Full wwPDB EM Validation Report (i)

Nov 19, 2022 – 08:52 PM EST

PDB ID	:	3JAV
EMDB ID	:	EMD-6369
Title	:	Structure of full-length IP3R1 channel in the apo-state determined by single particle cryo-EM
Authors	:	Fan, G.; Baker, M.L.; Wang, Z.; Baker, M.R.; Sinyagovskiy, P.A.; Chiu, W.; Ludtke, S.J.; Serysheva, I.I.
Deposited on	:	2015-06-30
Resolution	:	4.70 Å(reported)

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

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
https://www.wwpdb.org/validation/2017/EMValidationReportHelp
with specific help available everywhere you see the (i) 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 (i)) were used in the production of this report:

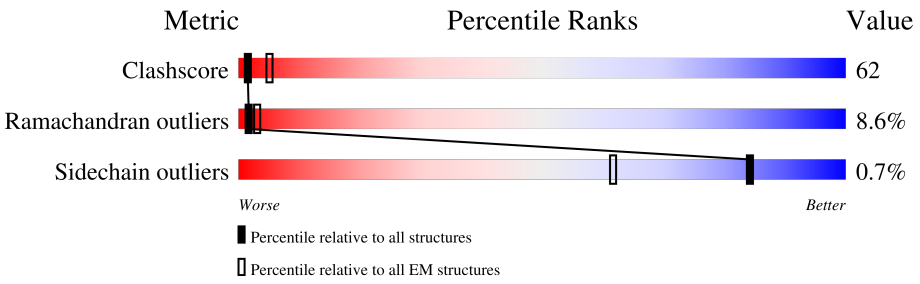
EMDB validation analysis	:	0.0.1.dev43
MolProbity	:	4.02b-467
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ	:	1.9.9
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.31.3

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 4.70 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	2750	12% 58% 23% • 15%
1	B	2750	12% 58% 24% • 15%
1	C	2750	12% 58% 24% • 15%
1	D	2750	12% 58% 24% • 15%

2 Entry composition (i)

There is only 1 type of molecule in this entry. The entry contains 33472 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 Inositol 1,4,5-trisphosphate receptor type 1.

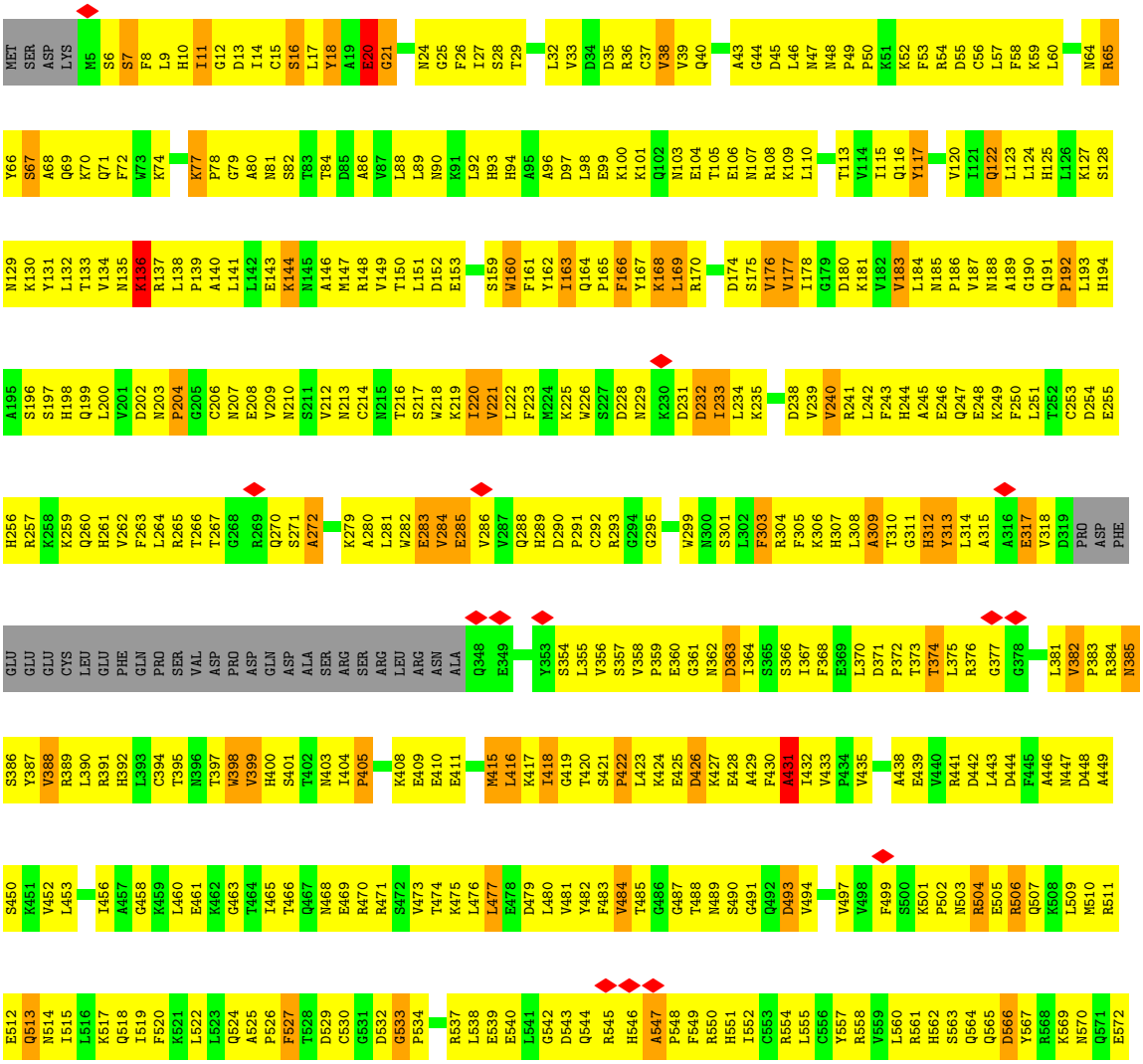
Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	A	2327	8368	5879	1191	1265	33	0	1459
1	B	2327	8368	5879	1191	1265	33	0	1459
1	C	2327	8368	5879	1191	1265	33	0	1459
1	D	2327	8368	5879	1191	1265	33	0	1459

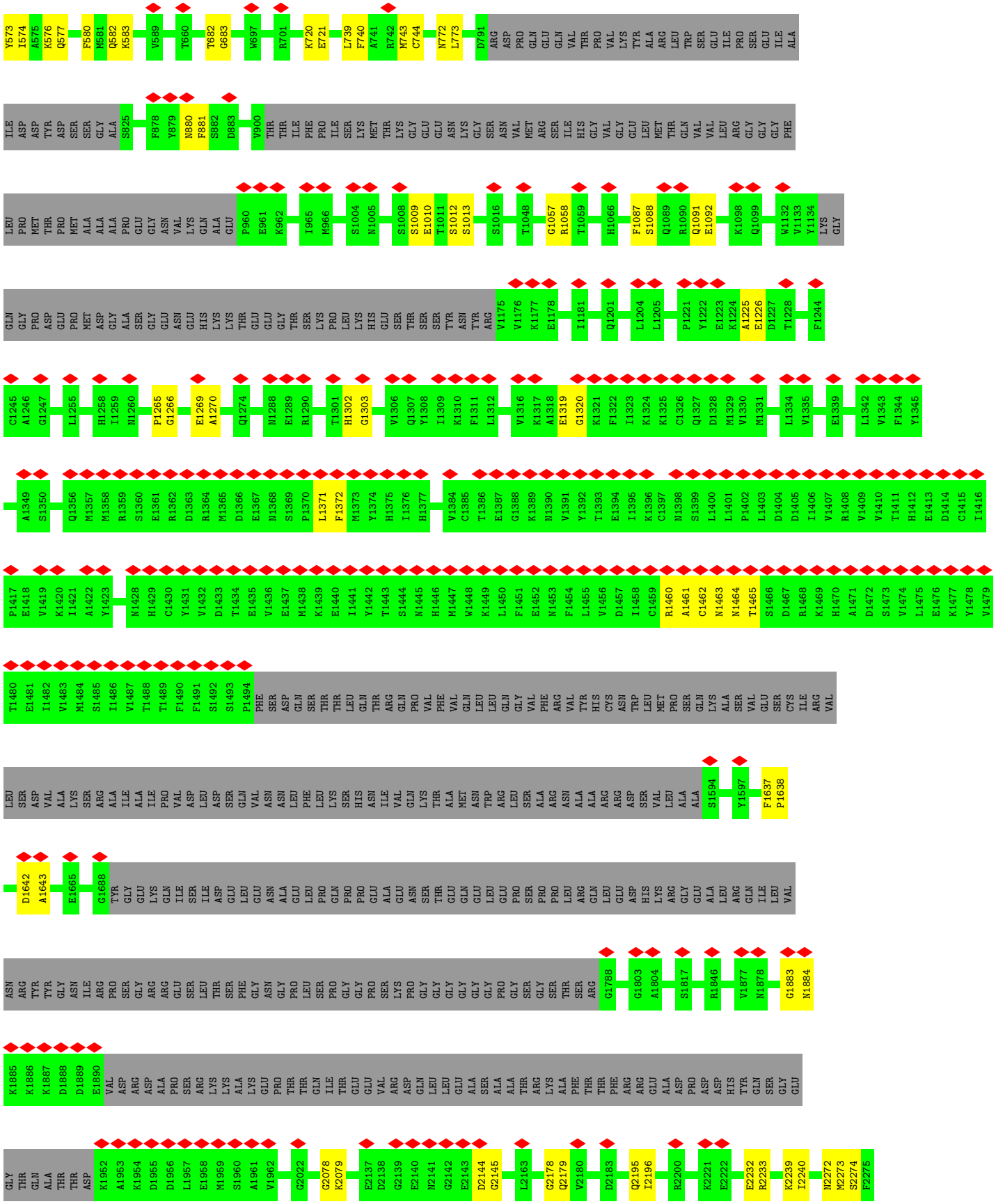
3 Residue-property plots (i)

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: Inositol 1,4,5-trisphosphate receptor type 1

Chain A:

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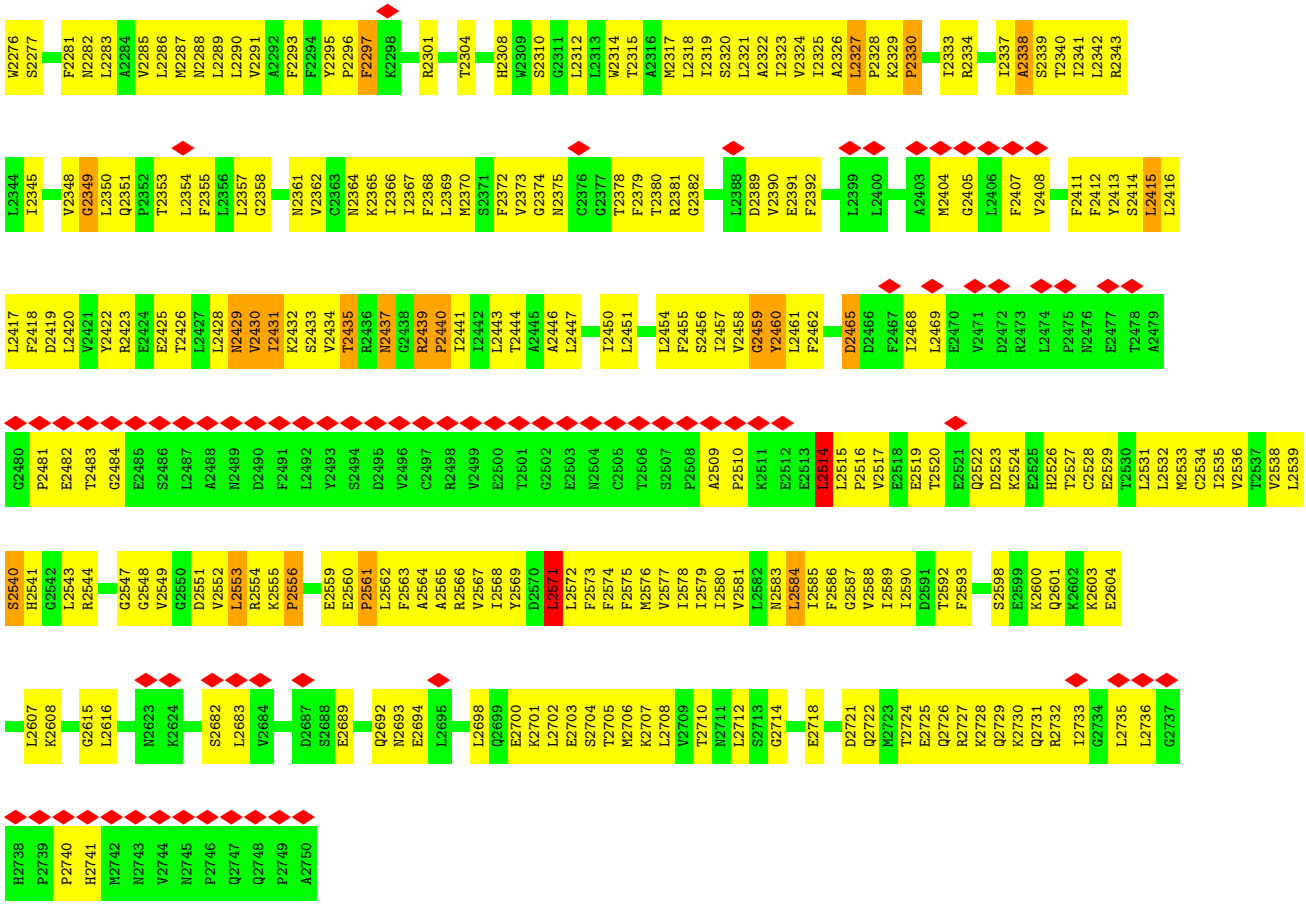
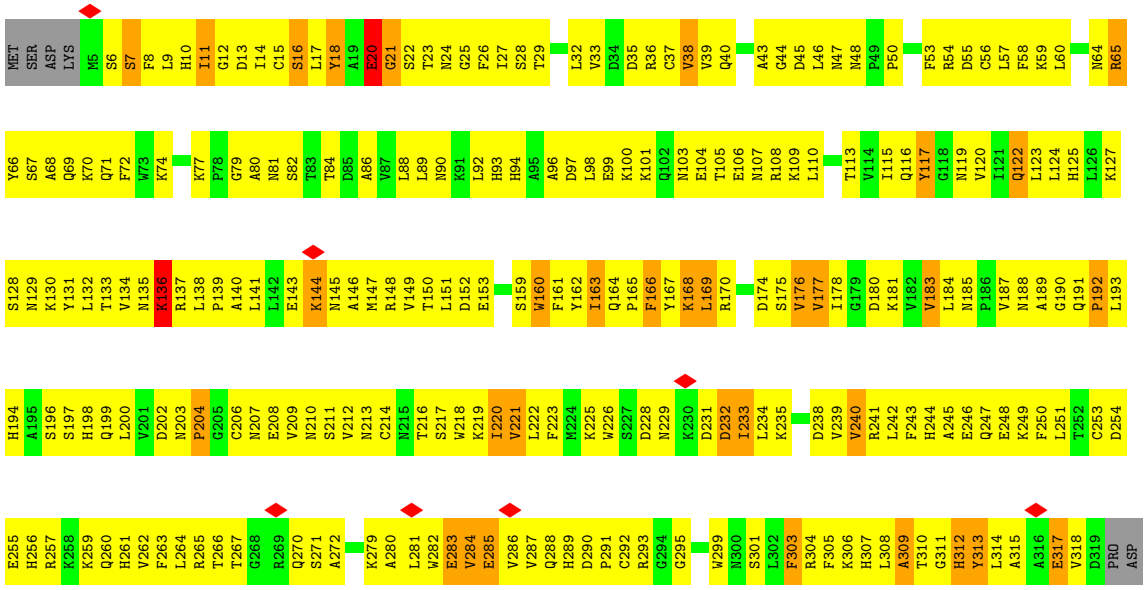
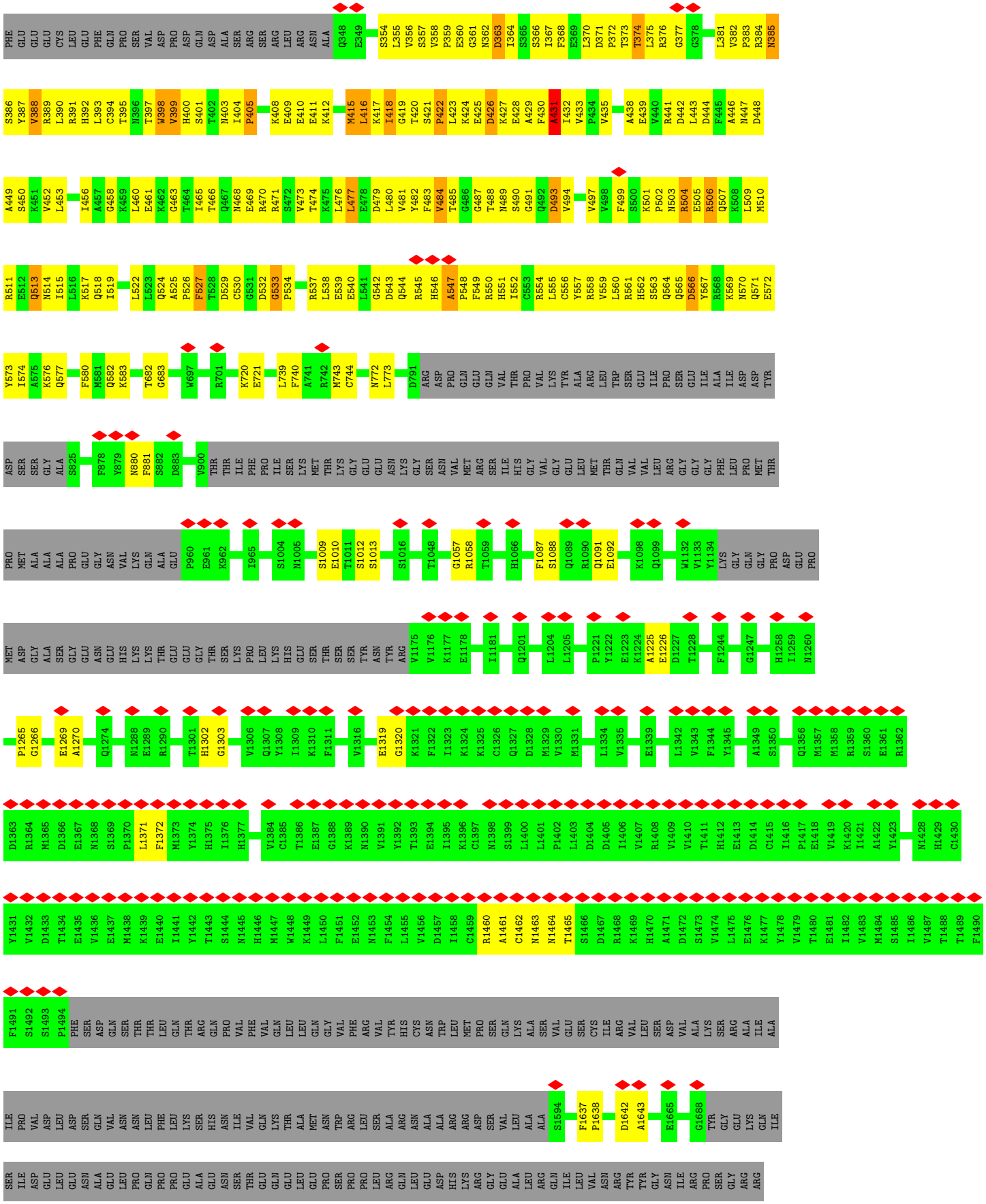
ILE ASP ASP TYR ASP SER SER GLY ALA S825 F878 Y879 N880 F881 S882 D883 W900 THR THR ILE PHE PRO ILE SER LYS MET THR LYS GLY GLU GLU ASN LYS GLY SER ASN VAL MET ARG SER ILE HIS GLY VAL GLY GLU LEU MET THR GLN VAL VAL LEU ARG GLY GLY GLY PHE
LEU PRO MET THR PRO MET ALA ALA ALA PRO GLU GLY ASN VAL LYS GLN ALA GLU P960 E961 K962 I965 M966 S1004 N1005 S1008 S1009 E1010 T1011 S1012 S1013 S1016 T1048 G1057 R1058 T1059 H1066 F1087 S1088 Q1089 R1090 Q1091 E1092 K1098 Q1099 W1132 V1133 Y1134 LYS GLY
GLN GLY PRO ASP GLU PRO MET ASP GLY ALA SER GLY GLU ASN GLU HIS LYS LYS THR GLU GLU GLY THR SER LYS PRO LEU LYS HIS GLU SER THR SER SER TYR ASN TYR ARG V1175 V1176 K1177 E1178 I1181 Q1201 L1204 L1205 P1221 Y1222 E1223 K1224 A1225 E1226 D1227 T1228 F1244
C1245 A1246 G1247 L1255 H1258 I1259 N1260 P1265 G1266 E1269 A1270 Q1274 N1288 E1289 R1290 T1301 H1302 G1303 V1306 Q1307 Y1308 I1309 K1310 F1311 L1312 V1316 K1317 A1318 E1319 G1320 K1321 F1322 I1323 K1324 K1325 C1326 Q1327 D1328 M1329 V1330 M1331 L1334 V1335 E1339 L1342 V1343 F1344 Y1345
A1349 S1350 Q1356 M1357 M1358 R1359 S1360 E1361 R1362 D1363 R1364 M1365 D1366 E1367 N1368 S1369 P1370 L1371 F1372 M1373 Y1374 H1375 I1376 H1377 V1384 C1385 T1386 E1387 G1388 K1389 N1390 V1391 Y1392 T1393 E1394 I1395 K1396 C1397 N1398 S1399 L1400 L1401 P1402 L1403 D1404 D1405 I1406 V1407 R1408 V1409 V1410 T1411 H1412 E1413 D1414 C1415 I1416
P1417 E1418 V1419 K1420 I1421 A1422 Y1423 N1428 H1429 C1430 Y1431 V1432 D1433 T1434 E1435 V1436 E1437 M1438 K1439 E1440 I1441 Y1442 T1443 S1444 N1445 H1446 M1447 W1448 K1449 L1450 F1451 E1452 N1453 F1454 L1455 V1456 D1457 I1458 C1459 R1460 A1461 C1462 N1463 N1464 T1465 S1466 D1467 R1468 K1469 H1470 A1471 D1472 S1473 V1474 L1475 E1476 K1477 Y1478 V1479
T1480 E1481 I1482 V1483 M1484 S1485 I1486 V1487 T1488 T1489 F1490 F1491 S1492 S1493 P1494 PHE SER ASP GLN SER THR THR LEU GLN THR ARG GLN PRO VAL PHE VAL GLN LEU LEU GLN GLY VAL PHE ARG VAL TYR HIS CYS ASN TRP LEU MET PRO SER GLN LYS ALA SER VAL GLU SER CYS ILE ARG VAL
LEU SER ASP VAL ALA LYS SER ARG ALA ILE ALA ILE PRO VAL ASP LEU ASP SER GLN VAL ASN ASN LEU PHE LEU LYS SER HIS ASN ILE VAL GLN LYS THR ALA MET ASN TRP ARG LEU SER ALA ARG ASN ALA ALA ARG ASP SER VAL LEU ALA ALA S1594 Y1597 F1637 P1638
D1642 A1643 E1665 G1688 TYR GLY GLU LYS GLN ILE SER ILE ASP GLU LEU GLU ASN ALA GLU LEU PRO GLN PRO PRO GLU ALA GLU ASN SER THR GLU GLN GLU LEU GLU PRO SER PRO PRO LEU ARG GLN GLU GLY ASP HIS LYS ARG GLY GLU ALA LEU ARG GLN ILE LEU LEU VAL
ASN ARG TYR TYR GLY ASN ILE ARG PRO SER GLY ARG ARG GLU SER LEU THR SER PHE GLY ASN GLY PRO LEU SER PRO GLY GLY PRO SER LYS PRO GLY GLY GLY GLY GLY GLY PRO GLY SER GLY SER THR SER ARG G1788 G1803 A1804 S1817 R1846 V1877 N1878 G1883 N1884
K1885 K1886 K1887 D1888 D1889 E1890 VAL ASP ARG ASP ALA PRO SER ARG LYS LYS ALA LYS GLU PRO THR THR GLN ILE THR GLU GLU VAL ARG ASP GLN LEU LEU GLU ALA ALA ALA THR ARG LYS ALA PHE THR THR PHE ARG ARG GLU ALA ASP PRO ASP ASP HIS TYR GLN SER GLY GLU
GLY THR GLN ALA THR THR ASP K1952 A1953 K1954 D1955 D1956 L1957 E1958 M1959 S1960 A1961 V1962 G2022 G2078 K2079 E2137 D2138 G2139 E2140 N2141 G2142 E2143 D2144 G2145 L2163 G2178 Q2179 V2180 D2183 Q2195 I2196 R2200 K2221 E2222 E2232 R2233 K2239 I2240 N2272 M2273 S2274 F2275



• Molecule 1: Inositol 1,4,5-trisphosphate receptor type 1

Chain B:

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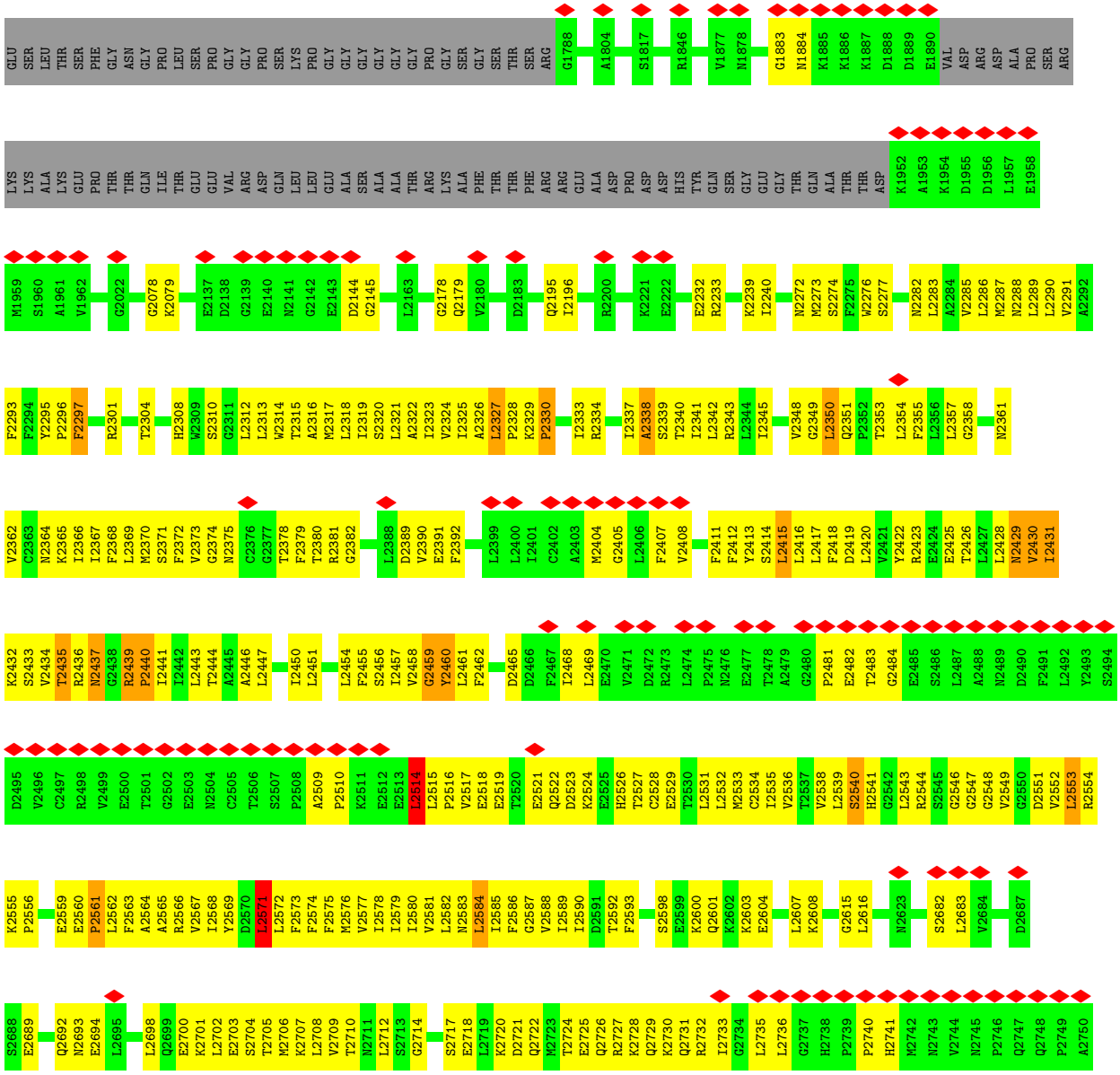
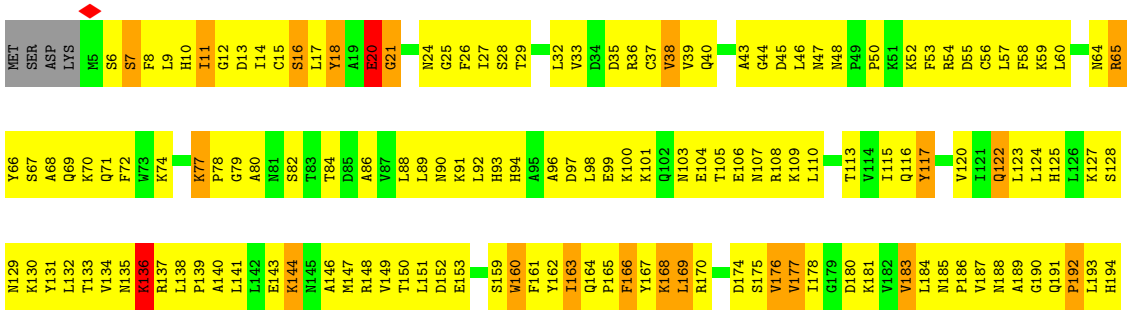
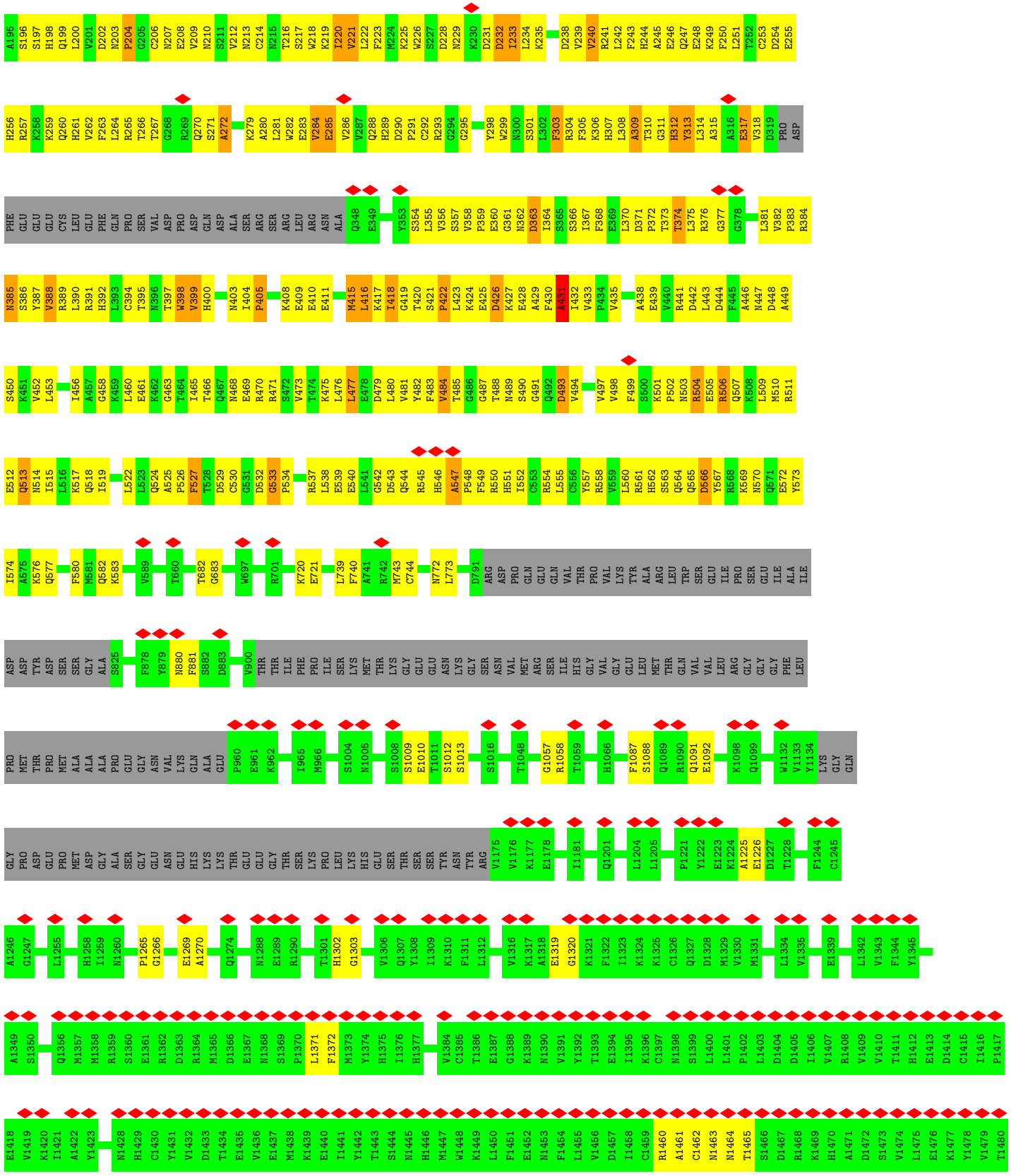
S386 Y387 V388 R389 L390 R391 H392 L393 C394 T395 N396 T397 W398 V399 H400 S401 T402 N403 I404 P405 K408 E409 E410 E411 K412 M415 L416 K417 I418 G419 T420 S421 P422 L423 K424 E425 D426 K427 E428 A429 F430 A431 I432 V433 P434 V435 A438 E439 V440 R441 D442 L443 D444 F445 A446 N447 D448
A449 S450 K451 V452 L453 I456 A457 G458 K459 L460 E461 K462 G463 T464 I465 T466 Q467 N468 E469 R470 R471 S472 V473 T474 K475 L476 L477 E478 D479 L480 V481 Y482 F483 V484 T485 G486 G487 T488 N489 S490 G491 Q492 D493 V494 V497 V498 F499 S500 K501 P502 N503 R504 E505 R506 Q507 K508 L509 M510
R511 E512 Q513 N514 I515 L516 K517 Q518 I519 L522 L523 Q524 A525 P526 P527 T528 D529 C530 G531 D532 G533 P534 R537 L538 E539 E540 L541 G542 D543 Q544 R545 H546 A547 P548 F549 R550 H551 I552 C553 R554 L555 C556 Y557 R558 V559 L560 R561 H562 S563 Q564 Q565 D566 Y567 R568 K569 N570 Q571 E572
Y573 I574 A575 K576 Q577 F580 M581 Q582 K583 T682 G683 W697 R701 K720 E721 L739 F740 A741 R742 M743 C744 N772 L773 D791 ARG ASP PRO GLN GLU GLN VAL THR PRO VAL LYS TYR ALA ARG LEU TRP SER GLU ILE PRO SER GLU ILE ALA ILE ASP ASP TYR
ASP SER SER GLY ALA S925 F878 Y879 N880 F881 S882 D883 V900 THR THR ILE PHE PRO ILE SER LYS MET THR LYS GLY GLU GLU ASN LYS GLY SER ASN VAL MET ARG SER ILE HIS GLY VAL GLY GLU LEU MET THR GLN VAL VAL LEU ARG GLY GLY GLY PHE LEU PRO MET THR
PRO MET ALA ALA ALA PRO GLU GLY ASN VAL LYS GLN ALA GLU P960 E961 K962 I965 S1004 N1005 S1009 E1010 T1011 S1012 S1013 S1016 T1048 G1057 R1058 T1059 H1066 F1087 S1088 Q1089 R1090 Q1091 E1092 K1098 Q1099 W1132 V1133 Y1134 LYS GLY GLN GLY PRO ASP GLU PRO
MET ASP GLY ALA SER GLY GLU ASN GLU HIS LYS LYS THR GLU GLU GLY THR SER LYS PRO LEU LYS HIS GLU SER THR SER SER TYR ASN TYR ARG V1175 V1176 K1177 E1178 I1181 Q1201 L1204 L1205 P1221 Y1222 E1223 K1224 A1225 E1226 D1227 T1228 F1244 G1247 H1258 I1259 N1260
P1265 G1266 E1269 A1270 Q1274 N1288 E1289 R1290 T1301 H1302 G1303 V1306 Q1307 Y1308 I1309 K1310 F1311 V1316 E1319 G1320 K1321 F1322 I1323 K1324 K1325 C1326 Q1327 D1328 M1329 V1330 M1331 L1334 V1335 E1339 L1342 V1343 F1344 Y1345 A1349 S1350 Q1356 M1357 M1358 R1359 S1360 E1361 R1362
D1363 R1364 M1365 D1366 E1367 N1368 S1369 P1370 L1371 F1372 M1373 Y1374 H1375 I1376 H1377 V1384 C1385 T1386 E1387 G1388 K1389 N1390 V1391 Y1392 T1393 E1394 I1395 K1396 C1397 N1398 S1399 L1400 L1401 P1402 L1403 D1404 D1405 I1406 V1407 R1408 V1409 V1410 T1411 H1412 E1413 D1414 C1415 I1416 P1417 E1418 V1419 K1420 I1421 A1422 Y1423 N1428 H1429 C1430
Y1431 V1432 D1433 T1434 E1435 V1436 E1437 M1438 K1439 E1440 I1441 Y1442 T1443 S1444 N1445 H1446 M1447 W1448 K1449 L1450 F1451 E1452 N1453 F1454 L1455 V1456 D1457 I1458 C1459 R1460 A1461 C1462 N1463 N1464 T1465 S1466 D1467 R1468 K1469 H1470 A1471 D1472 S1473 V1474 L1475 E1476 K1477 Y1478 V1479 T1480 E1481 I1482 V1483 M1484 S1485 I1486 V1487 T1488 T1489 F1490
F1491 S1492 S1493 P1494 PHE SER ASP ASN SER THR THR LEU GLN THR ARG GLN PRO VAL PHE VAL GLN LEU LEU GLN GLY VAL PHE ARG VAL TYR HIS CYS ASN TRP LEU MET PRO SER GLN LYS ALA SER VAL GLU SER CYS ILE ARG VAL LEU SER ASP VAL ALA LYS SER ARG ALA ILE ALA
ILE PRO VAL ASP LEU ASP SER GLN VAL ASN LEU PHE LEU LYS SER HIS ASN ILE VAL GLN LYS THR ALA MET ASN TRP ARG LEU SER ALA ARG ASN ALA ASP ARG ARG ASP SER VAL LEU ALA ALA S1594 F1637 P1638 D1642 A1643 E1665 G1688 TYR GLY GLU LYS GLN ILE
SER ILE ASP GLU LEU GLU ASN ALA GLU LEU PRO GLN PRO PRO GLU ALA GLU ASN SER THR GLU GLN GLU LEU GLU PRO SER PRO PRO LEU ARG GLN LEU GLU ASP HIS LYS ARG GLY GLU ALA LEU ARG GLN ILE LEU VAL ASN ARG TYR TYR GLY ASN ILE ARG PRO SER GLY ARG ARG



