227:MET:CE	1:D:282:GLU:CG	2.93	0.46
1:D:447:LEU:CD1	1:D:447:LEU:C	2.84	0.46
1:D:1143:ALA:O	1:D:1146:VAL:N	2.47	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:183:PHE:HE1	1:E:188:LEU:HA	1.79	0.46
1:E:386:GLY:N	1:E:389:GLU:OE2	2.48	0.46
1:E:606:LEU:C	1:E:607:THR:CG2	2.83	0.46
1:E:1383:PHE:O	1:E:1384:ALA:HB3	2.15	0.46
4:E:2474:FMN:H9	4:E:2474:FMN:H1'2	1.70	0.46
1:F:227:MET:CE	1:F:282:GLU:HG2	2.44	0.46
1:F:286:ARG:HD3	1:F:286:ARG:HA	1.55	0.46
1:F:347:ARG:HH11	1:F:347:ARG:HB2	1.79	0.46
1:F:417:ASP:HA	1:F:420:VAL:CG1	2.46	0.46
1:F:457:THR:O	1:F:461:MET:HG2	2.15	0.46
1:F:629:THR:O	1:F:632:ILE:HB	2.16	0.46
1:F:677:GLU:C	1:F:677:GLU:OE1	2.54	0.46
1:F:1201:LEU:H	1:F:1201:LEU:HD22	1.79	0.46
1:F:1424:LEU:HD23	1:F:1428:ILE:HG13	1.96	0.46
2:G:49:GLN:HE22	2:G:69:LEU:CB	2.28	0.46
2:G:64:ASN:OD1	2:G:66:PRO:HD2	2.15	0.46
2:G:246:ARG:O	2:G:397:LYS:HE3	2.16	0.46
2:G:331:GLN:OE1	2:G:332:ARG:HD3	2.15	0.46
2:G:405:ASP:OD1	2:G:407:PRO:HG2	2.15	0.46
2:H:49:GLN:HE22	2:H:69:LEU:CB	2.28	0.46
2:H:64:ASN:OD1	2:H:66:PRO:HD2	2.15	0.46
2:H:90:PHE:CZ	2:H:160:LEU:HB2	2.50	0.46
2:H:348:ALA:HB1	2:H:373:ASP:HA	1.96	0.46
2:H:472:ALA:O	2:H:473:GLU:HB3	2.15	0.46
2:I:109:VAL:O	2:I:112:GLN:HG2	2.09	0.46
2:I:189:GLY:HA2	2:I:265:LEU:HB3	1.98	0.46
2:I:207:LEU:CD1	2:I:212:VAL:CG1	2.94	0.46
2:I:208:ALA:HA	2:I:212:VAL:HG13	1.98	0.46
2:I:375:THR:CG2	2:I:376:GLY:N	2.79	0.46
2:I:432:THR:CG2	2:I:433:ASN:N	2.78	0.46
2:I:480:ALA:O	2:I:481:GLU:HB3	2.14	0.46
2:J:30:GLU:OE2	2:J:32:TYR:HB2	2.16	0.46
2:J:166:LEU:O	2:J:169:LYS:HB2	2.15	0.46
2:J:405:ASP:OD1	2:J:407:PRO:HG2	2.15	0.46
2:K:89:ASN:H	2:K:89:ASN:HD22	1.64	0.46
2:K:175:VAL:HG11	2:K:214:TYR:CG	2.47	0.46
2:K:218:PHE:HD2	2:K:223:ASP:OD2	1.98	0.46
2:K:350:PRO:CB	2:K:372:ALA:HB1	2.45	0.46
2:L:90:PHE:O	2:L:93:ILE:HG23	2.16	0.46
2:L:144:ARG:HH11	2:L:169:LYS:CA	2.27	0.46
2:L:218:PHE:HD2	2:L:223:ASP:OD2	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:143:GLN:CA	1:A:143:GLN:NE2	2.78	0.46
1:A:316:LEU:C	1:A:316:LEU:HD12	2.36	0.46
1:A:673:GLU:O	1:A:674:ALA:C	2.53	0.46
1:A:896:PRO:CB	1:C:1226:GLY:CA	2.92	0.46
1:A:940:GLU:O	1:A:969:PRO:HA	2.15	0.46
1:A:1132:PRO:O	1:A:1133:GLU:C	2.52	0.46
1:A:1274:GLN:NE2	1:A:1293:ASN:HB3	2.30	0.46
1:B:313:HIS:CD2	1:B:313:HIS:H	2.34	0.46
1:B:389:GLU:HA	1:B:403:ASP:OD2	2.15	0.46
1:B:608:ASP:OD2	1:B:647:ALA:N	2.42	0.46
1:B:839:PRO:HG2	1:B:842:GLU:OE1	2.15	0.46
1:B:1061:LEU:O	1:B:1064:ARG:HB2	2.15	0.46
1:B:1440:ALA:O	1:B:1441:ALA:C	2.53	0.46
1:C:47:HIS:HB3	1:C:206:ILE:HB	1.96	0.46
1:C:81:ILE:HD13	1:D:216:PHE:CE1	2.50	0.46
1:C:353:MET:HG2	1:C:385:LEU:HD23	1.97	0.46
1:C:672:GLN:O	1:C:673:GLU:C	2.52	0.46
1:C:1005:GLY:O	1:C:1009:ILE:HD12	2.16	0.46
1:C:1049:LEU:HD21	1:C:1087:ALA:HB2	1.98	0.46
1:C:1075:THR:HG22	1:C:1077:ARG:N	2.30	0.46
1:C:1156:ARG:O	1:C:1157:SER:CB	2.62	0.46
1:C:1231:LEU:O	1:C:1266:ILE:HA	2.16	0.46
1:C:1427:LEU:HD23	1:C:1427:LEU:HA	1.79	0.46
1:D:89:CYS:O	1:D:93:VAL:HG23	2.16	0.46
1:D:173:SER:HG	1:D:176:SER:H	1.63	0.46
1:D:1201:LEU:HD22	1:D:1201:LEU:H	1.79	0.46
1:D:1424:LEU:HD22	1:D:1447:TRP:HH2	1.80	0.46
1:E:572:THR:HG21	1:E:615:ARG:NE	2.30	0.46
1:E:1044:PRO:HG2	1:E:1047:MET:HE3	1.98	0.46
1:E:1075:THR:HG22	1:E:1077:ARG:N	2.30	0.46
1:E:1428:ILE:HG22	1:E:1428:ILE:O	2.14	0.46
1:E:1463:LEU:HD23	1:E:1463:LEU:HA	1.66	0.46
1:F:89:CYS:O	1:F:93:VAL:HG23	2.16	0.46
1:F:147:ASP:O	1:F:151:ILE:HG13	2.15	0.46
1:F:572:THR:HG23	1:F:616:ALA:O	2.15	0.46
1:F:615:ARG:HG2	1:F:615:ARG:NH1	2.30	0.46
1:F:673:GLU:O	1:F:674:ALA:C	2.54	0.46
1:F:1184:ASN:N	1:F:1185:PRO:HD2	2.30	0.46
1:F:1204:ARG:O	1:F:1205:ASN:C	2.51	0.46
1:F:1212:ASP:OD2	1:F:1243:GLY:CA	2.63	0.46
2:G:90:PHE:CE1	2:G:160:LEU:HB2	2.50	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:208:ALA:HA	2:G:212:VAL:HG13	1.98	0.46
2:H:91:PRO:HD2	2:H:203:ARG:HH21	1.79	0.46
2:H:108:CYS:SG	2:H:118:VAL:CG2	3.03	0.46
2:H:207:LEU:O	2:H:212:VAL:HG12	2.15	0.46
2:H:229:LEU:HD22	2:H:236:VAL:CG1	2.45	0.46
2:H:416:LYS:CE	2:H:433:ASN:HB2	2.45	0.46
2:I:64:ASN:OD1	2:I:66:PRO:HD2	2.15	0.46
2:J:63:ASN:HD21	2:J:83:VAL:HG12	1.79	0.46
2:J:90:PHE:CE1	2:J:160:LEU:HB2	2.50	0.46
2:J:358:VAL:CG1	2:J:366:ARG:HB2	2.44	0.46
2:J:375:THR:CG2	2:J:376:GLY:N	2.79	0.46
2:J:480:ALA:O	2:J:481:GLU:HB3	2.14	0.46
2:K:77:LEU:CA	2:K:127:ILE:CD1	2.93	0.46
2:K:207:LEU:O	2:K:212:VAL:HG12	2.15	0.46
2:K:246:ARG:O	2:K:397:LYS:HE3	2.16	0.46
2:K:416:LYS:HZ2	2:K:416:LYS:HB2	1.80	0.46
2:L:54:PHE:CB	2:L:107:ASN:HB3	2.39	0.46
2:L:297:GLY:HA2	2:L:320:TYR:HE1	1.80	0.46
2:L:321:ARG:HH11	2:L:322:ARG:CZ	2.27	0.46
2:L:375:THR:CG2	2:L:376:GLY:N	2.79	0.46
1:A:313:HIS:CD2	1:A:313:HIS:N	2.83	0.46
1:A:417:ASP:O	1:A:418:LYS:C	2.52	0.46
1:A:536:ASP:OD1	1:A:538:THR:N	2.49	0.46
1:A:805:ASP:O	1:A:805:ASP:OD1	2.33	0.46
1:A:833:SER:HB3	1:A:1153:LEU:HD22	1.98	0.46
1:A:944:LEU:HD12	1:A:944:LEU:HA	1.72	0.46
1:B:105:TYR:N	1:B:105:TYR:CD1	2.81	0.46
1:C:78:LEU:HD12	1:C:129:GLU:HG3	1.97	0.46
1:C:468:MET:HG2	1:C:699:ALA:HB1	1.97	0.46
1:C:500:ARG:NH2	1:C:1041:ALA:O	2.48	0.46
1:C:606:LEU:C	1:C:607:THR:CG2	2.83	0.46
1:C:672:GLN:CG	1:C:693:MET:CE	2.79	0.46
1:D:393:VAL:HG12	1:D:394:ASP:N	2.29	0.46
1:D:677:GLU:C	1:D:677:GLU:OE1	2.54	0.46
1:D:720:ARG:C	1:D:722:GLY:N	2.69	0.46
1:D:746:ILE:CG2	1:D:1182:ASP:CB	2.86	0.46
1:D:777:GLY:C	2:H:52:VAL:CG1	2.83	0.46
1:D:824:GLN:NE2	1:D:824:GLN:CA	2.78	0.46
1:D:839:PRO:HG2	1:D:842:GLU:OE1	2.15	0.46
1:E:251:MET:HB2	1:E:533:LEU:CD1	2.44	0.46
1:E:454:PHE:N	1:E:454:PHE:CD1	2.81	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:472:GLY:O	1:E:473:LYS:HG3	2.16	0.46
1:E:828:LEU:HD22	1:E:1172:SER:CB	2.38	0.46
1:E:935:GLY:HA3	1:E:1025:GLY:O	2.15	0.46
1:E:1231:LEU:O	1:E:1266:ILE:HA	2.16	0.46
1:F:24:ALA:C	1:F:26:LYS:H	2.19	0.46
1:F:107:TRP:H	1:F:107:TRP:HD1	1.60	0.46
1:F:150:ILE:HG21	1:F:259:HIS:CG	2.50	0.46
1:F:210:ARG:HA	3:F:2473:OMT:HE2	1.97	0.46
1:F:254:PRO:O	1:F:257:GLY:N	2.37	0.46
1:F:290:THR:HG22	1:F:292:PRO:N	2.31	0.46
1:F:304:THR:CG2	1:F:518:ARG:HD2	2.46	0.46
1:F:511:ILE:HG22	1:F:512:ASP:H	1.79	0.46
1:F:782:ARG:CA	2:I:52:VAL:C	2.84	0.46
1:F:824:GLN:O	1:F:827:ASP:CB	2.58	0.46
1:F:1061:LEU:O	1:F:1064:ARG:HB2	2.16	0.46
1:F:1143:ALA:O	1:F:1146:VAL:N	2.47	0.46
1:F:1417:VAL:HG12	1:F:1419:HIS:N	2.26	0.46
2:G:297:GLY:HA2	2:G:320:TYR:HE1	1.80	0.46
2:H:54:PHE:CB	2:H:107:ASN:HB3	2.39	0.46
2:H:63:ASN:HD21	2:H:83:VAL:HG12	1.79	0.46
2:H:81:TYR:HD1	2:H:128:ASN:HA	1.81	0.46
2:H:166:LEU:O	2:H:169:LYS:HB2	2.15	0.46
2:H:189:GLY:HA2	2:H:265:LEU:HB3	1.98	0.46
2:I:81:TYR:HD1	2:I:128:ASN:HA	1.81	0.46
2:I:367:ILE:HD13	2:I:368:HIS:C	2.34	0.46
2:J:51:GLY:O	2:J:52:VAL:HG23	2.16	0.46
2:J:416:LYS:NZ	2:J:433:ASN:HB2	2.29	0.46
2:K:90:PHE:CZ	2:K:160:LEU:HB2	2.50	0.46
2:K:93:ILE:HD11	2:K:195:LEU:CD2	2.30	0.46
2:K:108:CYS:SG	2:K:118:VAL:CG2	3.03	0.46
2:K:318:CYS:SG	2:K:320:TYR:CZ	3.06	0.46
2:K:324:ARG:HA	2:K:346:TRP:CZ2	2.46	0.46
2:L:89:ASN:H	2:L:89:ASN:HD22	1.64	0.46
2:L:90:PHE:CE1	2:L:160:LEU:HB2	2.50	0.46
2:L:189:GLY:HA2	2:L:265:LEU:HB3	1.98	0.46
2:L:208:ALA:HA	2:L:212:VAL:HG13	1.98	0.46
2:L:472:ALA:O	2:L:473:GLU:HB3	2.15	0.46
1:A:15:ARG:O	1:A:16:SER:C	2.53	0.46
1:A:1383:PHE:O	1:A:1384:ALA:HB3	2.15	0.46
1:B:125:ARG:HG3	1:B:219:TRP:CZ2	2.51	0.46
1:B:304:THR:CG2	1:B:518:ARG:HD2	2.46	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:430:VAL:HG13	1:B:554:GLU:CA	2.37	0.46
1:B:447:LEU:CD1	1:B:447:LEU:C	2.84	0.46
1:B:457:THR:O	1:B:461:MET:HG2	2.15	0.46
1:B:487:VAL:HG13	1:B:498:PHE:HE2	1.81	0.46
1:B:743:VAL:HG12	1:B:744:SER:N	2.30	0.46
1:B:842:GLU:HB3	1:B:1156:ARG:CD	2.43	0.46
1:B:848:ALA:O	1:B:849:ILE:C	2.54	0.46
1:B:963:VAL:CG1	1:B:964:MET:H	2.25	0.46
1:B:1010:ALA:HB2	1:B:1052:VAL:HG22	1.97	0.46
1:B:1076:GLY:N	1:B:1145:GLU:OE2	2.49	0.46
1:C:52:GLN:NE2	1:C:71:LEU:HB2	2.27	0.46
1:C:393:VAL:CG1	1:C:394:ASP:N	2.77	0.46
1:C:894:PHE:HD1	1:C:904:ASN:ND2	2.13	0.46
1:C:1195:ASN:HD21	1:C:1197:ARG:CZ	2.29	0.46
1:C:1401:LEU:N	1:C:1402:PRO:CD	2.79	0.46
1:C:1438:ARG:O	1:C:1441:ALA:N	2.49	0.46
1:C:1468:VAL:O	1:C:1468:VAL:HG12	2.15	0.46
1:D:125:ARG:HG3	1:D:219:TRP:CZ2	2.51	0.46
1:D:147:ASP:O	1:D:151:ILE:HG13	2.15	0.46
1:D:196:LEU:HD23	1:D:196:LEU:HA	1.55	0.46
1:D:227:MET:CE	1:D:282:GLU:HG2	2.44	0.46
1:D:263:LEU:N	1:D:263:LEU:CD1	2.73	0.46
1:D:313:HIS:CD2	1:D:313:HIS:H	2.34	0.46
1:D:437:GLY:O	1:D:438:GLU:C	2.48	0.46
1:D:871:LEU:O	1:D:872:ASN:C	2.53	0.46
1:D:878:ILE:HG21	1:D:878:ILE:HD13	1.66	0.46
1:D:1207:VAL:HG13	1:D:1208:PRO:CD	2.46	0.46
1:E:9:ILE:HG13	1:E:361:GLY:C	2.35	0.46
1:E:136:ASN:OD1	1:E:136:ASN:N	2.47	0.46
1:E:393:VAL:CG1	1:E:394:ASP:N	2.77	0.46
1:E:672:GLN:O	1:E:673:GLU:C	2.52	0.46
1:E:850:ARG:O	1:E:853:PHE:HB2	2.15	0.46
1:E:969:PRO:CD	1:E:970:PRO:HD2	2.46	0.46
1:E:1274:GLN:H	1:E:1274:GLN:HG2	1.35	0.46
1:E:1274:GLN:NE2	1:E:1293:ASN:HB3	2.30	0.46
1:E:1412:PHE:HD2	1:E:1455:TRP:CZ3	2.33	0.46
1:F:839:PRO:HG2	1:F:842:GLU:OE1	2.15	0.46
2:G:161:ALA:CB	2:G:454:ILE:HG12	2.40	0.46
2:G:228:GLU:O	2:G:231:ARG:HB3	2.16	0.46
2:G:375:THR:CG2	2:G:376:GLY:N	2.79	0.46
2:G:449:LEU:CD2	2:G:451:VAL:HG13	2.27	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:88:ASN:OD1	2:H:91:PRO:HA	2.16	0.46
2:I:30:GLU:OE2	2:I:32:TYR:HB2	2.16	0.46
2:I:348:ALA:HB1	2:I:373:ASP:HA	1.97	0.46
2:I:350:PRO:HG2	2:I:380:PRO:HA	1.98	0.46
2:I:367:ILE:HD13	2:I:367:ILE:C	2.36	0.46
2:I:416:LYS:CE	2:I:433:ASN:HB2	2.45	0.46
2:J:81:TYR:HD1	2:J:128:ASN:HA	1.81	0.46
2:J:228:GLU:O	2:J:231:ARG:HB3	2.16	0.46
2:J:362:VAL:HG12	2:J:362:VAL:O	2.15	0.46
2:J:394:LEU:CD2	2:J:395:VAL:N	2.79	0.46
2:J:432:THR:CG2	2:J:433:ASN:N	2.78	0.46
2:K:77:LEU:HD23	2:K:127:ILE:HD12	1.96	0.46
2:K:228:GLU:O	2:K:231:ARG:HB3	2.16	0.46
2:K:423:LEU:CD2	2:K:423:LEU:H	2.25	0.46
2:L:64:ASN:OD1	2:L:66:PRO:HD2	2.15	0.46
2:L:350:PRO:HG2	2:L:380:PRO:HA	1.98	0.46
1:A:52:GLN:NE2	1:A:71:LEU:CB	2.78	0.46
1:A:57:ASP:O	1:A:60:LYS:HB2	2.15	0.46
1:A:472:GLY:O	1:A:473:LYS:HG3	2.16	0.46
1:A:583:ARG:CZ	1:A:587:ARG:HH12	2.27	0.46
1:A:603:HIS:N	1:A:640:THR:CG2	2.79	0.46
1:A:896:PRO:HB3	1:C:1226:GLY:C	2.36	0.46
1:A:949:VAL:C	1:A:950:THR:O	2.50	0.46
1:A:969:PRO:CD	1:A:970:PRO:HD2	2.46	0.46
1:A:1231:LEU:O	1:A:1266:ILE:HA	2.16	0.46
1:B:30:HIS:CE1	1:B:368:GLU:OE2	2.68	0.46
1:B:139:VAL:HG12	1:B:143:GLN:HB2	1.97	0.46
1:B:263:LEU:HA	1:B:263:LEU:HD12	1.11	0.46
1:B:413:LEU:O	1:B:414:LYS:HD2	2.16	0.46
1:B:787:ARG:O	1:B:788:HIS:ND1	2.49	0.46
1:B:1131:THR:HG22	1:B:1133:GLU:CA	2.46	0.46
1:B:1212:ASP:OD2	1:B:1243:GLY:CA	2.63	0.46
1:B:1229:MET:HB3	1:D:877:ARG:O	2.15	0.46
1:B:1424:LEU:CD2	1:B:1428:ILE:HD11	2.46	0.46
1:C:21:GLY:O	1:C:22:ILE:C	2.49	0.46
1:C:98:LEU:HD23	1:C:98:LEU:HA	1.82	0.46
1:C:603:HIS:N	1:C:640:THR:HG22	2.30	0.46
1:C:782:ARG:HD3	2:K:53:PRO:HD2	1.79	0.46
1:D:290:THR:CG2	1:D:291:ALA:N	2.75	0.46
1:D:290:THR:HG22	1:D:292:PRO:N	2.31	0.46
1:D:416:TRP:O	1:D:419:TRP:HB2	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:798:LEU:O	1:D:801:ALA:HB3	2.16	0.46
1:D:824:GLN:NE2	1:D:824:GLN:HA	2.30	0.46
1:D:1141:PHE:O	1:D:1142:LEU:C	2.54	0.46
1:E:143:GLN:CA	1:E:143:GLN:NE2	2.78	0.46
1:E:191:PHE:HE1	1:E:192:TYR:CE1	2.33	0.46
1:E:505:GLN:HE21	1:E:1001:VAL:N	2.01	0.46
1:E:842:GLU:HG2	1:E:1156:ARG:HH11	1.80	0.46
1:E:989:GLN:O	1:E:1245:ARG:HD3	2.16	0.46
1:E:1049:LEU:HD21	1:E:1087:ALA:HB2	1.98	0.46
1:F:25:LEU:HD21	1:F:207:TYR:HB2	1.97	0.46
1:F:59:VAL:HG22	1:F:105:TYR:HD2	1.78	0.46
1:F:416:TRP:O	1:F:419:TRP:HB2	2.16	0.46
1:F:477:GLY:O	1:F:478:SER:HB3	2.15	0.46
1:F:720:ARG:C	1:F:722:GLY:N	2.69	0.46
1:F:766:TYR:C	1:F:768:GLU:H	2.18	0.46
1:F:782:ARG:HH22	2:I:51:GLY:HA2	0.97	0.46
1:F:1113:CYS:C	1:F:1115:VAL:N	2.69	0.46
1:F:1128:PHE:CZ	1:F:1130:GLY:CA	2.93	0.46
1:F:1207:VAL:HG13	1:F:1208:PRO:CD	2.46	0.46
1:F:1420:TYR:C	1:F:1422:SER:N	2.69	0.46
2:G:144:ARG:HH11	2:G:169:LYS:CA	2.27	0.46
2:G:203:ARG:HB3	2:G:203:ARG:NH2	2.31	0.46
2:G:257:ASN:HD22	2:G:364:ALA:CB	2.29	0.46
2:H:110:ILE:HG13	2:H:117:ALA:CA	2.35	0.46
2:H:110:ILE:HB	2:H:115:HIS:HE1	1.81	0.46
2:I:145:GLU:O	2:I:145:GLU:HG2	2.12	0.46
2:I:218:PHE:HD2	2:I:223:ASP:OD2	1.98	0.46
2:I:230:ARG:CZ	2:I:434:MET:HE1	2.46	0.46
2:I:350:PRO:CB	2:I:372:ALA:HB1	2.45	0.46
2:J:218:PHE:HD2	2:J:223:ASP:OD2	1.98	0.46
2:J:350:PRO:HG2	2:J:380:PRO:HA	1.98	0.46
2:K:257:ASN:HD22	2:K:364:ALA:CB	2.29	0.46
2:L:350:PRO:HB3	2:L:372:ALA:HB1	1.97	0.46
2:L:480:ALA:O	2:L:481:GLU:HB3	2.15	0.46
1:A:295:LYS:HE2	1:A:299:VAL:HG11	1.98	0.46
1:A:370:GLY:CA	1:A:1237:ASN:HB3	2.45	0.46
1:A:565:THR:HG22	1:A:565:THR:O	2.15	0.46
1:A:780:ARG:CB	2:J:51:GLY:O	2.64	0.46
1:A:1049:LEU:HD21	1:A:1087:ALA:HB2	1.98	0.46
1:B:89:CYS:O	1:B:93:VAL:HG23	2.16	0.46
1:B:266:VAL:HG12	1:B:266:VAL:O	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:777:GLY:CA	2:G:52:VAL:HG13	2.12	0.46
1:B:918:THR:HG23	1:B:1256:MET:SD	2.56	0.46
1:B:1184:ASN:N	1:B:1185:PRO:HD2	2.30	0.46
1:B:1207:VAL:HG13	1:B:1208:PRO:CD	2.46	0.46
1:C:260:MET:HA	1:C:263:LEU:HB2	1.98	0.46
1:C:350:LEU:HD23	1:C:350:LEU:HA	1.55	0.46
1:C:1201:LEU:HD12	1:C:1201:LEU:N	2.31	0.46
1:D:139:VAL:HG12	1:D:143:GLN:HB2	1.97	0.46
1:D:286:ARG:HA	1:D:286:ARG:HD3	1.55	0.46
1:D:359:THR:HG23	1:D:378:GLN:O	2.16	0.46
1:D:457:THR:O	1:D:461:MET:HG2	2.15	0.46
1:D:595:ASP:O	1:D:596:ALA:C	2.51	0.46
1:D:621:ILE:HG12	1:D:657:VAL:HG11	1.97	0.46
1:D:643:ASN:HB3	1:D:665:THR:HG22	1.98	0.46
1:D:757:LYS:O	1:D:758:VAL:C	2.53	0.46
1:D:766:TYR:C	1:D:768:GLU:H	2.18	0.46
1:D:1153:LEU:HD23	1:D:1153:LEU:HA	1.42	0.46
1:D:1401:LEU:C	1:D:1401:LEU:CD1	2.55	0.46
1:E:863:LEU:HB3	1:E:1118:CYS:HB3	1.97	0.46
1:E:1244:THR:O	1:E:1245:ARG:C	2.51	0.46
1:E:1276:LEU:HD12	1:E:1276:LEU:C	2.36	0.46
1:E:1393:TYR:C	1:E:1394:VAL:HG23	2.34	0.46
1:E:1397:LEU:HD22	1:E:1453:LYS:HD2	1.98	0.46
1:E:1438:ARG:O	1:E:1441:ALA:N	2.49	0.46
1:F:313:HIS:H	1:F:313:HIS:CD2	2.34	0.46
1:F:501:GLN:OE1	1:F:710:LYS:NZ	2.43	0.46
2:G:90:PHE:O	2:G:93:ILE:HG23	2.16	0.46
2:G:189:GLY:HA2	2:G:265:LEU:HB3	1.98	0.46
2:G:350:PRO:CB	2:G:372:ALA:HB1	2.45	0.46
2:H:89:ASN:H	2:H:89:ASN:HD22	1.64	0.46
2:H:228:GLU:O	2:H:231:ARG:HB3	2.16	0.46
2:I:88:ASN:OD1	2:I:91:PRO:HA	2.16	0.46
2:I:90:PHE:CE1	2:I:160:LEU:HB2	2.50	0.46
2:I:331:GLN:HA	2:I:334:VAL:HG22	1.93	0.46
2:I:430:LYS:CE	2:I:456:ASP:HB3	2.43	0.46
2:J:64:ASN:OD1	2:J:66:PRO:HD2	2.15	0.46
2:J:257:ASN:HD22	2:J:364:ALA:CB	2.29	0.46
2:J:365:VAL:HG22	2:J:366:ARG:CG	2.40	0.46
2:J:472:ALA:O	2:J:473:GLU:HB3	2.15	0.46
2:K:110:ILE:HG13	2:K:117:ALA:CA	2.35	0.46
2:K:189:GLY:HA2	2:K:265:LEU:HB3	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:K:203:ARG:HB3	2:K:203:ARG:NH2	2.31	0.46
2:K:208:ALA:HA	2:K:212:VAL:HG13	1.98	0.46
2:K:230:ARG:CZ	2:K:434:MET:HE1	2.46	0.46
2:K:367:ILE:HD13	2:K:367:ILE:C	2.36	0.46
2:K:394:LEU:CD2	2:K:395:VAL:N	2.79	0.46
2:L:81:TYR:HD1	2:L:128:ASN:HA	1.81	0.46
2:L:145:GLU:O	2:L:145:GLU:HG2	2.12	0.46
2:L:207:LEU:CD1	2:L:212:VAL:CG1	2.94	0.46
2:L:228:GLU:O	2:L:231:ARG:HB3	2.16	0.46
1:A:9:ILE:HG13	1:A:361:GLY:C	2.35	0.46
1:A:376:GLU:O	1:A:378:GLN:N	2.49	0.46
1:A:562:MET:CE	1:A:566:ALA:HB2	2.46	0.46
1:A:1195:ASN:HD21	1:A:1197:ARG:CZ	2.29	0.46
1:A:1228:LYS:HB2	1:E:899:ASN:O	2.16	0.46
1:B:25:LEU:HD21	1:B:207:TYR:HB2	1.97	0.46
1:B:1141:PHE:O	1:B:1142:LEU:C	2.54	0.46
1:C:52:GLN:O	1:C:56:LYS:HB2	2.16	0.46
1:C:57:ASP:O	1:C:60:LYS:HB2	2.15	0.46
1:C:863:LEU:HB3	1:C:1118:CYS:HB3	1.97	0.46
1:C:1132:PRO:O	1:C:1133:GLU:C	2.52	0.46
1:C:1432:VAL:O	1:C:1433:THR:C	2.53	0.46
1:D:100:PHE:O	1:D:137:LYS:CE	2.46	0.46
1:D:525:ARG:HG3	1:D:544:GLN:HG3	1.97	0.46
1:D:1076:GLY:N	1:D:1145:GLU:OE2	2.49	0.46
1:D:1347:ALA:O	1:D:1348:VAL:C	2.54	0.46
1:E:266:VAL:HG12	1:E:266:VAL:O	2.16	0.46
1:E:536:ASP:OD1	1:E:538:THR:N	2.49	0.46
1:E:938:PRO:O	1:E:939:GLY:C	2.53	0.46
1:E:1057:THR:HG22	1:E:1058:LEU:N	2.28	0.46
1:E:1117:VAL:HG12	1:E:1118:CYS:N	2.29	0.46
1:F:228:LEU:HD22	1:F:278:ASP:HA	1.98	0.46
1:F:284:MET:HE2	1:F:294:VAL:HG13	1.98	0.46
1:F:496:HIS:CD2	1:F:497:HIS:HD2	2.33	0.46
1:F:838:VAL:HG13	1:F:839:PRO:CD	2.32	0.46
2:G:165:GLU:HB3	2:G:169:LYS:HZ2	1.79	0.46
2:G:179:TYR:HB3	2:G:181:ARG:HH12	1.81	0.46
2:G:272:SER:O	2:G:273:LEU:HD13	2.16	0.46
2:G:367:ILE:HD13	2:G:367:ILE:C	2.36	0.46
2:H:207:LEU:CD1	2:H:212:VAL:CG1	2.94	0.46
2:H:208:ALA:HA	2:H:212:VAL:HG13	1.98	0.46
2:H:257:ASN:HD22	2:H:364:ALA:CB	2.29	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:276:THR:HG22	2:H:277:VAL:N	2.31	0.46
2:H:290:LYS:CG	2:H:291:HIS:N	2.79	0.46
2:H:371:VAL:CG2	2:H:386:SER:CB	2.94	0.46
2:H:394:LEU:CD2	2:H:395:VAL:N	2.79	0.46
2:H:460:ALA:O	2:H:464:ILE:HD12	2.14	0.46
2:I:246:ARG:O	2:I:397:LYS:HE3	2.16	0.46
2:I:276:THR:HG22	2:I:277:VAL:N	2.31	0.46
2:J:54:PHE:CB	2:J:107:ASN:HB3	2.39	0.46
2:J:80:ALA:HB3	2:J:127:ILE:HD11	1.96	0.46
2:J:189:GLY:HA2	2:J:265:LEU:HB3	1.98	0.46
2:J:371:VAL:CG2	2:J:386:SER:CB	2.94	0.46
2:J:449:LEU:CG	2:J:451:VAL:HG12	2.46	0.46
2:K:28:PHE:N	2:K:28:PHE:CD1	2.84	0.46
2:K:416:LYS:CE	2:K:433:ASN:HB2	2.45	0.46
2:K:472:ALA:O	2:K:473:GLU:HB3	2.15	0.46
2:L:30:GLU:OE2	2:L:32:TYR:HB2	2.16	0.46
2:L:365:VAL:HG22	2:L:366:ARG:CG	2.40	0.46
2:L:394:LEU:CD2	2:L:395:VAL:N	2.79	0.46
1:A:213:THR:O	1:A:214:ASN:ND2	2.43	0.46
1:A:281:PHE:CZ	1:A:335:MET:HG2	2.50	0.46
1:A:298:LEU:HD23	1:A:324:MET:CG	2.44	0.46
1:A:863:LEU:HB3	1:A:1118:CYS:HB3	1.97	0.46
1:B:102:TYR:HA	1:B:136:ASN:OD1	2.16	0.46
1:B:700:ILE:O	1:B:703:GLY:N	2.49	0.46
4:B:2474:FMN:H1'2	4:B:2474:FMN:H9	1.57	0.46
1:C:214:ASN:O	1:C:1015:LYS:CE	2.53	0.46
1:C:357:ILE:HD11	1:C:400:LEU:HD21	1.98	0.46
1:C:452:GLN:NE2	1:C:764:THR:HG23	1.99	0.46
1:C:661:VAL:O	1:C:661:VAL:CG1	2.61	0.46
1:C:833:SER:OG	1:C:834:THR:N	2.49	0.46
1:C:850:ARG:O	1:C:853:PHE:HB2	2.16	0.46
1:C:1274:GLN:NE2	1:C:1293:ASN:HB3	2.30	0.46
1:D:24:ALA:C	1:D:26:LYS:H	2.19	0.46
1:D:102:TYR:HA	1:D:136:ASN:OD1	2.16	0.46
1:D:700:ILE:O	1:D:703:GLY:N	2.49	0.46
1:D:728:ILE:CD1	1:D:1047:MET:CE	2.74	0.46
1:D:833:SER:OG	1:D:834:THR:N	2.48	0.46
1:D:1219:ALA:HA	1:D:1229:MET:CE	2.45	0.46
1:E:260:MET:HA	1:E:263:LEU:HB2	1.98	0.46
1:E:357:ILE:HD11	1:E:400:LEU:HD21	1.98	0.46
1:E:491:LYS:HZ1	1:E:785:GLY:HA3	1.81	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:509:PRO:HA	1:E:510:PRO:HD3	1.81	0.46
1:E:555:PHE:HD1	1:E:556:ARG:N	2.14	0.46
1:E:953:ILE:O	1:E:956:LEU:HB2	2.15	0.46
1:E:1195:ASN:HD21	1:E:1197:ARG:CZ	2.29	0.46
1:F:375:ASP:OD2	1:F:377:THR:CB	2.61	0.46
1:F:447:LEU:CD1	1:F:447:LEU:C	2.84	0.46
1:F:558:MET:C	1:F:560:ASP:N	2.69	0.46
1:F:571:ALA:HB2	1:F:606:LEU:HD22	1.98	0.46
1:F:1424:LEU:CD2	1:F:1428:ILE:HD11	2.46	0.46
1:F:1435:THR:HG23	1:F:1437:SER:HB2	1.98	0.46
2:G:28:PHE:N	2:G:28:PHE:CD1	2.84	0.46
2:G:290:LYS:CG	2:G:291:HIS:N	2.79	0.46
2:G:394:LEU:CD2	2:G:395:VAL:N	2.79	0.46
2:H:28:PHE:N	2:H:28:PHE:CD1	2.84	0.46
2:H:71:LEU:HD21	2:H:76:ARG:CA	2.46	0.46
2:H:203:ARG:HB3	2:H:203:ARG:NH2	2.31	0.46
2:I:93:ILE:HD11	2:I:195:LEU:CD2	2.30	0.46
2:I:181:ARG:CD	2:I:187:VAL:CG1	2.94	0.46
2:I:228:GLU:O	2:I:231:ARG:HB3	2.16	0.46
2:I:449:LEU:CD2	2:I:451:VAL:CG1	2.89	0.46
2:I:449:LEU:CG	2:I:451:VAL:HG12	2.46	0.46
2:J:181:ARG:CD	2:J:187:VAL:CG1	2.94	0.46
2:J:208:ALA:HA	2:J:212:VAL:HG13	1.98	0.46
2:J:246:ARG:O	2:J:397:LYS:HE3	2.16	0.46
2:J:416:LYS:HZ2	2:J:433:ASN:HB2	1.79	0.46
2:K:63:ASN:HD21	2:K:83:VAL:HG12	1.79	0.46
2:K:91:PRO:HD2	2:K:203:ARG:HH21	1.78	0.46
2:K:91:PRO:HD2	2:K:203:ARG:HH22	1.76	0.46
2:K:317:LYS:NZ	2:K:390:VAL:HG11	2.31	0.46
2:K:331:GLN:OE1	2:K:332:ARG:HD3	2.15	0.46
2:K:375:THR:CG2	2:K:376:GLY:N	2.79	0.46
2:K:405:ASP:OD1	2:K:407:PRO:HG2	2.16	0.46
2:L:81:TYR:CD1	2:L:131:ALA:CB	2.99	0.46
2:L:90:PHE:CE1	2:L:160:LEU:CB	2.99	0.46
2:L:246:ARG:O	2:L:397:LYS:HE3	2.16	0.46
2:L:317:LYS:CE	2:L:345:ILE:CD1	2.94	0.46
2:L:394:LEU:CD2	2:L:396:ILE:CD1	2.94	0.46
1:A:242:ASN:H	1:A:242:ASN:HD22	1.61	0.45
1:A:345:MET:CE	1:A:385:LEU:HB3	2.45	0.45
1:A:780:ARG:NH2	2:J:54:PHE:CD1	2.80	0.45
1:A:953:ILE:O	1:A:956:LEU:HB2	2.15	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:989:GLN:O	1:A:1245:ARG:HD3	2.16	0.45
1:A:1102:CYS:SG	1:A:1104:MET:N	2.89	0.45
1:A:1226:GLY:C	1:E:896:PRO:HB3	2.36	0.45
1:B:978:GLU:H	1:B:978:GLU:HG2	1.21	0.45
1:B:984:ILE:O	1:B:988:LYS:HG3	2.16	0.45
1:B:1026:ASN:HB3	1:B:1043:LEU:N	2.32	0.45
1:B:1057:THR:HG22	1:B:1190:VAL:HG11	1.98	0.45
1:B:1077:ARG:O	1:B:1079:ILE:N	2.48	0.45
1:C:351:ARG:HH12	1:C:978:GLU:CD	2.19	0.45
1:C:443:ASP:C	1:C:445:ALA:N	2.70	0.45
1:C:554:GLU:OE2	1:C:697:LYS:HE3	2.17	0.45
1:C:1244:THR:O	1:C:1245:ARG:C	2.51	0.45
1:C:1397:LEU:HD22	1:C:1453:LYS:HD2	1.98	0.45
1:D:266:VAL:HG12	1:D:266:VAL:O	2.15	0.45
1:D:486:ALA:O	1:D:487:VAL:C	2.51	0.45
1:D:612:GLY:O	1:D:762:HIS:HE1	1.99	0.45
1:D:673:GLU:O	1:D:674:ALA:C	2.54	0.45
1:E:131:ILE:HG23	1:E:131:ILE:O	2.16	0.45
1:E:173:SER:HG	1:E:176:SER:H	1.62	0.45
1:E:676:ALA:O	1:E:677:GLU:C	2.50	0.45
1:E:746:ILE:CG2	1:E:747:SER:N	2.76	0.45
1:F:102:TYR:HA	1:F:136:ASN:OD1	2.16	0.45
1:F:235:ASN:HD22	1:F:235:ASN:C	2.18	0.45
1:F:381:GLU:CD	1:F:402:ARG:NH1	2.67	0.45
1:F:1438:ARG:CD	2:G:377:ARG:N	2.41	0.45
2:G:90:PHE:CE1	2:G:160:LEU:CB	2.99	0.45
2:H:90:PHE:CE1	2:H:160:LEU:CB	2.99	0.45
2:H:197:LYS:HZ3	2:H:275:ASP:HB3	1.80	0.45
2:H:246:ARG:O	2:H:397:LYS:HE3	2.16	0.45
2:H:350:PRO:HG3	2:H:380:PRO:CA	2.47	0.45
2:H:375:THR:CG2	2:H:376:GLY:N	2.79	0.45
2:I:141:THR:HB	2:I:142:PRO:CD	2.40	0.45
2:I:394:LEU:CD2	2:I:395:VAL:N	2.79	0.45
2:J:207:LEU:CD1	2:J:212:VAL:CG1	2.94	0.45
2:J:409:ALA:O	2:J:412:GLU:HB2	2.16	0.45
2:J:416:LYS:CE	2:J:433:ASN:HB2	2.45	0.45
2:J:449:LEU:CD2	2:J:452:TRP:CG	2.93	0.45
2:K:64:ASN:OD1	2:K:66:PRO:HD2	2.15	0.45
2:K:81:TYR:HD1	2:K:128:ASN:HA	1.81	0.45
2:K:90:PHE:O	2:K:93:ILE:HG23	2.16	0.45
2:K:145:GLU:OE2	2:K:468:ALA:HB1	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:K:350:PRO:HB3	2:K:372:ALA:HB1	1.97	0.45
2:L:109:VAL:O	2:L:112:GLN:HG2	2.09	0.45
2:L:203:ARG:HB3	2:L:203:ARG:NH2	2.31	0.45
2:L:230:ARG:CZ	2:L:434:MET:HE1	2.46	0.45
1:A:81:ILE:HD13	1:B:216:PHE:CE1	2.50	0.45
1:A:479:MET:HB3	1:A:1106:ARG:NH1	2.31	0.45
1:A:545:LEU:HD23	1:A:545:LEU:HA	1.19	0.45
1:A:608:ASP:O	1:A:611:MET:N	2.44	0.45
1:A:857:GLY:N	1:A:883:ASP:HB3	2.31	0.45
1:A:1349:ARG:CG	1:A:1349:ARG:NH1	2.75	0.45
1:B:147:ASP:O	1:B:151:ILE:HG13	2.15	0.45
1:B:304:THR:HG21	1:B:518:ARG:HD2	1.98	0.45
1:B:447:LEU:HD11	1:B:451:GLN:CD	2.36	0.45
1:B:831:LEU:HD13	1:B:1084:MET:HE3	1.98	0.45
1:B:1435:THR:HG23	1:B:1437:SER:HB2	1.98	0.45
1:C:345:MET:CE	1:C:385:LEU:HB3	2.45	0.45
1:C:454:PHE:N	1:C:454:PHE:CD1	2.81	0.45
1:C:603:HIS:N	1:C:640:THR:CG2	2.79	0.45
1:C:1149:ILE:O	1:C:1149:ILE:HG22	2.12	0.45
1:C:1264:ILE:HG22	1:C:1284:ILE:HA	1.99	0.45
1:C:1416:GLU:OE1	1:C:1471:HIS:CD2	2.70	0.45
1:D:696:TYR:CZ	1:D:700:ILE:HD11	2.52	0.45
1:D:885:GLY:C	1:D:887:GLY:N	2.68	0.45
1:D:918:THR:HG23	1:D:1256:MET:SD	2.56	0.45
1:D:1431:HIS:O	1:D:1432:VAL:C	2.54	0.45
1:E:179:TYR:HD2	1:E:192:TYR:CD2	2.34	0.45
1:E:350:LEU:HD23	1:E:350:LEU:HA	1.56	0.45
1:E:353:MET:HE2	1:E:366:GLY:C	2.33	0.45
1:E:376:GLU:O	1:E:378:GLN:N	2.49	0.45
1:E:1124:LEU:HA	1:E:1124:LEU:HD12	1.29	0.45
1:E:1201:LEU:HD12	1:E:1201:LEU:N	2.31	0.45
1:F:186:GLU:H	1:F:186:GLU:HG3	1.05	0.45
1:F:235:ASN:HD22	1:F:236:THR:H	1.61	0.45
1:F:266:VAL:HG12	1:F:266:VAL:O	2.15	0.45
1:F:317:ILE:HG22	1:F:321:ASN:ND2	2.27	0.45
1:F:824:GLN:NE2	1:F:824:GLN:HA	2.30	0.45
1:F:885:GLY:C	1:F:887:GLY:N	2.68	0.45
1:F:1026:ASN:HB3	1:F:1043:LEU:N	2.32	0.45
1:F:1114:PRO:HB2	1:F:1115:VAL:HG23	1.97	0.45
1:F:1219:ALA:HA	1:F:1229:MET:CE	2.45	0.45
2:G:317:LYS:CE	2:G:345:ILE:CD1	2.94	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:350:PRO:HG2	2:G:380:PRO:HA	1.98	0.45
2:H:141:THR:HB	2:H:142:PRO:CD	2.40	0.45
2:H:272:SER:O	2:H:273:LEU:HD13	2.16	0.45
2:H:317:LYS:NZ	2:H:390:VAL:HG11	2.31	0.45
2:H:324:ARG:HA	2:H:346:TRP:CZ2	2.46	0.45
2:H:350:PRO:HB3	2:H:372:ALA:HB1	1.97	0.45
2:H:419:ARG:HD3	2:H:419:ARG:C	2.37	0.45
2:I:362:VAL:HG12	2:I:362:VAL:O	2.15	0.45
2:J:88:ASN:OD1	2:J:91:PRO:HA	2.16	0.45
2:J:317:LYS:CE	2:J:345:ILE:HG13	2.47	0.45
2:K:145:GLU:O	2:K:145:GLU:HG2	2.12	0.45
2:K:272:SER:O	2:K:273:LEU:HD13	2.16	0.45
2:K:419:ARG:HD3	2:K:419:ARG:C	2.37	0.45
2:L:317:LYS:CE	2:L:345:ILE:HG13	2.47	0.45
2:L:317:LYS:NZ	2:L:390:VAL:HG11	2.31	0.45
2:L:362:VAL:O	2:L:362:VAL:HG12	2.15	0.45
2:L:423:LEU:CD2	2:L:423:LEU:H	2.25	0.45
1:A:5:PHE:CE2	1:A:365:GLY:HA3	2.50	0.45
1:A:260:MET:HA	1:A:263:LEU:HB2	1.98	0.45
1:A:266:VAL:HG12	1:A:266:VAL:O	2.16	0.45
1:A:428:GLU:O	1:A:429:LEU:C	2.52	0.45
1:A:636:LEU:HA	1:A:636:LEU:HD12	1.61	0.45
1:A:778:PHE:HE2	1:A:1039:LYS:HD2	1.66	0.45
1:A:974:ILE:HG22	1:A:974:ILE:O	2.16	0.45
1:A:1044:PRO:HG2	1:A:1047:MET:HE3	1.97	0.45
1:A:1244:THR:O	1:A:1245:ARG:C	2.51	0.45
1:A:1394:VAL:HG11	1:A:1401:LEU:HD23	1.98	0.45
1:B:24:ALA:C	1:B:26:LYS:H	2.19	0.45
1:B:426:LEU:HD23	1:B:543:LEU:HB3	1.93	0.45
1:B:782:ARG:CA	2:G:52:VAL:C	2.84	0.45
1:B:1070:ASP:OD1	1:B:1070:ASP:C	2.55	0.45
1:B:1468:VAL:HG12	1:B:1469:PRO:O	2.17	0.45
1:C:536:ASP:OD1	1:C:538:THR:N	2.49	0.45
1:C:560:ASP:C	1:C:562:MET:N	2.70	0.45
1:C:562:MET:CE	1:C:566:ALA:HB2	2.46	0.45
1:C:787:ARG:NH1	1:C:821:PRO:HB2	2.24	0.45
1:C:985:TYR:CE1	1:C:1207:VAL:HG11	2.52	0.45
1:C:1236:ARG:C	1:C:1238:THR:H	2.17	0.45
1:D:443:ASP:O	1:D:444:LYS:C	2.54	0.45
1:D:487:VAL:HG13	1:D:498:PHE:HE2	1.81	0.45
1:D:501:GLN:OE1	1:D:710:LYS:NZ	2.43	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:572:THR:HG23	1:D:616:ALA:O	2.15	0.45
1:D:632:ILE:HD12	1:D:632:ILE:HG23	1.66	0.45
1:D:790:TRP:CZ2	1:D:1074:LYS:HG2	2.51	0.45
1:D:806:SER:OG	1:D:809:THR:CB	2.64	0.45
1:D:1010:ALA:HB2	1:D:1052:VAL:HG22	1.97	0.45
1:D:1131:THR:HG22	1:D:1133:GLU:CA	2.46	0.45
1:E:197:ASP:OD1	1:E:199:ARG:N	2.38	0.45
1:E:359:THR:CG2	1:E:378:GLN:CA	2.95	0.45
1:E:459:GLU:O	1:E:463:LEU:CB	2.59	0.45
1:E:491:LYS:HZ2	1:E:785:GLY:HA3	1.80	0.45
1:E:500:ARG:NH2	1:E:1041:ALA:O	2.48	0.45
1:F:487:VAL:HG13	1:F:498:PHE:HE2	1.81	0.45
1:F:495:LEU:HA	1:F:495:LEU:HD12	1.36	0.45
1:F:689:LEU:O	1:F:690:GLU:C	2.55	0.45
1:F:824:GLN:NE2	1:F:824:GLN:CA	2.78	0.45
1:F:984:ILE:O	1:F:988:LYS:HG3	2.16	0.45
1:F:1062:ARG:HH11	1:F:1062:ARG:HD3	1.40	0.45
1:F:1141:PHE:O	1:F:1142:LEU:C	2.54	0.45
1:F:1170:GLN:OE1	1:F:1183:LEU:HB2	2.16	0.45
2:G:207:LEU:CD1	2:G:212:VAL:CG1	2.94	0.45
2:G:362:VAL:HG12	2:G:362:VAL:O	2.15	0.45
2:G:409:ALA:O	2:G:412:GLU:HB2	2.16	0.45
2:G:472:ALA:O	2:G:473:GLU:HB3	2.15	0.45
2:H:30:GLU:OE2	2:H:32:TYR:HB2	2.16	0.45
2:H:90:PHE:O	2:H:93:ILE:HG23	2.16	0.45
2:H:186:LEU:HD23	2:H:195:LEU:CD1	2.47	0.45
2:H:317:LYS:CE	2:H:345:ILE:HG13	2.47	0.45
2:H:350:PRO:HG2	2:H:380:PRO:HA	1.98	0.45
2:H:443:ILE:CD1	2:H:444:VAL:HG23	2.47	0.45
2:I:89:ASN:HD22	2:I:89:ASN:H	1.64	0.45
2:I:90:PHE:CE1	2:I:160:LEU:CB	3.00	0.45
2:I:215:HIS:CD2	2:I:218:PHE:HD1	2.35	0.45
2:I:240:THR:OG1	8:I:484:FAD:N7A	2.50	0.45
2:I:257:ASN:HD22	2:I:364:ALA:CB	2.29	0.45
2:I:430:LYS:HD2	2:I:459:ASP:OD1	2.17	0.45
2:J:71:LEU:HD21	2:J:76:ARG:CA	2.46	0.45
2:J:145:GLU:OE2	2:J:468:ALA:HB1	2.17	0.45
2:J:169:LYS:HZ3	2:J:461:ALA:HB1	1.82	0.45
2:J:272:SER:O	2:J:273:LEU:HD13	2.16	0.45
2:K:88:ASN:OD1	2:K:91:PRO:HA	2.16	0.45
2:K:96:ARG:NH2	2:K:199:VAL:HG21	2.31	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:K:415:LEU:HD11	2:K:423:LEU:CB	2.47	0.45
2:L:88:ASN:OD1	2:L:91:PRO:HA	2.16	0.45
2:L:272:SER:O	2:L:273:LEU:HD13	2.16	0.45
2:L:367:ILE:HD13	2:L:367:ILE:C	2.36	0.45
1:A:52:GLN:NE2	1:A:71:LEU:HB2	2.27	0.45
1:A:59:VAL:HG12	1:A:60:LYS:N	2.32	0.45
1:A:131:ILE:HG23	1:A:131:ILE:O	2.16	0.45
1:A:253:HIS:ND1	1:A:254:PRO:CG	2.71	0.45
1:A:316:LEU:O	1:A:317:ILE:C	2.53	0.45
1:A:357:ILE:HD11	1:A:400:LEU:HD21	1.98	0.45
1:A:842:GLU:HG2	1:A:1156:ARG:HH11	1.80	0.45
1:A:985:TYR:CE1	1:A:1207:VAL:HG11	2.52	0.45
1:A:1264:ILE:HG22	1:A:1284:ILE:HA	1.99	0.45
1:B:290:THR:HG22	1:B:292:PRO:N	2.31	0.45
1:B:428:GLU:O	1:B:429:LEU:C	2.51	0.45
1:B:689:LEU:O	1:B:690:GLU:C	2.55	0.45
1:B:790:TRP:CZ2	1:B:1074:LYS:HG2	2.51	0.45
1:B:883:ASP:O	1:B:884:SER:C	2.55	0.45
1:B:1016:ALA:O	1:B:1017:ASN:HB2	2.17	0.45
1:B:1058:LEU:HA	1:B:1058:LEU:HD23	1.63	0.45
1:C:56:LYS:HE2	1:C:67:PRO:O	2.17	0.45
1:C:582:LEU:CB	1:C:755:GLN:HE21	2.30	0.45
1:C:657:VAL:HG12	1:C:658:LEU:N	2.30	0.45
1:D:228:LEU:HD22	1:D:278:ASP:HA	1.98	0.45
1:D:414:LYS:HB3	1:D:415:PRO:CD	2.47	0.45
1:D:417:ASP:HA	1:D:420:VAL:CG1	2.45	0.45
1:D:1026:ASN:HB3	1:D:1043:LEU:N	2.32	0.45
1:D:1057:THR:HG22	1:D:1190:VAL:HG11	1.98	0.45
1:D:1061:LEU:O	1:D:1064:ARG:HB2	2.15	0.45
1:E:203:ASP:OD1	1:E:203:ASP:N	2.45	0.45
1:E:313:HIS:CD2	1:E:313:HIS:N	2.83	0.45
1:E:351:ARG:HH12	1:E:978:GLU:CD	2.19	0.45
1:E:479:MET:HB3	1:E:1106:ARG:NH1	2.31	0.45
1:E:833:SER:OG	1:E:834:THR:N	2.49	0.45
1:E:1005:GLY:O	1:E:1009:ILE:HD12	2.16	0.45
1:E:1084:MET:SD	1:E:1168:LEU:CD2	3.05	0.45
1:E:1264:ILE:HG22	1:E:1284:ILE:HA	1.98	0.45
1:F:582:LEU:O	1:F:585:ALA:HB3	2.17	0.45
1:F:631:LEU:HD22	1:F:631:LEU:HA	1.74	0.45
1:F:790:TRP:CZ2	1:F:1074:LYS:HG2	2.51	0.45
1:F:798:LEU:O	1:F:801:ALA:HB3	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:871:LEU:O	1:F:872:ASN:C	2.54	0.45
1:F:875:MET:CE	1:F:1139:PHE:HE2	2.25	0.45
1:F:918:THR:HG23	1:F:1256:MET:SD	2.56	0.45
1:F:1094:THR:O	1:F:1097:LEU:HB2	2.17	0.45
1:F:1438:ARG:CZ	2:G:376:GLY:C	2.84	0.45
2:G:110:ILE:HB	2:G:115:HIS:HE1	1.81	0.45
2:G:317:LYS:NZ	2:G:390:VAL:HG11	2.31	0.45
2:I:90:PHE:O	2:I:93:ILE:HG23	2.16	0.45
2:I:295:LEU:HD21	2:I:319:LEU:CD1	2.46	0.45
2:I:321:ARG:HH11	2:I:322:ARG:NH1	2.14	0.45
2:I:331:GLN:HA	2:I:334:VAL:HG21	1.97	0.45
2:I:406:LEU:N	2:I:407:PRO:HD2	2.32	0.45
2:J:28:PHE:N	2:J:28:PHE:CD1	2.84	0.45
2:J:230:ARG:CZ	2:J:434:MET:HE1	2.46	0.45
2:J:367:ILE:HD13	2:J:367:ILE:C	2.36	0.45
2:J:394:LEU:CD2	2:J:396:ILE:CD1	2.94	0.45
2:J:415:LEU:HD11	2:J:423:LEU:CB	2.47	0.45
2:K:49:GLN:HE22	2:K:69:LEU:CB	2.28	0.45
2:K:207:LEU:CD1	2:K:212:VAL:CG1	2.94	0.45
2:K:215:HIS:CD2	2:K:218:PHE:HD1	2.35	0.45
2:K:295:LEU:HD21	2:K:319:LEU:CD1	2.46	0.45
2:K:449:LEU:CG	2:K:451:VAL:HG12	2.46	0.45
2:L:169:LYS:HZ3	2:L:461:ALA:HB1	1.81	0.45
2:L:179:TYR:HB3	2:L:181:ARG:HH12	1.81	0.45
2:L:186:LEU:HD23	2:L:195:LEU:CD1	2.47	0.45
2:L:230:ARG:CZ	2:L:434:MET:CE	2.95	0.45
2:L:418:THR:CA	2:L:424:LEU:CD2	2.95	0.45
2:L:430:LYS:HD2	2:L:459:ASP:OD1	2.17	0.45
1:A:353:MET:HE2	1:A:366:GLY:C	2.32	0.45
1:A:387:PRO:HD2	1:A:1344:GLU:OE2	2.14	0.45
1:A:782:ARG:CB	2:J:52:VAL:HA	2.26	0.45
1:A:1084:MET:SD	1:A:1168:LEU:CD2	3.05	0.45
1:B:629:THR:O	1:B:632:ILE:HB	2.15	0.45
1:B:731:SER:HA	1:B:747:SER:HB2	1.99	0.45
1:C:179:TYR:HD2	1:C:192:TYR:CD2	2.34	0.45
1:C:357:ILE:HD11	1:C:400:LEU:CD2	2.47	0.45
1:C:376:GLU:O	1:C:378:GLN:N	2.49	0.45
1:C:833:SER:HB3	1:C:1153:LEU:HD22	1.98	0.45
1:C:940:GLU:O	1:C:969:PRO:HA	2.15	0.45
1:C:1045:TRP:O	1:C:1046:GLU:C	2.54	0.45
1:C:1315:LEU:HB3	1:C:1320:ASN:ND2	2.31	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:227:MET:HE3	1:D:282:GLU:CA	2.28	0.45
1:D:312:ASN:HB2	1:D:411:ALA:CB	2.46	0.45
1:D:375:ASP:OD2	1:D:377:THR:CB	2.61	0.45
1:D:413:LEU:O	1:D:414:LYS:HD2	2.16	0.45
1:D:670:LEU:HD23	1:D:670:LEU:HA	1.48	0.45
1:D:831:LEU:HD13	1:D:1084:MET:HE3	1.97	0.45
1:D:883:ASP:O	1:D:884:SER:C	2.55	0.45
1:D:1212:ASP:OD1	1:D:1243:GLY:N	2.34	0.45
1:D:1432:VAL:HG12	1:D:1433:THR:N	2.31	0.45
1:D:1435:THR:HG23	1:D:1437:SER:HB2	1.98	0.45
1:E:57:ASP:O	1:E:60:LYS:HB2	2.15	0.45
1:E:295:LYS:C	1:E:295:LYS:CD	2.83	0.45
1:E:559:ARG:NH1	1:E:568:GLU:OE2	2.48	0.45
1:E:608:ASP:O	1:E:611:MET:N	2.44	0.45
1:E:673:GLU:O	1:E:674:ALA:C	2.53	0.45
1:E:974:ILE:HG22	1:E:974:ILE:O	2.16	0.45
1:E:979:ASP:O	1:E:980:LEU:C	2.55	0.45
1:E:1102:CYS:SG	1:E:1104:MET:N	2.89	0.45
1:E:1435:THR:HG23	1:E:1437:SER:CB	2.47	0.45
1:F:125:ARG:HG3	1:F:219:TRP:CZ2	2.51	0.45
1:F:304:THR:HG21	1:F:518:ARG:HD2	1.99	0.45
1:F:355:TYR:C	1:F:355:TYR:HD1	2.20	0.45
1:F:414:LYS:HB3	1:F:415:PRO:CD	2.47	0.45
1:F:621:ILE:HG12	1:F:657:VAL:HG11	1.97	0.45
1:F:743:VAL:HG12	1:F:744:SER:N	2.30	0.45
2:G:418:THR:CA	2:G:424:LEU:CD2	2.95	0.45
2:G:423:LEU:CD2	2:G:423:LEU:H	2.25	0.45
2:G:423:LEU:CD2	2:G:423:LEU:N	2.80	0.45
2:H:145:GLU:OE2	2:H:468:ALA:HB1	2.17	0.45
2:H:449:LEU:CG	2:H:451:VAL:HG12	2.46	0.45
2:I:63:ASN:HD21	2:I:83:VAL:HG12	1.79	0.45
2:I:81:TYR:CD1	2:I:131:ALA:CB	2.99	0.45
2:I:91:PRO:HD2	2:I:203:ARG:HH21	1.78	0.45
2:I:110:ILE:HB	2:I:115:HIS:HE1	1.81	0.45
2:I:317:LYS:NZ	2:I:390:VAL:HG11	2.31	0.45
2:J:90:PHE:O	2:J:93:ILE:HG23	2.16	0.45
2:J:430:LYS:HD2	2:J:459:ASP:OD1	2.17	0.45
2:J:443:ILE:CD1	2:J:444:VAL:HG23	2.47	0.45
2:K:30:GLU:OE2	2:K:32:TYR:HB2	2.16	0.45
2:K:429:THR:CG2	2:K:431:MET:HE2	2.46	0.45
2:K:443:ILE:CD1	2:K:444:VAL:HG23	2.47	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:110:ILE:HB	2:L:115:HIS:HE1	1.81	0.45
2:L:240:THR:OG1	8:L:484:FAD:N7A	2.50	0.45
2:L:322:ARG:CD	2:L:349:ALA:CB	2.94	0.45
2:L:443:ILE:CD1	2:L:444:VAL:HG23	2.47	0.45
1:A:30:HIS:N	1:A:30:HIS:CD2	2.85	0.45
1:A:52:GLN:O	1:A:56:LYS:HB2	2.16	0.45
1:A:110:VAL:HG12	1:A:111:PRO:O	2.17	0.45
1:A:250:ARG:NH2	1:A:639:PHE:CE1	2.79	0.45
1:A:636:LEU:C	1:A:638:THR:N	2.68	0.45
1:B:85:ALA:O	1:B:86:GLN:C	2.53	0.45
1:B:414:LYS:HB3	1:B:415:PRO:CD	2.47	0.45
1:B:643:ASN:HB3	1:B:665:THR:HG22	1.98	0.45
1:B:798:LEU:O	1:B:801:ALA:HB3	2.16	0.45
1:B:1094:THR:O	1:B:1097:LEU:HB2	2.17	0.45
1:B:1420:TYR:C	1:B:1422:SER:N	2.69	0.45
1:B:1431:HIS:O	1:B:1432:VAL:C	2.54	0.45
1:B:1432:VAL:HG12	1:B:1433:THR:N	2.31	0.45
1:B:1438:ARG:CD	2:H:377:ARG:N	2.41	0.45
1:C:216:PHE:HA	1:C:217:PRO:HD3	1.73	0.45
1:C:295:LYS:HE2	1:C:299:VAL:HG11	1.98	0.45
1:C:295:LYS:HZ1	1:C:299:VAL:HG12	1.76	0.45
1:C:316:LEU:C	1:C:316:LEU:HD12	2.36	0.45
1:C:673:GLU:O	1:C:674:ALA:C	2.53	0.45
1:C:704:LEU:C	1:C:706:LYS:H	2.20	0.45
1:D:582:LEU:O	1:D:585:ALA:HB3	2.17	0.45
1:D:787:ARG:H	1:D:787:ARG:HG3	1.23	0.45
1:D:1075:THR:HG22	1:D:1076:GLY:N	2.31	0.45
1:D:1201:LEU:HD22	1:D:1201:LEU:N	2.32	0.45
1:D:1424:LEU:CD2	1:D:1428:ILE:HD11	2.46	0.45
1:E:449:ARG:HD3	1:E:765:ALA:O	2.17	0.45
1:E:531:ASN:C	1:E:533:LEU:H	2.18	0.45
1:E:687:MET:HA	1:E:688:PRO:HD3	1.83	0.45
1:E:992:PRO:HA	1:E:1204:ARG:NH2	2.32	0.45
1:F:230:HIS:HE1	1:F:234:ILE:HG13	1.82	0.45
1:F:413:LEU:O	1:F:414:LYS:HD2	2.16	0.45
1:F:787:ARG:O	1:F:788:HIS:ND1	2.49	0.45
2:G:30:GLU:OE2	2:G:32:TYR:HB2	2.16	0.45
2:G:81:TYR:CD1	2:G:131:ALA:CB	2.99	0.45
2:G:186:LEU:HD23	2:G:195:LEU:CD1	2.47	0.45
2:G:230:ARG:CZ	2:G:434:MET:CE	2.95	0.45
2:G:367:ILE:HD12	2:G:369:LEU:HD11	1.93	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:447:ALA:HB1	2:H:452:TRP:CD2	2.50	0.45
2:I:317:LYS:CE	2:I:345:ILE:HG13	2.47	0.45
2:J:89:ASN:HD22	2:J:89:ASN:H	1.64	0.45
2:J:161:ALA:CB	2:J:454:ILE:HG12	2.40	0.45
2:J:249:LYS:CD	2:J:258:ILE:HD13	2.47	0.45
2:J:266:THR:HG23	2:J:270:LYS:HZ2	1.81	0.45
2:J:276:THR:HG22	2:J:277:VAL:N	2.31	0.45
2:J:447:ALA:HB1	2:J:452:TRP:CD2	2.50	0.45
2:K:230:ARG:CZ	2:K:434:MET:CE	2.95	0.45
2:K:321:ARG:HH11	2:K:322:ARG:NH1	2.14	0.45
2:K:350:PRO:HG2	2:K:380:PRO:HA	1.98	0.45
2:K:409:ALA:O	2:K:412:GLU:HB2	2.16	0.45
2:K:423:LEU:CD2	2:K:423:LEU:N	2.80	0.45
2:L:257:ASN:HD22	2:L:364:ALA:CB	2.29	0.45
1:A:103:TYR:HD2	1:A:105:TYR:CE1	2.35	0.45
1:A:184:LEU:HB3	1:A:186:GLU:HG3	1.99	0.45
1:A:572:THR:HG21	1:A:615:ARG:HE	1.82	0.45
1:A:1170:GLN:O	1:A:1170:GLN:HG2	2.16	0.45
1:B:12:LYS:HA	1:B:13:PRO:HD3	1.75	0.45
1:B:757:LYS:O	1:B:758:VAL:C	2.53	0.45
1:B:1236:ARG:C	1:B:1238:THR:N	2.70	0.45
1:B:1417:VAL:CG1	1:B:1419:HIS:H	2.28	0.45
1:C:184:LEU:HB3	1:C:186:GLU:HG3	1.99	0.45
1:C:248:GLU:OE2	1:C:266:VAL:N	2.44	0.45
1:C:253:HIS:CD2	1:C:254:PRO:HD2	2.40	0.45
1:C:479:MET:HB3	1:C:1106:ARG:NH1	2.31	0.45
1:C:495:LEU:HD12	1:C:495:LEU:HA	1.53	0.45
1:C:1052:VAL:O	1:C:1053:HIS:C	2.51	0.45
1:C:1084:MET:SD	1:C:1168:LEU:CD2	3.05	0.45
1:C:1415:ILE:HG21	1:C:1421:GLU:CB	2.44	0.45
1:D:559:ARG:O	1:D:559:ARG:NE	2.46	0.45
1:D:629:THR:O	1:D:632:ILE:HB	2.15	0.45
1:D:689:LEU:O	1:D:690:GLU:C	2.55	0.45
1:D:826:ARG:NH1	1:D:826:ARG:CG	2.67	0.45
1:D:991:ASN:HA	1:D:992:PRO:HD2	1.83	0.45
1:D:1068:ARG:NH2	1:D:1089:GLU:OE1	2.46	0.45
1:E:565:THR:HG22	1:E:565:THR:O	2.15	0.45
1:E:1170:GLN:HG2	1:E:1170:GLN:O	2.16	0.45
1:E:1401:LEU:N	1:E:1402:PRO:CD	2.79	0.45
1:F:447:LEU:HD11	1:F:451:GLN:CD	2.36	0.45
1:F:702:ASP:O	1:F:703:GLY:C	2.55	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:934:GLN:HE21	1:F:934:GLN:HB2	1.58	0.45
1:F:1080:VAL:O	1:F:1081:ILE:C	2.54	0.45
1:F:1432:VAL:HG12	1:F:1433:THR:N	2.31	0.45
2:G:81:TYR:HD1	2:G:128:ASN:HA	1.81	0.45
2:G:88:ASN:OD1	2:G:91:PRO:HA	2.16	0.45
2:G:269:ASN:HD22	2:G:273:LEU:CD2	2.30	0.45
2:G:295:LEU:HD21	2:G:319:LEU:CD1	2.46	0.45
2:G:406:LEU:N	2:G:407:PRO:HD2	2.32	0.45
2:G:443:ILE:CD1	2:G:444:VAL:HG23	2.47	0.45
2:G:449:LEU:CG	2:G:451:VAL:HG12	2.46	0.45
2:H:249:LYS:CD	2:H:258:ILE:HD13	2.47	0.45
2:H:266:THR:HG23	2:H:270:LYS:HZ2	1.81	0.45
2:H:295:LEU:HD21	2:H:319:LEU:CD1	2.46	0.45
2:H:409:ALA:O	2:H:412:GLU:HB2	2.16	0.45
2:I:269:ASN:HD22	2:I:273:LEU:CD2	2.30	0.45
2:J:321:ARG:HH11	2:J:322:ARG:NH1	2.14	0.45
2:J:449:LEU:CD2	2:J:451:VAL:CG1	2.89	0.45
2:K:71:LEU:HD21	2:K:76:ARG:C	2.37	0.45
2:K:71:LEU:HD21	2:K:76:ARG:CA	2.46	0.45
2:K:81:TYR:CD1	2:K:131:ALA:CB	2.99	0.45
2:K:90:PHE:CE1	2:K:160:LEU:CB	3.00	0.45
2:K:317:LYS:CE	2:K:345:ILE:HG13	2.47	0.45
2:K:371:VAL:CG2	2:K:386:SER:CB	2.94	0.45
2:L:350:PRO:HG3	2:L:380:PRO:HA	1.98	0.45
2:L:350:PRO:HG2	2:L:374:ALA:HA	1.99	0.45
2:L:449:LEU:CG	2:L:451:VAL:HG12	2.46	0.45
1:A:244:MET:HE3	1:A:244:MET:HB2	1.50	0.45
1:A:500:ARG:NH2	1:A:1041:ALA:O	2.48	0.45
1:A:1131:THR:HG22	1:A:1133:GLU:H	1.81	0.45
1:A:1141:PHE:O	1:A:1142:LEU:C	2.55	0.45
1:A:1415:ILE:HG21	1:A:1421:GLU:CB	2.44	0.45
1:A:1438:ARG:O	1:A:1441:ALA:N	2.49	0.45
1:B:416:TRP:O	1:B:419:TRP:HB2	2.16	0.45
1:B:561:TYR:CD1	1:B:561:TYR:C	2.90	0.45
1:B:875:MET:HE2	1:B:1139:PHE:CE2	2.48	0.45
1:B:1075:THR:HG22	1:B:1076:GLY:N	2.31	0.45
1:B:1170:GLN:OE1	1:B:1183:LEU:HB2	2.17	0.45
1:B:1329:TYR:HD1	1:B:1348:VAL:HG13	1.82	0.45
1:B:1366:GLU:CG	1:B:1367:TYR:CE2	3.00	0.45
1:C:353:MET:CE	1:C:366:GLY:C	2.82	0.45
1:C:370:GLY:CA	1:C:1237:ASN:HB3	2.45	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:417:ASP:O	1:C:418:LYS:C	2.52	0.45
1:C:636:LEU:C	1:C:638:THR:N	2.68	0.45
1:C:974:ILE:O	1:C:974:ILE:HG22	2.16	0.45
1:C:1170:GLN:O	1:C:1170:GLN:HG2	2.16	0.45
1:D:284:MET:HE2	1:D:294:VAL:HG13	1.99	0.45
1:D:447:LEU:HD11	1:D:451:GLN:CD	2.36	0.45
1:D:787:ARG:O	1:D:788:HIS:ND1	2.49	0.45
1:D:1094:THR:O	1:D:1097:LEU:HB2	2.17	0.45
1:D:1114:PRO:HB2	1:D:1115:VAL:HG23	1.97	0.45
1:D:1219:ALA:HA	1:D:1229:MET:HE1	1.98	0.45
1:D:1452:THR:O	1:D:1452:THR:CG2	2.64	0.45
1:E:56:LYS:HE2	1:E:67:PRO:O	2.17	0.45
1:E:428:GLU:O	1:E:429:LEU:C	2.52	0.45
1:E:780:ARG:CB	2:L:51:GLY:O	2.64	0.45
1:E:784:SER:HB3	1:E:785:GLY:H	1.66	0.45
1:E:937:LYS:CE	1:E:1033:SER:HB2	2.41	0.45
1:F:359:THR:HG23	1:F:378:GLN:O	2.16	0.45
1:F:595:ASP:O	1:F:596:ALA:C	2.51	0.45
1:F:696:TYR:CZ	1:F:700:ILE:HD11	2.52	0.45
1:F:701:ASP:C	1:F:703:GLY:N	2.69	0.45
1:F:777:GLY:CA	2:I:52:VAL:HG11	2.37	0.45
1:F:883:ASP:O	1:F:884:SER:C	2.55	0.45
1:F:1201:LEU:HD22	1:F:1201:LEU:N	2.32	0.45
1:F:1452:THR:O	1:F:1452:THR:CG2	2.64	0.45
2:G:271:VAL:CG1	2:G:281:GLU:CG	2.95	0.45
2:G:317:LYS:CE	2:G:345:ILE:HG13	2.47	0.45
2:G:350:PRO:HG3	2:G:380:PRO:CA	2.47	0.45
2:G:394:LEU:CD2	2:G:396:ILE:CD1	2.94	0.45
2:G:424:LEU:HD13	2:G:424:LEU:HA	1.75	0.45
2:G:430:LYS:HD2	2:G:459:ASP:OD1	2.17	0.45
2:G:447:ALA:HB1	2:G:452:TRP:CD2	2.50	0.45
2:H:191:PRO:HB2	2:H:193:PHE:CE2	2.52	0.45
2:H:383:ILE:HD13	2:H:383:ILE:C	2.37	0.45
2:H:415:LEU:HD22	2:H:415:LEU:C	2.37	0.45
2:H:480:ALA:O	2:H:481:GLU:HB3	2.15	0.45
2:I:102:ARG:HG3	2:I:330:SER:OG	2.17	0.45
2:I:179:TYR:HB3	2:I:181:ARG:HH12	1.81	0.45
2:I:409:ALA:O	2:I:412:GLU:HB2	2.16	0.45
2:I:415:LEU:HD22	2:I:415:LEU:C	2.37	0.45
2:J:90:PHE:CE1	2:J:160:LEU:CB	2.99	0.45
2:J:93:ILE:HD11	2:J:195:LEU:CD2	2.30	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:148:LEU:HB3	2:J:234:VAL:HG23	1.98	0.45
2:J:269:ASN:HD22	2:J:273:LEU:CD2	2.30	0.45
2:J:383:ILE:HD13	2:J:383:ILE:C	2.37	0.45
2:L:51:GLY:O	2:L:52:VAL:HG23	2.16	0.45
2:L:321:ARG:HH11	2:L:322:ARG:NH1	2.14	0.45
2:L:430:LYS:CE	2:L:456:ASP:HB3	2.43	0.45
1:A:443:ASP:C	1:A:445:ALA:N	2.70	0.45
1:A:531:ASN:C	1:A:533:LEU:H	2.18	0.45
1:A:833:SER:OG	1:A:834:THR:N	2.49	0.45
1:A:1432:VAL:O	1:A:1433:THR:C	2.53	0.45
1:B:802:VAL:CG2	1:B:1137:ASN:HB2	2.46	0.45
1:B:1080:VAL:O	1:B:1081:ILE:C	2.54	0.45
1:C:131:ILE:O	1:C:131:ILE:HG23	2.16	0.45
1:C:521:SER:C	1:C:522:LEU:HD23	2.38	0.45
1:C:608:ASP:O	1:C:611:MET:N	2.44	0.45
1:C:780:ARG:CB	2:K:51:GLY:O	2.64	0.45
1:C:782:ARG:C	1:C:784:SER:N	2.70	0.45
1:C:897:ASP:OD1	1:C:899:ASN:N	2.50	0.45
1:C:1084:MET:SD	1:C:1168:LEU:HD21	2.57	0.45
1:C:1394:VAL:HG11	1:C:1401:LEU:HD23	1.98	0.45
1:C:1445:ASN:HB2	2:J:373:ASP:OD2	2.17	0.45
1:D:528:ASN:O	1:D:529:LEU:HD23	2.17	0.45
1:D:558:MET:C	1:D:560:ASP:N	2.69	0.45
1:D:571:ALA:HB2	1:D:606:LEU:HD22	1.98	0.45
1:D:782:ARG:CA	2:H:52:VAL:C	2.84	0.45
1:D:1080:VAL:O	1:D:1081:ILE:C	2.54	0.45
1:D:1400:SER:O	1:D:1401:LEU:C	2.56	0.45
1:D:1420:TYR:C	1:D:1422:SER:N	2.69	0.45
1:E:317:ILE:C	1:E:321:ASN:HD22	2.18	0.45
1:E:360:ASP:OD1	1:E:360:ASP:N	2.49	0.45
1:E:442:MET:HE3	1:E:447:LEU:N	2.32	0.45
1:E:852:ARG:NH1	1:E:1088:GLU:O	2.50	0.45
1:E:1366:GLU:HG2	1:E:1367:TYR:CE2	2.47	0.45
1:F:85:ALA:O	1:F:86:GLN:C	2.53	0.45
1:F:700:ILE:O	1:F:703:GLY:N	2.49	0.45
1:F:787:ARG:H	1:F:787:ARG:HG3	1.23	0.45
1:F:848:ALA:O	1:F:849:ILE:C	2.54	0.45
1:F:878:ILE:HG21	1:F:878:ILE:HD13	1.66	0.45
1:F:991:ASN:HA	1:F:992:PRO:HD2	1.83	0.45
1:F:1468:VAL:HG12	1:F:1469:PRO:O	2.17	0.45
2:G:145:GLU:OE2	2:G:468:ALA:HB1	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:331:GLN:HA	2:G:334:VAL:HG21	1.98	0.45
2:H:71:LEU:HD21	2:H:76:ARG:C	2.37	0.45
2:H:230:ARG:CZ	2:H:434:MET:HE1	2.46	0.45
2:H:305:VAL:HG22	2:H:316:VAL:CG1	2.47	0.45
2:H:367:ILE:HD13	2:H:367:ILE:C	2.36	0.45
2:H:406:LEU:N	2:H:407:PRO:HD2	2.32	0.45
2:H:426:ASP:O	2:H:430:LYS:HA	2.17	0.45
2:I:34:ARG:HG3	2:I:125:LYS:CE	2.46	0.45
2:I:77:LEU:CA	2:I:127:ILE:CD1	2.93	0.45
2:I:153:ILE:CG1	2:I:220:VAL:CG1	2.95	0.45
2:I:186:LEU:HD23	2:I:195:LEU:CD1	2.47	0.45
2:I:191:PRO:HB2	2:I:193:PHE:CE2	2.52	0.45
2:I:249:LYS:CD	2:I:258:ILE:HD13	2.47	0.45
2:I:365:VAL:HG22	2:I:366:ARG:CG	2.40	0.45
2:I:415:LEU:HD11	2:I:423:LEU:CB	2.47	0.45
2:J:71:LEU:HD21	2:J:76:ARG:C	2.37	0.45
2:J:81:TYR:CD1	2:J:131:ALA:CB	2.99	0.45
2:J:203:ARG:HB3	2:J:203:ARG:NH2	2.31	0.45
2:J:350:PRO:HG3	2:J:380:PRO:HA	1.98	0.45
2:J:350:PRO:HG2	2:J:374:ALA:HA	1.99	0.45
2:K:191:PRO:HB2	2:K:193:PHE:CE2	2.52	0.45
2:L:96:ARG:HE	2:L:199:VAL:HG21	1.82	0.45
2:L:276:THR:HG22	2:L:277:VAL:N	2.31	0.45
2:L:297:GLY:O	2:L:327:MET:HE3	2.17	0.45
2:L:351:GLU:CB	2:L:353:PHE:HB3	2.47	0.45
2:L:406:LEU:N	2:L:407:PRO:HD2	2.32	0.45
2:L:419:ARG:HD3	2:L:419:ARG:C	2.37	0.45
2:L:423:LEU:CD2	2:L:423:LEU:N	2.80	0.45
1:A:521:SER:C	1:A:522:LEU:HD23	2.38	0.45
1:A:660:GLY:HA2	1:A:721:GLY:N	2.32	0.45
1:A:1005:GLY:O	1:A:1009:ILE:HD12	2.16	0.45
1:A:1289:MET:H	1:A:1289:MET:HE2	1.78	0.45
1:A:1395:TYR:HE1	1:A:1397:LEU:HG	1.82	0.45
1:B:286:ARG:HD3	1:B:286:ARG:HA	1.55	0.45
1:B:571:ALA:HB2	1:B:606:LEU:HD22	1.98	0.45
1:B:582:LEU:O	1:B:585:ALA:HB3	2.17	0.45
1:B:671:ALA:O	1:B:675:ILE:HD12	2.17	0.45
1:B:1164:ARG:HB3	1:B:1167:LEU:CD1	2.47	0.45
1:B:1204:ARG:O	1:B:1205:ASN:C	2.51	0.45
1:B:1420:TYR:OH	1:B:1466:LEU:CD2	2.65	0.45
1:C:103:TYR:HD2	1:C:105:TYR:CE1	2.35	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:251:MET:HB2	1:C:533:LEU:CD1	2.43	0.45
1:C:369:THR:C	1:C:371:MET:H	2.20	0.45
1:C:555:PHE:HD1	1:C:556:ARG:N	2.15	0.45
1:C:588:ARG:HH11	1:C:588:ARG:HD3	1.59	0.45
1:C:852:ARG:NH1	1:C:1088:GLU:O	2.50	0.45
1:C:938:PRO:O	1:C:939:GLY:C	2.53	0.45
1:C:969:PRO:CD	1:C:970:PRO:HD2	2.46	0.45
1:C:992:PRO:HA	1:C:1204:ARG:NH2	2.32	0.45
1:D:1366:GLU:CG	1:D:1367:TYR:CE2	3.00	0.45
1:D:1440:ALA:O	1:D:1441:ALA:C	2.53	0.45
1:E:6:ILE:HD13	1:E:20:LYS:HB2	1.99	0.45
1:E:98:LEU:HD23	1:E:98:LEU:HA	1.82	0.45
1:E:103:TYR:HD2	1:E:105:TYR:CE1	2.35	0.45
1:E:142:GLU:CD	1:E:142:GLU:N	2.58	0.45
1:E:184:LEU:HB3	1:E:186:GLU:HG3	1.99	0.45
1:E:634:SER:O	1:E:635:ASN:HB2	2.16	0.45
1:E:704:LEU:C	1:E:706:LYS:H	2.20	0.45
1:E:1139:PHE:N	1:E:1139:PHE:HD1	2.16	0.45
1:E:1159:ASN:O	1:E:1161:VAL:N	2.50	0.45
1:E:1395:TYR:HE1	1:E:1397:LEU:HG	1.82	0.45
1:F:777:GLY:C	2:I:52:VAL:CG1	2.83	0.45
1:F:1076:GLY:N	1:F:1145:GLU:OE2	2.49	0.45
1:F:1376:LEU:HD23	1:F:1376:LEU:HA	1.63	0.45
1:F:1400:SER:O	1:F:1401:LEU:C	2.56	0.45
2:G:230:ARG:CZ	2:G:434:MET:HE1	2.46	0.45
2:G:350:PRO:HG3	2:G:380:PRO:HA	1.98	0.45
2:G:419:ARG:HD3	2:G:419:ARG:C	2.37	0.45
2:H:317:LYS:CE	2:H:345:ILE:CD1	2.94	0.45
2:I:71:LEU:HD21	2:I:76:ARG:CA	2.46	0.45
2:I:443:ILE:CD1	2:I:444:VAL:HG23	2.47	0.45
2:J:292:VAL:HG22	2:J:394:LEU:CD1	2.30	0.45
2:J:415:LEU:HD22	2:J:415:LEU:C	2.37	0.45
2:J:430:LYS:CE	2:J:456:ASP:HB3	2.43	0.45
2:K:34:ARG:HG3	2:K:125:LYS:CE	2.46	0.45
2:K:51:GLY:O	2:K:52:VAL:HG23	2.16	0.45
2:K:53:PRO:HD2	2:K:56:GLN:HE21	1.82	0.45
2:L:71:LEU:HD21	2:L:76:ARG:CA	2.46	0.45
2:L:295:LEU:HD21	2:L:319:LEU:CD1	2.46	0.45
2:L:383:ILE:HD13	2:L:383:ILE:C	2.37	0.45
2:L:409:ALA:O	2:L:412:GLU:HB2	2.16	0.45
2:L:415:LEU:HD11	2:L:423:LEU:CB	2.47	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:458:ARG:HB3	2:L:458:ARG:NH2	2.32	0.45
1:A:291:ALA:CB	1:A:292:PRO:HD3	2.31	0.44
1:A:293:MET:HE3	1:A:293:MET:HB3	1.93	0.44
1:A:555:PHE:HD1	1:A:556:ARG:N	2.14	0.44
1:A:565:THR:HG22	1:A:603:HIS:HD2	1.83	0.44
1:A:780:ARG:HH21	2:J:54:PHE:HD1	1.60	0.44
1:A:819:LYS:HD3	1:A:819:LYS:HA	1.73	0.44
1:A:896:PRO:HG3	1:C:1225:GLU:CB	2.45	0.44
1:A:1159:ASN:O	1:A:1161:VAL:N	2.51	0.44
1:B:186:GLU:H	1:B:186:GLU:HG3	1.05	0.44
1:B:359:THR:HG23	1:B:378:GLN:O	2.16	0.44
1:B:443:ASP:O	1:B:444:LYS:C	2.54	0.44
1:B:513:SER:CB	1:B:520:MET:HE1	2.29	0.44
1:B:589:ILE:O	1:B:593:THR:OG1	2.28	0.44
1:B:806:SER:OG	1:B:809:THR:CB	2.64	0.44
1:B:869:GLY:O	1:B:870:THR:C	2.52	0.44
1:B:957:ARG:HD2	1:B:965:LEU:CD1	2.47	0.44
1:B:1068:ARG:HA	1:B:1089:GLU:O	2.17	0.44
1:B:1452:THR:O	1:B:1452:THR:CG2	2.64	0.44
1:C:6:ILE:HD13	1:C:20:LYS:HB2	1.99	0.44
1:C:292:PRO:O	1:C:293:MET:C	2.55	0.44
1:C:353:MET:HE2	1:C:366:GLY:C	2.31	0.44
1:C:359:THR:CG2	1:C:378:GLN:CA	2.95	0.44
1:C:510:PRO:CD	1:C:970:PRO:HB3	2.37	0.44
1:C:575:VAL:HG13	1:C:759:LEU:CD2	2.48	0.44
1:C:900:GLY:HA2	1:E:1263:HIS:CE1	2.31	0.44
1:D:30:HIS:HD2	1:D:31:ARG:H	1.65	0.44
1:D:561:TYR:CD1	1:D:561:TYR:C	2.90	0.44
1:D:957:ARG:NH2	5:D:2475:AKG:O4	2.40	0.44
1:D:984:ILE:O	1:D:988:LYS:HG3	2.16	0.44
1:D:1068:ARG:HA	1:D:1089:GLU:O	2.17	0.44
1:D:1124:LEU:HA	1:D:1124:LEU:HD12	1.30	0.44
1:D:1374:VAL:HG12	1:D:1375:ILE:N	2.32	0.44
1:D:1468:VAL:HG12	1:D:1469:PRO:O	2.17	0.44
1:E:110:VAL:HG12	1:E:111:PRO:O	2.17	0.44
1:E:197:ASP:OD2	1:E:199:ARG:NH2	2.50	0.44
1:E:309:THR:HB	1:E:314:LYS:HE3	1.99	0.44
1:E:357:ILE:HD11	1:E:400:LEU:CD2	2.47	0.44
1:E:452:GLN:NE2	1:E:764:THR:HG23	1.99	0.44
1:E:554:GLU:OE2	1:E:697:LYS:HE3	2.17	0.44
1:E:961:PRO:C	1:E:963:VAL:H	2.20	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1445:ASN:HB2	2:K:373:ASP:OD2	2.17	0.44
1:E:1458:VAL:HA	1:E:1459:PRO:HD3	1.65	0.44
1:F:12:LYS:HA	1:F:13:PRO:HD3	1.75	0.44
1:F:100:PHE:O	1:F:137:LYS:CE	2.46	0.44
1:F:508:ASN:HB2	1:F:509:PRO:CD	2.47	0.44
1:F:1003:ARG:NH1	1:F:1004:SER:O	2.50	0.44
1:F:1068:ARG:HA	1:F:1089:GLU:O	2.17	0.44
2:H:281:GLU:HG3	2:H:281:GLU:O	2.17	0.44
2:H:350:PRO:HG2	2:H:374:ALA:HA	1.99	0.44
2:H:394:LEU:CD2	2:H:396:ILE:CD1	2.94	0.44
2:I:166:LEU:HD23	2:I:461:ALA:CB	2.36	0.44
2:I:203:ARG:HB3	2:I:203:ARG:NH2	2.31	0.44
2:I:215:HIS:HD2	2:I:218:PHE:HD1	1.65	0.44
2:I:272:SER:O	2:I:273:LEU:HD13	2.16	0.44
2:I:418:THR:CA	2:I:424:LEU:CD2	2.95	0.44
2:I:419:ARG:HD3	2:I:419:ARG:C	2.37	0.44
2:J:102:ARG:HG3	2:J:330:SER:OG	2.17	0.44
2:J:186:LEU:HD23	2:J:195:LEU:CD1	2.47	0.44
2:J:191:PRO:HB2	2:J:193:PHE:CE2	2.52	0.44
2:K:166:LEU:HD22	2:K:169:LYS:HE2	2.00	0.44
2:K:249:LYS:CD	2:K:258:ILE:HD13	2.47	0.44
2:K:350:PRO:HG3	2:K:380:PRO:CA	2.47	0.44
2:K:394:LEU:CD2	2:K:396:ILE:CD1	2.95	0.44
2:K:415:LEU:HD22	2:K:415:LEU:C	2.37	0.44
2:L:215:HIS:HD2	2:L:218:PHE:HD1	1.65	0.44
2:L:426:ASP:O	2:L:430:LYS:HA	2.17	0.44
1:A:183:PHE:HE1	1:A:188:LEU:HA	1.79	0.44
1:A:897:ASP:OD1	1:A:899:ASN:N	2.50	0.44
1:A:1001:VAL:O	1:A:1002:SER:C	2.55	0.44
1:A:1084:MET:SD	1:A:1168:LEU:HD21	2.57	0.44
1:B:207:TYR:CD1	1:B:207:TYR:N	2.85	0.44
1:B:228:LEU:HD22	1:B:278:ASP:HA	1.98	0.44
1:B:985:TYR:O	1:B:988:LYS:N	2.50	0.44
1:B:1374:VAL:HG12	1:B:1375:ILE:N	2.32	0.44
1:C:110:VAL:HG12	1:C:111:PRO:O	2.17	0.44
1:C:989:GLN:O	1:C:1245:ARG:HD3	2.16	0.44
1:C:1245:ARG:O	1:C:1246:LEU:C	2.55	0.44
1:C:1360:CYS:O	1:C:1361:GLY:O	2.35	0.44
1:D:78:LEU:HB3	1:D:79:PRO:CD	2.48	0.44
1:D:139:VAL:CG1	1:D:140:SER:N	2.35	0.44
1:D:207:TYR:CD1	1:D:207:TYR:N	2.85	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:289:ARG:NH1	1:D:535:GLU:HB2	2.32	0.44
1:D:520:MET:HE3	1:D:705:LEU:HB3	1.98	0.44
1:D:1006:ILE:HG23	1:D:1007:GLY:N	2.32	0.44
1:E:420:VAL:O	1:E:422:ASN:N	2.50	0.44
1:E:443:ASP:C	1:E:445:ALA:N	2.70	0.44
1:E:780:ARG:NH2	2:L:54:PHE:CD1	2.80	0.44
1:E:857:GLY:N	1:E:883:ASP:HB3	2.31	0.44
1:E:985:TYR:CE1	1:E:1207:VAL:HG11	2.52	0.44
1:E:987:LEU:HD23	1:E:987:LEU:HA	1.70	0.44
1:E:1003:ARG:HH11	1:E:1003:ARG:CG	2.29	0.44
1:F:345:MET:HG3	1:F:346:ASP:N	2.32	0.44
1:F:1006:ILE:HG23	1:F:1007:GLY:N	2.33	0.44
2:G:429:THR:CB	2:G:431:MET:HE2	2.48	0.44
2:G:462:GLU:O	2:G:465:HIS:HB3	2.18	0.44
2:H:415:LEU:HD11	2:H:423:LEU:CB	2.47	0.44
2:H:430:LYS:HD2	2:H:459:ASP:OD1	2.17	0.44
2:I:28:PHE:CD1	2:I:28:PHE:N	2.84	0.44
2:I:31:ILE:HD11	2:I:194:LYS:HG2	2.00	0.44
2:I:96:ARG:HE	2:I:199:VAL:HG21	1.82	0.44
2:I:165:GLU:HB3	2:I:169:LYS:HZ2	1.79	0.44
2:I:230:ARG:CZ	2:I:434:MET:CE	2.95	0.44
2:I:305:VAL:HG22	2:I:316:VAL:CG1	2.47	0.44
2:I:383:ILE:HD13	2:I:383:ILE:C	2.37	0.44
2:I:458:ARG:HB3	2:I:458:ARG:NH2	2.32	0.44
2:J:179:TYR:HB3	2:J:181:ARG:HH12	1.81	0.44
2:J:271:VAL:CG1	2:J:281:GLU:CG	2.95	0.44
2:J:295:LEU:HD21	2:J:319:LEU:CD1	2.46	0.44
2:J:302:MET:CE	2:J:334:VAL:CA	2.95	0.44
2:J:305:VAL:HG22	2:J:316:VAL:CG1	2.47	0.44
2:J:317:LYS:NZ	2:J:390:VAL:HG11	2.31	0.44
2:K:102:ARG:HG3	2:K:330:SER:OG	2.17	0.44
2:K:186:LEU:HD23	2:K:195:LEU:CD1	2.47	0.44
2:K:383:ILE:HD13	2:K:383:ILE:C	2.37	0.44
2:K:405:ASP:OD1	2:K:407:PRO:HD2	2.18	0.44
2:K:418:THR:CA	2:K:424:LEU:CD2	2.95	0.44
2:L:96:ARG:NH2	2:L:199:VAL:HG21	2.31	0.44
2:L:118:VAL:HG22	2:L:118:VAL:H	1.08	0.44
2:L:443:ILE:HD12	2:L:444:VAL:HG23	1.99	0.44
1:A:197:ASP:OD2	1:A:199:ARG:NH2	2.50	0.44
1:A:357:ILE:HD11	1:A:400:LEU:CD2	2.47	0.44
1:A:393:VAL:CG1	1:A:394:ASP:N	2.77	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:672:GLN:CG	1:A:693:MET:CE	2.79	0.44
1:A:1156:ARG:O	1:A:1157:SER:CB	2.62	0.44
1:A:1416:GLU:OE1	1:A:1471:HIS:CD2	2.70	0.44
1:B:175:ARG:NH1	1:B:175:ARG:CG	2.79	0.44
1:B:303:LEU:O	1:B:303:LEU:HG	2.17	0.44
1:B:466:HIS:CE1	1:B:684:PHE:HE1	2.33	0.44
1:B:673:GLU:O	1:B:674:ALA:C	2.54	0.44
1:B:1006:ILE:HG23	1:B:1007:GLY:N	2.33	0.44
1:B:1210:THR:CG2	1:B:1211:LEU:H	2.07	0.44
1:B:1400:SER:O	1:B:1401:LEU:C	2.56	0.44
1:C:197:ASP:OD2	1:C:199:ARG:NH2	2.50	0.44
1:C:307:GLN:HB2	1:C:1403:LEU:HD22	1.99	0.44
1:C:353:MET:HA	1:C:366:GLY:O	2.18	0.44
1:C:449:ARG:HD3	1:C:765:ALA:O	2.17	0.44
1:C:857:GLY:N	1:C:883:ASP:HB3	2.31	0.44
1:C:1161:VAL:O	1:C:1161:VAL:HG13	2.18	0.44
1:C:1315:LEU:HA	1:C:1315:LEU:HD23	1.62	0.44
1:C:1435:THR:HG23	1:C:1437:SER:CB	2.47	0.44
1:D:1003:ARG:NH1	1:D:1004:SER:O	2.50	0.44
1:D:1016:ALA:O	1:D:1017:ASN:HB2	2.17	0.44
1:D:1190:VAL:C	1:D:1192:PRO:HD3	2.38	0.44
1:E:833:SER:HB3	1:E:1153:LEU:HD22	1.97	0.44
1:E:1132:PRO:O	1:E:1133:GLU:C	2.52	0.44
1:E:1416:GLU:OE1	1:E:1471:HIS:CD2	2.70	0.44
1:E:1440:ALA:O	1:E:1443:ILE:N	2.42	0.44
1:F:209:GLN:HG3	1:F:210:ARG:H	1.80	0.44
1:F:289:ARG:NH1	1:F:535:GLU:HB2	2.33	0.44
1:F:303:LEU:O	1:F:303:LEU:HG	2.17	0.44
1:F:443:ASP:O	1:F:444:LYS:C	2.54	0.44
1:F:643:ASN:HB3	1:F:665:THR:HG22	1.98	0.44
1:F:670:LEU:HD23	1:F:670:LEU:HA	1.48	0.44
1:F:671:ALA:O	1:F:675:ILE:HD12	2.17	0.44
1:F:705:LEU:HD23	1:F:705:LEU:HA	1.18	0.44
1:F:806:SER:OG	1:F:809:THR:CB	2.64	0.44
1:F:928:LEU:HD23	1:F:928:LEU:HA	1.65	0.44
1:F:1131:THR:HG22	1:F:1133:GLU:CA	2.46	0.44
1:F:1424:LEU:O	1:F:1425:LYS:C	2.53	0.44
2:G:53:PRO:CG	2:G:56:GLN:HG2	2.13	0.44
2:G:54:PHE:CB	2:G:107:ASN:HB3	2.39	0.44
2:G:71:LEU:HD21	2:G:76:ARG:C	2.37	0.44
2:G:93:ILE:HD11	2:G:195:LEU:CD2	2.30	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:144:ARG:CG	2:G:145:GLU:N	2.81	0.44
2:G:146:LEU:N	2:G:146:LEU:CD2	2.81	0.44
2:G:153:ILE:CG1	2:G:220:VAL:CG1	2.95	0.44
2:G:175:VAL:HG13	2:G:175:VAL:O	2.18	0.44
2:G:321:ARG:HH11	2:G:322:ARG:NH1	2.14	0.44
2:G:322:ARG:CD	2:G:349:ALA:CB	2.94	0.44
2:G:415:LEU:HD11	2:G:423:LEU:CB	2.47	0.44
2:G:443:ILE:HD12	2:G:444:VAL:HG23	1.99	0.44
2:H:53:PRO:HD2	2:H:56:GLN:HE21	1.82	0.44
2:H:81:TYR:CD1	2:H:131:ALA:CB	2.99	0.44
2:H:146:LEU:N	2:H:146:LEU:CD2	2.81	0.44
2:H:175:VAL:HG13	2:H:175:VAL:O	2.18	0.44
2:H:197:LYS:CD	2:H:275:ASP:H	2.30	0.44
2:H:215:HIS:CD2	2:H:218:PHE:HD1	2.35	0.44
2:H:458:ARG:HB3	2:H:458:ARG:NH2	2.32	0.44
2:J:31:ILE:HD11	2:J:194:LYS:HG2	2.00	0.44
2:J:141:THR:HB	2:J:142:PRO:CD	2.40	0.44
2:J:175:VAL:HG13	2:J:175:VAL:O	2.18	0.44
2:J:197:LYS:CD	2:J:275:ASP:H	2.30	0.44
2:J:230:ARG:CZ	2:J:434:MET:CE	2.95	0.44
2:J:406:LEU:N	2:J:407:PRO:HD2	2.32	0.44
2:J:454:ILE:CD1	2:J:458:ARG:HG2	2.48	0.44
2:K:426:ASP:O	2:K:430:LYS:HA	2.17	0.44
2:L:145:GLU:OE2	2:L:468:ALA:HB1	2.17	0.44
2:L:271:VAL:CG1	2:L:281:GLU:CG	2.95	0.44
1:A:449:ARG:HD3	1:A:765:ALA:O	2.17	0.44
1:A:459:GLU:O	1:A:463:LEU:CB	2.59	0.44
1:A:559:ARG:HD2	1:A:605:ILE:CD1	2.48	0.44
1:A:560:ASP:C	1:A:562:MET:N	2.70	0.44
1:A:648:GLU:HG2	1:A:654:TYR:CE1	2.53	0.44
1:A:964:MET:O	1:A:965:LEU:HD23	2.18	0.44
1:A:992:PRO:HA	1:A:1204:ARG:NH2	2.32	0.44
1:A:1139:PHE:N	1:A:1139:PHE:CD1	2.86	0.44
1:A:1401:LEU:N	1:A:1402:PRO:CD	2.79	0.44
1:B:196:LEU:HD23	1:B:196:LEU:HA	1.55	0.44
1:B:355:TYR:C	1:B:355:TYR:HD1	2.20	0.44
1:B:957:ARG:NH2	5:B:2475:AKG:O4	2.40	0.44
1:B:964:MET:O	1:B:965:LEU:HD23	2.18	0.44
1:B:1143:ALA:O	1:B:1146:VAL:N	2.47	0.44
1:B:1190:VAL:C	1:B:1192:PRO:HD3	2.38	0.44
1:B:1201:LEU:HD22	1:B:1201:LEU:N	2.32	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1346:PHE:O	1:B:1347:ALA:HB3	2.17	0.44
1:C:81:ILE:HD13	1:D:216:PHE:CZ	2.53	0.44
1:C:309:THR:HG22	1:C:310:PRO:O	2.17	0.44
1:C:485:ILE:HG21	1:C:485:ILE:HD13	1.72	0.44
1:C:648:GLU:HG2	1:C:654:TYR:CE1	2.53	0.44
1:C:960:THR:CG2	1:C:963:VAL:HG23	2.21	0.44
1:C:961:PRO:C	1:C:963:VAL:H	2.20	0.44
1:D:165:ASN:O	1:D:166:ASP:HB2	2.18	0.44
1:D:304:THR:HG21	1:D:518:ARG:HD2	1.99	0.44
1:D:1400:SER:C	1:D:1402:PRO:HD2	2.38	0.44
1:D:1420:TYR:OH	1:D:1466:LEU:CD2	2.65	0.44
1:D:1447:TRP:O	1:D:1450:GLU:N	2.51	0.44
1:E:24:ALA:O	1:E:27:ALA:N	2.27	0.44
1:E:498:PHE:H	1:E:498:PHE:HD1	1.64	0.44
1:F:165:ASN:O	1:F:166:ASP:CB	2.65	0.44
1:F:165:ASN:O	1:F:166:ASP:HB2	2.18	0.44
1:F:500:ARG:NH2	1:F:1039:LYS:O	2.50	0.44
1:F:561:TYR:C	1:F:561:TYR:CD1	2.90	0.44
1:F:751:LEU:HA	1:F:751:LEU:HD23	1.49	0.44
1:F:985:TYR:O	1:F:988:LYS:N	2.50	0.44
2:G:96:ARG:HE	2:G:199:VAL:HG21	1.82	0.44
2:G:148:LEU:HB3	2:G:234:VAL:HG23	1.98	0.44
2:G:215:HIS:HD2	2:G:218:PHE:HD1	1.65	0.44
2:G:426:ASP:O	2:G:430:LYS:HA	2.17	0.44
2:G:458:ARG:HB3	2:G:458:ARG:NH2	2.33	0.44
2:H:230:ARG:CZ	2:H:434:MET:CE	2.95	0.44
2:H:321:ARG:HH11	2:H:322:ARG:NH1	2.14	0.44
2:H:454:ILE:CD1	2:H:458:ARG:HG2	2.48	0.44
2:I:144:ARG:CG	2:I:145:GLU:N	2.81	0.44
2:I:197:LYS:CD	2:I:275:ASP:H	2.30	0.44
2:I:350:PRO:HG3	2:I:380:PRO:HA	1.98	0.44
2:I:394:LEU:CD2	2:I:396:ILE:CD1	2.95	0.44
2:I:423:LEU:CD2	2:I:423:LEU:N	2.80	0.44
2:J:144:ARG:CG	2:J:145:GLU:N	2.81	0.44
2:J:350:PRO:HG3	2:J:380:PRO:CA	2.47	0.44
2:J:405:ASP:OD1	2:J:407:PRO:HD2	2.18	0.44
2:J:458:ARG:HB3	2:J:458:ARG:NH2	2.33	0.44
2:K:271:VAL:CG1	2:K:281:GLU:CG	2.95	0.44
2:L:290:LYS:HD3	2:L:393:ASP:CG	2.38	0.44
2:L:449:LEU:CD2	2:L:451:VAL:CG1	2.89	0.44
1:A:369:THR:C	1:A:371:MET:H	2.20	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:634:SER:O	1:A:635:ASN:HB2	2.16	0.44
1:A:636:LEU:O	1:A:638:THR:N	2.51	0.44
1:A:683:LEU:HD23	1:A:683:LEU:HA	1.56	0.44
4:A:2474:FMN:H9	4:A:2474:FMN:H1'2	1.70	0.44
1:B:345:MET:HG3	1:B:346:ASP:N	2.32	0.44
1:B:440:SER:O	1:B:441:ASP:OD1	2.36	0.44
1:B:580:GLU:O	1:B:581:ALA:C	2.56	0.44
1:B:877:ARG:CD	1:F:1230:GLN:HB2	2.48	0.44
1:B:1260:GLN:O	1:B:1261:PRO:C	2.56	0.44
1:C:114:VAL:HG11	1:C:125:ARG:NH1	2.33	0.44
1:C:428:GLU:O	1:C:429:LEU:C	2.52	0.44
1:C:839:PRO:HG2	1:C:842:GLU:HB2	2.00	0.44
1:C:1393:TYR:C	1:C:1394:VAL:HG23	2.35	0.44
1:D:266:VAL:HG12	1:D:279:THR:HG22	1.97	0.44
1:D:303:LEU:O	1:D:303:LEU:HG	2.17	0.44
1:D:508:ASN:HB2	1:D:509:PRO:CD	2.47	0.44
1:D:689:LEU:O	1:D:689:LEU:HD12	2.18	0.44
1:D:875:MET:HE3	1:D:880:ALA:HB3	1.99	0.44
1:D:1164:ARG:HH11	1:D:1166:ASP:CG	2.21	0.44
1:D:1236:ARG:C	1:D:1238:THR:N	2.70	0.44
1:E:286:ARG:HD3	1:E:286:ARG:HA	1.60	0.44
1:E:369:THR:C	1:E:371:MET:H	2.20	0.44
1:E:419:TRP:CE2	1:E:537:GLU:HB3	2.53	0.44
1:F:207:TYR:N	1:F:207:TYR:CD1	2.85	0.44
1:F:452:GLN:NE2	1:F:764:THR:HG23	2.29	0.44
1:F:1016:ALA:O	1:F:1017:ASN:HB2	2.17	0.44
1:F:1070:ASP:OD1	1:F:1070:ASP:C	2.55	0.44
1:F:1164:ARG:HH11	1:F:1166:ASP:CG	2.21	0.44
2:G:53:PRO:HD2	2:G:56:GLN:HE21	1.83	0.44
2:G:59:CYS:SG	2:G:61:VAL:CG1	3.05	0.44
2:G:249:LYS:CD	2:G:258:ILE:HD13	2.47	0.44
2:G:415:LEU:HD22	2:G:415:LEU:C	2.37	0.44
2:H:59:CYS:SG	2:H:61:VAL:CG1	3.05	0.44
2:H:102:ARG:HG3	2:H:330:SER:OG	2.17	0.44
2:H:144:ARG:CG	2:H:145:GLU:N	2.81	0.44
2:H:163:ALA:HB3	2:H:207:LEU:HD21	2.00	0.44
2:H:166:LEU:HD22	2:H:169:LYS:HE2	2.00	0.44
2:H:405:ASP:OD1	2:H:407:PRO:HD2	2.18	0.44
2:I:53:PRO:HD2	2:I:56:GLN:HE21	1.82	0.44
2:I:166:LEU:HD22	2:I:169:LYS:HE2	2.00	0.44
2:I:405:ASP:OD1	2:I:407:PRO:HD2	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:59:CYS:SG	2:J:61:VAL:CG1	3.05	0.44
2:J:163:ALA:HB3	2:J:207:LEU:HD21	2.00	0.44
2:J:215:HIS:CD2	2:J:218:PHE:HD1	2.35	0.44
2:J:290:LYS:CG	2:J:291:HIS:N	2.79	0.44
2:K:148:LEU:HB3	2:K:234:VAL:HG23	1.98	0.44
2:K:163:ALA:HB3	2:K:207:LEU:HD21	2.00	0.44
2:K:276:THR:HG22	2:K:277:VAL:N	2.31	0.44
2:K:406:LEU:N	2:K:407:PRO:HD2	2.32	0.44
2:K:430:LYS:HD2	2:K:459:ASP:OD1	2.17	0.44
2:L:60:PRO:O	2:L:455:ARG:HD3	2.18	0.44
2:L:305:VAL:HG22	2:L:316:VAL:CG1	2.47	0.44
2:L:317:LYS:CE	2:L:345:ILE:CG1	2.95	0.44
2:L:350:PRO:HG3	2:L:380:PRO:CA	2.47	0.44
1:A:419:TRP:CE2	1:A:537:GLU:HB3	2.53	0.44
1:A:499:PHE:HE2	1:A:742:MET:CE	2.26	0.44