• Molecule 1: Inositol 1,4,5-trisphosphate receptor type 1

Chain C:

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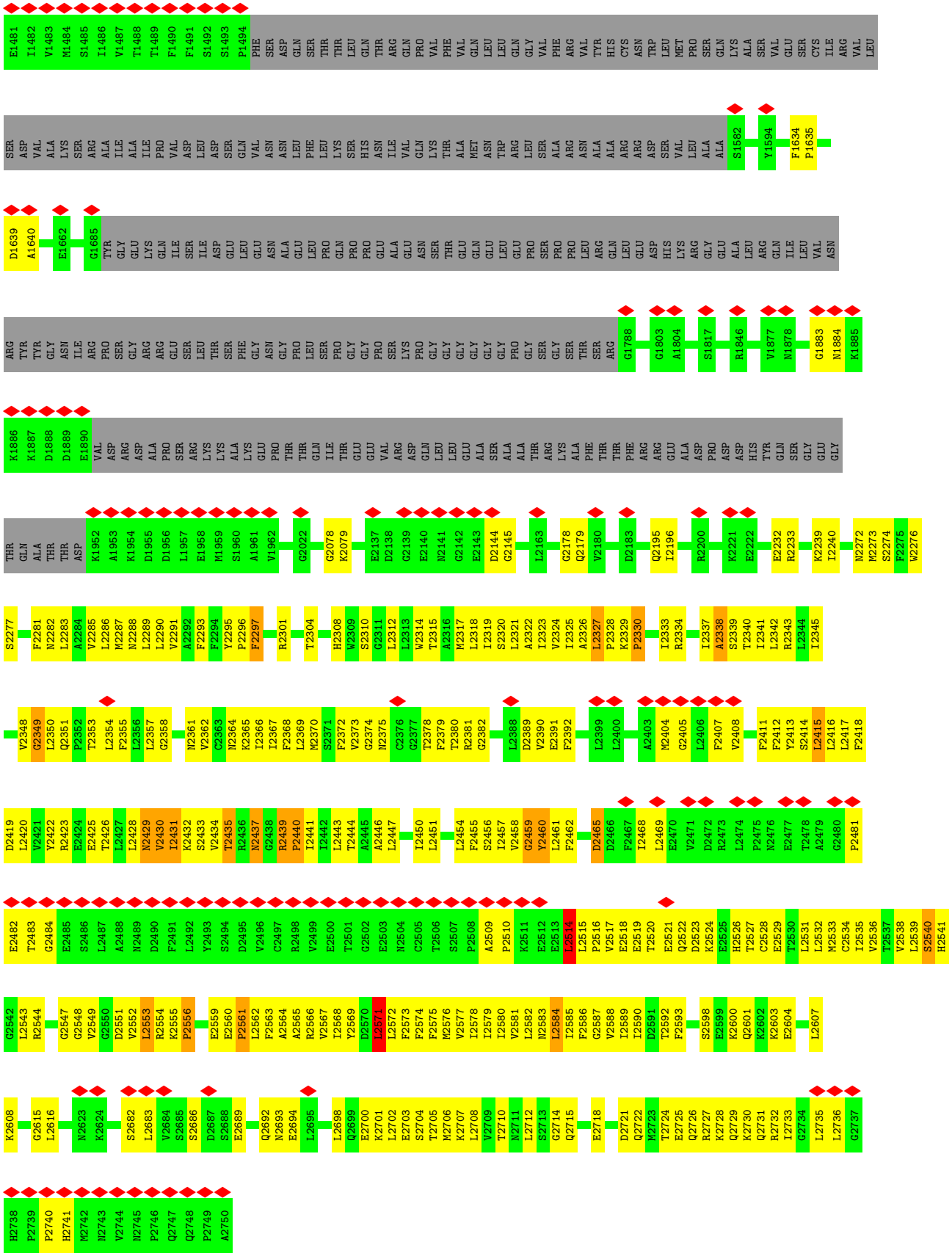
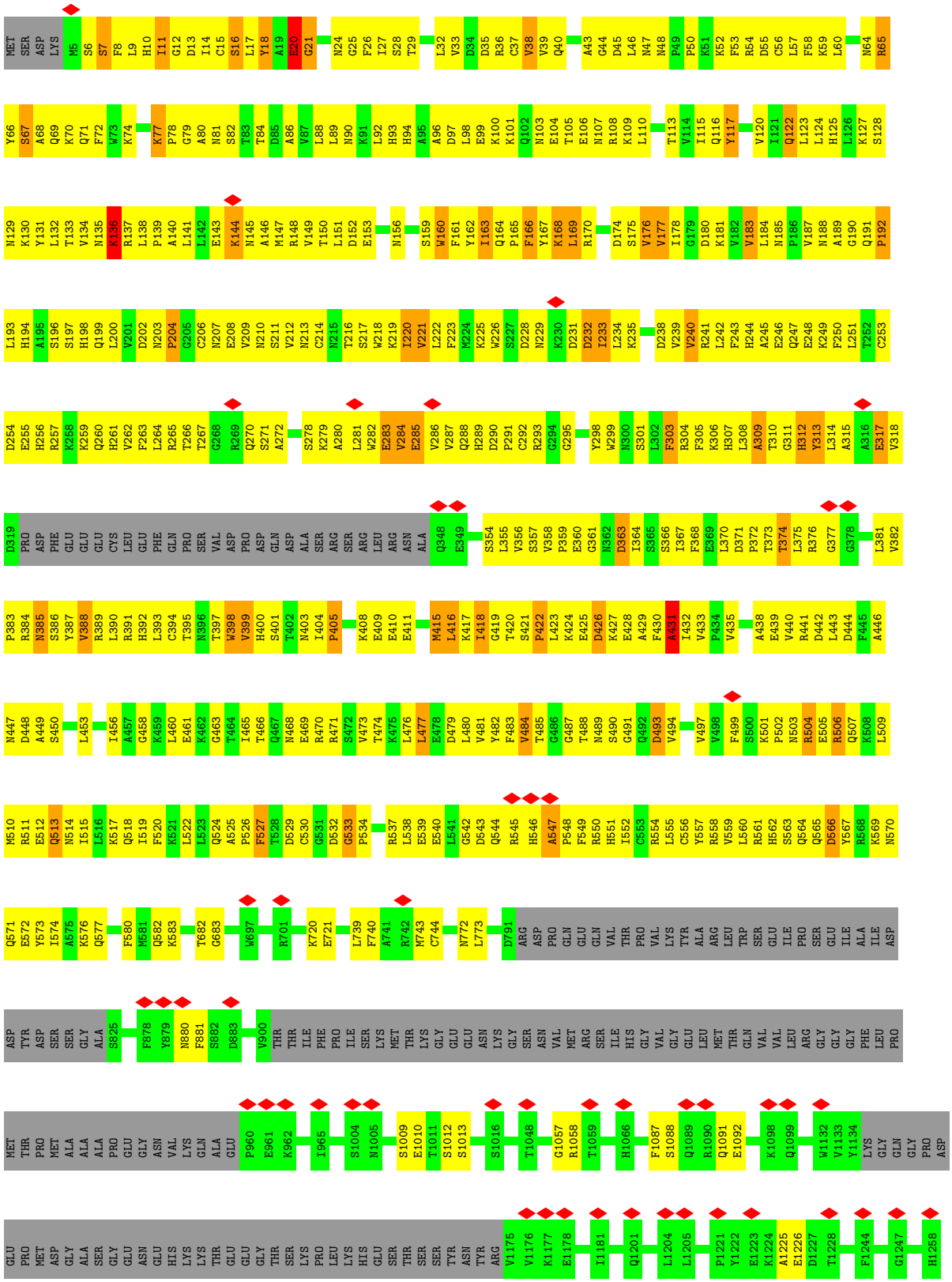
PHE GLU GLU GLU CYS LEU GLU PHE GLN PRO SER VAL ASP PRO ASP GLN ASP ALA SER ARG SER ARG LEU ARG ASN ALA Q348 E349 Y353 S354 L355 V356 S357 V358 P359 E360 G361 N362 D363 I364 S365 S366 I367 F368 E369 L370 D371 P372 T373 T374 L375 R376 G377 G378 L381 V382 P383 R384
N385 S386 Y387 V388 R389 L390 R391 H392 L393 C394 T395 N396 T397 W398 V399 H400 N403 I404 P405 K408 E409 E410 E411 M415 L416 K417 I418 G419 T420 S421 P422 L423 K424 E425 D426 K427 E428 A429 F430 A431 I432 V433 P434 V435 A438 E439 V440 R441 D442 L443 D444 F445 A446 N447 D448 A449
S450 K451 V452 L453 I456 A457 G458 K459 L460 E461 K462 G463 T464 I465 T466 Q467 N468 E469 R470 R471 S472 V473 T474 K475 L476 L477 E478 D479 L480 V481 Y482 F483 P422 V484 T485 G486 G487 T488 N489 S490 G491 Q492 D493 V494 V497 V498 F499 S500 K501 P502 N503 R504 E505 R506 Q507 K508 L509 M510 R511
E512 Q513 N514 I515 L516 K517 Q518 I519 L522 L523 Q524 A525 P526 F527 T528 D529 C530 G531 D532 G533 P534 R537 L538 E539 E540 L541 G542 D543 Q544 R545 H546 A547 P548 F549 R550 H551 I552 C553 R554 L555 C556 Y557 R558 V559 L560 R561 H562 S563 Q564 Q565 D566 Y567 R568 K569 N570 Q571 E572 Y573
I574 A575 K576 Q577 F580 M581 Q582 K583 V589 T660 T682 G683 W697 R701 K720 E721 L739 F740 A741 R742 W743 C744 N772 L773 D791 ARG ASP PRO GLN GLU GLN VAL THR PRO VAL LYS TYR ALA ARG LEU TRP SER GLU ILE PRO SER GLU ILE ALA ILE
ASP ASP TYR ASP SER SER GLY ALA S825 F878 Y879 N880 F881 S882 D883 V900 THR THR ILE PHE PRO ILE SER LYS MET THR LYS GLY GLU GLU ASN LYS GLY SER ASN VAL MET ARG SER ILE HIS GLY VAL GLY GLU LEU MET THR GLN VAL VAL LEU ARG GLY GLY GLY PHE LEU
PRO MET THR PRO MET ALA ALA ALA PRO GLU GLY ASN VAL LYS GLN ALA GLU P960 E961 K962 I965 M966 S1004 N1005 S1008 S1009 E1010 T1011 S1012 S1013 S1016 T1048 G1057 R1058 T1059 H1066 F1087 S1088 Q1089 R1090 Q1091 E1092 K1098 Q1099 W1132 Y1133 Y1134 LYS GLY GLN
GLY PRO ASP GLU PRO MET ASP GLY ALA SER GLY GLU ASN GLU HIS LYS LYS THR GLU GLU GLY THR SER LYS PRO LEU LYS HIS GLU SER THR SER SER TYR ASN TYR ARG V1175 V1176 K1177 E1178 I1181 Q1201 L1204 L1205 P1221 Y1222 E1223 K1224 A1225 E1226 D1227 T1228 F1244 C1245
A1246 G1247 L1255 H1258 I1259 N1260 P1265 G1266 E1269 A1270 Q1274 N1288 E1289 R1290 T1301 H1302 G1303 V1306 Q1307 Y1308 I1309 K1310 F1311 L1312 V1316 K1317 A1318 E1319 G1320 K1321 F1322 I1323 K1324 K1325 C1326 Q1327 D1328 M1329 V1330 M1331 L1334 V1335 E1339 L1342 V1343 F1344 Y1345
A1349 S1350 Q1356 M1357 M1358 R1359 S1360 E1361 R1362 D1363 R1364 M1365 D1366 E1367 N1368 S1369 P1370 L1371 F1372 M1373 Y1374 H1375 I1376 H1377 V1384 C1385 T1386 E1387 G1388 K1389 N1390 V1391 Y1392 T1393 E1394 I1395 K1396 C1397 N1398 S1399 L1400 L1401 P1402 L1403 D1404 D1405 I1406 V1407 R1408 V1409 V1410 T1411 H1412 E1413 D1414 C1415 I1416 P1417
E1418 V1419 K1420 I1421 A1422 Y1423 N1428 H1429 C1430 Y1431 V1432 D1433 T1434 E1435 V1436 E1437 M1438 K1439 E1440 I1441 Y1442 T1443 S1444 N1445 H1446 M1447 W1448 K1449 L1450 F1451 E1452 N1453 F1454 L1455 V1456 D1457 I1458 C1459 R1460 A1461 C1462 N1463 N1464 T1465 S1466 D1467 R1468 K1469 H1470 A1471 D1472 S1473 V1474 L1475 E1476 K1477 Y1478 V1479 T1480



- Molecule 1: Inositol 1,4,5-trisphosphate receptor type 1

Chain D:

12%
58%
24%
15%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Y66 S67 A68 Q69 K70 Q71 F72 W73 K74 K77 P78 G79 A80 N81 S82 T83 T84 D85 A86 W87 L88 L89 N90 K91 L92 H93 H94 A95 A96 D97 L98 E99 K100 K101 Q102 N103 E104 T105 E106 N107 R108 K109 L110 T113 V114 I115 Q116 Y117 V120 I121 Q122 L123 L124 H125 L126 K127 S128
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D254 E255 H256 R257 K258 K259 Q260 H261 V262 F263 L264 R265 T266 T267 G268 R269 Q270 S271 A272 S278 K279 A280 L281 W282 E283 V284 E285 V286 V287 Q288 H289 D290 P291 C292 R293 G294 G295 Y298 W299 N300 S301 L302 F303 R304 F305 K306 H307 L308 A309 T310 G311 H312 Y313 L314 A315 A316 E317 V318
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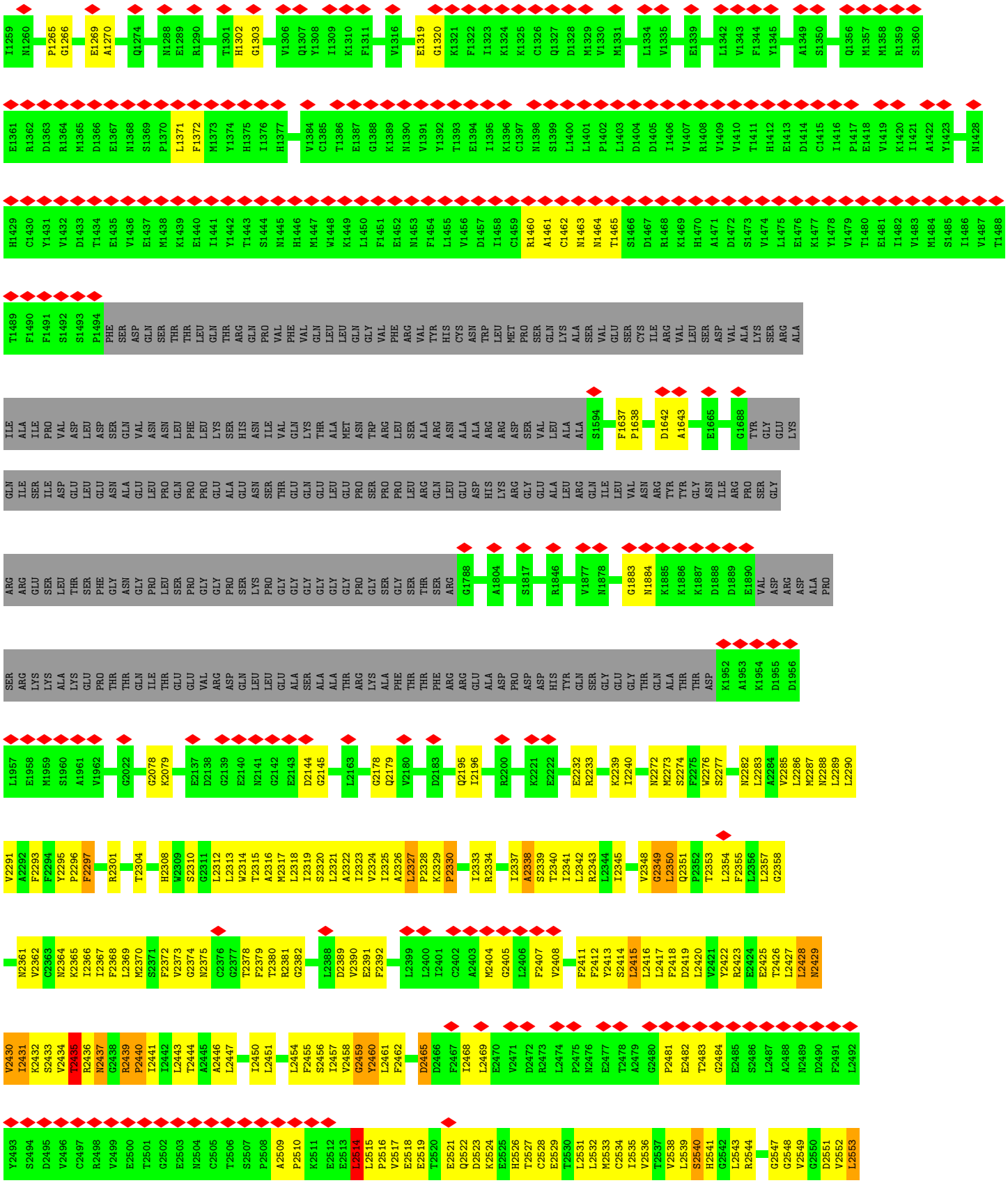
P383 R384 N385 S386 Y387 V388 R389 L390 R391 H392 L393 G394 T395 N396 T397 W398 V399 H400 S401 T402 N403 I404 P405 K408 E409 E410 E411 N415 L416 K417 I418 G419 T420 S421 P422 L423 K424 E425 D426 K427 E428 A429 F430 A431 I432 V433 P434 V435 A438 E439 V440 R441 D442 L443 D444 F445 A446
N447 D448 A449 S450 L453 I456 A457 G458 K459 L460 E461 K462 G463 T464 I465 T466 Q467 N468 E469 R470 R471 S472 V473 T474 K475 L476 L477 E478 D479 L480 V481 Y482 F483 V484 T485 G486 G487 T488 N489 S490 G491 Q492 D493 V494 V497 V498 F499 S500 K501 P502 N503 R504 E505 R506 Q507 K508 L509
M510 R511 E512 Q513 N514 I515 L516 K517 Q518 I519 F520 K521 L522 L523 Q524 A525 P526 F527 T528 D529 C530 G531 D532 G533 P534 R537 L538 E539 E540 L541 G542 D543 Q544 R545 H546 A547 P548 F549 R550 H551 I552 C553 R554 L555 C556 Y557 R558 V559 L560 R561 H562 S563 G564 Q565 D566 Y567 R568 K569 N570
Q571 E572 Y573 I574 A575 K576 Q577 F580 M581 Q582 K583 T682 G683 W697 R701 K720 E721 L739 F740 A741 R742 M743 C744 N772 L773 D791 ARG ASP PRO GLN GLU GLU GLN VAL THR PRO VAL LYS TYR ALA ARG LEU TRP SER GLU ILE PRO SER GLU ILE ILE ALA ILE ASP
ASP TYR ASP SER SER GLY ALA S825 F878 Y879 N880 F881 S882 D883 V900 THR THR ILE PHE PRO ILE SER LYS MET THR LYS GLY GLU GLU ASN LYS GLY SER ASN VAL MET ARG SER ILE HIS GLY VAL GLY GLU LEU MET THR GLN VAL VAL LEU ARG GLY GLY GLY PHE LEU PRO
MET THR PRO MET ALA ALA ALA PRO GLU GLY ASN VAL LYS GLN ALA GLU P960 E961 K962 I965 S1004 N1005 S1009 E1010 T1011 S1012 S1013 S1016 T1048 G1057 R1058 T1059 H1066 F1087 S1088 Q1089 R1090 Q1091 E1092 K1098 Q1099 W1132 V1133 Y1134 LYS GLY GLN GLY PRO ASP
GLU PRO MET ASP GLY ALA SER GLY GLU ASN GLU HIS LYS LYS THR GLU GLU GLY THR SER LYS PRO LEU LYS HIS GLU SER THR SER SER TYR ASN TYR ARG V1175 V1176 K1177 E1178 I1181 Q1201 L1204 L1205 P1221 Y1222 E1223 K1224 A1225 E1226 D1227 T1228 F1244 G1247 H1258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T1489 F1490 F1491 S1492 S1493 P1494 PHE SER ASP GLN SER THR THR LEU GLN THR ARG GLN PRO VAL PHE VAL GLN LEU LEU GLN GLY VAL PHE ARG VAL TYR HIS CYS ASN TRP LEU MET PRO SER GLN LYS ALA SER VAL GLU SER CYS ILE ARG VAL LEU SER ASP VAL ALA LYS SER ARG ALA
ILE ALA ILE PRO VAL ASP LEU ASP SER GLN VAL ASN ASN LEU PHE LEU LYS SER HIS ASN ILE VAL GLN LYS THR ALA MET ASN TRP ARG LEU SER ALA ARG ARG ASN ALA ALA ARG ARG ASP SER VAL LEU ALA ALA S1594 F1637 P1638 D1642 A1643 E1665 G1688 TYR GLY GLU LYS
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ARG ARG GLU SER LEU THR SER PHE GLY ASN GLY PRO LEU SER PRO GLY GLY PRO SER LYS PRO GLY GLY GLY GLY GLY GLY PRO GLY SER GLY SER THR SER ARG G1788 A1804 S1817 R1846 V1877 N1878 G1883 N1884 K1885 K1886 K1887 D1888 D1889 E1890 VAL ASP ARG ASP ALA PRO
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V2430 I2431 K2432 S2433 V2434 T2435 R2436 N2437 G2438 R2439 P2440 I2441 I2442 L2443 T2444 A2445 A2446 L2447 I2450 L2451 L2454 F2455 S2456 I2457 V2458 G2459 Y2460 L2461 F2462 D2465 D2466 F2467 I2468 L2469 E2470 V2471 D2472 R2473 L2474 P2475 N2476 E2477 T2478 A2479 G2480 P2481 E2482 T2483 G2484 E2485 S2486 L2487 A2488 N2489 D2490 F2491 L2492
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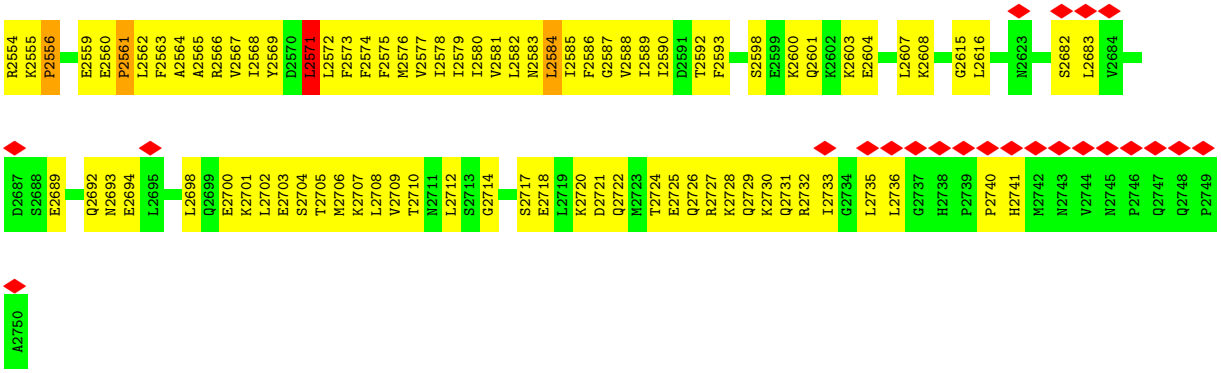
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P2749
A2750

4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C4	Depositor
Number of particles used	96106	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	CTFFIND3	Depositor
Microscope	FEI POLARA 300	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	22	Depositor
Minimum defocus (nm)	600	Depositor
Maximum defocus (nm)	3500	Depositor
Magnification	30886	Depositor
Image detector	GATAN K2 (4k x 4k)	Depositor
Maximum map value	16.272	Depositor
Minimum map value	-6.215	Depositor
Average map value	0.030	Depositor
Map value standard deviation	0.385	Depositor
Recommended contour level	0.7	Depositor
Map size (Å)	414.72, 414.72, 414.72	wwPDB
Map dimensions	256, 256, 256	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.62, 1.62, 1.62	Depositor

5 Model quality (i)

5.1 Standard geometry (i)

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	2.33	24/7045 (0.3%)	0.89	25/9516 (0.3%)
1	B	2.33	24/7045 (0.3%)	0.89	25/9516 (0.3%)
1	C	2.34	24/7045 (0.3%)	0.89	25/9516 (0.3%)
1	D	2.34	28/7045 (0.4%)	0.91	29/9516 (0.3%)
All	All	2.34	100/28180 (0.4%)	0.89	104/38064 (0.3%)

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	0	8
1	B	0	8
1	C	0	8
1	D	0	8
All	All	0	32

All (100) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	20	GLU	CG-CD	82.22	2.75	1.51
1	D	20	GLU	CG-CD	82.21	2.75	1.51
1	C	20	GLU	CG-CD	82.19	2.75	1.51
1	A	20	GLU	CG-CD	82.13	2.75	1.51
1	D	176	VAL	CA-CB	77.97	3.18	1.54
1	B	176	VAL	CA-CB	77.93	3.18	1.54
1	C	176	VAL	CA-CB	77.90	3.18	1.54
1	A	176	VAL	CA-CB	77.88	3.18	1.54
1	A	18	TYR	CD2-CE2	50.91	2.15	1.39
1	C	18	TYR	CD2-CE2	50.91	2.15	1.39
1	D	18	TYR	CD2-CE2	50.78	2.15	1.39
1	B	18	TYR	CD2-CE2	50.77	2.15	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	18	TYR	CD1-CE1	46.80	2.09	1.39
1	A	18	TYR	CD1-CE1	46.78	2.09	1.39
1	B	18	TYR	CD1-CE1	46.73	2.09	1.39
1	D	18	TYR	CD1-CE1	46.72	2.09	1.39
1	D	117	TYR	CD2-CE2	43.66	2.04	1.39
1	C	117	TYR	CD2-CE2	43.65	2.04	1.39
1	B	117	TYR	CD2-CE2	43.62	2.04	1.39
1	A	117	TYR	CD2-CE2	43.61	2.04	1.39
1	A	303	PHE	CD2-CE2	41.56	2.22	1.39
1	C	303	PHE	CD2-CE2	41.56	2.22	1.39
1	A	117	TYR	CD1-CE1	41.47	2.01	1.39
1	C	117	TYR	CD1-CE1	41.47	2.01	1.39
1	D	303	PHE	CD2-CE2	41.46	2.22	1.39
1	B	303	PHE	CD2-CE2	41.45	2.22	1.39
1	B	117	TYR	CD1-CE1	41.38	2.01	1.39
1	D	117	TYR	CD1-CE1	41.38	2.01	1.39
1	D	303	PHE	CD1-CE1	40.92	2.21	1.39
1	A	303	PHE	CD1-CE1	40.88	2.21	1.39
1	B	303	PHE	CD1-CE1	40.87	2.21	1.39
1	C	303	PHE	CD1-CE1	40.83	2.21	1.39
1	D	303	PHE	CE2-CZ	39.66	2.12	1.37
1	C	303	PHE	CE2-CZ	39.65	2.12	1.37
1	B	303	PHE	CE2-CZ	39.63	2.12	1.37
1	A	303	PHE	CE2-CZ	39.62	2.12	1.37
1	B	303	PHE	CE1-CZ	38.81	2.11	1.37
1	D	303	PHE	CE1-CZ	38.81	2.11	1.37
1	C	303	PHE	CE1-CZ	38.78	2.11	1.37
1	A	303	PHE	CE1-CZ	38.76	2.10	1.37
1	B	285	GLU	CA-C	35.21	2.44	1.52
1	D	285	GLU	CA-C	35.20	2.44	1.52
1	A	285	GLU	CA-C	35.20	2.44	1.52
1	C	285	GLU	CA-C	35.19	2.44	1.52
1	A	18	TYR	CE2-CZ	32.09	1.80	1.38
1	B	18	TYR	CE2-CZ	32.07	1.80	1.38
1	D	18	TYR	CE2-CZ	32.07	1.80	1.38
1	C	18	TYR	CE2-CZ	32.07	1.80	1.38
1	C	117	TYR	CE1-CZ	31.99	1.80	1.38
1	A	117	TYR	CE1-CZ	31.96	1.80	1.38
1	D	18	TYR	CE1-CZ	31.93	1.80	1.38
1	D	117	TYR	CE1-CZ	31.90	1.80	1.38
1	B	18	TYR	CE1-CZ	31.89	1.80	1.38
1	B	117	TYR	CE1-CZ	31.89	1.80	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	18	TYR	CE1-CZ	31.88	1.79	1.38
1	C	18	TYR	CE1-CZ	31.85	1.79	1.38
1	B	117	TYR	CE2-CZ	31.14	1.79	1.38
1	D	117	TYR	CE2-CZ	31.14	1.79	1.38
1	C	117	TYR	CE2-CZ	31.08	1.78	1.38
1	A	117	TYR	CE2-CZ	31.06	1.78	1.38
1	A	117	TYR	CG-CD2	25.64	1.72	1.39
1	C	117	TYR	CG-CD2	25.59	1.72	1.39
1	D	117	TYR	CG-CD2	25.59	1.72	1.39
1	B	117	TYR	CG-CD2	25.53	1.72	1.39
1	D	303	PHE	CG-CD2	25.22	1.76	1.38
1	B	303	PHE	CG-CD2	25.18	1.76	1.38
1	A	303	PHE	CG-CD2	25.17	1.76	1.38
1	C	303	PHE	CG-CD2	25.17	1.76	1.38
1	D	18	TYR	CG-CD1	25.02	1.71	1.39
1	B	18	TYR	CG-CD1	24.97	1.71	1.39
1	C	18	TYR	CG-CD1	24.97	1.71	1.39
1	C	18	TYR	CG-CD2	24.94	1.71	1.39
1	A	18	TYR	CG-CD1	24.93	1.71	1.39
1	B	18	TYR	CG-CD2	24.90	1.71	1.39
1	D	18	TYR	CG-CD2	24.90	1.71	1.39
1	A	18	TYR	CG-CD2	24.89	1.71	1.39
1	A	303	PHE	CG-CD1	24.31	1.75	1.38
1	C	303	PHE	CG-CD1	24.31	1.75	1.38
1	B	303	PHE	CG-CD1	24.30	1.75	1.38
1	D	303	PHE	CG-CD1	24.25	1.75	1.38
1	A	117	TYR	CG-CD1	24.07	1.70	1.39
1	C	117	TYR	CG-CD1	24.07	1.70	1.39
1	B	117	TYR	CG-CD1	24.04	1.70	1.39
1	D	117	TYR	CG-CD1	24.04	1.70	1.39
1	D	2428	LEU	CA-C	8.77	1.75	1.52
1	A	176	VAL	CB-CG2	8.55	1.70	1.52
1	C	176	VAL	CB-CG2	8.54	1.70	1.52
1	D	176	VAL	CB-CG2	8.53	1.70	1.52
1	B	176	VAL	CB-CG2	8.50	1.70	1.52
1	C	176	VAL	CB-CG1	8.18	1.70	1.52
1	A	176	VAL	CB-CG1	8.14	1.70	1.52
1	B	176	VAL	CB-CG1	8.10	1.69	1.52
1	D	176	VAL	CB-CG1	8.09	1.69	1.52
1	D	2428	LEU	N-CA	7.95	1.62	1.46
1	C	20	GLU	CB-CG	7.40	1.66	1.52
1	A	20	GLU	CB-CG	7.40	1.66	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	20	GLU	CB-CG	7.39	1.66	1.52
1	D	20	GLU	CB-CG	7.38	1.66	1.52
1	D	2435	THR	C-O	5.55	1.33	1.23
1	D	2428	LEU	C-O	5.43	1.33	1.23

All (104) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	B	20	GLU	OE1-CD-OE2	-19.29	100.15	123.30
1	D	20	GLU	OE1-CD-OE2	-19.28	100.16	123.30
1	A	20	GLU	OE1-CD-OE2	-19.28	100.17	123.30
1	C	20	GLU	OE1-CD-OE2	-19.26	100.19	123.30
1	A	285	GLU	O-C-N	-12.35	102.94	122.70
1	C	285	GLU	O-C-N	-12.35	102.94	122.70
1	D	285	GLU	O-C-N	-12.34	102.96	122.70
1	B	285	GLU	O-C-N	-12.31	103.00	122.70
1	A	176	VAL	CA-CB-CG2	11.13	127.59	110.90
1	B	176	VAL	CA-CB-CG2	11.12	127.59	110.90
1	D	176	VAL	CA-CB-CG2	11.12	127.58	110.90
1	C	176	VAL	CA-CB-CG2	11.11	127.56	110.90
1	D	2428	LEU	N-CA-C	10.78	140.11	111.00
1	C	2429	ASN	N-CA-C	10.35	138.93	111.00
1	A	2429	ASN	N-CA-C	10.33	138.90	111.00
1	B	2429	ASN	N-CA-C	10.32	138.87	111.00
1	A	176	VAL	CA-CB-CG1	10.15	126.13	110.90
1	C	176	VAL	CA-CB-CG1	10.13	126.10	110.90
1	B	176	VAL	CA-CB-CG1	10.12	126.08	110.90
1	D	176	VAL	CA-CB-CG1	10.12	126.07	110.90
1	C	285	GLU	N-CA-CB	-8.84	94.69	110.60
1	A	285	GLU	N-CA-CB	-8.81	94.74	110.60
1	B	285	GLU	N-CA-CB	-8.79	94.77	110.60
1	D	285	GLU	N-CA-CB	-8.79	94.77	110.60
1	D	2429	ASN	N-CA-C	8.24	133.25	111.00
1	B	285	GLU	CB-CA-C	7.54	125.47	110.40
1	D	285	GLU	CB-CA-C	7.53	125.47	110.40
1	C	285	GLU	CB-CA-C	7.53	125.45	110.40
1	A	285	GLU	CB-CA-C	7.51	125.43	110.40
1	B	176	VAL	CB-CA-C	7.26	125.20	111.40
1	D	176	VAL	CB-CA-C	7.26	125.19	111.40
1	C	176	VAL	CB-CA-C	7.25	125.18	111.40
1	A	176	VAL	CB-CA-C	7.25	125.17	111.40
1	D	285	GLU	CA-C-N	6.67	131.87	117.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	285	GLU	CA-C-N	6.67	131.87	117.20
1	B	285	GLU	CA-C-N	6.66	131.86	117.20
1	C	285	GLU	CA-C-N	6.66	131.85	117.20
1	D	20	GLU	CG-CD-OE1	6.53	131.35	118.30
1	A	20	GLU	CG-CD-OE1	6.52	131.35	118.30
1	B	20	GLU	CG-CD-OE1	6.52	131.34	118.30
1	C	20	GLU	CG-CD-OE1	6.52	131.34	118.30
1	A	2430	VAL	CB-CA-C	-6.47	99.11	111.40
1	C	2430	VAL	CB-CA-C	-6.46	99.13	111.40
1	B	2430	VAL	CB-CA-C	-6.45	99.14	111.40
1	C	303	PHE	CB-CG-CD2	-6.27	116.41	120.80
1	D	303	PHE	CB-CG-CD2	-6.27	116.41	120.80
1	D	2429	ASN	CB-CA-C	-6.26	97.88	110.40
1	A	303	PHE	CB-CG-CD2	-6.22	116.45	120.80
1	B	303	PHE	CB-CG-CD2	-6.21	116.45	120.80
1	D	2428	LEU	CA-C-O	6.09	132.88	120.10
1	B	477	LEU	CA-CB-CG	5.93	128.94	115.30
1	D	477	LEU	CA-CB-CG	5.92	128.90	115.30
1	B	2571	LEU	CA-CB-CG	5.91	128.88	115.30
1	D	2571	LEU	CA-CB-CG	5.89	128.85	115.30
1	A	2571	LEU	CA-CB-CG	5.86	128.79	115.30
1	C	2571	LEU	CA-CB-CG	5.84	128.74	115.30
1	D	2429	ASN	N-CA-CB	-5.83	100.11	110.60
1	C	285	GLU	N-CA-C	5.78	126.60	111.00
1	D	303	PHE	CD1-CG-CD2	5.76	125.79	118.30
1	A	285	GLU	N-CA-C	5.76	126.56	111.00
1	B	285	GLU	N-CA-C	5.75	126.53	111.00
1	D	285	GLU	N-CA-C	5.75	126.51	111.00
1	A	303	PHE	CD1-CG-CD2	5.73	125.75	118.30
1	C	303	PHE	CD1-CG-CD2	5.73	125.75	118.30
1	A	20	GLU	CB-CG-CD	5.73	129.67	114.20
1	B	20	GLU	CB-CG-CD	5.73	129.66	114.20
1	D	20	GLU	CB-CG-CD	5.72	129.64	114.20
1	D	2427	LEU	C-N-CA	5.72	136.00	121.70
1	B	303	PHE	CD1-CG-CD2	5.72	125.73	118.30
1	B	2437	ASN	N-CA-CB	5.71	120.88	110.60
1	C	20	GLU	CB-CG-CD	5.70	129.58	114.20
1	A	2437	ASN	N-CA-CB	5.68	120.82	110.60
1	C	477	LEU	CA-CB-CG	5.67	128.35	115.30
1	A	477	LEU	CA-CB-CG	5.66	128.31	115.30
1	B	176	VAL	N-CA-C	-5.65	95.75	111.00
1	D	176	VAL	N-CA-C	-5.65	95.75	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	C	2437	ASN	N-CA-CB	5.64	120.75	110.60
1	D	2437	ASN	N-CA-CB	5.63	120.74	110.60
1	A	176	VAL	N-CA-C	-5.59	95.91	111.00
1	C	176	VAL	N-CA-C	-5.58	95.94	111.00
1	D	2430	VAL	CB-CA-C	-5.47	101.01	111.40
1	B	176	VAL	N-CA-CB	5.24	123.03	111.50
1	D	176	VAL	N-CA-CB	5.24	123.03	111.50
1	B	176	VAL	CG1-CB-CG2	-5.23	102.53	110.90
1	D	176	VAL	CG1-CB-CG2	-5.23	102.53	110.90
1	A	176	VAL	CG1-CB-CG2	-5.23	102.53	110.90
1	C	176	VAL	CG1-CB-CG2	-5.20	102.58	110.90
1	A	176	VAL	N-CA-CB	5.19	122.91	111.50
1	C	176	VAL	N-CA-CB	5.17	122.89	111.50
1	C	2514	LEU	CA-CB-CG	5.16	127.16	115.30
1	A	2514	LEU	CA-CB-CG	5.14	127.13	115.30
1	B	20	GLU	CG-CD-OE2	5.10	128.50	118.30
1	B	2514	LEU	CA-CB-CG	5.10	127.03	115.30
1	D	416	LEU	CA-CB-CG	5.10	127.03	115.30
1	A	20	GLU	CG-CD-OE2	5.09	128.49	118.30
1	D	20	GLU	CG-CD-OE2	5.09	128.49	118.30
1	D	2514	LEU	CA-CB-CG	5.09	127.01	115.30
1	B	2429	ASN	CB-CA-C	-5.09	100.23	110.40
1	C	20	GLU	CG-CD-OE2	5.08	128.47	118.30
1	B	416	LEU	CA-CB-CG	5.08	126.98	115.30
1	C	2429	ASN	CB-CA-C	-5.04	100.33	110.40
1	C	416	LEU	CA-CB-CG	5.02	126.85	115.30
1	A	2429	ASN	CB-CA-C	-5.02	100.36	110.40
1	A	416	LEU	CA-CB-CG	5.00	126.81	115.30

There are no chirality outliers.

All (32) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	12	GLY	Peptide
1	A	136	LYS	Peptide
1	A	163	ILE	Peptide
1	A	169	LEU	Peptide
1	A	240	VAL	Peptide
1	A	374	THR	Peptide
1	A	415	MET	Peptide
1	A	431	ALA	Peptide
1	B	12	GLY	Peptide

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Mol	Chain	Res	Type	Group
1	B	136	LYS	Peptide
1	B	163	ILE	Peptide
1	B	169	LEU	Peptide
1	B	240	VAL	Peptide
1	B	374	THR	Peptide
1	B	415	MET	Peptide
1	B	431	ALA	Peptide
1	C	12	GLY	Peptide
1	C	136	LYS	Peptide
1	C	163	ILE	Peptide
1	C	169	LEU	Peptide
1	C	240	VAL	Peptide
1	C	374	THR	Peptide
1	C	415	MET	Peptide
1	C	431	ALA	Peptide
1	D	12	GLY	Peptide
1	D	136	LYS	Peptide
1	D	163	ILE	Peptide
1	D	169	LEU	Peptide
1	D	240	VAL	Peptide
1	D	374	THR	Peptide
1	D	415	MET	Peptide
1	D	431	ALA	Peptide

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	8368	0	6997	999	0
1	B	8368	0	6997	1004	0
1	C	8368	0	6997	1004	0
1	D	8368	0	6997	1000	0
All	All	33472	0	27988	3819	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 62.

All (3819) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:303:PHE:CG	1:D:303:PHE:CD1	1.75	1.72
1:B:303:PHE:CD1	1:B:303:PHE:CG	1.75	1.71
1:D:117:TYR:CE1	1:D:117:TYR:CZ	1.80	1.70
1:A:117:TYR:CE2	1:A:117:TYR:CZ	1.78	1.70
1:B:18:TYR:CZ	1:B:18:TYR:CE2	1.80	1.69
1:C:117:TYR:CZ	1:C:117:TYR:CE1	1.80	1.68
1:C:117:TYR:CZ	1:C:117:TYR:CE2	1.79	1.68
1:C:303:PHE:CD2	1:C:303:PHE:CG	1.76	1.68
1:B:117:TYR:CZ	1:B:117:TYR:CE2	1.79	1.67
1:C:303:PHE:CG	1:C:303:PHE:CD1	1.75	1.67
1:C:18:TYR:CE1	1:C:18:TYR:CZ	1.80	1.66
1:A:303:PHE:CG	1:A:303:PHE:CD1	1.75	1.66
1:D:18:TYR:CZ	1:D:18:TYR:CE2	1.80	1.65
1:D:117:TYR:CZ	1:D:117:TYR:CE2	1.79	1.65
1:D:303:PHE:CG	1:D:303:PHE:CD2	1.76	1.65
1:B:18:TYR:CZ	1:B:18:TYR:CE1	1.80	1.64
1:A:18:TYR:CZ	1:A:18:TYR:CE2	1.80	1.64
1:A:303:PHE:CG	1:A:303:PHE:CD2	1.76	1.64
1:B:117:TYR:CZ	1:B:117:TYR:CE1	1.80	1.62
1:A:18:TYR:CZ	1:A:18:TYR:CE1	1.80	1.62
1:C:18:TYR:CZ	1:C:18:TYR:CE2	1.80	1.61
1:B:303:PHE:CG	1:B:303:PHE:CD2	1.76	1.61
1:A:117:TYR:CZ	1:A:117:TYR:CE1	1.80	1.60
1:D:18:TYR:CZ	1:D:18:TYR:CE1	1.80	1.59
1:D:2428:LEU:CA	1:D:2428:LEU:C	1.75	1.53
1:A:117:TYR:CE1	1:A:117:TYR:CD1	2.01	1.48
1:B:117:TYR:CE1	1:B:117:TYR:CD1	2.01	1.48
1:A:2586:PHE:CD2	1:B:2586:PHE:CZ	1.99	1.48
1:D:117:TYR:CE1	1:D:117:TYR:CD1	2.01	1.48
1:C:2586:PHE:CD2	1:D:2586:PHE:CZ	2.00	1.47
1:C:117:TYR:CE1	1:C:117:TYR:CD1	2.01	1.47
1:D:117:TYR:CE2	1:D:117:TYR:CD2	2.04	1.45
1:A:117:TYR:CE2	1:A:117:TYR:CD2	2.04	1.43
1:B:117:TYR:CE2	1:B:117:TYR:CD2	2.04	1.43
1:A:2586:PHE:CZ	1:D:2586:PHE:CD2	2.07	1.43
1:C:117:TYR:CE2	1:C:117:TYR:CD2	2.04	1.43
1:B:18:TYR:CE1	1:B:18:TYR:CD1	2.09	1.41
1:C:18:TYR:CE1	1:C:18:TYR:CD1	2.09	1.41
1:A:117:TYR:CD1	1:A:176:VAL:HB	1.55	1.40
1:C:117:TYR:CD1	1:C:176:VAL:HB	1.55	1.40
1:D:117:TYR:CD1	1:D:176:VAL:HB	1.55	1.40
1:B:117:TYR:CD1	1:B:176:VAL:HB	1.55	1.39

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:303:PHE:CE1	1:D:303:PHE:CZ	2.11	1.39
1:B:2586:PHE:CD2	1:C:2586:PHE:CZ	2.07	1.39
1:B:117:TYR:CE2	1:B:176:VAL:HA	1.58	1.39
1:A:18:TYR:CE1	1:A:18:TYR:CD1	2.09	1.38
1:A:303:PHE:CE1	1:A:303:PHE:CZ	2.11	1.38
1:D:117:TYR:CE2	1:D:176:VAL:HA	1.58	1.38
1:C:117:TYR:CE2	1:C:176:VAL:HA	1.58	1.38
1:C:303:PHE:CE1	1:C:303:PHE:CZ	2.11	1.38
1:D:18:TYR:CE1	1:D:18:TYR:CD1	2.09	1.38
1:A:117:TYR:CE2	1:A:176:VAL:HA	1.58	1.38
1:B:303:PHE:CZ	1:B:303:PHE:CE1	2.11	1.37
1:C:303:PHE:CZ	1:C:303:PHE:CE2	2.12	1.37
1:A:303:PHE:CZ	1:A:303:PHE:CE2	2.12	1.37
1:C:2586:PHE:CE2	1:D:2586:PHE:CZ	2.13	1.36
1:B:303:PHE:CZ	1:B:303:PHE:CE2	2.12	1.35
1:D:303:PHE:CZ	1:D:303:PHE:CE2	2.12	1.35
1:A:18:TYR:CE2	1:A:18:TYR:CD2	2.15	1.35
1:D:18:TYR:CE2	1:D:18:TYR:CD2	2.15	1.35
1:A:2586:PHE:CE2	1:B:2586:PHE:CZ	2.13	1.34
1:B:18:TYR:CE2	1:B:18:TYR:CD2	2.15	1.33
1:C:18:TYR:CE2	1:C:18:TYR:CD2	2.15	1.32
1:C:303:PHE:CD1	1:C:303:PHE:CE1	2.20	1.29
1:A:2586:PHE:CZ	1:D:2586:PHE:CE2	2.20	1.29
1:B:2586:PHE:CE2	1:C:2586:PHE:CZ	2.20	1.28
1:A:303:PHE:CD1	1:A:303:PHE:CE1	2.21	1.28
1:C:2586:PHE:CD2	1:D:2586:PHE:HZ	1.41	1.28
1:D:303:PHE:CD1	1:D:303:PHE:CE1	2.21	1.27
1:D:303:PHE:CD2	1:D:303:PHE:CE2	2.22	1.27
1:B:303:PHE:CD1	1:B:303:PHE:CE1	2.21	1.27
1:B:303:PHE:CD2	1:B:303:PHE:CE2	2.22	1.27
1:A:2586:PHE:CD2	1:B:2586:PHE:HZ	1.41	1.26
1:C:303:PHE:CD2	1:C:303:PHE:CE2	2.22	1.25
1:A:303:PHE:CD2	1:A:303:PHE:CE2	2.22	1.25
1:D:285:GLU:HA	1:D:303:PHE:CD1	1.72	1.25
1:A:285:GLU:HA	1:A:303:PHE:CD1	1.72	1.24
1:C:285:GLU:HA	1:C:303:PHE:CD1	1.71	1.24
1:A:117:TYR:CE1	1:A:176:VAL:HB	1.73	1.23
1:D:285:GLU:HA	1:D:303:PHE:CE1	1.73	1.23
1:A:2428:LEU:HG	1:A:2429:ASN:OD1	1.35	1.23
1:C:117:TYR:CE1	1:C:176:VAL:HB	1.73	1.23
1:B:117:TYR:CE1	1:B:176:VAL:HB	1.73	1.23

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:285:GLU:HA	1:B:303:PHE:CD1	1.72	1.23
1:C:2428:LEU:HG	1:C:2429:ASN:OD1	1.35	1.22
1:D:117:TYR:CE1	1:D:176:VAL:HB	1.73	1.22
1:A:285:GLU:HA	1:A:303:PHE:CE1	1.74	1.22
1:B:285:GLU:HA	1:B:303:PHE:CE1	1.73	1.22
1:C:285:GLU:HA	1:C:303:PHE:CE1	1.74	1.21
1:B:2586:PHE:CD2	1:C:2586:PHE:HZ	1.52	1.19
1:A:2437:ASN:CB	1:A:2592:THR:HG21	1.74	1.18
1:B:2428:LEU:HG	1:B:2429:ASN:OD1	1.42	1.18
1:C:2437:ASN:CB	1:C:2592:THR:HG21	1.73	1.17
1:B:2437:ASN:CB	1:B:2592:THR:HG21	1.75	1.17
1:C:2586:PHE:CE2	1:D:2586:PHE:CE2	2.34	1.15
1:B:18:TYR:CE2	1:B:20:GLU:CD	2.20	1.15
1:D:18:TYR:CE2	1:D:20:GLU:CD	2.20	1.15
1:A:18:TYR:CE2	1:A:20:GLU:CD	2.20	1.15
1:C:18:TYR:CE2	1:C:20:GLU:CD	2.20	1.15
1:A:2586:PHE:CE2	1:B:2586:PHE:CE2	2.34	1.14
1:C:2325:ILE:HG22	1:C:2329:LYS:NZ	1.64	1.13
1:A:2586:PHE:HE2	1:B:2586:PHE:CE2	1.66	1.13
1:C:285:GLU:C	1:C:303:PHE:CD2	2.22	1.12
1:D:285:GLU:C	1:D:303:PHE:CD2	2.23	1.12
1:B:285:GLU:C	1:B:303:PHE:CD2	2.23	1.12
1:C:18:TYR:CD2	1:C:20:GLU:CD	2.23	1.12
1:D:117:TYR:CE2	1:D:176:VAL:CA	2.33	1.12
1:D:18:TYR:CD2	1:D:20:GLU:CD	2.23	1.12
1:A:2586:PHE:HZ	1:D:2586:PHE:CD2	1.52	1.12
1:C:2586:PHE:CE2	1:D:2586:PHE:HZ	1.57	1.12
1:A:117:TYR:CE2	1:A:176:VAL:CA	2.33	1.11
1:B:18:TYR:CD2	1:B:20:GLU:CD	2.23	1.11
1:A:18:TYR:CD2	1:A:20:GLU:CD	2.23	1.11
1:A:285:GLU:C	1:A:303:PHE:CD2	2.22	1.11
1:C:117:TYR:CE2	1:C:176:VAL:CA	2.33	1.11
1:B:117:TYR:CE2	1:B:176:VAL:CA	2.33	1.10
1:B:285:GLU:C	1:B:303:PHE:CE2	2.25	1.10
1:D:2425:GLU:OE2	1:D:2431:ILE:HG23	1.50	1.10
1:C:285:GLU:C	1:C:303:PHE:CE2	2.25	1.10
1:D:18:TYR:CE1	1:D:20:GLU:CG	2.35	1.10
1:D:2437:ASN:CB	1:D:2592:THR:HG21	1.81	1.10
1:A:18:TYR:CE1	1:A:20:GLU:CG	2.35	1.10
1:A:2439:ARG:O	1:A:2441:ILE:N	1.84	1.10
1:A:2586:PHE:CE2	1:D:2586:PHE:CE2	2.40	1.10

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:285:GLU:C	1:C:303:PHE:CZ	2.25	1.10
1:A:285:GLU:C	1:A:303:PHE:CZ	2.25	1.10
1:A:2586:PHE:CE2	1:B:2586:PHE:HZ	1.57	1.10
1:D:2325:ILE:HG22	1:D:2329:LYS:NZ	1.67	1.09
1:A:285:GLU:C	1:A:303:PHE:CE2	2.25	1.09
1:C:18:TYR:CZ	1:C:20:GLU:CD	2.25	1.09
1:D:285:GLU:C	1:D:303:PHE:CZ	2.25	1.09
1:A:18:TYR:CZ	1:A:20:GLU:CD	2.25	1.09
1:B:18:TYR:CE1	1:B:20:GLU:CG	2.35	1.09
1:C:18:TYR:CE1	1:C:20:GLU:CG	2.35	1.09
1:C:2586:PHE:HE2	1:D:2586:PHE:CE2	1.66	1.09
1:B:2586:PHE:CE2	1:C:2586:PHE:CE2	2.40	1.09
1:D:286:VAL:N	1:D:303:PHE:CE2	2.21	1.09
1:D:2439:ARG:O	1:D:2441:ILE:N	1.86	1.09
1:A:286:VAL:N	1:A:303:PHE:CE2	2.21	1.08
1:B:18:TYR:CZ	1:B:20:GLU:CD	2.25	1.08
1:B:285:GLU:C	1:B:303:PHE:CZ	2.25	1.08
1:D:18:TYR:CZ	1:D:20:GLU:CD	2.25	1.08
1:D:18:TYR:CD1	1:D:20:GLU:CG	2.36	1.08
1:A:18:TYR:CD1	1:A:20:GLU:CG	2.36	1.08
1:C:286:VAL:N	1:C:303:PHE:CE2	2.21	1.08
1:C:2439:ARG:O	1:C:2441:ILE:N	1.84	1.08
1:D:285:GLU:C	1:D:303:PHE:CE2	2.25	1.08
1:C:18:TYR:CD1	1:C:20:GLU:CG	2.36	1.08
1:D:117:TYR:CD2	1:D:176:VAL:CA	2.37	1.08
1:D:285:GLU:CA	1:D:303:PHE:CE1	2.37	1.08
1:A:117:TYR:CZ	1:A:176:VAL:CA	2.37	1.07
1:A:117:TYR:CD2	1:A:176:VAL:CA	2.37	1.07
1:B:117:TYR:CD2	1:B:176:VAL:CA	2.37	1.07
1:C:117:TYR:CD2	1:C:176:VAL:CA	2.37	1.07
1:B:2439:ARG:O	1:B:2441:ILE:N	1.85	1.07
1:D:2437:ASN:HB3	1:D:2592:THR:HG21	1.11	1.07
1:A:285:GLU:CA	1:A:303:PHE:CE1	2.37	1.07
1:D:117:TYR:CZ	1:D:176:VAL:CA	2.37	1.07
1:B:285:GLU:CA	1:B:303:PHE:CE1	2.37	1.07
1:B:286:VAL:N	1:B:303:PHE:CE2	2.21	1.07
1:B:2325:ILE:HG22	1:B:2329:LYS:NZ	1.67	1.07
1:C:285:GLU:CA	1:C:303:PHE:CE1	2.37	1.07
1:D:18:TYR:CD1	1:D:20:GLU:CD	2.28	1.07
1:B:2586:PHE:CE2	1:C:2586:PHE:HZ	1.64	1.06
1:C:18:TYR:CD1	1:C:20:GLU:CD	2.28	1.06

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:18:TYR:CD1	1:A:20:GLU:CD	2.28	1.06
1:A:285:GLU:C	1:A:303:PHE:CE1	2.29	1.06
1:A:2437:ASN:HB3	1:A:2592:THR:CG2	1.85	1.06
1:B:18:TYR:CD1	1:B:20:GLU:CG	2.36	1.06
1:C:2437:ASN:HB3	1:C:2592:THR:CG2	1.84	1.06
1:B:117:TYR:CZ	1:B:176:VAL:CA	2.37	1.06
1:C:117:TYR:CZ	1:C:176:VAL:CA	2.37	1.06
1:B:2586:PHE:HE2	1:C:2586:PHE:CE2	1.74	1.06
1:D:285:GLU:C	1:D:303:PHE:CE1	2.29	1.06
1:B:2437:ASN:HB3	1:B:2592:THR:CG2	1.84	1.06
1:A:285:GLU:C	1:A:303:PHE:CD1	2.30	1.05
1:B:18:TYR:CD1	1:B:20:GLU:CD	2.28	1.05
1:B:285:GLU:C	1:B:303:PHE:CE1	2.29	1.05
1:C:285:GLU:C	1:C:303:PHE:CE1	2.29	1.05
1:C:2437:ASN:CB	1:C:2592:THR:CG2	2.34	1.05
1:A:18:TYR:CE1	1:A:20:GLU:CD	2.30	1.05
1:C:18:TYR:CE1	1:C:20:GLU:CD	2.30	1.05
1:D:18:TYR:CZ	1:D:20:GLU:CG	2.40	1.05
1:D:285:GLU:C	1:D:303:PHE:CD1	2.30	1.05
1:A:2325:ILE:HG22	1:A:2329:LYS:NZ	1.70	1.05
1:B:285:GLU:C	1:B:303:PHE:CD1	2.29	1.05
1:D:18:TYR:CE1	1:D:20:GLU:CD	2.30	1.05
1:B:18:TYR:CE1	1:B:20:GLU:CD	2.30	1.04
1:D:2434:VAL:HG22	1:D:2593:PHE:CZ	1.92	1.04
1:B:18:TYR:CZ	1:B:20:GLU:CG	2.40	1.04
1:C:285:GLU:C	1:C:303:PHE:CD1	2.30	1.04
1:A:18:TYR:CZ	1:A:20:GLU:CG	2.40	1.04
1:C:18:TYR:CZ	1:C:20:GLU:CG	2.40	1.04
1:A:2431:ILE:H	1:A:2431:ILE:HD12	1.23	1.03
1:A:2437:ASN:CB	1:A:2592:THR:CG2	2.35	1.03
1:B:18:TYR:CE2	1:B:20:GLU:CG	2.42	1.03
1:B:2431:ILE:H	1:B:2431:ILE:HD12	1.23	1.03
1:C:18:TYR:CG	1:C:20:GLU:CD	2.32	1.03
1:C:117:TYR:CE1	1:C:176:VAL:CB	2.41	1.03
1:A:18:TYR:CE2	1:A:20:GLU:CG	2.42	1.03
1:C:117:TYR:CD1	1:C:176:VAL:CB	2.42	1.03
1:C:285:GLU:C	1:C:303:PHE:CG	2.32	1.03
1:A:18:TYR:CD2	1:A:20:GLU:CG	2.42	1.03
1:A:285:GLU:C	1:A:303:PHE:CG	2.32	1.03
1:A:2586:PHE:CE2	1:D:2586:PHE:HE2	1.74	1.03
1:B:2437:ASN:CB	1:B:2592:THR:CG2	2.35	1.03