1:A:582:LEU:CB	1:A:755:GLN:HE21	2.30	0.44
1:A:820:ARG:CB	1:A:821:PRO:CD	2.96	0.44
1:A:1435:THR:HG23	1:A:1437:SER:CB	2.47	0.44
1:B:235:ASN:HD22	1:B:236:THR:H	1.61	0.44
1:B:289:ARG:NH1	1:B:535:GLU:HB2	2.33	0.44
1:B:515:ARG:NE	1:B:1367:TYR:HE1	2.09	0.44
1:B:705:LEU:HD23	1:B:705:LEU:HA	1.18	0.44
1:B:928:LEU:HD23	1:B:928:LEU:HA	1.65	0.44
1:B:1164:ARG:HH11	1:B:1166:ASP:CG	2.21	0.44
1:C:266:VAL:HG12	1:C:266:VAL:O	2.16	0.44
1:C:660:GLY:HA2	1:C:721:GLY:N	2.32	0.44
1:C:858:MET:HA	4:C:2474:FMN:C5A	2.48	0.44
1:C:1047:MET:O	1:C:1048:GLY:C	2.56	0.44
1:C:1315:LEU:HD13	1:C:1320:ASN:ND2	2.33	0.44
1:C:1395:TYR:CE2	1:C:1443:ILE:CD1	3.01	0.44
1:D:8:ALA:HA	1:D:362:LEU:HD12	2.00	0.44
1:D:230:HIS:HE1	1:D:234:ILE:HG13	1.82	0.44
1:D:500:ARG:NH2	1:D:1039:LYS:O	2.50	0.44
1:D:651:ASP:OD1	1:D:651:ASP:N	2.38	0.44
1:D:671:ALA:O	1:D:675:ILE:HD12	2.17	0.44
1:D:731:SER:HA	1:D:747:SER:HB2	1.99	0.44
1:D:1329:TYR:HD1	1:D:1348:VAL:HG13	1.82	0.44
1:D:1346:PHE:O	1:D:1347:ALA:HB3	2.17	0.44
1:E:59:VAL:HG12	1:E:60:LYS:N	2.32	0.44
1:E:309:THR:HG22	1:E:310:PRO:O	2.17	0.44
1:E:400:LEU:HD12	1:E:400:LEU:HA	1.76	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:562:MET:CE	1:E:566:ALA:HB2	2.46	0.44
1:E:565:THR:HG22	1:E:603:HIS:HD2	1.83	0.44
1:E:572:THR:HG21	1:E:615:ARG:HE	1.82	0.44
1:E:648:GLU:HG2	1:E:654:TYR:CE1	2.53	0.44
1:E:780:ARG:HH21	2:L:54:PHE:HD1	1.60	0.44
1:F:9:ILE:HG21	1:F:9:ILE:HD13	1.59	0.44
1:F:266:VAL:HG12	1:F:279:THR:HG22	1.97	0.44
1:F:622:LEU:HD13	1:F:739:PHE:HZ	1.82	0.44
1:F:850:ARG:NH1	1:F:878:ILE:HB	2.33	0.44
1:F:920:GLU:CB	1:F:1256:MET:HE2	2.35	0.44
1:F:1315:LEU:HD23	1:F:1315:LEU:HA	1.69	0.44
1:F:1346:PHE:O	1:F:1347:ALA:HB3	2.17	0.44
1:F:1347:ALA:O	1:F:1348:VAL:C	2.54	0.44
2:G:350:PRO:HG2	2:G:374:ALA:HA	1.99	0.44
2:G:430:LYS:HE3	2:G:439:ALA:O	2.18	0.44
2:G:454:ILE:CD1	2:G:458:ARG:HG2	2.48	0.44
2:H:271:VAL:CG1	2:H:281:GLU:CG	2.95	0.44
2:H:290:LYS:HD3	2:H:393:ASP:CG	2.38	0.44
2:I:71:LEU:HD21	2:I:76:ARG:C	2.37	0.44
2:I:145:GLU:OE2	2:I:468:ALA:HB1	2.17	0.44
2:I:177:ASP:OD2	2:I:182:MET:HE3	2.18	0.44
2:I:271:VAL:CG1	2:I:281:GLU:CG	2.95	0.44
2:I:317:LYS:CE	2:I:345:ILE:CG1	2.95	0.44
2:I:350:PRO:HG3	2:I:380:PRO:CA	2.47	0.44
2:J:32:TYR:CE2	2:J:194:LYS:HA	2.53	0.44
2:J:206:LEU:HD22	2:J:206:LEU:HA	1.91	0.44
2:J:281:GLU:HG3	2:J:281:GLU:O	2.17	0.44
2:J:295:LEU:HD21	2:J:319:LEU:HD13	1.99	0.44
2:K:110:ILE:HB	2:K:115:HIS:HE1	1.81	0.44
2:K:181:ARG:CD	2:K:187:VAL:CG1	2.94	0.44
2:K:197:LYS:CD	2:K:275:ASP:H	2.30	0.44
2:K:215:HIS:HD2	2:K:218:PHE:HD1	1.65	0.44
2:K:302:MET:CE	2:K:334:VAL:CA	2.95	0.44
2:K:305:VAL:HG22	2:K:316:VAL:CG1	2.47	0.44
2:K:350:PRO:HG3	2:K:380:PRO:HA	1.98	0.44
2:L:32:TYR:HE2	2:L:194:LYS:CA	2.30	0.44
2:L:53:PRO:HD2	2:L:56:GLN:HE21	1.82	0.44
2:L:249:LYS:CD	2:L:258:ILE:HD13	2.47	0.44
2:L:462:GLU:O	2:L:465:HIS:HB3	2.18	0.44
1:A:179:TYR:HD2	1:A:192:TYR:CD2	2.35	0.44
1:A:307:GLN:HB2	1:A:1403:LEU:HD22	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:309:THR:HG22	1:A:310:PRO:O	2.17	0.44
1:A:316:LEU:O	1:A:319:TYR:N	2.50	0.44
1:A:350:LEU:HD23	1:A:350:LEU:HA	1.55	0.44
1:A:442:MET:CE	1:A:447:LEU:N	2.81	0.44
1:A:554:GLU:OE2	1:A:697:LYS:HE3	2.17	0.44
1:A:706:LYS:NZ	1:A:940:GLU:OE1	2.40	0.44
1:A:839:PRO:HG2	1:A:842:GLU:HB2	2.00	0.44
1:A:1445:ASN:HB2	2:L:373:ASP:OD2	2.17	0.44
1:B:293:MET:HG2	1:B:410:LEU:HD23	2.00	0.44
1:B:456:LEU:HD23	1:B:456:LEU:HA	1.11	0.44
1:B:495:LEU:HA	1:B:495:LEU:HD12	1.36	0.44
1:B:558:MET:O	1:B:560:ASP:N	2.51	0.44
1:B:696:TYR:CZ	1:B:700:ILE:HD11	2.52	0.44
1:B:850:ARG:NH1	1:B:878:ILE:HB	2.33	0.44
1:B:1347:ALA:O	1:B:1348:VAL:C	2.54	0.44
1:C:96:GLU:OE1	1:C:96:GLU:CA	2.54	0.44
1:C:313:HIS:CD2	1:C:313:HIS:N	2.83	0.44
1:C:442:MET:CE	1:C:447:LEU:N	2.81	0.44
1:C:442:MET:HE3	1:C:447:LEU:N	2.32	0.44
1:C:498:PHE:H	1:C:498:PHE:HD1	1.64	0.44
1:C:572:THR:HG21	1:C:615:ARG:HE	1.82	0.44
1:C:782:ARG:HG3	2:K:52:VAL:HA	0.89	0.44
1:C:964:MET:O	1:C:965:LEU:HD23	2.18	0.44
1:C:1053:HIS:ND1	1:C:1062:ARG:HD3	2.33	0.44
1:C:1113:CYS:C	1:C:1115:VAL:N	2.71	0.44
1:C:1156:ARG:HE	1:C:1156:ARG:HB2	1.72	0.44
1:D:558:MET:O	1:D:560:ASP:N	2.51	0.44
1:D:1417:VAL:CG1	1:D:1419:HIS:H	2.28	0.44
1:E:15:ARG:O	1:E:16:SER:C	2.53	0.44
1:E:16:SER:O	1:E:20:LYS:CG	2.66	0.44
1:E:250:ARG:NH2	1:E:639:PHE:CE1	2.79	0.44
1:E:452:GLN:CG	1:E:764:THR:HG22	2.48	0.44
1:E:575:VAL:HG13	1:E:759:LEU:CD2	2.47	0.44
1:E:831:LEU:HD13	1:E:1084:MET:HE3	1.98	0.44
1:F:254:PRO:CG	1:F:255:ALA:N	2.81	0.44
1:F:1057:THR:HG22	1:F:1190:VAL:HG11	1.98	0.44
1:F:1075:THR:HG22	1:F:1076:GLY:N	2.31	0.44
1:F:1210:THR:CG2	1:F:1211:LEU:N	2.75	0.44
1:F:1366:GLU:CG	1:F:1367:TYR:CE2	3.00	0.44
2:G:32:TYR:CE2	2:G:194:LYS:HA	2.53	0.44
2:G:71:LEU:HD21	2:G:76:ARG:CA	2.46	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:96:ARG:NH2	2:G:199:VAL:HG21	2.31	0.44
2:G:102:ARG:HG3	2:G:330:SER:OG	2.17	0.44
2:G:191:PRO:HB2	2:G:193:PHE:CE2	2.52	0.44
2:H:34:ARG:HG3	2:H:125:LYS:CE	2.46	0.44
2:H:269:ASN:HD22	2:H:273:LEU:CD2	2.30	0.44
2:I:443:ILE:HD12	2:I:444:VAL:HG23	1.99	0.44
2:J:32:TYR:HE2	2:J:194:LYS:CA	2.30	0.44
2:J:96:ARG:HE	2:J:199:VAL:HG21	1.82	0.44
2:J:317:LYS:CE	2:J:345:ILE:CD1	2.94	0.44
2:J:423:LEU:HD22	2:J:423:LEU:N	2.28	0.44
2:J:443:ILE:HD12	2:J:444:VAL:HG23	1.99	0.44
2:K:290:LYS:CG	2:K:291:HIS:N	2.79	0.44
2:K:462:GLU:O	2:K:465:HIS:HB3	2.18	0.44
2:L:31:ILE:HD11	2:L:194:LYS:HG2	2.00	0.44
2:L:102:ARG:HG3	2:L:330:SER:OG	2.17	0.44
2:L:269:ASN:HD22	2:L:273:LEU:CD2	2.30	0.44
1:A:16:SER:O	1:A:20:LYS:CG	2.66	0.44
1:A:81:ILE:HD13	1:B:216:PHE:CZ	2.53	0.44
1:A:353:MET:HA	1:A:366:GLY:O	2.18	0.44
1:A:588:ARG:HH11	1:A:588:ARG:HD3	1.59	0.44
1:A:704:LEU:C	1:A:706:LYS:H	2.20	0.44
1:A:1052:VAL:O	1:A:1053:HIS:C	2.51	0.44
1:A:1468:VAL:O	1:A:1468:VAL:HG12	2.15	0.44
1:B:165:ASN:O	1:B:166:ASP:HB2	2.18	0.44
1:B:739:PHE:O	1:B:740:PRO:C	2.55	0.44
1:B:782:ARG:HH22	2:G:51:GLY:N	1.97	0.44
1:C:515:ARG:HH22	1:C:966:ILE:CB	2.23	0.44
1:C:869:GLY:O	1:C:870:THR:C	2.54	0.44
1:C:979:ASP:O	1:C:980:LEU:C	2.55	0.44
1:C:1124:LEU:HA	1:C:1124:LEU:HD12	1.28	0.44
1:C:1139:PHE:N	1:C:1139:PHE:CD1	2.86	0.44
1:D:117:ILE:HG23	1:D:117:ILE:HD13	1.35	0.44
1:D:219:TRP:N	1:D:220:PRO:CD	2.81	0.44
1:D:227:MET:HE2	1:D:282:GLU:HG3	1.99	0.44
1:D:235:ASN:HD22	1:D:236:THR:H	1.61	0.44
1:D:960:THR:CG2	1:D:963:VAL:HG23	2.47	0.44
1:D:1097:LEU:HD23	1:D:1097:LEU:HA	1.69	0.44
1:D:1170:GLN:OE1	1:D:1183:LEU:HB2	2.17	0.44
1:E:102:TYR:HE2	1:E:144:PHE:CD1	2.34	0.44
1:E:298:LEU:HD23	1:E:324:MET:CG	2.44	0.44
1:E:660:GLY:HA2	1:E:721:GLY:N	2.32	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:858:MET:HA	4:E:2474:FMN:C5A	2.48	0.44
1:E:871:LEU:HD23	1:E:871:LEU:HA	1.68	0.44
1:E:1001:VAL:O	1:E:1002:SER:C	2.55	0.44
1:E:1084:MET:SD	1:E:1168:LEU:HD21	2.57	0.44
1:E:1141:PHE:O	1:E:1142:LEU:C	2.55	0.44
1:E:1156:ARG:O	1:E:1157:SER:HB3	2.17	0.44
1:E:1420:TYR:OH	1:E:1466:LEU:CD2	2.66	0.44
1:F:37:ASP:OD1	1:F:39:LYS:N	2.34	0.44
1:F:403:ASP:OD1	1:F:407:LYS:HG3	2.18	0.44
2:G:50:CYS:SG	2:G:109:VAL:HG21	2.58	0.44
2:H:31:ILE:HD11	2:H:194:LYS:HG2	2.00	0.44
2:H:32:TYR:HE2	2:H:194:LYS:CA	2.30	0.44
2:H:32:TYR:CE2	2:H:194:LYS:HA	2.53	0.44
2:H:179:TYR:HB3	2:H:181:ARG:HH12	1.81	0.44
2:H:240:THR:OG1	8:H:484:FAD:N7A	2.50	0.44
2:H:266:THR:HG23	2:H:270:LYS:NZ	2.33	0.44
2:H:302:MET:CE	2:H:334:VAL:CA	2.95	0.44
2:H:424:LEU:HD13	2:H:424:LEU:HA	1.75	0.44
2:I:32:TYR:HE2	2:I:194:LYS:CA	2.30	0.44
2:I:161:ALA:CB	2:I:454:ILE:HG12	2.40	0.44
2:I:290:LYS:HD3	2:I:393:ASP:CG	2.38	0.44
2:I:350:PRO:HG2	2:I:374:ALA:HA	1.99	0.44
2:I:418:THR:HG1	2:I:420:TRP:HD1	1.61	0.44
2:J:34:ARG:HG3	2:J:125:LYS:CE	2.46	0.44
2:J:93:ILE:HG23	2:J:94:CYS:N	2.33	0.44
2:J:132:TRP:CG	2:J:202:ARG:HD2	2.52	0.44
2:J:166:LEU:HD22	2:J:169:LYS:HE2	1.99	0.44
2:J:290:LYS:HD3	2:J:393:ASP:CG	2.38	0.44
2:J:324:ARG:HA	2:J:346:TRP:CZ2	2.46	0.44
2:J:351:GLU:CB	2:J:353:PHE:HB3	2.47	0.44
2:K:32:TYR:HE2	2:K:194:LYS:CA	2.30	0.44
2:K:144:ARG:CG	2:K:145:GLU:N	2.81	0.44
2:L:144:ARG:CG	2:L:145:GLU:N	2.81	0.44
2:L:415:LEU:HD22	2:L:415:LEU:C	2.37	0.44
2:L:469:LYS:HZ3	2:L:476:VAL:CA	2.29	0.44
1:A:120:LYS:O	1:A:123:ALA:HB3	2.18	0.44
1:A:359:THR:CG2	1:A:378:GLN:CA	2.95	0.44
1:A:836:ALA:HA	1:A:837:PRO:HD3	1.78	0.44
1:A:961:PRO:C	1:A:963:VAL:H	2.20	0.44
1:A:1289:MET:HE2	1:A:1289:MET:N	2.32	0.44
1:B:59:VAL:HG22	1:B:105:TYR:HD2	1.78	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:254:PRO:CG	1:B:255:ALA:N	2.81	0.44
1:B:353:MET:HE2	1:B:353:MET:HA	2.00	0.44
1:B:375:ASP:OD2	1:B:377:THR:CB	2.61	0.44
1:B:558:MET:C	1:B:560:ASP:N	2.69	0.44
1:B:689:LEU:HD12	1:B:689:LEU:O	2.18	0.44
1:B:913:GLY:CA	1:B:1349:ARG:CD	2.94	0.44
1:B:1184:ASN:CB	1:B:1185:PRO:CD	2.80	0.44
1:C:59:VAL:HG12	1:C:60:LYS:N	2.32	0.44
1:C:261:GLN:HE21	1:C:264:LYS:HD2	1.83	0.44
1:C:302:ALA:CA	1:C:347:ARG:NH1	2.81	0.44
1:C:316:LEU:O	1:C:319:TYR:N	2.50	0.44
1:C:468:MET:O	1:C:472:GLY:N	2.51	0.44
1:C:908:LYS:HD2	1:C:921:TYR:CD2	2.53	0.44
1:C:918:THR:O	1:C:921:TYR:N	2.51	0.44
1:C:1001:VAL:O	1:C:1002:SER:C	2.55	0.44
1:C:1173:ARG:HH22	1:C:1178:LEU:HD23	1.83	0.44
1:D:30:HIS:CD2	1:D:31:ARG:N	2.86	0.44
1:D:345:MET:HG3	1:D:346:ASP:N	2.32	0.44
1:D:454:PHE:CG	1:D:648:GLU:HB2	2.53	0.44
1:D:701:ASP:C	1:D:703:GLY:N	2.69	0.44
1:D:985:TYR:O	1:D:988:LYS:N	2.50	0.44
1:E:307:GLN:HB2	1:E:1403:LEU:HD22	1.99	0.44
1:E:337:ASP:O	1:E:338:GLY:C	2.56	0.44
1:E:602:THR:C	1:E:640:THR:HG22	2.38	0.44
1:E:731:SER:O	1:E:734:LEU:HB3	2.18	0.44
1:E:820:ARG:CB	1:E:821:PRO:CD	2.96	0.44
1:E:918:THR:HG21	1:E:1256:MET:HE2	1.99	0.44
1:E:964:MET:O	1:E:965:LEU:HD23	2.18	0.44
1:E:1053:HIS:ND1	1:E:1062:ARG:HD3	2.33	0.44
1:F:30:HIS:CD2	1:F:31:ARG:N	2.86	0.44
1:F:442:MET:HE3	1:F:442:MET:HB3	1.78	0.44
1:F:528:ASN:O	1:F:529:LEU:HD23	2.17	0.44
1:F:757:LYS:O	1:F:758:VAL:C	2.53	0.44
1:F:764:THR:CG2	1:F:764:THR:O	2.63	0.44
1:F:826:ARG:NH1	1:F:826:ARG:CG	2.67	0.44
1:F:943:GLN:HE21	1:F:1033:SER:HA	1.83	0.44
1:F:1336:LEU:HD23	1:F:1355:VAL:CG1	2.48	0.44
1:F:1440:ALA:O	1:F:1441:ALA:C	2.53	0.44
1:F:1447:TRP:O	1:F:1450:GLU:N	2.51	0.44
2:G:181:ARG:CD	2:G:187:VAL:CG1	2.94	0.44
2:G:240:THR:OG1	8:G:484:FAD:N7A	2.50	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:290:LYS:HD3	2:G:393:ASP:CG	2.38	0.44
2:G:304:CYS:CA	2:G:307:THR:HG22	2.48	0.44
2:G:383:ILE:HD13	2:G:383:ILE:C	2.37	0.44
2:H:64:ASN:CG	2:H:67:ASP:HB2	2.39	0.44
2:H:96:ARG:HE	2:H:199:VAL:HG21	1.82	0.44
2:H:96:ARG:NH2	2:H:199:VAL:HG21	2.31	0.44
2:H:350:PRO:HG3	2:H:380:PRO:HA	1.98	0.44
2:H:430:LYS:HE3	2:H:439:ALA:O	2.17	0.44
2:I:60:PRO:O	2:I:455:ARG:HD3	2.18	0.44
2:I:69:LEU:HA	2:I:72:THR:HG22	2.00	0.44
2:I:188:TYR:OH	2:I:262:LEU:HD23	2.18	0.44
2:I:281:GLU:HG3	2:I:281:GLU:O	2.17	0.44
2:I:426:ASP:O	2:I:430:LYS:HA	2.17	0.44
2:J:188:TYR:OH	2:J:262:LEU:HD23	2.18	0.44
2:J:215:HIS:HD2	2:J:218:PHE:HD1	1.65	0.44
2:J:266:THR:HG23	2:J:270:LYS:NZ	2.33	0.44
2:J:419:ARG:C	2:J:419:ARG:HD3	2.37	0.44
2:K:32:TYR:CE2	2:K:194:LYS:HA	2.53	0.44
2:K:96:ARG:HE	2:K:199:VAL:HG21	1.82	0.44
2:K:175:VAL:HG13	2:K:175:VAL:O	2.18	0.44
2:K:178:ARG:HH12	2:K:243:TYR:HB2	1.83	0.44
2:L:32:TYR:CD1	2:L:34:ARG:HD3	2.53	0.44
2:L:266:THR:HG23	2:L:270:LYS:NZ	2.33	0.44
2:L:371:VAL:CG2	2:L:386:SER:CB	2.94	0.44
1:A:6:ILE:HD13	1:A:20:LYS:HB2	1.99	0.43
1:A:114:VAL:HG11	1:A:125:ARG:NH1	2.33	0.43
1:A:125:ARG:HG3	1:A:219:TRP:CZ2	2.53	0.43
1:A:197:ASP:OD1	1:A:199:ARG:N	2.38	0.43
1:A:218:THR:CG2	1:A:221:LEU:HG	2.44	0.43
1:A:337:ASP:O	1:A:338:GLY:C	2.56	0.43
1:A:509:PRO:HA	1:A:510:PRO:HD3	1.81	0.43
1:A:573:PHE:CB	1:A:574:PRO:CD	2.96	0.43
1:A:828:LEU:HD22	1:A:1172:SER:CB	2.38	0.43
1:A:1348:VAL:O	1:A:1348:VAL:CG1	2.65	0.43
1:A:1351:SER:OG	1:A:1369:THR:HB	2.18	0.43
1:B:81:ILE:O	1:B:81:ILE:CG2	2.67	0.43
1:B:511:ILE:HG22	1:B:512:ASP:H	1.79	0.43
1:B:720:ARG:C	1:B:722:GLY:N	2.69	0.43
1:B:860:MET:HE2	1:B:860:MET:HB2	1.82	0.43
1:B:1336:LEU:HD23	1:B:1355:VAL:CG1	2.48	0.43
1:B:1467:GLU:O	1:B:1469:PRO:HD3	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:438:GLU:OE1	1:C:553:ALA:HB2	2.18	0.43
1:C:565:THR:HG22	1:C:603:HIS:HD2	1.83	0.43
1:C:634:SER:O	1:C:635:ASN:HB2	2.16	0.43
1:C:987:LEU:HD23	1:C:987:LEU:HA	1.70	0.43
1:D:403:ASP:OD1	1:D:407:LYS:HG3	2.18	0.43
1:D:643:ASN:HD22	1:D:665:THR:HG21	1.83	0.43
1:D:780:ARG:NH2	2:H:109:VAL:HG11	2.33	0.43
1:D:840:VAL:O	1:D:841:ASP:C	2.57	0.43
1:D:1366:GLU:OE2	1:D:1367:TYR:CE2	2.71	0.43
1:E:216:PHE:HA	1:E:217:PRO:HD3	1.73	0.43
1:E:261:GLN:HE21	1:E:264:LYS:HD2	1.83	0.43
1:E:495:LEU:HD12	1:E:495:LEU:HA	1.53	0.43
1:E:521:SER:C	1:E:522:LEU:HD23	2.38	0.43
1:E:908:LYS:HD2	1:E:921:TYR:CD2	2.53	0.43
1:E:1228:LYS:C	1:E:1229:MET:HG2	2.39	0.43
1:E:1245:ARG:O	1:E:1246:LEU:C	2.55	0.43
1:E:1351:SER:OG	1:E:1369:THR:HB	2.18	0.43
1:E:1360:CYS:O	1:E:1361:GLY:O	2.35	0.43
1:F:308:THR:O	1:F:308:THR:CG2	2.66	0.43
1:F:312:ASN:HB2	1:F:411:ALA:CB	2.46	0.43
1:F:426:LEU:HD23	1:F:543:LEU:HB3	1.93	0.43
1:F:559:ARG:O	1:F:559:ARG:HG3	2.17	0.43
1:F:562:MET:HB2	1:F:563:GLY:H	1.54	0.43
1:F:743:VAL:HG11	1:F:745:ARG:HG3	2.00	0.43
1:F:1463:LEU:HD23	1:F:1463:LEU:HA	1.71	0.43
2:G:34:ARG:HG3	2:G:125:LYS:CE	2.46	0.43
2:G:64:ASN:CG	2:G:67:ASP:HB2	2.38	0.43
2:G:181:ARG:NH2	2:G:188:TYR:CD1	2.86	0.43
2:G:277:VAL:CG1	2:G:278:GLU:N	2.81	0.43
2:G:371:VAL:CG2	2:G:386:SER:CB	2.94	0.43
2:G:449:LEU:HD22	2:G:452:TRP:CE2	2.53	0.43
2:H:178:ARG:HH12	2:H:243:TYR:HB2	1.83	0.43
2:H:188:TYR:OH	2:H:262:LEU:HD23	2.18	0.43
2:H:317:LYS:HE3	2:H:345:ILE:HG13	2.00	0.43
2:H:366:ARG:CG	2:H:391:GLN:HA	2.28	0.43
2:H:418:THR:CA	2:H:424:LEU:CD2	2.95	0.43
2:H:443:ILE:HD12	2:H:444:VAL:HG23	1.99	0.43
2:H:462:GLU:O	2:H:465:HIS:HB3	2.18	0.43
2:I:54:PHE:HB2	2:I:107:ASN:O	2.18	0.43
2:I:93:ILE:HG23	2:I:94:CYS:N	2.33	0.43
2:I:181:ARG:NH2	2:I:188:TYR:CD1	2.86	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:229:LEU:HD22	2:I:236:VAL:HG12	2.00	0.43
2:I:266:THR:HG23	2:I:270:LYS:NZ	2.33	0.43
2:I:302:MET:CE	2:I:334:VAL:CA	2.95	0.43
2:J:240:THR:OG1	8:J:484:FAD:N7A	2.50	0.43
2:J:430:LYS:HE3	2:J:439:ALA:O	2.18	0.43
2:K:64:ASN:CG	2:K:67:ASP:HB2	2.38	0.43
2:K:322:ARG:CD	2:K:349:ALA:CB	2.94	0.43
2:K:345:ILE:HD13	2:K:345:ILE:N	2.17	0.43
2:K:430:LYS:HE3	2:K:439:ALA:O	2.18	0.43
2:K:449:LEU:HD22	2:K:452:TRP:CE2	2.53	0.43
2:K:454:ILE:CD1	2:K:458:ARG:HG2	2.48	0.43
2:K:458:ARG:HB3	2:K:458:ARG:NH2	2.32	0.43
2:L:32:TYR:CE2	2:L:194:LYS:HA	2.53	0.43
2:L:71:LEU:HD21	2:L:76:ARG:C	2.37	0.43
2:L:175:VAL:HG13	2:L:175:VAL:O	2.18	0.43
2:L:191:PRO:HB2	2:L:193:PHE:CE2	2.52	0.43
1:A:447:LEU:CD1	1:A:670:LEU:HD21	2.43	0.43
1:A:495:LEU:HA	1:A:495:LEU:HD12	1.53	0.43
1:A:515:ARG:HH22	1:A:966:ILE:CB	2.23	0.43
1:A:1156:ARG:O	1:A:1157:SER:HB3	2.18	0.43
1:A:1468:VAL:HG12	1:A:1469:PRO:O	2.19	0.43
1:B:9:ILE:HD13	1:B:9:ILE:HG21	1.59	0.43
1:B:30:HIS:HD2	1:B:31:ARG:H	1.65	0.43
1:B:442:MET:HE3	1:B:442:MET:HB3	1.76	0.43
1:B:454:PHE:CG	1:B:648:GLU:HB2	2.53	0.43
1:B:700:ILE:C	1:B:703:GLY:H	2.22	0.43
1:B:702:ASP:O	1:B:703:GLY:C	2.55	0.43
1:B:838:VAL:HG13	1:B:839:PRO:CD	2.32	0.43
1:B:1003:ARG:NH1	1:B:1004:SER:O	2.50	0.43
1:B:1184:ASN:C	1:B:1186:ARG:N	2.71	0.43
1:B:1212:ASP:OD1	1:B:1243:GLY:N	2.34	0.43
1:C:125:ARG:HG3	1:C:219:TRP:CZ2	2.53	0.43
1:C:447:LEU:CD1	1:C:670:LEU:HD21	2.43	0.43
1:C:903:TRP:CD1	1:C:903:TRP:N	2.86	0.43
1:D:806:SER:HG	1:D:809:THR:CB	2.30	0.43
1:D:1032:ALA:O	1:D:1033:SER:HB2	2.19	0.43
1:D:1158:LEU:HD12	1:D:1158:LEU:HA	1.80	0.43
1:D:1260:GLN:O	1:D:1261:PRO:C	2.56	0.43
1:D:1467:GLU:O	1:D:1469:PRO:HD3	2.18	0.43
1:E:218:THR:CG2	1:E:221:LEU:HG	2.44	0.43
1:E:295:LYS:HE2	1:E:299:VAL:HG11	1.98	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:302:ALA:CA	1:E:347:ARG:NH1	2.81	0.43
1:E:515:ARG:HH22	1:E:966:ILE:CB	2.23	0.43
1:F:8:ALA:HA	1:F:362:LEU:HD12	2.00	0.43
1:F:219:TRP:N	1:F:220:PRO:CD	2.81	0.43
1:F:442:MET:HB2	1:F:673:GLU:HG2	2.01	0.43
1:F:454:PHE:CG	1:F:648:GLU:HB2	2.53	0.43
1:F:612:GLY:O	1:F:762:HIS:HE1	1.99	0.43
1:F:689:LEU:O	1:F:689:LEU:HD12	2.18	0.43
1:F:731:SER:HA	1:F:747:SER:HB2	1.99	0.43
1:F:957:ARG:HD2	1:F:965:LEU:CD1	2.48	0.43
1:F:1236:ARG:C	1:F:1238:THR:N	2.70	0.43
1:F:1400:SER:C	1:F:1402:PRO:HD2	2.38	0.43
2:G:54:PHE:HB2	2:G:107:ASN:O	2.18	0.43
2:G:195:LEU:HD12	2:G:196:GLU:O	2.19	0.43
2:G:295:LEU:HD21	2:G:319:LEU:HD13	1.99	0.43
2:G:297:GLY:O	2:G:327:MET:HE3	2.18	0.43
2:H:69:LEU:HA	2:H:72:THR:HG22	2.00	0.43
2:H:206:LEU:HD22	2:H:206:LEU:HA	1.91	0.43
2:I:32:TYR:CE2	2:I:194:LYS:HA	2.53	0.43
2:I:80:ALA:HB3	2:I:127:ILE:HD11	1.96	0.43
2:I:237:LEU:C	2:I:237:LEU:HD22	2.39	0.43
2:I:449:LEU:CD2	2:I:452:TRP:CG	2.93	0.43
2:J:32:TYR:CD1	2:J:34:ARG:HD3	2.53	0.43
2:J:54:PHE:HB2	2:J:107:ASN:O	2.18	0.43
2:J:64:ASN:CG	2:J:67:ASP:HB2	2.38	0.43
2:J:418:THR:CA	2:J:424:LEU:CD2	2.95	0.43
2:K:137:VAL:HG13	2:K:209:ASP:CG	2.39	0.43
2:K:237:LEU:C	2:K:237:LEU:HD22	2.39	0.43
2:K:297:GLY:O	2:K:327:MET:HE3	2.18	0.43
2:L:197:LYS:CD	2:L:275:ASP:H	2.30	0.43
2:L:290:LYS:CG	2:L:291:HIS:N	2.79	0.43
2:L:306:ARG:NH1	2:L:336:HIS:HB2	2.34	0.43
2:L:449:LEU:HD22	2:L:452:TRP:CE2	2.53	0.43
1:A:438:GLU:OE1	1:A:553:ALA:HB2	2.18	0.43
1:A:1022:LEU:HA	1:A:1068:ARG:O	2.19	0.43
1:A:1101:GLY:O	1:A:1102:CYS:C	2.57	0.43
1:A:1113:CYS:HB3	1:A:1119:VAL:CG1	2.49	0.43
1:A:1173:ARG:HH22	1:A:1178:LEU:HD23	1.83	0.43
1:A:1315:LEU:HD13	1:A:1320:ASN:ND2	2.33	0.43
1:B:420:VAL:HA	1:B:540:THR:HG21	2.00	0.43
1:B:508:ASN:HB2	1:B:509:PRO:CD	2.47	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:511:ILE:HG21	1:B:511:ILE:HD13	1.76	0.43
1:B:528:ASN:O	1:B:529:LEU:HD23	2.17	0.43
1:B:622:LEU:HD13	1:B:739:PHE:HZ	1.82	0.43
1:B:1400:SER:C	1:B:1402:PRO:HD2	2.38	0.43
1:B:1447:TRP:O	1:B:1450:GLU:N	2.51	0.43
1:C:120:LYS:O	1:C:123:ALA:HB3	2.18	0.43
1:C:191:PHE:CD1	1:C:191:PHE:O	2.71	0.43
1:C:246:ALA:C	1:C:248:GLU:N	2.70	0.43
1:C:309:THR:HB	1:C:314:LYS:HE3	1.99	0.43
1:C:337:ASP:O	1:C:338:GLY:C	2.56	0.43
1:C:420:VAL:O	1:C:422:ASN:N	2.50	0.43
1:C:736:ALA:O	1:C:737:GLU:C	2.53	0.43
1:C:778:PHE:HE2	1:C:1039:LYS:HD2	1.66	0.43
1:C:1395:TYR:HE1	1:C:1397:LEU:HG	1.82	0.43
1:D:98:LEU:HD23	1:D:98:LEU:HA	1.62	0.43
1:D:208:HIS:CD2	1:D:208:HIS:C	2.92	0.43
1:D:547:SER:C	1:D:549:VAL:H	2.21	0.43
1:D:763:ALA:C	1:D:765:ALA:N	2.72	0.43
1:D:869:GLY:O	1:D:870:THR:C	2.52	0.43
1:D:964:MET:O	1:D:965:LEU:HD23	2.17	0.43
1:D:1050:SER:O	1:D:1051:GLU:O	2.36	0.43
1:D:1070:ASP:OD1	1:D:1070:ASP:C	2.55	0.43
1:D:1085:LEU:HD23	1:D:1085:LEU:HA	1.65	0.43
4:D:2474:FMN:H1'2	4:D:2474:FMN:H9	1.57	0.43
1:E:227:MET:HE3	1:E:282:GLU:HG2	2.00	0.43
1:E:248:GLU:OE2	1:E:266:VAL:N	2.44	0.43
1:E:353:MET:HA	1:E:366:GLY:O	2.18	0.43
1:E:621:ILE:HG12	1:E:657:VAL:HG11	2.00	0.43
1:E:1211:LEU:HD12	1:E:1211:LEU:HA	1.72	0.43
1:F:580:GLU:O	1:F:581:ALA:C	2.56	0.43
1:F:1184:ASN:C	1:F:1186:ARG:N	2.71	0.43
2:G:31:ILE:HD11	2:G:194:LYS:HG2	2.00	0.43
2:G:163:ALA:HB3	2:G:207:LEU:HD21	2.00	0.43
2:G:197:LYS:CD	2:G:275:ASP:H	2.30	0.43
2:G:237:LEU:HD22	2:G:237:LEU:C	2.39	0.43
2:G:305:VAL:HG22	2:G:316:VAL:CG1	2.47	0.43
2:G:405:ASP:OD1	2:G:407:PRO:HD2	2.18	0.43
2:G:449:LEU:HD23	2:G:452:TRP:H	1.83	0.43
2:H:32:TYR:CD1	2:H:34:ARG:HD3	2.53	0.43
2:H:93:ILE:HG23	2:H:94:CYS:N	2.33	0.43
2:H:165:GLU:CB	2:H:169:LYS:HZ3	2.30	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:32:TYR:CD1	2:I:34:ARG:HD3	2.53	0.43
2:I:96:ARG:NH2	2:I:199:VAL:HG21	2.31	0.43
2:I:163:ALA:HB3	2:I:207:LEU:HD21	2.00	0.43
2:I:447:ALA:HB1	2:I:452:TRP:CD2	2.50	0.43
2:J:110:ILE:HD11	2:J:118:VAL:CA	2.48	0.43
2:J:423:LEU:CD2	2:J:423:LEU:N	2.80	0.43
2:J:426:ASP:O	2:J:430:LYS:HA	2.17	0.43
2:K:32:TYR:CD1	2:K:34:ARG:HD3	2.53	0.43
2:K:71:LEU:CD1	2:K:80:ALA:N	2.81	0.43
2:K:118:VAL:HG22	2:K:118:VAL:H	1.08	0.43
2:K:146:LEU:N	2:K:146:LEU:CD2	2.81	0.43
2:K:165:GLU:CB	2:K:169:LYS:HZ3	2.29	0.43
2:K:173:VAL:CG2	2:K:174:HIS:N	2.81	0.43
2:K:181:ARG:NH2	2:K:188:TYR:CD1	2.86	0.43
2:K:269:ASN:HD22	2:K:273:LEU:CD2	2.30	0.43
2:K:295:LEU:HD21	2:K:319:LEU:HD13	1.99	0.43
2:L:146:LEU:N	2:L:146:LEU:CD2	2.81	0.43
2:L:166:LEU:HD22	2:L:169:LYS:HE2	2.00	0.43
2:L:215:HIS:CD2	2:L:218:PHE:HD1	2.35	0.43
2:L:277:VAL:CG1	2:L:278:GLU:N	2.81	0.43
2:L:454:ILE:CD1	2:L:458:ARG:HG2	2.48	0.43
1:A:144:PHE:HD1	1:A:144:PHE:HA	1.68	0.43
1:A:191:PHE:CD1	1:A:191:PHE:O	2.72	0.43
1:A:330:PRO:HB3	1:A:350:LEU:HB3	2.01	0.43
1:A:420:VAL:O	1:A:422:ASN:N	2.50	0.43
1:A:562:MET:HE3	1:A:566:ALA:HB2	2.00	0.43
1:A:918:THR:O	1:A:921:TYR:N	2.51	0.43
1:A:1053:HIS:ND1	1:A:1062:ARG:HD3	2.33	0.43
1:B:78:LEU:HB3	1:B:79:PRO:CD	2.48	0.43
1:B:230:HIS:HE1	1:B:234:ILE:HG13	1.82	0.43
1:B:308:THR:O	1:B:308:THR:CG2	2.66	0.43
1:B:500:ARG:NH2	1:B:1039:LYS:O	2.50	0.43
1:B:1427:LEU:O	1:B:1428:ILE:C	2.56	0.43
1:C:30:HIS:CD2	1:C:30:HIS:N	2.85	0.43
1:C:509:PRO:HB3	1:C:975:TYR:CD1	2.53	0.43
1:C:803:THR:O	1:C:803:THR:HG22	2.08	0.43
1:C:911:ALA:O	1:C:912:SER:C	2.57	0.43
1:D:381:GLU:CD	1:D:402:ARG:NH1	2.67	0.43
1:D:420:VAL:HA	1:D:540:THR:HG21	2.00	0.43
1:D:430:VAL:HG13	1:D:554:GLU:CA	2.37	0.43
1:D:442:MET:HE3	1:D:442:MET:HB3	1.68	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:550:LEU:HA	1:D:554:GLU:OE2	2.19	0.43
1:D:580:GLU:O	1:D:581:ALA:C	2.56	0.43
1:D:660:GLY:HA2	1:D:721:GLY:N	2.33	0.43
1:D:970:PRO:HG2	1:D:970:PRO:O	2.19	0.43
1:D:1424:LEU:HD23	1:D:1424:LEU:C	2.39	0.43
1:E:78:LEU:HB3	1:E:79:PRO:HD2	2.00	0.43
1:E:114:VAL:HG11	1:E:125:ARG:NH1	2.33	0.43
1:E:210:ARG:HA	3:E:2473:OMT:HE1	2.01	0.43
1:E:468:MET:O	1:E:472:GLY:N	2.50	0.43
1:E:558:MET:C	1:E:560:ASP:N	2.72	0.43
1:E:636:LEU:O	1:E:639:PHE:N	2.38	0.43
1:E:918:THR:O	1:E:921:TYR:N	2.51	0.43
1:E:1138:LEU:HA	1:E:1138:LEU:HD12	1.79	0.43
1:E:1425:LYS:CD	1:E:1447:TRP:CD1	3.02	0.43
1:F:78:LEU:HB3	1:F:79:PRO:CD	2.48	0.43
1:F:558:MET:O	1:F:560:ASP:N	2.51	0.43
1:F:777:GLY:C	2:I:52:VAL:HG11	2.39	0.43
1:F:806:SER:HG	1:F:809:THR:H	1.63	0.43
1:F:869:GLY:O	1:F:870:THR:C	2.52	0.43
1:F:1190:VAL:C	1:F:1192:PRO:HD3	2.38	0.43
1:F:1244:THR:OG1	1:F:1278:ALA:HB3	2.18	0.43
1:F:1435:THR:HG23	1:F:1437:SER:N	2.34	0.43
2:G:32:TYR:CD1	2:G:34:ARG:HD3	2.53	0.43
2:G:60:PRO:O	2:G:455:ARG:HD3	2.18	0.43
2:G:197:LYS:HG2	2:G:273:LEU:CD1	2.43	0.43
2:G:306:ARG:NH1	2:G:336:HIS:HB2	2.34	0.43
2:H:32:TYR:CE2	2:H:194:LYS:CA	3.02	0.43
2:H:54:PHE:HB2	2:H:107:ASN:O	2.18	0.43
2:H:77:LEU:CA	2:H:127:ILE:CD1	2.93	0.43
2:H:92:GLU:HG3	2:H:203:ARG:NH1	2.34	0.43
2:I:153:ILE:CG1	2:I:220:VAL:HG22	2.49	0.43
2:J:53:PRO:HD2	2:J:56:GLN:HE21	1.83	0.43
2:J:68:TRP:CH2	2:J:124:GLU:OE1	2.72	0.43
2:J:137:VAL:HG13	2:J:209:ASP:CG	2.39	0.43
2:J:462:GLU:O	2:J:465:HIS:HB3	2.18	0.43
2:K:31:ILE:HG12	2:K:193:PHE:CD1	2.54	0.43
2:K:54:PHE:HB2	2:K:107:ASN:O	2.18	0.43
2:K:93:ILE:HG23	2:K:94:CYS:N	2.33	0.43
2:K:277:VAL:CG1	2:K:278:GLU:N	2.81	0.43
2:K:317:LYS:HE3	2:K:345:ILE:HG13	2.00	0.43
2:K:350:PRO:HG2	2:K:374:ALA:HA	1.99	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:28:PHE:HZ	2:L:285:LEU:HD21	1.83	0.43
2:L:188:TYR:OH	2:L:262:LEU:HD23	2.18	0.43
1:A:56:LYS:HE2	1:A:67:PRO:O	2.17	0.43
1:A:329:GLY:O	1:A:330:PRO:C	2.56	0.43
1:A:621:ILE:HG12	1:A:657:VAL:HG11	2.00	0.43
1:A:687:MET:HA	1:A:688:PRO:HD3	1.83	0.43
1:A:858:MET:HA	4:A:2474:FMN:C5A	2.48	0.43
1:A:908:LYS:HD2	1:A:921:TYR:CD2	2.53	0.43
1:A:1068:ARG:NE	1:A:1089:GLU:OE1	2.39	0.43
1:A:1274:GLN:H	1:A:1274:GLN:HG2	1.35	0.43
1:A:1315:LEU:HB3	1:A:1320:ASN:ND2	2.31	0.43
1:A:1395:TYR:CE2	1:A:1443:ILE:CD1	3.01	0.43
1:B:8:ALA:HA	1:B:362:LEU:HD12	2.00	0.43
1:B:284:MET:HE2	1:B:294:VAL:HG13	2.00	0.43
1:B:974:ILE:HD13	1:B:974:ILE:HG21	1.74	0.43
1:C:1458:VAL:CG1	1:C:1459:PRO:CD	2.97	0.43
1:D:364:ILE:HD12	1:D:374:ILE:HD11	2.00	0.43
1:D:440:SER:O	1:D:441:ASP:OD1	2.36	0.43
1:D:700:ILE:C	1:D:703:GLY:H	2.22	0.43
1:D:848:ALA:O	1:D:849:ILE:C	2.54	0.43
1:E:81:ILE:HD13	1:F:216:PHE:CZ	2.53	0.43
1:E:509:PRO:HB3	1:E:975:TYR:CD1	2.53	0.43
1:E:787:ARG:HH11	1:E:787:ARG:HD3	1.66	0.43
1:E:949:VAL:O	1:E:950:THR:O	2.37	0.43
1:E:978:GLU:H	1:E:978:GLU:HG2	1.19	0.43
1:E:1022:LEU:HA	1:E:1068:ARG:O	2.19	0.43
1:E:1101:GLY:O	1:E:1102:CYS:C	2.57	0.43
1:E:1310:THR:O	1:E:1313:SER:N	2.33	0.43
1:E:1315:LEU:HB3	1:E:1320:ASN:ND2	2.31	0.43
1:E:1315:LEU:HD13	1:E:1320:ASN:ND2	2.33	0.43
1:E:1387:MET:O	1:E:1387:MET:CG	2.41	0.43
1:E:1425:LYS:HD2	1:E:1447:TRP:CD2	2.54	0.43
1:F:144:PHE:HD1	1:F:144:PHE:HA	1.71	0.43
1:F:251:MET:CE	1:F:533:LEU:HD11	2.49	0.43
1:F:409:HIS:O	1:F:413:LEU:HD23	2.19	0.43
1:F:440:SER:O	1:F:441:ASP:OD1	2.36	0.43
1:F:643:ASN:HD22	1:F:665:THR:HG21	1.83	0.43
1:F:780:ARG:NH2	2:I:109:VAL:HG11	2.33	0.43
1:F:1329:TYR:HD1	1:F:1348:VAL:HG13	1.82	0.43
2:G:31:ILE:HG12	2:G:193:PHE:CD1	2.54	0.43
2:G:32:TYR:HE2	2:G:194:LYS:CA	2.30	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:77:LEU:CA	2:G:127:ILE:CD1	2.93	0.43
2:G:266:THR:HG23	2:G:270:LYS:NZ	2.33	0.43
2:G:351:GLU:CB	2:G:353:PHE:HB3	2.47	0.43
2:H:201:GLU:HA	2:H:204:VAL:CG1	2.49	0.43
2:H:237:LEU:C	2:H:237:LEU:HD22	2.39	0.43
2:I:137:VAL:HG13	2:I:209:ASP:CG	2.39	0.43
2:I:148:LEU:HB3	2:I:234:VAL:HG23	1.98	0.43
2:I:264:TYR:CE1	2:I:311:GLN:NE2	2.87	0.43
2:J:32:TYR:CE2	2:J:194:LYS:CA	3.02	0.43
2:J:96:ARG:NH2	2:J:199:VAL:HG21	2.31	0.43
2:J:110:ILE:HB	2:J:115:HIS:HE1	1.81	0.43
2:J:153:ILE:CG1	2:J:220:VAL:HG22	2.49	0.43
2:K:188:TYR:OH	2:K:262:LEU:HD23	2.18	0.43
2:K:266:THR:HG23	2:K:270:LYS:NZ	2.33	0.43
2:K:443:ILE:HD12	2:K:444:VAL:HG23	1.99	0.43
2:K:449:LEU:HD23	2:K:452:TRP:H	1.83	0.43
2:L:80:ALA:HB3	2:L:127:ILE:HD11	1.96	0.43
2:L:153:ILE:CG1	2:L:220:VAL:CG1	2.96	0.43
2:L:200:VAL:HA	2:L:203:ARG:HD2	1.97	0.43
2:L:201:GLU:HA	2:L:204:VAL:CG1	2.49	0.43
2:L:430:LYS:HE3	2:L:439:ALA:O	2.17	0.43
2:L:449:LEU:HD23	2:L:452:TRP:H	1.83	0.43
1:A:420:VAL:CG1	1:A:421:GLN:N	2.81	0.43
1:A:498:PHE:HD1	1:A:498:PHE:H	1.64	0.43
1:A:515:ARG:H	1:A:515:ARG:HG3	1.52	0.43
1:A:572:THR:CG2	1:A:615:ARG:HE	2.32	0.43
1:A:1161:VAL:O	1:A:1161:VAL:HG13	2.18	0.43
1:A:1465:ARG:HE	1:A:1465:ARG:HB3	1.62	0.43
1:B:208:HIS:CD2	1:B:208:HIS:C	2.92	0.43
1:B:219:TRP:N	1:B:220:PRO:CD	2.81	0.43
1:B:251:MET:CE	1:B:533:LEU:HD11	2.49	0.43
1:B:290:THR:HG22	1:B:292:PRO:CD	2.48	0.43
1:B:312:ASN:HB2	1:B:411:ALA:CB	2.46	0.43
1:B:677:GLU:OE2	1:B:681:ARG:NH1	2.52	0.43
1:B:1043:LEU:HD23	1:B:1047:MET:HE3	1.99	0.43
1:C:419:TRP:CE2	1:C:537:GLU:HB3	2.53	0.43
1:C:515:ARG:H	1:C:515:ARG:HG3	1.52	0.43
1:C:559:ARG:HD2	1:C:605:ILE:CD1	2.48	0.43
1:C:983:LEU:HD22	1:C:987:LEU:HG	2.01	0.43
1:C:1022:LEU:HA	1:C:1068:ARG:O	2.19	0.43
1:C:1026:ASN:ND2	1:C:1027:SER:N	2.66	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1349:ARG:NH1	1:C:1367:TYR:O	2.52	0.43
1:C:1425:LYS:HD2	1:C:1447:TRP:CD2	2.54	0.43
1:D:293:MET:HG2	1:D:410:LEU:HD23	2.00	0.43
1:D:353:MET:HE2	1:D:353:MET:HA	2.00	0.43
1:D:622:LEU:HD13	1:D:739:PHE:HZ	1.82	0.43
1:D:739:PHE:O	1:D:740:PRO:C	2.55	0.43
1:D:783:LYS:HD3	2:H:57:VAL:HG13	0.93	0.43
1:D:957:ARG:HD2	1:D:965:LEU:CD1	2.48	0.43
1:E:246:ALA:C	1:E:248:GLU:N	2.70	0.43
1:E:316:LEU:O	1:E:319:TYR:N	2.50	0.43
1:E:1113:CYS:C	1:E:1115:VAL:N	2.71	0.43
1:E:1113:CYS:HB3	1:E:1119:VAL:CG1	2.49	0.43
1:E:1131:THR:HG22	1:E:1133:GLU:H	1.81	0.43
1:E:1354:THR:HG23	1:E:1372:THR:HB	2.01	0.43
1:E:1395:TYR:CE2	1:E:1443:ILE:CD1	3.01	0.43
1:F:120:LYS:HE2	1:F:120:LYS:HA	2.00	0.43
1:F:208:HIS:CD2	1:F:208:HIS:C	2.92	0.43
1:F:632:ILE:HG23	1:F:632:ILE:HD12	1.66	0.43
2:G:51:GLY:O	2:G:52:VAL:HG23	2.16	0.43
2:G:94:CYS:SG	2:G:450:VAL:HG22	2.59	0.43
2:G:173:VAL:CG2	2:G:174:HIS:N	2.81	0.43
2:G:178:ARG:HH12	2:G:243:TYR:HB2	1.83	0.43
2:H:60:PRO:O	2:H:455:ARG:HD3	2.18	0.43
2:H:94:CYS:SG	2:H:450:VAL:HG22	2.59	0.43
2:H:215:HIS:HD2	2:H:218:PHE:HD1	1.65	0.43
2:I:110:ILE:HD11	2:I:118:VAL:CA	2.48	0.43
2:I:175:VAL:HG13	2:I:175:VAL:O	2.18	0.43
2:J:28:PHE:HZ	2:J:285:LEU:HD21	1.84	0.43
2:J:94:CYS:SG	2:J:450:VAL:HG22	2.59	0.43
2:J:178:ARG:HH12	2:J:243:TYR:HB2	1.83	0.43
2:J:229:LEU:HD22	2:J:236:VAL:HG12	2.00	0.43
2:J:240:THR:HG23	2:J:443:ILE:HG21	2.01	0.43
2:J:264:TYR:CE1	2:J:311:GLN:NE2	2.87	0.43
2:J:297:GLY:O	2:J:327:MET:HE3	2.18	0.43
2:J:306:ARG:NH1	2:J:336:HIS:HB2	2.34	0.43
2:K:60:PRO:O	2:K:455:ARG:HD3	2.18	0.43
2:L:28:PHE:N	2:L:28:PHE:CD1	2.84	0.43
2:L:165:GLU:HB3	2:L:169:LYS:HZ2	1.82	0.43
2:L:240:THR:HG23	2:L:443:ILE:HG21	2.01	0.43
2:L:304:CYS:CA	2:L:307:THR:HG22	2.48	0.43
1:A:216:PHE:HA	1:A:217:PRO:HD3	1.73	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:345:MET:HE2	1:A:385:LEU:HB2	1.96	0.43
1:A:463:LEU:HD23	1:A:463:LEU:HA	1.48	0.43
1:A:575:VAL:HG13	1:A:759:LEU:CD2	2.48	0.43
1:A:896:PRO:HB2	1:C:1226:GLY:CA	2.49	0.43
1:A:1226:GLY:CA	1:E:896:PRO:HB2	2.49	0.43
1:A:1267:ARG:H	1:A:1267:ARG:HG2	1.71	0.43
1:A:1315:LEU:HD23	1:A:1315:LEU:HA	1.62	0.43
1:A:1394:VAL:CG1	1:A:1401:LEU:HD23	2.49	0.43
1:B:403:ASP:OD1	1:B:407:LYS:HG3	2.18	0.43
1:B:409:HIS:O	1:B:413:LEU:HD23	2.18	0.43
1:B:606:LEU:HA	1:B:606:LEU:HD23	1.78	0.43
1:B:643:ASN:HD22	1:B:665:THR:HG21	1.83	0.43
1:B:1105:VAL:HG23	2:G:54:PHE:CD1	2.54	0.43
1:B:1244:THR:OG1	1:B:1278:ALA:HB3	2.18	0.43
1:C:16:SER:O	1:C:20:LYS:CG	2.66	0.43
1:C:56:LYS:CG	1:C:71:LEU:HD22	2.49	0.43
1:C:143:GLN:CA	1:C:143:GLN:NE2	2.78	0.43
1:C:218:THR:CG2	1:C:221:LEU:HG	2.44	0.43
1:C:256:PHE:O	1:C:257:GLY:C	2.56	0.43
1:C:896:PRO:HB2	1:E:1226:GLY:C	2.39	0.43
1:D:409:HIS:O	1:D:413:LEU:HD23	2.18	0.43
1:D:511:ILE:HG22	1:D:512:ASP:H	1.79	0.43
1:D:552:THR:O	1:D:552:THR:HG22	2.19	0.43
1:D:677:GLU:OE2	1:D:681:ARG:NH1	2.52	0.43
1:D:764:THR:CG2	1:D:764:THR:O	2.63	0.43
1:D:1058:LEU:HD23	1:D:1058:LEU:HA	1.63	0.43
1:D:1427:LEU:O	1:D:1428:ILE:C	2.56	0.43
1:E:46:ILE:HG12	1:E:48:VAL:HG13	2.01	0.43
1:E:56:LYS:CG	1:E:71:LEU:HD22	2.49	0.43
1:E:248:GLU:CA	1:E:251:MET:HG2	2.31	0.43
1:E:303:LEU:HD11	1:E:314:LYS:HG2	2.01	0.43
1:E:358:THR:CB	1:E:360:ASP:OD1	2.65	0.43
1:E:442:MET:CE	1:E:447:LEU:N	2.81	0.43
1:E:780:ARG:NH2	2:L:54:PHE:HD1	2.17	0.43
1:E:911:ALA:O	1:E:912:SER:C	2.57	0.43
1:E:983:LEU:HD22	1:E:987:LEU:HG	2.01	0.43
1:E:990:ILE:O	1:E:990:ILE:HG13	2.19	0.43
1:F:364:ILE:HD12	1:F:374:ILE:HD11	2.00	0.43
1:F:420:VAL:HA	1:F:540:THR:HG21	2.00	0.43
1:F:511:ILE:CG2	1:F:512:ASP:N	2.74	0.43
1:F:550:LEU:HD13	1:F:555:PHE:HA	2.01	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:677:GLU:OE2	1:F:681:ARG:NH1	2.52	0.43
1:F:739:PHE:O	1:F:740:PRO:C	2.55	0.43
1:F:1222:LEU:N	1:F:1229:MET:HE2	2.33	0.43
1:F:1374:VAL:HG12	1:F:1375:ILE:N	2.32	0.43
1:F:1458:VAL:HA	1:F:1459:PRO:HD3	1.90	0.43
2:G:93:ILE:HG23	2:G:94:CYS:N	2.33	0.43
2:G:197:LYS:CB	2:G:273:LEU:HG	2.48	0.43
2:G:229:LEU:HD22	2:G:236:VAL:HG12	2.00	0.43
2:H:31:ILE:HG12	2:H:193:PHE:CD1	2.54	0.43
2:H:68:TRP:CH2	2:H:124:GLU:OE1	2.72	0.43
2:H:137:VAL:CG1	2:H:138:LYS:N	2.82	0.43
2:H:295:LEU:HD21	2:H:319:LEU:HD13	1.99	0.43
2:H:306:ARG:NH1	2:H:336:HIS:HB2	2.34	0.43
2:H:324:ARG:HH11	2:H:324:ARG:CB	2.32	0.43
2:H:449:LEU:HD23	2:H:452:TRP:H	1.83	0.43
2:I:29:ALA:O	2:I:193:PHE:HB2	2.19	0.43
2:I:64:ASN:CG	2:I:67:ASP:HB2	2.38	0.43
2:I:162:ALA:HB3	2:I:237:LEU:CD1	2.49	0.43
2:I:350:PRO:HD2	2:I:374:ALA:CB	2.49	0.43
2:I:430:LYS:HE3	2:I:439:ALA:O	2.18	0.43
2:J:29:ALA:O	2:J:193:PHE:HB2	2.19	0.43
2:J:137:VAL:CG1	2:J:138:LYS:N	2.82	0.43
2:J:146:LEU:N	2:J:146:LEU:CD2	2.81	0.43
2:J:181:ARG:NH2	2:J:188:TYR:CD1	2.86	0.43
2:J:201:GLU:HA	2:J:204:VAL:CG1	2.49	0.43
2:J:317:LYS:CE	2:J:345:ILE:CG1	2.95	0.43
2:K:31:ILE:HD11	2:K:194:LYS:HG2	2.00	0.43
2:K:92:GLU:HG3	2:K:203:ARG:NH1	2.34	0.43
2:K:324:ARG:HH11	2:K:324:ARG:CB	2.32	0.43
2:L:29:ALA:O	2:L:193:PHE:HB2	2.19	0.43
2:L:94:CYS:SG	2:L:450:VAL:HG22	2.59	0.43
2:L:137:VAL:HG13	2:L:209:ASP:CG	2.39	0.43
2:L:153:ILE:CG1	2:L:220:VAL:HG22	2.49	0.43
2:L:181:ARG:NH2	2:L:188:TYR:CD1	2.86	0.43
2:L:207:LEU:HD12	2:L:212:VAL:CG1	2.49	0.43
2:L:237:LEU:C	2:L:237:LEU:HD22	2.39	0.43
2:L:302:MET:CE	2:L:334:VAL:CA	2.95	0.43
2:L:388:PHE:CD2	2:L:390:VAL:CG1	2.95	0.43
1:A:56:LYS:CG	1:A:71:LEU:HD22	2.49	0.43
1:A:228:LEU:HA	1:A:228:LEU:HD12	1.29	0.43
1:A:261:GLN:HE21	1:A:264:LYS:HD2	1.83	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:302:ALA:CA	1:A:347:ARG:NH1	2.81	0.43
1:A:309:THR:HB	1:A:314:LYS:HE3	2.00	0.43
1:A:708:MET:HE2	1:A:708:MET:HB2	1.74	0.43
1:A:1212:ASP:OD2	1:A:1243:GLY:CA	2.67	0.43
1:A:1228:LYS:C	1:A:1229:MET:HG2	2.39	0.43
1:A:1349:ARG:NH1	1:A:1367:TYR:O	2.52	0.43
1:A:1420:TYR:OH	1:A:1466:LEU:CD2	2.66	0.43
1:B:120:LYS:HE2	1:B:120:LYS:HA	2.00	0.43
1:B:552:THR:O	1:B:552:THR:HG22	2.19	0.43
1:B:562:MET:CE	1:B:605:ILE:HD11	2.49	0.43
1:B:943:GLN:HE21	1:B:1033:SER:HA	1.83	0.43
1:B:1011:ALA:O	1:B:1014:ALA:N	2.52	0.43
1:B:1230:GLN:HB2	1:D:877:ARG:CD	2.48	0.43
1:C:329:GLY:O	1:C:330:PRO:C	2.56	0.43
1:C:551:THR:H	1:C:554:GLU:CG	2.32	0.43
1:C:572:THR:CG2	1:C:615:ARG:HE	2.32	0.43
1:C:611:MET:HE3	1:C:611:MET:HB3	1.82	0.43
1:C:636:LEU:O	1:C:638:THR:N	2.51	0.43
1:C:949:VAL:O	1:C:950:THR:O	2.37	0.43
1:C:1011:ALA:O	1:C:1014:ALA:N	2.52	0.43
1:C:1159:ASN:O	1:C:1161:VAL:N	2.51	0.43
1:C:1264:ILE:HG22	1:C:1283:GLY:O	2.19	0.43
1:C:1351:SER:OG	1:C:1369:THR:HB	2.18	0.43
1:D:165:ASN:O	1:D:166:ASP:CB	2.65	0.43
1:D:850:ARG:NH1	1:D:878:ILE:HB	2.33	0.43
1:E:120:LYS:O	1:E:123:ALA:HB3	2.18	0.43
1:E:345:MET:HE1	1:E:385:LEU:HB2	2.00	0.43
1:E:559:ARG:HD2	1:E:605:ILE:CD1	2.48	0.43
1:E:572:THR:CG2	1:E:615:ARG:HE	2.32	0.43
1:E:991:ASN:HA	1:E:992:PRO:HD2	1.84	0.43
1:E:1011:ALA:O	1:E:1014:ALA:N	2.52	0.43
1:E:1139:PHE:N	1:E:1139:PHE:CD1	2.86	0.43
1:E:1348:VAL:O	1:E:1348:VAL:CG1	2.65	0.43
1:E:1349:ARG:NH1	1:E:1367:TYR:O	2.52	0.43
1:E:1444:LEU:HD23	1:E:1444:LEU:HA	1.77	0.43
1:F:466:HIS:CE1	1:F:684:PHE:HE1	2.33	0.43
1:F:780:ARG:HH21	2:I:54:PHE:HE1	1.59	0.43
1:F:897:ASP:OD1	1:F:899:ASN:N	2.52	0.43
1:F:970:PRO:HG2	1:F:970:PRO:O	2.19	0.43
1:F:1050:SER:O	1:F:1051:GLU:O	2.36	0.43
2:G:89:ASN:HD22	2:G:89:ASN:N	2.17	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:188:TYR:OH	2:G:262:LEU:HD23	2.18	0.43
2:G:207:LEU:HD12	2:G:212:VAL:CG1	2.49	0.43
2:G:215:HIS:CD2	2:G:218:PHE:HD1	2.35	0.43
2:G:281:GLU:HG3	2:G:281:GLU:O	2.17	0.43
2:G:317:LYS:CE	2:G:345:ILE:CG1	2.95	0.43
2:G:324:ARG:HH11	2:G:324:ARG:CB	2.32	0.43
2:H:50:CYS:SG	2:H:109:VAL:HG21	2.58	0.43
2:H:80:ALA:HB3	2:H:127:ILE:HD11	1.96	0.43
2:H:181:ARG:NH2	2:H:188:TYR:CD1	2.86	0.43
2:H:423:LEU:CD2	2:H:423:LEU:N	2.80	0.43
2:I:50:CYS:SG	2:I:109:VAL:HG21	2.58	0.43
2:I:178:ARG:HH12	2:I:243:TYR:HB2	1.83	0.43
2:I:371:VAL:CG2	2:I:386:SER:CB	2.94	0.43
2:I:462:GLU:O	2:I:465:HIS:HB3	2.18	0.43
2:J:50:CYS:SG	2:J:109:VAL:HG21	2.58	0.43
2:J:92:GLU:HG3	2:J:203:ARG:NH1	2.34	0.43
2:K:132:TRP:CG	2:K:202:ARG:HD2	2.52	0.43
2:K:201:GLU:HA	2:K:204:VAL:CG1	2.49	0.43
2:K:290:LYS:HD3	2:K:393:ASP:CG	2.38	0.43
2:L:54:PHE:HB2	2:L:107:ASN:O	2.18	0.43
2:L:163:ALA:HB3	2:L:207:LEU:HD21	2.00	0.43
1:A:303:LEU:HD11	1:A:314:LYS:HG2	2.01	0.43
1:A:442:MET:HE1	1:A:447:LEU:CA	2.48	0.43
1:A:454:PHE:CD1	1:A:454:PHE:N	2.81	0.43
1:A:485:ILE:HD13	1:A:485:ILE:HG21	1.72	0.43
1:A:562:MET:HE1	1:A:605:ILE:HD11	2.01	0.43
1:A:784:SER:HB3	1:A:785:GLY:H	1.66	0.43
1:A:896:PRO:HB2	1:C:1226:GLY:C	2.39	0.43
1:A:911:ALA:O	1:A:912:SER:C	2.57	0.43
1:A:979:ASP:O	1:A:980:LEU:C	2.55	0.43
1:A:1011:ALA:O	1:A:1014:ALA:N	2.52	0.43
1:A:1276:LEU:HD12	1:A:1276:LEU:C	2.36	0.43
1:A:1360:CYS:O	1:A:1361:GLY:O	2.35	0.43
1:A:1425:LYS:CD	1:A:1447:TRP:CD1	3.02	0.43
1:B:30:HIS:CD2	1:B:31:ARG:N	2.86	0.43
1:B:783:LYS:HD3	2:G:57:VAL:HG13	0.93	0.43
1:B:824:GLN:O	1:B:827:ASP:CB	2.58	0.43
1:B:986:ASP:O	1:B:987:LEU:C	2.56	0.43
1:B:1062:ARG:HH11	1:B:1062:ARG:HD3	1.40	0.43
1:B:1085:LEU:HD23	1:B:1085:LEU:HA	1.65	0.43
1:C:545:LEU:HD23	1:C:545:LEU:HA	1.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:746:ILE:CG2	1:C:747:SER:N	2.76	0.43
1:C:944:LEU:HA	1:C:944:LEU:HD12	1.72	0.43
1:C:1108:CYS:SG	6:C:2476:F3S:S4	2.94	0.43
1:C:1139:PHE:N	1:C:1139:PHE:HD1	2.15	0.43
1:C:1212:ASP:OD2	1:C:1243:GLY:CA	2.67	0.43
1:C:1425:LYS:CD	1:C:1447:TRP:CD1	3.02	0.43
1:D:390:MET:HG3	1:D:406:LEU:CD2	2.48	0.43
1:D:458:MET:O	1:D:461:MET:N	2.50	0.43
1:D:754:ILE:HG22	1:D:755:GLN:N	2.34	0.43
1:E:191:PHE:O	1:E:191:PHE:CD1	2.72	0.43
1:E:250:ARG:HH21	1:E:639:PHE:HE1	1.63	0.43
1:E:417:ASP:O	1:E:418:LYS:C	2.52	0.43
1:E:551:THR:H	1:E:554:GLU:CG	2.32	0.43
1:E:636:LEU:O	1:E:638:THR:N	2.51	0.43
1:E:819:LYS:HA	1:E:819:LYS:HD3	1.73	0.43
1:E:842:GLU:OE1	1:E:1156:ARG:NH1	2.52	0.43
1:E:1158:LEU:HD12	1:E:1158:LEU:HA	1.61	0.43
1:E:1173:ARG:HH22	1:E:1178:LEU:HD23	1.83	0.43
1:E:1264:ILE:HG22	1:E:1283:GLY:O	2.19	0.43
1:E:1468:VAL:O	1:E:1468:VAL:HG12	2.15	0.43
1:F:30:HIS:HD2	1:F:31:ARG:H	1.65	0.43
1:F:552:THR:O	1:F:552:THR:HG22	2.19	0.43
1:F:574:PRO:HG2	1:F:574:PRO:O	2.19	0.43
1:F:890:ASP:HA	1:F:891:PRO:HD3	1.65	0.43
2:G:29:ALA:O	2:G:193:PHE:HB2	2.19	0.43
2:G:109:VAL:HG22	2:G:109:VAL:H	1.50	0.43
2:G:241:GLY:O	2:G:443:ILE:HG22	2.19	0.43
2:H:71:LEU:HD22	2:H:74:GLU:HG3	2.01	0.43
2:H:197:LYS:CB	2:H:273:LEU:HG	2.48	0.43
2:H:264:TYR:CE1	2:H:311:GLN:NE2	2.87	0.43
2:I:137:VAL:CG1	2:I:138:LYS:N	2.82	0.43
2:I:146:LEU:N	2:I:146:LEU:CD2	2.81	0.43
2:I:306:ARG:NH1	2:I:336:HIS:HB2	2.34	0.43
2:I:449:LEU:HD22	2:I:452:TRP:CE2	2.53	0.43
2:J:69:LEU:HA	2:J:72:THR:HG22	2.00	0.43
2:J:237:LEU:HD22	2:J:237:LEU:C	2.39	0.43
2:J:322:ARG:CD	2:J:349:ALA:CB	2.94	0.43
2:K:50:CYS:SG	2:K:109:VAL:HG21	2.58	0.43
2:K:68:TRP:CH2	2:K:124:GLU:OE1	2.72	0.43
2:K:162:ALA:HB3	2:K:237:LEU:CD1	2.49	0.43
2:K:240:THR:OG1	8:K:484:FAD:N7A	2.50	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:32:TYR:CE2	2:L:194:LYS:CA	3.02	0.43
2:L:93:ILE:HG23	2:L:94:CYS:N	2.33	0.43
2:L:281:GLU:HG3	2:L:281:GLU:O	2.17	0.43
2:L:324:ARG:HH11	2:L:324:ARG:CB	2.32	0.43
1:A:78:LEU:HB3	1:A:79:PRO:HD2	2.00	0.43
1:A:831:LEU:HD13	1:A:1084:MET:HE3	2.00	0.43
1:A:842:GLU:OE1	1:A:1156:ARG:NH1	2.52	0.43
1:A:903:TRP:CD1	1:A:903:TRP:N	2.86	0.43
1:A:1349:ARG:HG2	1:A:1349:ARG:NH1	2.31	0.43
1:B:555:PHE:CD1	1:B:556:ARG:N	2.77	0.43
1:B:1366:GLU:OE2	1:B:1367:TYR:CE2	2.71	0.43
1:B:1424:LEU:HD23	1:B:1424:LEU:C	2.39	0.43
1:C:244:MET:HE3	1:C:244:MET:HB2	1.56	0.43
1:C:491:LYS:HZ1	1:C:785:GLY:HA3	1.84	0.43
1:C:828:LEU:HD22	1:C:1172:SER:CB	2.38	0.43
1:C:1141:PHE:O	1:C:1142:LEU:C	2.55	0.43
1:C:1156:ARG:O	1:C:1157:SER:HB3	2.18	0.43
1:C:1276:LEU:HD12	1:C:1276:LEU:C	2.36	0.43
1:D:402:ARG:HH11	1:D:402:ARG:HD3	1.69	0.43
1:D:562:MET:CE	1:D:605:ILE:HD11	2.49	0.43
1:D:702:ASP:O	1:D:703:GLY:C	2.55	0.43
1:D:743:VAL:HG11	1:D:745:ARG:HG3	2.00	0.43
1:D:978:GLU:H	1:D:978:GLU:HG2	1.21	0.43
1:D:1317:THR:HG22	1:D:1318:ASN:CA	2.46	0.43
1:D:1336:LEU:HD23	1:D:1355:VAL:CG1	2.48	0.43
1:E:97:ILE:HA	1:E:151:ILE:HD13	2.01	0.43
1:E:214:ASN:O	1:E:1015:LYS:CE	2.53	0.43
1:E:420:VAL:CG1	1:E:421:GLN:N	2.81	0.43
1:E:560:ASP:C	1:E:562:MET:N	2.70	0.43
1:E:770:VAL:O	1:E:770:VAL:HG12	2.19	0.43
1:F:81:ILE:O	1:F:81:ILE:CG2	2.67	0.43
1:F:244:MET:O	1:F:245:LYS:C	2.57	0.43
1:F:342:VAL:HG11	1:F:390:MET:HE2	2.01	0.43
1:F:390:MET:HG3	1:F:406:LEU:CD2	2.48	0.43
1:F:533:LEU:HD23	1:F:533:LEU:HA	1.43	0.43
1:F:843:VAL:HG11	1:F:1147:ARG:HB3	2.00	0.43
1:F:913:GLY:CA	1:F:1349:ARG:CD	2.94	0.43
1:F:963:VAL:CG1	1:F:964:MET:H	2.25	0.43
1:F:964:MET:O	1:F:965:LEU:HD23	2.18	0.43
1:F:1155:PHE:CZ	1:F:1167:LEU:HD21	2.54	0.43
2:G:32:TYR:CE2	2:G:194:LYS:CA	3.02	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:166:LEU:HD22	2:G:169:LYS:HE2	1.99	0.43
2:G:240:THR:HG23	2:G:443:ILE:HG21	2.01	0.43
2:G:350:PRO:HD2	2:G:374:ALA:CB	2.49	0.43
2:G:430:LYS:CE	2:G:456:ASP:HB3	2.43	0.43
2:G:469:LYS:HZ3	2:G:476:VAL:CA	2.27	0.43
2:H:32:TYR:HB3	2:H:34:ARG:HG2	2.01	0.43
2:H:93:ILE:HD11	2:H:195:LEU:CD2	2.30	0.43
2:H:350:PRO:HD2	2:H:374:ALA:CB	2.49	0.43
2:H:415:LEU:CD2	2:H:416:LYS:N	2.82	0.43
2:I:109:VAL:HG22	2:I:109:VAL:H	1.50	0.43
2:I:132:TRP:CG	2:I:202:ARG:HD2	2.52	0.43
2:I:201:GLU:HA	2:I:204:VAL:CG1	2.49	0.43
2:I:324:ARG:HH11	2:I:324:ARG:CB	2.32	0.43
2:J:181:ARG:C	2:J:182:MET:HE3	2.38	0.43
2:J:324:ARG:HH11	2:J:324:ARG:CB	2.32	0.43
2:K:32:TYR:HB3	2:K:34:ARG:HG2	2.01	0.43
2:K:71:LEU:HD22	2:K:74:GLU:HG3	2.01	0.43
2:K:207:LEU:HD12	2:K:212:VAL:CG1	2.49	0.43
2:K:241:GLY:O	2:K:443:ILE:HG22	2.19	0.43
2:K:306:ARG:NH1	2:K:336:HIS:HB2	2.34	0.43
2:K:317:LYS:CE	2:K:345:ILE:CD1	2.94	0.43
2:K:447:ALA:HB1	2:K:452:TRP:CD2	2.50	0.43
2:L:31:ILE:HG12	2:L:193:PHE:CD1	2.54	0.43
2:L:64:ASN:CG	2:L:67:ASP:HB2	2.39	0.43
2:L:69:LEU:HA	2:L:72:THR:HG22	2.00	0.43
2:L:264:TYR:CE1	2:L:311:GLN:NE2	2.87	0.43
2:L:306:ARG:HD3	2:L:336:HIS:CB	2.45	0.43
2:L:405:ASP:OD1	2:L:407:PRO:HD2	2.18	0.43
2:L:406:LEU:CD2	2:L:406:LEU:N	2.82	0.43
1:A:509:PRO:HB3	1:A:975:TYR:CD1	2.53	0.42
1:A:510:PRO:CD	1:A:970:PRO:HB3	2.37	0.42
1:A:602:THR:C	1:A:640:THR:HG22	2.38	0.42
1:A:802:VAL:HG22	1:A:802:VAL:H	1.50	0.42
1:A:1139:PHE:N	1:A:1139:PHE:HD1	2.15	0.42
1:B:165:ASN:O	1:B:166:ASP:CB	2.65	0.42
1:B:206:ILE:HG21	1:B:206:ILE:HD13	1.76	0.42
1:B:228:LEU:HA	1:B:228:LEU:HD12	1.88	0.42
1:B:558:MET:C	1:B:560:ASP:H	2.23	0.42
1:B:574:PRO:HG2	1:B:574:PRO:O	2.19	0.42
1:B:609:GLU:C	1:B:611:MET:H	2.22	0.42
1:B:612:GLY:O	1:B:762:HIS:HE1	1.99	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:763:ALA:C	1:B:765:ALA:N	2.72	0.42
1:B:885:GLY:O	1:B:887:GLY:N	2.52	0.42
1:B:1032:ALA:O	1:B:1033:SER:HB2	2.19	0.42
1:B:1050:SER:O	1:B:1051:GLU:O	2.36	0.42
1:C:46:ILE:HG12	1:C:48:VAL:HG13	2.01	0.42
1:C:121:ALA:C	1:C:123:ALA:N	2.73	0.42
1:C:1159:ASN:C	1:C:1161:VAL:H	2.23	0.42
1:C:1228:LYS:C	1:C:1229:MET:HG2	2.39	0.42
1:C:1394:VAL:CG1	1:C:1401:LEU:HD23	2.49	0.42
1:C:1468:VAL:HG12	1:C:1469:PRO:O	2.19	0.42
1:D:81:ILE:O	1:D:81:ILE:CG2	2.67	0.42
1:D:216:PHE:HA	1:D:217:PRO:HD3	1.76	0.42
1:D:244:MET:O	1:D:245:LYS:C	2.57	0.42
1:D:251:MET:CE	1:D:533:LEU:HD11	2.49	0.42
1:D:511:ILE:HG21	1:D:511:ILE:HD13	1.76	0.42
1:D:550:LEU:HD13	1:D:555:PHE:HA	2.01	0.42
1:D:777:GLY:C	2:H:52:VAL:HG11	2.39	0.42
1:D:897:ASP:OD1	1:D:899:ASN:N	2.52	0.42
1:D:1132:PRO:O	1:D:1133:GLU:C	2.56	0.42
1:E:438:GLU:OE1	1:E:553:ALA:HB2	2.18	0.42
1:E:591:GLN:O	1:E:594:GLU:N	2.52	0.42
1:E:869:GLY:O	1:E:870:THR:C	2.54	0.42
1:E:903:TRP:N	1:E:903:TRP:CD1	2.86	0.42
1:E:985:TYR:CD1	1:E:1207:VAL:HG11	2.54	0.42
1:E:1026:ASN:ND2	1:E:1027:SER:N	2.66	0.42
1:E:1109:HIS:ND1	1:E:1109:HIS:N	2.45	0.42
1:E:1339:ALA:HB2	1:E:1435:THR:OG1	2.19	0.42
1:E:1468:VAL:HG12	1:E:1469:PRO:O	2.19	0.42
1:F:547:SER:C	1:F:549:VAL:H	2.21	0.42
1:F:666:VAL:HG13	1:F:667:ASN:N	2.34	0.42
1:F:700:ILE:C	1:F:703:GLY:H	2.22	0.42
1:F:1032:ALA:O	1:F:1033:SER:HB2	2.19	0.42
2:G:200:VAL:HA	2:G:203:ARG:HD2	1.97	0.42
2:H:29:ALA:O	2:H:193:PHE:HB2	2.19	0.42
2:H:71:LEU:CD1	2:H:80:ALA:N	2.81	0.42
2:H:153:ILE:CG1	2:H:220:VAL:HG22	2.49	0.42
2:H:195:LEU:HD12	2:H:196:GLU:O	2.19	0.42
2:H:306:ARG:HD3	2:H:336:HIS:CB	2.45	0.42
2:I:32:TYR:CE2	2:I:194:LYS:CA	3.02	0.42
2:I:59:CYS:SG	2:I:61:VAL:CG1	3.05	0.42
2:I:68:TRP:CH2	2:I:124:GLU:OE1	2.72	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:415:LEU:CD2	2:I:416:LYS:N	2.82	0.42
2:I:454:ILE:CD1	2:I:458:ARG:HG2	2.48	0.42
2:I:469:LYS:HZ2	2:I:476:VAL:HB	1.82	0.42
2:J:32:TYR:HB3	2:J:34:ARG:HG2	2.01	0.42
2:J:367:ILE:O	2:J:390:VAL:HG23	2.20	0.42
2:K:29:ALA:O	2:K:193:PHE:HB2	2.19	0.42
2:K:32:TYR:CE2	2:K:194:LYS:CA	3.02	0.42
2:K:94:CYS:SG	2:K:450:VAL:HG22	2.59	0.42
2:K:292:VAL:HG21	2:K:394:LEU:HD13	1.97	0.42
2:K:322:ARG:CD	2:K:349:ALA:CA	2.98	0.42
2:K:350:PRO:HD2	2:K:374:ALA:CB	2.49	0.42
2:L:89:ASN:HD22	2:L:89:ASN:N	2.17	0.42
2:L:195:LEU:HD12	2:L:196:GLU:O	2.19	0.42
2:L:295:LEU:HD21	2:L:319:LEU:HD13	1.99	0.42
1:A:246:ALA:C	1:A:248:GLU:N	2.70	0.42
1:A:295:LYS:CE	1:A:299:VAL:CG1	2.89	0.42
1:A:629:THR:O	1:A:631:LEU:N	2.53	0.42
1:A:956:LEU:HA	1:A:956:LEU:HD23	1.70	0.42
1:A:1245:ARG:O	1:A:1246:LEU:C	2.55	0.42
1:B:501:GLN:OE1	1:B:710:LYS:NZ	2.43	0.42
1:B:777:GLY:C	2:G:52:VAL:HG11	2.39	0.42
1:B:1124:LEU:HD12	1:B:1124:LEU:HA	1.30	0.42
1:C:330:PRO:HB3	1:C:350:LEU:HB3	2.01	0.42
1:C:452:GLN:CG	1:C:764:THR:HG22	2.48	0.42
1:C:605:ILE:HA	1:C:643:ASN:O	2.20	0.42
1:C:666:VAL:HG12	1:C:667:ASN:N	2.34	0.42
1:C:819:LYS:HD3	1:C:819:LYS:HA	1.73	0.42
1:C:990:ILE:O	1:C:990:ILE:HG13	2.19	0.42
1:C:1354:THR:HG23	1:C:1372:THR:HB	2.01	0.42
1:C:1420:TYR:OH	1:C:1466:LEU:CD2	2.66	0.42
1:C:1458:VAL:HA	1:C:1459:PRO:HD3	1.66	0.42
1:D:12:LYS:HA	1:D:13:PRO:HD3	1.75	0.42
1:D:442:MET:HB2	1:D:673:GLU:HG2	2.01	0.42
1:D:843:VAL:HG11	1:D:1147:ARG:HB3	2.00	0.42
1:D:1244:THR:OG1	1:D:1278:ALA:HB3	2.18	0.42
1:D:1375:ILE:O	1:D:1377:GLY:N	2.52	0.42
1:E:59:VAL:HG22	1:E:105:TYR:CD2	2.25	0.42
1:E:125:ARG:HG3	1:E:219:TRP:CZ2	2.53	0.42
1:E:194:ASP:HB3	1:E:200:PHE:CE1	2.54	0.42
1:E:485:ILE:HD13	1:E:485:ILE:HG21	1.72	0.42
1:E:917:VAL:CG1	1:E:922:LEU:HD21	2.50	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:992:PRO:HA	1:E:1204:ARG:HH22	1.84	0.42
1:F:485:ILE:HG21	1:F:485:ILE:HD13	1.68	0.42
1:F:756:LYS:O	1:F:757:LYS:C	2.58	0.42
1:F:1105:VAL:HG23	2:I:54:PHE:CD1	2.54	0.42
1:F:1417:VAL:CG1	1:F:1419:HIS:H	2.28	0.42
1:F:1467:GLU:O	1:F:1469:PRO:HD3	2.18	0.42
2:G:153:ILE:CG1	2:G:220:VAL:HG22	2.49	0.42
2:G:201:GLU:HA	2:G:204:VAL:CG1	2.49	0.42
2:H:207:LEU:HD12	2:H:212:VAL:CG1	2.49	0.42
2:H:229:LEU:HD22	2:H:236:VAL:HG12	2.00	0.42
2:H:358:VAL:CG2	2:H:365:VAL:CG1	2.94	0.42
2:H:406:LEU:CD2	2:H:406:LEU:N	2.82	0.42
2:H:449:LEU:HD22	2:H:452:TRP:CE2	2.53	0.42
2:I:71:LEU:HD22	2:I:74:GLU:HG3	2.01	0.42
2:J:317:LYS:HE3	2:J:345:ILE:HG13	2.00	0.42
2:K:64:ASN:C	2:K:66:PRO:HD2	2.40	0.42
2:K:110:ILE:HD11	2:K:118:VAL:CA	2.48	0.42
2:K:229:LEU:HD22	2:K:236:VAL:HG12	2.00	0.42
2:K:264:TYR:CE1	2:K:311:GLN:NE2	2.87	0.42
2:K:367:ILE:O	2:K:390:VAL:HG23	2.19	0.42
2:K:406:LEU:CD2	2:K:406:LEU:N	2.82	0.42
2:K:415:LEU:CD2	2:K:416:LYS:N	2.82	0.42
2:L:50:CYS:SG	2:L:109:VAL:HG21	2.58	0.42
2:L:109:VAL:HG22	2:L:109:VAL:H	1.50	0.42
2:L:137:VAL:CG1	2:L:138:LYS:N	2.82	0.42
2:L:151:GLY:O	2:L:236:VAL:HA	2.20	0.42
2:L:264:TYR:CE2	2:L:307:THR:CG2	2.94	0.42
2:L:447:ALA:HB1	2:L:452:TRP:CD2	2.50	0.42
1:A:317:ILE:C	1:A:321:ASN:HD22	2.18	0.42
1:A:454:PHE:CD2	1:A:648:GLU:CB	3.00	0.42
1:A:522:LEU:HA	1:A:716:ILE:HG22	2.01	0.42
1:A:551:THR:H	1:A:554:GLU:CG	2.32	0.42
1:A:1047:MET:O	1:A:1048:GLY:C	2.56	0.42
1:A:1458:VAL:CG1	1:A:1459:PRO:CD	2.97	0.42
1:B:62:ILE:O	1:B:62:ILE:CG2	2.68	0.42
1:B:248:GLU:C	1:B:250:ARG:N	2.73	0.42
1:B:307:GLN:HE21	1:B:1403:LEU:CD2	2.32	0.42
1:B:485:ILE:HG21	1:B:485:ILE:HD13	1.68	0.42
1:B:560:ASP:O	1:B:561:TYR:C	2.58	0.42
1:B:637:ARG:HH11	1:B:637:ARG:HD3	1.69	0.42
1:B:743:VAL:HG11	1:B:745:ARG:HG3	2.00	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:754:ILE:HG22	1:B:755:GLN:N	2.34	0.42
1:B:770:VAL:O	1:B:770:VAL:CG1	2.67	0.42
1:B:868:HIS:HB3	1:B:869:GLY:H	1.57	0.42
1:C:280:VAL:O	1:C:281:PHE:C	2.58	0.42
1:C:400:LEU:HD12	1:C:400:LEU:HA	1.76	0.42
1:C:447:LEU:CD1	1:C:451:GLN:CG	2.96	0.42
1:C:731:SER:O	1:C:734:LEU:HB3	2.18	0.42
1:C:842:GLU:OE1	1:C:1156:ARG:NH1	2.52	0.42
1:C:896:PRO:HB3	1:E:1226:GLY:C	2.36	0.42
1:C:985:TYR:CD1	1:C:1207:VAL:HG11	2.54	0.42
1:C:1113:CYS:HB3	1:C:1119:VAL:CG1	2.49	0.42
1:D:116:ILE:HD11	1:D:191:PHE:HB2	2.01	0.42
1:D:505:GLN:HE22	1:D:1001:VAL:N	2.17	0.42
1:D:509:PRO:HA	1:D:510:PRO:HD3	1.77	0.42
1:D:574:PRO:HG2	1:D:574:PRO:O	2.19	0.42
1:D:1184:ASN:C	1:D:1186:ARG:N	2.71	0.42
1:D:1281:VAL:HA	1:D:1301:SER:O	2.20	0.42
1:D:1435:THR:HG23	1:D:1437:SER:N	2.34	0.42
1:E:30:HIS:N	1:E:30:HIS:CD2	2.85	0.42
1:E:636:LEU:HD12	1:E:636:LEU:HA	1.61	0.42
1:E:1349:ARG:HG2	1:E:1349:ARG:NH1	2.31	0.42
1:E:1447:TRP:NE1	1:E:1451:VAL:HG21	2.35	0.42
1:E:1458:VAL:CG1	1:E:1459:PRO:CD	2.97	0.42
1:F:51:PRO:HD2	1:F:55:PHE:HD2	1.84	0.42
1:F:307:GLN:HE21	1:F:1403:LEU:CD2	2.32	0.42
1:F:325:GLU:HA	1:F:326:PRO:HD3	1.92	0.42
1:F:1250:VAL:HG13	1:F:1259:LEU:HD12	2.01	0.42
1:F:1281:VAL:HA	1:F:1301:SER:O	2.20	0.42
1:F:1366:GLU:OE2	1:F:1367:TYR:CE2	2.71	0.42
2:G:32:TYR:HB3	2:G:34:ARG:HG2	2.01	0.42
2:G:64:ASN:C	2:G:66:PRO:HD2	2.40	0.42
2:G:68:TRP:CH2	2:G:124:GLU:OE1	2.72	0.42
2:G:137:VAL:HG13	2:G:209:ASP:CG	2.39	0.42
2:G:151:GLY:O	2:G:236:VAL:HA	2.19	0.42
2:G:302:MET:CE	2:G:334:VAL:CA	2.95	0.42
2:G:322:ARG:CD	2:G:349:ALA:CA	2.98	0.42
2:H:132:TRP:CG	2:H:202:ARG:HD2	2.52	0.42
2:H:137:VAL:HG13	2:H:209:ASP:CG	2.39	0.42
2:H:255:LEU:HD22	2:H:255:LEU:HA	1.92	0.42
2:H:367:ILE:O	2:H:390:VAL:HG23	2.20	0.42
2:H:465:HIS:NE2	2:H:469:LYS:CE	2.83	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:31:ILE:HG12	2:I:193:PHE:CD1	2.54	0.42
2:I:195:LEU:HD12	2:I:196:GLU:O	2.19	0.42
2:I:277:VAL:CG1	2:I:278:GLU:N	2.81	0.42
2:I:322:ARG:CD	2:I:349:ALA:CB	2.94	0.42
2:I:406:LEU:CD2	2:I:406:LEU:N	2.82	0.42
2:I:449:LEU:HD12	8:I:484:FAD:O2	2.20	0.42
2:J:60:PRO:O	2:J:455:ARG:HD3	2.18	0.42
2:J:331:GLN:HA	2:J:334:VAL:HG21	1.98	0.42
2:J:415:LEU:CD2	2:J:416:LYS:N	2.82	0.42
2:J:465:HIS:NE2	2:J:469:LYS:CE	2.83	0.42
2:K:89:ASN:HD22	2:K:89:ASN:N	2.17	0.42
2:K:264:TYR:CE2	2:K:307:THR:CG2	2.94	0.42
2:K:281:GLU:HG3	2:K:281:GLU:O	2.17	0.42
2:L:71:LEU:CD1	2:L:80:ALA:N	2.81	0.42
2:L:162:ALA:HB3	2:L:237:LEU:CD1	2.49	0.42
2:L:178:ARG:HH12	2:L:243:TYR:HB2	1.83	0.42
2:L:367:ILE:HD12	2:L:369:LEU:HD11	1.93	0.42
2:L:387:GLU:CG	2:L:388:PHE:N	2.82	0.42
1:A:133:VAL:HG12	1:A:134:GLY:N	2.34	0.42
1:A:358:THR:CB	1:A:360:ASP:OD1	2.65	0.42
1:A:468:MET:O	1:A:472:GLY:N	2.51	0.42
1:A:591:GLN:O	1:A:594:GLU:N	2.52	0.42
1:A:780:ARG:NH2	2:J:54:PHE:HD1	2.16	0.42
1:A:869:GLY:O	1:A:870:THR:C	2.54	0.42
1:A:983:LEU:HD22	1:A:987:LEU:HG	2.01	0.42
1:A:1159:ASN:C	1:A:1161:VAL:H	2.23	0.42
1:A:1393:TYR:C	1:A:1394:VAL:HG23	2.34	0.42
1:B:442:MET:HB2	1:B:673:GLU:HG2	2.00	0.42
1:B:540:THR:O	1:B:542:LEU:HG	2.20	0.42
1:B:559:ARG:O	1:B:559:ARG:HG3	2.17	0.42
1:B:559:ARG:O	1:B:559:ARG:NE	2.46	0.42
1:B:647:ALA:HB2	1:B:669:TYR:OH	2.19	0.42
1:B:695:ASN:O	1:B:696:TYR:C	2.57	0.42
1:B:1131:THR:O	1:B:1132:PRO:C	2.58	0.42
1:B:1155:PHE:CZ	1:B:1167:LEU:HD21	2.54	0.42
1:B:1282:GLN:HA	1:B:1302:GLY:O	2.20	0.42
1:B:1375:ILE:O	1:B:1377:GLY:N	2.52	0.42
1:C:352:PRO:HB2	1:C:367:SER:O	2.20	0.42
1:D:242:ASN:C	1:D:244:MET:N	2.72	0.42
1:D:792:GLY:O	1:D:793:GLY:C	2.51	0.42
1:D:802:VAL:CG2	1:D:1137:ASN:HB2	2.46	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1315:LEU:HA	1:D:1315:LEU:HD23	1.69	0.42
1:D:1471:HIS:O	1:D:1472:LEU:CB	2.58	0.42
1:E:111:PRO:C	1:E:112:ILE:HG23	2.40	0.42
1:E:391:ILE:O	1:E:391:ILE:CG2	2.63	0.42
1:E:522:LEU:HA	1:E:716:ILE:HG22	2.01	0.42
1:E:666:VAL:HG12	1:E:667:ASN:N	2.34	0.42
1:E:839:PRO:HG2	1:E:842:GLU:HB2	2.00	0.42
1:E:1045:TRP:O	1:E:1046:GLU:C	2.54	0.42
1:F:56:LYS:CG	1:F:71:LEU:HD22	2.48	0.42
1:F:116:ILE:HD11	1:F:191:PHE:HB2	2.01	0.42
1:F:198:GLU:H	1:F:198:GLU:HG3	1.71	0.42
1:F:562:MET:CE	1:F:605:ILE:HD11	2.49	0.42
1:F:609:GLU:C	1:F:611:MET:H	2.22	0.42
1:F:763:ALA:C	1:F:765:ALA:N	2.72	0.42
1:F:885:GLY:O	1:F:887:GLY:N	2.52	0.42
1:F:1097:LEU:HA	1:F:1097:LEU:HD23	1.69	0.42
2:G:264:TYR:CE1	2:G:311:GLN:NE2	2.87	0.42
2:G:276:THR:HG22	2:G:277:VAL:N	2.31	0.42
2:H:181:ARG:CD	2:H:187:VAL:CG1	2.94	0.42
2:H:240:THR:HG23	2:H:443:ILE:HG21	2.01	0.42
2:H:252:GLY:HA3	2:H:258:ILE:HG21	2.02	0.42
2:H:322:ARG:CD	2:H:349:ALA:CA	2.98	0.42
2:I:71:LEU:CD1	2:I:80:ALA:N	2.81	0.42
2:I:90:PHE:HZ	2:I:160:LEU:CB	2.33	0.42
2:I:151:GLY:O	2:I:236:VAL:HA	2.20	0.42
2:I:207:LEU:HD12	2:I:212:VAL:CG1	2.49	0.42
2:I:465:HIS:NE2	2:I:469:LYS:CE	2.83	0.42
2:J:350:PRO:HD2	2:J:374:ALA:CB	2.49	0.42
2:K:269:ASN:HD22	2:K:273:LEU:HD23	1.85	0.42
2:K:378:GLN:O	2:K:378:GLN:HG2	2.20	0.42
2:K:430:LYS:HE3	2:K:430:LYS:HB2	1.80	0.42
2:K:449:LEU:CD2	2:K:451:VAL:HG13	2.27	0.42
2:L:32:TYR:HB3	2:L:34:ARG:HG2	2.01	0.42
2:L:229:LEU:HD22	2:L:236:VAL:HG12	2.00	0.42
2:L:241:GLY:O	2:L:443:ILE:HG22	2.19	0.42
2:L:322:ARG:CD	2:L:349:ALA:CA	2.98	0.42
2:L:378:GLN:O	2:L:378:GLN:HG2	2.20	0.42
2:L:465:HIS:NE2	2:L:469:LYS:CE	2.83	0.42
1:A:46:ILE:HG12	1:A:48:VAL:HG13	2.01	0.42
1:A:194:ASP:HB3	1:A:200:PHE:CE1	2.54	0.42
1:A:452:GLN:CG	1:A:764:THR:HG22	2.48	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:456:LEU:HA	1:A:456:LEU:HD23	1.65	0.42
1:A:928:LEU:HA	1:A:928:LEU:HD23	1.73	0.42
1:A:1026:ASN:ND2	1:A:1027:SER:N	2.66	0.42
1:A:1339:ALA:HB2	1:A:1435:THR:OG1	2.19	0.42
1:B:117:ILE:HD13	1:B:117:ILE:HG23	1.35	0.42
1:B:253:HIS:CE1	1:B:254:PRO:CG	3.03	0.42
1:B:885:GLY:C	1:B:887:GLY:N	2.68	0.42
1:B:1222:LEU:HD12	1:B:1222:LEU:O	2.20	0.42
1:B:1435:THR:HG23	1:B:1437:SER:N	2.34	0.42
1:C:216:PHE:CE1	1:D:81:ILE:HD13	2.54	0.42
1:C:248:GLU:O	1:C:249:THR:C	2.56	0.42
1:C:420:VAL:CG1	1:C:421:GLN:N	2.81	0.42
1:C:454:PHE:CD2	1:C:648:GLU:CB	3.00	0.42
1:C:602:THR:C	1:C:640:THR:HG22	2.38	0.42
1:C:871:LEU:HA	1:C:871:LEU:HD23	1.68	0.42
1:C:992:PRO:HA	1:C:1204:ARG:HH22	1.84	0.42
1:C:1102:CYS:SG	1:C:1104:MET:N	2.89	0.42
1:D:248:GLU:C	1:D:250:ARG:N	2.73	0.42
1:D:307:GLN:HE21	1:D:1403:LEU:CD2	2.32	0.42
1:D:560:ASP:O	1:D:561:TYR:C	2.58	0.42
1:D:647:ALA:HB2	1:D:669:TYR:OH	2.19	0.42
1:D:756:LYS:O	1:D:757:LYS:C	2.58	0.42
1:D:794:VAL:CG2	1:D:817:VAL:HG23	2.49	0.42
1:D:875:MET:HE2	1:D:1139:PHE:HE2	1.84	0.42
1:D:934:GLN:HE21	1:D:934:GLN:HB2	1.58	0.42
1:D:943:GLN:HE21	1:D:1033:SER:HA	1.83	0.42
1:D:957:ARG:HD2	1:D:965:LEU:HD12	2.02	0.42
1:D:1155:PHE:CZ	1:D:1167:LEU:HD21	2.54	0.42
1:E:227:MET:HE2	1:E:282:GLU:CG	2.49	0.42
1:E:248:GLU:O	1:E:249:THR:C	2.56	0.42
1:E:280:VAL:O	1:E:281:PHE:C	2.58	0.42
1:E:893:ARG:O	1:E:904:ASN:HB2	2.20	0.42
1:E:1394:VAL:CG1	1:E:1401:LEU:HD23	2.49	0.42
1:F:62:ILE:O	1:F:62:ILE:CG2	2.68	0.42
1:F:242:ASN:C	1:F:244:MET:N	2.72	0.42
1:F:293:MET:HG2	1:F:410:LEU:HD23	2.00	0.42
1:F:317:ILE:C	1:F:321:ASN:HD22	2.18	0.42
1:F:336:THR:C	1:F:337:ASP:O	2.50	0.42
1:F:1058:LEU:HA	1:F:1058:LEU:HD23	1.64	0.42
1:F:1153:LEU:HA	1:F:1153:LEU:HD23	1.42	0.42
1:F:1164:ARG:HB3	1:F:1167:LEU:CD1	2.47	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1260:GLN:O	1:F:1261:PRO:C	2.56	0.42
1:F:1420:TYR:OH	1:F:1466:LEU:CD2	2.65	0.42
2:G:69:LEU:HA	2:G:72:THR:HG22	2.00	0.42
2:G:162:ALA:HB3	2:G:237:LEU:CD1	2.49	0.42
2:G:257:ASN:ND2	2:G:395:VAL:HG22	2.34	0.42
2:G:317:LYS:HE3	2:G:345:ILE:HG13	2.00	0.42
2:G:358:VAL:CG2	2:G:365:VAL:CG1	2.94	0.42
2:G:417:VAL:CG1	2:G:418:THR:N	2.83	0.42
2:H:319:LEU:CD2	2:H:320:TYR:N	2.83	0.42
2:H:378:GLN:O	2:H:378:GLN:HG2	2.20	0.42
2:I:94:CYS:SG	2:I:450:VAL:HG22	2.59	0.42
2:I:120:ILE:O	2:I:120:ILE:HG22	2.20	0.42
2:I:190:ILE:CG2	2:I:191:PRO:HD2	2.49	0.42
2:I:319:LEU:C	2:I:319:LEU:HD22	2.40	0.42
2:I:429:THR:HB	2:I:431:MET:HG3	2.02	0.42
2:J:90:PHE:HZ	2:J:160:LEU:CB	2.33	0.42
2:J:162:ALA:HB3	2:J:237:LEU:CD1	2.49	0.42
2:J:190:ILE:CG2	2:J:191:PRO:HD2	2.49	0.42
2:J:195:LEU:HD12	2:J:196:GLU:O	2.19	0.42
2:J:304:CYS:CA	2:J:307:THR:HG22	2.48	0.42
2:K:252:GLY:HA3	2:K:258:ILE:HG21	2.02	0.42
2:K:316:VAL:HG12	2:K:342:VAL:HG13	2.02	0.42
2:L:68:TRP:CH2	2:L:124:GLU:OE1	2.72	0.42
2:L:71:LEU:HD22	2:L:74:GLU:HG3	2.01	0.42
1:A:121:ALA:C	1:A:123:ALA:N	2.73	0.42
1:A:297:MET:HE1	1:A:323:VAL:HG11	2.02	0.42
1:A:558:MET:C	1:A:560:ASP:N	2.72	0.42
1:A:731:SER:O	1:A:734:LEU:HB3	2.18	0.42
1:A:871:LEU:HA	1:A:871:LEU:HD23	1.68	0.42
1:A:917:VAL:CG1	1:A:922:LEU:HD21	2.49	0.42
1:A:992:PRO:HA	1:A:1204:ARG:HH22	1.84	0.42
1:A:1045:TRP:O	1:A:1046:GLU:C	2.54	0.42
1:A:1147:ARG:HH11	1:A:1147:ARG:HD3	1.57	0.42
1:A:1430:GLU:O	1:A:1431:HIS:C	2.58	0.42
1:A:1447:TRP:CE2	1:A:1451:VAL:HG21	2.52	0.42
1:B:24:ALA:O	1:B:25:LEU:C	2.56	0.42
1:B:252:GLU:HA	1:B:260:MET:CE	2.50	0.42
1:B:999:LYS:CG	1:B:1022:LEU:CD2	2.64	0.42
1:B:1113:CYS:C	1:B:1115:VAL:H	2.23	0.42
1:B:1274:GLN:NE2	1:B:1294:ASP:H	2.18	0.42
1:B:1281:VAL:HA	1:B:1301:SER:O	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:78:LEU:HB3	1:C:79:PRO:HD2	2.01	0.42
1:C:90:ARG:HB3	1:C:107:TRP:CZ2	2.55	0.42
1:C:111:PRO:C	1:C:112:ILE:HG23	2.40	0.42
1:C:183:PHE:HE1	1:C:188:LEU:HA	1.79	0.42
1:C:194:ASP:HB3	1:C:200:PHE:CE1	2.54	0.42
1:C:210:ARG:HA	3:C:2473:OMT:HE1	2.02	0.42
1:C:464:ILE:CD1	1:C:779:TYR:CZ	2.94	0.42
1:C:562:MET:HE1	1:C:605:ILE:HD11	2.01	0.42
1:C:896:PRO:HB2	1:E:1226:GLY:CA	2.49	0.42
1:D:24:ALA:O	1:D:25:LEU:C	2.57	0.42
1:D:438:GLU:HG3	1:D:693:MET:CG	2.50	0.42
1:D:558:MET:C	1:D:560:ASP:H	2.23	0.42
1:D:1011:ALA:O	1:D:1014:ALA:N	2.52	0.42
1:D:1376:LEU:HD23	1:D:1376:LEU:HA	1.63	0.42
1:E:133:VAL:HG12	1:E:134:GLY:N	2.34	0.42
1:E:386:GLY:H	1:E:389:GLU:CG	2.33	0.42
1:E:605:ILE:HA	1:E:643:ASN:O	2.20	0.42
1:E:1156:ARG:HE	1:E:1156:ARG:HB2	1.72	0.42
1:F:105:TYR:H	1:F:105:TYR:HD1	1.68	0.42
1:F:353:MET:HE2	1:F:353:MET:HA	2.01	0.42
1:F:540:THR:O	1:F:542:LEU:HG	2.20	0.42
1:F:558:MET:C	1:F:560:ASP:H	2.23	0.42
2:G:28:PHE:HZ	2:G:285:LEU:HD21	1.84	0.42
2:G:92:GLU:HG3	2:G:203:ARG:NH1	2.34	0.42
2:G:249:LYS:HD2	2:G:258:ILE:HD13	2.02	0.42
2:G:316:VAL:HG12	2:G:342:VAL:HG13	2.02	0.42
2:G:465:HIS:NE2	2:G:469:LYS:CE	2.83	0.42
2:H:257:ASN:ND2	2:H:395:VAL:HG22	2.34	0.42
2:H:269:ASN:HD22	2:H:273:LEU:HD23	1.85	0.42
2:H:297:GLY:O	2:H:327:MET:HE3	2.19	0.42
2:H:429:THR:CG2	2:H:431:MET:HE2	2.48	0.42
2:I:324:ARG:HA	2:I:346:TRP:CZ2	2.46	0.42
2:I:342:VAL:CG1	2:I:343:GLU:N	2.83	0.42
2:I:367:ILE:O	2:I:390:VAL:HG23	2.19	0.42
2:J:120:ILE:O	2:J:120:ILE:HG22	2.20	0.42
2:J:264:TYR:CE2	2:J:307:THR:CG2	2.94	0.42
2:J:319:LEU:CD2	2:J:320:TYR:N	2.83	0.42
2:J:417:VAL:CG1	2:J:418:THR:N	2.83	0.42
2:J:449:LEU:HD22	2:J:452:TRP:CE2	2.53	0.42
2:K:80:ALA:HB3	2:K:127:ILE:HD11	1.96	0.42
2:K:206:LEU:HD22	2:K:206:LEU:HA	1.91	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:K:249:LYS:CE	2:K:258:ILE:CD1	2.95	0.42
2:K:319:LEU:CD2	2:K:320:TYR:N	2.83	0.42
2:K:465:HIS:NE2	2:K:469:LYS:CE	2.83	0.42
2:L:249:LYS:HD2	2:L:258:ILE:HD13	2.02	0.42
2:L:257:ASN:ND2	2:L:395:VAL:HG22	2.34	0.42
1:A:292:PRO:O	1:A:293:MET:C	2.55	0.42
1:A:353:MET:O	1:A:353:MET:CG	2.67	0.42
1:A:419:TRP:CE3	1:A:537:GLU:HA	2.55	0.42
1:A:691:LYS:O	1:A:691:LYS:HG3	2.20	0.42
1:A:770:VAL:O	1:A:770:VAL:HG12	2.19	0.42
1:A:1424:LEU:HD23	1:A:1424:LEU:C	2.40	0.42
1:A:1425:LYS:HD2	1:A:1447:TRP:CD2	2.54	0.42
1:B:488:LEU:HA	1:B:488:LEU:HD23	1.71	0.42
1:B:780:ARG:NH2	2:G:109:VAL:HG11	2.33	0.42
1:B:843:VAL:HG11	1:B:1147:ARG:HB3	2.00	0.42
1:B:970:PRO:HG2	1:B:970:PRO:O	2.19	0.42
1:B:1113:CYS:C	1:B:1115:VAL:N	2.69	0.42
1:B:1438:ARG:CZ	2:H:376:GLY:C	2.84	0.42
1:B:1449:ARG:NH1	1:B:1449:ARG:CG	2.69	0.42
1:C:362:LEU:HD12	1:C:362:LEU:HA	1.88	0.42
1:C:591:GLN:O	1:C:594:GLU:N	2.52	0.42
1:C:877:ARG:CD	1:E:1230:GLN:HB2	2.33	0.42
1:C:929:GLU:HA	1:C:997:THR:HB	2.01	0.42
1:D:52:GLN:HE21	1:D:52:GLN:HB3	1.74	0.42
1:D:62:ILE:O	1:D:62:ILE:CG2	2.68	0.42
1:D:317:ILE:HG22	1:D:321:ASN:ND2	2.28	0.42
1:D:466:HIS:CE1	1:D:684:PHE:HE1	2.33	0.42
1:D:807:TYR:O	1:D:810:PHE:HB3	2.20	0.42
1:D:944:LEU:HA	1:D:945:PRO:HD3	1.90	0.42
1:D:997:THR:CG2	1:D:998:VAL:N	2.83	0.42