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:18:TYR:CD2	1:D:20:GLU:CG	2.42	1.03
1:D:285:GLU:C	1:D:303:PHE:CG	2.32	1.03
1:A:2586:PHE:HZ	1:D:2586:PHE:CE2	1.64	1.03
1:B:18:TYR:CD2	1:B:20:GLU:CG	2.42	1.03
1:B:117:TYR:CD1	1:B:176:VAL:CB	2.42	1.03
1:C:18:TYR:CD2	1:C:20:GLU:CG	2.42	1.03
1:D:18:TYR:CE2	1:D:20:GLU:CG	2.42	1.03
1:A:18:TYR:CG	1:A:20:GLU:CD	2.32	1.02
1:A:117:TYR:CE1	1:A:176:VAL:CB	2.41	1.02
1:A:117:TYR:CD1	1:A:176:VAL:CB	2.42	1.02
1:D:117:TYR:CD1	1:D:176:VAL:CB	2.42	1.02
1:B:18:TYR:CG	1:B:20:GLU:CD	2.32	1.02
1:B:285:GLU:C	1:B:303:PHE:CG	2.32	1.02
1:C:18:TYR:CE2	1:C:20:GLU:CG	2.42	1.02
1:D:18:TYR:CG	1:D:20:GLU:CD	2.32	1.02
1:D:117:TYR:CE1	1:D:176:VAL:CB	2.41	1.02
1:D:2425:GLU:OE2	1:D:2431:ILE:CG2	2.07	1.02
1:B:2437:ASN:HB3	1:B:2592:THR:HG21	1.02	1.02
1:B:117:TYR:CE1	1:B:176:VAL:CB	2.41	1.02
1:A:2437:ASN:HB3	1:A:2592:THR:HG21	1.02	1.01
1:C:2586:PHE:HD2	1:D:2586:PHE:CZ	1.78	1.01
1:A:285:GLU:CA	1:A:303:PHE:CZ	2.44	1.01
1:C:2437:ASN:HB3	1:C:2592:THR:HG21	1.02	1.01
1:C:373:THR:H	1:C:388:VAL:HG21	1.26	1.01
1:D:285:GLU:CA	1:D:303:PHE:CZ	2.44	1.01
1:A:373:THR:H	1:A:388:VAL:HG21	1.25	1.00
1:B:18:TYR:CG	1:B:20:GLU:CG	2.44	1.00
1:C:18:TYR:CG	1:C:20:GLU:CG	2.44	1.00
1:D:373:THR:H	1:D:388:VAL:HG21	1.26	1.00
1:B:285:GLU:CA	1:B:303:PHE:CZ	2.44	1.00
1:D:18:TYR:CG	1:D:20:GLU:CG	2.45	1.00
1:A:18:TYR:CG	1:A:20:GLU:CG	2.44	0.99
1:C:285:GLU:CA	1:C:303:PHE:CZ	2.44	0.99
1:D:285:GLU:CA	1:D:303:PHE:CE2	2.46	0.99
1:D:2431:ILE:HD12	1:D:2431:ILE:H	1.25	0.99
1:C:2431:ILE:H	1:C:2431:ILE:HD12	1.23	0.99
1:A:2586:PHE:HD2	1:B:2586:PHE:CZ	1.78	0.99
1:A:285:GLU:CA	1:A:303:PHE:CE2	2.46	0.99
1:A:117:TYR:CE2	1:A:176:VAL:CB	2.46	0.99
1:B:117:TYR:CD2	1:B:176:VAL:CB	2.46	0.99
1:D:18:TYR:CD1	1:D:20:GLU:HG3	1.98	0.98

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:117:TYR:CE1	1:A:176:VAL:CA	2.46	0.98
1:C:285:GLU:CA	1:C:303:PHE:CD1	2.46	0.98
1:C:285:GLU:CA	1:C:303:PHE:CE2	2.46	0.98
1:D:117:TYR:CD2	1:D:176:VAL:CB	2.46	0.98
1:B:117:TYR:CE1	1:B:176:VAL:CA	2.46	0.98
1:C:2434:VAL:HG22	1:C:2593:PHE:CZ	1.99	0.98
1:C:117:TYR:CZ	1:C:176:VAL:CB	2.47	0.98
1:A:117:TYR:CD2	1:A:176:VAL:CB	2.46	0.98
1:B:117:TYR:CE2	1:B:176:VAL:CB	2.46	0.98
1:A:117:TYR:CZ	1:A:176:VAL:CB	2.46	0.98
1:A:2434:VAL:HG22	1:A:2593:PHE:CZ	1.98	0.98
1:D:18:TYR:CE1	1:D:20:GLU:HG2	1.99	0.98
1:D:117:TYR:CE1	1:D:176:VAL:CA	2.46	0.98
1:C:117:TYR:CD2	1:C:176:VAL:CB	2.46	0.98
1:B:285:GLU:CA	1:B:303:PHE:CD1	2.46	0.98
1:D:285:GLU:CA	1:D:303:PHE:CD1	2.46	0.98
1:B:285:GLU:CA	1:B:303:PHE:CE2	2.46	0.97
1:C:18:TYR:CE1	1:C:20:GLU:HG2	1.99	0.97
1:C:117:TYR:CE1	1:C:176:VAL:CA	2.46	0.97
1:D:2437:ASN:HB3	1:D:2592:THR:CG2	1.93	0.97
1:C:117:TYR:CE2	1:C:176:VAL:CB	2.46	0.97
1:A:18:TYR:CE1	1:A:20:GLU:HG2	1.99	0.97
1:C:18:TYR:CD1	1:C:20:GLU:HG3	1.98	0.97
1:C:2430:VAL:O	1:C:2433:SER:OG	1.82	0.97
1:D:117:TYR:CE2	1:D:176:VAL:CB	2.46	0.97
1:B:18:TYR:CD1	1:B:20:GLU:HG3	1.98	0.97
1:A:285:GLU:CA	1:A:303:PHE:CD1	2.46	0.97
1:B:18:TYR:CE1	1:B:20:GLU:HG2	1.99	0.97
1:B:117:TYR:CZ	1:B:176:VAL:CB	2.46	0.97
1:D:117:TYR:CZ	1:D:176:VAL:CB	2.47	0.97
1:A:2430:VAL:O	1:A:2433:SER:OG	1.82	0.97
1:A:18:TYR:CD1	1:A:20:GLU:HG3	1.98	0.96
1:C:117:TYR:CD1	1:C:176:VAL:CA	2.49	0.96
1:D:117:TYR:CD1	1:D:176:VAL:CA	2.49	0.96
1:B:117:TYR:CG	1:B:176:VAL:CA	2.49	0.96
1:B:373:THR:H	1:B:388:VAL:HG21	1.27	0.96
1:C:117:TYR:CG	1:C:176:VAL:CA	2.49	0.96
1:D:117:TYR:CG	1:D:176:VAL:CA	2.49	0.96
1:B:2430:VAL:O	1:B:2433:SER:OG	1.82	0.96
1:D:2437:ASN:CB	1:D:2592:THR:CG2	2.44	0.96
1:D:2430:VAL:O	1:D:2433:SER:OG	1.82	0.95