1:D:1164:ARG:HB3	1:D:1167:LEU:CD1	2.47	0.42
1:D:1438:ARG:CZ	2:I:376:GLY:C	2.85	0.42
1:E:293:MET:HE3	1:E:293:MET:HB3	1.98	0.42
1:E:330:PRO:HB3	1:E:350:LEU:HB3	2.01	0.42
1:E:505:GLN:NE2	1:E:1000:LEU:HB3	2.35	0.42
1:E:1131:THR:HG21	1:E:1133:GLU:HB2	2.01	0.42
1:E:1161:VAL:O	1:E:1161:VAL:HG13	2.18	0.42
1:E:1267:ARG:H	1:E:1267:ARG:HG2	1.71	0.42
1:F:203:ASP:OD1	1:F:203:ASP:N	2.48	0.42
1:F:267:ILE:HG12	1:F:279:THR:HG21	2.01	0.42
1:F:390:MET:HE2	1:F:390:MET:HB2	1.90	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:488:LEU:HD23	1:F:488:LEU:HA	1.71	0.42
1:F:1112:THR:O	2:I:112:GLN:CD	2.57	0.42
1:F:1158:LEU:HD12	1:F:1158:LEU:HA	1.80	0.42
1:F:1274:GLN:NE2	1:F:1294:ASP:H	2.18	0.42
1:F:1359:GLY:O	1:F:1360:CYS:HB3	2.20	0.42
1:F:1431:HIS:O	1:F:1432:VAL:C	2.54	0.42
2:G:132:TRP:CG	2:G:202:ARG:HD2	2.52	0.42
2:G:137:VAL:CG1	2:G:138:LYS:N	2.82	0.42
2:G:367:ILE:O	2:G:390:VAL:HG23	2.20	0.42
2:G:388:PHE:CD2	2:G:390:VAL:CG1	2.95	0.42
2:G:406:LEU:CD2	2:G:406:LEU:N	2.82	0.42
2:H:64:ASN:C	2:H:66:PRO:HD2	2.40	0.42
2:H:89:ASN:HD22	2:H:89:ASN:N	2.17	0.42
2:I:89:ASN:HD22	2:I:89:ASN:N	2.17	0.42
2:I:92:GLU:HG3	2:I:203:ARG:NH1	2.34	0.42
2:I:322:ARG:CD	2:I:349:ALA:CA	2.98	0.42
2:I:387:GLU:CG	2:I:388:PHE:N	2.82	0.42
2:I:449:LEU:HD23	2:I:452:TRP:H	1.83	0.42
2:J:26:GLN:HG3	2:J:310:ARG:O	2.20	0.42
2:J:64:ASN:C	2:J:66:PRO:HD2	2.40	0.42
2:J:165:GLU:CB	2:J:169:LYS:HZ3	2.32	0.42
2:J:207:LEU:HD12	2:J:212:VAL:CG1	2.49	0.42
2:J:252:GLY:HA3	2:J:258:ILE:HG21	2.02	0.42
2:J:257:ASN:ND2	2:J:395:VAL:HG22	2.34	0.42
2:K:69:LEU:HA	2:K:72:THR:HG22	2.00	0.42
2:K:137:VAL:CG1	2:K:138:LYS:N	2.82	0.42
2:K:153:ILE:CG1	2:K:220:VAL:HG22	2.49	0.42
2:K:195:LEU:HD12	2:K:196:GLU:O	2.19	0.42
2:L:358:VAL:HG22	2:L:365:VAL:HG11	1.99	0.42
2:L:415:LEU:CD2	2:L:416:LYS:N	2.82	0.42
1:A:165:ASN:O	1:A:166:ASP:HB2	2.20	0.42
1:A:185:ALA:O	1:A:186:GLU:C	2.57	0.42
1:A:352:PRO:HB2	1:A:367:SER:O	2.20	0.42
1:A:476:ILE:CG2	1:A:477:GLY:N	2.83	0.42
1:A:565:THR:CG2	1:A:603:HIS:HD2	2.33	0.42
1:A:969:PRO:N	1:A:970:PRO:HD2	2.35	0.42
1:A:1003:ARG:HH11	1:A:1003:ARG:CG	2.29	0.42
1:A:1264:ILE:HG22	1:A:1283:GLY:O	2.19	0.42
1:B:550:LEU:HA	1:B:554:GLU:OE2	2.19	0.42
1:B:656:ALA:O	1:B:657:VAL:C	2.59	0.42
1:B:868:HIS:O	1:B:870:THR:N	2.53	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:875:MET:HE1	1:B:878:ILE:HD11	2.02	0.42
1:C:303:LEU:HD11	1:C:314:LYS:HG2	2.01	0.42
1:C:442:MET:HE3	1:C:442:MET:HB3	1.81	0.42
1:C:522:LEU:HA	1:C:716:ILE:HG22	2.01	0.42
1:C:1363:ASN:HD22	1:C:1363:ASN:HA	1.61	0.42
1:C:1458:VAL:CG1	1:C:1459:PRO:HD2	2.47	0.42
1:D:30:HIS:CE1	1:D:1238:THR:HA	2.53	0.42
1:D:253:HIS:CE1	1:D:254:PRO:CG	3.03	0.42
1:D:308:THR:O	1:D:308:THR:CG2	2.66	0.42
1:D:404:ARG:HB3	1:D:405:GLU:OE1	2.20	0.42
1:D:444:LYS:HE3	1:D:681:ARG:HH12	1.85	0.42
1:D:500:ARG:HD2	1:D:728:ILE:HG21	2.02	0.42
1:D:586:LEU:HD23	1:D:586:LEU:HA	1.86	0.42
1:D:782:ARG:HH22	2:H:51:GLY:N	1.97	0.42
1:D:853:PHE:CZ	1:D:1079:ILE:HD13	2.55	0.42
1:E:216:PHE:CE1	1:F:81:ILE:HD13	2.54	0.42
1:E:309:THR:HG21	1:E:314:LYS:HG3	2.02	0.42
1:E:353:MET:O	1:E:353:MET:CG	2.67	0.42
1:E:565:THR:CG2	1:E:603:HIS:HD2	2.33	0.42
1:E:635:ASN:O	1:E:636:LEU:HD13	2.20	0.42
1:E:956:LEU:HD23	1:E:956:LEU:HA	1.70	0.42
1:E:1212:ASP:OD2	1:E:1243:GLY:CA	2.67	0.42
1:F:53:LYS:O	1:F:54:PHE:C	2.58	0.42
1:F:560:ASP:O	1:F:561:TYR:C	2.58	0.42
1:F:608:ASP:OD2	1:F:646:THR:HA	2.20	0.42
1:F:957:ARG:HD2	1:F:965:LEU:HD12	2.02	0.42
2:H:153:ILE:CG1	2:H:220:VAL:CG1	2.96	0.42
2:H:169:LYS:HZ3	2:H:461:ALA:HB1	1.85	0.42
2:H:241:GLY:O	2:H:443:ILE:HG22	2.19	0.42
2:H:304:CYS:CA	2:H:307:THR:HG22	2.48	0.42
2:I:28:PHE:HZ	2:I:285:LEU:HD21	1.83	0.42
2:I:64:ASN:C	2:I:66:PRO:HD2	2.40	0.42
2:I:290:LYS:CG	2:I:291:HIS:N	2.79	0.42
2:J:71:LEU:HD22	2:J:74:GLU:HG3	2.01	0.42
2:J:449:LEU:HD23	2:J:452:TRP:H	1.83	0.42
2:K:32:TYR:CD2	2:K:194:LYS:HA	2.55	0.42
2:K:151:GLY:O	2:K:236:VAL:HA	2.20	0.42
2:K:417:VAL:CG1	2:K:418:THR:N	2.83	0.42
2:L:34:ARG:HG3	2:L:125:LYS:CE	2.46	0.42
2:L:190:ILE:CG2	2:L:191:PRO:HD2	2.49	0.42
2:L:342:VAL:CG1	2:L:343:GLU:N	2.83	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:37:ASP:OD1	1:A:38:GLY:N	2.53	0.42
1:A:216:PHE:CE1	1:B:81:ILE:HD13	2.54	0.42
1:A:763:ALA:O	1:A:764:THR:C	2.58	0.42
1:A:852:ARG:NH1	1:A:1088:GLU:O	2.50	0.42
1:A:929:GLU:HA	1:A:997:THR:HB	2.01	0.42
1:A:1236:ARG:O	1:A:1238:THR:N	2.53	0.42
1:A:1458:VAL:CG1	1:A:1459:PRO:HD2	2.47	0.42
1:B:357:ILE:HD13	1:B:357:ILE:HG21	1.65	0.42
1:B:547:SER:C	1:B:549:VAL:H	2.22	0.42
1:B:571:ALA:C	1:B:618:ILE:HD12	2.40	0.42
1:B:732:ARG:H	1:B:747:SER:HA	1.85	0.42
1:B:756:LYS:O	1:B:757:LYS:C	2.58	0.42
1:C:189:THR:CG2	1:C:190:THR:N	2.63	0.42
1:C:420:VAL:C	1:C:422:ASN:H	2.23	0.42
1:C:621:ILE:HG12	1:C:657:VAL:HG11	2.00	0.42
1:C:683:LEU:HD23	1:C:683:LEU:HA	1.56	0.42
1:C:917:VAL:CG1	1:C:922:LEU:HD21	2.49	0.42
1:C:969:PRO:N	1:C:970:PRO:HD2	2.35	0.42
1:C:1246:LEU:O	1:C:1249:MET:HB2	2.20	0.42
1:C:1276:LEU:HD12	1:C:1277:GLY:H	1.85	0.42
1:C:1370:GLY:N	1:C:1389:GLY:O	2.53	0.42
1:D:252:GLU:HA	1:D:260:MET:CE	2.50	0.42
1:D:267:ILE:HG12	1:D:279:THR:HG21	2.01	0.42
1:D:965:LEU:HD23	1:D:965:LEU:HA	1.69	0.42
1:D:1111:ASN:OD1	1:D:1119:VAL:CG2	2.39	0.42
1:D:1129:VAL:O	1:D:1129:VAL:HG23	2.19	0.42
1:D:1250:VAL:HG13	1:D:1259:LEU:HD12	2.01	0.42
1:E:90:ARG:HB3	1:E:107:TRP:CZ2	2.55	0.42
1:E:240:ASN:O	1:E:241:VAL:C	2.58	0.42
1:E:284:MET:CE	1:E:294:VAL:HG13	2.50	0.42
1:E:583:ARG:NE	1:E:587:ARG:NH1	2.68	0.42
1:E:611:MET:HE3	1:E:611:MET:HB3	1.80	0.42
1:F:218:THR:CG2	1:F:221:LEU:H	2.30	0.42
1:F:550:LEU:HA	1:F:554:GLU:OE2	2.19	0.42
1:F:860:MET:HE2	1:F:868:HIS:ND1	2.34	0.42
1:F:868:HIS:O	1:F:870:THR:N	2.53	0.42
1:F:1113:CYS:C	1:F:1115:VAL:H	2.23	0.42
2:G:319:LEU:HD22	2:G:319:LEU:C	2.40	0.42
2:G:469:LYS:O	2:G:472:ALA:HB3	2.20	0.42
2:H:316:VAL:HG12	2:H:342:VAL:HG13	2.02	0.42
2:I:32:TYR:HB3	2:I:34:ARG:HG2	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:240:THR:HG23	2:I:443:ILE:HG21	2.01	0.42
2:I:378:GLN:O	2:I:378:GLN:HG2	2.20	0.42
2:I:425:VAL:HG21	2:I:444:VAL:HG22	2.01	0.42
2:J:31:ILE:HG12	2:J:193:PHE:CD1	2.54	0.42
2:J:63:ASN:CG	2:J:68:TRP:CZ3	2.94	0.42
2:J:64:ASN:OD1	2:J:66:PRO:HG2	2.20	0.42
2:J:151:GLY:O	2:J:236:VAL:HA	2.19	0.42
2:J:197:LYS:CB	2:J:273:LEU:HG	2.48	0.42
2:J:322:ARG:CD	2:J:349:ALA:CA	2.98	0.42
2:J:378:GLN:O	2:J:378:GLN:HG2	2.20	0.42
2:K:179:TYR:HB3	2:K:181:ARG:HH12	1.81	0.42
2:K:319:LEU:HD22	2:K:319:LEU:C	2.40	0.42
2:K:359:VAL:O	2:K:359:VAL:HG13	2.20	0.42
2:L:90:PHE:HZ	2:L:160:LEU:CB	2.33	0.42
2:L:110:ILE:HD11	2:L:118:VAL:CA	2.48	0.42
2:L:153:ILE:HG22	2:L:237:LEU:O	2.20	0.42
2:L:173:VAL:CG2	2:L:174:HIS:N	2.81	0.42
2:L:350:PRO:HD2	2:L:374:ALA:CB	2.49	0.42
2:L:429:THR:HB	2:L:431:MET:HG3	2.02	0.42
1:A:102:TYR:HE2	1:A:144:PHE:CD1	2.34	0.42
1:A:420:VAL:HG12	1:A:421:GLN:N	2.35	0.42
1:A:894:PHE:CD1	1:A:904:ASN:ND2	2.88	0.42
1:A:1226:GLY:C	1:E:896:PRO:HB2	2.39	0.42
1:A:1354:THR:HG23	1:A:1372:THR:HB	2.01	0.42
1:B:701:ASP:C	1:B:703:GLY:N	2.69	0.42
1:B:864:SER:HG	1:B:867:ALA:H	1.61	0.42
1:B:1164:ARG:HD2	1:B:1164:ARG:HH11	1.60	0.42
1:C:391:ILE:O	1:C:391:ILE:CG2	2.63	0.42
1:C:505:GLN:NE2	1:C:1000:LEU:HB3	2.35	0.42
1:C:583:ARG:NE	1:C:587:ARG:NH1	2.68	0.42
1:C:595:ASP:O	1:C:596:ALA:O	2.38	0.42
1:C:635:ASN:O	1:C:636:LEU:HD13	2.20	0.42
1:C:770:VAL:HG12	1:C:770:VAL:O	2.19	0.42
1:C:777:GLY:CA	2:K:52:VAL:HG11	2.42	0.42
1:C:1339:ALA:HB2	1:C:1435:THR:OG1	2.19	0.42
1:C:1348:VAL:O	1:C:1348:VAL:CG1	2.65	0.42
1:D:51:PRO:HD2	1:D:55:PHE:HD2	1.84	0.42
1:D:175:ARG:NH1	1:D:175:ARG:CG	2.79	0.42
1:D:734:LEU:HD11	1:D:738:HIS:HD2	1.51	0.42
1:D:745:ARG:C	1:D:746:ILE:HG13	2.40	0.42
1:D:1113:CYS:C	1:D:1115:VAL:H	2.23	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1274:GLN:NE2	1:D:1294:ASP:H	2.18	0.42
1:D:1359:GLY:O	1:D:1360:CYS:HB3	2.20	0.42
1:D:1468:VAL:O	1:D:1469:PRO:C	2.57	0.42
1:E:37:ASP:OD1	1:E:38:GLY:N	2.53	0.42
1:E:256:PHE:O	1:E:257:GLY:C	2.56	0.42
1:E:653:HIS:O	1:E:655:PHE:N	2.53	0.42
1:E:695:ASN:O	1:E:698:LYS:N	2.53	0.42
1:E:745:ARG:C	1:E:746:ILE:HG13	2.40	0.42
1:E:897:ASP:OD1	1:E:899:ASN:N	2.50	0.42
1:E:1159:ASN:C	1:E:1161:VAL:H	2.22	0.42
1:E:1460:LYS:O	1:E:1461:GLU:C	2.55	0.42
1:F:438:GLU:HG3	1:F:693:MET:CG	2.50	0.42
1:F:438:GLU:OE2	1:F:553:ALA:HB3	2.20	0.42
1:F:491:LYS:HE2	1:F:785:GLY:HA3	2.02	0.42
1:F:732:ARG:O	1:F:733:ALA:C	2.58	0.42
1:F:919:ALA:CB	1:F:1281:VAL:CG1	2.98	0.42
1:F:948:LYS:C	1:F:950:THR:H	2.24	0.42
1:F:1131:THR:O	1:F:1132:PRO:C	2.58	0.42
1:F:1143:ALA:O	1:F:1147:ARG:HG3	2.20	0.42
1:F:1424:LEU:HD23	1:F:1424:LEU:C	2.39	0.42
2:G:71:LEU:HD22	2:G:74:GLU:HG3	2.01	0.42
2:G:110:ILE:HD11	2:G:118:VAL:CA	2.48	0.42
2:G:269:ASN:HD22	2:G:273:LEU:HD23	1.85	0.42
2:G:387:GLU:CG	2:G:388:PHE:N	2.82	0.42
2:G:449:LEU:HD12	8:G:484:FAD:O2	2.20	0.42
2:H:32:TYR:CD2	2:H:194:LYS:HA	2.55	0.42
2:H:359:VAL:O	2:H:359:VAL:HG13	2.20	0.42
2:H:418:THR:CB	2:H:424:LEU:CD1	2.93	0.42
2:I:26:GLN:HG3	2:I:310:ARG:O	2.20	0.42
2:I:46:ARG:NH2	2:I:118:VAL:HA	2.35	0.42
2:I:63:ASN:CG	2:I:68:TRP:CZ3	2.94	0.42
2:I:64:ASN:OD1	2:I:66:PRO:HG2	2.20	0.42
2:I:113:SER:HB3	2:I:115:HIS:CD2	2.55	0.42
2:I:118:VAL:HG22	2:I:118:VAL:H	1.08	0.42
2:I:358:VAL:HG22	2:I:365:VAL:HG11	1.99	0.42
2:J:174:HIS:CD2	2:J:176:TYR:CD1	3.08	0.42
2:J:319:LEU:HD22	2:J:319:LEU:C	2.40	0.42
2:K:26:GLN:HG3	2:K:310:ARG:O	2.20	0.42
2:L:237:LEU:HD22	2:L:238:VAL:N	2.35	0.42
2:L:319:LEU:C	2:L:319:LEU:HD22	2.40	0.42
2:L:425:VAL:HG21	2:L:444:VAL:HG22	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:42:ASP:OD1	1:A:212:SER:OG	2.39	0.41
1:A:77:PHE:HB3	1:A:126:PRO:CB	2.50	0.41
1:A:111:PRO:C	1:A:112:ILE:HG23	2.40	0.41
1:A:195:LEU:HD23	1:A:195:LEU:HA	1.57	0.41
1:A:210:ARG:HA	3:A:2473:OMT:HE1	2.02	0.41
1:A:666:VAL:HG12	1:A:667:ASN:N	2.34	0.41
1:A:782:ARG:C	1:A:784:SER:N	2.70	0.41
1:A:990:ILE:O	1:A:990:ILE:HG13	2.19	0.41
1:B:42:ASP:HB2	1:B:210:ARG:O	2.20	0.41
1:B:182:MET:CG	1:B:182:MET:O	2.66	0.41
1:B:479:MET:HG3	1:B:1104:MET:HE3	2.02	0.41
1:B:491:LYS:HE2	1:B:785:GLY:HA3	2.02	0.41
1:B:550:LEU:HD13	1:B:555:PHE:HA	2.01	0.41
1:C:52:GLN:HE21	1:C:52:GLN:HB3	1.56	0.41
1:C:102:TYR:HE2	1:C:144:PHE:CD1	2.34	0.41
1:C:103:TYR:OH	1:D:1178:LEU:HD13	2.20	0.41
1:C:133:VAL:HG12	1:C:134:GLY:N	2.34	0.41
1:C:442:MET:HE1	1:C:447:LEU:CA	2.47	0.41
1:C:805:ASP:OD1	1:C:805:ASP:C	2.58	0.41
1:C:820:ARG:CB	1:C:821:PRO:CD	2.96	0.41
1:C:893:ARG:O	1:C:904:ASN:HB2	2.20	0.41
1:C:1062:ARG:HH11	1:C:1062:ARG:HD3	1.53	0.41
1:C:1131:THR:HG21	1:C:1133:GLU:HB2	2.01	0.41
1:C:1447:TRP:NE1	1:C:1451:VAL:HG21	2.35	0.41
1:D:732:ARG:H	1:D:747:SER:HA	1.85	0.41
1:D:1222:LEU:HD12	1:D:1222:LEU:O	2.20	0.41
1:E:289:ARG:HD3	1:E:293:MET:HE2	2.02	0.41
1:E:390:MET:HG3	1:E:406:LEU:HD23	2.02	0.41
1:E:582:LEU:CB	1:E:755:GLN:HE21	2.30	0.41
1:E:778:PHE:CE2	1:E:1039:LYS:CD	2.75	0.41
1:E:894:PHE:CZ	1:E:924:GLN:HG3	2.55	0.41
1:E:969:PRO:N	1:E:970:PRO:HD2	2.35	0.41
1:E:1236:ARG:O	1:E:1238:THR:N	2.53	0.41
1:E:1289:MET:CE	1:E:1289:MET:N	2.76	0.41
1:F:42:ASP:HB2	1:F:210:ARG:O	2.20	0.41
1:F:232:GLY:HA3	1:F:330:PRO:O	2.20	0.41
1:F:252:GLU:HA	1:F:260:MET:CE	2.50	0.41
1:F:295:LYS:HB3	1:F:390:MET:HE1	2.02	0.41
1:F:404:ARG:HB3	1:F:405:GLU:OE1	2.20	0.41
1:F:571:ALA:C	1:F:618:ILE:HD12	2.40	0.41
1:F:1129:VAL:O	1:F:1129:VAL:HG23	2.19	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:144:ARG:HD2	2:G:169:LYS:CB	2.47	0.41
2:G:415:LEU:CD2	2:G:416:LYS:N	2.82	0.41
2:H:174:HIS:CD2	2:H:176:TYR:CD1	3.08	0.41
2:H:249:LYS:CE	2:H:258:ILE:CD1	2.95	0.41
2:H:288:ALA:CB	2:H:311:GLN:HG3	2.50	0.41
2:I:32:TYR:CD2	2:I:194:LYS:HA	2.55	0.41
2:I:359:VAL:O	2:I:359:VAL:HG13	2.20	0.41
2:I:417:VAL:CG1	2:I:418:THR:N	2.83	0.41
2:J:153:ILE:HG22	2:J:237:LEU:O	2.20	0.41
2:J:237:LEU:HD22	2:J:238:VAL:N	2.35	0.41
2:J:291:HIS:HD2	2:J:392:ALA:HB2	1.84	0.41
2:J:359:VAL:O	2:J:359:VAL:HG13	2.20	0.41
2:L:64:ASN:C	2:L:66:PRO:HD2	2.40	0.41
2:L:92:GLU:HG3	2:L:203:ARG:NH1	2.34	0.41
2:L:113:SER:HB3	2:L:115:HIS:CD2	2.55	0.41
2:L:181:ARG:CD	2:L:187:VAL:CG1	2.94	0.41
2:L:302:MET:CE	2:L:333:GLU:CG	2.95	0.41
2:L:331:GLN:HA	2:L:334:VAL:HG21	1.98	0.41
2:L:417:VAL:CG1	2:L:418:THR:N	2.83	0.41
2:L:418:THR:N	2:L:424:LEU:CD2	2.83	0.41
2:L:432:THR:CG2	2:L:437:VAL:HG13	2.50	0.41
1:A:112:ILE:HA	1:A:191:PHE:O	2.20	0.41
1:A:280:VAL:O	1:A:281:PHE:C	2.58	0.41
1:A:304:THR:HG21	1:A:518:ARG:HD2	2.03	0.41
1:A:376:GLU:HG3	1:A:1310:THR:OG1	2.20	0.41
1:A:735:VAL:HG23	1:A:735:VAL:H	1.49	0.41
1:A:949:VAL:O	1:A:950:THR:O	2.37	0.41
1:A:1039:LYS:O	1:A:1040:PHE:CD1	2.73	0.41
1:A:1246:LEU:O	1:A:1249:MET:HB2	2.20	0.41
1:A:1450:GLU:O	1:A:1451:VAL:C	2.57	0.41
1:B:51:PRO:HD2	1:B:55:PHE:HD2	1.84	0.41
1:B:105:TYR:H	1:B:105:TYR:HD1	1.68	0.41
1:B:267:ILE:HG12	1:B:279:THR:HG21	2.01	0.41
1:B:404:ARG:HB3	1:B:405:GLU:OE1	2.20	0.41
1:B:444:LYS:HE3	1:B:681:ARG:HH12	1.85	0.41
1:B:481:ASP:HB2	1:B:1038:ILE:HG22	2.03	0.41
1:B:919:ALA:CB	1:B:1281:VAL:CG1	2.98	0.41
1:B:960:THR:CG2	1:B:963:VAL:HG23	2.47	0.41
1:B:1104:MET:C	2:G:54:PHE:HZ	2.03	0.41
1:C:309:THR:HG21	1:C:314:LYS:HG3	2.02	0.41
1:C:787:ARG:HH11	1:C:787:ARG:HD3	1.66	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:831:LEU:HD13	1:C:1084:MET:HE3	2.02	0.41
1:C:862:ALA:O	1:C:1118:CYS:HB3	2.18	0.41
1:C:991:ASN:HA	1:C:992:PRO:HD2	1.84	0.41
1:C:1059:ASN:N	1:C:1059:ASN:HD22	2.19	0.41
1:C:1356:VAL:CG1	1:C:1431:HIS:CG	3.03	0.41
1:D:232:GLY:HA3	1:D:330:PRO:O	2.20	0.41
1:D:666:VAL:HG13	1:D:667:ASN:N	2.34	0.41
1:D:856:PRO:HG2	1:D:1093:GLY:HA3	2.02	0.41
1:D:919:ALA:CB	1:D:1281:VAL:CG1	2.98	0.41
1:D:942:GLY:HA2	5:D:2475:AKG:O5	2.20	0.41
1:D:1131:THR:O	1:D:1132:PRO:C	2.58	0.41
1:D:1143:ALA:O	1:D:1147:ARG:HG3	2.20	0.41
1:E:52:GLN:NE2	1:E:71:LEU:N	2.44	0.41
1:E:149:TYR:HE2	1:E:263:LEU:HD21	1.86	0.41
1:E:165:ASN:O	1:E:166:ASP:HB2	2.20	0.41
1:E:329:GLY:O	1:E:330:PRO:C	2.56	0.41
1:E:629:THR:O	1:E:631:LEU:N	2.53	0.41
1:E:1407:ASP:O	1:E:1409:SER:N	2.53	0.41
1:E:1424:LEU:HD23	1:E:1424:LEU:C	2.40	0.41
1:F:253:HIS:CE1	1:F:254:PRO:CG	3.03	0.41
1:F:263:LEU:N	1:F:263:LEU:CD1	2.73	0.41
1:F:481:ASP:HB2	1:F:1038:ILE:HG22	2.02	0.41
1:F:500:ARG:HD2	1:F:728:ILE:HG21	2.02	0.41
1:F:694:ALA:O	1:F:695:ASN:C	2.58	0.41
1:F:794:VAL:CG2	1:F:817:VAL:HG23	2.49	0.41
1:F:853:PHE:CZ	1:F:1079:ILE:HD13	2.55	0.41
1:F:942:GLY:HA2	5:F:2475:AKG:O5	2.20	0.41
1:F:1438:ARG:NH2	2:G:377:ARG:O	2.47	0.41
2:G:32:TYR:CD2	2:G:194:LYS:HA	2.55	0.41
2:G:80:ALA:HB3	2:G:127:ILE:HD11	1.96	0.41
2:G:190:ILE:CG2	2:G:191:PRO:HD2	2.49	0.41
2:G:345:ILE:HD13	2:G:345:ILE:N	2.17	0.41
2:G:447:ALA:CB	2:G:452:TRP:CE3	2.92	0.41
2:H:46:ARG:NH2	2:H:118:VAL:HA	2.35	0.41
2:H:151:GLY:O	2:H:236:VAL:HA	2.20	0.41
2:H:153:ILE:HG22	2:H:237:LEU:O	2.20	0.41
2:I:241:GLY:O	2:I:443:ILE:HG22	2.19	0.41
2:I:269:ASN:HD22	2:I:273:LEU:HD23	1.85	0.41
2:I:317:LYS:CE	2:I:345:ILE:CD1	2.94	0.41
2:I:319:LEU:CD2	2:I:320:TYR:N	2.83	0.41
2:J:46:ARG:NH2	2:J:118:VAL:HA	2.35	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:89:ASN:HD22	2:J:89:ASN:N	2.17	0.41
2:J:153:ILE:CG1	2:J:220:VAL:CG1	2.95	0.41
2:J:181:ARG:CG	2:J:182:MET:N	2.83	0.41
2:J:241:GLY:O	2:J:443:ILE:HG22	2.19	0.41
2:J:429:THR:HB	2:J:431:MET:HG3	2.02	0.41
2:K:46:ARG:NH2	2:K:118:VAL:HA	2.35	0.41
2:K:342:VAL:CG1	2:K:343:GLU:N	2.83	0.41
2:K:432:THR:CG2	2:K:437:VAL:HG13	2.50	0.41
2:K:449:LEU:CD2	2:K:451:VAL:CG1	2.89	0.41
2:L:64:ASN:OD1	2:L:66:PRO:HG2	2.20	0.41
2:L:132:TRP:CG	2:L:202:ARG:HD2	2.52	0.41
2:L:318:CYS:SG	2:L:320:TYR:CZ	3.06	0.41
2:L:358:VAL:CG2	2:L:365:VAL:CG1	2.94	0.41
2:L:418:THR:CB	2:L:424:LEU:CD1	2.93	0.41
1:A:10:ASP:OD1	1:A:10:ASP:C	2.59	0.41
1:A:653:HIS:O	1:A:655:PHE:N	2.53	0.41
1:A:856:PRO:C	1:A:883:ASP:HB3	2.41	0.41
1:A:893:ARG:O	1:A:904:ASN:HB2	2.20	0.41
1:A:1057:THR:CG2	1:A:1190:VAL:HG11	2.50	0.41
1:B:175:ARG:NH2	1:B:203:ASP:OD2	2.53	0.41
1:B:266:VAL:HG12	1:B:279:THR:HG22	1.97	0.41
1:B:745:ARG:C	1:B:746:ILE:HG13	2.40	0.41
1:B:806:SER:HG	1:B:809:THR:HB	1.85	0.41
1:B:853:PHE:CZ	1:B:1079:ILE:HD13	2.55	0.41
1:B:897:ASP:OD1	1:B:899:ASN:N	2.52	0.41
1:B:942:GLY:HA2	5:B:2475:AKG:O5	2.20	0.41
1:B:1359:GLY:O	1:B:1360:CYS:HB3	2.20	0.41
1:C:24:ALA:O	1:C:27:ALA:N	2.27	0.41
1:C:37:ASP:OD1	1:C:38:GLY:N	2.53	0.41
1:C:476:ILE:CG2	1:C:477:GLY:N	2.83	0.41
1:C:500:ARG:H	1:C:500:ARG:HG2	1.71	0.41
1:C:1235:ALA:HA	1:C:1239:GLN:OE1	2.20	0.41
1:C:1384:ALA:O	1:C:1385:ALA:C	2.57	0.41
1:D:117:ILE:HD12	1:D:117:ILE:HG21	1.49	0.41
1:D:244:MET:HE2	1:D:244:MET:HA	2.01	0.41
1:D:485:ILE:HD13	1:D:485:ILE:HG21	1.68	0.41
1:D:495:LEU:HA	1:D:495:LEU:HD12	1.36	0.41
1:D:561:TYR:CD1	1:D:561:TYR:O	2.74	0.41
1:D:571:ALA:C	1:D:618:ILE:HD12	2.40	0.41
1:D:598:ARG:HH11	1:D:598:ARG:HD3	1.70	0.41
1:D:695:ASN:O	1:D:696:TYR:C	2.57	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:780:ARG:NH2	2:H:54:PHE:HD1	2.18	0.41
1:D:1282:GLN:HA	1:D:1302:GLY:O	2.20	0.41
1:E:420:VAL:C	1:E:422:ASN:H	2.23	0.41
1:E:454:PHE:CD2	1:E:648:GLU:CB	3.00	0.41
1:E:526:LEU:CD1	1:E:526:LEU:H	2.17	0.41
1:E:856:PRO:C	1:E:883:ASP:HB3	2.41	0.41
1:E:914:ARG:HH22	1:E:973:ASP:CG	2.23	0.41
1:E:982:GLN:HE22	1:E:1240:ARG:CD	2.25	0.41
1:E:1427:LEU:HA	1:E:1427:LEU:HD23	1.79	0.41
1:E:1430:GLU:O	1:E:1431:HIS:C	2.58	0.41
1:F:175:ARG:NH2	1:F:203:ASP:OD2	2.53	0.41
1:F:444:LYS:HE3	1:F:681:ARG:HH12	1.85	0.41
1:F:997:THR:CG2	1:F:998:VAL:N	2.83	0.41
1:F:1011:ALA:O	1:F:1014:ALA:N	2.52	0.41
2:G:26:GLN:HG3	2:G:310:ARG:O	2.20	0.41
2:G:342:VAL:CG1	2:G:343:GLU:N	2.83	0.41
2:G:432:THR:CG2	2:G:437:VAL:HG13	2.50	0.41
2:H:181:ARG:CG	2:H:182:MET:N	2.83	0.41
2:H:190:ILE:HB	2:H:195:LEU:HD23	2.03	0.41
2:I:174:HIS:CD2	2:I:176:TYR:CD1	3.08	0.41
2:I:237:LEU:HD22	2:I:238:VAL:N	2.35	0.41
2:I:257:ASN:ND2	2:I:395:VAL:HG22	2.34	0.41
2:I:418:THR:N	2:I:424:LEU:CD2	2.83	0.41
2:J:113:SER:HB3	2:J:115:HIS:CD2	2.55	0.41
2:J:449:LEU:HD12	8:J:484:FAD:O2	2.20	0.41
2:K:174:HIS:CD2	2:K:176:TYR:CD1	3.08	0.41
2:K:237:LEU:HD22	2:K:238:VAL:N	2.35	0.41
2:K:306:ARG:HD3	2:K:336:HIS:CB	2.45	0.41
2:K:351:GLU:CB	2:K:353:PHE:HB3	2.47	0.41
2:K:429:THR:HB	2:K:431:MET:HG3	2.02	0.41
2:L:46:ARG:NH2	2:L:118:VAL:HA	2.35	0.41
2:L:100:GLN:CB	2:L:105:GLU:CG	2.93	0.41
1:A:113:ASN:ND2	1:A:115:ASP:N	2.42	0.41
1:A:253:HIS:N	1:A:260:MET:HE1	2.31	0.41
1:A:406:LEU:O	1:A:409:HIS:HB3	2.21	0.41
1:A:606:LEU:O	1:A:607:THR:HG22	2.21	0.41
1:A:960:THR:HA	1:A:961:PRO:HD3	1.92	0.41
1:A:1230:GLN:C	1:A:1231:LEU:HD23	2.41	0.41
1:A:1375:ILE:HD13	1:A:1375:ILE:HG21	1.75	0.41
1:A:1407:ASP:O	1:A:1409:SER:N	2.53	0.41
1:B:342:VAL:HG11	1:B:390:MET:HE2	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:364:ILE:HD12	1:B:374:ILE:HD11	2.00	0.41
1:B:438:GLU:HG3	1:B:693:MET:CG	2.50	0.41
1:B:588:ARG:HH11	1:B:588:ARG:HD3	1.68	0.41
1:B:608:ASP:OD2	1:B:646:THR:HA	2.20	0.41
1:B:661:VAL:HG12	1:B:661:VAL:O	2.21	0.41
1:B:856:PRO:HG2	1:B:1093:GLY:HA3	2.02	0.41
1:B:991:ASN:HA	1:B:992:PRO:HD2	1.83	0.41
1:B:1250:VAL:HG13	1:B:1259:LEU:HD12	2.01	0.41
1:C:77:PHE:HB3	1:C:126:PRO:CB	2.50	0.41
1:C:420:VAL:HG12	1:C:421:GLN:N	2.35	0.41
1:C:461:MET:HA	1:C:461:MET:HE3	2.02	0.41
1:C:537:GLU:C	1:C:539:GLN:N	2.74	0.41
1:C:629:THR:O	1:C:631:LEU:N	2.53	0.41
1:C:653:HIS:O	1:C:655:PHE:N	2.53	0.41
1:C:696:TYR:CZ	1:C:700:ILE:HD11	2.55	0.41
1:C:784:SER:HB3	1:C:785:GLY:H	1.66	0.41
1:C:890:ASP:HA	1:C:891:PRO:HD3	1.85	0.41
1:C:1039:LYS:O	1:C:1040:PHE:CD1	2.73	0.41
1:C:1147:ARG:HH11	1:C:1147:ARG:HD3	1.57	0.41
1:C:1424:LEU:HD23	1:C:1424:LEU:C	2.40	0.41
1:D:410:LEU:HD12	1:D:410:LEU:N	2.36	0.41
1:D:481:ASP:HB2	1:D:1038:ILE:HG22	2.03	0.41
1:D:536:ASP:OD1	1:D:538:THR:N	2.54	0.41
1:D:913:GLY:CA	1:D:1349:ARG:CD	2.94	0.41
1:D:948:LYS:C	1:D:950:THR:H	2.23	0.41
1:D:1230:GLN:HB2	1:F:877:ARG:CD	2.48	0.41
1:D:1458:VAL:HA	1:D:1459:PRO:HD3	1.90	0.41
1:D:1461:GLU:H	1:D:1461:GLU:HG2	1.64	0.41
1:E:263:LEU:HA	1:E:263:LEU:HD12	1.01	0.41
1:E:352:PRO:HB2	1:E:367:SER:O	2.20	0.41
1:E:447:LEU:CD1	1:E:451:GLN:CG	2.96	0.41
1:E:545:LEU:HA	1:E:545:LEU:HD23	1.19	0.41
1:E:734:LEU:HD12	1:E:738:HIS:CD2	2.41	0.41
1:F:520:MET:HE3	1:F:705:LEU:HB3	2.01	0.41
1:F:754:ILE:HG22	1:F:755:GLN:N	2.34	0.41
2:G:46:ARG:NH2	2:G:118:VAL:HA	2.35	0.41
2:G:113:SER:HB3	2:G:115:HIS:CD2	2.55	0.41
2:G:119:THR:OG1	2:G:122:SER:HB3	2.21	0.41
2:G:153:ILE:HG22	2:G:237:LEU:O	2.20	0.41
2:H:110:ILE:HD11	2:H:118:VAL:CA	2.48	0.41
2:I:181:ARG:CG	2:I:182:MET:N	2.83	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:351:GLU:CB	2:I:353:PHE:HB3	2.47	0.41
2:I:353:PHE:CD1	2:I:382:VAL:CG1	3.01	0.41
2:I:358:VAL:CG2	2:I:365:VAL:CG1	2.94	0.41
2:J:152:VAL:CG2	2:J:153:ILE:N	2.82	0.41
2:J:316:VAL:HG12	2:J:342:VAL:HG13	2.02	0.41
2:J:353:PHE:N	2:J:369:LEU:HD23	2.36	0.41
2:J:429:THR:CB	2:J:431:MET:HE2	2.50	0.41
2:K:469:LYS:O	2:K:472:ALA:HB3	2.20	0.41
2:L:181:ARG:CG	2:L:182:MET:N	2.83	0.41
2:L:212:VAL:HG12	2:L:212:VAL:H	1.49	0.41
2:L:359:VAL:O	2:L:359:VAL:HG13	2.20	0.41
2:L:469:LYS:O	2:L:472:ALA:HB3	2.20	0.41
1:A:24:ALA:C	1:A:26:LYS:H	2.23	0.41
1:A:149:TYR:HE2	1:A:263:LEU:HD21	1.86	0.41
1:A:273:ASP:OD1	1:A:273:ASP:N	2.54	0.41
1:A:289:ARG:HD3	1:A:293:MET:HE2	2.02	0.41
1:A:605:ILE:HA	1:A:643:ASN:O	2.19	0.41
1:A:833:SER:HB2	1:A:1167:LEU:HD22	2.03	0.41
1:A:914:ARG:HH22	1:A:973:ASP:CG	2.23	0.41
1:A:1356:VAL:CG1	1:A:1431:HIS:CG	3.03	0.41
1:A:1447:TRP:NE1	1:A:1451:VAL:HG21	2.35	0.41
1:A:1466:LEU:O	1:A:1468:VAL:N	2.53	0.41
1:B:30:HIS:HE2	1:B:31:ARG:HD2	1.86	0.41
1:B:53:LYS:O	1:B:54:PHE:C	2.58	0.41
1:B:227:MET:HE2	1:B:282:GLU:HG3	2.01	0.41
1:B:232:GLY:HA3	1:B:330:PRO:O	2.20	0.41
1:B:244:MET:O	1:B:245:LYS:C	2.57	0.41
1:B:330:PRO:HA	1:B:350:LEU:HB2	2.03	0.41
1:B:410:LEU:HD12	1:B:410:LEU:N	2.36	0.41
1:B:505:GLN:HE22	1:B:1001:VAL:N	2.17	0.41
1:B:561:TYR:CD1	1:B:561:TYR:O	2.74	0.41
1:B:807:TYR:O	1:B:810:PHE:HB3	2.20	0.41
1:B:843:VAL:CG1	1:B:844:GLU:H	2.32	0.41
1:B:970:PRO:O	1:B:970:PRO:CG	2.68	0.41
1:B:1066:ARG:NH1	1:B:1089:GLU:OE2	2.53	0.41
1:B:1158:LEU:HD12	1:B:1158:LEU:HA	1.80	0.41
1:C:112:ILE:HA	1:C:191:PHE:O	2.20	0.41
1:C:165:ASN:O	1:C:166:ASP:HB2	2.20	0.41
1:C:230:HIS:CD2	1:C:230:HIS:C	2.94	0.41
1:C:284:MET:CE	1:C:294:VAL:HG13	2.50	0.41
1:C:348:ASN:O	1:C:349:GLY:C	2.58	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:419:TRP:CE3	1:C:537:GLU:HA	2.55	0.41
1:C:555:PHE:CD1	1:C:556:ARG:N	2.89	0.41
1:C:565:THR:CG2	1:C:603:HIS:HD2	2.33	0.41
1:C:1236:ARG:O	1:C:1238:THR:N	2.53	0.41
1:D:42:ASP:HB2	1:D:210:ARG:O	2.20	0.41
1:D:175:ARG:NH2	1:D:203:ASP:OD2	2.54	0.41
1:D:230:HIS:CE1	1:D:234:ILE:HG13	2.55	0.41
1:D:290:THR:HG22	1:D:292:PRO:CD	2.48	0.41
1:D:492:TYR:CD1	1:D:492:TYR:C	2.94	0.41
1:D:504:SER:HB2	1:D:508:ASN:OD1	2.21	0.41
1:D:609:GLU:C	1:D:611:MET:H	2.22	0.41
1:E:10:ASP:OD1	1:E:10:ASP:C	2.59	0.41
1:E:24:ALA:C	1:E:26:LYS:H	2.23	0.41
1:E:121:ALA:C	1:E:123:ALA:N	2.73	0.41
1:E:304:THR:HG21	1:E:518:ARG:HD2	2.03	0.41
1:E:419:TRP:CE3	1:E:537:GLU:HA	2.55	0.41
1:E:420:VAL:HG12	1:E:421:GLN:N	2.35	0.41
1:E:479:MET:HG3	1:E:1104:MET:HE1	1.97	0.41
1:E:520:MET:O	1:E:521:SER:CB	2.69	0.41
1:E:763:ALA:O	1:E:764:THR:C	2.58	0.41
1:E:930:ILE:CD1	1:E:983:LEU:HD13	2.43	0.41
1:E:1059:ASN:HD22	1:E:1059:ASN:N	2.19	0.41
1:E:1062:ARG:HH11	1:E:1062:ARG:HD3	1.53	0.41
1:E:1356:VAL:CG1	1:E:1431:HIS:CG	3.03	0.41
1:F:505:GLN:HE22	1:F:1001:VAL:N	2.17	0.41
1:F:555:PHE:CD1	1:F:556:ARG:N	2.77	0.41
1:F:732:ARG:H	1:F:747:SER:HA	1.85	0.41
1:F:780:ARG:NH2	2:I:54:PHE:HD1	2.18	0.41
1:F:807:TYR:O	1:F:810:PHE:HB3	2.20	0.41
1:F:937:LYS:N	1:F:938:PRO:HD3	2.35	0.41
1:F:1219:ALA:HA	1:F:1229:MET:HE1	2.01	0.41
2:G:319:LEU:CD2	2:G:320:TYR:N	2.83	0.41
2:G:449:LEU:CD2	2:G:451:VAL:CG1	2.89	0.41
2:H:51:GLY:O	2:H:52:VAL:HG23	2.16	0.41
2:H:63:ASN:CG	2:H:68:TRP:CZ3	2.94	0.41
2:H:365:VAL:H	2:H:365:VAL:HG12	1.52	0.41
2:I:31:ILE:CG1	2:I:193:PHE:HD1	2.34	0.41
2:I:181:ARG:HB3	2:I:181:ARG:CZ	2.51	0.41
2:I:197:LYS:CB	2:I:273:LEU:HG	2.48	0.41
2:I:249:LYS:HD2	2:I:258:ILE:HD13	2.02	0.41
2:I:304:CYS:CA	2:I:307:THR:HG22	2.48	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:427:HIS:ND1	2:I:428:ARG:HG3	2.36	0.41
2:J:32:TYR:CD2	2:J:194:LYS:HA	2.55	0.41
2:J:181:ARG:HB3	2:J:181:ARG:CZ	2.51	0.41
2:J:190:ILE:HB	2:J:195:LEU:HD23	2.03	0.41
2:J:197:LYS:CD	2:J:274:GLY:N	2.83	0.41
2:J:427:HIS:ND1	2:J:428:ARG:HG3	2.36	0.41
2:J:447:ALA:CB	2:J:452:TRP:CE3	2.92	0.41
2:K:181:ARG:CG	2:K:182:MET:N	2.83	0.41
2:K:449:LEU:HD12	8:K:484:FAD:O2	2.20	0.41
2:L:31:ILE:CG1	2:L:193:PHE:HD1	2.33	0.41
2:L:119:THR:OG1	2:L:122:SER:HB3	2.21	0.41
2:L:449:LEU:HD12	8:L:484:FAD:O2	2.20	0.41
1:A:90:ARG:HB3	1:A:107:TRP:CZ2	2.55	0.41
1:A:97:ILE:HA	1:A:151:ILE:HD13	2.01	0.41
1:A:189:THR:O	1:A:189:THR:HG23	2.20	0.41
1:A:832:ARG:HH11	1:A:832:ARG:HD2	1.73	0.41
1:A:843:VAL:CG1	1:A:844:GLU:H	2.30	0.41
1:A:894:PHE:CZ	1:A:924:GLN:HG3	2.55	0.41
1:A:985:TYR:CD1	1:A:1207:VAL:HG11	2.54	0.41
1:A:1056:LEU:HD23	1:A:1056:LEU:HA	1.87	0.41
1:A:1131:THR:HG21	1:A:1133:GLU:HB2	2.01	0.41
1:A:1210:THR:CG2	1:A:1211:LEU:N	2.47	0.41
1:A:1226:GLY:O	1:A:1227:GLU:C	2.59	0.41
1:A:1235:ALA:HA	1:A:1239:GLN:OE1	2.21	0.41
1:B:5:PHE:CZ	1:B:365:GLY:HA3	2.55	0.41
1:B:242:ASN:C	1:B:244:MET:N	2.72	0.41
1:B:457:THR:HA	1:B:773:LEU:HB3	2.02	0.41
1:B:764:THR:CG2	1:B:764:THR:O	2.63	0.41
1:B:997:THR:CG2	1:B:998:VAL:N	2.83	0.41
1:B:1354:THR:HA	1:B:1372:THR:O	2.21	0.41
1:B:1354:THR:HG21	1:B:1427:LEU:HD21	2.03	0.41
1:C:195:LEU:HD23	1:C:195:LEU:HA	1.57	0.41
1:C:520:MET:O	1:C:521:SER:CB	2.69	0.41
1:C:606:LEU:O	1:C:607:THR:HG22	2.21	0.41
1:C:622:LEU:HD13	1:C:739:PHE:HZ	1.85	0.41
1:C:706:LYS:NZ	1:C:1034:PRO:HG2	2.36	0.41
1:C:864:SER:HB3	1:C:1116:GLY:O	2.21	0.41
1:C:1057:THR:CG2	1:C:1190:VAL:HG11	2.50	0.41
1:C:1111:ASN:OD1	1:C:1119:VAL:CG2	2.37	0.41
1:C:1230:GLN:C	1:C:1231:LEU:HD23	2.41	0.41
1:C:1394:VAL:CG1	1:C:1401:LEU:CD2	2.95	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:30:HIS:HE2	1:D:31:ARG:HD2	1.86	0.41
1:D:540:THR:O	1:D:542:LEU:HG	2.20	0.41
1:D:570:ASP:OD1	1:D:570:ASP:C	2.59	0.41
1:D:868:HIS:O	1:D:870:THR:N	2.53	0.41
1:D:1435:THR:CG2	1:D:1437:SER:CB	2.99	0.41
1:E:339:ARG:O	1:E:395:LEU:HB2	2.21	0.41
1:E:555:PHE:CD1	1:E:556:ARG:N	2.89	0.41
1:E:631:LEU:HA	1:E:631:LEU:HD22	1.39	0.41
1:E:932:VAL:O	1:E:933:ALA:CB	2.45	0.41
1:E:1235:ALA:HA	1:E:1239:GLN:OE1	2.21	0.41
1:E:1394:VAL:CG1	1:E:1401:LEU:CD2	2.95	0.41
1:F:98:LEU:HA	1:F:98:LEU:HD23	1.62	0.41
1:F:458:MET:O	1:F:461:MET:N	2.50	0.41
1:F:559:ARG:O	1:F:559:ARG:NE	2.46	0.41
1:F:802:VAL:CG2	1:F:1137:ASN:HB2	2.46	0.41
1:F:802:VAL:CG2	1:F:1134:LYS:O	2.69	0.41
1:F:1105:VAL:HG13	1:F:1107:GLN:CG	2.48	0.41
2:G:64:ASN:OD1	2:G:66:PRO:HG2	2.20	0.41
2:G:237:LEU:HD22	2:G:238:VAL:N	2.35	0.41
2:G:252:GLY:HA3	2:G:258:ILE:HG21	2.02	0.41
2:G:359:VAL:O	2:G:359:VAL:HG13	2.20	0.41
2:G:366:ARG:HG2	2:G:391:GLN:CA	2.29	0.41
2:G:378:GLN:O	2:G:378:GLN:HG2	2.20	0.41
2:H:26:GLN:HG3	2:H:310:ARG:O	2.20	0.41
2:H:249:LYS:HD2	2:H:258:ILE:HD13	2.02	0.41
2:H:264:TYR:CE2	2:H:307:THR:CG2	2.94	0.41
2:H:291:HIS:HD2	2:H:392:ALA:HB2	1.84	0.41
2:H:322:ARG:CD	2:H:349:ALA:CB	2.94	0.41
2:H:418:THR:N	2:H:424:LEU:CD2	2.83	0.41
2:H:425:VAL:HG21	2:H:444:VAL:HG22	2.01	0.41
2:H:469:LYS:O	2:H:472:ALA:HB3	2.20	0.41
2:I:148:LEU:CB	2:I:234:VAL:CG2	2.97	0.41
2:I:252:GLY:HA3	2:I:258:ILE:HG21	2.02	0.41
2:I:255:LEU:HD22	2:I:255:LEU:HA	1.92	0.41
2:I:353:PHE:N	2:I:369:LEU:HD23	2.36	0.41
2:I:429:THR:CG2	2:I:431:MET:HE2	2.51	0.41
2:J:31:ILE:CG1	2:J:193:PHE:HD1	2.34	0.41
2:J:100:GLN:HB3	2:J:105:GLU:CD	2.41	0.41
2:J:137:VAL:HG12	2:J:139:PRO:HD3	2.03	0.41
2:J:306:ARG:HD3	2:J:336:HIS:CB	2.45	0.41
2:J:469:LYS:O	2:J:472:ALA:HB3	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:K:59:CYS:SG	2:K:61:VAL:CG1	3.05	0.41
2:K:137:VAL:HG12	2:K:139:PRO:HD3	2.03	0.41
2:K:153:ILE:CG1	2:K:220:VAL:CG1	2.95	0.41
2:K:153:ILE:HG22	2:K:237:LEU:O	2.20	0.41
2:K:190:ILE:CG2	2:K:191:PRO:HD2	2.49	0.41
2:K:257:ASN:ND2	2:K:395:VAL:HG22	2.34	0.41
2:L:32:TYR:CD2	2:L:194:LYS:HA	2.55	0.41
2:L:63:ASN:CG	2:L:68:TRP:CZ3	2.94	0.41
2:L:63:ASN:OD1	2:L:68:TRP:CH2	2.74	0.41
2:L:319:LEU:CD2	2:L:320:TYR:N	2.83	0.41
1:A:355:TYR:CZ	1:A:383:GLY:HA3	2.56	0.41
1:A:391:ILE:O	1:A:391:ILE:CG2	2.63	0.41
1:A:635:ASN:O	1:A:636:LEU:HD13	2.20	0.41
1:A:732:ARG:O	1:A:733:ALA:C	2.59	0.41
1:A:900:GLY:HA2	1:C:1263:HIS:CE1	2.31	0.41
1:A:1124:LEU:HD12	1:A:1124:LEU:HA	1.28	0.41
1:A:1218:ASP:OD1	1:E:851:LYS:NZ	2.54	0.41
1:A:1229:MET:C	1:E:877:ARG:CG	2.89	0.41
1:B:116:ILE:HD11	1:B:191:PHE:HB2	2.01	0.41
1:B:463:LEU:HD23	1:B:463:LEU:HA	1.20	0.41
1:B:500:ARG:HD2	1:B:728:ILE:HG21	2.02	0.41
1:B:570:ASP:OD1	1:B:570:ASP:C	2.59	0.41
1:B:660:GLY:HA2	1:B:721:GLY:N	2.33	0.41
1:B:756:LYS:HE2	1:B:1177:HIS:CD2	2.56	0.41
1:B:969:PRO:N	1:B:970:PRO:CD	2.84	0.41
1:B:987:LEU:HD23	1:B:987:LEU:HA	1.80	0.41
1:B:1230:GLN:O	1:B:1231:LEU:HD23	2.21	0.41
1:C:80:ARG:O	1:C:80:ARG:CG	2.69	0.41
1:C:228:LEU:HD12	1:C:228:LEU:HA	1.29	0.41
1:C:273:ASP:OD1	1:C:273:ASP:N	2.54	0.41
1:C:290:THR:HG21	1:C:292:PRO:HD2	1.81	0.41
1:C:573:PHE:CB	1:C:574:PRO:CD	2.96	0.41
1:C:1009:ILE:O	1:C:1010:ALA:C	2.59	0.41
1:C:1075:THR:HG23	1:C:1076:GLY:N	2.36	0.41
1:D:105:TYR:H	1:D:105:TYR:HD1	1.68	0.41
1:D:438:GLU:OE2	1:D:553:ALA:HB3	2.20	0.41
1:D:622:LEU:HD12	1:D:622:LEU:HA	1.59	0.41
1:D:739:PHE:HB3	1:D:740:PRO:HD2	2.03	0.41
1:D:770:VAL:O	1:D:770:VAL:CG1	2.67	0.41
1:D:1043:LEU:O	1:D:1044:PRO:C	2.58	0.41
1:D:1222:LEU:N	1:D:1229:MET:HE2	2.34	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1226:GLY:HA3	1:F:896:PRO:HG3	2.03	0.41
1:D:1463:LEU:HA	1:D:1463:LEU:HD23	1.71	0.41
1:E:464:ILE:CD1	1:E:779:TYR:CZ	2.94	0.41
1:E:701:ASP:C	1:E:703:GLY:N	2.71	0.41
1:E:803:THR:O	1:E:803:THR:CG2	2.62	0.41
1:E:978:GLU:HG3	1:E:979:ASP:H	1.85	0.41
1:E:1047:MET:O	1:E:1048:GLY:C	2.56	0.41
1:E:1105:VAL:HG23	2:L:54:PHE:CE1	2.56	0.41
1:E:1425:LYS:HD3	1:E:1447:TRP:CD1	2.56	0.41
1:F:410:LEU:HD12	1:F:410:LEU:N	2.36	0.41
1:F:622:LEU:HD12	1:F:622:LEU:HA	1.59	0.41
1:F:647:ALA:HB2	1:F:669:TYR:OH	2.19	0.41
1:F:856:PRO:HG2	1:F:1093:GLY:HA3	2.02	0.41
1:F:1150:LEU:O	1:F:1153:LEU:N	2.54	0.41
1:F:1212:ASP:OD1	1:F:1243:GLY:N	2.34	0.41
1:F:1221:PRO:CD	1:F:1229:MET:HE1	2.32	0.41
1:F:1222:LEU:HD12	1:F:1222:LEU:O	2.20	0.41
1:F:1354:THR:HG21	1:F:1427:LEU:HD21	2.03	0.41
1:F:1462:MET:O	1:F:1466:LEU:HB2	2.21	0.41
2:G:93:ILE:O	2:G:96:ARG:HG2	2.21	0.41
2:G:120:ILE:O	2:G:120:ILE:HG22	2.20	0.41
2:G:144:ARG:HD3	2:G:465:HIS:ND1	2.36	0.41
2:H:319:LEU:C	2:H:319:LEU:HD22	2.40	0.41
2:I:69:LEU:HA	2:I:72:THR:CG2	2.51	0.41
2:I:119:THR:O	2:I:123:VAL:HG22	2.21	0.41
2:I:432:THR:CG2	2:I:437:VAL:HG13	2.50	0.41
2:J:288:ALA:CB	2:J:311:GLN:HG3	2.50	0.41
2:K:69:LEU:HA	2:K:72:THR:CG2	2.51	0.41
2:K:113:SER:HB3	2:K:115:HIS:CD2	2.55	0.41
2:K:119:THR:O	2:K:123:VAL:HG22	2.21	0.41
2:K:181:ARG:HB3	2:K:181:ARG:HH11	1.85	0.41
2:L:150:VAL:CG2	2:L:151:GLY:N	2.82	0.41
2:L:316:VAL:HG12	2:L:342:VAL:HG13	2.02	0.41
2:L:353:PHE:CD1	2:L:382:VAL:CG1	3.01	0.41
1:A:309:THR:HG21	1:A:314:LYS:HG3	2.02	0.41
1:A:339:ARG:O	1:A:395:LEU:HB2	2.21	0.41
1:A:696:TYR:CZ	1:A:700:ILE:HD11	2.55	0.41
1:A:842:GLU:O	1:A:1156:ARG:HG2	2.21	0.41
1:B:117:ILE:HD12	1:B:117:ILE:HG21	1.49	0.41
1:B:218:THR:CG2	1:B:221:LEU:H	2.30	0.41
1:B:864:SER:O	1:B:864:SER:OG	2.37	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:948:LYS:C	1:B:950:THR:H	2.23	0.41
1:B:1135:VAL:O	1:B:1138:LEU:N	2.54	0.41
1:C:309:THR:HB	1:C:314:LYS:CE	2.51	0.41
1:C:691:LYS:O	1:C:691:LYS:HG3	2.20	0.41
1:C:735:VAL:HG23	1:C:735:VAL:H	1.49	0.41
1:C:780:ARG:NH2	2:K:54:PHE:HD1	2.16	0.41
1:C:894:PHE:CD1	1:C:904:ASN:ND2	2.88	0.41
1:C:978:GLU:HG3	1:C:979:ASP:H	1.85	0.41
1:C:1131:THR:HG22	1:C:1133:GLU:H	1.81	0.41
1:C:1401:LEU:HD11	1:C:1405:ILE:CD1	2.50	0.41
1:D:56:LYS:CG	1:D:71:LEU:HD22	2.49	0.41
1:D:120:LYS:HE2	1:D:120:LYS:HA	2.00	0.41
1:D:608:ASP:OD2	1:D:646:THR:HA	2.20	0.41
1:D:875:MET:SD	1:D:1139:PHE:CE2	3.14	0.41
1:D:999:LYS:CG	1:D:1022:LEU:CD2	2.64	0.41
1:D:1113:CYS:C	1:D:1115:VAL:N	2.69	0.41
1:D:1138:LEU:HD12	1:D:1138:LEU:HA	1.66	0.41
1:D:1228:LYS:CB	1:F:901:ASP:OD1	2.59	0.41
1:E:273:ASP:OD1	1:E:273:ASP:N	2.54	0.41
1:E:376:GLU:HG3	1:E:1310:THR:OG1	2.20	0.41
1:E:558:MET:C	1:E:560:ASP:H	2.24	0.41
1:E:598:ARG:HH11	1:E:598:ARG:HD3	1.72	0.41
1:E:622:LEU:HD13	1:E:739:PHE:HZ	1.85	0.41
1:E:691:LYS:O	1:E:691:LYS:HG3	2.20	0.41
1:E:706:LYS:NZ	1:E:1034:PRO:HG2	2.36	0.41
1:E:732:ARG:O	1:E:733:ALA:C	2.59	0.41
1:E:1170:GLN:HB2	1:E:1183:LEU:HD12	2.02	0.41
1:E:1395:TYR:HD2	1:E:1454:PHE:CE1	2.39	0.41
1:E:1465:ARG:HE	1:E:1465:ARG:HB3	1.62	0.41
1:F:117:ILE:HD12	1:F:117:ILE:HG21	1.49	0.41
1:F:230:HIS:CE1	1:F:234:ILE:HG13	2.55	0.41
1:F:248:GLU:C	1:F:250:ARG:N	2.73	0.41
1:F:457:THR:HA	1:F:773:LEU:HB3	2.02	0.41
1:F:561:TYR:CD1	1:F:561:TYR:O	2.74	0.41
1:F:661:VAL:HG12	1:F:661:VAL:O	2.21	0.41
1:F:875:MET:SD	1:F:1139:PHE:CE2	3.14	0.41
1:F:1047:MET:HB2	1:F:1048:GLY:H	1.77	0.41
1:F:1427:LEU:O	1:F:1428:ILE:C	2.56	0.41
2:G:31:ILE:CG1	2:G:193:PHE:HD1	2.34	0.41
2:G:145:GLU:O	2:G:171:TYR:CE1	2.74	0.41
2:H:64:ASN:OD1	2:H:66:PRO:HG2	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:69:LEU:HA	2:H:72:THR:CG2	2.51	0.41
2:H:93:ILE:O	2:H:96:ARG:HG2	2.21	0.41
2:H:113:SER:HB3	2:H:115:HIS:CD2	2.55	0.41
2:H:120:ILE:O	2:H:120:ILE:HG22	2.20	0.41
2:H:137:VAL:HG12	2:H:139:PRO:HD3	2.03	0.41
2:H:181:ARG:HE	2:H:187:VAL:CG1	2.34	0.41
2:H:197:LYS:CD	2:H:274:GLY:N	2.83	0.41
2:H:353:PHE:N	2:H:369:LEU:HD23	2.36	0.41
2:H:432:THR:CG2	2:H:437:VAL:HG13	2.50	0.41
2:H:449:LEU:HD12	8:H:484:FAD:O2	2.20	0.41
2:I:119:THR:OG1	2:I:122:SER:HB3	2.21	0.41
2:I:173:VAL:CG2	2:I:174:HIS:N	2.81	0.41
2:I:418:THR:CB	2:I:424:LEU:CD1	2.93	0.41
2:J:71:LEU:CD1	2:J:80:ALA:N	2.81	0.41
2:J:249:LYS:HD2	2:J:258:ILE:HD13	2.02	0.41
2:J:277:VAL:CG1	2:J:278:GLU:N	2.81	0.41
2:K:28:PHE:HZ	2:K:285:LEU:HD21	1.83	0.41
2:K:63:ASN:CG	2:K:68:TRP:CZ3	2.94	0.41
2:K:120:ILE:O	2:K:120:ILE:HG22	2.20	0.41
2:K:181:ARG:HB3	2:K:181:ARG:CZ	2.51	0.41
2:K:190:ILE:HB	2:K:195:LEU:HD23	2.03	0.41
2:K:240:THR:HG23	2:K:443:ILE:HG21	2.01	0.41
2:L:119:THR:O	2:L:123:VAL:HG22	2.21	0.41
2:L:469:LYS:HZ2	2:L:476:VAL:HB	1.85	0.41
1:A:98:LEU:HD23	1:A:98:LEU:HA	1.82	0.41
1:A:237:VAL:C	1:A:239:GLY:N	2.73	0.41
1:A:256:PHE:O	1:A:257:GLY:C	2.56	0.41
1:A:333:LEU:HD23	1:A:333:LEU:HA	1.85	0.41
1:A:348:ASN:O	1:A:349:GLY:C	2.58	0.41
1:A:386:GLY:H	1:A:389:GLU:CG	2.33	0.41
1:A:420:VAL:C	1:A:422:ASN:H	2.23	0.41
1:A:583:ARG:NE	1:A:587:ARG:NH1	2.68	0.41
1:A:622:LEU:HD13	1:A:739:PHE:HZ	1.85	0.41
1:A:745:ARG:C	1:A:746:ILE:HG13	2.40	0.41
1:A:978:GLU:HG3	1:A:979:ASP:H	1.85	0.41
1:A:1009:ILE:O	1:A:1010:ALA:C	2.59	0.41
1:A:1059:ASN:HD22	1:A:1059:ASN:N	2.19	0.41
1:A:1085:LEU:N	1:A:1085:LEU:HD23	2.36	0.41
1:A:1113:CYS:C	1:A:1115:VAL:N	2.71	0.41
1:A:1158:LEU:HA	1:A:1158:LEU:HD12	1.62	0.41
1:A:1170:GLN:HB2	1:A:1183:LEU:HD12	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1302:GLY:H	1:A:1333:ALA:C	2.24	0.41
1:A:1370:GLY:N	1:A:1389:GLY:O	2.53	0.41
1:A:1374:VAL:HG12	1:A:1375:ILE:H	1.86	0.41
1:B:240:ASN:HB3	1:B:327:TRP:CH2	2.56	0.41
1:B:317:ILE:C	1:B:321:ASN:HD22	2.18	0.41
1:B:458:MET:O	1:B:461:MET:N	2.50	0.41
1:B:515:ARG:H	1:B:515:ARG:HG3	1.63	0.41
1:B:648:GLU:O	1:B:648:GLU:HG2	2.21	0.41
1:B:732:ARG:O	1:B:733:ALA:C	2.58	0.41
1:B:896:PRO:HG3	1:F:1226:GLY:HA3	2.03	0.41
1:B:957:ARG:HD2	1:B:965:LEU:HD12	2.02	0.41
1:B:1129:VAL:HG23	1:B:1129:VAL:O	2.19	0.41
1:B:1132:PRO:O	1:B:1133:GLU:C	2.56	0.41
1:B:1143:ALA:O	1:B:1144:GLU:C	2.58	0.41
1:B:1295:TYR:CD1	1:B:1295:TYR:N	2.87	0.41
1:B:1412:PHE:CD1	1:B:1412:PHE:N	2.88	0.41
1:B:1435:THR:CG2	1:B:1437:SER:CB	2.99	0.41
1:C:24:ALA:C	1:C:26:LYS:H	2.23	0.41
1:C:97:ILE:HA	1:C:151:ILE:HD13	2.01	0.41
1:C:320:CYS:O	1:C:322:SER:N	2.54	0.41
1:C:443:ASP:OD2	1:C:445:ALA:HB3	2.21	0.41
1:C:636:LEU:HA	1:C:636:LEU:HD12	1.61	0.41
1:C:651:ASP:OD1	1:C:651:ASP:N	2.43	0.41
1:C:763:ALA:O	1:C:764:THR:C	2.58	0.41
1:C:781:PHE:CE2	2:K:57:VAL:CG1	3.04	0.41
1:C:803:THR:O	1:C:803:THR:CG2	2.62	0.41
1:C:833:SER:HB2	1:C:1167:LEU:HD22	2.03	0.41
1:C:864:SER:HB3	1:C:1117:VAL:O	2.21	0.41
1:C:894:PHE:CZ	1:C:924:GLN:HG3	2.55	0.41
1:C:976:SER:O	1:C:979:ASP:N	2.54	0.41
1:C:1374:VAL:HG12	1:C:1375:ILE:H	1.86	0.41
1:C:1407:ASP:O	1:C:1409:SER:N	2.53	0.41
1:C:1450:GLU:O	1:C:1451:VAL:C	2.57	0.41
1:D:491:LYS:HE2	1:D:785:GLY:HA3	2.02	0.41
1:D:559:ARG:O	1:D:559:ARG:HG3	2.17	0.41
1:D:783:LYS:H	2:H:56:GLN:HG3	1.86	0.41
1:D:839:PRO:CG	1:D:842:GLU:OE1	2.69	0.41
1:D:937:LYS:N	1:D:938:PRO:HD3	2.35	0.41
1:D:970:PRO:O	1:D:970:PRO:CG	2.68	0.41
1:D:1047:MET:HB2	1:D:1048:GLY:H	1.77	0.41
1:D:1066:ARG:NH1	1:D:1089:GLU:OE2	2.53	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1135:VAL:O	1:D:1138:LEU:N	2.54	0.41
1:D:1354:THR:HG21	1:D:1427:LEU:HD21	2.03	0.41
1:D:1412:PHE:CD1	1:D:1412:PHE:N	2.88	0.41
1:E:42:ASP:OD1	1:E:212:SER:OG	2.39	0.41
1:E:195:LEU:HA	1:E:195:LEU:HD23	1.57	0.41
1:E:292:PRO:O	1:E:293:MET:C	2.55	0.41
1:E:355:TYR:CZ	1:E:383:GLY:HA3	2.56	0.41
1:E:426:LEU:CD2	1:E:543:LEU:CB	2.93	0.41
1:E:476:ILE:CG2	1:E:477:GLY:N	2.83	0.41
1:E:486:ALA:O	1:E:487:VAL:C	2.58	0.41
1:E:562:MET:HE1	1:E:605:ILE:HD11	2.01	0.41
1:E:782:ARG:C	1:E:784:SER:N	2.70	0.41
1:E:864:SER:HB3	1:E:1117:VAL:O	2.21	0.41
1:E:894:PHE:CD1	1:E:904:ASN:ND2	2.88	0.41
1:E:1039:LYS:O	1:E:1040:PHE:CD1	2.73	0.41
1:E:1057:THR:CG2	1:E:1190:VAL:HG11	2.50	0.41
1:E:1230:GLN:C	1:E:1231:LEU:HD23	2.41	0.41
1:E:1246:LEU:O	1:E:1249:MET:HB2	2.20	0.41
1:E:1370:GLY:N	1:E:1389:GLY:O	2.53	0.41
1:F:30:HIS:HE2	1:F:31:ARG:HD2	1.86	0.41
1:F:87:GLU:O	1:F:90:ARG:N	2.54	0.41
1:F:143:GLN:HE21	1:F:143:GLN:C	2.24	0.41
1:F:504:SER:HB2	1:F:508:ASN:OD1	2.21	0.41
1:F:569:ILE:N	1:F:569:ILE:CD1	2.77	0.41
1:F:695:ASN:O	1:F:696:TYR:C	2.57	0.41
1:F:806:SER:HG	1:F:809:THR:HB	1.86	0.41
1:F:841:ASP:OD1	1:F:841:ASP:N	2.51	0.41
1:F:843:VAL:CG1	1:F:844:GLU:H	2.32	0.41
1:F:918:THR:HG23	1:F:1256:MET:HE2	2.03	0.41
1:F:1066:ARG:NH1	1:F:1089:GLU:OE2	2.53	0.41
1:F:1282:GLN:HA	1:F:1302:GLY:O	2.20	0.41
1:F:1427:LEU:HD23	1:F:1427:LEU:HA	1.94	0.41
1:F:1461:GLU:H	1:F:1461:GLU:HG2	1.64	0.41
1:F:1468:VAL:O	1:F:1469:PRO:C	2.57	0.41
2:G:63:ASN:CG	2:G:68:TRP:CZ3	2.94	0.41
2:G:69:LEU:HA	2:G:72:THR:CG2	2.51	0.41
2:G:137:VAL:HG12	2:G:139:PRO:HD3	2.03	0.41
2:G:186:LEU:HD21	2:G:200:VAL:CB	2.47	0.41
2:G:353:PHE:N	2:G:369:LEU:HD23	2.36	0.41
2:G:358:VAL:HG22	2:G:365:VAL:HG11	1.99	0.41
2:G:425:VAL:HG21	2:G:444:VAL:HG22	2.01	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:427:HIS:ND1	2:G:428:ARG:HG3	2.36	0.41
2:H:31:ILE:CG1	2:H:193:PHE:HD1	2.33	0.41
2:H:90:PHE:HZ	2:H:160:LEU:CB	2.33	0.41
2:H:181:ARG:HB3	2:H:181:ARG:CZ	2.51	0.41
2:H:212:VAL:HG12	2:H:212:VAL:H	1.49	0.41
2:H:292:VAL:HG22	2:H:394:LEU:CD1	2.30	0.41
2:H:342:VAL:CG1	2:H:343:GLU:N	2.83	0.41
2:H:351:GLU:CB	2:H:353:PHE:HB3	2.47	0.41
2:H:429:THR:HB	2:H:431:MET:HG3	2.02	0.41
2:H:476:VAL:CG2	2:H:477:ALA:N	2.83	0.41
2:I:51:GLY:O	2:I:52:VAL:HG23	2.16	0.41
2:I:63:ASN:OD1	2:I:68:TRP:CH2	2.74	0.41
2:I:100:GLN:HB3	2:I:105:GLU:CD	2.41	0.41
2:I:153:ILE:HG22	2:I:237:LEU:O	2.20	0.41
2:I:200:VAL:HA	2:I:203:ARG:HD2	1.97	0.41
2:I:291:HIS:HD2	2:I:392:ALA:HB2	1.84	0.41
2:I:316:VAL:HG12	2:I:342:VAL:HG13	2.02	0.41
2:J:69:LEU:HA	2:J:72:THR:CG2	2.51	0.41
2:J:212:VAL:HG12	2:J:212:VAL:H	1.49	0.41
2:J:387:GLU:CG	2:J:388:PHE:N	2.82	0.41
2:J:406:LEU:CD2	2:J:406:LEU:N	2.82	0.41
2:K:144:ARG:HD3	2:K:465:HIS:ND1	2.36	0.41
2:K:212:VAL:HG12	2:K:212:VAL:H	1.49	0.41
2:K:249:LYS:HD2	2:K:258:ILE:HD13	2.02	0.41
2:K:291:HIS:HD2	2:K:392:ALA:HB2	1.84	0.41
2:K:418:THR:N	2:K:424:LEU:CD2	2.83	0.41
2:K:425:VAL:HG21	2:K:444:VAL:HG22	2.01	0.41
2:K:427:HIS:ND1	2:K:428:ARG:HG3	2.36	0.41
2:L:174:HIS:CD2	2:L:176:TYR:CD1	3.08	0.41
2:L:252:GLY:HA3	2:L:258:ILE:HG21	2.02	0.41
2:L:322:ARG:O	2:L:346:TRP:CD1	2.74	0.41
2:L:367:ILE:O	2:L:390:VAL:HG23	2.20	0.41
2:L:427:HIS:ND1	2:L:428:ARG:HG3	2.36	0.41
1:A:240:ASN:O	1:A:241:VAL:C	2.58	0.41
1:A:443:ASP:OD2	1:A:445:ALA:HB3	2.21	0.41
1:A:505:GLN:NE2	1:A:1000:LEU:HB3	2.35	0.41
1:A:706:LYS:NZ	1:A:1034:PRO:HG2	2.36	0.41
1:A:746:ILE:CG2	1:A:747:SER:N	2.76	0.41
1:A:969:PRO:CD	1:A:970:PRO:CD	2.99	0.41
1:A:1021:ILE:HG21	1:A:1021:ILE:HD13	1.81	0.41
1:A:1463:LEU:HA	1:A:1463:LEU:HD23	1.66	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:240:ASN:HB3	1:B:327:TRP:CZ2	2.56	0.41
1:B:390:MET:HG3	1:B:406:LEU:CD2	2.48	0.41
1:B:438:GLU:OE2	1:B:553:ALA:HB3	2.20	0.41
1:B:551:THR:OG1	1:B:554:GLU:CG	2.65	0.41
1:B:739:PHE:HB3	1:B:740:PRO:HD2	2.03	0.41
1:B:787:ARG:HH11	1:B:787:ARG:HD3	1.73	0.41
1:B:839:PRO:CG	1:B:842:GLU:OE1	2.69	0.41
1:B:875:MET:SD	1:B:1139:PHE:CE2	3.14	0.41
1:B:1468:VAL:O	1:B:1469:PRO:C	2.57	0.41
1:C:360:ASP:OD1	1:C:360:ASP:N	2.49	0.41
1:C:402:ARG:HH11	1:C:402:ARG:HD3	1.68	0.41
1:C:479:MET:HG3	1:C:1104:MET:HE1	1.99	0.41
1:C:558:MET:C	1:C:560:ASP:N	2.72	0.41
1:C:851:LYS:NZ	1:E:1218:ASP:OD1	2.54	0.41
1:C:896:PRO:HG2	1:E:1226:GLY:CA	2.26	0.41
1:C:1170:GLN:HB2	1:C:1183:LEU:HD12	2.02	0.41
1:C:1466:LEU:O	1:C:1468:VAL:N	2.53	0.41
1:D:143:GLN:C	1:D:143:GLN:HE21	2.24	0.41
1:D:240:ASN:HB3	1:D:327:TRP:CZ2	2.56	0.41
1:D:756:LYS:HE2	1:D:1177:HIS:CD2	2.56	0.41
1:D:860:MET:HE2	1:D:868:HIS:ND1	2.36	0.41
1:D:928:LEU:HD23	1:D:928:LEU:HA	1.65	0.41
1:D:1318:ASN:N	1:D:1318:ASN:HD22	2.08	0.41
1:E:320:CYS:O	1:E:322:SER:N	2.54	0.41
1:E:362:LEU:HD12	1:E:362:LEU:HA	1.88	0.41
1:E:503:PHE:CE2	1:E:938:PRO:HB3	2.56	0.41
1:E:864:SER:HB3	1:E:1116:GLY:O	2.21	0.41
1:E:1075:THR:HG23	1:E:1076:GLY:N	2.36	0.41
1:E:1366:GLU:CG	1:E:1367:TYR:CD2	2.92	0.41
1:F:226:ARG:N	1:F:278:ASP:OD2	2.53	0.41
1:F:492:TYR:CD1	1:F:492:TYR:C	2.94	0.41
1:F:575:VAL:HG13	1:F:759:LEU:HD22	2.03	0.41
1:F:745:ARG:C	1:F:746:ILE:HG13	2.40	0.41
1:F:969:PRO:N	1:F:970:PRO:CD	2.84	0.41
1:F:1190:VAL:HG12	1:F:1191:ASP:N	2.36	0.41
2:G:71:LEU:CD1	2:G:80:ALA:N	2.81	0.41
2:G:305:VAL:HG12	2:G:306:ARG:N	2.33	0.41
2:H:63:ASN:OD1	2:H:68:TRP:CH2	2.74	0.41
2:H:71:LEU:HD12	2:H:80:ALA:CA	2.49	0.41
2:H:110:ILE:HG13	2:H:116:GLY:O	2.21	0.41
2:I:110:ILE:HG13	2:I:116:GLY:O	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:137:VAL:HG12	2:I:139:PRO:HD3	2.03	0.41
2:I:181:ARG:HH11	2:I:181:ARG:CB	2.34	0.41
2:I:190:ILE:HB	2:I:195:LEU:HD23	2.03	0.41
2:I:322:ARG:O	2:I:346:TRP:CD1	2.74	0.41
2:I:409:ALA:O	2:I:413:PRO:HD3	2.21	0.41
2:I:443:ILE:HD12	2:I:443:ILE:C	2.41	0.41
2:K:31:ILE:CG1	2:K:193:PHE:HD1	2.34	0.41
2:K:93:ILE:O	2:K:96:ARG:HG2	2.21	0.41
2:K:476:VAL:CG2	2:K:477:ALA:N	2.83	0.41
2:L:353:PHE:N	2:L:369:LEU:HD23	2.36	0.41
2:L:409:ALA:O	2:L:413:PRO:HD3	2.21	0.41
1:A:227:MET:HE3	1:A:282:GLU:CA	2.41	0.40
1:A:309:THR:HB	1:A:314:LYS:CE	2.51	0.40
1:A:775:VAL:H	1:A:775:VAL:HG23	1.67	0.40
1:A:836:ALA:HB1	1:A:837:PRO:CD	2.52	0.40
1:A:864:SER:HB3	1:A:1117:VAL:O	2.21	0.40
1:A:877:ARG:CG	1:C:1229:MET:C	2.89	0.40
1:A:1108:CYS:SG	6:A:2476:F3S:S2	3.20	0.40
1:A:1131:THR:CG2	1:A:1133:GLU:HB2	2.52	0.40
1:B:68:ASP:OD1	1:B:68:ASP:N	2.54	0.40
1:B:143:GLN:HE21	1:B:143:GLN:C	2.24	0.40
1:B:230:HIS:CE1	1:B:234:ILE:HG13	2.55	0.40
1:B:504:SER:HB2	1:B:508:ASN:OD1	2.21	0.40
1:B:666:VAL:HG13	1:B:667:ASN:N	2.34	0.40
1:B:780:ARG:HH21	2:G:54:PHE:HE1	1.59	0.40
1:B:825:LEU:O	1:B:826:ARG:C	2.59	0.40
1:B:875:MET:O	1:B:877:ARG:N	2.54	0.40
1:C:10:ASP:C	1:C:10:ASP:OD1	2.59	0.40
1:C:30:HIS:CE1	1:C:368:GLU:OE1	2.68	0.40
1:C:233:GLU:O	1:C:329:GLY:HA3	2.21	0.40
1:C:240:ASN:O	1:C:241:VAL:C	2.58	0.40
1:C:304:THR:HG21	1:C:518:ARG:HD2	2.03	0.40
1:C:397:SER:O	1:C:398:GLY:C	2.58	0.40
1:C:782:ARG:CZ	2:K:53:PRO:HD3	2.52	0.40
1:C:856:PRO:C	1:C:883:ASP:HB3	2.41	0.40
1:C:914:ARG:HH22	1:C:973:ASP:CG	2.23	0.40
1:D:447:LEU:HD21	1:D:674:ALA:N	2.36	0.40
1:D:606:LEU:HA	1:D:606:LEU:HD23	1.77	0.40
1:D:782:ARG:NE	2:H:53:PRO:CD	2.81	0.40
1:D:914:ARG:NH2	1:D:973:ASP:OD1	2.54	0.40
1:D:1077:ARG:HG2	1:D:1078:ASP:H	1.86	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1383:PHE:O	1:D:1384:ALA:CB	2.64	0.40
1:E:77:PHE:HB3	1:E:126:PRO:CB	2.50	0.40
1:E:103:TYR:OH	1:F:1178:LEU:HD13	2.20	0.40
1:E:112:ILE:HA	1:E:191:PHE:O	2.20	0.40
1:E:144:PHE:HD1	1:E:144:PHE:HA	1.68	0.40
1:E:189:THR:O	1:E:189:THR:HG23	2.20	0.40
1:E:461:MET:CE	1:E:461:MET:HA	2.51	0.40
1:E:537:GLU:C	1:E:539:GLN:N	2.74	0.40
1:E:606:LEU:O	1:E:607:THR:HG22	2.21	0.40
1:E:1440:ALA:O	1:E:1441:ALA:C	2.59	0.40
1:E:1450:GLU:O	1:E:1451:VAL:C	2.57	0.40
1:F:263:LEU:HA	1:F:263:LEU:HD12	1.11	0.40
1:F:515:ARG:H	1:F:515:ARG:HG3	1.63	0.40
1:F:756:LYS:HE2	1:F:1177:HIS:CD2	2.56	0.40
1:F:770:VAL:O	1:F:770:VAL:CG1	2.67	0.40
1:F:783:LYS:H	2:I:56:GLN:HG3	1.86	0.40
1:F:829:LEU:CD1	1:F:1168:LEU:HD13	2.46	0.40
1:F:829:LEU:HD21	1:F:1183:LEU:HD13	2.04	0.40
1:F:1077:ARG:HG2	1:F:1078:ASP:H	1.86	0.40
1:F:1077:ARG:C	1:F:1079:ILE:N	2.75	0.40
2:G:90:PHE:HZ	2:G:160:LEU:CB	2.33	0.40
2:G:100:GLN:HB3	2:G:105:GLU:CD	2.41	0.40
2:G:197:LYS:CD	2:G:274:GLY:N	2.83	0.40
2:G:418:THR:N	2:G:424:LEU:CD2	2.83	0.40
2:G:429:THR:HG21	2:G:431:MET:HE2	1.99	0.40
2:H:97:ILE:CD1	2:H:450:VAL:CG1	2.95	0.40
2:H:137:VAL:O	2:H:139:PRO:HD3	2.21	0.40
2:I:46:ARG:NH1	2:I:110:ILE:HD12	2.36	0.40
2:I:96:ARG:CA	2:I:125:LYS:HD2	2.49	0.40
2:I:469:LYS:O	2:I:472:ALA:HB3	2.20	0.40
2:J:96:ARG:CA	2:J:125:LYS:HD2	2.49	0.40
2:J:269:ASN:HD22	2:J:273:LEU:HD23	1.85	0.40
2:J:425:VAL:HG21	2:J:444:VAL:HG22	2.01	0.40
2:K:119:THR:OG1	2:K:122:SER:HB3	2.21	0.40
2:K:353:PHE:N	2:K:369:LEU:HD23	2.36	0.40
2:K:417:VAL:HG13	2:K:422:THR:N	2.37	0.40
2:L:59:CYS:SG	2:L:61:VAL:CG1	3.05	0.40
2:L:165:GLU:OE2	2:L:458:ARG:HD2	2.22	0.40
2:L:181:ARG:HB3	2:L:181:ARG:HH11	1.85	0.40
2:L:181:ARG:HE	2:L:187:VAL:CG1	2.34	0.40
1:A:503:PHE:CE2	1:A:938:PRO:HB3	2.56	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:528:ASN:O	1:A:529:LEU:HD23	2.22	0.40
1:A:595:ASP:O	1:A:596:ALA:O	2.38	0.40
1:A:1112:THR:O	2:J:112:GLN:CD	2.60	0.40
1:B:80:ARG:O	1:B:80:ARG:HG3	2.21	0.40
1:B:87:GLU:O	1:B:90:ARG:N	2.54	0.40
1:B:144:PHE:HD1	1:B:144:PHE:HA	1.71	0.40
1:B:317:ILE:HG22	1:B:321:ASN:ND2	2.27	0.40
1:B:406:LEU:O	1:B:409:HIS:HB3	2.22	0.40
1:B:525:ARG:HG2	1:B:542:LEU:CD1	2.47	0.40
1:B:783:LYS:H	2:G:56:GLN:HG3	1.86	0.40
1:B:969:PRO:HD2	1:B:970:PRO:CD	2.52	0.40
1:B:1375:ILE:HG21	1:B:1375:ILE:HD13	1.63	0.40
1:C:6:ILE:HB	1:C:205:ALA:HB3	2.03	0.40
1:C:286:ARG:HA	1:C:286:ARG:HD3	1.60	0.40
1:C:355:TYR:CZ	1:C:383:GLY:HA3	2.56	0.40
1:C:528:ASN:O	1:C:529:LEU:HD23	2.21	0.40
1:C:804:ASN:O	1:C:805:ASP:CB	2.69	0.40
1:C:842:GLU:O	1:C:1156:ARG:HG2	2.21	0.40
1:C:877:ARG:HD3	1:E:1230:GLN:CB	2.34	0.40
1:C:877:ARG:CG	1:E:1229:MET:C	2.89	0.40
1:C:930:ILE:CD1	1:C:983:LEU:HD13	2.43	0.40
1:C:1413:GLN:OE1	1:C:1470:VAL:HG13	2.22	0.40
1:C:1440:ALA:O	1:C:1441:ALA:C	2.59	0.40
1:C:1460:LYS:O	1:C:1461:GLU:C	2.55	0.40
1:D:25:LEU:HD23	1:D:25:LEU:HA	1.85	0.40
1:D:116:ILE:HG21	1:D:190:THR:HG21	2.03	0.40
1:D:588:ARG:HH11	1:D:588:ARG:HD3	1.68	0.40
1:D:732:ARG:O	1:D:733:ALA:C	2.59	0.40
1:D:732:ARG:N	1:D:747:SER:HA	2.37	0.40
1:D:819:LYS:HA	1:D:819:LYS:HD3	1.60	0.40
1:D:829:LEU:HD21	1:D:1183:LEU:HD13	2.03	0.40
1:D:1116:GLY:HA3	1:D:1128:PHE:HB2	2.04	0.40
1:E:55:PHE:O	1:E:58:HIS:HB3	2.22	0.40
1:E:290:THR:HG21	1:E:292:PRO:HD2	1.81	0.40
1:E:482:ASP:OD2	1:E:790:TRP:N	2.47	0.40
1:E:510:PRO:CD	1:E:970:PRO:HB3	2.37	0.40
1:E:696:TYR:CZ	1:E:700:ILE:HD11	2.55	0.40
1:E:842:GLU:HG2	1:E:1156:ARG:HD3	2.04	0.40
1:E:855:THR:O	1:E:855:THR:CG2	2.69	0.40
1:E:1184:ASN:CB	1:E:1185:PRO:CD	2.82	0.40
1:E:1226:GLY:O	1:E:1227:GLU:C	2.59	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:5:PHE:CZ	1:F:365:GLY:HA3	2.56	0.40
1:F:206:ILE:HG21	1:F:206:ILE:HD13	1.76	0.40
1:F:345:MET:HE2	1:F:345:MET:HB2	1.71	0.40
1:F:354:ARG:HH11	1:F:354:ARG:HD2	1.68	0.40
1:F:825:LEU:O	1:F:826:ARG:C	2.59	0.40
1:F:875:MET:O	1:F:877:ARG:N	2.54	0.40
1:F:1062:ARG:NH2	1:F:1088:GLU:OE2	2.54	0.40
1:F:1135:VAL:O	1:F:1138:LEU:N	2.54	0.40
1:F:1139:PHE:O	1:F:1140:THR:C	2.59	0.40
1:F:1335:LYS:HA	1:F:1354:THR:O	2.21	0.40
2:G:119:THR:O	2:G:123:VAL:HG22	2.21	0.40
2:G:322:ARG:O	2:G:346:TRP:CD1	2.74	0.40
2:G:429:THR:HB	2:G:431:MET:HG3	2.02	0.40
2:H:162:ALA:HB3	2:H:237:LEU:CD1	2.49	0.40
2:H:322:ARG:CG	2:H:323:ASP:H	2.21	0.40
2:I:93:ILE:O	2:I:96:ARG:HG2	2.21	0.40
2:J:292:VAL:HG21	2:J:394:LEU:HD13	1.97	0.40
2:K:197:LYS:CB	2:K:273:LEU:HG	2.48	0.40
2:K:257:ASN:HD21	2:K:394:LEU:HA	1.85	0.40
2:K:317:LYS:CE	2:K:345:ILE:CG1	2.95	0.40
2:L:26:GLN:HG3	2:L:310:ARG:O	2.20	0.40
2:L:69:LEU:HA	2:L:72:THR:CG2	2.51	0.40
2:L:137:VAL:HG12	2:L:139:PRO:HD3	2.03	0.40
2:L:181:ARG:HB3	2:L:181:ARG:CZ	2.51	0.40
1:A:103:TYR:OH	1:B:1178:LEU:HD13	2.20	0.40
1:A:184:LEU:HD12	1:A:184:LEU:HA	1.91	0.40
1:A:248:GLU:O	1:A:249:THR:C	2.56	0.40
1:A:284:MET:CE	1:A:294:VAL:HG13	2.50	0.40
1:A:320:CYS:O	1:A:322:SER:N	2.54	0.40
1:A:442:MET:HB3	1:A:442:MET:HE3	1.67	0.40
1:A:461:MET:CE	1:A:461:MET:HA	2.51	0.40
1:A:555:PHE:CD1	1:A:556:ARG:N	2.89	0.40
1:A:855:THR:O	1:A:855:THR:CG2	2.69	0.40
1:A:1153:LEU:HD23	1:A:1153:LEU:HA	1.85	0.40
1:A:1210:THR:O	1:A:1211:LEU:C	2.60	0.40
1:A:1289:MET:CE	1:A:1289:MET:N	2.76	0.40
1:B:56:LYS:CG	1:B:71:LEU:HD22	2.49	0.40
1:B:937:LYS:N	1:B:938:PRO:HD3	2.35	0.40
1:B:965:LEU:HD23	1:B:965:LEU:HA	1.69	0.40
1:B:1190:VAL:HG12	1:B:1191:ASP:N	2.36	0.40
1:C:55:PHE:O	1:C:58:HIS:HB3	2.22	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:149:TYR:HE2	1:C:263:LEU:HD21	1.86	0.40
1:C:376:GLU:HG3	1:C:1310:THR:OG1	2.21	0.40
1:C:969:PRO:CD	1:C:970:PRO:CD	2.99	0.40
1:C:1430:GLU:O	1:C:1431:HIS:C	2.58	0.40
1:D:9:ILE:HG21	1:D:9:ILE:HD13	1.59	0.40
1:D:87:GLU:O	1:D:90:ARG:N	2.54	0.40
1:D:92:ILE:O	1:D:93:VAL:C	2.59	0.40
1:D:313:HIS:CD2	1:D:313:HIS:N	2.89	0.40
1:D:330:PRO:HA	1:D:350:LEU:HB2	2.03	0.40
1:D:918:THR:HG23	1:D:1256:MET:HE2	2.02	0.40
1:D:969:PRO:HD2	1:D:970:PRO:CD	2.52	0.40
1:E:78:LEU:CD1	1:E:129:GLU:HG3	2.52	0.40
1:E:80:ARG:O	1:E:80:ARG:CG	2.69	0.40
1:E:225:PHE:HB3	1:E:278:ASP:CG	2.42	0.40
1:E:347:ARG:CB	1:E:347:ARG:HH11	2.34	0.40
1:E:705:LEU:HD22	1:E:705:LEU:HA	1.90	0.40
1:E:731:SER:HA	1:E:747:SER:HA	2.04	0.40
1:E:803:THR:O	1:E:803:THR:HG22	2.08	0.40
1:E:929:GLU:HA	1:E:997:THR:HB	2.01	0.40
1:E:969:PRO:CD	1:E:970:PRO:CD	2.99	0.40
1:E:976:SER:O	1:E:979:ASP:N	2.54	0.40
1:E:1302:GLY:H	1:E:1333:ALA:C	2.24	0.40
1:E:1374:VAL:HG12	1:E:1375:ILE:H	1.86	0.40
1:F:80:ARG:O	1:F:80:ARG:HG3	2.21	0.40
1:F:89:CYS:SG	1:F:164:ILE:HG21	2.62	0.40
1:F:313:HIS:CD2	1:F:313:HIS:N	2.89	0.40
1:F:660:GLY:HA2	1:F:721:GLY:N	2.33	0.40
1:F:864:SER:O	1:F:864:SER:OG	2.37	0.40
1:F:1043:LEU:O	1:F:1044:PRO:C	2.58	0.40
2:G:46:ARG:NH1	2:G:110:ILE:HD12	2.36	0.40
2:G:132:TRP:HA	2:G:202:ARG:HH11	1.82	0.40
2:G:190:ILE:HB	2:G:195:LEU:HD23	2.03	0.40
2:G:306:ARG:HD3	2:G:336:HIS:CB	2.45	0.40
2:G:319:LEU:HD22	2:G:320:TYR:N	2.36	0.40
2:H:28:PHE:HZ	2:H:285:LEU:HD21	1.83	0.40
2:H:181:ARG:HH11	2:H:181:ARG:CB	2.34	0.40
2:H:317:LYS:CE	2:H:345:ILE:CG1	2.95	0.40
2:H:417:VAL:CG1	2:H:418:THR:N	2.83	0.40
2:H:427:HIS:ND1	2:H:428:ARG:HG3	2.36	0.40
2:I:145:GLU:O	2:I:171:TYR:CE1	2.74	0.40
2:I:150:VAL:CG2	2:I:151:GLY:N	2.82	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:152:VAL:CG2	2:I:153:ILE:N	2.82	0.40
2:I:175:VAL:CG1	2:I:214:TYR:CD2	2.94	0.40
2:I:181:ARG:HE	2:I:187:VAL:CG1	2.34	0.40
2:I:292:VAL:HG21	2:I:394:LEU:HD13	1.97	0.40
2:I:295:LEU:HD21	2:I:319:LEU:HD13	1.99	0.40
2:I:351:GLU:OE1	2:I:353:PHE:HB3	2.22	0.40
2:J:46:ARG:NH1	2:J:110:ILE:HD12	2.36	0.40
2:J:119:THR:O	2:J:123:VAL:HG22	2.21	0.40
2:J:319:LEU:HD22	2:J:320:TYR:N	2.36	0.40
2:J:418:THR:N	2:J:424:LEU:CD2	2.83	0.40
2:K:46:ARG:NH1	2:K:110:ILE:HD12	2.36	0.40
2:K:71:LEU:HD11	2:K:76:ARG:C	2.41	0.40
2:K:137:VAL:O	2:K:139:PRO:HD3	2.21	0.40
2:K:145:GLU:O	2:K:171:TYR:CE1	2.74	0.40
2:K:169:LYS:HZ3	2:K:461:ALA:HB1	1.86	0.40
2:L:71:LEU:HD12	2:L:80:ALA:CA	2.49	0.40
2:L:190:ILE:HB	2:L:195:LEU:HD23	2.03	0.40
2:L:288:ALA:HB1	2:L:394:LEU:HD12	2.04	0.40
1:A:347:ARG:HH11	1:A:347:ARG:CB	2.34	0.40
1:A:813:TYR:CG	1:A:814:SER:N	2.90	0.40
1:A:1105:VAL:HG23	2:J:54:PHE:CE1	2.56	0.40
1:A:1301:SER:O	1:A:1301:SER:OG	2.37	0.40
1:A:1440:ALA:O	1:A:1441:ALA:C	2.59	0.40
1:B:98:LEU:HD23	1:B:98:LEU:HA	1.62	0.40
1:B:116:ILE:HG21	1:B:190:THR:HG21	2.03	0.40
1:B:263:LEU:N	1:B:263:LEU:CD1	2.73	0.40
1:B:325:GLU:HA	1:B:326:PRO:HD3	1.92	0.40
1:B:787:ARG:HH12	1:B:821:PRO:CB	2.34	0.40
1:B:898:LYS:H	1:B:898:LYS:HD3	1.86	0.40
1:B:931:LYS:O	1:B:931:LYS:HG2	2.21	0.40
1:B:1143:ALA:O	1:B:1147:ARG:HG3	2.20	0.40
1:C:225:PHE:HB3	1:C:278:ASP:CG	2.42	0.40
1:C:318:GLN:O	1:C:322:SER:OG	2.39	0.40
1:C:347:ARG:CB	1:C:347:ARG:HH11	2.34	0.40
1:C:390:MET:HG3	1:C:406:LEU:HD23	2.02	0.40
1:C:442:MET:HB2	1:C:673:GLU:OE2	2.22	0.40
1:C:492:TYR:CD2	1:C:761:GLN:HG2	2.56	0.40
1:C:503:PHE:CE2	1:C:938:PRO:HB3	2.56	0.40
1:C:559:ARG:HD2	1:C:605:ILE:HD13	2.03	0.40
1:C:695:ASN:O	1:C:698:LYS:N	2.53	0.40
1:C:842:GLU:HG2	1:C:1156:ARG:HD3	2.04	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:843:VAL:CG1	1:C:844:GLU:H	2.30	0.40
1:C:1101:GLY:O	1:C:1102:CYS:C	2.57	0.40
1:C:1210:THR:O	1:C:1211:LEU:C	2.60	0.40
1:C:1211:LEU:HG	1:C:1215:ILE:HD11	2.04	0.40
1:C:1282:GLN:CB	1:C:1302:GLY:O	2.70	0.40
1:C:1285:LYS:HG3	1:C:1304:THR:HB	2.04	0.40
1:C:1395:TYR:HD2	1:C:1454:PHE:CE1	2.39	0.40
1:C:1421:GLU:O	1:C:1421:GLU:HG2	2.21	0.40
1:D:53:LYS:O	1:D:54:PHE:C	2.58	0.40
1:D:68:ASP:OD1	1:D:68:ASP:N	2.54	0.40
1:D:240:ASN:HB3	1:D:327:TRP:CH2	2.56	0.40
1:D:249:THR:O	1:D:249:THR:CG2	2.55	0.40
1:D:406:LEU:O	1:D:409:HIS:HB3	2.21	0.40
1:D:551:THR:OG1	1:D:554:GLU:CG	2.65	0.40
1:D:898:LYS:H	1:D:898:LYS:HD3	1.86	0.40
1:D:1260:GLN:CD	1:F:899:ASN:HA	2.42	0.40
1:E:233:GLU:O	1:E:329:GLY:HA3	2.21	0.40
1:E:587:ARG:O	1:E:590:ARG:CB	2.70	0.40
1:E:1009:ILE:O	1:E:1010:ALA:C	2.59	0.40
1:E:1108:CYS:SG	6:E:2476:F3S:S2	3.20	0.40
1:E:1113:CYS:SG	6:E:2476:F3S:S1	3.19	0.40
1:F:49:ALA:O	1:F:50:VAL:C	2.58	0.40
1:F:152:ARG:HH11	1:F:152:ARG:HD3	1.71	0.40
1:F:240:ASN:HB3	1:F:327:TRP:CZ2	2.56	0.40
1:F:935:GLY:HA3	1:F:1025:GLY:O	2.22	0.40
1:F:1164:ARG:CB	1:F:1167:LEU:HD12	2.51	0.40
2:G:63:ASN:OD1	2:G:68:TRP:CH2	2.74	0.40
2:G:165:GLU:OE2	2:G:458:ARG:HD2	2.22	0.40
2:G:288:ALA:HB1	2:G:394:LEU:HD12	2.04	0.40
2:G:291:HIS:HD2	2:G:392:ALA:HB2	1.84	0.40
2:H:100:GLN:HB3	2:H:105:GLU:CD	2.41	0.40
2:H:119:THR:OG1	2:H:122:SER:HB3	2.21	0.40
2:H:319:LEU:HD22	2:H:320:TYR:N	2.36	0.40
2:I:447:ALA:CB	2:I:452:TRP:CE3	2.92	0.40
2:J:165:GLU:OE2	2:J:458:ARG:HD2	2.22	0.40
2:J:177:ASP:OD2	2:J:182:MET:HE3	2.21	0.40
2:J:181:ARG:HE	2:J:187:VAL:CG1	2.34	0.40
2:J:342:VAL:CG1	2:J:343:GLU:N	2.83	0.40
2:J:351:GLU:OE1	2:J:353:PHE:HB3	2.22	0.40
2:K:152:VAL:CG2	2:K:153:ILE:N	2.82	0.40
2:K:181:ARG:HE	2:K:187:VAL:CG1	2.34	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:K:306:ARG:HG2	2:K:340:GLU:HG3	2.04	0.40
2:K:387:GLU:CG	2:K:388:PHE:N	2.82	0.40
2:L:137:VAL:O	2:L:139:PRO:HD3	2.21	0.40
2:L:145:GLU:O	2:L:171:TYR:CE1	2.74	0.40
2:L:291:HIS:HD2	2:L:392:ALA:HB2	1.84	0.40
2:L:417:VAL:HG13	2:L:422:THR:N	2.37	0.40
1:A:225:PHE:HB3	1:A:278:ASP:CG	2.42	0.40
1:A:250:ARG:HH21	1:A:639:PHE:HE1	1.63	0.40
1:A:492:TYR:CD2	1:A:761:GLN:HG2	2.56	0.40
1:A:537:GLU:C	1:A:539:GLN:N	2.74	0.40
1:A:842:GLU:HG2	1:A:1156:ARG:HD3	2.04	0.40
1:A:860:MET:HE2	1:A:893:ARG:HH12	1.87	0.40
1:A:864:SER:HB3	1:A:1116:GLY:O	2.21	0.40
1:A:902:ASN:OD1	1:A:902:ASN:C	2.60	0.40
1:A:1321:THR:HA	1:A:1341:GLN:HB2	2.04	0.40
1:A:1413:GLN:OE1	1:A:1470:VAL:HG13	2.22	0.40
1:B:148:LEU:HD23	1:B:148:LEU:HA	1.91	0.40
1:B:611:MET:HE3	1:B:611:MET:HB3	1.64	0.40
1:B:621:ILE:HG12	1:B:657:VAL:HG12	2.04	0.40
1:B:1047:MET:HB2	1:B:1048:GLY:H	1.77	0.40
1:B:1062:ARG:NH2	1:B:1088:GLU:OE2	2.54	0.40
1:B:1116:GLY:HA3	1:B:1128:PHE:HB2	2.04	0.40
1:C:144:PHE:HD1	1:C:144:PHE:HA	1.68	0.40
1:C:289:ARG:HD3	1:C:293:MET:HE2	2.04	0.40
1:C:485:ILE:O	1:C:486:ALA:C	2.60	0.40
1:C:558:MET:C	1:C:560:ASP:H	2.24	0.40
1:C:1105:VAL:HG23	2:K:54:PHE:CE1	2.56	0.40
1:C:1252:ARG:HH11	1:C:1252:ARG:HD3	1.66	0.40
1:D:5:PHE:CZ	1:D:365:GLY:HA3	2.55	0.40
1:D:325:GLU:HA	1:D:326:PRO:HD3	1.92	0.40
1:D:736:ALA:O	1:D:737:GLU:C	2.58	0.40
1:D:829:LEU:CD1	1:D:1168:LEU:HD13	2.46	0.40
1:D:918:THR:CG2	1:D:1256:MET:HE2	2.51	0.40
1:D:1143:ALA:O	1:D:1144:GLU:C	2.58	0.40
1:D:1335:LYS:HA	1:D:1354:THR:O	2.21	0.40
1:E:198:GLU:H	1:E:198:GLU:HG3	1.72	0.40
1:E:443:ASP:OD2	1:E:445:ALA:HB3	2.21	0.40
1:E:447:LEU:CD1	1:E:670:LEU:HD21	2.43	0.40
1:E:485:ILE:O	1:E:486:ALA:C	2.60	0.40
1:E:492:TYR:CD2	1:E:761:GLN:HG2	2.57	0.40
1:E:501:GLN:OE1	1:E:710:LYS:NZ	2.47	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:782:ARG:N	2:L:52:VAL:CB	2.84	0.40
1:E:836:ALA:HB1	1:E:837:PRO:CD	2.52	0.40
1:E:1458:VAL:CG1	1:E:1459:PRO:HD2	2.47	0.40
1:F:412:THR:O	1:F:412:THR:CG2	2.68	0.40
1:F:570:ASP:OD1	1:F:570:ASP:C	2.59	0.40
1:F:588:ARG:HH11	1:F:588:ARG:HD3	1.68	0.40
1:F:621:ILE:HG12	1:F:657:VAL:HG12	2.03	0.40
1:F:656:ALA:O	1:F:657:VAL:C	2.59	0.40
1:F:739:PHE:HB3	1:F:740:PRO:HD2	2.03	0.40
1:F:875:MET:HE3	1:F:880:ALA:HB3	2.03	0.40
1:F:1143:ALA:O	1:F:1144:GLU:C	2.58	0.40
1:F:1161:VAL:O	1:F:1161:VAL:HG12	2.21	0.40
1:F:1354:THR:HA	1:F:1372:THR:O	2.21	0.40
2:G:218:PHE:CD2	2:G:223:ASP:OD2	2.74	0.40
2:G:322:ARG:O	2:G:346:TRP:HD1	2.05	0.40
2:G:450:VAL:HG13	2:G:451:VAL:H	1.87	0.40
2:H:181:ARG:HB3	2:H:181:ARG:HH11	1.85	0.40
2:H:277:VAL:CG1	2:H:278:GLU:N	2.81	0.40
2:H:292:VAL:HG21	2:H:394:LEU:HD13	1.97	0.40
2:I:110:ILE:HD11	2:I:118:VAL:HG13	2.00	0.40
2:I:165:GLU:OE2	2:I:458:ARG:HD2	2.22	0.40
2:J:63:ASN:OD1	2:J:68:TRP:CH2	2.74	0.40
2:J:119:THR:OG1	2:J:122:SER:HB3	2.21	0.40
2:J:145:GLU:O	2:J:171:TYR:CE1	2.74	0.40
2:J:306:ARG:HG2	2:J:340:GLU:HG3	2.04	0.40
2:J:353:PHE:CE1	2:J:370:GLY:C	2.95	0.40
2:J:432:THR:CG2	2:J:437:VAL:HG13	2.50	0.40
2:K:181:ARG:HH11	2:K:181:ARG:CB	2.34	0.40
2:K:256:GLY:O	2:K:257:ASN:CB	2.67	0.40
2:L:93:ILE:O	2:L:96:ARG:HG2	2.21	0.40
2:L:319:LEU:HD22	2:L:320:TYR:N	2.36	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	1470/1472 (100%)	1174 (80%)	231 (16%)	65 (4%)	2	22
1	B	1470/1472 (100%)	1191 (81%)	215 (15%)	64 (4%)	2	22
1	C	1470/1472 (100%)	1175 (80%)	230 (16%)	65 (4%)	2	22
1	D	1470/1472 (100%)	1191 (81%)	215 (15%)	64 (4%)	2	22
1	E	1470/1472 (100%)	1174 (80%)	231 (16%)	65 (4%)	2	22
1	F	1470/1472 (100%)	1192 (81%)	214 (15%)	64 (4%)	2	22
2	G	454/456 (100%)	419 (92%)	25 (6%)	10 (2%)	6	35
2	H	454/456 (100%)	420 (92%)	24 (5%)	10 (2%)	6	35
2	I	454/456 (100%)	420 (92%)	24 (5%)	10 (2%)	6	35
2	J	454/456 (100%)	419 (92%)	25 (6%)	10 (2%)	6	35
2	K	454/456 (100%)	420 (92%)	24 (5%)	10 (2%)	6	35
2	L	454/456 (100%)	420 (92%)	24 (5%)	10 (2%)	6	35
All	All	11544/11568 (100%)	9615 (83%)	1482 (13%)	447 (4%)	5	23

All (447) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	25	LEU
1	A	444	LYS
1	A	451	GLN
1	A	705	LEU
1	A	712	GLY
1	A	950	THR
1	A	1062	ARG
1	A	1227	GLU
1	A	1339	ALA
1	A	1375	ILE
1	A	1388	THR
1	A	1394	VAL
1	A	1408	GLU
1	A	1461	GLU
1	A	1467	GLU
1	B	249	THR
1	B	255	ALA
1	B	418	LYS
1	B	561	TYR

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Mol	Chain	Res	Type
1	B	705	LEU
1	B	740	PRO
1	B	950	THR
1	B	1164	ARG
1	B	1467	GLU
1	C	25	LEU
1	C	444	LYS
1	C	451	GLN
1	C	705	LEU
1	C	712	GLY
1	C	950	THR
1	C	1062	ARG
1	C	1227	GLU
1	C	1339	ALA
1	C	1375	ILE
1	C	1388	THR
1	C	1394	VAL
1	C	1408	GLU
1	C	1461	GLU
1	C	1467	GLU
1	D	249	THR
1	D	255	ALA
1	D	418	LYS
1	D	561	TYR
1	D	705	LEU
1	D	740	PRO
1	D	950	THR
1	D	1164	ARG
1	D	1467	GLU
1	E	25	LEU
1	E	444	LYS
1	E	451	GLN
1	E	705	LEU
1	E	712	GLY
1	E	950	THR
1	E	1062	ARG
1	E	1227	GLU
1	E	1339	ALA
1	E	1375	ILE
1	E	1388	THR
1	E	1394	VAL
1	E	1408	GLU