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:242:LEU:HD13	1:A:282:TRP:HA	1.48	0.95
1:D:242:LEU:HD13	1:D:282:TRP:HA	1.47	0.95
1:A:117:TYR:CD1	1:A:176:VAL:CA	2.49	0.95
1:A:117:TYR:CG	1:A:176:VAL:CA	2.49	0.95
1:B:2434:VAL:HG22	1:B:2593:PHE:CZ	2.01	0.95
1:B:242:LEU:HD13	1:B:282:TRP:HA	1.47	0.95
1:C:117:TYR:CG	1:C:176:VAL:CB	2.50	0.94
1:D:117:TYR:CG	1:D:176:VAL:CB	2.50	0.94
1:B:117:TYR:CD1	1:B:176:VAL:CA	2.49	0.94
1:C:285:GLU:O	1:C:303:PHE:CD1	2.21	0.94
1:C:2586:PHE:HE2	1:D:2586:PHE:HE2	1.10	0.94
1:A:117:TYR:CG	1:A:176:VAL:CB	2.50	0.94
1:B:117:TYR:CG	1:B:176:VAL:CB	2.50	0.94
1:B:285:GLU:O	1:B:303:PHE:CD1	2.21	0.93
1:D:285:GLU:O	1:D:303:PHE:CD1	2.21	0.93
1:B:415:MET:HA	1:B:417:LYS:HE2	1.49	0.93
1:A:2586:PHE:HE2	1:B:2586:PHE:HE2	1.10	0.93
1:C:242:LEU:HD13	1:C:282:TRP:HA	1.48	0.93
1:A:2607:LEU:C	1:A:2608:LYS:CA	2.37	0.93
1:A:285:GLU:O	1:A:303:PHE:CD1	2.21	0.92
1:C:2607:LEU:C	1:C:2608:LYS:CA	2.37	0.92
1:D:2607:LEU:C	1:D:2608:LYS:CA	2.37	0.92
1:B:2607:LEU:C	1:B:2608:LYS:CA	2.37	0.92
1:D:415:MET:HA	1:D:417:LYS:HE2	1.49	0.92
1:C:582:GLN:C	1:C:583:LYS:CA	2.39	0.91
1:B:2586:PHE:HD2	1:C:2586:PHE:CZ	1.87	0.91
1:D:582:GLN:C	1:D:583:LYS:CA	2.39	0.91
1:B:286:VAL:N	1:B:303:PHE:CD2	2.39	0.91
1:C:222:LEU:HB3	1:C:292:CYS:HB2	1.53	0.91
1:A:582:GLN:C	1:A:583:LYS:CA	2.39	0.91
1:D:286:VAL:N	1:D:303:PHE:CD2	2.39	0.90
1:B:222:LEU:HB3	1:B:292:CYS:HB2	1.52	0.90
1:C:415:MET:HA	1:C:417:LYS:HE2	1.51	0.90
1:D:2428:LEU:HG	1:D:2429:ASN:H	1.34	0.90
1:B:582:GLN:C	1:B:583:LYS:CA	2.39	0.90
1:D:2428:LEU:HG	1:D:2429:ASN:N	1.87	0.90
1:A:286:VAL:N	1:A:303:PHE:CD2	2.40	0.90
1:B:312:HIS:ND1	1:B:358:VAL:O	2.05	0.89
1:A:312:HIS:ND1	1:A:358:VAL:O	2.05	0.89
1:A:415:MET:HA	1:A:417:LYS:HE2	1.51	0.89
1:C:286:VAL:N	1:C:303:PHE:CD2	2.40	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:285:GLU:O	1:D:303:PHE:CE1	2.26	0.89
1:D:2428:LEU:C	1:D:2431:ILE:HD13	1.91	0.89
1:D:312:HIS:ND1	1:D:358:VAL:O	2.05	0.89
1:D:222:LEU:HB3	1:D:292:CYS:HB2	1.51	0.89
1:B:130:LYS:HE3	1:B:152:ASP:HA	1.55	0.89
1:C:312:HIS:ND1	1:C:358:VAL:O	2.05	0.89
1:A:285:GLU:O	1:A:303:PHE:CE1	2.27	0.88
1:C:285:GLU:O	1:C:303:PHE:CE1	2.26	0.88
1:D:2428:LEU:HD21	1:D:2429:ASN:HD21	1.37	0.88
1:D:130:LYS:HE3	1:D:152:ASP:HA	1.55	0.88
1:A:2552:VAL:HA	1:A:2553:LEU:HB2	1.56	0.88
1:D:2434:VAL:HG22	1:D:2593:PHE:HZ	1.36	0.88
1:B:117:TYR:CD2	1:B:176:VAL:HA	2.09	0.88
1:B:511:ARG:NH2	1:B:569:LYS:O	2.07	0.88
1:C:2552:VAL:HA	1:C:2553:LEU:HB2	1.56	0.88
1:B:285:GLU:O	1:B:303:PHE:CE1	2.26	0.87
1:D:511:ARG:NH2	1:D:569:LYS:O	2.07	0.87
1:D:2432:LYS:O	1:D:2435:THR:HG23	1.74	0.87
1:D:2552:VAL:HA	1:D:2553:LEU:HB2	1.56	0.87
1:A:222:LEU:HB3	1:A:292:CYS:HB2	1.53	0.87
1:A:285:GLU:CA	1:A:303:PHE:CD2	2.58	0.87
1:D:285:GLU:CA	1:D:303:PHE:CD2	2.58	0.87
1:A:16:SER:HA	1:A:58:PHE:H	1.39	0.87
1:B:2552:VAL:HA	1:B:2553:LEU:HB2	1.56	0.87
1:B:285:GLU:CA	1:B:303:PHE:CD2	2.58	0.87
1:C:285:GLU:CA	1:C:303:PHE:CD2	2.58	0.87
1:B:2468:ILE:C	1:B:2469:LEU:CA	2.43	0.87
1:B:2586:PHE:HE2	1:C:2586:PHE:HE2	1.17	0.87
1:D:16:SER:HA	1:D:58:PHE:H	1.40	0.86
1:A:2381:ARG:C	1:A:2382:GLY:CA	2.44	0.86
1:C:130:LYS:HE3	1:C:152:ASP:HA	1.57	0.86
1:C:2381:ARG:C	1:C:2382:GLY:CA	2.44	0.86
1:A:130:LYS:HE3	1:A:152:ASP:HA	1.57	0.86
1:C:2468:ILE:C	1:C:2469:LEU:CA	2.43	0.86
1:D:2468:ILE:C	1:D:2469:LEU:CA	2.43	0.86
1:B:16:SER:HA	1:B:58:PHE:H	1.40	0.86
1:B:285:GLU:C	1:B:285:GLU:CA	2.44	0.86
1:B:2381:ARG:C	1:B:2382:GLY:CA	2.44	0.86
1:D:2429:ASN:OD1	1:D:2430:VAL:N	2.07	0.86
1:C:285:GLU:C	1:C:285:GLU:CA	2.44	0.86
1:A:2586:PHE:HE2	1:D:2586:PHE:HE2	1.17	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:285:GLU:C	1:D:285:GLU:CA	2.44	0.86
1:A:117:TYR:CD2	1:A:176:VAL:HA	2.10	0.86
1:D:2381:ARG:C	1:D:2382:GLY:CA	2.44	0.86
1:C:117:TYR:CD2	1:C:176:VAL:HA	2.10	0.85
1:C:285:GLU:N	1:C:303:PHE:CZ	2.44	0.85
1:A:285:GLU:C	1:A:285:GLU:CA	2.44	0.85
1:C:285:GLU:CA	1:C:303:PHE:CG	2.59	0.85
1:C:2434:VAL:HG22	1:C:2593:PHE:HZ	1.38	0.85
1:A:285:GLU:N	1:A:303:PHE:CZ	2.44	0.85
1:A:2586:PHE:CZ	1:D:2586:PHE:HD2	1.87	0.85
1:A:2468:ILE:C	1:A:2469:LEU:CA	2.43	0.85
1:B:285:GLU:N	1:B:303:PHE:CZ	2.44	0.85
1:D:285:GLU:CA	1:D:303:PHE:CG	2.60	0.85
1:A:2434:VAL:HG22	1:A:2593:PHE:HZ	1.37	0.85
1:B:177:VAL:HG12	1:B:178:ILE:HD12	1.58	0.85
1:D:2430:VAL:N	1:D:2431:ILE:HD12	1.91	0.85
1:B:2439:ARG:O	1:B:2440:PRO:C	2.13	0.85
1:D:117:TYR:CD2	1:D:176:VAL:HA	2.09	0.85
1:D:177:VAL:HG12	1:D:178:ILE:HD12	1.58	0.85
1:A:511:ARG:NH2	1:A:569:LYS:O	2.10	0.84
1:A:2432:LYS:O	1:A:2435:THR:HG23	1.77	0.84
1:B:285:GLU:CA	1:B:303:PHE:CG	2.60	0.84
1:D:232:ASP:OD2	1:D:385:ASN:ND2	2.11	0.84
1:D:285:GLU:N	1:D:303:PHE:CZ	2.45	0.84
1:A:285:GLU:CA	1:A:303:PHE:CG	2.60	0.84
1:B:2432:LYS:O	1:B:2435:THR:HG23	1.77	0.84
1:A:18:TYR:CZ	1:A:20:GLU:HG2	2.11	0.84
1:C:18:TYR:CZ	1:C:20:GLU:HG2	2.11	0.84
1:D:2431:ILE:H	1:D:2431:ILE:CD1	1.87	0.84
1:A:232:ASP:OD2	1:A:385:ASN:ND2	2.11	0.83
1:D:249:LYS:NZ	1:D:265:ARG:O	2.11	0.83
1:C:16:SER:HA	1:C:58:PHE:H	1.39	0.83
1:C:511:ARG:NH2	1:C:569:LYS:O	2.10	0.83
1:A:177:VAL:HG12	1:A:178:ILE:HD12	1.60	0.83
1:C:2432:LYS:O	1:C:2435:THR:HG23	1.77	0.83
1:B:232:ASP:OD2	1:B:385:ASN:ND2	2.11	0.83
1:B:2407:PHE:CA	1:B:2408:VAL:N	2.42	0.83
1:B:18:TYR:CZ	1:B:20:GLU:HG2	2.11	0.83
1:C:177:VAL:HG12	1:C:178:ILE:HD12	1.60	0.83
1:C:249:LYS:NZ	1:C:265:ARG:O	2.10	0.83
1:D:18:TYR:CZ	1:D:20:GLU:HG2	2.11	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:232:ASP:OD2	1:C:385:ASN:ND2	2.11	0.83
1:D:2407:PHE:CA	1:D:2408:VAL:N	2.42	0.83
1:C:2439:ARG:O	1:C:2440:PRO:C	2.12	0.83
1:A:2407:PHE:CA	1:A:2408:VAL:N	2.42	0.83
1:C:2428:LEU:HG	1:C:2429:ASN:CG	1.99	0.83
1:A:285:GLU:CB	1:A:303:PHE:CD2	2.62	0.82
1:B:285:GLU:HB2	1:B:303:PHE:CG	2.14	0.82
1:A:2428:LEU:HG	1:A:2429:ASN:CG	1.99	0.82
1:D:2428:LEU:C	1:D:2428:LEU:HA	1.98	0.82
1:B:285:GLU:CB	1:B:303:PHE:CD2	2.62	0.82
1:C:2407:PHE:CA	1:C:2408:VAL:N	2.42	0.82
1:D:2439:ARG:O	1:D:2440:PRO:C	2.17	0.82
1:A:2439:ARG:O	1:A:2440:PRO:C	2.12	0.82
1:C:2272:ASN:CA	1:C:2273:MET:N	2.42	0.82
1:D:18:TYR:CG	1:D:20:GLU:HG3	2.15	0.82
1:C:280:ALA:HA	1:C:281:LEU:HB2	1.62	0.82
1:B:280:ALA:HA	1:B:281:LEU:HB2	1.62	0.82
1:C:18:TYR:CG	1:C:20:GLU:HG3	2.14	0.82
1:C:117:TYR:CG	1:C:176:VAL:N	2.47	0.82
1:C:2580:ILE:HD13	1:C:2583:ASN:HD21	1.45	0.82
1:D:117:TYR:CG	1:D:176:VAL:N	2.48	0.82
1:A:2272:ASN:CA	1:A:2273:MET:N	2.42	0.82
1:C:285:GLU:HB2	1:C:303:PHE:CG	2.15	0.82
1:D:18:TYR:CD2	1:D:20:GLU:OE1	2.33	0.82
1:D:2272:ASN:CA	1:D:2273:MET:N	2.42	0.82
1:B:2272:ASN:CA	1:B:2273:MET:N	2.42	0.82
1:C:192:PRO:HG2	1:C:213:ASN:HD22	1.45	0.82
1:B:285:GLU:HB2	1:B:303:PHE:CD2	2.15	0.82
1:A:2732:ARG:C	1:A:2733:ILE:CA	2.48	0.81
1:B:18:TYR:CD2	1:B:20:GLU:OE1	2.33	0.81
1:D:192:PRO:HG2	1:D:213:ASN:HD22	1.45	0.81
1:B:58:PHE:HB3	1:B:123:LEU:HD11	1.62	0.81
1:C:2732:ARG:C	1:C:2733:ILE:CA	2.48	0.81
1:D:2732:ARG:C	1:D:2733:ILE:CA	2.48	0.81
1:B:18:TYR:CG	1:B:20:GLU:HG3	2.15	0.81
1:C:285:GLU:CB	1:C:303:PHE:CD2	2.62	0.81
1:C:2682:SER:CA	1:C:2683:LEU:N	2.43	0.81
1:D:285:GLU:CB	1:D:303:PHE:CD2	2.62	0.81
1:D:285:GLU:HB2	1:D:303:PHE:CD2	2.15	0.81
1:A:285:GLU:HB2	1:A:303:PHE:CD2	2.15	0.81
1:A:2554:ARG:HD3	1:B:2523:ASP:HA	1.62	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2732:ARG:C	1:B:2733:ILE:CA	2.48	0.81
1:D:285:GLU:HB2	1:D:303:PHE:CG	2.14	0.81
1:A:117:TYR:CG	1:A:176:VAL:N	2.48	0.81
1:A:285:GLU:HB2	1:A:303:PHE:CG	2.15	0.81
1:A:2523:ASP:HA	1:D:2554:ARG:HD3	1.62	0.81
1:B:192:PRO:HG2	1:B:213:ASN:HD22	1.45	0.81
1:B:249:LYS:NZ	1:B:265:ARG:O	2.11	0.81
1:A:58:PHE:HB3	1:A:123:LEU:HD11	1.62	0.81
1:C:2431:ILE:H	1:C:2431:ILE:CD1	1.89	0.81
1:B:117:TYR:CG	1:B:176:VAL:N	2.48	0.81
1:B:2682:SER:CA	1:B:2683:LEU:N	2.43	0.81
1:A:2682:SER:CA	1:A:2683:LEU:N	2.43	0.81
1:C:18:TYR:CD2	1:C:20:GLU:OE1	2.33	0.81
1:C:387:TYR:OH	1:C:432:ILE:O	1.99	0.81
1:A:249:LYS:NZ	1:A:265:ARG:O	2.10	0.81
1:D:2682:SER:CA	1:D:2683:LEU:N	2.43	0.81
1:B:2431:ILE:H	1:B:2431:ILE:CD1	1.89	0.81
1:B:2428:LEU:HG	1:B:2429:ASN:CG	2.01	0.80
1:D:387:TYR:OH	1:D:432:ILE:O	1.99	0.80
1:A:18:TYR:CD2	1:A:20:GLU:OE1	2.33	0.80
1:A:192:PRO:HG2	1:A:213:ASN:HD22	1.45	0.80
1:C:2374:GLY:O	1:C:2378:THR:OG1	2.00	0.80
1:A:2509:ALA:CA	1:A:2510:PRO:N	2.44	0.80
1:B:266:THR:HG22	1:B:267:THR:HG23	1.63	0.80
1:D:280:ALA:HA	1:D:281:LEU:HB2	1.62	0.80
1:D:2509:ALA:CA	1:D:2510:PRO:N	2.44	0.80
1:A:280:ALA:HA	1:A:281:LEU:HB2	1.62	0.80
1:B:2509:ALA:CA	1:B:2510:PRO:N	2.44	0.80
1:A:387:TYR:OH	1:A:432:ILE:O	1.99	0.80
1:C:285:GLU:HB2	1:C:303:PHE:CD2	2.15	0.80
1:D:58:PHE:HB3	1:D:123:LEU:HD11	1.62	0.80
1:D:2566:ARG:HA	1:D:2569:TYR:HB3	1.64	0.80
1:D:40:GLN:HG3	1:D:43:ALA:H	1.47	0.80
1:B:2434:VAL:HG22	1:B:2593:PHE:HZ	1.43	0.80
1:A:2566:ARG:HA	1:A:2569:TYR:HB3	1.64	0.80
1:B:2374:GLY:O	1:B:2378:THR:OG1	1.99	0.80
1:B:2580:ILE:HD13	1:B:2583:ASN:HD21	1.46	0.80
1:D:2374:GLY:O	1:D:2378:THR:OG1	1.99	0.80
1:C:18:TYR:CE1	1:C:20:GLU:OE2	2.35	0.80
1:C:2509:ALA:CA	1:C:2510:PRO:N	2.44	0.80
1:A:2580:ILE:HD13	1:A:2583:ASN:HD21	1.45	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2554:ARG:HD3	1:C:2523:ASP:HA	1.62	0.80
1:C:58:PHE:HB3	1:C:123:LEU:HD11	1.62	0.80
1:A:14:ILE:HG12	1:A:59:LYS:HG3	1.63	0.79
1:D:2434:VAL:CG2	1:D:2593:PHE:HZ	1.95	0.79
1:A:18:TYR:CG	1:A:20:GLU:HG3	2.14	0.79
1:A:18:TYR:CE1	1:A:20:GLU:OE2	2.35	0.79
1:D:2434:VAL:HG13	1:D:2589:ILE:HG23	1.64	0.79
1:D:18:TYR:CE1	1:D:20:GLU:OE2	2.35	0.79
1:D:117:TYR:N	1:D:174:ASP:O	2.16	0.79
1:A:2434:VAL:HG13	1:A:2589:ILE:HG23	1.65	0.79
1:D:2580:ILE:HD13	1:D:2583:ASN:HD21	1.46	0.79
1:B:2434:VAL:HG13	1:B:2589:ILE:HG23	1.65	0.79
1:C:2554:ARG:HD3	1:D:2523:ASP:HA	1.62	0.79
1:B:18:TYR:CE1	1:B:20:GLU:OE2	2.35	0.79
1:C:266:THR:HG22	1:C:267:THR:HG23	1.64	0.79
1:C:2434:VAL:HG13	1:C:2589:ILE:HG23	1.65	0.79
1:D:2428:LEU:O	1:D:2431:ILE:HD13	1.83	0.79
1:A:2414:SER:HB3	1:D:2457:ILE:HD13	1.63	0.78
1:A:117:TYR:N	1:A:174:ASP:O	2.16	0.78
1:A:266:THR:HG22	1:A:267:THR:HG23	1.64	0.78
1:B:117:TYR:N	1:B:174:ASP:O	2.16	0.78
1:B:387:TYR:OH	1:B:432:ILE:O	1.99	0.78
1:D:266:THR:HG22	1:D:267:THR:HG23	1.63	0.78
1:D:117:TYR:CZ	1:D:176:VAL:HA	2.19	0.78
1:B:2566:ARG:HA	1:B:2569:TYR:HB3	1.63	0.78
1:C:117:TYR:N	1:C:174:ASP:O	2.16	0.78
1:C:14:ILE:HG12	1:C:59:LYS:HG3	1.63	0.78
1:C:2318:LEU:HD12	1:C:2319:ILE:HG12	1.65	0.78
1:C:117:TYR:CZ	1:C:176:VAL:HA	2.18	0.78
1:A:194:HIS:ND1	1:A:210:ASN:O	2.17	0.78
1:A:2374:GLY:O	1:A:2378:THR:OG1	1.99	0.78
1:B:194:HIS:ND1	1:B:210:ASN:O	2.17	0.78
1:C:14:ILE:HG23	1:C:59:LYS:HA	1.66	0.78
1:D:194:HIS:ND1	1:D:210:ASN:O	2.17	0.78
1:D:551:HIS:O	1:D:555:LEU:N	2.17	0.78
1:A:2434:VAL:HG13	1:A:2589:ILE:HD12	1.66	0.77
1:B:551:HIS:O	1:B:555:LEU:N	2.17	0.77
1:D:14:ILE:HG12	1:D:59:LYS:HG3	1.65	0.77
1:A:2318:LEU:HD12	1:A:2319:ILE:HG12	1.65	0.77
1:B:2457:ILE:HD13	1:C:2414:SER:HB3	1.65	0.77
1:C:2434:VAL:HG13	1:C:2589:ILE:HD12	1.65	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2457:ILE:HD13	1:B:2414:SER:HB3	1.66	0.77
1:B:14:ILE:HG12	1:B:59:LYS:HG3	1.65	0.77
1:C:40:GLN:HG3	1:C:43:ALA:H	1.48	0.77
1:C:2566:ARG:HA	1:C:2569:TYR:HB3	1.64	0.77
1:A:2434:VAL:CG2	1:A:2593:PHE:HZ	1.97	0.77
1:A:368:PHE:HB3	1:A:390:LEU:HD11	1.65	0.77
1:A:551:HIS:O	1:A:555:LEU:N	2.17	0.77
1:D:511:ARG:HA	1:D:515:ILE:HG12	1.67	0.77
1:D:2379:PHE:HB2	1:D:2416:LEU:HD13	1.66	0.77
1:B:2318:LEU:HD12	1:B:2319:ILE:HG12	1.66	0.77
1:B:368:PHE:HB3	1:B:390:LEU:HD11	1.66	0.77
1:C:194:HIS:ND1	1:C:210:ASN:O	2.17	0.77
1:C:511:ARG:HA	1:C:515:ILE:HG12	1.67	0.77
1:C:2434:VAL:CG2	1:C:2593:PHE:HZ	1.98	0.77
1:D:2318:LEU:HD12	1:D:2319:ILE:HG12	1.66	0.77
1:A:40:GLN:HG3	1:A:43:ALA:H	1.48	0.77
1:C:368:PHE:HB3	1:C:390:LEU:HD11	1.65	0.77
1:C:2547:GLY:H	1:D:2544:ARG:HB3	1.49	0.77
1:B:40:GLN:HG3	1:B:43:ALA:H	1.48	0.76
1:B:511:ARG:HA	1:B:515:ILE:HG12	1.67	0.76
1:C:551:HIS:O	1:C:555:LEU:N	2.17	0.76
1:A:253:CYS:HA	1:A:262:VAL:HA	1.67	0.76
1:A:2431:ILE:H	1:A:2431:ILE:CD1	1.89	0.76
1:A:2544:ARG:HB3	1:D:2547:GLY:H	1.50	0.76
1:B:2379:PHE:HB2	1:B:2416:LEU:HD13	1.67	0.76
1:A:117:TYR:CZ	1:A:176:VAL:HA	2.18	0.76
1:A:511:ARG:HA	1:A:515:ILE:HG12	1.67	0.76
1:A:2295:TYR:HB2	1:D:2531:LEU:HD13	1.68	0.76
1:A:2547:GLY:H	1:B:2544:ARG:HB3	1.50	0.76
1:A:14:ILE:HG23	1:A:59:LYS:HA	1.66	0.76
1:B:117:TYR:CZ	1:B:176:VAL:HA	2.18	0.76
1:C:2457:ILE:HD13	1:D:2414:SER:HB3	1.66	0.76
1:B:246:GLU:N	1:B:428:GLU:OE2	2.19	0.75
1:D:2329:LYS:CG	1:D:2330:PRO:HD3	2.16	0.75
1:A:2274:SER:HB3	1:A:2339:SER:HB3	1.68	0.75
1:A:2431:ILE:O	1:A:2435:THR:HG22	1.87	0.75
1:B:2431:ILE:O	1:B:2435:THR:HG22	1.86	0.75
1:B:2547:GLY:H	1:C:2544:ARG:HB3	1.50	0.75
1:C:246:GLU:N	1:C:428:GLU:OE2	2.20	0.75
1:C:253:CYS:HA	1:C:262:VAL:HA	1.67	0.75
1:C:315:ALA:HA	1:C:355:LEU:HA	1.69	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:208:GLU:HG2	1:D:209:VAL:H	1.52	0.75
1:D:368:PHE:HB3	1:D:390:LEU:HD11	1.66	0.75
1:A:117:TYR:CE1	1:A:176:VAL:C	2.60	0.75
1:B:2274:SER:HB3	1:B:2339:SER:HB3	1.69	0.75
1:D:117:TYR:CZ	1:D:176:VAL:CG1	2.70	0.75
1:D:2434:VAL:HG22	1:D:2593:PHE:CE1	2.22	0.75
1:B:65:ARG:HG3	1:B:99:GLU:HG2	1.69	0.75
1:B:117:TYR:CE1	1:B:176:VAL:C	2.60	0.75
1:C:2524:LYS:HD2	1:C:2526:HIS:HD2	1.52	0.75
1:D:180:ASP:HB2	1:D:218:TRP:H	1.52	0.75
1:A:315:ALA:HA	1:A:355:LEU:HA	1.69	0.75
1:A:65:ARG:HG3	1:A:99:GLU:HG2	1.69	0.75
1:A:117:TYR:CZ	1:A:176:VAL:CG1	2.70	0.75
1:C:2274:SER:HB3	1:C:2339:SER:HB3	1.69	0.75
1:D:117:TYR:CE1	1:D:176:VAL:C	2.60	0.75
1:B:36:ARG:NH2	1:B:202:ASP:OD1	2.18	0.74
1:B:2329:LYS:CG	1:B:2330:PRO:HD3	2.17	0.74
1:C:65:ARG:HG3	1:C:99:GLU:HG2	1.69	0.74
1:C:2379:PHE:HB2	1:C:2416:LEU:HD13	1.69	0.74
1:C:2531:LEU:HD13	1:D:2295:TYR:HB2	1.69	0.74
1:D:404:ILE:HA	1:D:417:LYS:HD2	1.69	0.74
1:A:180:ASP:HB2	1:A:218:TRP:H	1.52	0.74
1:C:117:TYR:CE1	1:C:176:VAL:C	2.60	0.74
1:D:65:ARG:HG3	1:D:99:GLU:HG2	1.69	0.74
1:B:404:ILE:HA	1:B:417:LYS:HD2	1.69	0.74
1:B:2524:LYS:HD2	1:B:2526:HIS:HD2	1.53	0.74
1:D:263:PHE:HD1	1:D:416:LEU:HB3	1.53	0.74
1:A:404:ILE:HA	1:A:417:LYS:HD2	1.70	0.74
1:B:117:TYR:CZ	1:B:176:VAL:CG1	2.70	0.74
1:B:315:ALA:HA	1:B:355:LEU:HA	1.69	0.74
1:C:2329:LYS:CG	1:C:2330:PRO:HD3	2.17	0.74
1:A:36:ARG:NH2	1:A:202:ASP:OD1	2.19	0.74
1:A:263:PHE:HD1	1:A:416:LEU:HB3	1.53	0.74
1:D:315:ALA:HA	1:D:355:LEU:HA	1.69	0.74
1:A:2524:LYS:HD2	1:A:2526:HIS:HD2	1.51	0.74
1:C:2437:ASN:CG	1:C:2592:THR:CG2	2.56	0.74
1:D:246:GLU:N	1:D:428:GLU:OE2	2.19	0.74
1:B:107:ASN:HA	1:B:110:LEU:HB2	1.70	0.74
1:B:194:HIS:HB2	1:B:209:VAL:HA	1.70	0.74
1:B:2531:LEU:HD13	1:C:2295:TYR:HB2	1.67	0.74
1:D:36:ARG:NH2	1:D:202:ASP:OD1	2.18	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2434:VAL:HG13	1:C:2589:ILE:CG2	2.18	0.73
1:D:2274:SER:HB3	1:D:2339:SER:HB3	1.69	0.73
1:A:2434:VAL:HG13	1:A:2589:ILE:CG2	2.18	0.73
1:C:404:ILE:HA	1:C:417:LYS:HD2	1.70	0.73
1:D:14:ILE:HG23	1:D:59:LYS:HA	1.69	0.73
1:D:2428:LEU:HD11	1:D:2429:ASN:ND2	2.03	0.73
1:A:2379:PHE:HB2	1:A:2416:LEU:HD13	1.69	0.73
1:C:263:PHE:HD1	1:C:416:LEU:HB3	1.52	0.73
1:D:107:ASN:HA	1:D:110:LEU:HB2	1.70	0.73
1:D:194:HIS:HB2	1:D:209:VAL:HA	1.70	0.73
1:C:2431:ILE:O	1:C:2435:THR:HG22	1.87	0.73
1:B:69:GLN:NE2	1:B:96:ALA:O	2.22	0.73
1:C:117:TYR:CZ	1:C:176:VAL:CG1	2.70	0.73
1:C:180:ASP:HB2	1:C:218:TRP:H	1.53	0.73
1:A:107:ASN:HA	1:A:110:LEU:HB2	1.71	0.73
1:A:208:GLU:HG2	1:A:209:VAL:H	1.54	0.73
1:B:253:CYS:HA	1:B:262:VAL:HA	1.70	0.73
1:B:263:PHE:HD1	1:B:416:LEU:HB3	1.53	0.73
1:A:194:HIS:HB2	1:A:209:VAL:HA	1.71	0.73
1:B:208:GLU:HG2	1:B:209:VAL:H	1.52	0.73
1:B:240:VAL:HG21	1:B:435:VAL:HB	1.71	0.73
1:D:2428:LEU:HD21	1:D:2429:ASN:ND2	2.03	0.73
1:A:398:TRP:H	1:A:422:PRO:HG2	1.54	0.73
1:A:2432:LYS:HA	1:A:2435:THR:CG2	2.19	0.73
1:A:2437:ASN:CG	1:A:2592:THR:CG2	2.56	0.73
1:D:15:CYS:HB3	1:D:223:PHE:HB2	1.70	0.73
1:D:253:CYS:HA	1:D:262:VAL:HA	1.70	0.72
1:B:180:ASP:HB2	1:B:218:TRP:H	1.52	0.72
1:C:107:ASN:HA	1:C:110:LEU:HB2	1.71	0.72
1:C:398:TRP:H	1:C:422:PRO:HG2	1.54	0.72
1:A:2531:LEU:HD13	1:B:2295:TYR:HB2	1.70	0.72
1:B:14:ILE:HG23	1:B:59:LYS:HA	1.69	0.72
1:A:2428:LEU:CG	1:A:2429:ASN:OD1	2.29	0.72
1:C:194:HIS:HB2	1:C:209:VAL:HA	1.71	0.72
1:C:2325:ILE:CG2	1:C:2329:LYS:NZ	2.49	0.72
1:D:240:VAL:HG21	1:D:435:VAL:HB	1.71	0.72
1:A:117:TYR:CG	1:A:176:VAL:HB	2.21	0.72
1:A:240:VAL:HG21	1:A:435:VAL:HB	1.71	0.72
1:C:160:TRP:NE1	1:C:185:ASN:OD1	2.23	0.72
1:B:15:CYS:HB3	1:B:223:PHE:HB2	1.70	0.72
1:D:511:ARG:HD2	1:D:515:ILE:HG21	1.72	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:69:GLN:NE2	1:C:96:ALA:O	2.22	0.72
1:C:285:GLU:HB3	1:C:304:ARG:O	1.90	0.72
1:D:2524:LYS:HD2	1:D:2526:HIS:HD2	1.53	0.72
1:A:15:CYS:HB3	1:A:223:PHE:HB2	1.72	0.71
1:C:2430:VAL:N	1:C:2431:ILE:HD12	2.05	0.71
1:C:2712:LEU:HD21	1:D:2707:LYS:HB3	1.73	0.71
1:A:410:GLU:HA	1:A:411:GLU:HB3	1.72	0.71
1:B:285:GLU:HB3	1:B:304:ARG:O	1.90	0.71
1:B:2434:VAL:HG13	1:B:2589:ILE:CG2	2.20	0.71
1:B:2434:VAL:CG2	1:B:2593:PHE:HZ	2.02	0.71
1:B:2462:PHE:H	1:B:2566:ARG:HH21	1.38	0.71
1:A:511:ARG:HD2	1:A:515:ILE:HG21	1.73	0.71
1:A:2430:VAL:N	1:A:2431:ILE:HD12	2.05	0.71
1:B:2434:VAL:HG13	1:B:2589:ILE:HD12	1.71	0.71
1:B:2437:ASN:CG	1:B:2592:THR:CG2	2.58	0.71
1:C:36:ARG:NH2	1:C:202:ASP:OD1	2.19	0.71
1:C:2549:VAL:HG22	1:C:2551:ASP:H	1.55	0.71
1:A:2549:VAL:HG22	1:A:2551:ASP:H	1.56	0.71
1:C:125:HIS:CE1	1:C:127:LYS:HB3	2.25	0.71
1:A:246:GLU:N	1:A:428:GLU:OE2	2.20	0.71
1:C:410:GLU:HA	1:C:411:GLU:HB3	1.72	0.71
1:C:2425:GLU:OE2	1:C:2431:ILE:CG2	2.39	0.71
1:C:2432:LYS:HA	1:C:2435:THR:CG2	2.19	0.71
1:D:160:TRP:NE1	1:D:185:ASN:OD1	2.24	0.71
1:A:160:TRP:NE1	1:A:185:ASN:OD1	2.23	0.71
1:D:2429:ASN:OD1	1:D:2430:VAL:HG23	1.91	0.71
1:B:291:PRO:O	1:B:293:ARG:NH1	2.24	0.71
1:B:548:PRO:O	1:B:552:ILE:N	2.24	0.71
1:D:410:GLU:HA	1:D:411:GLU:HB3	1.72	0.71
1:C:240:VAL:HG21	1:C:435:VAL:HB	1.71	0.70
1:C:567:TYR:CZ	1:C:570:ASN:HB3	2.26	0.70
1:C:2437:ASN:CG	1:C:2592:THR:HG22	2.12	0.70
1:D:285:GLU:HB3	1:D:304:ARG:O	1.90	0.70
1:A:285:GLU:HB3	1:A:304:ARG:O	1.90	0.70
1:A:2425:GLU:OE2	1:A:2431:ILE:CG2	2.39	0.70
1:A:2712:LEU:HD21	1:B:2707:LYS:HB3	1.72	0.70
1:B:511:ARG:HD2	1:B:515:ILE:HG21	1.72	0.70
1:B:2432:LYS:HA	1:B:2435:THR:CG2	2.21	0.70
1:C:291:PRO:O	1:C:293:ARG:NH1	2.25	0.70
1:C:2350:LEU:O	1:C:2353:THR:OG1	2.09	0.70
1:D:220:ILE:HG22	1:D:221:VAL:H	1.56	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:291:PRO:O	1:D:293:ARG:NH1	2.24	0.70
1:D:2462:PHE:H	1:D:2566:ARG:HH21	1.38	0.70
1:A:567:TYR:CZ	1:A:570:ASN:HB3	2.26	0.70
1:A:2232:GLU:CA	1:A:2233:ARG:CA	2.70	0.70
1:D:2428:LEU:CA	1:D:2429:ASN:N	2.52	0.70
1:D:548:PRO:O	1:D:552:ILE:N	2.24	0.70
1:D:2549:VAL:HG22	1:D:2551:ASP:H	1.57	0.70
1:A:2350:LEU:O	1:A:2353:THR:OG1	2.08	0.70
1:B:160:TRP:NE1	1:B:185:ASN:OD1	2.24	0.70
1:B:2232:GLU:CA	1:B:2233:ARG:CA	2.70	0.70
1:B:2430:VAL:N	1:B:2431:ILE:HD12	2.05	0.70
1:B:249:LYS:HE3	1:B:264:LEU:HD23	1.73	0.70
1:C:164:GLN:O	1:C:181:LYS:NZ	2.17	0.70
1:D:45:ASP:HB3	1:D:48:ASN:HB3	1.73	0.70
1:A:116:GLN:OE1	1:A:175:SER:OG	2.09	0.70
1:A:2462:PHE:H	1:A:2566:ARG:HH21	1.38	0.70
1:B:398:TRP:H	1:B:422:PRO:HG2	1.57	0.70
1:C:54:ARG:HG2	1:C:127:LYS:HE3	1.74	0.70
1:D:249:LYS:HE3	1:D:264:LEU:HD23	1.73	0.70
1:A:125:HIS:CE1	1:A:127:LYS:HB3	2.26	0.70
1:A:2604:GLU:OE1	1:A:2604:GLU:N	2.24	0.70
1:B:194:HIS:H	1:B:210:ASN:H	1.39	0.70
1:B:410:GLU:HA	1:B:411:GLU:HB3	1.72	0.70
1:C:466:THR:OG1	1:C:469:GLU:N	2.24	0.70
1:C:2232:GLU:CA	1:C:2233:ARG:CA	2.69	0.70
1:D:125:HIS:CE1	1:D:127:LYS:HB3	2.27	0.70
1:D:2232:GLU:CA	1:D:2233:ARG:CA	2.70	0.70
1:A:291:PRO:O	1:A:293:ARG:NH1	2.25	0.70
1:B:45:ASP:HB3	1:B:48:ASN:HB3	1.73	0.70
1:C:15:CYS:HB3	1:C:223:PHE:HB2	1.72	0.70
1:C:208:GLU:HG2	1:C:209:VAL:H	1.54	0.70
1:B:220:ILE:HG22	1:B:221:VAL:H	1.56	0.70
1:B:484:VAL:HG11	1:B:497:VAL:HG13	1.74	0.70
1:C:548:PRO:O	1:C:552:ILE:N	2.24	0.70
1:C:2462:PHE:H	1:C:2566:ARG:HH21	1.38	0.70
1:D:116:GLN:OE1	1:D:175:SER:OG	2.10	0.69
1:A:548:PRO:O	1:A:552:ILE:N	2.24	0.69
1:A:2329:LYS:CG	1:A:2330:PRO:HD3	2.22	0.69
1:B:2420:LEU:O	1:B:2423:ARG:HG2	1.92	0.69
1:B:2549:VAL:HG22	1:B:2551:ASP:H	1.56	0.69
1:C:117:TYR:CG	1:C:176:VAL:HB	2.21	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2420:LEU:O	1:C:2423:ARG:HG2	1.92	0.69
1:D:2428:LEU:HG	1:D:2429:ASN:CG	2.13	0.69