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Mol	Chain	Res	Type
1	E	1461	GLU
1	E	1467	GLU
1	F	249	THR
1	F	255	ALA
1	F	418	LYS
1	F	561	TYR
1	F	705	LEU
1	F	740	PRO
1	F	950	THR
1	F	1164	ARG
1	F	1467	GLU
2	G	27	ASP
2	G	232	LYS
2	G	257	ASN
2	G	478	VAL
2	H	27	ASP
2	H	232	LYS
2	H	257	ASN
2	H	478	VAL
2	I	27	ASP
2	I	232	LYS
2	I	257	ASN
2	I	478	VAL
2	J	27	ASP
2	J	232	LYS
2	J	257	ASN
2	J	478	VAL
2	K	27	ASP
2	K	232	LYS
2	K	257	ASN
2	K	478	VAL
2	L	27	ASP
2	L	232	LYS
2	L	257	ASN
2	L	478	VAL
1	A	53	LYS
1	A	249	THR
1	A	370	GLY
1	A	561	TYR
1	A	599	GLY
1	A	663	ALA
1	A	709	SER

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Mol	Chain	Res	Type
1	A	745	ARG
1	A	939	GLY
1	A	1042	GLY
1	A	1160	GLU
1	A	1164	ARG
1	A	1317	THR
1	A	1376	LEU
1	A	1439	PHE
1	A	1454	PHE
1	A	1460	LYS
1	B	25	LEU
1	B	421	GLN
1	B	444	LYS
1	B	451	GLN
1	B	562	MET
1	B	577	GLY
1	B	610	ALA
1	B	747	SER
1	B	764	THR
1	B	868	HIS
1	B	884	SER
1	B	886	GLU
1	B	1160	GLU
1	B	1381	ASP
1	B	1408	GLU
1	B	1421	GLU
1	B	1432	VAL
1	B	1433	THR
1	B	1452	THR
1	B	1461	GLU
1	C	53	LYS
1	C	249	THR
1	C	370	GLY
1	C	561	TYR
1	C	599	GLY
1	C	663	ALA
1	C	709	SER
1	C	745	ARG
1	C	939	GLY
1	C	1042	GLY
1	C	1160	GLU
1	C	1164	ARG

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Mol	Chain	Res	Type
1	C	1317	THR
1	C	1376	LEU
1	C	1439	PHE
1	C	1454	PHE
1	C	1460	LYS
1	D	25	LEU
1	D	421	GLN
1	D	444	LYS
1	D	451	GLN
1	D	562	MET
1	D	577	GLY
1	D	610	ALA
1	D	747	SER
1	D	764	THR
1	D	868	HIS
1	D	884	SER
1	D	886	GLU
1	D	1160	GLU
1	D	1381	ASP
1	D	1408	GLU
1	D	1421	GLU
1	D	1432	VAL
1	D	1433	THR
1	D	1452	THR
1	D	1461	GLU
1	E	53	LYS
1	E	249	THR
1	E	370	GLY
1	E	561	TYR
1	E	599	GLY
1	E	663	ALA
1	E	709	SER
1	E	745	ARG
1	E	939	GLY
1	E	1042	GLY
1	E	1160	GLU
1	E	1164	ARG
1	E	1317	THR
1	E	1376	LEU
1	E	1439	PHE
1	E	1454	PHE
1	E	1460	LYS

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Mol	Chain	Res	Type
1	F	25	LEU
1	F	421	GLN
1	F	444	LYS
1	F	451	GLN
1	F	562	MET
1	F	577	GLY
1	F	610	ALA
1	F	747	SER
1	F	764	THR
1	F	868	HIS
1	F	884	SER
1	F	886	GLU
1	F	1160	GLU
1	F	1381	ASP
1	F	1408	GLU
1	F	1421	GLU
1	F	1432	VAL
1	F	1433	THR
1	F	1452	THR
1	F	1461	GLU
2	G	284	SER
2	H	284	SER
2	I	284	SER
2	J	284	SER
2	K	284	SER
2	L	284	SER
1	A	24	ALA
1	A	54	PHE
1	A	245	LYS
1	A	377	THR
1	A	432	THR
1	A	433	ALA
1	A	629	THR
1	A	740	PRO
1	A	974	ILE
1	A	1361	GLY
1	A	1381	ASP
1	A	1407	ASP
1	A	1438	ARG
1	B	663	ALA
1	B	721	GLY
1	B	745	ARG

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Mol	Chain	Res	Type
1	B	869	GLY
1	B	1062	ARG
1	B	1071	GLY
1	B	1114	PRO
1	B	1142	LEU
1	B	1172	SER
1	B	1339	ALA
1	B	1438	ARG
1	B	1439	PHE
1	C	24	ALA
1	C	54	PHE
1	C	245	LYS
1	C	377	THR
1	C	432	THR
1	C	433	ALA
1	C	629	THR
1	C	740	PRO
1	C	974	ILE
1	C	1361	GLY
1	C	1381	ASP
1	C	1407	ASP
1	C	1438	ARG
1	D	663	ALA
1	D	721	GLY
1	D	745	ARG
1	D	869	GLY
1	D	1062	ARG
1	D	1071	GLY
1	D	1114	PRO
1	D	1142	LEU
1	D	1172	SER
1	D	1339	ALA
1	D	1438	ARG
1	D	1439	PHE
1	E	24	ALA
1	E	54	PHE
1	E	245	LYS
1	E	377	THR
1	E	432	THR
1	E	433	ALA
1	E	629	THR
1	E	740	PRO

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Mol	Chain	Res	Type
1	E	974	ILE
1	E	1361	GLY
1	E	1381	ASP
1	E	1407	ASP
1	E	1438	ARG
1	F	663	ALA
1	F	721	GLY
1	F	745	ARG
1	F	869	GLY
1	F	1062	ARG
1	F	1071	GLY
1	F	1114	PRO
1	F	1142	LEU
1	F	1172	SER
1	F	1339	ALA
1	F	1438	ARG
1	F	1439	PHE
2	G	290	LYS
2	H	290	LYS
2	I	290	LYS
2	J	290	LYS
2	K	290	LYS
2	L	290	LYS
1	A	208	HIS
1	A	421	GLN
1	A	450	ARG
1	A	492	TYR
1	A	553	ALA
1	A	844	GLU
1	A	915	PHE
1	B	326	PRO
1	B	475	ALA
1	B	496	HIS
1	B	856	PRO
1	B	974	ILE
1	B	1376	LEU
1	B	1407	ASP
1	B	1424	LEU
1	C	208	HIS
1	C	421	GLN
1	C	450	ARG
1	C	492	TYR

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Mol	Chain	Res	Type
1	C	553	ALA
1	C	844	GLU
1	C	915	PHE
1	D	326	PRO
1	D	475	ALA
1	D	496	HIS
1	D	856	PRO
1	D	974	ILE
1	D	1376	LEU
1	D	1407	ASP
1	D	1424	LEU
1	E	208	HIS
1	E	421	GLN
1	E	450	ARG
1	E	492	TYR
1	E	553	ALA
1	E	844	GLU
1	E	915	PHE
1	F	326	PRO
1	F	475	ALA
1	F	496	HIS
1	F	856	PRO
1	F	974	ILE
1	F	1376	LEU
1	F	1407	ASP
1	F	1424	LEU
2	G	348	ALA
2	G	446	GLY
2	H	348	ALA
2	H	446	GLY
2	I	348	ALA
2	I	446	GLY
2	J	348	ALA
2	J	446	GLY
2	K	348	ALA
2	K	446	GLY
2	L	348	ALA
2	L	446	GLY
1	A	69	ASN
1	A	521	SER
1	A	654	TYR
1	A	962	GLY

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Mol	Chain	Res	Type
1	A	1395	TYR
1	B	254	PRO
1	B	388	GLY
1	B	450	ARG
1	B	559	ARG
1	C	69	ASN
1	C	521	SER
1	C	654	TYR
1	C	962	GLY
1	C	1395	TYR
1	D	254	PRO
1	D	388	GLY
1	D	450	ARG
1	D	559	ARG
1	E	69	ASN
1	E	521	SER
1	E	654	TYR
1	E	962	GLY
1	E	1395	TYR
1	F	254	PRO
1	F	388	GLY
1	F	450	ARG
1	F	559	ARG
1	A	217	PRO
1	B	290	THR
1	B	619	PRO
1	B	780	ARG
1	B	1078	ASP
1	C	217	PRO
1	D	290	THR
1	D	619	PRO
1	D	780	ARG
1	D	1078	ASP
1	E	217	PRO
1	F	290	THR
1	F	619	PRO
1	F	780	ARG
1	F	1078	ASP
2	G	362	VAL
2	H	362	VAL
2	I	362	VAL
2	J	362	VAL

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Mol	Chain	Res	Type
2	K	362	VAL
2	L	362	VAL
1	A	707	ILE
1	A	1185	PRO
1	B	61	VAL
1	C	707	ILE
1	C	1185	PRO
1	D	61	VAL
1	E	707	ILE
1	E	1185	PRO
1	F	61	VAL
2	G	250	ALA
2	H	250	ALA
2	I	250	ALA
2	J	250	ALA
2	K	250	ALA
2	L	250	ALA
1	A	619	PRO
1	A	1071	GLY
1	A	1261	PRO
1	A	1389	GLY
1	B	116	ILE
1	B	455	GLY
1	C	619	PRO
1	C	1071	GLY
1	C	1261	PRO
1	C	1389	GLY
1	D	116	ILE
1	D	455	GLY
1	E	619	PRO
1	E	1071	GLY
1	E	1261	PRO
1	E	1389	GLY
1	F	116	ILE
1	F	455	GLY
1	A	372	VAL
1	B	1394	VAL
1	C	372	VAL
1	D	1394	VAL
1	E	372	VAL
1	F	1394	VAL
1	B	774	PRO

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Mol	Chain	Res	Type
1	B	953	ILE
1	D	774	PRO
1	D	953	ILE
1	F	774	PRO
1	F	953	ILE
1	B	657	VAL
1	D	657	VAL
1	F	657	VAL

5.3.2 Protein sidechains

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	1201/1201 (100%)	985 (82%)	216 (18%)	1 10
1	B	1201/1201 (100%)	981 (82%)	220 (18%)	1 10
1	C	1201/1201 (100%)	985 (82%)	216 (18%)	1 10
1	D	1201/1201 (100%)	981 (82%)	220 (18%)	1 10
1	E	1201/1201 (100%)	985 (82%)	216 (18%)	1 10
1	F	1201/1201 (100%)	981 (82%)	220 (18%)	1 10
2	G	358/358 (100%)	257 (72%)	101 (28%)	0 2
2	H	358/358 (100%)	257 (72%)	101 (28%)	0 2
2	I	358/358 (100%)	257 (72%)	101 (28%)	0 2
2	J	358/358 (100%)	257 (72%)	101 (28%)	0 2
2	K	358/358 (100%)	257 (72%)	101 (28%)	0 2
2	L	358/358 (100%)	257 (72%)	101 (28%)	0 2
All	All	9354/9354 (100%)	7440 (80%)	1914 (20%)	3 7

All (1914) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	3	VAL
1	A	30	HIS

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Mol	Chain	Res	Type
1	A	34	VAL
1	A	35	ASP
1	A	37	ASP
1	A	39	LYS
1	A	40	THR
1	A	47	HIS
1	A	52	GLN
1	A	59	VAL
1	A	68	ASP
1	A	69	ASN
1	A	76	VAL
1	A	78	LEU
1	A	80	ARG
1	A	81	ILE
1	A	109	GLN
1	A	113	ASN
1	A	117	ILE
1	A	120	LYS
1	A	143	GLN
1	A	144	PHE
1	A	146	LEU
1	A	156	GLU
1	A	162	GLU
1	A	175	ARG
1	A	177	ILE
1	A	184	LEU
1	A	186	GLU
1	A	188	LEU
1	A	189	THR
1	A	196	LEU
1	A	198	GLU
1	A	207	TYR
1	A	209	GLN
1	A	210	ARG
1	A	215	THR
1	A	218	THR
1	A	228	LEU
1	A	235	ASN
1	A	242	ASN
1	A	244	MET
1	A	249	THR
1	A	254	PRO

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Mol	Chain	Res	Type
1	A	258	THR
1	A	261	GLN
1	A	267	ILE
1	A	269	VAL
1	A	279	THR
1	A	286	ARG
1	A	312	ASN
1	A	316	LEU
1	A	322	SER
1	A	335	MET
1	A	336	THR
1	A	342	VAL
1	A	347	ARG
1	A	351	ARG
1	A	353	MET
1	A	355	TYR
1	A	362	LEU
1	A	367	SER
1	A	368	GLU
1	A	377	THR
1	A	380	ILE
1	A	390	MET
1	A	397	SER
1	A	405	GLU
1	A	413	LEU
1	A	417	ASP
1	A	420	VAL
1	A	429	LEU
1	A	439	PRO
1	A	440	SER
1	A	441	ASP
1	A	447	LEU
1	A	461	MET
1	A	463	LEU
1	A	465	LEU
1	A	479	MET
1	A	483	SER
1	A	487	VAL
1	A	495	LEU
1	A	509	PRO
1	A	519	VAL
1	A	520	MET

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Mol	Chain	Res	Type
1	A	526	LEU
1	A	534	ASP
1	A	537	GLU
1	A	547	SER
1	A	559	ARG
1	A	564	ASP
1	A	572	THR
1	A	584	ASP
1	A	598	ARG
1	A	606	LEU
1	A	607	THR
1	A	611	MET
1	A	631	LEU
1	A	634	SER
1	A	636	LEU
1	A	637	ARG
1	A	640	THR
1	A	642	LEU
1	A	650	LEU
1	A	658	LEU
1	A	665	THR
1	A	670	LEU
1	A	673	GLU
1	A	678	ARG
1	A	704	LEU
1	A	705	LEU
1	A	724	ASN
1	A	731	SER
1	A	734	LEU
1	A	764	THR
1	A	768	GLU
1	A	786	ASP
1	A	787	ARG
1	A	794	VAL
1	A	795	ILE
1	A	806	SER
1	A	812	LYS
1	A	813	TYR
1	A	820	ARG
1	A	824	GLN
1	A	826	ARG
1	A	833	SER

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Mol	Chain	Res	Type
1	A	841	ASP
1	A	842	GLU
1	A	850	ARG
1	A	851	LYS
1	A	855	THR
1	A	863	LEU
1	A	875	MET
1	A	884	SER
1	A	889	GLU
1	A	912	SER
1	A	934	GLN
1	A	937	LYS
1	A	952	MET
1	A	953	ILE
1	A	958	HIS
1	A	960	THR
1	A	970	PRO
1	A	978	GLU
1	A	982	GLN
1	A	983	LEU
1	A	1003	ARG
1	A	1008	THR
1	A	1015	LYS
1	A	1036	THR
1	A	1043	LEU
1	A	1057	THR
1	A	1058	LEU
1	A	1062	ARG
1	A	1064	ARG
1	A	1065	VAL
1	A	1066	ARG
1	A	1090	PHE
1	A	1109	HIS
1	A	1121	ASP
1	A	1122	ASP
1	A	1124	LEU
1	A	1142	LEU
1	A	1145	GLU
1	A	1157	SER
1	A	1159	ASN
1	A	1170	GLN
1	A	1173	ARG

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Mol	Chain	Res	Type
1	A	1206	GLU
1	A	1207	VAL
1	A	1220	ARG
1	A	1225	GLU
1	A	1245	ARG
1	A	1246	LEU
1	A	1253	LYS
1	A	1261	PRO
1	A	1264	ILE
1	A	1267	ARG
1	A	1269	ARG
1	A	1274	GLN
1	A	1289	MET
1	A	1291	ASP
1	A	1301	SER
1	A	1304	THR
1	A	1308	ARG
1	A	1310	THR
1	A	1314	PRO
1	A	1317	THR
1	A	1318	ASN
1	A	1349	ARG
1	A	1355	VAL
1	A	1357	VAL
1	A	1360	CYS
1	A	1379	VAL
1	A	1381	ASP
1	A	1398	ASP
1	A	1401	LEU
1	A	1402	PRO
1	A	1408	GLU
1	A	1410	VAL
1	A	1413	GLN
1	A	1419	HIS
1	A	1421	GLU
1	A	1422	SER
1	A	1424	LEU
1	A	1425	LYS
1	A	1449	ARG
1	A	1452	THR
1	A	1461	GLU
1	A	1465	ARG

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Mol	Chain	Res	Type
1	A	1466	LEU
1	A	1470	VAL
1	A	1471	HIS
1	A	1472	LEU
1	B	3	VAL
1	B	30	HIS
1	B	34	VAL
1	B	35	ASP
1	B	37	ASP
1	B	40	THR
1	B	47	HIS
1	B	59	VAL
1	B	68	ASP
1	B	76	VAL
1	B	80	ARG
1	B	81	ILE
1	B	109	GLN
1	B	113	ASN
1	B	117	ILE
1	B	120	LYS
1	B	143	GLN
1	B	144	PHE
1	B	146	LEU
1	B	173	SER
1	B	175	ARG
1	B	184	LEU
1	B	186	GLU
1	B	188	LEU
1	B	189	THR
1	B	198	GLU
1	B	209	GLN
1	B	210	ARG
1	B	215	THR
1	B	217	PRO
1	B	218	THR
1	B	235	ASN
1	B	242	ASN
1	B	249	THR
1	B	254	PRO
1	B	258	THR
1	B	260	MET
1	B	261	GLN

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Mol	Chain	Res	Type
1	B	263	LEU
1	B	269	VAL
1	B	274	SER
1	B	279	THR
1	B	286	ARG
1	B	290	THR
1	B	296	MET
1	B	297	MET
1	B	308	THR
1	B	312	ASN
1	B	316	LEU
1	B	322	SER
1	B	325	GLU
1	B	347	ARG
1	B	351	ARG
1	B	353	MET
1	B	355	TYR
1	B	362	LEU
1	B	367	SER
1	B	377	THR
1	B	380	ILE
1	B	385	LEU
1	B	389	GLU
1	B	397	SER
1	B	402	ARG
1	B	413	LEU
1	B	417	ASP
1	B	420	VAL
1	B	422	ASN
1	B	423	THR
1	B	426	LEU
1	B	429	LEU
1	B	439	PRO
1	B	447	LEU
1	B	461	MET
1	B	462	GLU
1	B	481	ASP
1	B	483	SER
1	B	487	VAL
1	B	490	ASP
1	B	492	TYR
1	B	495	LEU

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Mol	Chain	Res	Type
1	B	496	HIS
1	B	500	ARG
1	B	501	GLN
1	B	519	VAL
1	B	520	MET
1	B	522	LEU
1	B	526	LEU
1	B	531	ASN
1	B	534	ASP
1	B	537	GLU
1	B	538	THR
1	B	542	LEU
1	B	555	PHE
1	B	559	ARG
1	B	562	MET
1	B	564	ASP
1	B	572	THR
1	B	576	ASP
1	B	584	ASP
1	B	593	THR
1	B	606	LEU
1	B	607	THR
1	B	608	ASP
1	B	631	LEU
1	B	636	LEU
1	B	637	ARG
1	B	640	THR
1	B	642	LEU
1	B	643	ASN
1	B	658	LEU
1	B	665	THR
1	B	670	LEU
1	B	673	GLU
1	B	681	ARG
1	B	704	LEU
1	B	714	SER
1	B	717	SER
1	B	731	SER
1	B	746	ILE
1	B	751	LEU
1	B	764	THR
1	B	770	VAL

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Mol	Chain	Res	Type
1	B	786	ASP
1	B	787	ARG
1	B	805	ASP
1	B	813	TYR
1	B	820	ARG
1	B	823	MET
1	B	824	GLN
1	B	826	ARG
1	B	833	SER
1	B	841	ASP
1	B	850	ARG
1	B	855	THR
1	B	859	SER
1	B	884	SER
1	B	889	GLU
1	B	898	LYS
1	B	912	SER
1	B	918	THR
1	B	934	GLN
1	B	937	LYS
1	B	950	THR
1	B	952	MET
1	B	958	HIS
1	B	960	THR
1	B	978	GLU
1	B	983	LEU
1	B	1002	SER
1	B	1003	ARG
1	B	1008	THR
1	B	1015	LYS
1	B	1030	THR
1	B	1043	LEU
1	B	1057	THR
1	B	1058	LEU
1	B	1059	ASN
1	B	1062	ARG
1	B	1064	ARG
1	B	1065	VAL
1	B	1077	ARG
1	B	1090	PHE
1	B	1104	MET
1	B	1105	VAL

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Mol	Chain	Res	Type
1	B	1109	HIS
1	B	1114	PRO
1	B	1121	ASP
1	B	1122	ASP
1	B	1124	LEU
1	B	1131	THR
1	B	1142	LEU
1	B	1145	GLU
1	B	1147	ARG
1	B	1157	SER
1	B	1159	ASN
1	B	1167	LEU
1	B	1169	HIS
1	B	1170	GLN
1	B	1186	ARG
1	B	1195	ASN
1	B	1204	ARG
1	B	1212	ASP
1	B	1229	MET
1	B	1230	GLN
1	B	1237	ASN
1	B	1238	THR
1	B	1245	ARG
1	B	1246	LEU
1	B	1247	SER
1	B	1253	LYS
1	B	1261	PRO
1	B	1264	ILE
1	B	1269	ARG
1	B	1289	MET
1	B	1298	LYS
1	B	1308	ARG
1	B	1317	THR
1	B	1318	ASN
1	B	1344	GLU
1	B	1349	ARG
1	B	1355	VAL
1	B	1360	CYS
1	B	1379	VAL
1	B	1381	ASP
1	B	1388	THR
1	B	1398	ASP

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Mol	Chain	Res	Type
1	B	1400	SER
1	B	1401	LEU
1	B	1408	GLU
1	B	1409	SER
1	B	1410	VAL
1	B	1421	GLU
1	B	1422	SER
1	B	1435	THR
1	B	1449	ARG
1	B	1452	THR
1	B	1465	ARG
1	B	1466	LEU
1	B	1470	VAL
1	B	1471	HIS
1	C	3	VAL
1	C	30	HIS
1	C	34	VAL
1	C	35	ASP
1	C	37	ASP
1	C	39	LYS
1	C	40	THR
1	C	47	HIS
1	C	52	GLN
1	C	59	VAL
1	C	68	ASP
1	C	69	ASN
1	C	76	VAL
1	C	78	LEU
1	C	80	ARG
1	C	81	ILE
1	C	109	GLN
1	C	113	ASN
1	C	117	ILE
1	C	120	LYS
1	C	143	GLN
1	C	144	PHE
1	C	146	LEU
1	C	156	GLU
1	C	162	GLU
1	C	175	ARG
1	C	177	ILE
1	C	184	LEU

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Mol	Chain	Res	Type
1	C	186	GLU
1	C	188	LEU
1	C	189	THR
1	C	196	LEU
1	C	198	GLU
1	C	207	TYR
1	C	209	GLN
1	C	210	ARG
1	C	215	THR
1	C	218	THR
1	C	228	LEU
1	C	235	ASN
1	C	242	ASN
1	C	244	MET
1	C	249	THR
1	C	254	PRO
1	C	258	THR
1	C	261	GLN
1	C	267	ILE
1	C	269	VAL
1	C	279	THR
1	C	286	ARG
1	C	312	ASN
1	C	316	LEU
1	C	322	SER
1	C	335	MET
1	C	336	THR
1	C	342	VAL
1	C	347	ARG
1	C	351	ARG
1	C	353	MET
1	C	355	TYR
1	C	362	LEU
1	C	367	SER
1	C	368	GLU
1	C	377	THR
1	C	380	ILE
1	C	390	MET
1	C	397	SER
1	C	405	GLU
1	C	413	LEU
1	C	417	ASP

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Mol	Chain	Res	Type
1	C	420	VAL
1	C	429	LEU
1	C	439	PRO
1	C	440	SER
1	C	441	ASP
1	C	447	LEU
1	C	461	MET
1	C	463	LEU
1	C	465	LEU
1	C	479	MET
1	C	483	SER
1	C	487	VAL
1	C	495	LEU
1	C	509	PRO
1	C	519	VAL
1	C	520	MET
1	C	526	LEU
1	C	534	ASP
1	C	537	GLU
1	C	547	SER
1	C	559	ARG
1	C	564	ASP
1	C	572	THR
1	C	584	ASP
1	C	598	ARG
1	C	606	LEU
1	C	607	THR
1	C	611	MET
1	C	631	LEU
1	C	634	SER
1	C	636	LEU
1	C	637	ARG
1	C	640	THR
1	C	642	LEU
1	C	650	LEU
1	C	658	LEU
1	C	665	THR
1	C	670	LEU
1	C	673	GLU
1	C	678	ARG
1	C	704	LEU
1	C	705	LEU

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Mol	Chain	Res	Type
1	C	724	ASN
1	C	731	SER
1	C	734	LEU
1	C	764	THR
1	C	768	GLU
1	C	786	ASP
1	C	787	ARG
1	C	794	VAL
1	C	795	ILE
1	C	806	SER
1	C	812	LYS
1	C	813	TYR
1	C	820	ARG
1	C	824	GLN
1	C	826	ARG
1	C	833	SER
1	C	841	ASP
1	C	842	GLU
1	C	850	ARG
1	C	851	LYS
1	C	855	THR
1	C	863	LEU
1	C	875	MET
1	C	884	SER
1	C	889	GLU
1	C	912	SER
1	C	934	GLN
1	C	937	LYS
1	C	952	MET
1	C	953	ILE
1	C	958	HIS
1	C	960	THR
1	C	970	PRO
1	C	978	GLU
1	C	982	GLN
1	C	983	LEU
1	C	1003	ARG
1	C	1008	THR
1	C	1015	LYS
1	C	1036	THR
1	C	1043	LEU
1	C	1057	THR

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Mol	Chain	Res	Type
1	C	1058	LEU
1	C	1062	ARG
1	C	1064	ARG
1	C	1065	VAL
1	C	1066	ARG
1	C	1090	PHE
1	C	1109	HIS
1	C	1121	ASP
1	C	1122	ASP
1	C	1124	LEU
1	C	1142	LEU
1	C	1145	GLU
1	C	1157	SER
1	C	1159	ASN
1	C	1170	GLN
1	C	1173	ARG
1	C	1206	GLU
1	C	1207	VAL
1	C	1220	ARG
1	C	1225	GLU
1	C	1245	ARG
1	C	1246	LEU
1	C	1253	LYS
1	C	1261	PRO
1	C	1264	ILE
1	C	1267	ARG
1	C	1269	ARG
1	C	1274	GLN
1	C	1289	MET
1	C	1291	ASP
1	C	1301	SER
1	C	1304	THR
1	C	1308	ARG
1	C	1310	THR
1	C	1314	PRO
1	C	1317	THR
1	C	1318	ASN
1	C	1349	ARG
1	C	1355	VAL
1	C	1357	VAL
1	C	1360	CYS
1	C	1379	VAL

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Mol	Chain	Res	Type
1	C	1381	ASP
1	C	1398	ASP
1	C	1401	LEU
1	C	1402	PRO
1	C	1408	GLU
1	C	1410	VAL
1	C	1413	GLN
1	C	1419	HIS
1	C	1421	GLU
1	C	1422	SER
1	C	1424	LEU
1	C	1425	LYS
1	C	1449	ARG
1	C	1452	THR
1	C	1461	GLU
1	C	1465	ARG
1	C	1466	LEU
1	C	1470	VAL
1	C	1471	HIS
1	C	1472	LEU
1	D	3	VAL
1	D	30	HIS
1	D	34	VAL
1	D	35	ASP
1	D	37	ASP
1	D	40	THR
1	D	47	HIS
1	D	59	VAL
1	D	68	ASP
1	D	76	VAL
1	D	80	ARG
1	D	81	ILE
1	D	109	GLN
1	D	113	ASN
1	D	117	ILE
1	D	120	LYS
1	D	143	GLN
1	D	144	PHE
1	D	146	LEU
1	D	173	SER
1	D	175	ARG
1	D	184	LEU

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Mol	Chain	Res	Type
1	D	186	GLU
1	D	188	LEU
1	D	189	THR
1	D	198	GLU
1	D	209	GLN
1	D	210	ARG
1	D	215	THR
1	D	217	PRO
1	D	218	THR
1	D	235	ASN
1	D	242	ASN
1	D	249	THR
1	D	254	PRO
1	D	258	THR
1	D	260	MET
1	D	261	GLN
1	D	263	LEU
1	D	269	VAL
1	D	274	SER
1	D	279	THR
1	D	286	ARG
1	D	290	THR
1	D	296	MET
1	D	297	MET
1	D	308	THR
1	D	312	ASN
1	D	316	LEU
1	D	322	SER
1	D	325	GLU
1	D	347	ARG
1	D	351	ARG
1	D	353	MET
1	D	355	TYR
1	D	362	LEU
1	D	367	SER
1	D	377	THR
1	D	380	ILE
1	D	385	LEU
1	D	389	GLU
1	D	397	SER
1	D	402	ARG
1	D	413	LEU

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Mol	Chain	Res	Type
1	D	417	ASP
1	D	420	VAL
1	D	422	ASN
1	D	423	THR
1	D	426	LEU
1	D	429	LEU
1	D	439	PRO
1	D	447	LEU
1	D	461	MET
1	D	462	GLU
1	D	481	ASP
1	D	483	SER
1	D	487	VAL
1	D	490	ASP
1	D	492	TYR
1	D	495	LEU
1	D	496	HIS
1	D	500	ARG
1	D	501	GLN
1	D	519	VAL
1	D	520	MET
1	D	522	LEU
1	D	526	LEU
1	D	531	ASN
1	D	534	ASP
1	D	537	GLU
1	D	538	THR
1	D	542	LEU
1	D	555	PHE
1	D	559	ARG
1	D	562	MET
1	D	564	ASP
1	D	572	THR
1	D	576	ASP
1	D	584	ASP
1	D	593	THR
1	D	606	LEU
1	D	607	THR
1	D	608	ASP
1	D	631	LEU
1	D	636	LEU
1	D	637	ARG

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Mol	Chain	Res	Type
1	D	640	THR
1	D	642	LEU
1	D	643	ASN
1	D	658	LEU
1	D	665	THR
1	D	670	LEU
1	D	673	GLU
1	D	681	ARG
1	D	704	LEU
1	D	714	SER
1	D	717	SER
1	D	731	SER
1	D	746	ILE
1	D	751	LEU
1	D	764	THR
1	D	770	VAL
1	D	786	ASP
1	D	787	ARG
1	D	805	ASP
1	D	813	TYR
1	D	820	ARG
1	D	823	MET
1	D	824	GLN
1	D	826	ARG
1	D	833	SER
1	D	841	ASP
1	D	850	ARG
1	D	855	THR
1	D	859	SER
1	D	884	SER
1	D	889	GLU
1	D	898	LYS
1	D	912	SER
1	D	918	THR
1	D	934	GLN
1	D	937	LYS
1	D	950	THR
1	D	952	MET
1	D	958	HIS
1	D	960	THR
1	D	978	GLU
1	D	983	LEU

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Mol	Chain	Res	Type
1	D	1002	SER
1	D	1003	ARG
1	D	1008	THR
1	D	1015	LYS
1	D	1030	THR
1	D	1043	LEU
1	D	1057	THR
1	D	1058	LEU
1	D	1059	ASN
1	D	1062	ARG
1	D	1064	ARG
1	D	1065	VAL
1	D	1077	ARG
1	D	1090	PHE
1	D	1104	MET
1	D	1105	VAL
1	D	1109	HIS
1	D	1114	PRO
1	D	1121	ASP
1	D	1122	ASP
1	D	1124	LEU
1	D	1131	THR
1	D	1142	LEU
1	D	1145	GLU
1	D	1147	ARG
1	D	1157	SER
1	D	1159	ASN
1	D	1167	LEU
1	D	1169	HIS
1	D	1170	GLN
1	D	1186	ARG
1	D	1195	ASN
1	D	1204	ARG
1	D	1212	ASP
1	D	1229	MET
1	D	1230	GLN
1	D	1237	ASN
1	D	1238	THR
1	D	1245	ARG
1	D	1246	LEU
1	D	1247	SER
1	D	1253	LYS

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Mol	Chain	Res	Type
1	D	1261	PRO
1	D	1264	ILE
1	D	1269	ARG
1	D	1289	MET
1	D	1298	LYS
1	D	1308	ARG
1	D	1317	THR
1	D	1318	ASN
1	D	1344	GLU
1	D	1349	ARG
1	D	1355	VAL
1	D	1360	CYS
1	D	1379	VAL
1	D	1381	ASP
1	D	1388	THR
1	D	1398	ASP
1	D	1400	SER
1	D	1401	LEU
1	D	1408	GLU
1	D	1409	SER
1	D	1410	VAL
1	D	1421	GLU
1	D	1422	SER
1	D	1435	THR
1	D	1449	ARG
1	D	1452	THR
1	D	1465	ARG
1	D	1466	LEU
1	D	1470	VAL
1	D	1471	HIS
1	E	3	VAL
1	E	30	HIS
1	E	34	VAL
1	E	35	ASP
1	E	37	ASP
1	E	39	LYS
1	E	40	THR
1	E	47	HIS
1	E	52	GLN
1	E	59	VAL
1	E	68	ASP
1	E	69	ASN

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Mol	Chain	Res	Type
1	E	76	VAL
1	E	78	LEU
1	E	80	ARG
1	E	81	ILE
1	E	109	GLN
1	E	113	ASN
1	E	117	ILE
1	E	120	LYS
1	E	143	GLN
1	E	144	PHE
1	E	146	LEU
1	E	156	GLU
1	E	162	GLU
1	E	175	ARG
1	E	177	ILE
1	E	184	LEU
1	E	186	GLU
1	E	188	LEU
1	E	189	THR
1	E	196	LEU
1	E	198	GLU
1	E	207	TYR
1	E	209	GLN
1	E	210	ARG
1	E	215	THR
1	E	218	THR
1	E	228	LEU
1	E	235	ASN
1	E	242	ASN
1	E	244	MET
1	E	249	THR
1	E	254	PRO
1	E	258	THR
1	E	261	GLN
1	E	267	ILE
1	E	269	VAL
1	E	279	THR
1	E	286	ARG
1	E	312	ASN
1	E	316	LEU
1	E	322	SER
1	E	335	MET

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Mol	Chain	Res	Type
1	E	336	THR
1	E	342	VAL
1	E	347	ARG
1	E	351	ARG
1	E	353	MET
1	E	355	TYR
1	E	362	LEU
1	E	367	SER
1	E	368	GLU
1	E	377	THR
1	E	380	ILE
1	E	390	MET
1	E	397	SER
1	E	405	GLU
1	E	413	LEU
1	E	417	ASP
1	E	420	VAL
1	E	429	LEU
1	E	439	PRO
1	E	440	SER
1	E	441	ASP
1	E	447	LEU
1	E	461	MET
1	E	463	LEU
1	E	465	LEU
1	E	479	MET
1	E	483	SER
1	E	487	VAL
1	E	495	LEU
1	E	509	PRO
1	E	519	VAL
1	E	520	MET
1	E	526	LEU
1	E	534	ASP
1	E	537	GLU
1	E	547	SER
1	E	559	ARG
1	E	564	ASP
1	E	572	THR
1	E	584	ASP
1	E	598	ARG
1	E	606	LEU

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Mol	Chain	Res	Type
1	E	607	THR
1	E	611	MET
1	E	631	LEU
1	E	634	SER
1	E	636	LEU
1	E	637	ARG
1	E	640	THR
1	E	642	LEU
1	E	650	LEU
1	E	658	LEU
1	E	665	THR
1	E	670	LEU
1	E	673	GLU
1	E	678	ARG
1	E	704	LEU
1	E	705	LEU
1	E	724	ASN
1	E	731	SER
1	E	734	LEU
1	E	764	THR
1	E	768	GLU
1	E	786	ASP
1	E	787	ARG
1	E	794	VAL
1	E	795	ILE
1	E	806	SER
1	E	812	LYS
1	E	813	TYR
1	E	820	ARG
1	E	824	GLN
1	E	826	ARG
1	E	833	SER
1	E	841	ASP
1	E	842	GLU
1	E	850	ARG
1	E	851	LYS
1	E	855	THR
1	E	863	LEU
1	E	875	MET
1	E	884	SER
1	E	889	GLU
1	E	912	SER

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Mol	Chain	Res	Type
1	E	934	GLN
1	E	937	LYS
1	E	952	MET
1	E	953	ILE
1	E	958	HIS
1	E	960	THR
1	E	970	PRO
1	E	978	GLU
1	E	982	GLN
1	E	983	LEU
1	E	1003	ARG
1	E	1008	THR
1	E	1015	LYS
1	E	1036	THR
1	E	1043	LEU
1	E	1057	THR
1	E	1058	LEU
1	E	1062	ARG
1	E	1064	ARG
1	E	1065	VAL
1	E	1066	ARG
1	E	1090	PHE
1	E	1109	HIS
1	E	1121	ASP
1	E	1122	ASP
1	E	1124	LEU
1	E	1142	LEU
1	E	1145	GLU
1	E	1157	SER
1	E	1159	ASN
1	E	1170	GLN
1	E	1173	ARG
1	E	1206	GLU
1	E	1207	VAL
1	E	1220	ARG
1	E	1225	GLU
1	E	1245	ARG
1	E	1246	LEU
1	E	1253	LYS
1	E	1261	PRO
1	E	1264	ILE
1	E	1267	ARG

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Mol	Chain	Res	Type
1	E	1269	ARG
1	E	1274	GLN
1	E	1289	MET
1	E	1291	ASP
1	E	1301	SER
1	E	1304	THR
1	E	1308	ARG
1	E	1310	THR
1	E	1314	PRO
1	E	1317	THR
1	E	1318	ASN
1	E	1349	ARG
1	E	1355	VAL
1	E	1357	VAL
1	E	1360	CYS
1	E	1379	VAL
1	E	1381	ASP
1	E	1398	ASP
1	E	1401	LEU
1	E	1402	PRO
1	E	1408	GLU
1	E	1410	VAL
1	E	1413	GLN
1	E	1419	HIS
1	E	1421	GLU
1	E	1422	SER
1	E	1424	LEU
1	E	1425	LYS
1	E	1449	ARG
1	E	1452	THR
1	E	1461	GLU
1	E	1465	ARG
1	E	1466	LEU
1	E	1470	VAL
1	E	1471	HIS
1	E	1472	LEU
1	F	3	VAL
1	F	30	HIS
1	F	34	VAL
1	F	35	ASP
1	F	37	ASP
1	F	40	THR

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Mol	Chain	Res	Type
1	F	47	HIS
1	F	59	VAL
1	F	68	ASP
1	F	76	VAL
1	F	80	ARG
1	F	81	ILE
1	F	109	GLN
1	F	113	ASN
1	F	117	ILE
1	F	120	LYS
1	F	143	GLN
1	F	144	PHE
1	F	146	LEU
1	F	173	SER
1	F	175	ARG
1	F	184	LEU
1	F	186	GLU
1	F	188	LEU
1	F	189	THR
1	F	198	GLU
1	F	209	GLN
1	F	210	ARG
1	F	215	THR
1	F	217	PRO
1	F	218	THR
1	F	235	ASN
1	F	242	ASN
1	F	249	THR
1	F	254	PRO
1	F	258	THR
1	F	260	MET
1	F	261	GLN
1	F	263	LEU
1	F	269	VAL
1	F	274	SER
1	F	279	THR
1	F	286	ARG
1	F	290	THR
1	F	296	MET
1	F	297	MET
1	F	308	THR
1	F	312	ASN

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Mol	Chain	Res	Type
1	F	316	LEU
1	F	322	SER
1	F	325	GLU
1	F	347	ARG
1	F	351	ARG
1	F	353	MET
1	F	355	TYR
1	F	362	LEU
1	F	367	SER
1	F	377	THR
1	F	380	ILE
1	F	385	LEU
1	F	389	GLU
1	F	397	SER
1	F	402	ARG
1	F	413	LEU
1	F	417	ASP
1	F	420	VAL
1	F	422	ASN
1	F	423	THR
1	F	426	LEU
1	F	429	LEU
1	F	439	PRO
1	F	447	LEU
1	F	461	MET
1	F	462	GLU
1	F	481	ASP
1	F	483	SER
1	F	487	VAL
1	F	490	ASP
1	F	492	TYR
1	F	495	LEU
1	F	496	HIS
1	F	500	ARG
1	F	501	GLN
1	F	519	VAL
1	F	520	MET
1	F	522	LEU
1	F	526	LEU
1	F	531	ASN
1	F	534	ASP
1	F	537	GLU

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Mol	Chain	Res	Type
1	F	538	THR
1	F	542	LEU
1	F	555	PHE
1	F	559	ARG
1	F	562	MET
1	F	564	ASP
1	F	572	THR
1	F	576	ASP
1	F	584	ASP
1	F	593	THR
1	F	606	LEU
1	F	607	THR
1	F	608	ASP
1	F	631	LEU
1	F	636	LEU
1	F	637	ARG
1	F	640	THR
1	F	642	LEU
1	F	643	ASN
1	F	658	LEU
1	F	665	THR
1	F	670	LEU
1	F	673	GLU
1	F	681	ARG
1	F	704	LEU
1	F	714	SER
1	F	717	SER
1	F	731	SER
1	F	746	ILE
1	F	751	LEU
1	F	764	THR
1	F	770	VAL
1	F	786	ASP
1	F	787	ARG
1	F	805	ASP
1	F	813	TYR
1	F	820	ARG
1	F	823	MET
1	F	824	GLN
1	F	826	ARG
1	F	833	SER
1	F	841	ASP

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Mol	Chain	Res	Type
1	F	850	ARG
1	F	855	THR
1	F	859	SER
1	F	884	SER
1	F	889	GLU
1	F	898	LYS
1	F	912	SER
1	F	918	THR
1	F	934	GLN
1	F	937	LYS
1	F	950	THR
1	F	952	MET
1	F	958	HIS
1	F	960	THR
1	F	978	GLU
1	F	983	LEU
1	F	1002	SER
1	F	1003	ARG
1	F	1008	THR
1	F	1015	LYS
1	F	1030	THR
1	F	1043	LEU
1	F	1057	THR
1	F	1058	LEU
1	F	1059	ASN
1	F	1062	ARG
1	F	1064	ARG
1	F	1065	VAL
1	F	1077	ARG
1	F	1090	PHE
1	F	1104	MET
1	F	1105	VAL
1	F	1109	HIS
1	F	1114	PRO
1	F	1121	ASP
1	F	1122	ASP
1	F	1124	LEU
1	F	1131	THR
1	F	1142	LEU
1	F	1145	GLU
1	F	1147	ARG
1	F	1157	SER

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Mol	Chain	Res	Type
1	F	1159	ASN
1	F	1167	LEU
1	F	1169	HIS
1	F	1170	GLN
1	F	1186	ARG
1	F	1195	ASN
1	F	1204	ARG
1	F	1212	ASP
1	F	1229	MET
1	F	1230	GLN
1	F	1237	ASN
1	F	1238	THR
1	F	1245	ARG
1	F	1246	LEU
1	F	1247	SER
1	F	1253	LYS
1	F	1261	PRO
1	F	1264	ILE
1	F	1269	ARG
1	F	1289	MET
1	F	1298	LYS
1	F	1308	ARG
1	F	1317	THR
1	F	1318	ASN
1	F	1344	GLU
1	F	1349	ARG
1	F	1355	VAL
1	F	1360	CYS
1	F	1379	VAL
1	F	1381	ASP
1	F	1388	THR
1	F	1398	ASP
1	F	1400	SER
1	F	1401	LEU
1	F	1408	GLU
1	F	1409	SER
1	F	1410	VAL
1	F	1421	GLU
1	F	1422	SER
1	F	1435	THR
1	F	1449	ARG
1	F	1452	THR

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Mol	Chain	Res	Type
1	F	1465	ARG
1	F	1466	LEU
1	F	1470	VAL
1	F	1471	HIS
2	G	37	ASP
2	G	52	VAL
2	G	61	VAL
2	G	68	TRP
2	G	69	LEU
2	G	72	THR
2	G	97	ILE
2	G	109	VAL
2	G	111	GLU
2	G	114	THR
2	G	118	VAL
2	G	119	THR
2	G	123	VAL
2	G	125	LYS
2	G	139	PRO
2	G	141	THR
2	G	146	LEU
2	G	148	LEU
2	G	150	VAL
2	G	152	VAL
2	G	166	LEU
2	G	169	LYS
2	G	173	VAL
2	G	175	VAL
2	G	181	ARG
2	G	182	MET
2	G	186	LEU
2	G	195	LEU
2	G	196	GLU
2	G	197	LYS
2	G	200	VAL
2	G	203	ARG
2	G	204	VAL
2	G	206	LEU
2	G	207	LEU
2	G	212	VAL
2	G	220	VAL
2	G	226	LEU

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Mol	Chain	Res	Type
2	G	236	VAL
2	G	237	LEU
2	G	238	VAL
2	G	240	THR
2	G	242	VAL
2	G	244	LYS
2	G	255	LEU
2	G	259	VAL
2	G	262	LEU
2	G	263	ASP
2	G	265	LEU
2	G	267	THR
2	G	271	VAL
2	G	273	LEU
2	G	295	LEU
2	G	307	THR
2	G	319	LEU
2	G	321	ARG
2	G	322	ARG
2	G	328	PRO
2	G	331	GLN
2	G	334	VAL
2	G	345	ILE
2	G	347	GLN
2	G	350	PRO
2	G	354	THR
2	G	356	ASP
2	G	358	VAL
2	G	359	VAL
2	G	360	THR
2	G	365	VAL
2	G	367	ILE
2	G	371	VAL
2	G	373	ASP
2	G	380	PRO
2	G	382	VAL
2	G	383	ILE
2	G	389	THR
2	G	390	VAL
2	G	394	LEU
2	G	395	VAL
2	G	399	LEU

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Mol	Chain	Res	Type
2	G	405	ASP
2	G	406	LEU
2	G	408	ASN
2	G	411	ASP
2	G	413	PRO
2	G	415	LEU
2	G	418	THR
2	G	419	ARG
2	G	422	THR
2	G	423	LEU
2	G	424	LEU
2	G	425	VAL
2	G	430	LYS
2	G	437	VAL
2	G	449	LEU
2	G	450	VAL
2	G	454	ILE
2	G	462	GLU
2	G	475	PRO
2	G	476	VAL
2	G	478	VAL
2	H	37	ASP
2	H	52	VAL
2	H	61	VAL
2	H	68	TRP
2	H	69	LEU
2	H	72	THR
2	H	97	ILE
2	H	109	VAL
2	H	111	GLU
2	H	114	THR
2	H	118	VAL
2	H	119	THR
2	H	123	VAL
2	H	125	LYS
2	H	139	PRO
2	H	141	THR
2	H	146	LEU
2	H	148	LEU
2	H	150	VAL
2	H	152	VAL
2	H	166	LEU

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Mol	Chain	Res	Type
2	H	169	LYS
2	H	173	VAL
2	H	175	VAL
2	H	181	ARG
2	H	182	MET
2	H	186	LEU
2	H	195	LEU
2	H	196	GLU
2	H	197	LYS
2	H	200	VAL
2	H	203	ARG
2	H	204	VAL
2	H	206	LEU
2	H	207	LEU
2	H	212	VAL
2	H	220	VAL
2	H	226	LEU
2	H	236	VAL
2	H	237	LEU
2	H	238	VAL
2	H	240	THR
2	H	242	VAL
2	H	244	LYS
2	H	255	LEU
2	H	259	VAL
2	H	262	LEU
2	H	263	ASP
2	H	265	LEU
2	H	267	THR
2	H	271	VAL
2	H	273	LEU
2	H	295	LEU
2	H	307	THR
2	H	319	LEU
2	H	321	ARG
2	H	322	ARG
2	H	328	PRO
2	H	331	GLN
2	H	334	VAL
2	H	345	ILE
2	H	347	GLN
2	H	350	PRO

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Mol	Chain	Res	Type
2	H	354	THR
2	H	356	ASP
2	H	358	VAL
2	H	359	VAL
2	H	360	THR
2	H	365	VAL
2	H	367	ILE
2	H	371	VAL
2	H	373	ASP
2	H	380	PRO
2	H	382	VAL
2	H	383	ILE
2	H	389	THR
2	H	390	VAL
2	H	394	LEU
2	H	395	VAL
2	H	399	LEU
2	H	405	ASP
2	H	406	LEU
2	H	408	ASN
2	H	411	ASP
2	H	413	PRO
2	H	415	LEU
2	H	418	THR
2	H	419	ARG
2	H	422	THR
2	H	423	LEU
2	H	424	LEU
2	H	425	VAL
2	H	430	LYS
2	H	437	VAL
2	H	449	LEU
2	H	450	VAL
2	H	454	ILE
2	H	462	GLU
2	H	475	PRO
2	H	476	VAL
2	H	478	VAL
2	I	37	ASP
2	I	52	VAL
2	I	61	VAL
2	I	68	TRP

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Mol	Chain	Res	Type
2	I	69	LEU
2	I	72	THR
2	I	97	ILE
2	I	109	VAL
2	I	111	GLU
2	I	114	THR
2	I	118	VAL
2	I	119	THR
2	I	123	VAL
2	I	125	LYS
2	I	139	PRO
2	I	141	THR
2	I	146	LEU
2	I	148	LEU
2	I	150	VAL
2	I	152	VAL
2	I	166	LEU
2	I	169	LYS
2	I	173	VAL
2	I	175	VAL
2	I	181	ARG
2	I	182	MET
2	I	186	LEU
2	I	195	LEU
2	I	196	GLU
2	I	197	LYS
2	I	200	VAL
2	I	203	ARG
2	I	204	VAL
2	I	206	LEU
2	I	207	LEU
2	I	212	VAL
2	I	220	VAL
2	I	226	LEU
2	I	236	VAL
2	I	237	LEU
2	I	238	VAL
2	I	240	THR
2	I	242	VAL
2	I	244	LYS
2	I	255	LEU
2	I	259	VAL

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Mol	Chain	Res	Type
2	I	262	LEU
2	I	263	ASP
2	I	265	LEU
2	I	267	THR
2	I	271	VAL
2	I	273	LEU
2	I	295	LEU
2	I	307	THR
2	I	319	LEU
2	I	321	ARG
2	I	322	ARG
2	I	328	PRO
2	I	331	GLN
2	I	334	VAL
2	I	345	ILE
2	I	347	GLN
2	I	350	PRO
2	I	354	THR
2	I	356	ASP
2	I	358	VAL
2	I	359	VAL
2	I	360	THR
2	I	365	VAL
2	I	367	ILE
2	I	371	VAL
2	I	373	ASP
2	I	380	PRO
2	I	382	VAL
2	I	383	ILE
2	I	389	THR
2	I	390	VAL
2	I	394	LEU
2	I	395	VAL
2	I	399	LEU
2	I	405	ASP
2	I	406	LEU
2	I	408	ASN
2	I	411	ASP
2	I	413	PRO
2	I	415	LEU
2	I	418	THR
2	I	419	ARG

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Mol	Chain	Res	Type
2	I	422	THR
2	I	423	LEU
2	I	424	LEU
2	I	425	VAL
2	I	430	LYS
2	I	437	VAL
2	I	449	LEU
2	I	450	VAL
2	I	454	ILE
2	I	462	GLU
2	I	475	PRO
2	I	476	VAL
2	I	478	VAL
2	J	37	ASP
2	J	52	VAL
2	J	61	VAL
2	J	68	TRP
2	J	69	LEU
2	J	72	THR
2	J	97	ILE
2	J	109	VAL
2	J	111	GLU
2	J	114	THR
2	J	118	VAL
2	J	119	THR
2	J	123	VAL
2	J	125	LYS
2	J	139	PRO
2	J	141	THR
2	J	146	LEU
2	J	148	LEU
2	J	150	VAL
2	J	152	VAL
2	J	166	LEU
2	J	169	LYS
2	J	173	VAL
2	J	175	VAL
2	J	181	ARG
2	J	182	MET
2	J	186	LEU
2	J	195	LEU
2	J	196	GLU

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Mol	Chain	Res	Type
2	J	197	LYS
2	J	200	VAL
2	J	203	ARG
2	J	204	VAL
2	J	206	LEU
2	J	207	LEU
2	J	212	VAL
2	J	220	VAL
2	J	226	LEU
2	J	236	VAL
2	J	237	LEU
2	J	238	VAL
2	J	240	THR
2	J	242	VAL
2	J	244	LYS
2	J	255	LEU
2	J	259	VAL
2	J	262	LEU
2	J	263	ASP
2	J	265	LEU
2	J	267	THR
2	J	271	VAL
2	J	273	LEU
2	J	295	LEU
2	J	307	THR
2	J	319	LEU
2	J	321	ARG
2	J	322	ARG
2	J	328	PRO
2	J	331	GLN
2	J	334	VAL
2	J	345	ILE
2	J	347	GLN
2	J	350	PRO
2	J	354	THR
2	J	356	ASP
2	J	358	VAL
2	J	359	VAL
2	J	360	THR
2	J	365	VAL
2	J	367	ILE
2	J	371	VAL

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Mol	Chain	Res	Type
2	J	373	ASP
2	J	380	PRO
2	J	382	VAL
2	J	383	ILE
2	J	389	THR
2	J	390	VAL
2	J	394	LEU
2	J	395	VAL
2	J	399	LEU
2	J	405	ASP
2	J	406	LEU
2	J	408	ASN
2	J	411	ASP
2	J	413	PRO
2	J	415	LEU
2	J	418	THR
2	J	419	ARG
2	J	422	THR
2	J	423	LEU
2	J	424	LEU
2	J	425	VAL
2	J	430	LYS
2	J	437	VAL
2	J	449	LEU
2	J	450	VAL
2	J	454	ILE
2	J	462	GLU
2	J	475	PRO
2	J	476	VAL
2	J	478	VAL
2	K	37	ASP
2	K	52	VAL
2	K	61	VAL
2	K	68	TRP
2	K	69	LEU
2	K	72	THR
2	K	97	ILE
2	K	109	VAL
2	K	111	GLU
2	K	114	THR
2	K	118	VAL
2	K	119	THR

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Mol	Chain	Res	Type
2	K	123	VAL
2	K	125	LYS
2	K	139	PRO
2	K	141	THR
2	K	146	LEU
2	K	148	LEU
2	K	150	VAL
2	K	152	VAL
2	K	166	LEU
2	K	169	LYS
2	K	173	VAL
2	K	175	VAL
2	K	181	ARG
2	K	182	MET
2	K	186	LEU
2	K	195	LEU
2	K	196	GLU
2	K	197	LYS
2	K	200	VAL
2	K	203	ARG
2	K	204	VAL
2	K	206	LEU
2	K	207	LEU
2	K	212	VAL
2	K	220	VAL
2	K	226	LEU
2	K	236	VAL
2	K	237	LEU
2	K	238	VAL
2	K	240	THR
2	K	242	VAL
2	K	244	LYS
2	K	255	LEU
2	K	259	VAL
2	K	262	LEU
2	K	263	ASP
2	K	265	LEU
2	K	267	THR
2	K	271	VAL
2	K	273	LEU
2	K	295	LEU
2	K	307	THR

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Mol	Chain	Res	Type
2	K	319	LEU
2	K	321	ARG
2	K	322	ARG
2	K	328	PRO
2	K	331	GLN
2	K	334	VAL
2	K	345	ILE
2	K	347	GLN
2	K	350	PRO
2	K	354	THR
2	K	356	ASP
2	K	358	VAL
2	K	359	VAL
2	K	360	THR
2	K	365	VAL
2	K	367	ILE
2	K	371	VAL
2	K	373	ASP
2	K	380	PRO
2	K	382	VAL
2	K	383	ILE
2	K	389	THR
2	K	390	VAL
2	K	394	LEU
2	K	395	VAL
2	K	399	LEU
2	K	405	ASP
2	K	406	LEU
2	K	408	ASN
2	K	411	ASP
2	K	413	PRO
2	K	415	LEU
2	K	418	THR
2	K	419	ARG
2	K	422	THR
2	K	423	LEU
2	K	424	LEU
2	K	425	VAL
2	K	430	LYS
2	K	437	VAL
2	K	449	LEU
2	K	450	VAL

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Mol	Chain	Res	Type
2	K	454	ILE
2	K	462	GLU
2	K	475	PRO
2	K	476	VAL
2	K	478	VAL
2	L	37	ASP
2	L	52	VAL
2	L	61	VAL
2	L	68	TRP
2	L	69	LEU
2	L	72	THR
2	L	97	ILE
2	L	109	VAL
2	L	111	GLU
2	L	114	THR
2	L	118	VAL
2	L	119	THR
2	L	123	VAL
2	L	125	LYS
2	L	139	PRO
2	L	141	THR
2	L	146	LEU
2	L	148	LEU
2	L	150	VAL
2	L	152	VAL
2	L	166	LEU
2	L	169	LYS
2	L	173	VAL
2	L	175	VAL
2	L	181	ARG
2	L	182	MET
2	L	186	LEU
2	L	195	LEU
2	L	196	GLU
2	L	197	LYS
2	L	200	VAL
2	L	203	ARG
2	L	204	VAL
2	L	206	LEU
2	L	207	LEU
2	L	212	VAL
2	L	220	VAL