1:A:249:LYS:HE3	1:A:264:LEU:HD23	1.73	0.69
1:A:2273:MET:N	1:A:2343:ARG:HH12	1.90	0.69
1:B:2712:LEU:HD21	1:C:2707:LYS:HB3	1.74	0.69
1:D:567:TYR:CZ	1:D:570:ASN:HB3	2.28	0.69
1:A:45:ASP:HB3	1:A:48:ASN:HB3	1.74	0.69
1:B:194:HIS:ND1	1:B:210:ASN:OD1	2.26	0.69
1:B:466:THR:OG1	1:B:469:GLU:N	2.24	0.69
1:C:249:LYS:HE3	1:C:264:LEU:HD23	1.73	0.69
1:C:511:ARG:HD2	1:C:515:ILE:HG21	1.73	0.69
1:D:398:TRP:H	1:D:422:PRO:HG2	1.57	0.69
1:A:484:VAL:HG11	1:A:497:VAL:HG13	1.73	0.69
1:A:2420:LEU:O	1:A:2423:ARG:HG2	1.92	0.69
1:B:125:HIS:CE1	1:B:127:LYS:HB3	2.27	0.69
1:C:2604:GLU:N	1:C:2604:GLU:OE1	2.24	0.69
1:D:69:GLN:NE2	1:D:96:ALA:O	2.22	0.69
1:C:484:VAL:HG11	1:C:497:VAL:HG13	1.73	0.69
1:D:2273:MET:N	1:D:2343:ARG:HH12	1.90	0.69
1:A:54:ARG:HG2	1:A:127:LYS:HE3	1.74	0.69
1:A:466:THR:OG1	1:A:469:GLU:N	2.24	0.69
1:A:2437:ASN:CG	1:A:2592:THR:HG22	2.12	0.69
1:A:2707:LYS:HB3	1:D:2712:LEU:HD21	1.74	0.69
1:B:2604:GLU:OE1	1:B:2604:GLU:N	2.25	0.69
1:C:18:TYR:CE2	1:C:20:GLU:OE1	2.46	0.69
1:C:2329:LYS:HG3	1:C:2330:PRO:HD3	1.74	0.69
1:C:2428:LEU:CG	1:C:2429:ASN:OD1	2.28	0.69
1:D:484:VAL:HG11	1:D:497:VAL:HG13	1.74	0.69
1:C:116:GLN:OE1	1:C:175:SER:OG	2.09	0.69
1:C:2526:HIS:ND1	1:C:2528:CYS:SG	2.66	0.69
1:D:2428:LEU:C	1:D:2428:LEU:CB	2.61	0.69
1:B:169:LEU:HD21	1:C:389:ARG:HH12	1.58	0.68
1:C:220:ILE:HG22	1:C:221:VAL:H	1.58	0.68
1:D:466:THR:OG1	1:D:469:GLU:N	2.24	0.68
1:A:2433:SER:OG	1:A:2593:PHE:CE1	2.45	0.68
1:D:194:HIS:H	1:D:210:ASN:H	1.39	0.68
1:D:2604:GLU:OE1	1:D:2604:GLU:N	2.25	0.68
1:C:45:ASP:HB3	1:C:48:ASN:HB3	1.74	0.68
1:C:2273:MET:N	1:C:2343:ARG:HH12	1.90	0.68
1:D:54:ARG:HG2	1:D:127:LYS:HE3	1.75	0.68
1:D:194:HIS:ND1	1:D:210:ASN:OD1	2.26	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:141:LEU:HB2	1:A:148:ARG:HG2	1.76	0.68
1:B:2425:GLU:OE2	1:B:2431:ILE:CG2	2.42	0.68
1:C:2433:SER:OG	1:C:2593:PHE:CE1	2.45	0.68
1:D:189:ALA:HB3	1:D:190:GLY:HA2	1.76	0.68
1:D:2434:VAL:CG2	1:D:2593:PHE:CZ	2.70	0.68
1:A:18:TYR:CE2	1:A:20:GLU:OE1	2.46	0.68
1:A:164:GLN:HG2	1:A:181:LYS:HE3	1.76	0.68
1:A:2526:HIS:ND1	1:A:2528:CYS:SG	2.66	0.68
1:B:2273:MET:N	1:B:2343:ARG:HH12	1.91	0.68
1:B:2329:LYS:HG3	1:B:2330:PRO:HD3	1.75	0.68
1:D:2425:GLU:OE2	1:D:2431:ILE:HG21	1.93	0.68
1:B:181:LYS:HD3	1:B:219:LYS:HE2	1.76	0.68
1:B:189:ALA:HB3	1:B:190:GLY:HA2	1.75	0.68
1:B:2437:ASN:CG	1:B:2592:THR:HG22	2.13	0.68
1:D:2420:LEU:O	1:D:2423:ARG:HG2	1.92	0.68
1:D:2460:TYR:OH	1:D:2551:ASP:OD2	2.09	0.68
1:A:189:ALA:HB3	1:A:190:GLY:HA2	1.76	0.68
1:B:54:ARG:HG2	1:B:127:LYS:HE3	1.75	0.68
1:B:180:ASP:HA	1:B:219:LYS:HB2	1.76	0.68
1:D:2434:VAL:HG13	1:D:2589:ILE:CG2	2.24	0.68
1:A:220:ILE:HG22	1:A:221:VAL:H	1.58	0.68
1:D:141:LEU:HB2	1:D:148:ARG:HG2	1.74	0.68
1:A:169:LEU:HD21	1:B:389:ARG:HH12	1.59	0.68
1:B:2555:LYS:HZ2	1:B:2562:LEU:HD11	1.57	0.68
1:C:169:LEU:HD21	1:D:389:ARG:HH12	1.59	0.68
1:C:2707:LYS:O	1:C:2710:THR:OG1	2.09	0.68
1:D:2329:LYS:HG3	1:D:2330:PRO:HD3	1.74	0.68
1:D:2726:GLN:OE1	1:D:2729:GLN:NE2	2.27	0.68
1:B:567:TYR:CZ	1:B:570:ASN:HB3	2.28	0.67
1:B:2321:LEU:HA	1:B:2324:VAL:HB	1.76	0.67
1:C:2726:GLN:OE1	1:C:2729:GLN:NE2	2.26	0.67
1:D:288:GLN:N	1:D:289:HIS:O	2.27	0.67
1:A:69:GLN:NE2	1:A:96:ALA:O	2.22	0.67
1:A:2726:GLN:OE1	1:A:2729:GLN:NE2	2.26	0.67
1:C:164:GLN:HG2	1:C:181:LYS:HE3	1.76	0.67
1:C:241:ARG:HA	1:C:282:TRP:HB3	1.77	0.67
1:D:2321:LEU:HA	1:D:2324:VAL:HB	1.76	0.67
1:A:136:LYS:HD3	1:A:188:ASN:HB3	1.76	0.67
1:A:2555:LYS:HZ2	1:A:2562:LEU:HD11	1.58	0.67
1:D:180:ASP:HA	1:D:219:LYS:HB2	1.76	0.67
1:D:181:LYS:HD3	1:D:219:LYS:HE2	1.76	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:285:GLU:CB	1:D:303:PHE:CG	2.77	0.67
1:D:2350:LEU:O	1:D:2353:THR:OG1	2.12	0.67
1:A:389:ARG:HH12	1:D:169:LEU:HD21	1.58	0.67
1:B:288:GLN:N	1:B:289:HIS:O	2.27	0.67
1:B:2726:GLN:OE1	1:B:2729:GLN:NE2	2.27	0.67
1:C:180:ASP:HA	1:C:219:LYS:HB2	1.77	0.67
1:C:194:HIS:H	1:C:210:ASN:H	1.41	0.67
1:D:11:ILE:O	1:D:226:TRP:NE1	2.28	0.67
1:A:28:SER:HB2	1:A:56:CYS:HA	1.76	0.67
1:A:124:LEU:HA	1:A:131:TYR:HB2	1.77	0.67
1:B:2439:ARG:HB3	1:B:2440:PRO:HD2	1.77	0.67
1:C:2439:ARG:HB3	1:C:2440:PRO:HD2	1.77	0.67
1:C:2703:GLU:HA	1:C:2706:MET:HE2	1.77	0.67
1:D:136:LYS:HD3	1:D:188:ASN:HB3	1.76	0.67
1:D:164:GLN:HG2	1:D:181:LYS:HE3	1.77	0.67
1:B:141:LEU:HB2	1:B:148:ARG:HG2	1.75	0.67
1:B:241:ARG:HA	1:B:282:TRP:HB3	1.77	0.67
1:B:2554:ARG:NH2	1:C:2519:GLU:O	2.28	0.67
1:D:18:TYR:CE2	1:D:20:GLU:OE1	2.47	0.67
1:A:2325:ILE:CG2	1:A:2329:LYS:NZ	2.55	0.67
1:A:2554:ARG:NH2	1:B:2519:GLU:O	2.28	0.67
1:B:164:GLN:HG2	1:B:181:LYS:HE3	1.77	0.67
1:C:285:GLU:CB	1:C:303:PHE:CG	2.78	0.67
1:D:2437:ASN:CG	1:D:2592:THR:CG2	2.63	0.67
1:D:2526:HIS:ND1	1:D:2528:CYS:SG	2.68	0.67
1:A:194:HIS:H	1:A:210:ASN:H	1.41	0.67
1:B:18:TYR:CE2	1:B:20:GLU:OE1	2.47	0.67
1:D:229:ASN:O	1:D:235:LYS:NZ	2.28	0.67
1:A:164:GLN:O	1:A:181:LYS:NZ	2.17	0.67
1:A:180:ASP:HA	1:A:219:LYS:HB2	1.76	0.67
1:A:181:LYS:HD3	1:A:219:LYS:HE2	1.76	0.67
1:B:285:GLU:CB	1:B:303:PHE:CG	2.77	0.67
1:A:117:TYR:CG	1:A:176:VAL:CG2	2.78	0.66
1:A:2707:LYS:O	1:A:2710:THR:OG1	2.09	0.66
1:B:178:ILE:HG12	1:B:221:VAL:HA	1.77	0.66
1:B:229:ASN:O	1:B:235:LYS:NZ	2.28	0.66
1:B:2350:LEU:O	1:B:2353:THR:OG1	2.12	0.66
1:B:2526:HIS:ND1	1:B:2528:CYS:SG	2.68	0.66
1:C:11:ILE:O	1:C:226:TRP:NE1	2.28	0.66
1:C:136:LYS:HD3	1:C:188:ASN:HB3	1.76	0.66
1:A:2439:ARG:HB3	1:A:2440:PRO:HD2	1.77	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:389:ARG:NH1	1:B:427:LYS:O	2.28	0.66
1:C:28:SER:HB2	1:C:56:CYS:HA	1.77	0.66
1:C:181:LYS:HD3	1:C:219:LYS:HE2	1.76	0.66
1:B:117:TYR:CG	1:B:176:VAL:CG2	2.79	0.66
1:C:288:GLN:N	1:C:289:HIS:O	2.28	0.66
1:D:159:SER:HA	1:D:160:TRP:O	1.96	0.66
1:A:159:SER:HA	1:A:160:TRP:O	1.96	0.66
1:A:2434:VAL:CG2	1:A:2593:PHE:CZ	2.74	0.66
1:B:2433:SER:OG	1:B:2593:PHE:CE1	2.48	0.66
1:C:141:LEU:HB2	1:C:148:ARG:HG2	1.76	0.66
1:C:198:HIS:N	1:C:207:ASN:OD1	2.29	0.66
1:C:574:ILE:HA	1:C:577:GLN:HB2	1.77	0.66
1:C:2434:VAL:CG1	1:C:2589:ILE:HD12	2.26	0.66
1:D:178:ILE:HG12	1:D:221:VAL:HA	1.77	0.66
1:A:288:GLN:N	1:A:289:HIS:O	2.28	0.66
1:A:2321:LEU:HA	1:A:2324:VAL:HB	1.78	0.66
1:A:2329:LYS:HG3	1:A:2330:PRO:HD3	1.78	0.66
1:A:2457:ILE:HD13	1:B:2414:SER:CB	2.26	0.66
1:B:2325:ILE:CG2	1:B:2329:LYS:NZ	2.54	0.66
1:B:2434:VAL:CG2	1:B:2593:PHE:CZ	2.77	0.66
1:B:2707:LYS:O	1:B:2710:THR:OG1	2.09	0.66
1:C:563:SER:O	1:C:570:ASN:ND2	2.27	0.66
1:C:2554:ARG:NH2	1:D:2519:GLU:O	2.28	0.66
1:A:178:ILE:HG12	1:A:221:VAL:HA	1.77	0.66
1:A:389:ARG:NH1	1:A:427:LYS:O	2.29	0.66
1:B:2457:ILE:HD13	1:C:2414:SER:CB	2.26	0.66
1:D:389:ARG:NH1	1:D:427:LYS:O	2.28	0.66
1:A:194:HIS:ND1	1:A:210:ASN:OD1	2.28	0.66
1:A:563:SER:O	1:A:570:ASN:ND2	2.28	0.66
1:B:11:ILE:O	1:B:226:TRP:NE1	2.28	0.66
1:B:136:LYS:HD3	1:B:188:ASN:HB3	1.76	0.66
1:C:229:ASN:O	1:C:235:LYS:NZ	2.29	0.66
1:A:2348:VAL:HG13	1:A:2351:GLN:HB2	1.78	0.66
1:B:28:SER:HB2	1:B:56:CYS:HA	1.78	0.66
1:B:133:THR:O	1:B:137:ARG:NH1	2.28	0.66
1:B:2703:GLU:HA	1:B:2706:MET:HE2	1.78	0.66
1:C:159:SER:HA	1:C:160:TRP:O	1.96	0.66
1:C:189:ALA:HB3	1:C:190:GLY:HA2	1.76	0.66
1:D:28:SER:HB2	1:D:56:CYS:HA	1.78	0.66
1:A:241:ARG:HA	1:A:282:TRP:HB3	1.77	0.66
1:A:285:GLU:CB	1:A:303:PHE:CG	2.78	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:384:ARG:O	1:A:386:SER:N	2.29	0.66
1:A:2414:SER:CB	1:D:2457:ILE:HD13	2.26	0.66
1:A:2519:GLU:O	1:D:2554:ARG:NH2	2.28	0.66
1:C:117:TYR:CG	1:C:176:VAL:CG2	2.78	0.66
1:C:384:ARG:O	1:C:386:SER:N	2.29	0.66
1:C:2527:THR:OG1	1:C:2529:GLU:OE1	2.14	0.66
1:C:2555:LYS:HZ2	1:C:2562:LEU:HD11	1.61	0.66
1:A:11:ILE:O	1:A:226:TRP:NE1	2.28	0.65
1:B:2348:VAL:HG13	1:B:2351:GLN:HB2	1.78	0.65
1:C:124:LEU:HA	1:C:131:TYR:HB2	1.77	0.65
1:D:117:TYR:CG	1:D:176:VAL:CG2	2.79	0.65
1:A:198:HIS:N	1:A:207:ASN:OD1	2.29	0.65
1:C:2586:PHE:CD2	1:D:2586:PHE:CE2	2.75	0.65
1:D:307:HIS:HD2	1:D:309:ALA:HB3	1.61	0.65
1:A:122:GLN:NE2	1:A:159:SER:O	2.30	0.65
1:B:159:SER:HA	1:B:160:TRP:O	1.96	0.65
1:C:178:ILE:HG12	1:C:221:VAL:HA	1.77	0.65
1:D:241:ARG:HA	1:D:282:TRP:HB3	1.77	0.65
1:A:133:THR:O	1:A:137:ARG:NH1	2.29	0.65
1:A:229:ASN:O	1:A:235:LYS:NZ	2.29	0.65
1:B:124:LEU:HA	1:B:131:TYR:HB2	1.78	0.65
1:C:524:GLN:HA	1:C:527:PHE:HB3	1.79	0.65
1:C:2516:PRO:HA	1:C:2519:GLU:HG2	1.79	0.65
1:A:371:ASP:HB3	1:A:389:ARG:HB2	1.79	0.65
1:C:2321:LEU:HA	1:C:2324:VAL:HB	1.78	0.65
1:C:2429:ASN:OD1	1:C:2429:ASN:N	2.29	0.65
1:D:2555:LYS:HZ2	1:D:2562:LEU:HD11	1.59	0.65
1:A:505:GLU:O	1:A:507:GLN:N	2.29	0.65
1:C:194:HIS:ND1	1:C:210:ASN:OD1	2.28	0.65
1:C:389:ARG:NH1	1:C:427:LYS:O	2.29	0.65
1:C:2457:ILE:HD13	1:D:2414:SER:CB	2.26	0.65
1:D:133:THR:O	1:D:137:ARG:NH1	2.28	0.65
1:D:2527:THR:OG1	1:D:2529:GLU:OE1	2.13	0.65
1:B:198:HIS:N	1:B:207:ASN:OD1	2.29	0.65
1:B:505:GLU:O	1:B:507:GLN:N	2.30	0.65
1:C:2348:VAL:HG13	1:C:2351:GLN:HB2	1.78	0.65
1:D:13:ASP:OD1	1:D:225:LYS:HA	1.97	0.65
1:D:539:GLU:O	1:D:543:ASP:N	2.30	0.65
1:D:2348:VAL:HG13	1:D:2351:GLN:HB2	1.78	0.65
1:B:170:ARG:HH12	1:C:373:THR:HG21	1.62	0.65
1:B:2527:THR:OG1	1:B:2529:GLU:OE1	2.13	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2731:GLN:HE21	1:D:394:CYS:HB3	1.62	0.65
1:A:2516:PRO:HA	1:A:2519:GLU:HG2	1.79	0.65
1:B:2460:TYR:OH	1:B:2551:ASP:OD2	2.09	0.65
1:C:133:THR:O	1:C:137:ARG:NH1	2.29	0.65
1:D:124:LEU:HA	1:D:131:TYR:HB2	1.78	0.65
1:D:198:HIS:N	1:D:207:ASN:OD1	2.29	0.65
1:A:2434:VAL:CG1	1:A:2589:ILE:HD12	2.27	0.65
1:C:13:ASP:OD1	1:C:225:LYS:HA	1.97	0.65
1:C:2600:LYS:HD3	1:C:2603:LYS:HZ3	1.62	0.65
1:D:384:ARG:O	1:D:386:SER:N	2.30	0.65
1:D:505:GLU:O	1:D:507:GLN:N	2.30	0.65
1:D:2516:PRO:HA	1:D:2519:GLU:HG2	1.79	0.65
1:C:371:ASP:HB3	1:C:389:ARG:HB2	1.79	0.64
1:D:453:LEU:HA	1:D:456:ILE:HG12	1.80	0.64
1:D:2439:ARG:HB3	1:D:2440:PRO:HD2	1.79	0.64
1:A:13:ASP:OD1	1:A:225:LYS:HA	1.97	0.64
1:A:574:ILE:HA	1:A:577:GLN:HB2	1.77	0.64
1:A:2731:GLN:HE21	1:B:394:CYS:HB3	1.62	0.64
1:B:122:GLN:NE2	1:B:159:SER:O	2.30	0.64
1:A:524:GLN:HA	1:A:527:PHE:HB3	1.79	0.64
1:C:122:GLN:NE2	1:C:159:SER:O	2.30	0.64
1:A:2325:ILE:HG22	1:A:2329:LYS:HZ2	1.62	0.64
1:D:533:GLY:HA2	1:D:537:ARG:HB3	1.79	0.64
1:A:250:PHE:CZ	1:A:272:ALA:HB1	2.33	0.64
1:B:307:HIS:HD2	1:B:309:ALA:HB3	1.62	0.64
1:B:384:ARG:O	1:B:386:SER:N	2.30	0.64
1:B:453:LEU:HA	1:B:456:ILE:HG12	1.80	0.64
1:B:533:GLY:HA2	1:B:537:ARG:HB3	1.79	0.64
1:B:551:HIS:HA	1:B:554:ARG:HD3	1.80	0.64
1:B:2516:PRO:HA	1:B:2519:GLU:HG2	1.79	0.64
1:B:563:SER:O	1:B:570:ASN:ND2	2.31	0.64
1:D:563:SER:O	1:D:570:ASN:ND2	2.31	0.64
1:A:307:HIS:CD2	1:A:309:ALA:HB3	2.33	0.64
1:C:250:PHE:CZ	1:C:272:ALA:HB1	2.33	0.64
1:A:307:HIS:HD2	1:A:309:ALA:HB3	1.63	0.64
1:A:477:LEU:HG	1:A:555:LEU:HD22	1.79	0.64
1:A:2429:ASN:OD1	1:A:2429:ASN:N	2.30	0.64
1:C:307:HIS:HD2	1:C:309:ALA:HB3	1.63	0.64
1:C:505:GLU:O	1:C:507:GLN:N	2.30	0.64
1:C:2615:GLY:CA	1:C:2616:LEU:CA	2.76	0.64
1:D:250:PHE:CZ	1:D:272:ALA:HB1	2.33	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:185:ASN:HB3	1:A:191:GLN:HG3	1.80	0.64
1:B:1091:GLN:CA	1:B:1092:GLU:CA	2.76	0.64
1:A:303:PHE:CD2	1:A:303:PHE:CB	2.76	0.64
1:A:391:ARG:HD3	1:A:398:TRP:CE3	2.33	0.64
1:A:533:GLY:HA2	1:A:537:ARG:HB3	1.79	0.64
1:C:453:LEU:HA	1:C:456:ILE:HG12	1.80	0.64
1:D:392:HIS:NE2	1:D:394:CYS:SG	2.39	0.64
1:D:2707:LYS:O	1:D:2710:THR:OG1	2.08	0.64
1:A:2615:GLY:CA	1:A:2616:LEU:CA	2.76	0.63
1:B:307:HIS:CD2	1:B:309:ALA:HB3	2.33	0.63
1:C:27:ILE:HG13	1:C:218:TRP:HZ3	1.63	0.63
1:C:117:TYR:CE2	1:C:170:ARG:HD3	2.33	0.63
1:C:391:ARG:HD3	1:C:398:TRP:CE3	2.33	0.63
1:D:117:TYR:CE2	1:D:170:ARG:HD3	2.33	0.63
1:A:373:THR:HG21	1:D:170:ARG:HH12	1.62	0.63
1:A:547:ALA:HB3	1:A:548:PRO:HD3	1.80	0.63
1:A:2600:LYS:HD3	1:A:2603:LYS:HZ3	1.62	0.63
1:B:493:ASP:O	1:B:558:ARG:NH2	2.32	0.63
1:B:545:ARG:HE	1:B:547:ALA:HA	1.63	0.63
1:D:307:HIS:CD2	1:D:309:ALA:HB3	2.33	0.63
1:D:400:HIS:ND1	1:D:422:PRO:HB3	2.13	0.63
1:A:18:TYR:CE2	1:A:20:GLU:CB	2.82	0.63
1:A:27:ILE:HG13	1:A:218:TRP:HZ3	1.63	0.63
1:A:551:HIS:HA	1:A:554:ARG:HD3	1.80	0.63
1:B:2731:GLN:HE21	1:C:394:CYS:HB3	1.63	0.63
1:C:368:PHE:HA	1:C:392:HIS:HA	1.80	0.63
1:C:1091:GLN:CA	1:C:1092:GLU:CA	2.76	0.63
1:C:2437:ASN:CG	1:C:2592:THR:HG21	2.19	0.63
1:D:125:HIS:O	1:D:129:ASN:N	2.31	0.63
1:D:1091:GLN:CA	1:D:1092:GLU:CA	2.76	0.63
1:B:13:ASP:OD1	1:B:225:LYS:HA	1.97	0.63
1:B:139:PRO:HG2	1:B:148:ARG:HH12	1.63	0.63
1:B:400:HIS:ND1	1:B:422:PRO:HB3	2.13	0.63
1:D:122:GLN:NE2	1:D:159:SER:O	2.30	0.63
1:D:191:GLN:HB3	1:D:192:PRO:HA	1.81	0.63
1:D:574:ILE:HA	1:D:577:GLN:HB2	1.80	0.63
1:A:117:TYR:CE2	1:A:170:ARG:HD3	2.33	0.63
1:B:117:TYR:CE2	1:B:170:ARG:HD3	2.33	0.63
1:B:191:GLN:HB3	1:B:192:PRO:HA	1.81	0.63
1:C:191:GLN:HB3	1:C:192:PRO:HA	1.81	0.63
1:C:453:LEU:HG	1:C:456:ILE:HD11	1.80	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:191:GLN:HB3	1:A:192:PRO:HA	1.81	0.63
1:B:27:ILE:HG13	1:B:218:TRP:HZ3	1.64	0.63
1:B:453:LEU:HG	1:B:456:ILE:HD11	1.81	0.63
1:B:2317:MET:HA	1:B:2320:SER:HA	1.81	0.63
1:C:307:HIS:CD2	1:C:309:ALA:HB3	2.33	0.63
1:D:2598:SER:O	1:D:2601:GLN:HG2	1.99	0.63
1:A:453:LEU:HA	1:A:456:ILE:HG12	1.80	0.63
1:A:2547:GLY:N	1:B:2544:ARG:HD2	2.14	0.63
1:B:125:HIS:O	1:B:129:ASN:N	2.31	0.63
1:B:250:PHE:CZ	1:B:272:ALA:HB1	2.33	0.63
1:B:547:ALA:HB3	1:B:548:PRO:HD3	1.81	0.63
1:B:2455:PHE:HA	1:B:2458:VAL:HG12	1.81	0.63
1:C:18:TYR:CE2	1:C:20:GLU:CB	2.81	0.63
1:C:400:HIS:ND1	1:C:422:PRO:HB3	2.14	0.63
1:C:2455:PHE:HA	1:C:2458:VAL:HG12	1.81	0.63
1:D:477:LEU:HG	1:D:555:LEU:HD22	1.79	0.63
1:D:493:ASP:O	1:D:558:ARG:NH2	2.31	0.63
1:D:2446:ALA:O	1:D:2450:ILE:HG12	1.99	0.63
1:D:2455:PHE:HA	1:D:2458:VAL:HG12	1.81	0.63
1:A:45:ASP:OD1	1:A:46:LEU:N	2.32	0.63
1:A:394:CYS:HB3	1:D:2731:GLN:HE21	1.63	0.63
1:A:551:HIS:HA	1:A:554:ARG:HB2	1.80	0.63
1:A:1091:GLN:CA	1:A:1092:GLU:CA	2.76	0.63
1:B:2429:ASN:OD1	1:B:2429:ASN:N	2.31	0.63
1:B:2446:ALA:O	1:B:2450:ILE:HG12	1.99	0.63
1:B:2615:GLY:CA	1:B:2616:LEU:CA	2.76	0.63
1:A:2455:PHE:HA	1:A:2458:VAL:HG12	1.80	0.63
1:B:18:TYR:CE2	1:B:20:GLU:CB	2.82	0.63
1:B:315:ALA:O	1:B:421:SER:OG	2.16	0.63
1:C:185:ASN:HB3	1:C:191:GLN:HG3	1.80	0.63
1:C:2446:ALA:O	1:C:2450:ILE:HG12	1.99	0.63
1:C:2555:LYS:HZ2	1:C:2562:LEU:HD21	1.64	0.63
1:D:105:THR:HG23	1:D:108:ARG:HH21	1.64	0.63
1:D:371:ASP:HB3	1:D:389:ARG:HB2	1.81	0.63
1:A:539:GLU:O	1:A:543:ASP:N	2.31	0.62
1:C:551:HIS:HA	1:C:554:ARG:HB2	1.80	0.62
1:A:170:ARG:HH12	1:B:373:THR:HG21	1.64	0.62
1:C:551:HIS:HA	1:C:554:ARG:HD3	1.80	0.62
1:B:162:TYR:HB2	1:B:185:ASN:HB3	1.82	0.62
1:B:574:ILE:HA	1:B:577:GLN:HB2	1.80	0.62
1:C:493:ASP:O	1:C:558:ARG:NH2	2.32	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2434:VAL:CG2	1:C:2593:PHE:CZ	2.75	0.62
1:C:2523:ASP:OD1	1:C:2524:LYS:N	2.32	0.62
1:D:551:HIS:HA	1:D:554:ARG:HD3	1.80	0.62
1:D:2527:THR:HB	1:D:2533:MET:HE1	1.81	0.62
1:A:368:PHE:HA	1:A:392:HIS:HA	1.80	0.62
1:A:2598:SER:O	1:A:2601:GLN:HG2	1.99	0.62
1:B:371:ASP:HB3	1:B:389:ARG:HB2	1.81	0.62
1:B:507:GLN:NE2	1:B:562:HIS:O	2.33	0.62
1:C:45:ASP:OD1	1:C:46:LEU:N	2.32	0.62
1:C:170:ARG:HH12	1:D:373:THR:HG21	1.65	0.62
1:D:368:PHE:HA	1:D:392:HIS:HA	1.82	0.62
1:D:450:SER:HA	1:D:517:LYS:HE2	1.80	0.62
1:D:453:LEU:HG	1:D:456:ILE:HD11	1.81	0.62
1:D:2317:MET:HA	1:D:2320:SER:HA	1.81	0.62
1:D:2615:GLY:CA	1:D:2616:LEU:CA	2.76	0.62
1:A:493:ASP:O	1:A:558:ARG:NH2	2.32	0.62
1:C:533:GLY:HA2	1:C:537:ARG:HB3	1.79	0.62
1:D:162:TYR:HB2	1:D:185:ASN:HB3	1.82	0.62
1:D:2555:LYS:HZ2	1:D:2562:LEU:HD21	1.65	0.62
1:A:162:TYR:HB2	1:A:185:ASN:HB3	1.81	0.62
1:B:116:GLN:OE1	1:B:175:SER:OG	2.10	0.62
1:B:368:PHE:HA	1:B:392:HIS:HA	1.81	0.62
1:C:146:ALA:O	1:C:147:MET:HG3	2.00	0.62
1:C:162:TYR:HB2	1:C:185:ASN:HB3	1.82	0.62
1:C:249:LYS:HB3	1:C:264:LEU:HD23	1.82	0.62
1:D:27:ILE:HG13	1:D:218:TRP:HZ3	1.64	0.62
1:D:139:PRO:HG2	1:D:148:ARG:HH12	1.63	0.62
1:A:400:HIS:ND1	1:A:422:PRO:HB3	2.14	0.62
1:B:256:HIS:N	1:B:259:LYS:O	2.31	0.62
1:B:397:THR:HG21	1:B:423:LEU:HA	1.81	0.62
1:C:196:SER:HB2	1:C:207:ASN:HB3	1.82	0.62
1:C:231:ASP:O	1:C:233:ILE:N	2.33	0.62
1:C:2460:TYR:OH	1:C:2551:ASP:OD2	2.10	0.62
1:D:18:TYR:CE2	1:D:20:GLU:CB	2.82	0.62
1:D:524:GLN:HA	1:D:527:PHE:HB3	1.81	0.62
1:D:545:ARG:HE	1:D:547:ALA:HA	1.64	0.62
1:A:139:PRO:HG2	1:A:148:ARG:HH12	1.64	0.62
1:B:281:LEU:HG	1:B:309:ALA:HB1	1.82	0.62
1:B:2600:LYS:HD3	1:B:2603:LYS:HZ3	1.63	0.62
1:C:2527:THR:HB	1:C:2533:MET:HE1	1.81	0.62
1:A:2460:TYR:OH	1:A:2551:ASP:OD2	2.10	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2527:THR:HB	1:A:2533:MET:HE1	1.81	0.62
1:B:146:ALA:O	1:B:147:MET:HG3	2.00	0.62
1:B:539:GLU:O	1:B:543:ASP:N	2.30	0.62
1:B:2523:ASP:OD1	1:B:2524:LYS:N	2.33	0.62
1:B:2598:SER:O	1:B:2601:GLN:HG2	1.99	0.62
1:C:547:ALA:HB3	1:C:548:PRO:HD3	1.80	0.62
1:D:397:THR:HG21	1:D:423:LEU:HA	1.81	0.62
1:D:2325:ILE:CG2	1:D:2329:LYS:NZ	2.54	0.62
1:A:146:ALA:O	1:A:147:MET:HG3	2.00	0.62
1:A:577:GLN:OE1	1:A:577:GLN:N	2.32	0.62
1:B:249:LYS:HB3	1:B:264:LEU:HD23	1.82	0.62
1:B:477:LEU:HG	1:B:555:LEU:HD22	1.80	0.62
1:C:270:GLN:HG3	1:C:271:SER:H	1.64	0.62
1:C:397:THR:HG21	1:C:423:LEU:HA	1.81	0.62
1:C:477:LEU:HG	1:C:555:LEU:HD22	1.79	0.62
1:C:2288:ASN:HA	1:C:2291:VAL:HG12	1.82	0.62
1:D:18:TYR:CD2	1:D:20:GLU:CB	2.83	0.62
1:D:249:LYS:HB3	1:D:264:LEU:HD23	1.82	0.62
1:D:547:ALA:HB3	1:D:548:PRO:HD3	1.81	0.62
1:D:2600:LYS:HD3	1:D:2603:LYS:HZ3	1.64	0.62
1:A:18:TYR:CD2	1:A:20:GLU:CB	2.83	0.61
1:A:397:THR:HG21	1:A:423:LEU:HA	1.81	0.61
1:A:453:LEU:HG	1:A:456:ILE:HD11	1.80	0.61
1:B:18:TYR:CD2	1:B:20:GLU:CB	2.83	0.61
1:C:29:THR:HG21	1:C:37:CYS:HA	1.82	0.61
1:D:69:GLN:HE22	1:D:100:LYS:HG2	1.65	0.61
1:D:281:LEU:HG	1:D:309:ALA:HB1	1.82	0.61
1:D:391:ARG:HD3	1:D:398:TRP:CE3	2.35	0.61
1:D:507:GLN:NE2	1:D:562:HIS:O	2.33	0.61
1:D:2523:ASP:OD1	1:D:2524:LYS:N	2.32	0.61
1:B:450:SER:HA	1:B:517:LYS:HE2	1.80	0.61
1:C:125:HIS:O	1:C:129:ASN:N	2.33	0.61
1:D:45:ASP:OD1	1:D:46:LEU:N	2.33	0.61
1:A:29:THR:HG21	1:A:37:CYS:HA	1.82	0.61
1:A:2523:ASP:OD1	1:A:2524:LYS:N	2.32	0.61
1:B:20:GLU:HA	1:B:24:ASN:HA	1.82	0.61
1:D:2437:ASN:CG	1:D:2592:THR:HG22	2.21	0.61
1:A:2317:MET:HA	1:A:2320:SER:HA	1.81	0.61
1:A:2437:ASN:CG	1:A:2592:THR:HG21	2.19	0.61
1:B:196:SER:HB2	1:B:207:ASN:HB3	1.82	0.61
1:B:303:PHE:CD2	1:B:303:PHE:CB	2.76	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:739:LEU:CA	1:C:740:PHE:CA	2.78	0.61
1:C:2460:TYR:HA	1:C:2566:ARG:NH1	2.15	0.61
1:C:2598:SER:O	1:C:2601:GLN:HG2	2.00	0.61
1:D:2460:TYR:HA	1:D:2566:ARG:NH1	2.16	0.61
1:A:18:TYR:CD1	1:A:20:GLU:OE2	2.54	0.61
1:A:270:GLN:HG3	1:A:271:SER:H	1.64	0.61
1:A:2446:ALA:O	1:A:2450:ILE:HG12	1.99	0.61
1:B:239:VAL:HB	1:B:283:GLU:HA	1.82	0.61
1:B:400:HIS:HB2	1:B:420:THR:HG21	1.82	0.61
1:B:2600:LYS:HA	1:B:2603:LYS:HG2	1.82	0.61
1:C:539:GLU:O	1:C:543:ASP:N	2.30	0.61
1:D:20:GLU:HA	1:D:24:ASN:HA	1.83	0.61
1:D:71:GLN:HA	1:D:74:LYS:HZ3	1.66	0.61
1:D:231:ASP:O	1:D:233:ILE:N	2.34	0.61
1:A:193:LEU:HA	1:A:210:ASN:C	2.21	0.61
1:A:231:ASP:O	1:A:233:ILE:N	2.33	0.61
1:B:45:ASP:OD1	1:B:46:LEU:N	2.33	0.61
1:B:105:THR:HG23	1:B:108:ARG:HH21	1.64	0.61
1:B:2460:TYR:HA	1:B:2566:ARG:NH1	2.15	0.61
1:D:146:ALA:O	1:D:147:MET:HG3	2.00	0.61
1:A:392:HIS:NE2	1:A:394:CYS:SG	2.38	0.61
1:A:2460:TYR:HA	1:A:2566:ARG:NH1	2.15	0.61
1:A:2600:LYS:HA	1:A:2603:LYS:HG2	1.83	0.61
1:B:2527:THR:HB	1:B:2533:MET:HE1	1.81	0.61
1:C:193:LEU:HA	1:C:210:ASN:C	2.21	0.61
1:C:359:PRO:HB2	1:C:360:GLU:HA	1.83	0.61
1:C:450:SER:HA	1:C:517:LYS:HE2	1.81	0.61
1:A:739:LEU:CA	1:A:740:PHE:CA	2.78	0.61
1:A:2527:THR:OG1	1:A:2529:GLU:OE1	2.14	0.61
1:C:2547:GLY:N	1:D:2544:ARG:HD2	2.15	0.61
1:D:193:LEU:HA	1:D:210:ASN:C	2.21	0.61
1:D:2600:LYS:HA	1:D:2603:LYS:HG2	1.82	0.61
1:A:105:THR:HG23	1:A:108:ARG:HH21	1.65	0.61
1:A:125:HIS:O	1:A:129:ASN:N	2.33	0.61
1:A:450:SER:HA	1:A:517:LYS:HE2	1.81	0.61
1:A:2288:ASN:HA	1:A:2291:VAL:HG12	1.82	0.61
1:B:2434:VAL:HG22	1:B:2593:PHE:CE1	2.35	0.61
1:D:281:LEU:HG	1:D:309:ALA:CB	2.31	0.61
1:D:2430:VAL:H	1:D:2431:ILE:HD12	1.66	0.61
1:A:429:ALA:HB2	1:D:169:LEU:HG	1.83	0.61
1:B:231:ASP:O	1:B:233:ILE:N	2.34	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:551:HIS:HA	1:B:554:ARG:HB2	1.82	0.61
1:C:18:TYR:CD2	1:C:20:GLU:CB	2.83	0.61
1:C:139:PRO:HG2	1:C:148:ARG:HH12	1.64	0.61
1:C:392:HIS:NE2	1:C:394:CYS:SG	2.38	0.61