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Mol	Chain	Res	Type
2	L	226	LEU
2	L	236	VAL
2	L	237	LEU
2	L	238	VAL
2	L	240	THR
2	L	242	VAL
2	L	244	LYS
2	L	255	LEU
2	L	259	VAL
2	L	262	LEU
2	L	263	ASP
2	L	265	LEU
2	L	267	THR
2	L	271	VAL
2	L	273	LEU
2	L	295	LEU
2	L	307	THR
2	L	319	LEU
2	L	321	ARG
2	L	322	ARG
2	L	328	PRO
2	L	331	GLN
2	L	334	VAL
2	L	345	ILE
2	L	347	GLN
2	L	350	PRO
2	L	354	THR
2	L	356	ASP
2	L	358	VAL
2	L	359	VAL
2	L	360	THR
2	L	365	VAL
2	L	367	ILE
2	L	371	VAL
2	L	373	ASP
2	L	380	PRO
2	L	382	VAL
2	L	383	ILE
2	L	389	THR
2	L	390	VAL
2	L	394	LEU
2	L	395	VAL

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Mol	Chain	Res	Type
2	L	399	LEU
2	L	405	ASP
2	L	406	LEU
2	L	408	ASN
2	L	411	ASP
2	L	413	PRO
2	L	415	LEU
2	L	418	THR
2	L	419	ARG
2	L	422	THR
2	L	423	LEU
2	L	424	LEU
2	L	425	VAL
2	L	430	LYS
2	L	437	VAL
2	L	449	LEU
2	L	450	VAL
2	L	454	ILE
2	L	462	GLU
2	L	475	PRO
2	L	476	VAL
2	L	478	VAL

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (277) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	30	HIS
1	A	47	HIS
1	A	52	GLN
1	A	64	HIS
1	A	113	ASN
1	A	143	GLN
1	A	163	GLN
1	A	208	HIS
1	A	214	ASN
1	A	230	HIS
1	A	235	ASN
1	A	240	ASN
1	A	261	GLN
1	A	313	HIS
1	A	321	ASN
1	A	452	GLN

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Mol	Chain	Res	Type
1	A	505	GLN
1	A	635	ASN
1	A	643	ASN
1	A	653	HIS
1	A	724	ASN
1	A	738	HIS
1	A	755	GLN
1	A	788	HIS
1	A	824	GLN
1	A	943	GLN
1	A	982	GLN
1	A	1059	ASN
1	A	1205	ASN
1	A	1230	GLN
1	A	1274	GLN
1	A	1318	ASN
1	A	1320	ASN
1	A	1363	ASN
1	A	1382	ASN
1	A	1419	HIS
1	A	1471	HIS
1	B	30	HIS
1	B	47	HIS
1	B	52	GLN
1	B	113	ASN
1	B	143	GLN
1	B	208	HIS
1	B	214	ASN
1	B	231	ASN
1	B	235	ASN
1	B	240	ASN
1	B	242	ASN
1	B	247	HIS
1	B	259	HIS
1	B	301	GLN
1	B	307	GLN
1	B	321	ASN
1	B	452	GLN
1	B	497	HIS
1	B	505	GLN
1	B	643	ASN
1	B	653	HIS

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Mol	Chain	Res	Type
1	B	738	HIS
1	B	755	GLN
1	B	762	HIS
1	B	788	HIS
1	B	816	GLN
1	B	824	GLN
1	B	943	GLN
1	B	982	GLN
1	B	1059	ASN
1	B	1137	ASN
1	B	1195	ASN
1	B	1205	ASN
1	B	1263	HIS
1	B	1274	GLN
1	B	1318	ASN
1	B	1363	ASN
1	B	1382	ASN
1	B	1419	HIS
1	B	1471	HIS
1	C	30	HIS
1	C	47	HIS
1	C	52	GLN
1	C	64	HIS
1	C	113	ASN
1	C	143	GLN
1	C	163	GLN
1	C	208	HIS
1	C	214	ASN
1	C	230	HIS
1	C	235	ASN
1	C	240	ASN
1	C	261	GLN
1	C	313	HIS
1	C	321	ASN
1	C	452	GLN
1	C	505	GLN
1	C	635	ASN
1	C	643	ASN
1	C	653	HIS
1	C	724	ASN
1	C	738	HIS
1	C	755	GLN

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Mol	Chain	Res	Type
1	C	788	HIS
1	C	824	GLN
1	C	943	GLN
1	C	982	GLN
1	C	1059	ASN
1	C	1205	ASN
1	C	1230	GLN
1	C	1274	GLN
1	C	1318	ASN
1	C	1320	ASN
1	C	1363	ASN
1	C	1382	ASN
1	C	1419	HIS
1	C	1471	HIS
1	D	30	HIS
1	D	47	HIS
1	D	52	GLN
1	D	113	ASN
1	D	143	GLN
1	D	208	HIS
1	D	214	ASN
1	D	231	ASN
1	D	235	ASN
1	D	240	ASN
1	D	242	ASN
1	D	247	HIS
1	D	301	GLN
1	D	307	GLN
1	D	321	ASN
1	D	452	GLN
1	D	497	HIS
1	D	505	GLN
1	D	643	ASN
1	D	653	HIS
1	D	738	HIS
1	D	755	GLN
1	D	762	HIS
1	D	788	HIS
1	D	816	GLN
1	D	824	GLN
1	D	943	GLN
1	D	982	GLN

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Mol	Chain	Res	Type
1	D	1059	ASN
1	D	1137	ASN
1	D	1195	ASN
1	D	1205	ASN
1	D	1263	HIS
1	D	1274	GLN
1	D	1318	ASN
1	D	1363	ASN
1	D	1382	ASN
1	D	1419	HIS
1	D	1471	HIS
1	E	30	HIS
1	E	47	HIS
1	E	52	GLN
1	E	64	HIS
1	E	113	ASN
1	E	143	GLN
1	E	163	GLN
1	E	208	HIS
1	E	214	ASN
1	E	230	HIS
1	E	235	ASN
1	E	240	ASN
1	E	261	GLN
1	E	313	HIS
1	E	321	ASN
1	E	452	GLN
1	E	505	GLN
1	E	635	ASN
1	E	643	ASN
1	E	653	HIS
1	E	724	ASN
1	E	738	HIS
1	E	755	GLN
1	E	788	HIS
1	E	824	GLN
1	E	943	GLN
1	E	982	GLN
1	E	1059	ASN
1	E	1205	ASN
1	E	1230	GLN
1	E	1274	GLN

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Mol	Chain	Res	Type
1	E	1293	ASN
1	E	1318	ASN
1	E	1320	ASN
1	E	1363	ASN
1	E	1382	ASN
1	E	1419	HIS
1	E	1471	HIS
1	F	30	HIS
1	F	47	HIS
1	F	52	GLN
1	F	113	ASN
1	F	143	GLN
1	F	208	HIS
1	F	214	ASN
1	F	231	ASN
1	F	235	ASN
1	F	240	ASN
1	F	242	ASN
1	F	247	HIS
1	F	259	HIS
1	F	301	GLN
1	F	307	GLN
1	F	321	ASN
1	F	452	GLN
1	F	497	HIS
1	F	505	GLN
1	F	643	ASN
1	F	653	HIS
1	F	738	HIS
1	F	755	GLN
1	F	762	HIS
1	F	788	HIS
1	F	816	GLN
1	F	824	GLN
1	F	943	GLN
1	F	982	GLN
1	F	1059	ASN
1	F	1137	ASN
1	F	1195	ASN
1	F	1205	ASN
1	F	1263	HIS
1	F	1274	GLN

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Mol	Chain	Res	Type
1	F	1318	ASN
1	F	1363	ASN
1	F	1382	ASN
1	F	1419	HIS
1	F	1471	HIS
2	G	45	ASN
2	G	56	GLN
2	G	100	GLN
2	G	174	HIS
2	G	269	ASN
2	G	291	HIS
2	G	408	ASN
2	G	433	ASN
2	H	45	ASN
2	H	56	GLN
2	H	100	GLN
2	H	174	HIS
2	H	269	ASN
2	H	291	HIS
2	H	408	ASN
2	H	433	ASN
2	I	45	ASN
2	I	56	GLN
2	I	100	GLN
2	I	174	HIS
2	I	269	ASN
2	I	291	HIS
2	I	408	ASN
2	I	433	ASN
2	J	45	ASN
2	J	56	GLN
2	J	100	GLN
2	J	174	HIS
2	J	269	ASN
2	J	291	HIS
2	J	408	ASN
2	J	433	ASN
2	K	45	ASN
2	K	56	GLN
2	K	174	HIS
2	K	269	ASN
2	K	291	HIS

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Mol	Chain	Res	Type
2	K	408	ASN
2	K	433	ASN
2	L	45	ASN
2	L	56	GLN
2	L	174	HIS
2	L	269	ASN
2	L	291	HIS
2	L	408	ASN
2	L	433	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

42 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	$\#\|Z\| > 2$
6	F3S	D	2476	1	0,9,9	-	-	-		
7	SF4	L	482	2	0,12,12	-	-	-		
8	FAD	L	484	-	53,58,58	1.89	19 (35%)	68,89,89	1.26	9 (13%)
8	FAD	J	484	-	53,58,58	1.89	19 (35%)	68,89,89	1.26	8 (11%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
3	OMT	F	2473	-	9,10,10	4.15	5 (55%)	11,14,14	5.79	5 (45%)
7	SF4	I	482	2	0,12,12	-	-	-		
4	FMN	C	2474	-	33,33,33	1.48	5 (15%)	48,50,50	2.73	20 (41%)
7	SF4	J	483	2	0,12,12	-	-	-		
7	SF4	I	483	2	0,12,12	-	-	-		
4	FMN	D	2474	-	33,33,33	1.37	4 (12%)	48,50,50	2.59	20 (41%)
4	FMN	A	2474	-	33,33,33	1.48	5 (15%)	48,50,50	2.72	20 (41%)
4	FMN	B	2474	-	33,33,33	1.37	4 (12%)	48,50,50	2.59	20 (41%)
6	F3S	C	2476	1	0,9,9	-	-	-		
7	SF4	G	482	2	0,12,12	-	-	-		
7	SF4	G	483	2	0,12,12	-	-	-		
4	FMN	E	2474	-	33,33,33	1.48	5 (15%)	48,50,50	2.73	20 (41%)
7	SF4	H	483	2	0,12,12	-	-	-		
8	FAD	G	484	-	53,58,58	1.89	19 (35%)	68,89,89	1.26	8 (11%)
3	OMT	E	2473	-	9,10,10	4.27	5 (55%)	11,14,14	4.46	6 (54%)
6	F3S	F	2476	1	0,9,9	-	-	-		
7	SF4	H	482	2	0,12,12	-	-	-		
4	FMN	F	2474	-	33,33,33	1.37	4 (12%)	48,50,50	2.59	20 (41%)
5	AKG	B	2475	-	9,9,9	3.48	4 (44%)	11,11,11	2.80	4 (36%)
3	OMT	B	2473	-	9,10,10	4.15	5 (55%)	11,14,14	5.78	5 (45%)
6	F3S	A	2476	1	0,9,9	-	-	-		
7	SF4	J	482	2	0,12,12	-	-	-		
6	F3S	B	2476	1	0,9,9	-	-	-		
5	AKG	E	2475	-	9,9,9	3.08	4 (44%)	11,11,11	2.91	4 (36%)
5	AKG	F	2475	-	9,9,9	3.48	4 (44%)	11,11,11	2.80	4 (36%)
7	SF4	K	483	2	0,12,12	-	-	-		
3	OMT	A	2473	-	9,10,10	4.28	5 (55%)	11,14,14	4.47	6 (54%)
8	FAD	I	484	-	53,58,58	1.89	19 (35%)	68,89,89	1.26	8 (11%)
7	SF4	K	482	2	0,12,12	-	-	-		
8	FAD	K	484	-	53,58,58	1.89	19 (35%)	68,89,89	1.26	8 (11%)
5	AKG	A	2475	-	9,9,9	3.09	4 (44%)	11,11,11	2.92	4 (36%)
3	OMT	C	2473	-	9,10,10	4.28	5 (55%)	11,14,14	4.47	6 (54%)
3	OMT	D	2473	-	9,10,10	4.14	5 (55%)	11,14,14	5.79	5 (45%)
5	AKG	D	2475	-	9,9,9	3.49	4 (44%)	11,11,11	2.80	4 (36%)
8	FAD	H	484	-	53,58,58	1.89	19 (35%)	68,89,89	1.26	9 (13%)
5	AKG	C	2475	-	9,9,9	3.08	4 (44%)	11,11,11	2.92	4 (36%)
7	SF4	L	483	2	0,12,12	-	-	-		
6	F3S	E	2476	1	0,9,9	-	-	-		

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
8	FAD	L	484	-	-	3/30/50/50	0/6/6/6
6	F3S	D	2476	1	-	-	0/3/3/3
7	SF4	L	482	2	-	-	0/6/5/5
8	FAD	J	484	-	-	3/30/50/50	0/6/6/6
3	OMT	F	2473	-	-	5/10/10/10	-
7	SF4	I	482	2	-	-	0/6/5/5
4	FMN	C	2474	-	-	7/18/18/18	0/3/3/3
7	SF4	J	483	2	-	-	0/6/5/5
7	SF4	I	483	2	-	-	0/6/5/5
4	FMN	D	2474	-	-	4/18/18/18	0/3/3/3
4	FMN	A	2474	-	-	7/18/18/18	0/3/3/3
4	FMN	B	2474	-	-	4/18/18/18	0/3/3/3
6	F3S	C	2476	1	-	-	0/3/3/3
7	SF4	G	482	2	-	-	0/6/5/5
7	SF4	G	483	2	-	-	0/6/5/5
4	FMN	E	2474	-	-	7/18/18/18	0/3/3/3
7	SF4	H	483	2	-	-	0/6/5/5
8	FAD	G	484	-	-	3/30/50/50	0/6/6/6
3	OMT	E	2473	-	-	5/10/10/10	-
6	F3S	F	2476	1	-	-	0/3/3/3
7	SF4	H	482	2	-	-	0/6/5/5
4	FMN	F	2474	-	-	4/18/18/18	0/3/3/3
5	AKG	B	2475	-	-	1/9/9/9	-
3	OMT	B	2473	-	-	5/10/10/10	-
6	F3S	A	2476	1	-	-	0/3/3/3
7	SF4	J	482	2	-	-	0/6/5/5
6	F3S	B	2476	1	-	-	0/3/3/3
5	AKG	E	2475	-	-	2/9/9/9	-
5	AKG	F	2475	-	-	1/9/9/9	-
7	SF4	K	483	2	-	-	0/6/5/5
3	OMT	A	2473	-	-	5/10/10/10	-
8	FAD	I	484	-	-	3/30/50/50	0/6/6/6
7	SF4	K	482	2	-	-	0/6/5/5
8	FAD	K	484	-	-	3/30/50/50	0/6/6/6
5	AKG	A	2475	-	-	2/9/9/9	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
3	OMT	C	2473	-	-	5/10/10/10	-
3	OMT	D	2473	-	-	5/10/10/10	-
5	AKG	D	2475	-	-	1/9/9/9	-
8	FAD	H	484	-	-	3/30/50/50	0/6/6/6
5	AKG	C	2475	-	-	2/9/9/9	-
7	SF4	L	483	2	-	-	0/6/5/5
6	F3S	E	2476	1	-	-	0/3/3/3

All (195) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	C	2473	OMT	CB-CG	-7.01	1.45	1.52
3	A	2473	OMT	CB-CG	-6.97	1.45	1.52
3	E	2473	OMT	CB-CG	-6.93	1.45	1.52
3	B	2473	OMT	CG-SD	-6.88	1.69	1.78
3	F	2473	OMT	CG-SD	-6.86	1.69	1.78
3	D	2473	OMT	CG-SD	-6.84	1.69	1.78
3	E	2473	OMT	CG-SD	-6.68	1.69	1.78
3	A	2473	OMT	CG-SD	-6.64	1.69	1.78
3	C	2473	OMT	CG-SD	-6.64	1.69	1.78
5	D	2475	AKG	O5-C2	6.47	1.36	1.23
5	F	2475	AKG	O5-C2	6.46	1.36	1.23
5	B	2475	AKG	O5-C2	6.44	1.36	1.23
5	A	2475	AKG	O5-C2	6.00	1.35	1.23
5	E	2475	AKG	O5-C2	5.99	1.35	1.23
5	C	2475	AKG	O5-C2	5.98	1.35	1.23
3	B	2473	OMT	CB-CG	-5.97	1.46	1.52
3	F	2473	OMT	CB-CG	-5.97	1.46	1.52
3	D	2473	OMT	CB-CG	-5.96	1.46	1.52
3	D	2473	OMT	OD1-SD	5.93	1.57	1.44
3	B	2473	OMT	OD1-SD	5.92	1.57	1.44
3	F	2473	OMT	OD1-SD	5.91	1.57	1.44
5	D	2475	AKG	O1-C1	5.79	1.38	1.22
5	B	2475	AKG	O1-C1	5.78	1.38	1.22
5	F	2475	AKG	O1-C1	5.78	1.37	1.22
3	A	2473	OMT	OD2-SD	5.39	1.56	1.44
3	C	2473	OMT	OD2-SD	5.37	1.56	1.44
3	E	2473	OMT	OD2-SD	5.36	1.56	1.44
3	F	2473	OMT	OD2-SD	4.82	1.55	1.44
3	B	2473	OMT	OD2-SD	4.79	1.54	1.44
3	D	2473	OMT	OD2-SD	4.78	1.54	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	A	2475	AKG	O1-C1	4.61	1.34	1.22
3	E	2473	OMT	OD1-SD	4.60	1.54	1.44
5	E	2475	AKG	O1-C1	4.60	1.34	1.22
3	C	2473	OMT	OD1-SD	4.60	1.54	1.44
3	A	2473	OMT	OD1-SD	4.60	1.54	1.44
5	C	2475	AKG	O1-C1	4.58	1.34	1.22
5	A	2475	AKG	O3-C5	4.25	1.36	1.22
5	C	2475	AKG	O3-C5	4.25	1.36	1.22
5	E	2475	AKG	O3-C5	4.25	1.36	1.22
5	D	2475	AKG	O3-C5	4.15	1.35	1.22
3	A	2473	OMT	O-C	4.15	1.34	1.22
3	E	2473	OMT	O-C	4.15	1.34	1.22
3	C	2473	OMT	O-C	4.15	1.34	1.22
5	B	2475	AKG	O3-C5	4.14	1.35	1.22
5	F	2475	AKG	O3-C5	4.14	1.35	1.22
8	I	484	FAD	PA-O2A	-4.05	1.36	1.55
8	K	484	FAD	PA-O2A	-4.05	1.36	1.55
8	G	484	FAD	PA-O2A	-4.05	1.36	1.55
8	J	484	FAD	PA-O2A	-4.05	1.36	1.55
8	H	484	FAD	PA-O2A	-4.04	1.36	1.55
8	L	484	FAD	PA-O2A	-4.04	1.36	1.55
8	G	484	FAD	O4B-C1B	3.97	1.46	1.41
8	J	484	FAD	O4B-C1B	3.97	1.46	1.41
8	I	484	FAD	O4B-C1B	3.94	1.46	1.41
8	K	484	FAD	O4B-C1B	3.94	1.46	1.41
8	H	484	FAD	O4B-C1B	3.94	1.46	1.41
8	L	484	FAD	O4B-C1B	3.94	1.46	1.41
8	I	484	FAD	C4X-N5	3.84	1.38	1.30
8	K	484	FAD	C4X-N5	3.84	1.38	1.30
8	G	484	FAD	C4X-N5	3.82	1.38	1.30
8	J	484	FAD	C4X-N5	3.82	1.38	1.30
8	H	484	FAD	C4X-N5	3.81	1.38	1.30
8	L	484	FAD	C4X-N5	3.81	1.38	1.30
8	I	484	FAD	P-O2P	-3.39	1.39	1.55
8	K	484	FAD	P-O2P	-3.39	1.39	1.55
8	G	484	FAD	P-O2P	-3.38	1.39	1.55
8	J	484	FAD	P-O2P	-3.38	1.39	1.55
8	H	484	FAD	P-O2P	-3.38	1.39	1.55
8	L	484	FAD	P-O2P	-3.38	1.39	1.55
8	H	484	FAD	C9A-N10	3.33	1.47	1.41
8	L	484	FAD	C9A-N10	3.33	1.47	1.41
8	G	484	FAD	C9A-N10	3.32	1.47	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	J	484	FAD	C9A-N10	3.32	1.47	1.41
8	I	484	FAD	C9A-N10	3.31	1.47	1.41
8	K	484	FAD	C9A-N10	3.31	1.47	1.41
4	B	2474	FMN	C10-N1	3.30	1.40	1.33
4	F	2474	FMN	C10-N1	3.30	1.40	1.33
3	B	2473	OMT	O-C	3.30	1.32	1.22
4	D	2474	FMN	C10-N1	3.29	1.40	1.33
3	D	2473	OMT	O-C	3.29	1.32	1.22
3	F	2473	OMT	O-C	3.29	1.32	1.22
4	E	2474	FMN	C4A-N5	3.13	1.36	1.30
4	A	2474	FMN	C4A-N5	3.13	1.36	1.30
4	C	2474	FMN	C4A-N5	3.13	1.36	1.30
5	F	2475	AKG	C3-C2	3.12	1.54	1.51
5	D	2475	AKG	C3-C2	3.09	1.54	1.51
5	B	2475	AKG	C3-C2	3.07	1.54	1.51
4	F	2474	FMN	C9A-N10	-2.98	1.35	1.41
8	G	484	FAD	C9A-C5X	2.98	1.46	1.41
8	J	484	FAD	C9A-C5X	2.98	1.46	1.41
4	D	2474	FMN	C9A-N10	-2.98	1.35	1.41
8	I	484	FAD	C9A-C5X	2.98	1.46	1.41
8	K	484	FAD	C9A-C5X	2.98	1.46	1.41
8	H	484	FAD	C9A-C5X	2.97	1.46	1.41
8	L	484	FAD	C9A-C5X	2.97	1.46	1.41
8	H	484	FAD	C8-C7	2.96	1.48	1.40
8	L	484	FAD	C8-C7	2.96	1.48	1.40
4	B	2474	FMN	C9A-N10	-2.96	1.35	1.41
8	I	484	FAD	C8-C7	2.95	1.48	1.40
8	K	484	FAD	C8-C7	2.95	1.48	1.40
8	G	484	FAD	C8-C7	2.95	1.48	1.40
8	J	484	FAD	C8-C7	2.95	1.48	1.40
8	I	484	FAD	C2B-C1B	-2.85	1.49	1.53
8	K	484	FAD	C2B-C1B	-2.85	1.49	1.53
5	C	2475	AKG	C3-C2	2.84	1.54	1.51
8	H	484	FAD	C2B-C1B	-2.84	1.49	1.53
8	L	484	FAD	C2B-C1B	-2.84	1.49	1.53
5	E	2475	AKG	C3-C2	2.83	1.54	1.51
8	G	484	FAD	C2B-C1B	-2.83	1.49	1.53
8	J	484	FAD	C2B-C1B	-2.83	1.49	1.53
5	A	2475	AKG	C3-C2	2.81	1.54	1.51
8	G	484	FAD	O5'-C5'	2.79	1.55	1.44
8	J	484	FAD	O5'-C5'	2.79	1.55	1.44
8	I	484	FAD	O5'-C5'	2.79	1.55	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	K	484	FAD	O5'-C5'	2.79	1.55	1.44
8	H	484	FAD	O5'-C5'	2.78	1.55	1.44
8	L	484	FAD	O5'-C5'	2.78	1.55	1.44
4	A	2474	FMN	C9A-C5A	-2.76	1.36	1.41
4	C	2474	FMN	C9A-C5A	-2.76	1.36	1.41
4	E	2474	FMN	C9A-C5A	-2.76	1.36	1.41
4	E	2474	FMN	C10-N1	2.72	1.38	1.33
4	C	2474	FMN	C10-N1	2.71	1.38	1.33
4	A	2474	FMN	C10-N1	2.71	1.38	1.33
4	D	2474	FMN	C4A-N5	2.71	1.36	1.30
4	B	2474	FMN	C4A-N5	2.68	1.36	1.30
4	F	2474	FMN	C4A-N5	2.67	1.35	1.30
8	H	484	FAD	C4A-N3A	2.59	1.39	1.35
8	L	484	FAD	C4A-N3A	2.59	1.39	1.35
8	G	484	FAD	C9-C9A	2.56	1.43	1.39
8	J	484	FAD	C9-C9A	2.56	1.43	1.39
8	I	484	FAD	C4A-N3A	2.55	1.39	1.35
8	K	484	FAD	C4A-N3A	2.55	1.39	1.35
8	G	484	FAD	C4A-N3A	2.55	1.39	1.35
8	J	484	FAD	C4A-N3A	2.55	1.39	1.35
8	G	484	FAD	C6-C5X	2.55	1.44	1.40
8	J	484	FAD	C6-C5X	2.55	1.44	1.40
8	H	484	FAD	C9-C9A	2.54	1.43	1.39
8	L	484	FAD	C9-C9A	2.54	1.43	1.39
8	I	484	FAD	C9-C9A	2.54	1.43	1.39
8	K	484	FAD	C9-C9A	2.54	1.43	1.39
8	H	484	FAD	C6-C5X	2.54	1.44	1.40
8	L	484	FAD	C6-C5X	2.54	1.44	1.40
4	C	2474	FMN	O4'-C4'	-2.53	1.38	1.43
4	A	2474	FMN	O4'-C4'	-2.53	1.38	1.43
4	E	2474	FMN	O4'-C4'	-2.53	1.38	1.43
8	I	484	FAD	C6-C5X	2.52	1.43	1.40
8	K	484	FAD	C6-C5X	2.52	1.43	1.40
4	F	2474	FMN	C9A-C5A	-2.40	1.37	1.41
4	D	2474	FMN	C9A-C5A	-2.40	1.37	1.41
4	B	2474	FMN	C9A-C5A	-2.40	1.37	1.41
8	G	484	FAD	C10-N1	2.37	1.38	1.33
8	J	484	FAD	C10-N1	2.37	1.38	1.33
8	H	484	FAD	C10-N1	2.36	1.38	1.33
8	L	484	FAD	C10-N1	2.36	1.38	1.33
8	I	484	FAD	C10-N1	2.35	1.38	1.33
8	K	484	FAD	C10-N1	2.35	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	H	484	FAD	C2A-N3A	2.33	1.35	1.32
8	L	484	FAD	C2A-N3A	2.33	1.35	1.32
8	G	484	FAD	C2A-N3A	2.33	1.35	1.32
8	J	484	FAD	C2A-N3A	2.33	1.35	1.32
8	I	484	FAD	C2A-N3A	2.31	1.35	1.32
8	K	484	FAD	C2A-N3A	2.31	1.35	1.32
8	H	484	FAD	O4B-C4B	2.28	1.50	1.45
8	L	484	FAD	O4B-C4B	2.28	1.50	1.45
8	I	484	FAD	O4B-C4B	2.27	1.50	1.45
8	K	484	FAD	O4B-C4B	2.27	1.50	1.45
8	G	484	FAD	O4B-C4B	2.25	1.50	1.45
8	J	484	FAD	O4B-C4B	2.25	1.50	1.45
4	C	2474	FMN	C9A-N10	-2.25	1.37	1.41
4	A	2474	FMN	C9A-N10	-2.25	1.37	1.41
4	E	2474	FMN	C9A-N10	-2.25	1.37	1.41
8	H	484	FAD	C2A-N1A	2.09	1.37	1.33
8	L	484	FAD	C2A-N1A	2.09	1.37	1.33
8	G	484	FAD	C2A-N1A	2.09	1.37	1.33
8	J	484	FAD	C2A-N1A	2.09	1.37	1.33
8	I	484	FAD	C2A-N1A	2.08	1.37	1.33
8	K	484	FAD	C2A-N1A	2.08	1.37	1.33
8	G	484	FAD	C3B-C4B	2.08	1.58	1.53
8	J	484	FAD	C3B-C4B	2.08	1.58	1.53
8	H	484	FAD	C3B-C4B	2.07	1.58	1.53
8	L	484	FAD	C3B-C4B	2.07	1.58	1.53
8	G	484	FAD	O2-C2	-2.07	1.20	1.24
8	J	484	FAD	O2-C2	-2.07	1.20	1.24
8	I	484	FAD	C3B-C4B	2.07	1.58	1.53
8	K	484	FAD	C3B-C4B	2.07	1.58	1.53
8	H	484	FAD	O2-C2	-2.06	1.20	1.24
8	L	484	FAD	O2-C2	-2.06	1.20	1.24
8	I	484	FAD	C9-C8	2.06	1.42	1.39
8	K	484	FAD	C9-C8	2.06	1.42	1.39
8	H	484	FAD	C9-C8	2.05	1.42	1.39
8	L	484	FAD	C9-C8	2.05	1.42	1.39
8	I	484	FAD	O2-C2	-2.03	1.20	1.24
8	K	484	FAD	O2-C2	-2.03	1.20	1.24
8	G	484	FAD	C9-C8	2.01	1.42	1.39
8	J	484	FAD	C9-C8	2.01	1.42	1.39

All (227) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	D	2473	OMT	OD2-SD-CG	-16.66	96.68	108.34
3	F	2473	OMT	OD2-SD-CG	-16.64	96.69	108.34
3	B	2473	OMT	OD2-SD-CG	-16.63	96.70	108.34
3	C	2473	OMT	OD2-SD-CE	-11.63	97.22	108.91
3	A	2473	OMT	OD2-SD-CE	-11.61	97.24	108.91
3	E	2473	OMT	OD2-SD-CE	-11.59	97.26	108.91
4	C	2474	FMN	O5'-P-O1P	-7.86	84.42	106.47
4	A	2474	FMN	O5'-P-O1P	-7.86	84.44	106.47
4	E	2474	FMN	O5'-P-O1P	-7.85	84.46	106.47
5	F	2475	AKG	C4-C3-C2	-7.67	98.58	113.03
5	B	2475	AKG	C4-C3-C2	-7.66	98.59	113.03
5	D	2475	AKG	C4-C3-C2	-7.65	98.61	113.03
5	A	2475	AKG	C4-C3-C2	-7.26	99.36	113.03
5	C	2475	AKG	C4-C3-C2	-7.25	99.36	113.03
5	E	2475	AKG	C4-C3-C2	-7.25	99.37	113.03
4	D	2474	FMN	C4'-C3'-C2'	-7.06	98.68	113.36
4	B	2474	FMN	C4'-C3'-C2'	-7.05	98.69	113.36
4	F	2474	FMN	C4'-C3'-C2'	-7.05	98.70	113.36
4	F	2474	FMN	O4'-C4'-C3'	-6.47	93.36	109.10
4	D	2474	FMN	O4'-C4'-C3'	-6.47	93.37	109.10
4	B	2474	FMN	O4'-C4'-C3'	-6.47	93.37	109.10
3	F	2473	OMT	OD1-SD-CE	-6.41	102.46	108.91
3	B	2473	OMT	OD1-SD-CE	-6.40	102.47	108.91
3	D	2473	OMT	OD1-SD-CE	-6.39	102.49	108.91
4	E	2474	FMN	O4'-C4'-C5'	-6.25	95.87	109.92
4	C	2474	FMN	O4'-C4'-C5'	-6.25	95.87	109.92
4	A	2474	FMN	O4'-C4'-C5'	-6.25	95.87	109.92
3	C	2473	OMT	CE-SD-CG	5.84	127.72	105.21
3	A	2473	OMT	CE-SD-CG	5.84	127.72	105.21
3	E	2473	OMT	CE-SD-CG	5.83	127.70	105.21
4	A	2474	FMN	O4'-C4'-C3'	-5.64	95.37	109.10
4	C	2474	FMN	O4'-C4'-C3'	-5.64	95.38	109.10
4	E	2474	FMN	O4'-C4'-C3'	-5.64	95.38	109.10
4	C	2474	FMN	O3P-P-O5'	5.47	121.29	106.73
4	A	2474	FMN	O3P-P-O5'	5.46	121.26	106.73
4	E	2474	FMN	O3P-P-O5'	5.45	121.24	106.73
3	F	2473	OMT	OD1-SD-CG	5.09	111.91	108.34
4	E	2474	FMN	O2P-P-O5'	5.09	120.27	106.73
4	C	2474	FMN	O2P-P-O5'	5.08	120.25	106.73
4	A	2474	FMN	O2P-P-O5'	5.08	120.24	106.73
3	B	2473	OMT	OD1-SD-CG	5.07	111.90	108.34
3	D	2473	OMT	OD1-SD-CG	5.03	111.87	108.34
4	B	2474	FMN	C1'-N10-C9A	-4.94	112.27	120.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	D	2474	FMN	C1'-N10-C9A	-4.93	112.30	120.51
4	F	2474	FMN	C1'-N10-C9A	-4.92	112.31	120.51
4	D	2474	FMN	C5'-C4'-C3'	4.72	121.32	112.20
4	B	2474	FMN	C5'-C4'-C3'	4.71	121.31	112.20
4	F	2474	FMN	C5'-C4'-C3'	4.71	121.30	112.20
3	A	2473	OMT	OD2-SD-CG	-4.20	105.41	108.34
3	E	2473	OMT	OD2-SD-CG	-4.18	105.42	108.34
3	C	2473	OMT	OD2-SD-CG	-4.15	105.44	108.34
4	D	2474	FMN	C4-C4A-C10	4.05	123.59	116.79
4	B	2474	FMN	C4-C4A-C10	4.04	123.58	116.79
4	F	2474	FMN	C4-C4A-C10	4.03	123.57	116.79
4	E	2474	FMN	C9A-C5A-N5	-4.01	118.07	122.43
4	A	2474	FMN	C9A-C5A-N5	-4.00	118.09	122.43
4	F	2474	FMN	C4-N3-C2	-3.99	118.26	125.64
4	C	2474	FMN	C9A-C5A-N5	-3.98	118.11	122.43
4	B	2474	FMN	C4-N3-C2	-3.97	118.30	125.64
4	D	2474	FMN	C4-N3-C2	-3.97	118.31	125.64
5	A	2475	AKG	O1-C1-C2	3.96	127.01	121.72
5	C	2475	AKG	O1-C1-C2	3.95	127.00	121.72
5	E	2475	AKG	O1-C1-C2	3.94	126.98	121.72
4	C	2474	FMN	C4-N3-C2	-3.81	118.60	125.64
4	E	2474	FMN	C4-N3-C2	-3.80	118.61	125.64
4	A	2474	FMN	C4-N3-C2	-3.80	118.61	125.64
4	E	2474	FMN	O3P-P-O1P	-3.77	95.93	110.68
4	A	2474	FMN	O3P-P-O1P	-3.76	95.96	110.68
4	C	2474	FMN	C4'-C3'-C2'	-3.76	105.54	113.36
4	E	2474	FMN	C4'-C3'-C2'	-3.76	105.54	113.36
4	C	2474	FMN	O3P-P-O1P	-3.76	95.97	110.68
4	A	2474	FMN	C4'-C3'-C2'	-3.75	105.56	113.36
4	D	2474	FMN	C8M-C8-C9	3.74	126.41	119.49
4	B	2474	FMN	C8M-C8-C9	3.74	126.41	119.49
4	F	2474	FMN	C8M-C8-C9	3.74	126.41	119.49
4	E	2474	FMN	O2-C2-N3	-3.62	111.61	118.65
4	C	2474	FMN	O2-C2-N3	-3.61	111.63	118.65
4	A	2474	FMN	O2-C2-N3	-3.61	111.63	118.65
4	D	2474	FMN	O3P-P-O2P	-3.57	94.00	107.64
4	B	2474	FMN	O3P-P-O2P	-3.57	94.00	107.64
4	F	2474	FMN	O3P-P-O2P	-3.57	94.00	107.64
4	B	2474	FMN	O2-C2-N3	-3.55	111.75	118.65
8	H	484	FAD	O2A-PA-O1A	3.54	129.73	112.24
8	L	484	FAD	O2A-PA-O1A	3.54	129.73	112.24
8	I	484	FAD	O2A-PA-O1A	3.54	129.73	112.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
8	K	484	FAD	O2A-PA-O1A	3.54	129.73	112.24
8	G	484	FAD	O2A-PA-O1A	3.53	129.72	112.24
8	J	484	FAD	O2A-PA-O1A	3.53	129.72	112.24
4	F	2474	FMN	O2-C2-N3	-3.53	111.78	118.65
4	D	2474	FMN	O2-C2-N3	-3.53	111.78	118.65
4	A	2474	FMN	C4-C4A-C10	3.44	122.56	116.79
4	C	2474	FMN	C4-C4A-C10	3.43	122.55	116.79
4	E	2474	FMN	C4-C4A-C10	3.43	122.55	116.79
3	F	2473	OMT	CE-SD-CG	3.34	118.08	105.21
3	D	2473	OMT	CE-SD-CG	3.34	118.07	105.21
3	B	2473	OMT	CE-SD-CG	3.33	118.06	105.21
4	D	2474	FMN	C8M-C8-C7	-3.30	113.97	120.74
4	F	2474	FMN	C8M-C8-C7	-3.30	113.98	120.74
4	B	2474	FMN	C8M-C8-C7	-3.30	113.98	120.74
5	E	2475	AKG	C3-C2-C1	3.26	122.03	115.97
5	A	2475	AKG	C3-C2-C1	3.26	122.02	115.97
5	C	2475	AKG	C3-C2-C1	3.26	122.02	115.97
3	E	2473	OMT	OD2-SD-OD1	-3.23	110.18	117.09
3	A	2473	OMT	OD2-SD-OD1	-3.23	110.18	117.09
3	C	2473	OMT	OD2-SD-OD1	-3.23	110.19	117.09
4	F	2474	FMN	O2'-C2'-C1'	-3.23	102.00	109.80
4	B	2474	FMN	O2'-C2'-C1'	-3.21	102.03	109.80
3	E	2473	OMT	OD1-SD-CE	-3.20	105.69	108.91
4	D	2474	FMN	O2'-C2'-C1'	-3.20	102.05	109.80
3	F	2473	OMT	CB-CA-N	3.20	118.57	110.17
3	C	2473	OMT	OD1-SD-CE	-3.20	105.69	108.91
3	B	2473	OMT	CB-CA-N	3.20	118.55	110.17
3	D	2473	OMT	CB-CA-N	3.20	118.55	110.17
3	A	2473	OMT	OD1-SD-CE	-3.19	105.70	108.91
5	B	2475	AKG	C3-C4-C5	3.07	120.22	113.60
5	D	2475	AKG	C3-C4-C5	3.07	120.21	113.60
5	F	2475	AKG	C3-C4-C5	3.07	120.21	113.60
4	E	2474	FMN	C1'-N10-C9A	-3.07	115.39	120.51
4	C	2474	FMN	C1'-N10-C9A	-3.07	115.40	120.51
4	A	2474	FMN	C1'-N10-C9A	-3.06	115.41	120.51
4	D	2474	FMN	O3P-P-O5'	2.98	114.67	106.73
4	C	2474	FMN	N3-C2-N1	2.98	125.23	119.38
4	E	2474	FMN	N3-C2-N1	2.98	125.23	119.38
4	B	2474	FMN	O3P-P-O5'	2.98	114.66	106.73
4	F	2474	FMN	O3P-P-O5'	2.98	114.66	106.73
4	A	2474	FMN	N3-C2-N1	2.98	125.22	119.38
4	D	2474	FMN	O2P-P-O5'	2.94	114.55	106.73

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	F	2474	FMN	O2P-P-O5'	2.93	114.52	106.73
4	B	2474	FMN	O2P-P-O5'	2.93	114.52	106.73
4	B	2474	FMN	C4A-C10-N1	-2.89	118.02	124.73
4	D	2474	FMN	C4A-C10-N1	-2.89	118.02	124.73
4	F	2474	FMN	C4A-C10-N1	-2.89	118.03	124.73
3	A	2473	OMT	CB-CA-N	2.83	117.58	110.17
3	E	2473	OMT	CB-CA-N	2.82	117.57	110.17
3	C	2473	OMT	CB-CA-N	2.82	117.56	110.17
4	A	2474	FMN	C5A-C9A-N10	2.79	120.84	117.95
4	C	2474	FMN	C5A-C9A-N10	2.79	120.84	117.95
4	E	2474	FMN	C5A-C9A-N10	2.79	120.84	117.95
4	F	2474	FMN	N3-C2-N1	2.67	124.63	119.38
4	B	2474	FMN	N3-C2-N1	2.67	124.63	119.38
4	D	2474	FMN	N3-C2-N1	2.67	124.61	119.38
5	D	2475	AKG	C3-C2-C1	2.66	120.90	115.97
5	C	2475	AKG	O5-C2-C1	-2.65	115.59	119.43
4	B	2474	FMN	C9A-C5A-N5	-2.65	119.55	122.43
4	D	2474	FMN	C9A-C5A-N5	-2.65	119.55	122.43
4	F	2474	FMN	C9A-C5A-N5	-2.65	119.55	122.43
5	A	2475	AKG	O5-C2-C1	-2.65	115.59	119.43
5	E	2475	AKG	O5-C2-C1	-2.64	115.60	119.43
5	F	2475	AKG	C3-C2-C1	2.64	120.87	115.97
5	B	2475	AKG	C3-C2-C1	2.64	120.87	115.97
8	I	484	FAD	C5'-C4'-C3'	-2.59	107.20	112.20
8	K	484	FAD	C5'-C4'-C3'	-2.59	107.20	112.20
8	G	484	FAD	C5'-C4'-C3'	-2.59	107.21	112.20
8	J	484	FAD	C5'-C4'-C3'	-2.59	107.21	112.20
8	H	484	FAD	C5'-C4'-C3'	-2.57	107.23	112.20
8	L	484	FAD	C5'-C4'-C3'	-2.57	107.23	112.20
8	I	484	FAD	C2A-N1A-C6A	2.54	123.10	118.75
8	K	484	FAD	C2A-N1A-C6A	2.54	123.10	118.75
8	H	484	FAD	C2A-N1A-C6A	2.54	123.09	118.75
8	L	484	FAD	C2A-N1A-C6A	2.54	123.09	118.75
8	G	484	FAD	C2A-N1A-C6A	2.54	123.09	118.75
8	J	484	FAD	C2A-N1A-C6A	2.54	123.09	118.75
8	H	484	FAD	C5A-C6A-N1A	-2.32	115.09	120.35
8	L	484	FAD	C5A-C6A-N1A	-2.32	115.09	120.35
8	I	484	FAD	C5A-C6A-N1A	-2.32	115.10	120.35
8	K	484	FAD	C5A-C6A-N1A	-2.32	115.10	120.35
8	G	484	FAD	C5A-C6A-N1A	-2.31	115.11	120.35
8	J	484	FAD	C5A-C6A-N1A	-2.31	115.11	120.35
4	E	2474	FMN	C5A-N5-C4A	2.28	121.87	118.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	A	2474	FMN	C5A-N5-C4A	2.28	121.86	118.07
4	C	2474	FMN	C5A-N5-C4A	2.27	121.86	118.07
5	D	2475	AKG	O3-C5-C4	-2.27	115.80	123.08
5	B	2475	AKG	O3-C5-C4	-2.26	115.81	123.08
5	F	2475	AKG	O3-C5-C4	-2.26	115.84	123.08
4	A	2474	FMN	C10-C4A-N5	-2.23	120.11	124.86
4	E	2474	FMN	C10-C4A-N5	-2.23	120.13	124.86
4	C	2474	FMN	C10-C4A-N5	-2.23	120.13	124.86
4	A	2474	FMN	O3P-P-O2P	2.22	116.11	107.64
4	C	2474	FMN	O2'-C2'-C1'	-2.22	104.44	109.80
4	E	2474	FMN	O3P-P-O2P	2.21	116.10	107.64
4	A	2474	FMN	O2'-C2'-C1'	-2.21	104.45	109.80
4	E	2474	FMN	O2'-C2'-C1'	-2.21	104.45	109.80
4	C	2474	FMN	O3P-P-O2P	2.21	116.08	107.64
8	I	484	FAD	C4A-C5A-N7A	2.18	111.67	109.40
8	K	484	FAD	C4A-C5A-N7A	2.18	111.67	109.40
8	H	484	FAD	P-O3P-PA	2.14	140.17	132.83
8	L	484	FAD	P-O3P-PA	2.14	140.17	132.83
8	I	484	FAD	P-O3P-PA	2.14	140.17	132.83
8	K	484	FAD	P-O3P-PA	2.14	140.17	132.83
8	G	484	FAD	P-O3P-PA	2.14	140.16	132.83
8	J	484	FAD	P-O3P-PA	2.14	140.16	132.83
8	I	484	FAD	C4-N3-C2	-2.13	121.70	125.64
8	K	484	FAD	C4-N3-C2	-2.13	121.70	125.64
8	G	484	FAD	C4A-C5A-N7A	2.13	111.62	109.40
8	H	484	FAD	C4A-C5A-N7A	2.13	111.62	109.40
8	J	484	FAD	C4A-C5A-N7A	2.13	111.62	109.40
8	L	484	FAD	C4A-C5A-N7A	2.13	111.62	109.40
8	G	484	FAD	C4-N3-C2	-2.13	121.71	125.64
8	J	484	FAD	C4-N3-C2	-2.13	121.71	125.64
4	D	2474	FMN	C10-C4A-N5	-2.12	120.35	124.86
4	B	2474	FMN	N10-C10-N1	2.12	124.44	118.35
4	F	2474	FMN	N10-C10-N1	2.12	124.44	118.35
4	D	2474	FMN	N10-C10-N1	2.12	124.43	118.35
8	H	484	FAD	C4-N3-C2	-2.11	121.73	125.64
8	L	484	FAD	C4-N3-C2	-2.11	121.73	125.64
4	B	2474	FMN	C10-C4A-N5	-2.10	120.39	124.86
4	F	2474	FMN	C10-C4A-N5	-2.09	120.42	124.86
4	A	2474	FMN	C5'-C4'-C3'	2.09	116.25	112.20
4	C	2474	FMN	C5'-C4'-C3'	2.09	116.24	112.20
8	H	484	FAD	C10-N1-C2	2.09	121.08	116.90
8	L	484	FAD	C10-N1-C2	2.09	121.08	116.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
8	G	484	FAD	C10-N1-C2	2.09	121.08	116.90
8	J	484	FAD	C10-N1-C2	2.09	121.08	116.90
4	F	2474	FMN	O2'-C2'-C3'	2.09	114.18	109.10
4	A	2474	FMN	C4A-C10-N1	-2.09	119.89	124.73
4	F	2474	FMN	C4A-C4-N3	2.09	118.49	113.19
4	C	2474	FMN	C4A-C10-N1	-2.09	119.89	124.73
4	E	2474	FMN	C4A-C10-N1	-2.09	119.89	124.73
4	B	2474	FMN	O2'-C2'-C3'	2.08	114.17	109.10
4	E	2474	FMN	C5'-C4'-C3'	2.08	116.22	112.20
8	I	484	FAD	C10-N1-C2	2.08	121.06	116.90
8	K	484	FAD	C10-N1-C2	2.08	121.06	116.90
4	D	2474	FMN	O2'-C2'-C3'	2.08	114.15	109.10
4	B	2474	FMN	C4A-C4-N3	2.08	118.46	113.19
4	D	2474	FMN	C4A-C4-N3	2.07	118.46	113.19
8	H	484	FAD	C5X-C9A-N10	-2.00	115.89	117.95
8	L	484	FAD	C5X-C9A-N10	-2.00	115.89	117.95

There are no chirality outliers.

All (90) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
3	A	2473	OMT	C-CA-CB-CG
3	A	2473	OMT	CB-CG-SD-OD1
3	A	2473	OMT	CB-CG-SD-OD2
3	B	2473	OMT	N-CA-CB-CG
3	B	2473	OMT	C-CA-CB-CG
3	B	2473	OMT	CB-CG-SD-OD1
3	B	2473	OMT	CB-CG-SD-OD2
3	C	2473	OMT	C-CA-CB-CG
3	C	2473	OMT	CB-CG-SD-OD1
3	C	2473	OMT	CB-CG-SD-OD2
3	D	2473	OMT	N-CA-CB-CG
3	D	2473	OMT	C-CA-CB-CG
3	D	2473	OMT	CB-CG-SD-OD1
3	D	2473	OMT	CB-CG-SD-OD2
3	E	2473	OMT	C-CA-CB-CG
3	E	2473	OMT	CB-CG-SD-OD1
3	E	2473	OMT	CB-CG-SD-OD2
3	F	2473	OMT	N-CA-CB-CG
3	F	2473	OMT	C-CA-CB-CG
3	F	2473	OMT	CB-CG-SD-OD1
3	F	2473	OMT	CB-CG-SD-OD2

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Mol	Chain	Res	Type	Atoms
4	A	2474	FMN	O4'-C4'-C5'-O5'
4	A	2474	FMN	C5'-O5'-P-O1P
4	A	2474	FMN	C5'-O5'-P-O3P
4	B	2474	FMN	C2'-C3'-C4'-O4'
4	B	2474	FMN	O3'-C3'-C4'-O4'
4	C	2474	FMN	O4'-C4'-C5'-O5'
4	C	2474	FMN	C5'-O5'-P-O1P
4	C	2474	FMN	C5'-O5'-P-O3P
4	D	2474	FMN	C2'-C3'-C4'-O4'
4	D	2474	FMN	O3'-C3'-C4'-O4'
4	E	2474	FMN	O4'-C4'-C5'-O5'
4	E	2474	FMN	C5'-O5'-P-O1P
4	E	2474	FMN	C5'-O5'-P-O3P
4	F	2474	FMN	C2'-C3'-C4'-O4'
4	F	2474	FMN	O3'-C3'-C4'-O4'
8	G	484	FAD	C5B-O5B-PA-O1A
8	G	484	FAD	PA-O3P-P-O5'
8	H	484	FAD	C5B-O5B-PA-O1A
8	H	484	FAD	PA-O3P-P-O5'
8	I	484	FAD	C5B-O5B-PA-O1A
8	I	484	FAD	PA-O3P-P-O5'
8	J	484	FAD	C5B-O5B-PA-O1A
8	J	484	FAD	PA-O3P-P-O5'
8	K	484	FAD	C5B-O5B-PA-O1A
8	K	484	FAD	PA-O3P-P-O5'
8	L	484	FAD	C5B-O5B-PA-O1A
8	L	484	FAD	PA-O3P-P-O5'
4	A	2474	FMN	O3'-C3'-C4'-O4'
4	C	2474	FMN	O3'-C3'-C4'-O4'
4	E	2474	FMN	O3'-C3'-C4'-O4'
4	A	2474	FMN	C2'-C3'-C4'-O4'
4	C	2474	FMN	C2'-C3'-C4'-O4'
4	E	2474	FMN	C2'-C3'-C4'-O4'
4	A	2474	FMN	O3'-C3'-C4'-C5'
4	B	2474	FMN	O3'-C3'-C4'-C5'
4	C	2474	FMN	O3'-C3'-C4'-C5'
4	D	2474	FMN	O3'-C3'-C4'-C5'
4	E	2474	FMN	O3'-C3'-C4'-C5'
4	F	2474	FMN	O3'-C3'-C4'-C5'
4	A	2474	FMN	C2'-C3'-C4'-C5'
4	B	2474	FMN	C2'-C3'-C4'-C5'
4	C	2474	FMN	C2'-C3'-C4'-C5'

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Mol	Chain	Res	Type	Atoms
4	D	2474	FMN	C2'-C3'-C4'-C5'
4	E	2474	FMN	C2'-C3'-C4'-C5'
4	F	2474	FMN	C2'-C3'-C4'-C5'
3	A	2473	OMT	CB-CG-SD-CE
3	C	2473	OMT	CB-CG-SD-CE
3	E	2473	OMT	CB-CG-SD-CE
3	B	2473	OMT	CB-CG-SD-CE
3	D	2473	OMT	CB-CG-SD-CE
3	F	2473	OMT	CB-CG-SD-CE
5	B	2475	AKG	C2-C3-C4-C5
5	D	2475	AKG	C2-C3-C4-C5
5	F	2475	AKG	C2-C3-C4-C5
5	A	2475	AKG	C3-C4-C5-O4
5	C	2475	AKG	C3-C4-C5-O4
5	E	2475	AKG	C3-C4-C5-O4
3	A	2473	OMT	CA-CB-CG-SD
3	C	2473	OMT	CA-CB-CG-SD
3	E	2473	OMT	CA-CB-CG-SD
5	A	2475	AKG	C3-C4-C5-O3
5	C	2475	AKG	C3-C4-C5-O3
5	E	2475	AKG	C3-C4-C5-O3
8	G	484	FAD	O4B-C4B-C5B-O5B
8	H	484	FAD	O4B-C4B-C5B-O5B
8	I	484	FAD	O4B-C4B-C5B-O5B
8	J	484	FAD	O4B-C4B-C5B-O5B
8	K	484	FAD	O4B-C4B-C5B-O5B
8	L	484	FAD	O4B-C4B-C5B-O5B

There are no ring outliers.

31 monomers are involved in 186 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
6	D	2476	F3S	3	0
8	L	484	FAD	17	0
8	J	484	FAD	18	0
3	F	2473	OMT	1	0
4	C	2474	FMN	3	0
7	J	483	SF4	2	0
7	I	483	SF4	2	0
4	D	2474	FMN	7	0
4	A	2474	FMN	4	0
4	B	2474	FMN	7	0

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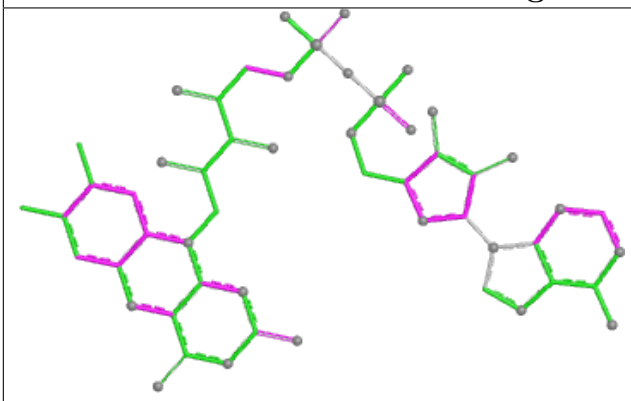
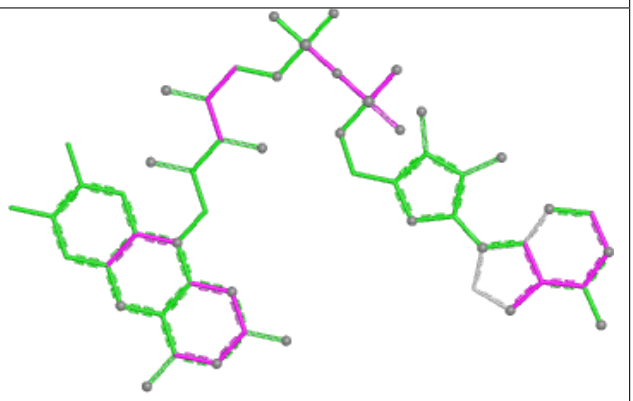
Mol	Chain	Res	Type	Clashes	Symm-Clashes
6	C	2476	F3S	3	0
7	G	483	SF4	2	0
4	E	2474	FMN	4	0
7	H	483	SF4	2	0
8	G	484	FAD	18	0
3	E	2473	OMT	3	0
6	F	2476	F3S	3	0
4	F	2474	FMN	6	0
5	B	2475	AKG	2	0
6	A	2476	F3S	3	0
6	B	2476	F3S	3	0
5	F	2475	AKG	1	0
7	K	483	SF4	2	0
3	A	2473	OMT	3	0
8	I	484	FAD	18	0
8	K	484	FAD	18	0
3	C	2473	OMT	3	0
5	D	2475	AKG	2	0
8	H	484	FAD	18	0
7	L	483	SF4	2	0
6	E	2476	F3S	6	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.