1:C:2600:LYS:HA	1:C:2603:LYS:HG2	1.83	0.61
1:A:249:LYS:HB3	1:A:264:LEU:HD23	1.82	0.60
1:B:29:THR:HG21	1:B:37:CYS:HA	1.83	0.60
1:B:193:LEU:HA	1:B:210:ASN:C	2.21	0.60
1:B:281:LEU:HG	1:B:309:ALA:CB	2.31	0.60
1:C:468:ASN:HA	1:C:471:ARG:HG2	1.82	0.60
1:C:545:ARG:HE	1:C:547:ALA:HA	1.66	0.60
1:D:315:ALA:O	1:D:421:SER:OG	2.16	0.60
1:D:739:LEU:CA	1:D:740:PHE:CA	2.79	0.60
1:A:281:LEU:HG	1:A:309:ALA:CB	2.31	0.60
1:B:524:GLN:HA	1:B:527:PHE:HB3	1.81	0.60
1:B:2437:ASN:CG	1:B:2592:THR:HG21	2.21	0.60
1:D:303:PHE:CD2	1:D:303:PHE:CB	2.76	0.60
1:D:359:PRO:HB2	1:D:360:GLU:HA	1.83	0.60
1:D:551:HIS:HA	1:D:554:ARG:HB2	1.82	0.60
1:A:196:SER:HB2	1:A:207:ASN:HB3	1.82	0.60
1:B:399:VAL:N	1:B:422:PRO:HG2	2.16	0.60
1:C:281:LEU:HG	1:C:309:ALA:HB1	1.83	0.60
1:C:489:ASN:HB3	1:C:490:SER:OG	2.02	0.60
1:D:29:THR:HG21	1:D:37:CYS:HA	1.83	0.60
1:D:164:GLN:O	1:D:181:LYS:NZ	2.16	0.60
1:D:2288:ASN:HA	1:D:2291:VAL:HG12	1.84	0.60
1:D:2434:VAL:HG13	1:D:2589:ILE:HD12	1.83	0.60
1:B:164:GLN:O	1:B:181:LYS:NZ	2.16	0.60
1:C:2317:MET:HA	1:C:2320:SER:HA	1.81	0.60
1:D:162:TYR:HB3	1:D:183:VAL:O	2.02	0.60
1:D:399:VAL:N	1:D:422:PRO:HG2	2.16	0.60
1:D:400:HIS:HB2	1:D:420:THR:HG21	1.82	0.60
1:A:143:GLU:HG3	1:A:144:LYS:H	1.66	0.60
1:B:10:HIS:HB3	1:B:115:ILE:HD12	1.84	0.60
1:B:391:ARG:HD3	1:B:398:TRP:CE3	2.35	0.60
1:C:281:LEU:HG	1:C:309:ALA:CB	2.31	0.60
1:C:399:VAL:N	1:C:422:PRO:HG2	2.17	0.60
1:D:395:THR:HG23	1:D:397:THR:H	1.67	0.60
1:A:468:ASN:HA	1:A:471:ARG:HG2	1.83	0.60
1:A:507:GLN:NE2	1:A:562:HIS:O	2.34	0.60
1:B:2288:ASN:HA	1:B:2291:VAL:HG12	1.84	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:69:GLN:HE22	1:C:100:LYS:HG2	1.66	0.60
1:C:105:THR:HG23	1:C:108:ARG:HH21	1.66	0.60
1:C:2425:GLU:OE2	1:C:2431:ILE:HG23	2.02	0.60
1:D:143:GLU:HG3	1:D:144:LYS:H	1.66	0.60
1:D:2431:ILE:HD12	1:D:2431:ILE:N	2.08	0.60
1:D:2441:ILE:O	1:D:2444:THR:OG1	2.11	0.60
1:A:69:GLN:HE22	1:A:100:LYS:HG2	1.66	0.60
1:A:545:ARG:HE	1:A:547:ALA:HA	1.66	0.60
1:A:2604:GLU:HA	1:A:2607:LEU:HB3	1.84	0.60
1:B:739:LEU:CA	1:B:740:PHE:CA	2.79	0.60
1:C:507:GLN:NE2	1:C:562:HIS:O	2.34	0.60
1:D:196:SER:HB2	1:D:207:ASN:HB3	1.83	0.60
1:A:281:LEU:HG	1:A:309:ALA:HB1	1.83	0.60
1:B:395:THR:HG23	1:B:397:THR:H	1.67	0.60
1:C:2358:GLY:HA2	1:C:2361:ASN:ND2	2.16	0.60
1:D:10:HIS:HB3	1:D:115:ILE:HD12	1.84	0.60
1:D:2312:LEU:O	1:D:2315:THR:OG1	2.14	0.60
1:D:2437:ASN:CG	1:D:2592:THR:HG21	2.22	0.60
1:A:399:VAL:N	1:A:422:PRO:HG2	2.17	0.60
1:A:1642:ASP:CA	1:A:1643:ALA:CA	2.80	0.60
1:A:2358:GLY:HA2	1:A:2361:ASN:ND2	2.16	0.60
1:B:18:TYR:CD1	1:B:20:GLU:OE2	2.55	0.60
1:B:117:TYR:CD2	1:B:176:VAL:CG2	2.85	0.60
1:B:162:TYR:HB3	1:B:183:VAL:O	2.01	0.60
1:C:18:TYR:CD1	1:C:20:GLU:OE2	2.54	0.60
1:C:169:LEU:HG	1:D:429:ALA:HB2	1.84	0.60
1:C:2312:LEU:O	1:C:2315:THR:OG1	2.15	0.60
1:D:1642:ASP:CA	1:D:1643:ALA:CA	2.80	0.60
1:B:143:GLU:HG3	1:B:144:LYS:H	1.66	0.59
1:D:2604:GLU:HA	1:D:2607:LEU:HB3	1.84	0.59
1:A:10:HIS:HB3	1:A:115:ILE:HD12	1.84	0.59
1:A:20:GLU:HA	1:A:24:ASN:HA	1.84	0.59
1:A:239:VAL:HB	1:A:283:GLU:HA	1.84	0.59
1:A:246:GLU:HG3	1:A:429:ALA:HB3	1.84	0.59
1:B:468:ASN:HA	1:B:471:ARG:HG2	1.83	0.59
1:B:577:GLN:OE1	1:B:577:GLN:N	2.32	0.59
1:C:20:GLU:HA	1:C:24:ASN:HA	1.84	0.59
1:C:162:TYR:HB3	1:C:183:VAL:O	2.02	0.59
1:D:117:TYR:CZ	1:D:176:VAL:C	2.76	0.59
1:D:239:VAL:HB	1:D:283:GLU:HA	1.83	0.59
1:B:2425:GLU:OE2	1:B:2431:ILE:HG23	2.03	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2547:GLY:N	1:C:2544:ARG:HD2	2.17	0.59
1:A:33:VAL:H	1:A:35:ASP:HB2	1.67	0.59
1:C:264:LEU:O	1:C:415:MET:HG3	2.02	0.59
1:C:2425:GLU:OE2	1:C:2431:ILE:HG21	2.02	0.59
1:C:2708:LEU:O	1:C:2712:LEU:HG	2.02	0.59
1:D:468:ASN:HA	1:D:471:ARG:HG2	1.83	0.59
1:D:577:GLN:OE1	1:D:577:GLN:N	2.32	0.59
1:A:359:PRO:HB2	1:A:360:GLU:HA	1.83	0.59
1:B:69:GLN:HE22	1:B:100:LYS:HG2	1.66	0.59
1:B:185:ASN:HB3	1:B:191:GLN:HG3	1.84	0.59
1:B:2358:GLY:HA2	1:B:2361:ASN:ND2	2.17	0.59
1:C:143:GLU:H	1:C:146:ALA:HB2	1.67	0.59
1:C:246:GLU:HG3	1:C:429:ALA:HB3	1.84	0.59
1:C:577:GLN:OE1	1:C:577:GLN:N	2.33	0.59
1:A:117:TYR:CD2	1:A:176:VAL:CG2	2.86	0.59
1:B:304:ARG:NH2	1:B:363:ASP:O	2.36	0.59
1:B:2144:ASP:CA	1:B:2145:GLY:CA	2.81	0.59
1:D:134:VAL:HG23	1:D:149:VAL:HA	1.83	0.59
1:D:2144:ASP:CA	1:D:2145:GLY:CA	2.81	0.59
1:B:134:VAL:HG23	1:B:149:VAL:HA	1.83	0.59
1:B:169:LEU:HG	1:C:429:ALA:HB2	1.83	0.59
1:B:2434:VAL:CG1	1:B:2589:ILE:HD12	2.33	0.59
1:B:2509:ALA:CA	1:B:2510:PRO:CD	2.81	0.59
1:B:2604:GLU:HA	1:B:2607:LEU:HB3	1.84	0.59
1:C:143:GLU:HG3	1:C:144:LYS:H	1.66	0.59
1:C:2144:ASP:CA	1:C:2145:GLY:CA	2.80	0.59
1:D:18:TYR:CD1	1:D:20:GLU:OE2	2.55	0.59
1:D:117:TYR:CD2	1:D:176:VAL:CG2	2.86	0.59
1:D:286:VAL:HG22	1:D:295:GLY:H	1.67	0.59
1:A:143:GLU:H	1:A:146:ALA:HB2	1.67	0.59
1:B:264:LEU:O	1:B:415:MET:HG3	2.03	0.59
1:B:359:PRO:HB2	1:B:360:GLU:HA	1.84	0.59
1:B:1642:ASP:CA	1:B:1643:ALA:CA	2.80	0.59
1:C:315:ALA:O	1:C:421:SER:OG	2.20	0.59
1:D:238:ASP:HA	1:D:283:GLU:OE2	2.03	0.59
1:D:264:LEU:O	1:D:415:MET:HG3	2.03	0.59
1:D:270:GLN:HG3	1:D:271:SER:H	1.67	0.59
1:D:489:ASN:HB3	1:D:490:SER:OG	2.03	0.59
1:A:162:TYR:HB3	1:A:183:VAL:O	2.02	0.59
1:A:392:HIS:CD2	1:A:395:THR:HG22	2.38	0.59
1:A:2527:THR:OG1	1:A:2528:CYS:HA	2.03	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:489:ASN:HB3	1:B:490:SER:OG	2.03	0.59
1:C:304:ARG:NH2	1:C:363:ASP:O	2.36	0.59
1:C:1639:ASP:CA	1:C:1640:ALA:CA	2.81	0.59
1:D:33:VAL:H	1:D:35:ASP:HB2	1.67	0.59
1:A:169:LEU:HG	1:B:429:ALA:HB2	1.83	0.59
1:A:2144:ASP:CA	1:A:2145:GLY:CA	2.80	0.59
1:A:2509:ALA:CA	1:A:2510:PRO:CD	2.81	0.59
1:A:2544:ARG:HD2	1:D:2547:GLY:N	2.17	0.59
1:B:2708:LEU:O	1:B:2712:LEU:HG	2.03	0.59
1:C:71:GLN:HA	1:C:74:LYS:HZ3	1.68	0.59
1:D:417:LYS:HB2	1:D:418:ILE:HD12	1.85	0.59
1:D:1883:GLY:CA	1:D:1884:ASN:CA	2.81	0.59
1:D:2703:GLU:HA	1:D:2706:MET:HE2	1.85	0.59
1:A:264:LEU:O	1:A:415:MET:HG3	2.02	0.58
1:A:304:ARG:NH2	1:A:363:ASP:O	2.36	0.58
1:C:1225:ALA:CA	1:C:1226:GLU:CA	2.81	0.58
1:C:2604:GLU:HA	1:C:2607:LEU:HB3	1.84	0.58
1:D:304:ARG:NH2	1:D:363:ASP:O	2.36	0.58
1:D:513:GLN:OE1	1:D:513:GLN:N	2.36	0.58
1:D:2327:LEU:HB3	1:D:2328:PRO:HD3	1.85	0.58
1:D:2509:ALA:CA	1:D:2510:PRO:CD	2.81	0.58
1:A:489:ASN:HB3	1:A:490:SER:OG	2.02	0.58
1:A:1225:ALA:CA	1:A:1226:GLU:CA	2.81	0.58
1:A:1371:LEU:CA	1:A:1372:PHE:CA	2.81	0.58
1:B:238:ASP:HA	1:B:283:GLU:OE2	2.03	0.58
1:C:247:GLN:O	1:C:249:LYS:HG2	2.03	0.58
1:C:1883:GLY:CA	1:C:1884:ASN:CA	2.81	0.58
1:C:2509:ALA:CA	1:C:2510:PRO:CD	2.81	0.58
1:D:2358:GLY:HA2	1:D:2361:ASN:ND2	2.17	0.58
1:D:2708:LEU:O	1:D:2712:LEU:HG	2.03	0.58
1:B:1883:GLY:CA	1:B:1884:ASN:CA	2.81	0.58
1:C:117:TYR:CD2	1:C:176:VAL:CG2	2.86	0.58
1:C:239:VAL:HB	1:C:283:GLU:HA	1.84	0.58
1:C:400:HIS:HB2	1:C:420:THR:HG21	1.85	0.58
1:D:392:HIS:CD2	1:D:395:THR:HG22	2.38	0.58
1:A:2429:ASN:C	1:A:2431:ILE:HD12	2.24	0.58
1:A:2434:VAL:HG22	1:A:2593:PHE:CE1	2.38	0.58
1:A:2555:LYS:HZ2	1:A:2562:LEU:HD21	1.68	0.58
1:B:33:VAL:H	1:B:35:ASP:HB2	1.67	0.58
1:B:2554:ARG:NH2	1:C:2522:GLN:HB2	2.18	0.58
1:C:1371:LEU:CA	1:C:1372:PHE:CA	2.81	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:117:TYR:CZ	1:A:176:VAL:C	2.76	0.58
1:A:238:ASP:HA	1:A:283:GLU:OE2	2.04	0.58
1:A:376:ARG:NH2	1:D:178:ILE:O	2.37	0.58
1:A:2425:GLU:OE2	1:A:2431:ILE:HG23	2.02	0.58
1:A:2425:GLU:OE2	1:A:2431:ILE:HG21	2.03	0.58
1:B:71:GLN:HA	1:B:74:LYS:HZ3	1.67	0.58
1:B:1225:ALA:CA	1:B:1226:GLU:CA	2.82	0.58
1:C:2434:VAL:HG22	1:C:2593:PHE:CE1	2.39	0.58
1:C:2561:PRO:HA	1:C:2564:ALA:HB3	1.85	0.58
1:D:256:HIS:N	1:D:259:LYS:O	2.31	0.58
1:A:256:HIS:N	1:A:259:LYS:O	2.32	0.58
1:A:2708:LEU:O	1:A:2712:LEU:HG	2.02	0.58
1:C:117:TYR:CZ	1:C:176:VAL:C	2.76	0.58
1:C:2527:THR:OG1	1:C:2528:CYS:HA	2.03	0.58
1:D:549:PHE:HA	1:D:552:ILE:HD12	1.85	0.58
1:D:2404:MET:CA	1:D:2405:GLY:CA	2.82	0.58
1:A:2327:LEU:HB3	1:A:2328:PRO:HD3	1.86	0.58
1:A:2561:PRO:HA	1:A:2564:ALA:HB3	1.85	0.58
1:B:513:GLN:OE1	1:B:513:GLN:N	2.37	0.58
1:B:2404:MET:CA	1:B:2405:GLY:CA	2.82	0.58
1:C:33:VAL:H	1:C:35:ASP:HB2	1.67	0.58
1:C:54:ARG:HH21	1:C:282:TRP:HE1	1.52	0.58
1:C:152:ASP:OD1	1:C:153:GLU:N	2.37	0.58
1:D:247:GLN:O	1:D:249:LYS:HG2	2.03	0.58
1:D:1225:ALA:CA	1:D:1226:GLU:CA	2.82	0.58
1:A:506:ARG:O	1:A:509:LEU:HG	2.03	0.58
1:A:2404:MET:CA	1:A:2405:GLY:CA	2.82	0.58
1:B:117:TYR:CZ	1:B:176:VAL:C	2.76	0.58
1:B:131:TYR:N	1:B:152:ASP:O	2.37	0.58
1:B:270:GLN:HG3	1:B:271:SER:H	1.67	0.58
1:B:286:VAL:HG22	1:B:295:GLY:H	1.67	0.58
1:B:549:PHE:HA	1:B:552:ILE:HD12	1.85	0.58
1:C:238:ASP:HA	1:C:283:GLU:OE2	2.04	0.58
1:C:286:VAL:HG22	1:C:295:GLY:H	1.68	0.58
1:D:185:ASN:HB3	1:D:191:GLN:HG3	1.84	0.58
1:D:1371:LEU:CA	1:D:1372:PHE:CA	2.82	0.58
1:A:1883:GLY:CA	1:A:1884:ASN:CA	2.81	0.58
1:B:54:ARG:HH21	1:B:282:TRP:HE1	1.52	0.58
1:B:194:HIS:H	1:B:210:ASN:N	2.02	0.58
1:B:2327:LEU:HB3	1:B:2328:PRO:HD3	1.85	0.58
1:C:10:HIS:NE2	1:C:176:VAL:O	2.36	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:513:GLN:OE1	1:C:513:GLN:N	2.37	0.58
1:A:72:PHE:HD1	1:A:92:LEU:HD23	1.68	0.58
1:A:286:VAL:HG22	1:A:295:GLY:H	1.68	0.58
1:A:2432:LYS:HA	1:A:2435:THR:HG23	1.86	0.58
1:B:27:ILE:HG13	1:B:218:TRP:CZ3	2.39	0.58
1:B:417:LYS:HB2	1:B:418:ILE:HD12	1.85	0.58
1:C:2404:MET:CA	1:C:2405:GLY:CA	2.82	0.58
1:A:372:PRO:HB2	1:A:374:THR:HG23	1.86	0.57
1:A:2522:GLN:HB2	1:D:2554:ARG:NH2	2.19	0.57
1:B:178:ILE:O	1:C:376:ARG:NH2	2.37	0.57
1:B:2555:LYS:HZ2	1:B:2562:LEU:HD21	1.67	0.57
1:C:10:HIS:HB3	1:C:115:ILE:HD12	1.84	0.57
1:C:1319:GLU:CA	1:C:1320:GLY:CA	2.82	0.57
1:D:442:ASP:OD2	1:D:504:ARG:NH2	2.37	0.57
1:A:373:THR:N	1:A:388:VAL:HG21	2.09	0.57
1:A:2552:VAL:HA	1:A:2553:LEU:CB	2.32	0.57
1:A:2554:ARG:NH2	1:B:2522:GLN:HB2	2.19	0.57
1:B:143:GLU:H	1:B:146:ALA:HB2	1.68	0.57
1:B:2429:ASN:C	1:B:2431:ILE:HD12	2.24	0.57
1:C:506:ARG:O	1:C:509:LEU:HG	2.03	0.57
1:C:2295:TYR:CD1	1:C:2296:PRO:HD2	2.40	0.57
1:D:143:GLU:H	1:D:146:ALA:HB2	1.69	0.57
1:D:161:PHE:CE1	1:D:184:LEU:HD12	2.39	0.57
1:D:2527:THR:OG1	1:D:2528:CYS:HA	2.04	0.57
1:A:247:GLN:O	1:A:249:LYS:HG2	2.03	0.57
1:B:392:HIS:CD2	1:B:395:THR:HG22	2.38	0.57
1:C:2554:ARG:NH2	1:D:2522:GLN:HB2	2.19	0.57
1:D:2310:SER:HB3	1:D:2312:LEU:HG	1.87	0.57
1:A:2462:PHE:H	1:A:2566:ARG:NH2	2.02	0.57
1:B:247:GLN:O	1:B:249:LYS:HG2	2.03	0.57
1:B:506:ARG:O	1:B:509:LEU:HG	2.03	0.57
1:C:27:ILE:HG13	1:C:218:TRP:CZ3	2.40	0.57
1:C:303:PHE:CD1	1:C:303:PHE:CB	2.77	0.57
1:C:439:GLU:OE1	1:C:439:GLU:N	2.38	0.57
1:C:1009:SER:CA	1:C:1010:GLU:CA	2.82	0.57
1:A:6:SER:O	1:A:7:SER:OG	2.23	0.57
1:A:54:ARG:HH21	1:A:282:TRP:HE1	1.52	0.57
1:A:720:LYS:CA	1:A:721:GLU:CA	2.83	0.57
1:A:2703:GLU:HA	1:A:2706:MET:HE2	1.86	0.57
1:B:299:TRP:CD1	1:B:372:PRO:HG3	2.40	0.57
1:B:1371:LEU:CA	1:B:1372:PHE:CA	2.81	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:392:HIS:CD2	1:C:395:THR:HG22	2.38	0.57
1:C:2429:ASN:C	1:C:2431:ILE:HD12	2.24	0.57
1:D:1319:GLU:CA	1:D:1320:GLY:CA	2.83	0.57
1:A:84:THR:HG21	1:A:88:LEU:HD13	1.87	0.57
1:A:152:ASP:OD1	1:A:153:GLU:N	2.37	0.57
1:A:373:THR:HG21	1:D:170:ARG:NH1	2.20	0.57
1:A:1009:SER:CA	1:A:1010:GLU:CA	2.82	0.57
1:B:2295:TYR:CD1	1:B:2296:PRO:HD2	2.40	0.57
1:D:299:TRP:CD1	1:D:372:PRO:HG3	2.40	0.57
1:D:720:LYS:CA	1:D:721:GLU:CA	2.83	0.57
1:A:513:GLN:OE1	1:A:513:GLN:N	2.37	0.57
1:A:2295:TYR:CD1	1:A:2296:PRO:HD2	2.39	0.57
1:C:72:PHE:HD1	1:C:92:LEU:HD23	1.68	0.57
1:C:134:VAL:HG23	1:C:149:VAL:HA	1.87	0.57
1:C:2455:PHE:HB2	1:C:2573:PHE:CE1	2.40	0.57
1:C:2552:VAL:HA	1:C:2553:LEU:CB	2.32	0.57
1:D:54:ARG:HH21	1:D:282:TRP:HE1	1.52	0.57
1:D:235:LYS:HB3	1:D:238:ASP:OD1	2.05	0.57
1:D:1009:SER:CA	1:D:1010:GLU:CA	2.82	0.57
1:D:2428:LEU:CG	1:D:2429:ASN:H	2.11	0.57
1:A:442:ASP:OD2	1:A:504:ARG:NH2	2.38	0.57
1:C:44:GLY:HA3	1:C:50:PRO:HD3	1.86	0.57
1:C:161:PHE:CE1	1:C:184:LEU:HD12	2.40	0.57
1:C:2327:LEU:HB3	1:C:2328:PRO:HD3	1.86	0.57
1:D:44:GLY:HA3	1:D:50:PRO:HD3	1.87	0.57
1:D:506:ARG:O	1:D:509:LEU:HG	2.04	0.57
1:A:71:GLN:HA	1:A:74:LYS:HZ3	1.68	0.57
1:A:1319:GLU:CA	1:A:1320:GLY:CA	2.82	0.57
1:B:246:GLU:HG3	1:B:429:ALA:HB3	1.87	0.57
1:B:387:TYR:CD1	1:B:431:ALA:HB3	2.40	0.57
1:B:772:ASN:CA	1:B:773:LEU:CA	2.83	0.57
1:C:235:LYS:HB3	1:C:238:ASP:OD1	2.05	0.57
1:C:395:THR:HG23	1:C:397:THR:H	1.70	0.57
1:C:720:LYS:CA	1:C:721:GLU:CA	2.83	0.57
1:C:2441:ILE:O	1:C:2444:THR:OG1	2.11	0.57
1:D:2429:ASN:N	1:D:2431:ILE:HD13	2.19	0.57
1:A:53:PHE:HA	1:A:56:CYS:HB3	1.87	0.57
1:B:161:PHE:CE1	1:B:184:LEU:HD12	2.39	0.57
1:C:299:TRP:CD1	1:C:372:PRO:HG3	2.40	0.57
1:D:152:ASP:OD1	1:D:153:GLU:N	2.37	0.57
1:D:772:ASN:CA	1:D:773:LEU:CA	2.83	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2514:LEU:HA	1:D:2517:VAL:HG12	1.87	0.57
1:A:387:TYR:CD1	1:A:431:ALA:HB3	2.40	0.56
1:A:2433:SER:OG	1:A:2434:VAL:N	2.38	0.56
1:B:2701:LYS:HB2	1:C:2700:GLU:OE2	2.05	0.56
1:D:130:LYS:NZ	1:D:153:GLU:OE1	2.34	0.56
1:D:2455:PHE:HB2	1:D:2573:PHE:CE1	2.40	0.56
1:A:10:HIS:NE2	1:A:176:VAL:O	2.36	0.56
1:A:134:VAL:HG23	1:A:149:VAL:HA	1.87	0.56
1:B:235:LYS:HB3	1:B:238:ASP:OD1	2.05	0.56
1:B:442:ASP:OD2	1:B:504:ARG:NH2	2.37	0.56
1:B:1009:SER:CA	1:B:1010:GLU:CA	2.82	0.56
1:B:2310:SER:HB3	1:B:2312:LEU:HG	1.86	0.56
1:B:2527:THR:OG1	1:B:2528:CYS:HA	2.04	0.56
1:C:84:THR:HG21	1:C:88:LEU:HD13	1.87	0.56
1:C:193:LEU:O	1:C:214:CYS:HB3	2.06	0.56
1:D:2432:LYS:C	1:D:2435:THR:HG23	2.26	0.56
1:A:44:GLY:HA3	1:A:50:PRO:HD3	1.86	0.56
1:A:772:ASN:CA	1:A:773:LEU:CA	2.84	0.56
1:A:2701:LYS:HB2	1:B:2700:GLU:OE2	2.05	0.56
1:B:72:PHE:HD1	1:B:92:LEU:HD23	1.71	0.56
1:B:392:HIS:NE2	1:B:394:CYS:SG	2.39	0.56
1:B:720:LYS:CA	1:B:721:GLU:CA	2.83	0.56
1:B:2433:SER:OG	1:B:2434:VAL:N	2.38	0.56
1:C:303:PHE:CD2	1:C:303:PHE:CB	2.76	0.56
1:D:2295:TYR:CD1	1:D:2296:PRO:HD2	2.40	0.56
1:B:308:LEU:N	1:B:309:ALA:HB2	2.20	0.56
1:B:1319:GLU:CA	1:B:1320:GLY:CA	2.83	0.56
1:C:193:LEU:N	1:C:212:VAL:O	2.39	0.56
1:C:308:LEU:N	1:C:309:ALA:HB2	2.21	0.56
1:C:2514:LEU:HA	1:C:2517:VAL:HG12	1.88	0.56
1:D:1462:CYS:CA	1:D:1463:ASN:CA	2.83	0.56
1:A:193:LEU:O	1:A:214:CYS:HB3	2.06	0.56
1:A:308:LEU:N	1:A:309:ALA:HB2	2.21	0.56
1:A:2432:LYS:C	1:A:2435:THR:HG23	2.26	0.56
1:B:168:LYS:NZ	1:C:247:GLN:HA	2.21	0.56
1:B:170:ARG:NH1	1:C:373:THR:HG21	2.20	0.56
1:B:2312:LEU:O	1:B:2315:THR:OG1	2.14	0.56
1:C:549:PHE:HA	1:C:552:ILE:HD12	1.87	0.56
1:C:1462:CYS:CA	1:C:1463:ASN:CA	2.84	0.56
1:D:131:TYR:N	1:D:152:ASP:O	2.37	0.56
1:D:194:HIS:H	1:D:210:ASN:N	2.02	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:387:TYR:CD1	1:D:431:ALA:HB3	2.40	0.56
1:D:477:LEU:O	1:D:480:LEU:HB2	2.06	0.56
1:A:2700:GLU:OE2	1:D:2701:LYS:HB2	2.06	0.56
1:B:44:GLY:HA3	1:B:50:PRO:HD3	1.87	0.56
1:B:2428:LEU:CG	1:B:2429:ASN:OD1	2.35	0.56
1:C:477:LEU:O	1:C:480:LEU:HB2	2.06	0.56
1:C:2701:LYS:HB2	1:D:2700:GLU:OE2	2.05	0.56
1:A:299:TRP:CD1	1:A:372:PRO:HG3	2.41	0.56
1:A:2333:ILE:HG13	1:A:2334:ARG:N	2.21	0.56
1:B:282:TRP:H	1:B:308:LEU:H	1.54	0.56
1:C:2282:ASN:O	1:C:2285:VAL:HG22	2.06	0.56
1:A:161:PHE:CE1	1:A:184:LEU:HD12	2.40	0.56
1:A:235:LYS:HB3	1:A:238:ASP:OD1	2.05	0.56
1:A:311:GLY:HA2	1:A:359:PRO:HD3	1.87	0.56
1:A:2735:LEU:CA	1:A:2736:LEU:CA	2.84	0.56
1:B:152:ASP:OD1	1:B:153:GLU:N	2.37	0.56
1:B:2552:VAL:HA	1:B:2553:LEU:CB	2.32	0.56
1:B:2735:LEU:CA	1:B:2736:LEU:CA	2.84	0.56
1:C:256:HIS:N	1:C:259:LYS:O	2.32	0.56
1:C:311:GLY:HA2	1:C:359:PRO:HD3	1.87	0.56
1:C:2432:LYS:HA	1:C:2435:THR:HG23	1.86	0.56
1:D:27:ILE:HG13	1:D:218:TRP:CZ3	2.39	0.56
1:D:2283:LEU:O	1:D:2286:LEU:HB3	2.06	0.56
1:B:1462:CYS:CA	1:B:1463:ASN:CA	2.83	0.56
1:C:29:THR:OG1	1:C:38:VAL:N	2.32	0.56
1:C:194:HIS:H	1:C:210:ASN:N	2.04	0.56
1:C:372:PRO:HB2	1:C:374:THR:HG23	1.87	0.56
1:C:442:ASP:OD2	1:C:504:ARG:NH2	2.38	0.56
1:C:2432:LYS:C	1:C:2435:THR:HG23	2.26	0.56
1:D:53:PHE:HA	1:D:56:CYS:HB3	1.88	0.56
1:D:72:PHE:HD1	1:D:92:LEU:HD23	1.71	0.56
1:D:103:ASN:HA	1:D:106:GLU:OE2	2.05	0.56
1:D:372:PRO:HB2	1:D:374:THR:HG23	1.88	0.56
1:A:549:PHE:HA	1:A:552:ILE:HD12	1.87	0.56
1:A:1462:CYS:CA	1:A:1463:ASN:CA	2.84	0.56
1:A:2312:LEU:O	1:A:2315:THR:OG1	2.14	0.56
1:B:103:ASN:HA	1:B:106:GLU:OE2	2.06	0.56
1:B:477:LEU:O	1:B:480:LEU:HB2	2.06	0.56
1:C:131:TYR:N	1:C:152:ASP:O	2.37	0.56
1:C:387:TYR:CD1	1:C:431:ALA:HB3	2.40	0.56
1:C:2455:PHE:HB2	1:C:2573:PHE:CZ	2.41	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:242:LEU:HD22	1:D:307:HIS:HB3	1.88	0.56
1:A:27:ILE:HG13	1:A:218:TRP:CZ3	2.39	0.55
1:A:306:LYS:HA	1:A:313:TYR:HB3	1.87	0.55
1:A:2329:LYS:O	1:A:2333:ILE:HG12	2.07	0.55
1:A:2483:THR:CA	1:A:2484:GLY:CA	2.84	0.55
1:B:2326:ALA:HA	1:B:2329:LYS:CE	2.37	0.55
1:B:2561:PRO:HA	1:B:2564:ALA:HB3	1.86	0.55
1:C:306:LYS:HA	1:C:313:TYR:HB3	1.87	0.55
1:C:391:ARG:HD3	1:C:398:TRP:HE3	1.70	0.55
1:D:282:TRP:H	1:D:308:LEU:H	1.54	0.55
1:D:525:ALA:HB3	1:D:526:PRO:HD3	1.89	0.55
1:A:20:GLU:CD	1:A:20:GLU:CG	2.75	0.55
1:A:193:LEU:N	1:A:212:VAL:O	2.39	0.55
1:A:2282:ASN:O	1:A:2285:VAL:HG22	2.06	0.55
1:C:170:ARG:NH1	1:D:373:THR:HG21	2.22	0.55
1:D:246:GLU:HG3	1:D:429:ALA:HB3	1.87	0.55
1:D:311:GLY:HA2	1:D:359:PRO:HD3	1.87	0.55
1:D:484:VAL:HG13	1:D:562:HIS:CE1	2.41	0.55
1:D:2329:LYS:HG2	1:D:2330:PRO:HD3	1.88	0.55
1:A:439:GLU:N	1:A:439:GLU:OE1	2.38	0.55
1:A:540:GLU:O	1:A:544:GLN:HG2	2.06	0.55
1:A:2455:PHE:HB2	1:A:2573:PHE:CZ	2.41	0.55
1:B:311:GLY:HA2	1:B:359:PRO:HD3	1.87	0.55
1:B:2283:LEU:O	1:B:2286:LEU:HB3	2.06	0.55
1:D:20:GLU:CD	1:D:20:GLU:CG	2.75	0.55
1:D:308:LEU:N	1:D:309:ALA:HB2	2.20	0.55
1:D:418:ILE:HG22	1:D:419:GLY:N	2.21	0.55
1:D:1057:GLY:CA	1:D:1058:ARG:CA	2.84	0.55
1:A:395:THR:HG23	1:A:397:THR:H	1.69	0.55
1:A:504:ARG:HG2	1:A:506:ARG:H	1.71	0.55
1:A:1057:GLY:CA	1:A:1058:ARG:CA	2.84	0.55
1:B:20:GLU:CD	1:B:20:GLU:CG	2.75	0.55
1:B:242:LEU:HD22	1:B:307:HIS:HB3	1.89	0.55
1:C:6:SER:O	1:C:7:SER:OG	2.23	0.55
1:C:6:SER:O	1:D:376:ARG:HG3	2.07	0.55
1:C:484:VAL:HG13	1:C:562:HIS:CE1	2.41	0.55
1:C:2178:GLY:CA	1:C:2179:GLN:CA	2.85	0.55
1:C:2483:THR:CA	1:C:2484:GLY:CA	2.84	0.55
1:C:2735:LEU:CA	1:C:2736:LEU:CA	2.84	0.55
1:D:2326:ALA:HA	1:D:2329:LYS:CE	2.36	0.55
1:D:2431:ILE:O	1:D:2435:THR:HG22	2.05	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:32:LEU:N	1:A:33:VAL:HA	2.22	0.55
1:A:388:VAL:O	1:A:429:ALA:HA	2.07	0.55
1:A:400:HIS:HB2	1:A:420:THR:HG21	1.86	0.55
1:B:388:VAL:O	1:B:429:ALA:HA	2.07	0.55
1:B:418:ILE:HG22	1:B:419:GLY:N	2.21	0.55
1:B:2514:LEU:HA	1:B:2517:VAL:HG12	1.87	0.55
1:C:53:PHE:HA	1:C:56:CYS:HB3	1.87	0.55
1:C:103:ASN:HA	1:C:106:GLU:OE2	2.06	0.55
1:C:1057:GLY:CA	1:C:1058:ARG:CA	2.84	0.55
1:C:2283:LEU:O	1:C:2286:LEU:HB3	2.07	0.55
1:D:2552:VAL:HA	1:D:2553:LEU:CB	2.32	0.55
1:A:124:LEU:HD12	1:A:131:TYR:HB2	1.87	0.55
1:B:10:HIS:NE2	1:B:176:VAL:O	2.39	0.55
1:B:2178:GLY:CA	1:B:2179:GLN:CA	2.85	0.55
1:C:124:LEU:HD12	1:C:131:TYR:HB2	1.87	0.55
1:C:130:LYS:NZ	1:C:153:GLU:OE1	2.35	0.55
1:D:193:LEU:O	1:D:214:CYS:HB3	2.06	0.55
1:D:2274:SER:H	1:D:2343:ARG:NH1	2.05	0.55
1:D:2462:PHE:H	1:D:2566:ARG:NH2	2.03	0.55
1:D:2561:PRO:HA	1:D:2564:ALA:HB3	1.88	0.55
1:A:26:PHE:HB3	1:A:56:CYS:SG	2.47	0.55
1:A:2455:PHE:HB2	1:A:2573:PHE:CE1	2.40	0.55
1:A:2514:LEU:HA	1:A:2517:VAL:HG12	1.88	0.55
1:B:209:VAL:HG11	1:B:218:TRP:HZ2	1.72	0.55
1:B:372:PRO:HB2	1:B:374:THR:HG23	1.87	0.55
1:B:2455:PHE:HB2	1:B:2573:PHE:CE1	2.40	0.55
1:B:2462:PHE:H	1:B:2566:ARG:NH2	2.03	0.55
1:C:168:LYS:NZ	1:D:247:GLN:HA	2.22	0.55
1:C:388:VAL:O	1:C:429:ALA:HA	2.07	0.55
1:C:772:ASN:CA	1:C:773:LEU:CA	2.84	0.55
1:C:2333:ILE:HG13	1:C:2334:ARG:N	2.21	0.55
1:D:2735:LEU:CA	1:D:2736:LEU:CA	2.84	0.55
1:A:2310:SER:HB3	1:A:2312:LEU:HG	1.89	0.55
1:B:244:HIS:CD2	1:B:430:PHE:HB3	2.42	0.55
1:B:439:GLU:OE1	1:B:439:GLU:N	2.39	0.55
1:B:2483:THR:CA	1:B:2484:GLY:CA	2.85	0.55
1:C:389:ARG:HD2	1:C:398:TRP:HE1	1.72	0.55
1:C:417:LYS:HB2	1:C:418:ILE:HD12	1.89	0.55
1:C:499:PHE:O	1:C:502:PRO:HD2	2.07	0.55
1:C:525:ALA:HB3	1:C:526:PRO:HD3	1.89	0.55
1:D:299:TRP:CG	1:D:372:PRO:HG3	2.42	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:439:GLU:N	1:D:439:GLU:OE1	2.39	0.55
1:A:6:SER:O	1:B:376:ARG:HG3	2.06	0.55
1:A:484:VAL:HG13	1:A:562:HIS:CE1	2.41	0.55
1:A:499:PHE:O	1:A:502:PRO:HD2	2.07	0.55
1:B:2333:ILE:HG13	1:B:2334:ARG:N	2.21	0.55
1:C:540:GLU:O	1:C:544:GLN:HG2	2.07	0.55
1:C:2462:PHE:H	1:C:2566:ARG:NH2	2.02	0.55
1:D:388:VAL:O	1:D:429:ALA:HA	2.07	0.55