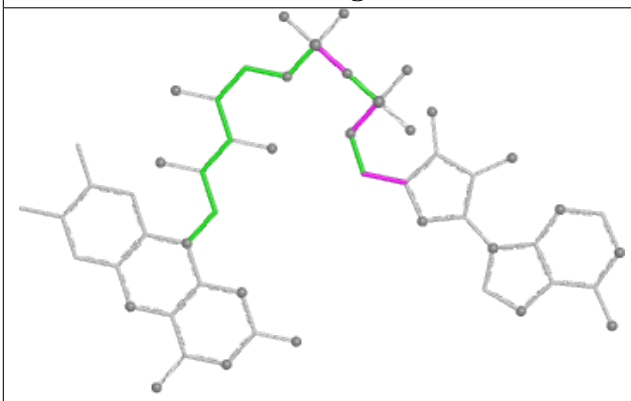
Ligand FAD L 484



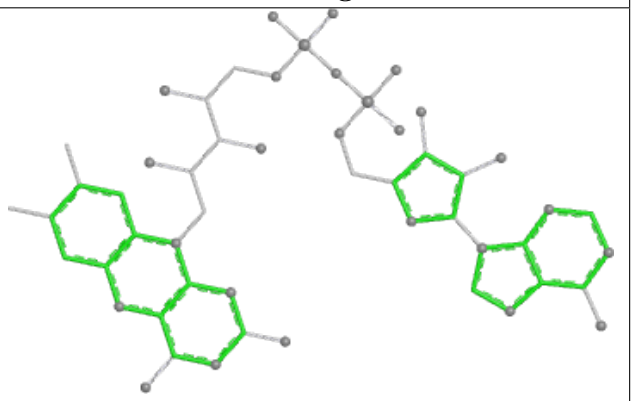
Bond lengths



Bond angles

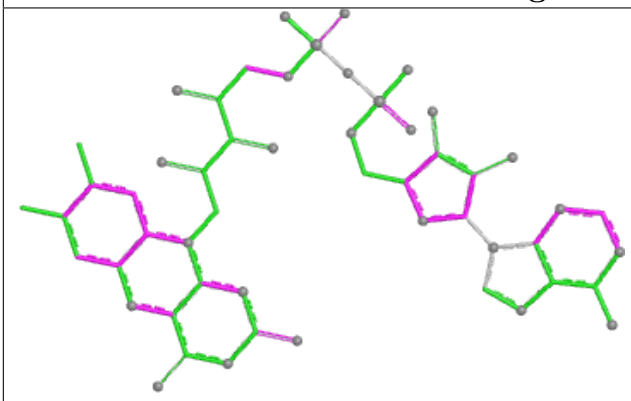


Torsions

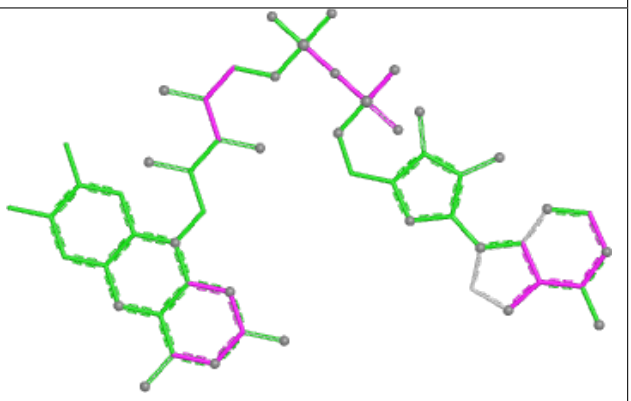


Rings

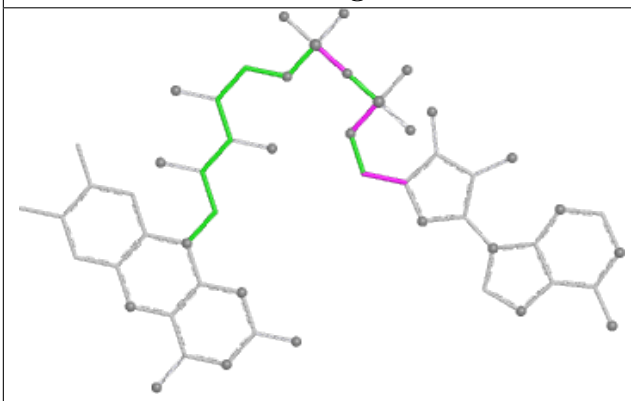
Ligand FAD J 484



Bond lengths



Bond angles



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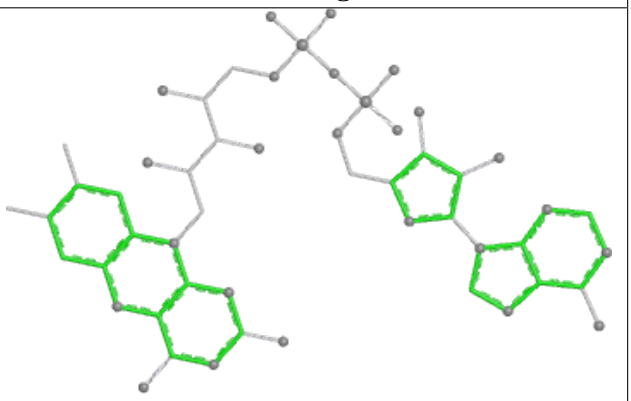
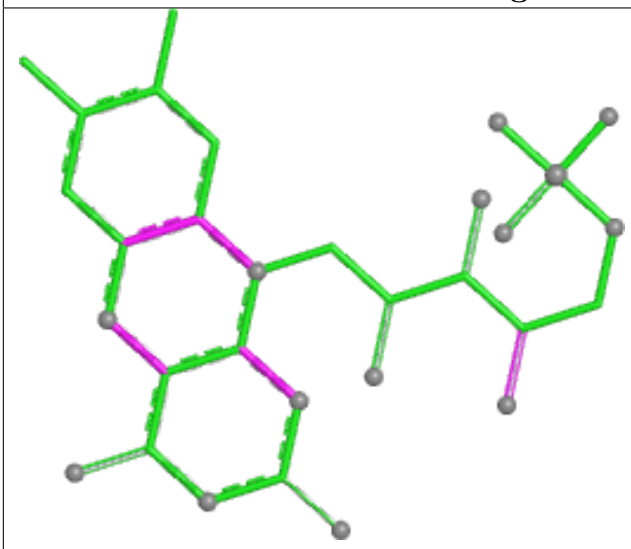


Rings

Ligand FMN C 2474



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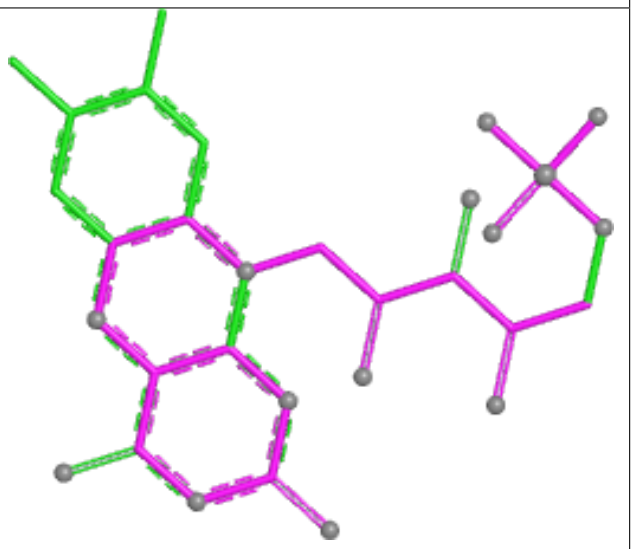
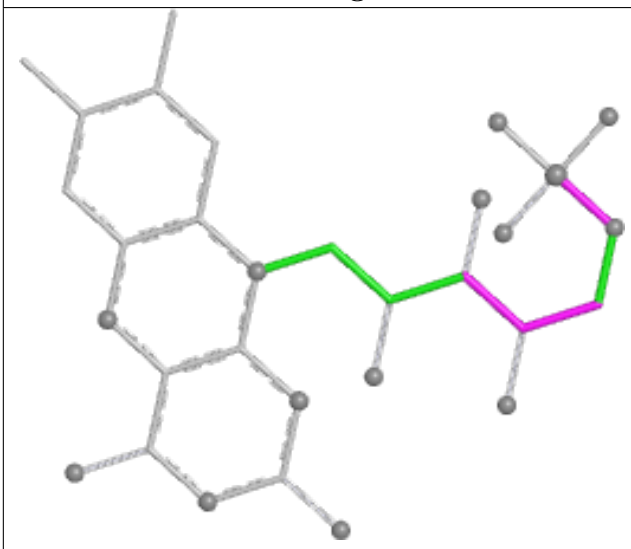
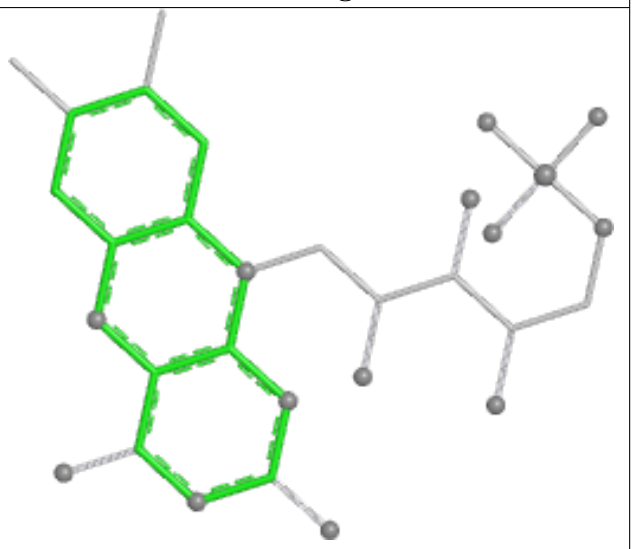


Bond angles

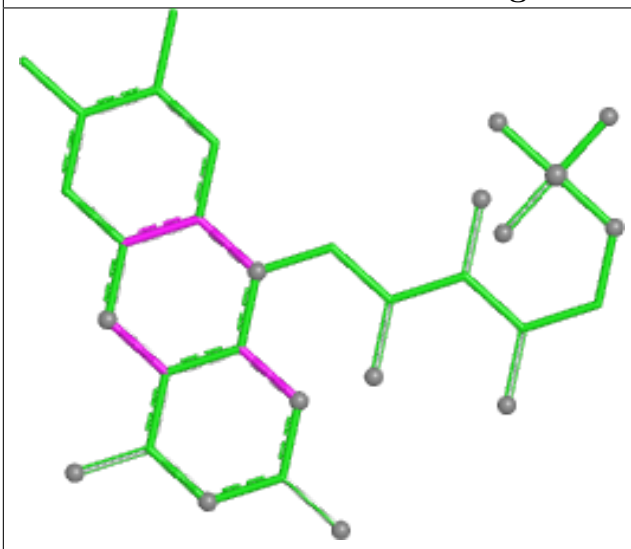


Torsions

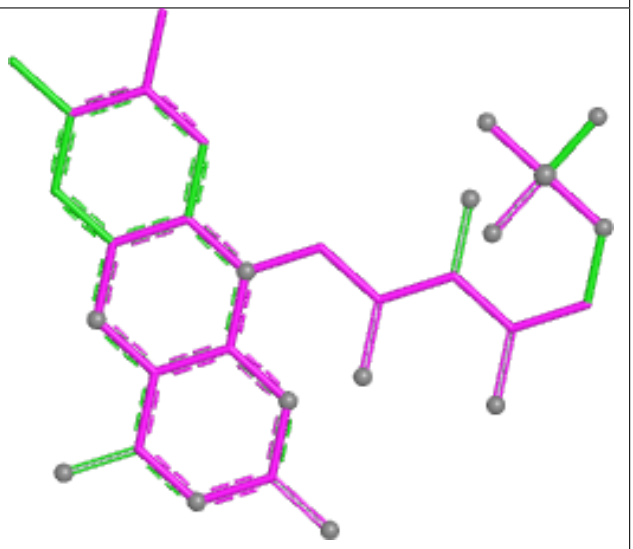


Rings

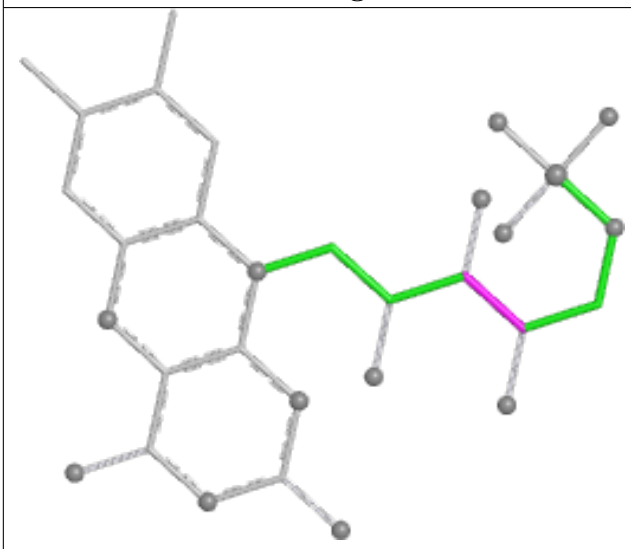
Ligand FMN D 2474



Bond lengths



Bond angles



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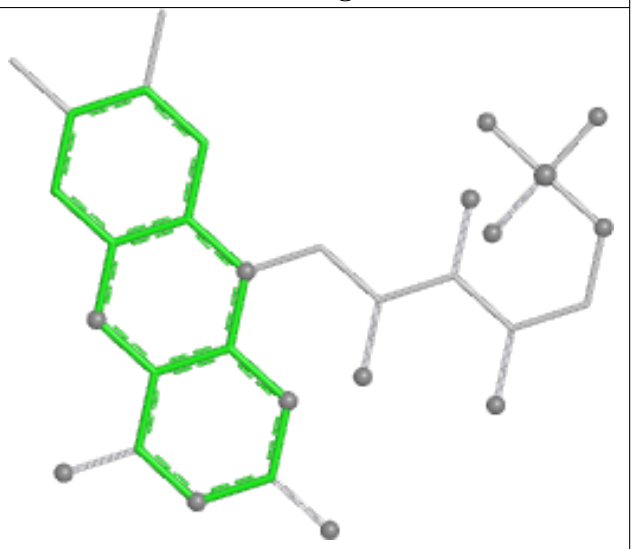
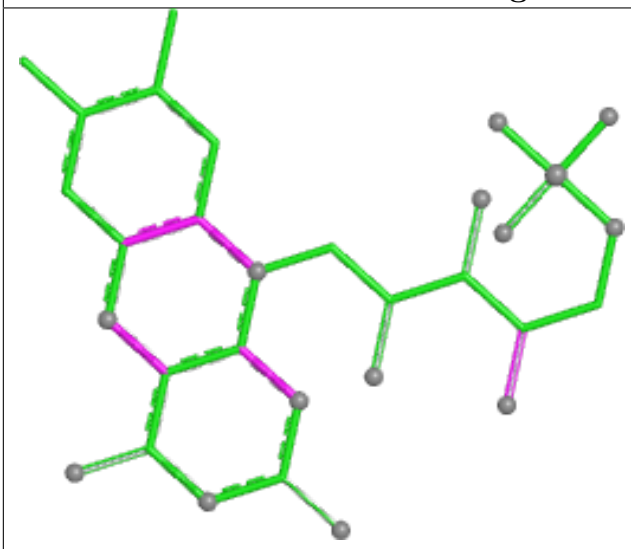


Rings

Ligand FMN A 2474



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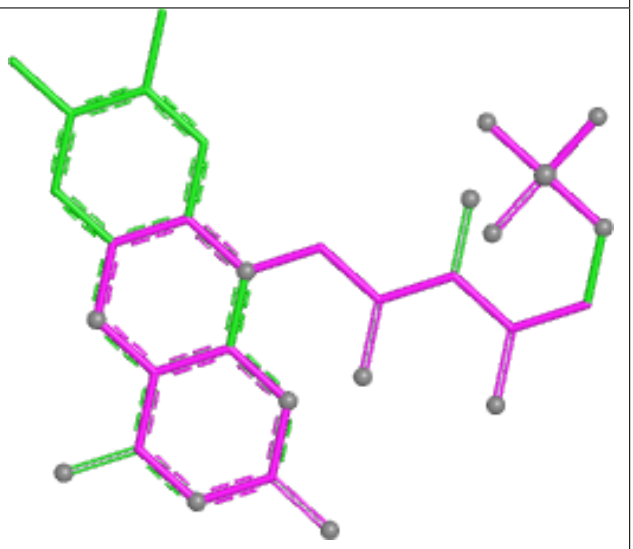

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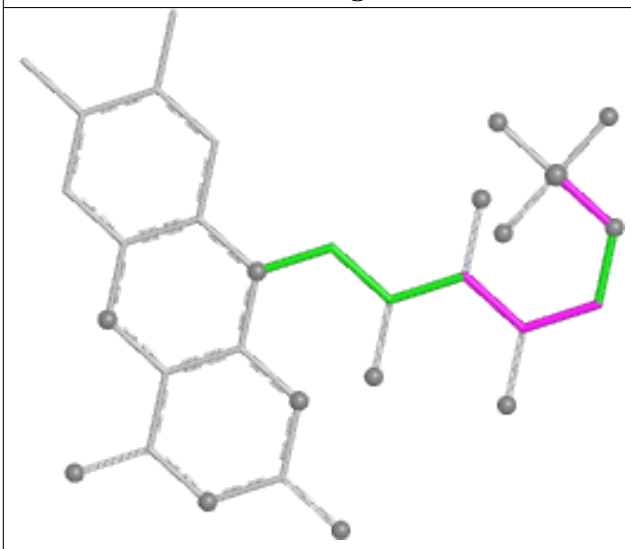

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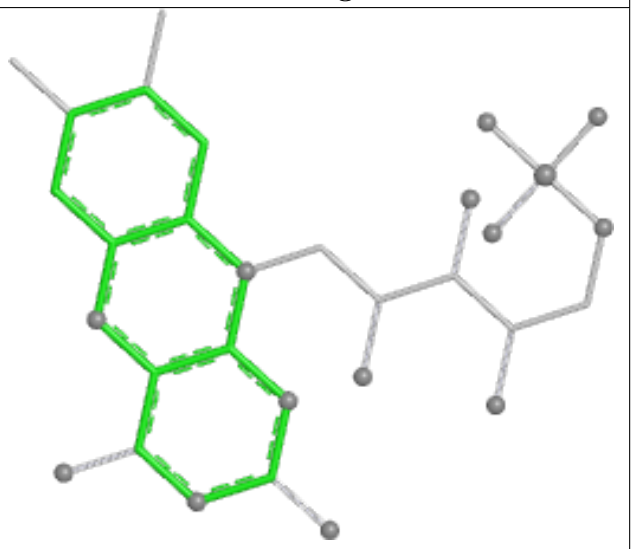
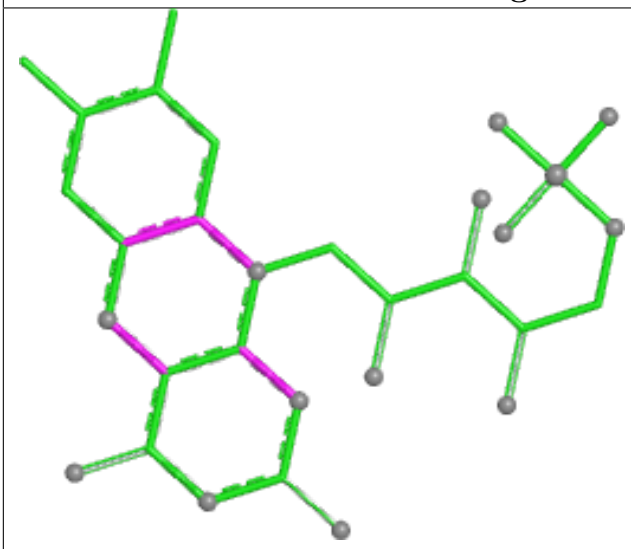


Rings

Ligand FMN B 2474



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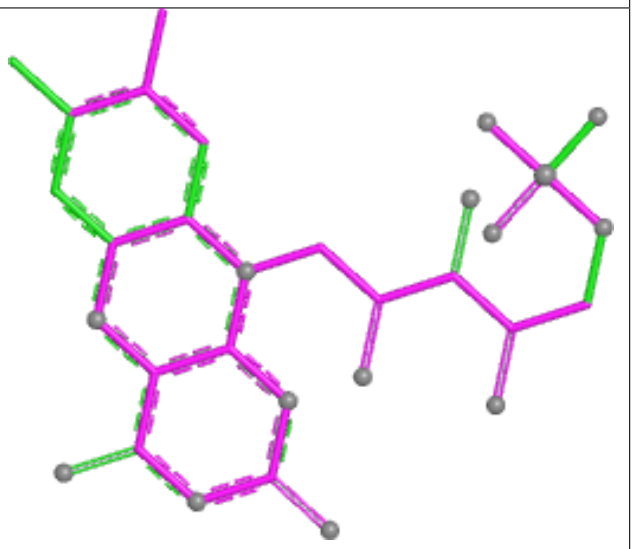

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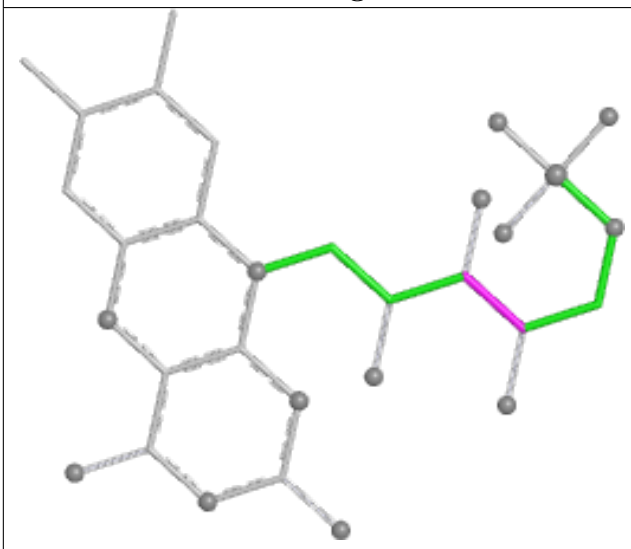

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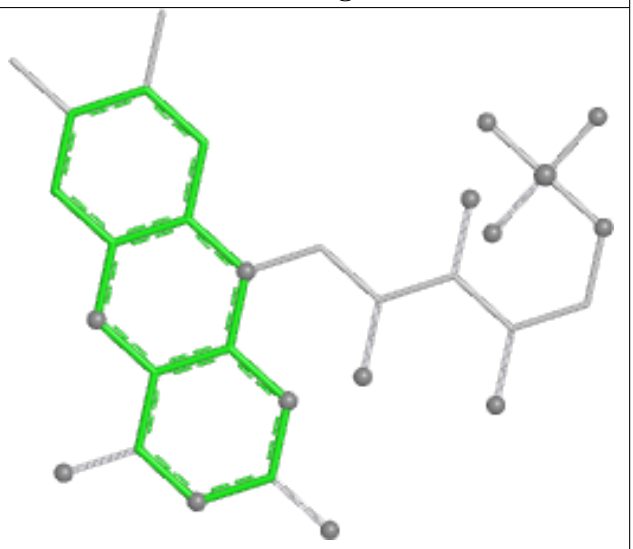
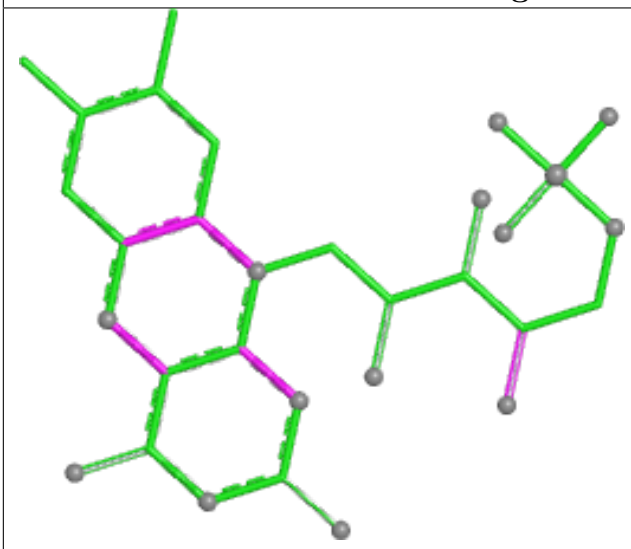


Rings

Ligand FMN E 2474



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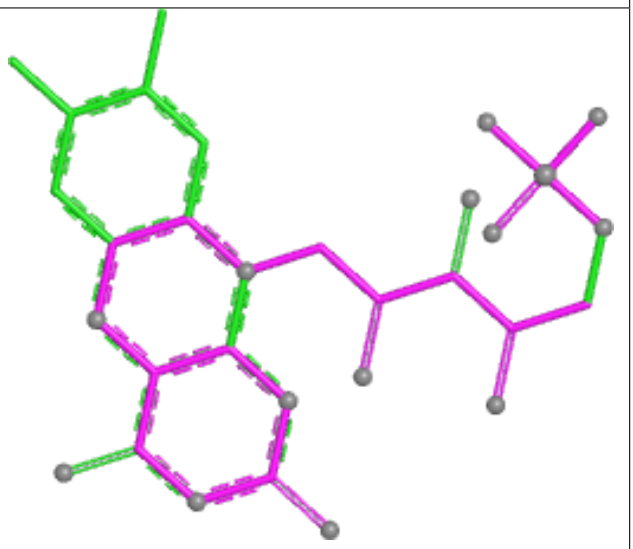
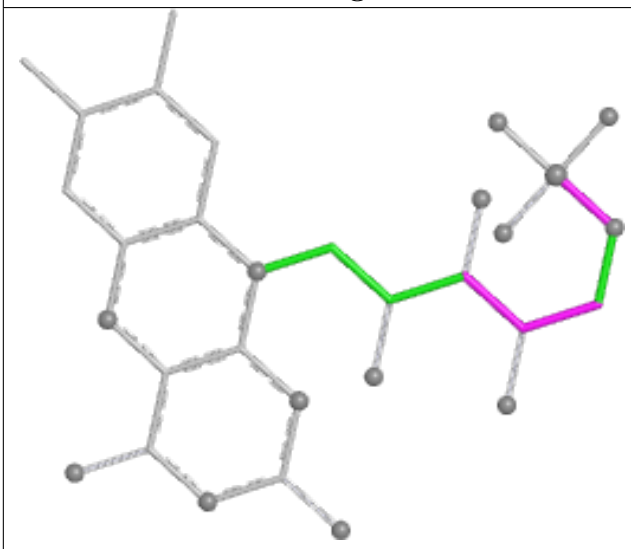


Bond angles



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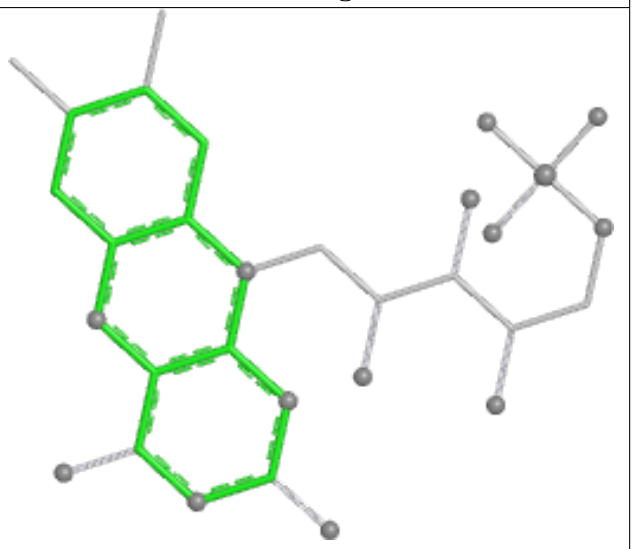
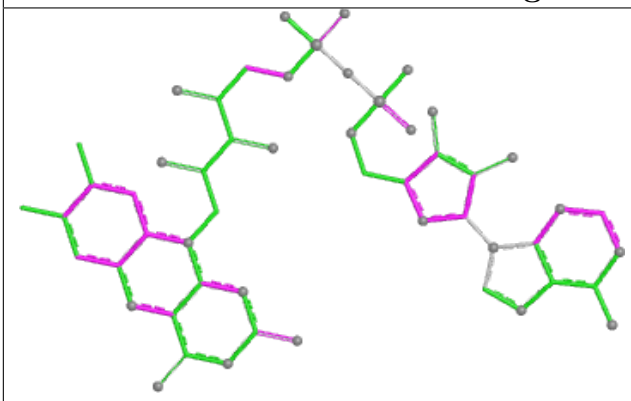


Rings

Ligand FAD G 484



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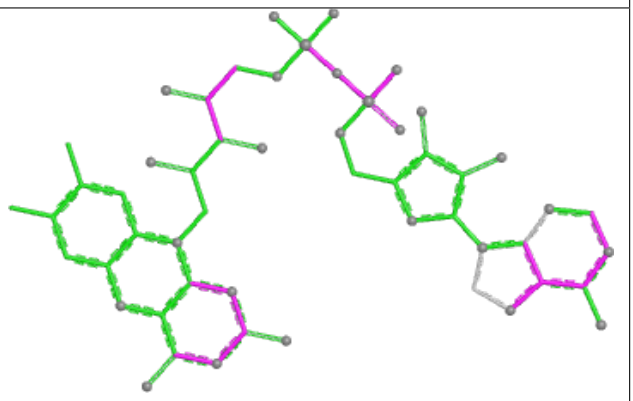
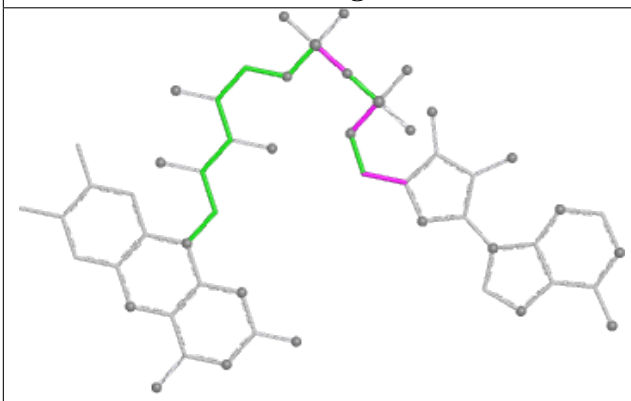


Bond angles



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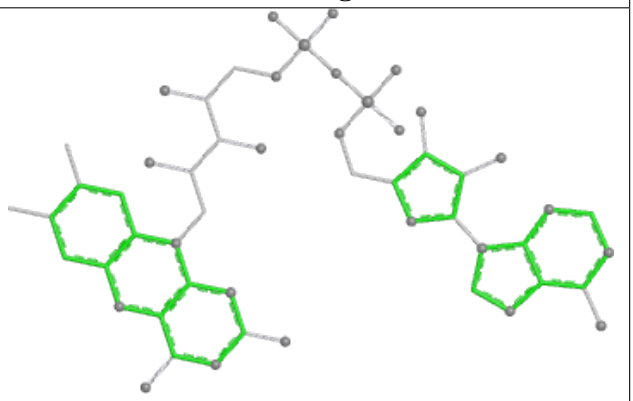
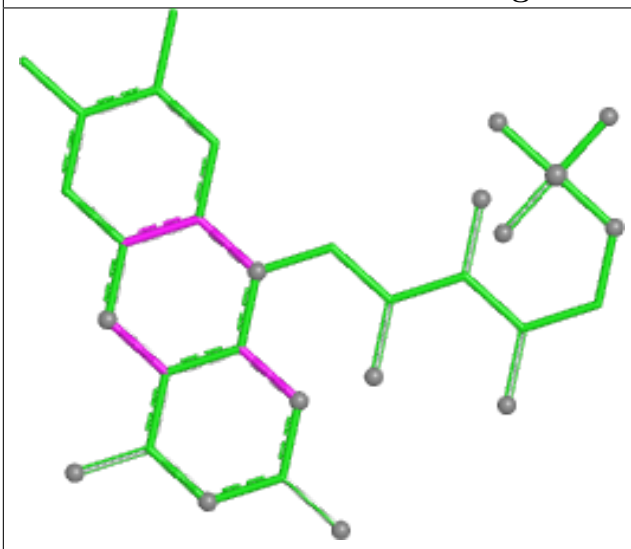


Rings

Ligand FMN F 2474



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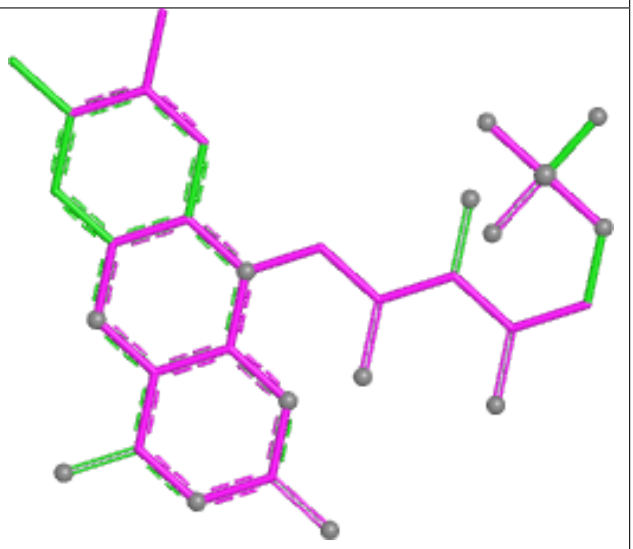

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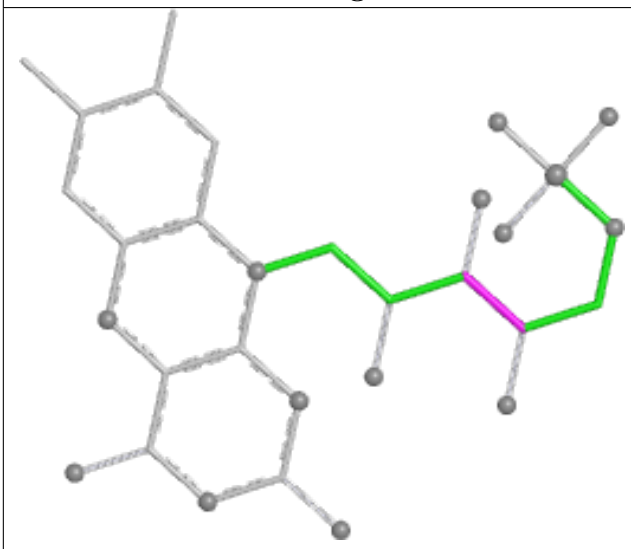
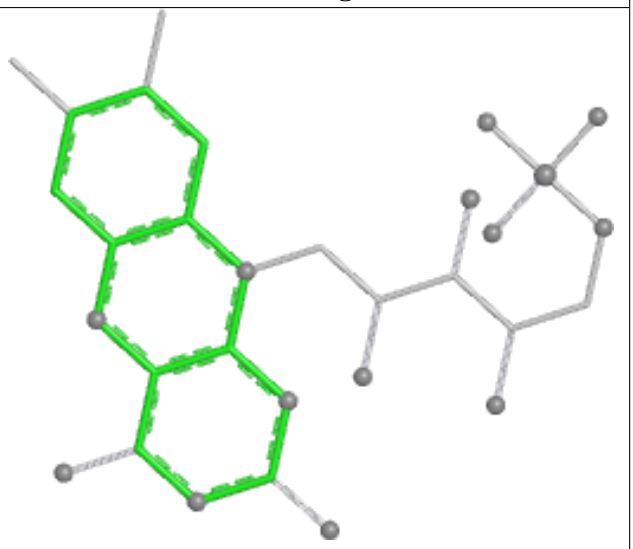
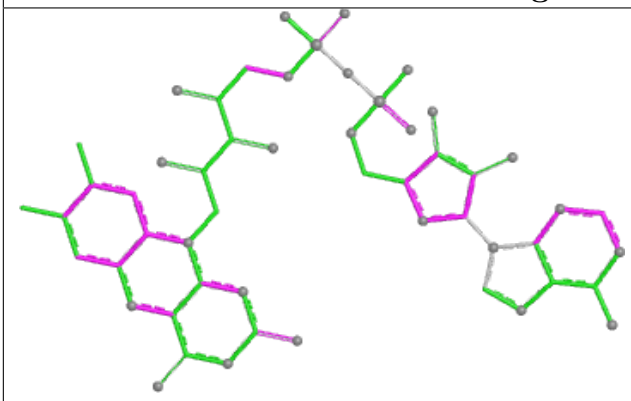


Torsions



Rings

Ligand FAD I 484



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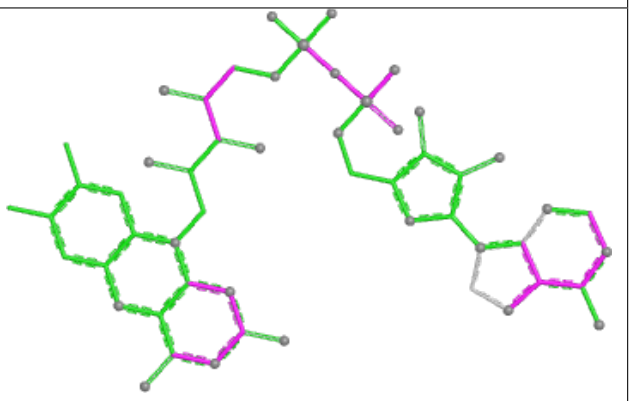
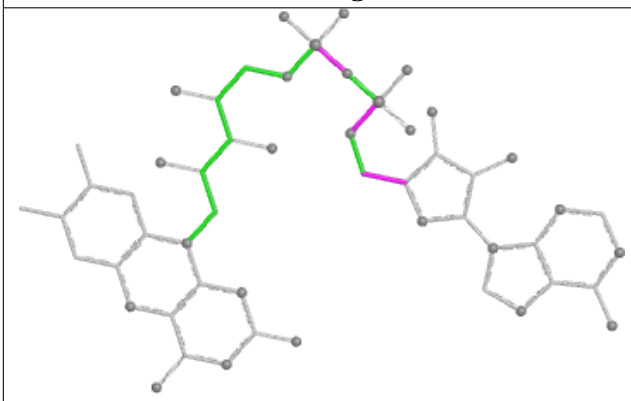
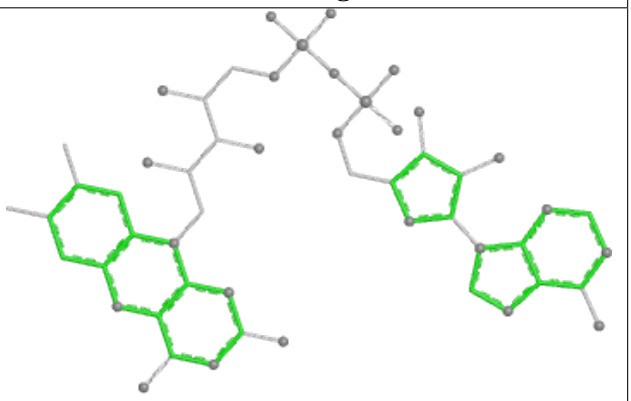


Bond angles

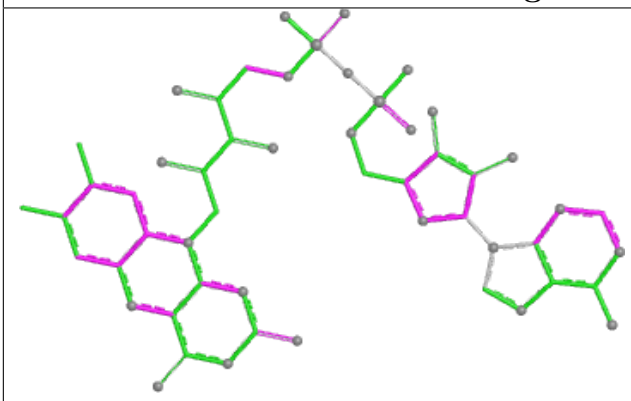


Torsions



Rings

Ligand FAD K 484



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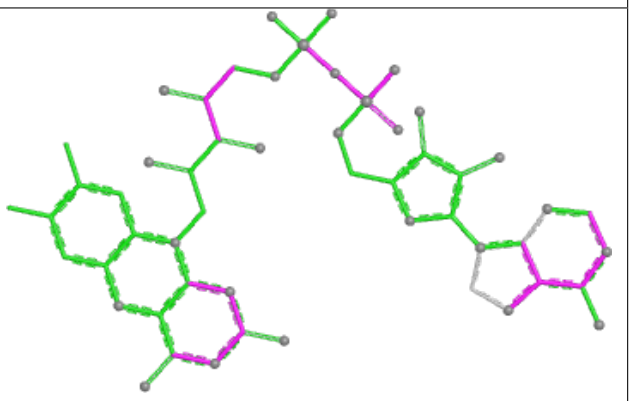
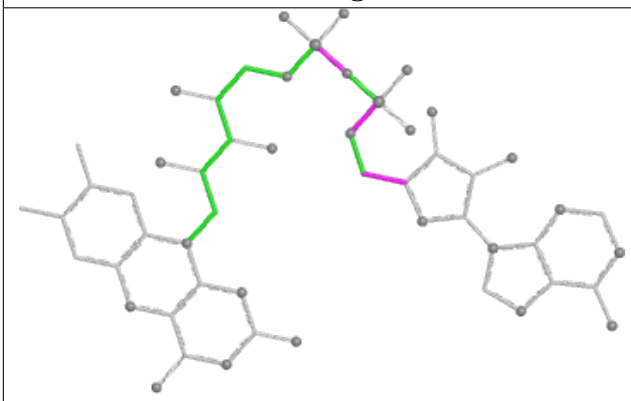


Bond angles



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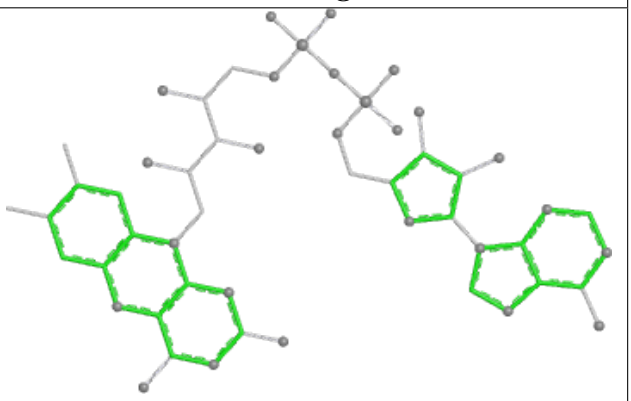
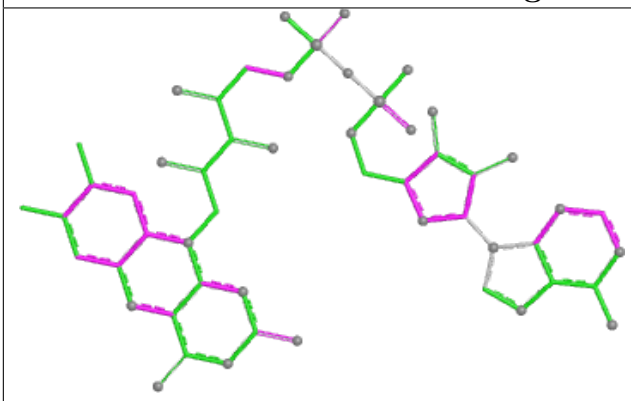


Rings

Ligand FAD H 484



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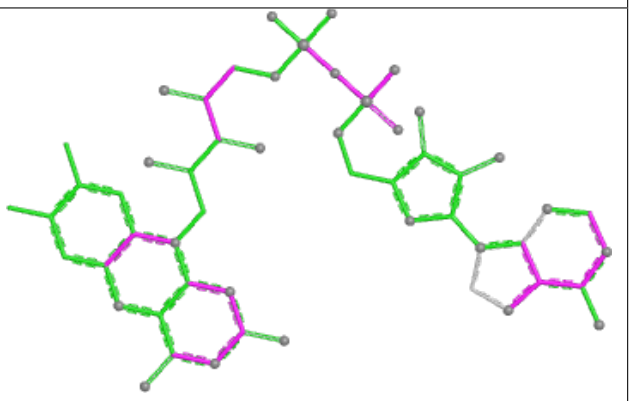
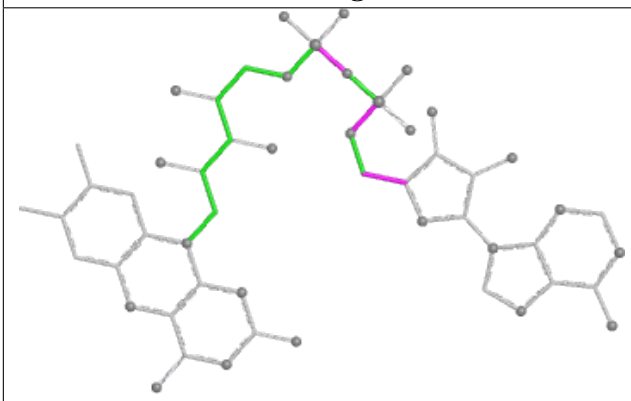


Bond angles



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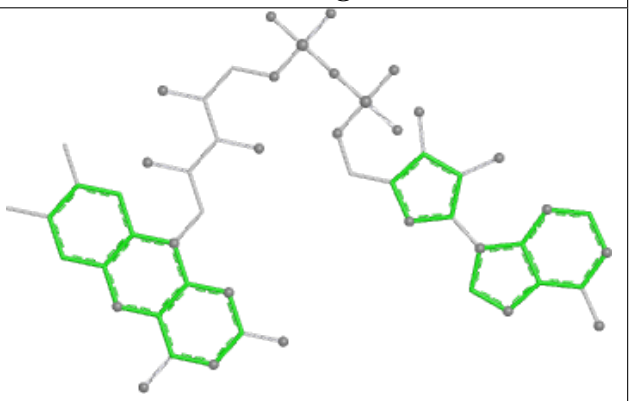


Rings

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.

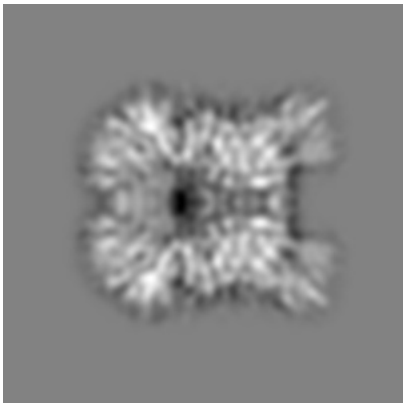
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-1440. These allow visual inspection of the internal detail of the map and identification of artifacts.

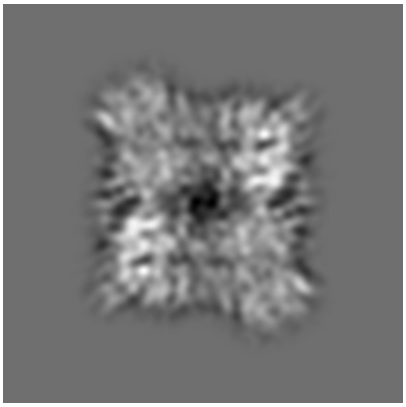
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections

6.1.1 Primary map



X



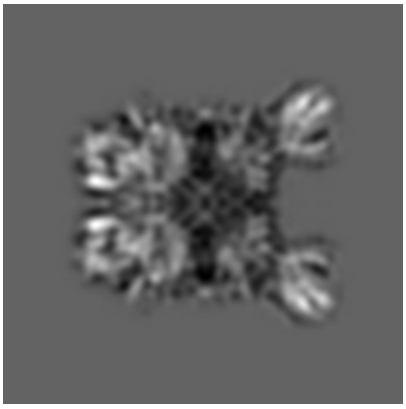
Y

Z

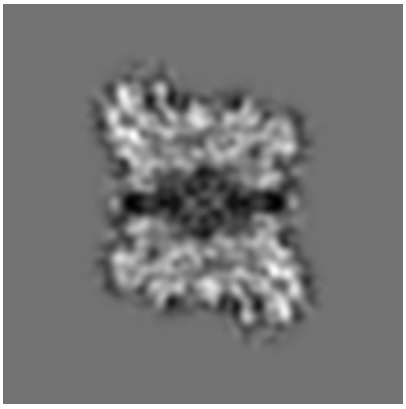
The images above show the map projected in three orthogonal directions.

6.2 Central slices

6.2.1 Primary map



X Index: 96



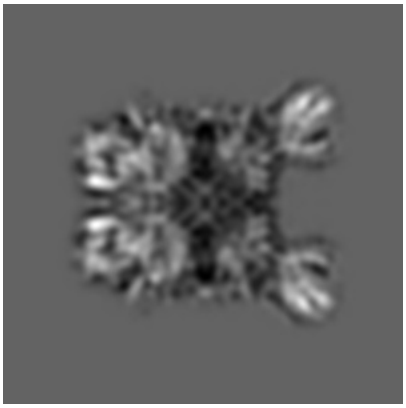
Y Index: 96

Z Index: 96

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: 96

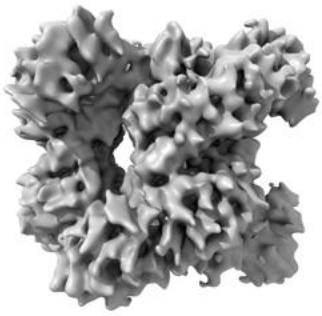
Y Index: 98

Z Index: 59

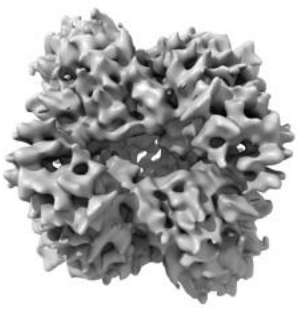
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal surface views (i)

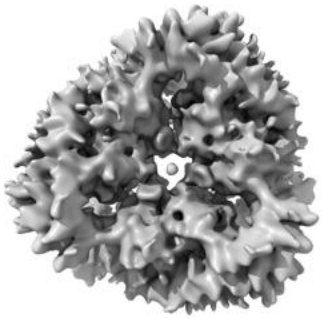
6.4.1 Primary map



X



Y



Z

The images above show the 3D surface view of the map at the recommended contour level 125.0. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

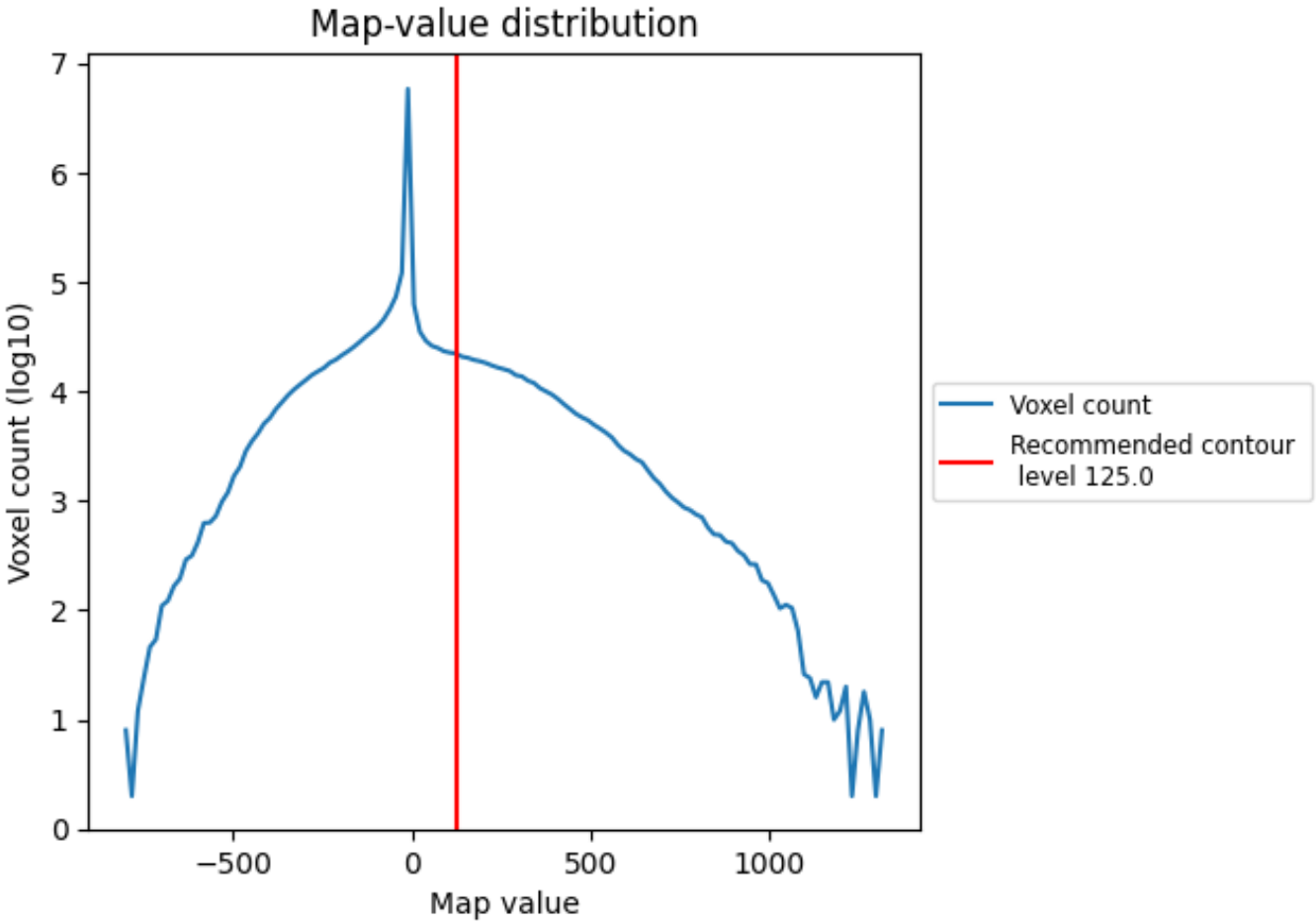
6.5 Mask visualisation (i)

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

7 Map analysis

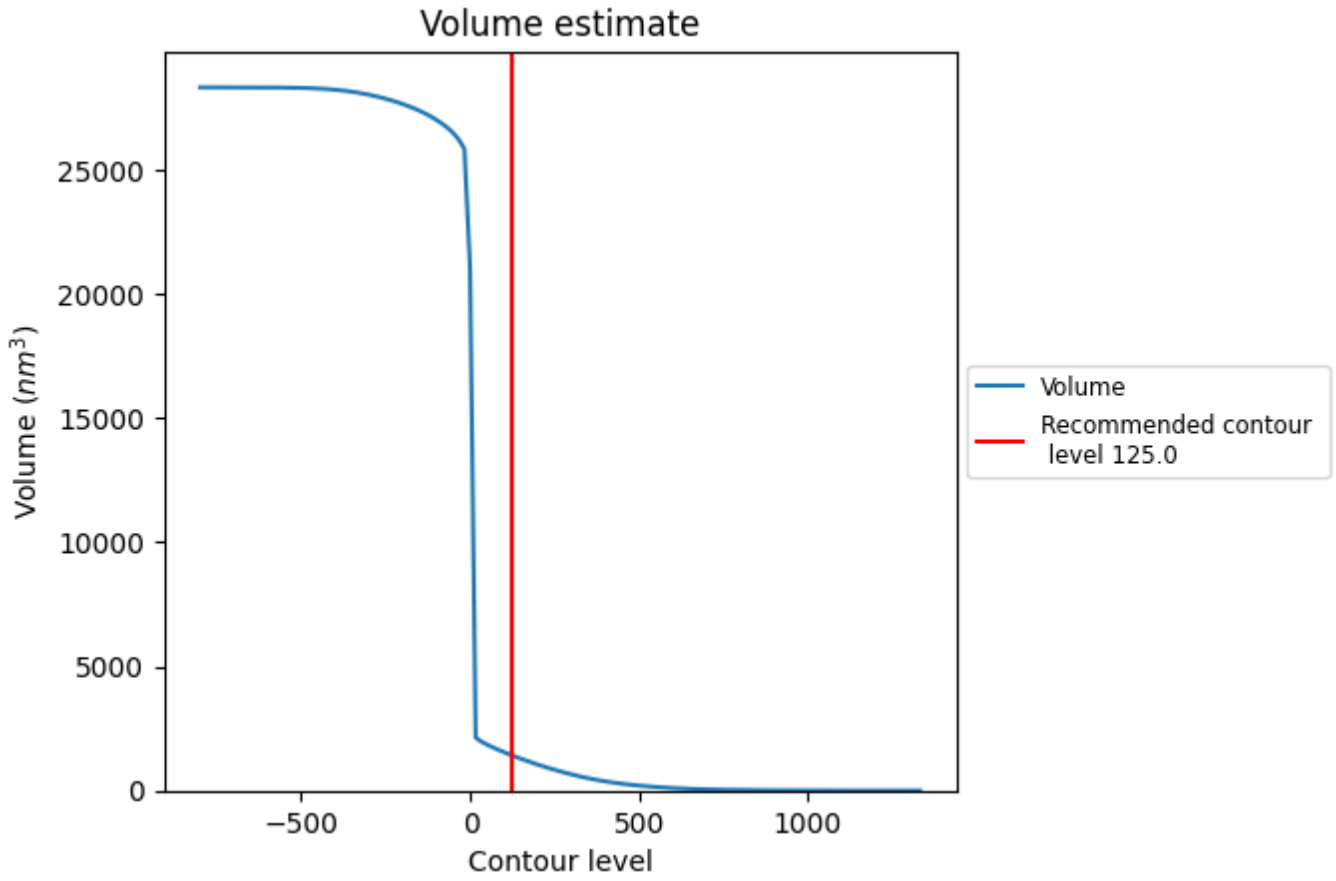
This section contains the results of statistical analysis of the map.

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.

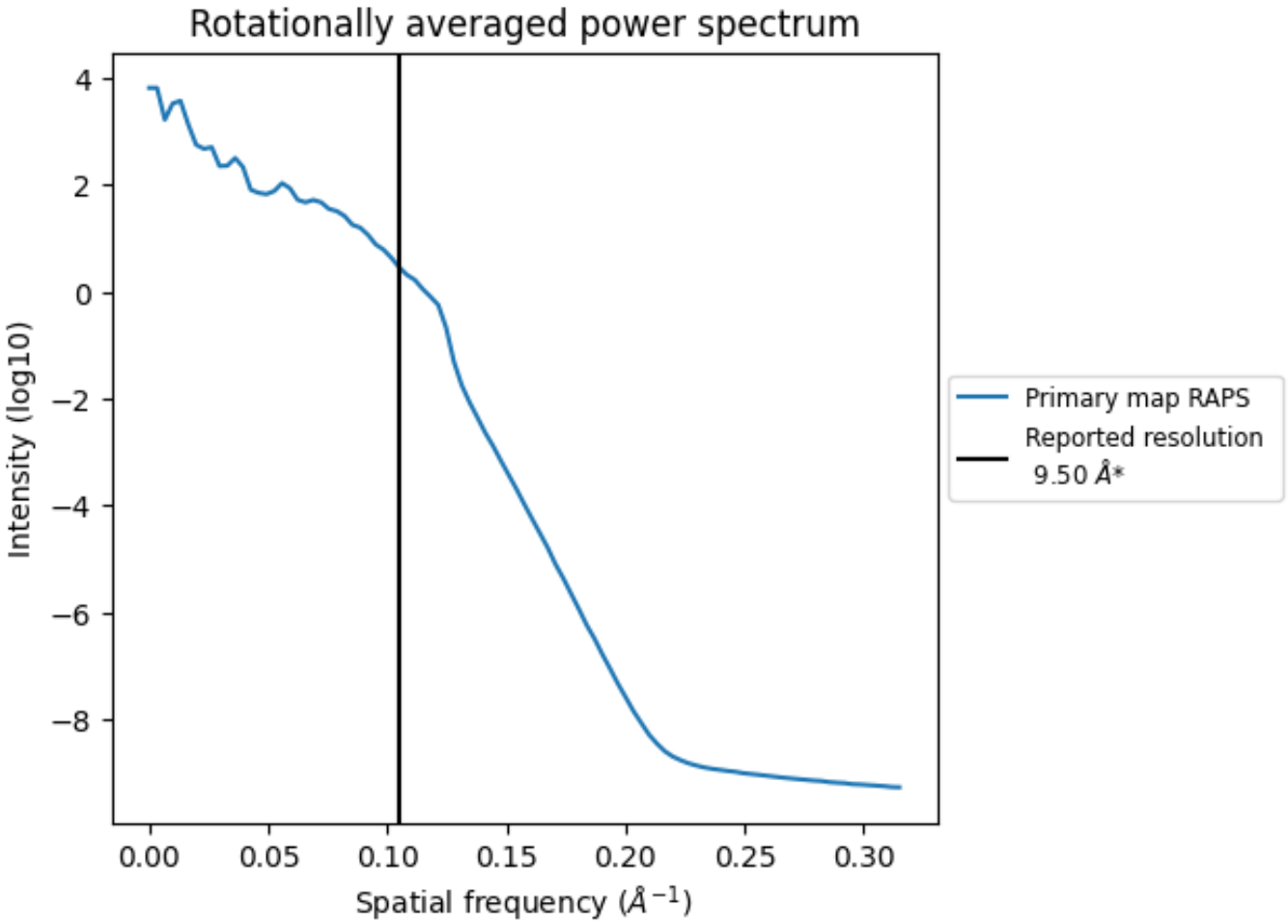
7.2 Volume estimate



The volume at the recommended contour level is 1412 nm^3; this corresponds to an approximate mass of 1276 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)

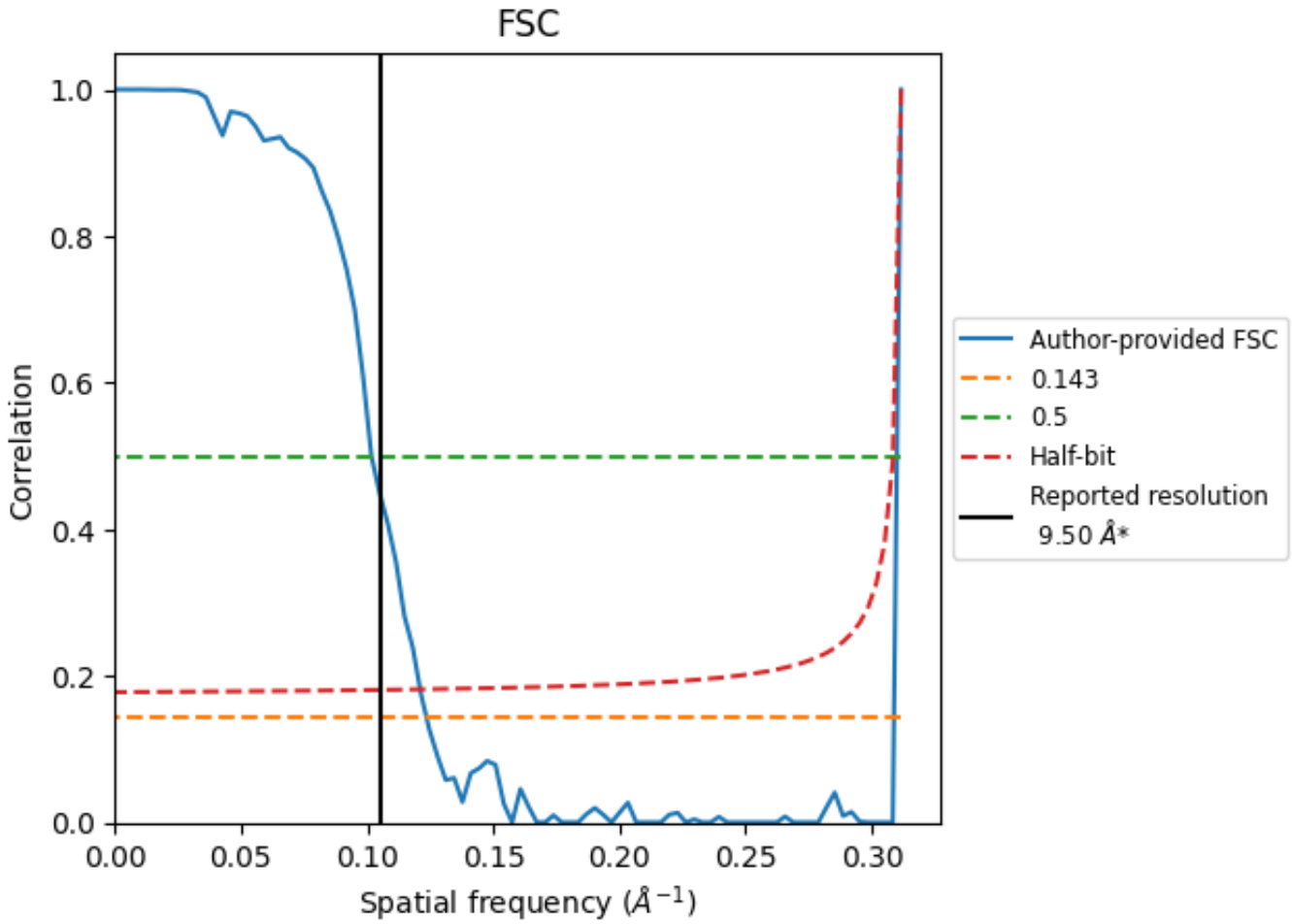


*Reported resolution corresponds to spatial frequency of 0.105 Å^{-1}

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 0.105 Å^{-1}

8.2 Resolution estimates (i)

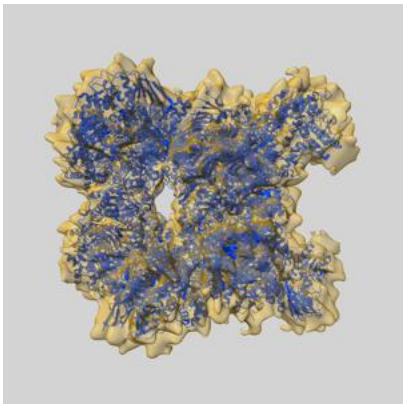
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	-	-	-
Author-provided FSC curve	8.10	9.83	8.26
Unmasked-calculated*	-	-	-

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

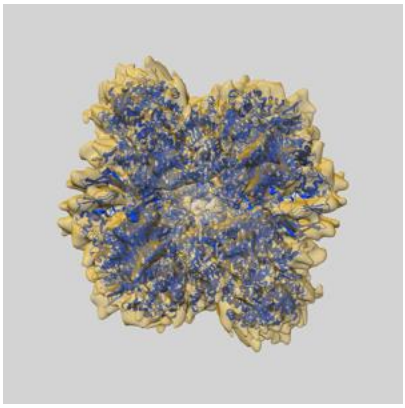
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-1440 and PDB model 2VDC. Per-residue inclusion information can be found in section 3 on page 11.

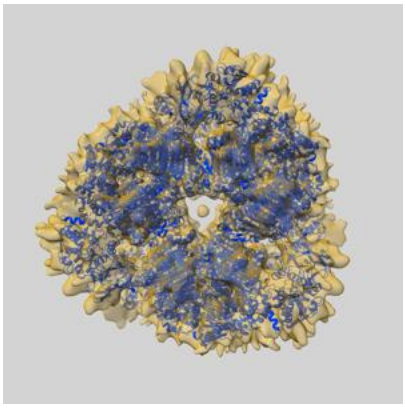
9.1 Map-model overlay



X



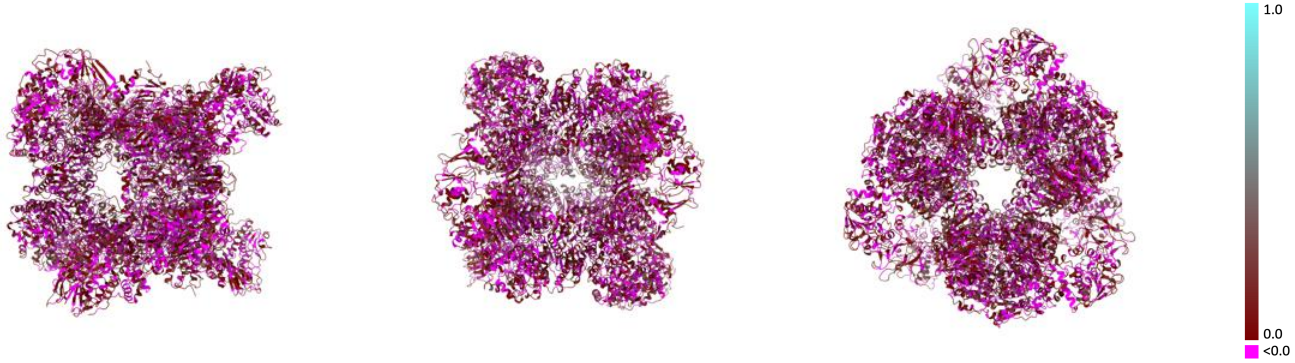
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 125.0 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

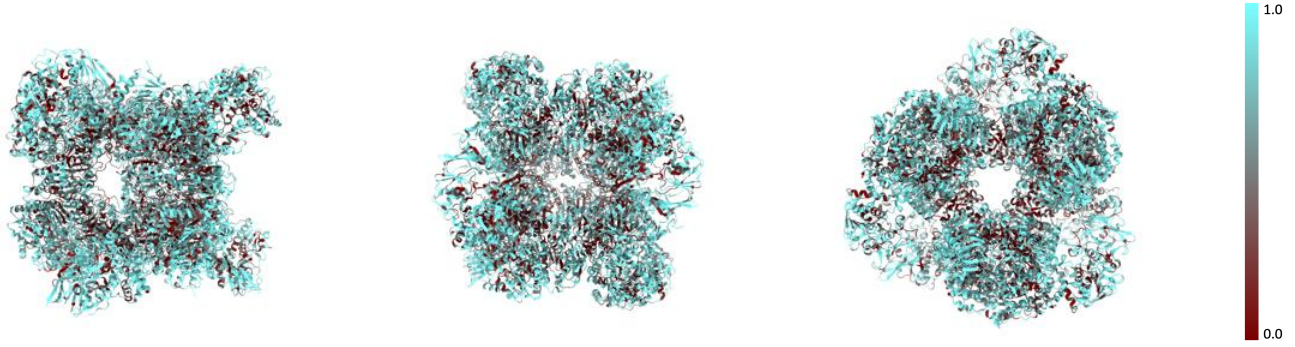
9.2 Q-score mapped to coordinate model (i)



X Y Z

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

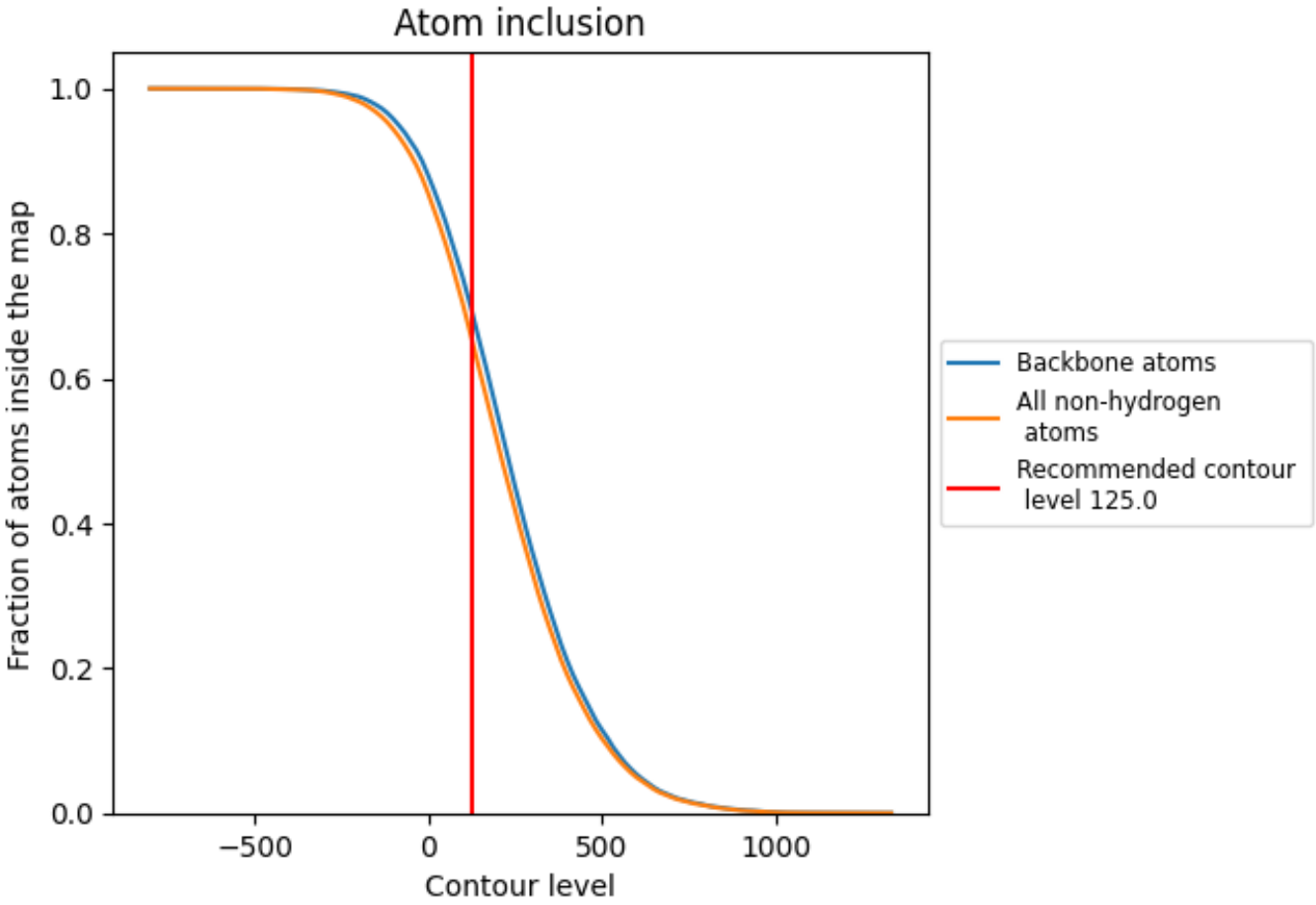
9.3 Atom inclusion mapped to coordinate model (i)



X Y Z

The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (125.0).

9.4 Atom inclusion (i)



At the recommended contour level, 69% of all backbone atoms, 66% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary

The table lists the average atom inclusion at the recommended contour level (125.0) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.6561	0.0430
A	0.6473	0.0430
B	0.6458	0.0430
C	0.6349	0.0400
D	0.6351	0.0430
E	0.6361	0.0450
F	0.6348	0.0410
G	0.7248	0.0470
H	0.7080	0.0430
I	0.7011	0.0470
J	0.7248	0.0490
K	0.7011	0.0470
L	0.7080	0.0430