1:D:2333:ILE:HG13	1:D:2334:ARG:N	2.21	0.55
1:D:2483:THR:CA	1:D:2484:GLY:CA	2.85	0.55
1:A:194:HIS:H	1:A:210:ASN:N	2.04	0.55
1:A:477:LEU:O	1:A:480:LEU:HB2	2.06	0.55
1:A:2274:SER:H	1:A:2343:ARG:NH1	2.05	0.55
1:B:53:PHE:HA	1:B:56:CYS:HB3	1.88	0.55
1:B:193:LEU:O	1:B:214:CYS:HB3	2.06	0.55
1:B:254:ASP:OD1	1:B:255:GLU:N	2.40	0.55
1:B:299:TRP:CG	1:B:372:PRO:HG3	2.41	0.55
1:B:484:VAL:HG13	1:B:562:HIS:CE1	2.41	0.55
1:B:514:ASN:C	1:B:518:GLN:HE22	2.10	0.55
1:C:2555:LYS:NZ	1:C:2562:LEU:HD11	2.22	0.55
1:B:162:TYR:H	1:B:185:ASN:H	1.56	0.54
1:B:2432:LYS:HA	1:B:2435:THR:HG23	1.88	0.54
1:B:2432:LYS:C	1:B:2435:THR:HG23	2.27	0.54
1:C:2362:VAL:O	1:C:2366:ILE:HG12	2.07	0.54
1:C:2433:SER:OG	1:C:2434:VAL:N	2.38	0.54
1:D:192:PRO:HG2	1:D:213:ASN:HA	1.89	0.54
1:D:504:ARG:HG2	1:D:506:ARG:H	1.72	0.54
1:D:2178:GLY:CA	1:D:2179:GLN:CA	2.85	0.54
1:A:525:ALA:HB3	1:A:526:PRO:HD3	1.90	0.54
1:A:2178:GLY:CA	1:A:2179:GLN:CA	2.85	0.54
1:B:373:THR:N	1:B:388:VAL:HG21	2.11	0.54
1:B:499:PHE:O	1:B:502:PRO:HD2	2.08	0.54
1:B:504:ARG:HG2	1:B:506:ARG:H	1.73	0.54
1:B:1057:GLY:CA	1:B:1058:ARG:CA	2.84	0.54
1:B:2585:ILE:O	1:B:2589:ILE:HG12	2.07	0.54
1:C:181:LYS:HB2	1:C:219:LYS:HZ3	1.72	0.54
1:C:254:ASP:OD1	1:C:255:GLU:N	2.40	0.54
1:D:244:HIS:CD2	1:D:430:PHE:HB3	2.42	0.54
1:A:170:ARG:NH1	1:B:373:THR:HG21	2.21	0.54
1:A:315:ALA:O	1:A:421:SER:OG	2.21	0.54
1:C:2310:SER:HB3	1:C:2312:LEU:HG	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:540:GLU:O	1:D:544:GLN:HG2	2.08	0.54
1:D:2585:ILE:O	1:D:2589:ILE:HG12	2.07	0.54
1:A:192:PRO:HB2	1:A:212:VAL:O	2.08	0.54
1:A:247:GLN:HA	1:D:168:LYS:NZ	2.21	0.54
1:D:254:ASP:OD1	1:D:255:GLU:N	2.41	0.54
1:D:2282:ASN:O	1:D:2285:VAL:HG22	2.06	0.54
1:D:2555:LYS:NZ	1:D:2562:LEU:HD11	2.22	0.54
1:A:417:LYS:HB2	1:A:418:ILE:HD12	1.90	0.54
1:B:418:ILE:HG22	1:B:419:GLY:H	1.72	0.54
1:B:2274:SER:H	1:B:2343:ARG:NH1	2.05	0.54
1:C:20:GLU:CD	1:C:20:GLU:CG	2.75	0.54
1:C:33:VAL:HG23	1:C:35:ASP:HB2	1.90	0.54
1:C:143:GLU:HG2	1:C:194:HIS:CD2	2.43	0.54
1:C:261:HIS:ND1	1:C:355:LEU:HD11	2.23	0.54
1:C:504:ARG:HG2	1:C:506:ARG:H	1.71	0.54
1:D:162:TYR:H	1:D:185:ASN:H	1.56	0.54
1:D:2419:ASP:O	1:D:2422:TYR:HB3	2.08	0.54
1:D:2455:PHE:HB2	1:D:2573:PHE:CZ	2.41	0.54
1:A:103:ASN:HA	1:A:106:GLU:OE2	2.06	0.54
1:A:261:HIS:ND1	1:A:355:LEU:HD11	2.23	0.54
1:A:2362:VAL:O	1:A:2366:ILE:HG12	2.07	0.54
1:A:2415:LEU:HA	1:A:2418:PHE:CZ	2.43	0.54
1:B:6:SER:O	1:B:7:SER:OG	2.24	0.54
1:B:2282:ASN:O	1:B:2285:VAL:HG22	2.06	0.54
1:B:2455:PHE:HB2	1:B:2573:PHE:CZ	2.42	0.54
1:C:120:VAL:HG13	1:C:161:PHE:H	1.73	0.54
1:C:192:PRO:HB2	1:C:212:VAL:O	2.08	0.54
1:D:192:PRO:HB2	1:D:212:VAL:O	2.08	0.54
1:A:389:ARG:HD2	1:A:398:TRP:HE1	1.73	0.54
1:A:2283:LEU:O	1:A:2286:LEU:HB3	2.07	0.54
1:B:2329:LYS:HG2	1:B:2330:PRO:HD3	1.88	0.54
1:B:2555:LYS:NZ	1:B:2562:LEU:HD11	2.22	0.54
1:C:2337:ILE:O	1:C:2341:ILE:HG22	2.08	0.54
1:D:32:LEU:N	1:D:33:VAL:HA	2.22	0.54
1:D:199:GLN:HB2	1:D:206:CYS:HB3	1.90	0.54
1:D:514:ASN:C	1:D:518:GLN:HE22	2.11	0.54
1:A:168:LYS:NZ	1:B:247:GLN:HA	2.22	0.54
1:A:391:ARG:HD3	1:A:398:TRP:HE3	1.70	0.54
1:A:2337:ILE:O	1:A:2341:ILE:HG22	2.08	0.54
1:B:143:GLU:HG2	1:B:194:HIS:CD2	2.43	0.54
1:B:192:PRO:HG2	1:B:213:ASN:HA	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:525:ALA:HB3	1:B:526:PRO:HD3	1.89	0.54
1:B:2362:VAL:O	1:B:2366:ILE:HG12	2.08	0.54
1:C:2274:SER:H	1:C:2343:ARG:NH1	2.05	0.54
1:D:499:PHE:O	1:D:502:PRO:HD2	2.07	0.54
1:D:2721:ASP:OD1	1:D:2722:GLN:N	2.41	0.54
1:A:120:VAL:HG13	1:A:161:PHE:H	1.73	0.54
1:A:2540:SER:O	1:A:2544:ARG:HG2	2.07	0.54
1:B:32:LEU:N	1:B:33:VAL:HA	2.22	0.54
1:B:33:VAL:HG23	1:B:35:ASP:HB2	1.90	0.54
1:B:117:TYR:CZ	1:B:177:VAL:N	2.76	0.54
1:B:193:LEU:N	1:B:212:VAL:O	2.41	0.54
1:B:1460:ARG:CA	1:B:1461:ALA:CA	2.86	0.54
1:C:2415:LEU:HA	1:C:2418:PHE:CZ	2.43	0.54
1:D:26:PHE:HB3	1:D:56:CYS:SG	2.48	0.54
1:D:143:GLU:HG2	1:D:194:HIS:CD2	2.43	0.54
1:D:1460:ARG:CA	1:D:1461:ALA:CA	2.86	0.54
1:D:2481:PRO:CA	1:D:2482:GLU:CA	2.86	0.54
1:A:282:TRP:H	1:A:308:LEU:H	1.56	0.54
1:A:514:ASN:C	1:A:518:GLN:HE22	2.11	0.54
1:A:2451:LEU:O	1:A:2454:LEU:HG	2.08	0.54
1:A:2555:LYS:NZ	1:A:2562:LEU:HD11	2.22	0.54
1:C:26:PHE:HB3	1:C:56:CYS:SG	2.47	0.54
1:C:32:LEU:N	1:C:33:VAL:HA	2.22	0.54
1:C:418:ILE:HG22	1:C:419:GLY:N	2.23	0.54
1:C:2540:SER:O	1:C:2544:ARG:HG2	2.07	0.54
1:D:47:ASN:HA	1:D:291:PRO:HD3	1.89	0.54
1:D:209:VAL:HG11	1:D:218:TRP:HZ2	1.72	0.54
1:D:2451:LEU:O	1:D:2454:LEU:HG	2.08	0.54
1:A:143:GLU:HG2	1:A:194:HIS:CD2	2.43	0.53
1:A:254:ASP:OD1	1:A:255:GLU:N	2.40	0.53
1:A:1464:ASN:CA	1:A:1465:THR:CA	2.87	0.53
1:B:199:GLN:HB2	1:B:206:CYS:HB3	1.91	0.53
1:B:1464:ASN:CA	1:B:1465:THR:CA	2.87	0.53
1:B:2329:LYS:O	1:B:2333:ILE:HG12	2.08	0.53
1:B:2337:ILE:O	1:B:2341:ILE:HG22	2.08	0.53
1:B:2481:PRO:CA	1:B:2482:GLU:CA	2.86	0.53
1:C:299:TRP:CG	1:C:372:PRO:HG3	2.43	0.53
1:C:373:THR:N	1:C:388:VAL:HG21	2.09	0.53
1:C:546:HIS:H	1:C:549:PHE:HE2	1.56	0.53
1:C:2274:SER:H	1:C:2343:ARG:CZ	2.21	0.53
1:D:117:TYR:CZ	1:D:177:VAL:N	2.76	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:193:LEU:N	1:D:212:VAL:O	2.41	0.53
1:D:317:GLU:HG3	1:D:318:VAL:O	2.08	0.53
1:D:1464:ASN:CA	1:D:1465:THR:CA	2.86	0.53
1:A:117:TYR:CZ	1:A:177:VAL:N	2.77	0.53
1:A:2419:ASP:O	1:A:2422:TYR:HB3	2.08	0.53
1:B:18:TYR:CD2	1:B:20:GLU:HB2	2.43	0.53
1:B:391:ARG:HD3	1:B:398:TRP:HE3	1.73	0.53
1:B:540:GLU:O	1:B:544:GLN:HG2	2.08	0.53
1:B:2451:LEU:O	1:B:2454:LEU:HG	2.08	0.53
1:B:2540:SER:OG	1:B:2541:HIS:N	2.41	0.53
1:A:1460:ARG:CA	1:A:1461:ALA:CA	2.87	0.53
1:B:26:PHE:HB3	1:B:56:CYS:SG	2.48	0.53
1:B:2721:ASP:OD1	1:B:2722:GLN:N	2.41	0.53
1:C:242:LEU:HD22	1:C:307:HIS:HB3	1.91	0.53
1:C:2329:LYS:HG2	1:C:2330:PRO:HD3	1.89	0.53
1:C:2329:LYS:O	1:C:2333:ILE:HG12	2.08	0.53
1:D:2540:SER:OG	1:D:2541:HIS:N	2.41	0.53
1:A:18:TYR:CD2	1:A:20:GLU:HB2	2.43	0.53
1:A:2355:PHE:CZ	1:A:2357:LEU:HD23	2.44	0.53
1:B:130:LYS:NZ	1:B:153:GLU:OE1	2.34	0.53
1:B:577:GLN:HA	1:B:580:PHE:CD2	2.44	0.53
1:C:1460:ARG:CA	1:C:1461:ALA:CA	2.86	0.53
1:C:2481:PRO:CA	1:C:2482:GLU:CA	2.87	0.53
1:D:306:LYS:HA	1:D:313:TYR:HB3	1.90	0.53
1:D:2337:ILE:O	1:D:2341:ILE:HG22	2.08	0.53
1:D:2355:PHE:CZ	1:D:2357:LEU:HD23	2.44	0.53
1:A:314:LEU:O	1:A:356:VAL:N	2.42	0.53
1:B:29:THR:OG1	1:B:38:VAL:N	2.31	0.53
1:B:317:GLU:HG3	1:B:318:VAL:O	2.08	0.53
1:C:192:PRO:HG2	1:C:213:ASN:HA	1.91	0.53
1:C:577:GLN:HA	1:C:580:PHE:CD2	2.44	0.53
1:C:2355:PHE:CZ	1:C:2357:LEU:HD23	2.44	0.53
1:D:6:SER:O	1:D:7:SER:OG	2.24	0.53
1:D:418:ILE:HG22	1:D:419:GLY:H	1.72	0.53
1:A:577:GLN:HA	1:A:580:PHE:CD2	2.44	0.53
1:A:2721:ASP:OD1	1:A:2722:GLN:N	2.42	0.53
1:B:2355:PHE:CZ	1:B:2357:LEU:HD23	2.44	0.53
1:B:2370:MET:HA	1:B:2373:VAL:HG22	1.91	0.53
1:B:2540:SER:O	1:B:2544:ARG:HG2	2.08	0.53
1:C:18:TYR:CD2	1:C:20:GLU:HB2	2.43	0.53
1:C:69:GLN:HG3	1:C:99:GLU:CD	2.29	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:514:ASN:C	1:C:518:GLN:HE22	2.11	0.53
1:C:2326:ALA:HA	1:C:2329:LYS:CE	2.39	0.53
1:C:2554:ARG:NH2	1:D:2519:GLU:HB2	2.23	0.53
1:A:2437:ASN:CB	1:A:2592:THR:HG22	2.34	0.53
1:B:506:ARG:HD3	1:B:562:HIS:CE1	2.44	0.53
1:B:2571:LEU:O	1:B:2575:PHE:HB3	2.09	0.53
1:C:117:TYR:CZ	1:C:177:VAL:N	2.76	0.53
1:C:2588:VAL:O	1:C:2592:THR:HG23	2.09	0.53
1:D:542:GLY:HA2	1:D:549:PHE:CE1	2.44	0.53
1:D:2329:LYS:O	1:D:2333:ILE:HG12	2.08	0.53
1:D:2362:VAL:O	1:D:2366:ILE:HG12	2.08	0.53
1:A:69:GLN:HG3	1:A:99:GLU:CD	2.29	0.53
1:A:192:PRO:HG2	1:A:213:ASN:HA	1.91	0.53
1:A:564:GLN:N	1:A:564:GLN:OE1	2.42	0.53
1:A:2554:ARG:NH2	1:B:2519:GLU:HB2	2.23	0.53
1:C:282:TRP:H	1:C:308:LEU:H	1.56	0.53
1:D:543:ASP:OD1	1:D:550:ARG:NH2	2.37	0.53
1:D:2588:VAL:O	1:D:2592:THR:HG23	2.09	0.53
1:A:242:LEU:HD22	1:A:307:HIS:HB3	1.91	0.53
1:A:506:ARG:HD3	1:A:562:HIS:CE1	2.44	0.53
1:B:2588:VAL:O	1:B:2592:THR:HG23	2.09	0.53
1:C:244:HIS:CD2	1:C:430:PHE:HB3	2.43	0.53
1:C:317:GLU:HG3	1:C:318:VAL:O	2.09	0.53
1:C:1464:ASN:CA	1:C:1465:THR:CA	2.87	0.53
1:C:2370:MET:HA	1:C:2373:VAL:HG22	1.91	0.53
1:D:18:TYR:CD2	1:D:20:GLU:HB2	2.43	0.53
1:D:185:ASN:HB2	1:D:191:GLN:H	1.74	0.53
1:A:162:TYR:H	1:A:185:ASN:H	1.57	0.53
1:A:299:TRP:CG	1:A:372:PRO:HG3	2.43	0.53
1:C:2721:ASP:OD1	1:C:2722:GLN:N	2.42	0.53
1:D:84:THR:HG21	1:D:88:LEU:HD13	1.91	0.53
1:D:178:ILE:HG21	1:D:221:VAL:HG12	1.91	0.53
1:D:2540:SER:O	1:D:2544:ARG:HG2	2.08	0.53
1:A:2289:LEU:HA	1:A:2417:LEU:HD11	1.91	0.52
1:A:2481:PRO:CA	1:A:2482:GLU:CA	2.87	0.52
1:B:303:PHE:CD1	1:B:303:PHE:CB	2.77	0.52
1:B:314:LEU:O	1:B:356:VAL:N	2.42	0.52
1:B:1265:PRO:CA	1:B:1266:GLY:CA	2.87	0.52
1:B:2425:GLU:OE2	1:B:2431:ILE:HG21	2.08	0.52
1:B:2706:MET:HG3	1:B:2707:LYS:HD2	1.92	0.52
1:C:21:GLY:H	1:C:24:ASN:HA	1.74	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:314:LEU:O	1:C:356:VAL:N	2.42	0.52
1:D:33:VAL:HG23	1:D:35:ASP:HB2	1.90	0.52
1:D:69:GLN:HG3	1:D:99:GLU:CD	2.30	0.52
1:D:181:LYS:HB2	1:D:219:LYS:HZ3	1.74	0.52
1:A:33:VAL:HG23	1:A:35:ASP:HB2	1.90	0.52
1:B:69:GLN:HG3	1:B:99:GLU:CD	2.29	0.52
1:B:192:PRO:HB2	1:B:212:VAL:O	2.08	0.52
1:B:2274:SER:H	1:B:2343:ARG:CZ	2.22	0.52
1:B:2291:VAL:HG21	1:B:2324:VAL:HG11	1.91	0.52
1:C:415:MET:CA	1:C:417:LYS:HE2	2.34	0.52
1:D:303:PHE:CD1	1:D:303:PHE:CB	2.77	0.52
1:D:2571:LEU:O	1:D:2575:PHE:HB3	2.09	0.52
1:A:209:VAL:HG11	1:A:218:TRP:HZ2	1.74	0.52
1:A:244:HIS:CD2	1:A:430:PHE:HB3	2.43	0.52
1:A:2432:LYS:CA	1:A:2435:THR:HG23	2.39	0.52
1:A:2563:PHE:O	1:A:2567:VAL:HG12	2.09	0.52
1:B:11:ILE:HD13	1:B:60:LEU:HB3	1.91	0.52
1:B:36:ARG:CZ	1:B:200:LEU:HG	2.40	0.52
1:B:47:ASN:HA	1:B:291:PRO:HD3	1.89	0.52
1:B:542:GLY:HA2	1:B:549:PHE:CE1	2.44	0.52
1:B:2419:ASP:O	1:B:2422:TYR:HB3	2.08	0.52
1:C:880:ASN:CA	1:C:881:PHE:CA	2.88	0.52
1:C:2432:LYS:CA	1:C:2435:THR:HG23	2.39	0.52
1:C:2540:SER:OG	1:C:2541:HIS:N	2.42	0.52
1:D:506:ARG:HD3	1:D:562:HIS:CE1	2.44	0.52
1:D:2274:SER:H	1:D:2343:ARG:CZ	2.22	0.52
1:D:2283:LEU:O	1:D:2287:MET:HG2	2.09	0.52
1:D:2524:LYS:HD2	1:D:2526:HIS:CD2	2.41	0.52
1:A:317:GLU:HG3	1:A:318:VAL:O	2.08	0.52
1:B:2554:ARG:NH2	1:C:2519:GLU:HB2	2.24	0.52
1:C:162:TYR:H	1:C:185:ASN:H	1.57	0.52
1:D:2370:MET:HA	1:D:2373:VAL:HG22	1.91	0.52
1:A:6:SER:H	1:B:377:GLY:HA2	1.74	0.52
1:A:36:ARG:CZ	1:A:200:LEU:HG	2.40	0.52
1:A:2274:SER:H	1:A:2343:ARG:CZ	2.21	0.52
1:A:2519:GLU:HB2	1:D:2554:ARG:NH2	2.24	0.52
1:A:2540:SER:OG	1:A:2541:HIS:N	2.42	0.52
1:A:2548:GLY:HA2	1:A:2574:PHE:HE2	1.75	0.52
1:A:2588:VAL:O	1:A:2592:THR:HG23	2.09	0.52
1:B:178:ILE:HG21	1:B:221:VAL:HG12	1.91	0.52
1:B:2578:ILE:HA	1:B:2581:VAL:HG12	1.92	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:506:ARG:HD3	1:C:562:HIS:CE1	2.44	0.52
1:A:2370:MET:HA	1:A:2373:VAL:HG22	1.91	0.52
1:B:168:LYS:HD3	1:C:246:GLU:O	2.09	0.52
1:B:306:LYS:HA	1:B:313:TYR:HB3	1.90	0.52
1:B:564:GLN:OE1	1:B:564:GLN:N	2.42	0.52
1:B:2563:PHE:O	1:B:2567:VAL:HG12	2.10	0.52
1:C:209:VAL:HG11	1:C:218:TRP:HZ2	1.74	0.52
1:C:1265:PRO:CA	1:C:1266:GLY:CA	2.87	0.52
1:C:2419:ASP:O	1:C:2422:TYR:HB3	2.08	0.52
1:D:36:ARG:CZ	1:D:200:LEU:HG	2.40	0.52
1:D:577:GLN:HA	1:D:580:PHE:CD2	2.44	0.52
1:D:2291:VAL:HG21	1:D:2324:VAL:HG11	1.91	0.52
1:A:246:GLU:O	1:D:168:LYS:HD3	2.09	0.52
1:A:2571:LEU:O	1:A:2575:PHE:HB3	2.10	0.52
1:A:2578:ILE:HA	1:A:2581:VAL:HG12	1.92	0.52
1:B:373:THR:HB	1:B:388:VAL:HG11	1.92	0.52
1:B:543:ASP:OD1	1:B:550:ARG:NH2	2.37	0.52
1:B:2441:ILE:O	1:B:2444:THR:OG1	2.11	0.52
1:C:11:ILE:HD13	1:C:60:LEU:HB3	1.91	0.52
1:C:36:ARG:CZ	1:C:200:LEU:HG	2.40	0.52
1:C:2285:VAL:O	1:C:2289:LEU:HB2	2.10	0.52
1:C:2571:LEU:O	1:C:2575:PHE:HB3	2.10	0.52
1:D:66:TYR:OH	1:D:160:TRP:HB2	2.10	0.52
1:D:564:GLN:OE1	1:D:564:GLN:N	2.42	0.52
1:D:2706:MET:HG3	1:D:2707:LYS:HD2	1.92	0.52
1:A:375:LEU:HG	1:D:177:VAL:HG21	1.92	0.52
1:A:546:HIS:H	1:A:549:PHE:HE2	1.56	0.52
1:A:2585:ILE:O	1:A:2589:ILE:HG12	2.10	0.52
1:B:84:THR:HG21	1:B:88:LEU:HD13	1.91	0.52
1:B:120:VAL:HG13	1:B:161:PHE:H	1.75	0.52
1:B:181:LYS:HB2	1:B:219:LYS:HZ3	1.75	0.52
1:B:2288:ASN:HD22	1:B:2416:LEU:CD2	2.23	0.52
1:C:2365:LYS:O	1:C:2369:LEU:HB2	2.10	0.52
1:D:257:ARG:HH12	1:D:408:LYS:HD3	1.75	0.52
1:D:2285:VAL:O	1:D:2289:LEU:HB2	2.10	0.52
1:A:11:ILE:HD13	1:A:60:LEU:HB3	1.91	0.52
1:A:21:GLY:H	1:A:24:ASN:HA	1.74	0.52
1:A:2288:ASN:HD22	1:A:2416:LEU:CD2	2.23	0.52
1:A:2726:GLN:HA	1:A:2729:GLN:OE1	2.10	0.52
1:B:2415:LEU:HA	1:B:2418:PHE:CE2	2.45	0.52
1:C:364:ILE:HA	1:C:367:ILE:HD11	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:194:HIS:O	1:D:209:VAL:HG22	2.10	0.52
1:D:314:LEU:O	1:D:356:VAL:N	2.42	0.52
1:D:373:THR:HB	1:D:388:VAL:HG11	1.92	0.52
1:D:405:PRO:O	1:D:417:LYS:NZ	2.43	0.52
1:D:446:ALA:HB1	1:D:513:GLN:HE22	1.75	0.52
1:D:2288:ASN:HD22	1:D:2416:LEU:CD2	2.23	0.52
1:D:2578:ILE:HA	1:D:2581:VAL:HG12	1.92	0.52
1:A:418:ILE:HG22	1:A:419:GLY:N	2.25	0.52
1:C:2524:LYS:HB3	1:C:2526:HIS:CD2	2.45	0.52
1:C:2563:PHE:O	1:C:2567:VAL:HG12	2.09	0.52
1:D:1265:PRO:CA	1:D:1266:GLY:CA	2.87	0.52
1:D:2415:LEU:HA	1:D:2418:PHE:CE2	2.45	0.52
1:D:2693:ASN:OD1	1:D:2694:GLU:N	2.43	0.52
1:A:253:CYS:SG	1:A:254:ASP:N	2.84	0.51
1:A:373:THR:HB	1:A:388:VAL:HG11	1.93	0.51
1:A:2283:LEU:O	1:A:2287:MET:HG2	2.10	0.51
1:B:364:ILE:HA	1:B:367:ILE:HD11	1.92	0.51
1:B:405:PRO:O	1:B:417:LYS:NZ	2.43	0.51
1:B:416:LEU:O	1:B:417:LYS:HD3	2.10	0.51
1:B:483:PHE:HD2	1:B:506:ARG:CZ	2.23	0.51
1:B:880:ASN:CA	1:B:881:PHE:CA	2.88	0.51
1:C:2451:LEU:O	1:C:2454:LEU:HG	2.09	0.51
1:C:2574:PHE:HA	1:C:2577:VAL:HG12	1.92	0.51
1:D:166:PHE:CG	1:D:167:TYR:N	2.78	0.51
1:D:364:ILE:HA	1:D:367:ILE:HD11	1.92	0.51
1:D:880:ASN:CA	1:D:881:PHE:CA	2.88	0.51
1:D:2563:PHE:C	1:D:2567:VAL:HG12	2.30	0.51
1:A:199:GLN:HB2	1:A:206:CYS:HB3	1.92	0.51
1:A:542:GLY:HA2	1:A:549:PHE:CE1	2.45	0.51
1:A:558:ARG:O	1:A:561:ARG:HB3	2.11	0.51
1:A:2326:ALA:HA	1:A:2329:LYS:CE	2.39	0.51
1:A:2706:MET:HG3	1:A:2707:LYS:HD2	1.92	0.51
1:B:66:TYR:OH	1:B:160:TRP:HB2	2.10	0.51
1:B:2285:VAL:O	1:B:2289:LEU:HB2	2.10	0.51
1:B:2365:LYS:O	1:B:2369:LEU:HB2	2.10	0.51
1:B:2583:ASN:OD1	1:B:2584:LEU:N	2.44	0.51
1:C:166:PHE:CG	1:C:167:TYR:N	2.79	0.51
1:C:178:ILE:HB	1:D:376:ARG:HH12	1.74	0.51
1:C:185:ASN:CB	1:C:191:GLN:HG3	2.40	0.51
1:C:416:LEU:O	1:C:417:LYS:HD3	2.11	0.51
1:C:2283:LEU:O	1:C:2287:MET:HG2	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:261:HIS:ND1	1:D:355:LEU:HD11	2.26	0.51
1:D:483:PHE:HD2	1:D:506:ARG:CZ	2.23	0.51
1:A:130:LYS:NZ	1:A:153:GLU:OE1	2.35	0.51
1:A:185:ASN:CB	1:A:191:GLN:HG3	2.40	0.51
1:A:1265:PRO:CA	1:A:1266:GLY:CA	2.87	0.51
1:A:2285:VAL:O	1:A:2289:LEU:HB2	2.10	0.51
1:B:21:GLY:H	1:B:24:ASN:HA	1.75	0.51
1:B:558:ARG:O	1:B:561:ARG:HB3	2.10	0.51
1:B:2283:LEU:O	1:B:2287:MET:HG2	2.10	0.51
1:B:2693:ASN:OD1	1:B:2694:GLU:N	2.43	0.51
1:C:199:GLN:HB2	1:C:206:CYS:HB3	1.92	0.51
1:C:253:CYS:SG	1:C:254:ASP:N	2.84	0.51
1:C:298:TYR:O	1:C:301:SER:OG	2.15	0.51
1:C:542:GLY:HA2	1:C:549:PHE:CE1	2.45	0.51
1:C:2585:ILE:O	1:C:2589:ILE:HG12	2.10	0.51
1:D:2458:VAL:HG13	1:D:2569:TYR:HE1	1.76	0.51
1:A:196:SER:O	1:A:207:ASN:ND2	2.44	0.51
1:A:880:ASN:CA	1:A:881:PHE:CA	2.88	0.51
1:A:2365:LYS:O	1:A:2369:LEU:HB2	2.10	0.51
1:A:2574:PHE:HA	1:A:2577:VAL:HG12	1.92	0.51
1:B:185:ASN:HB2	1:B:191:GLN:H	1.74	0.51
1:B:2289:LEU:HA	1:B:2417:LEU:HD11	1.92	0.51
1:B:2726:GLN:HA	1:B:2729:GLN:OE1	2.11	0.51
1:B:2730:LYS:HD3	1:C:289:HIS:NE2	2.26	0.51
1:C:2288:ASN:HD22	1:C:2416:LEU:CD2	2.24	0.51
1:D:400:HIS:CE1	1:D:422:PRO:HB3	2.45	0.51
1:D:558:ARG:O	1:D:561:ARG:HB3	2.11	0.51
1:D:2433:SER:OG	1:D:2434:VAL:N	2.42	0.51
1:A:66:TYR:OH	1:A:160:TRP:HB2	2.10	0.51
1:A:483:PHE:HD2	1:A:506:ARG:CZ	2.24	0.51
1:C:6:SER:H	1:D:377:GLY:HA2	1.75	0.51
1:C:117:TYR:CD2	1:C:176:VAL:N	2.78	0.51
1:C:168:LYS:HD3	1:D:246:GLU:O	2.11	0.51
1:C:398:TRP:N	1:C:422:PRO:HG2	2.23	0.51
1:C:2289:LEU:HA	1:C:2417:LEU:HD11	1.91	0.51
1:C:2413:TYR:O	1:C:2416:LEU:HB3	2.11	0.51
1:A:47:ASN:HA	1:A:291:PRO:HD3	1.92	0.51
1:A:364:ILE:HA	1:A:367:ILE:HD11	1.92	0.51
1:A:2524:LYS:HB3	1:A:2526:HIS:CD2	2.46	0.51
1:A:2603:LYS:N	1:A:2604:GLU:OE1	2.43	0.51
1:B:253:CYS:SG	1:B:254:ASP:N	2.84	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2432:LYS:CA	1:B:2435:THR:HG23	2.41	0.51
1:C:564:GLN:OE1	1:C:564:GLN:N	2.42	0.51
1:C:2457:ILE:O	1:C:2461:LEU:HB2	2.11	0.51
1:D:120:VAL:HG13	1:D:161:PHE:H	1.75	0.51
1:D:209:VAL:HG11	1:D:218:TRP:CZ2	2.46	0.51
1:D:482:TYR:CE1	1:D:488:THR:HG23	2.46	0.51
1:D:2365:LYS:O	1:D:2369:LEU:HB2	2.10	0.51
1:D:2559:GLU:O	1:D:2561:PRO:HD3	2.11	0.51
1:A:131:TYR:N	1:A:152:ASP:O	2.37	0.51
1:A:178:ILE:HG21	1:A:221:VAL:HG12	1.93	0.51
1:A:181:LYS:HB2	1:A:219:LYS:HZ3	1.75	0.51
1:A:238:ASP:OD1	1:A:238:ASP:N	2.44	0.51
1:A:499:PHE:O	1:A:503:ASN:ND2	2.44	0.51
1:A:2423:ARG:O	1:A:2426:THR:HG22	2.11	0.51
1:A:2721:ASP:O	1:A:2724:THR:HB	2.11	0.51
1:B:177:VAL:HG21	1:C:375:LEU:HG	1.92	0.51
1:B:194:HIS:O	1:B:209:VAL:HG22	2.10	0.51
1:B:446:ALA:HB1	1:B:513:GLN:HE22	1.75	0.51
1:B:497:VAL:HG12	1:B:501:LYS:HG3	1.93	0.51
1:B:497:VAL:O	1:B:501:LYS:HG3	2.11	0.51
1:B:2329:LYS:HG3	1:B:2330:PRO:CD	2.40	0.51
1:C:66:TYR:OH	1:C:160:TRP:HB2	2.10	0.51
1:C:2548:GLY:HA2	1:C:2574:PHE:CE2	2.46	0.51
1:D:11:ILE:HD13	1:D:60:LEU:HB3	1.91	0.51
1:D:432:ILE:HG22	1:D:433:VAL:O	2.11	0.51
1:A:117:TYR:CD2	1:A:176:VAL:N	2.78	0.51
1:A:2548:GLY:HA2	1:A:2574:PHE:CE2	2.46	0.51
1:B:104:GLU:O	1:B:108:ARG:HG3	2.11	0.51
1:B:499:PHE:O	1:B:503:ASN:ND2	2.44	0.51
1:B:2458:VAL:HG13	1:B:2569:TYR:CE1	2.46	0.51
1:C:10:HIS:NE2	1:C:177:VAL:HA	2.26	0.51
1:C:117:TYR:CE1	1:C:181:LYS:HD2	2.46	0.51
1:C:444:ASP:O	1:C:448:ASP:HB3	2.11	0.51
1:C:2329:LYS:HG3	1:C:2330:PRO:CD	2.41	0.51
1:C:2423:ARG:O	1:C:2426:THR:HG22	2.11	0.51
1:C:2559:GLU:O	1:C:2561:PRO:HD3	2.10	0.51
1:D:104:GLU:O	1:D:108:ARG:HG3	2.11	0.51
1:D:391:ARG:HD3	1:D:398:TRP:HE3	1.73	0.51
1:D:2329:LYS:HG3	1:D:2330:PRO:CD	2.40	0.51
1:D:2428:LEU:CD2	1:D:2429:ASN:ND2	2.72	0.51
1:A:168:LYS:HZ2	1:B:247:GLN:HA	1.75	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:400:HIS:CE1	1:B:422:PRO:HB3	2.45	0.51
1:B:2574:PHE:HA	1:B:2577:VAL:HG12	1.93	0.51
1:C:312:HIS:N	1:C:358:VAL:O	2.44	0.51
1:C:373:THR:HB	1:C:388:VAL:HG11	1.93	0.51
1:C:2548:GLY:HA2	1:C:2574:PHE:HE2	1.75	0.51
1:D:86:ALA:HA	1:D:89:LEU:HB2	1.93	0.51
1:D:191:GLN:HA	1:D:192:PRO:O	2.11	0.51
1:D:2289:LEU:HA	1:D:2417:LEU:HD11	1.92	0.51
1:D:2326:ALA:CA	1:D:2329:LYS:HE2	2.27	0.51
1:A:10:HIS:NE2	1:A:177:VAL:HA	2.26	0.51
1:B:209:VAL:HG11	1:B:218:TRP:CZ2	2.46	0.51
1:B:438:ALA:O	1:B:441:ARG:HB3	2.11	0.51
1:B:2415:LEU:HA	1:B:2418:PHE:CZ	2.46	0.51
1:C:191:GLN:HA	1:C:192:PRO:O	2.11	0.51
1:C:405:PRO:O	1:C:417:LYS:NZ	2.44	0.51
1:D:117:TYR:CE1	1:D:181:LYS:HD2	2.46	0.51
1:D:416:LEU:O	1:D:417:LYS:HD3	2.10	0.51
1:D:497:VAL:O	1:D:501:LYS:HG3	2.11	0.51
1:D:2389:ASP:CA	1:D:2390:VAL:CA	2.89	0.51
1:D:2415:LEU:HA	1:D:2418:PHE:CZ	2.46	0.51
1:D:2515:LEU:HB3	1:D:2516:PRO:HD3	1.93	0.51
1:A:185:ASN:HB2	1:A:191:GLN:H	1.76	0.50
1:A:400:HIS:CE1	1:A:422:PRO:HB3	2.46	0.50
1:A:2353:THR:HA	1:A:2354:LEU:HD23	1.94	0.50
1:A:2515:LEU:HB3	1:A:2516:PRO:HD3	1.93	0.50
1:A:2693:ASN:OD1	1:A:2694:GLU:N	2.44	0.50
1:B:444:ASP:O	1:B:448:ASP:HB3	2.11	0.50
1:B:482:TYR:CE1	1:B:488:THR:HG23	2.46	0.50
1:B:2524:LYS:HB3	1:B:2526:HIS:CD2	2.47	0.50
1:C:483:PHE:HD2	1:C:506:ARG:CZ	2.24	0.50
1:C:2563:PHE:C	1:C:2567:VAL:HG12	2.31	0.50
1:C:2578:ILE:HA	1:C:2581:VAL:HG12	1.92	0.50
1:D:2326:ALA:HA	1:D:2329:LYS:HE2	1.93	0.50
1:A:117:TYR:CE1	1:A:181:LYS:HD2	2.46	0.50
1:A:405:PRO:O	1:A:417:LYS:NZ	2.44	0.50
1:B:185:ASN:CB	1:B:191:GLN:HG3	2.42	0.50
1:B:370:LEU:HD23	1:B:390:LEU:HD13	1.93	0.50
1:C:55:ASP:HA	1:C:127:LYS:HG2	1.92	0.50
1:C:178:ILE:HG21	1:C:221:VAL:HG12	1.93	0.50
1:C:196:SER:O	1:C:207:ASN:ND2	2.44	0.50
1:C:558:ARG:O	1:C:561:ARG:HB3	2.11	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2706:MET:HG3	1:C:2707:LYS:HD2	1.92	0.50
1:D:10:HIS:NE2	1:D:176:VAL:O	2.39	0.50
1:D:253:CYS:SG	1:D:254:ASP:N	2.84	0.50
1:D:546:HIS:H	1:D:549:PHE:HE2	1.58	0.50
1:A:178:ILE:HB	1:B:376:ARG:HH12	1.76	0.50
1:A:398:TRP:N	1:A:422:PRO:HG2	2.24	0.50
1:A:416:LEU:O	1:A:417:LYS:HD3	2.11	0.50
1:A:446:ALA:HB1	1:A:513:GLN:HE22	1.76	0.50
1:A:482:TYR:CE1	1:A:488:THR:HG23	2.47	0.50
1:B:261:HIS:ND1	1:B:355:LEU:HD11	2.26	0.50
1:C:47:ASN:HA	1:C:291:PRO:HD3	1.92	0.50
1:C:209:VAL:HG11	1:C:218:TRP:CZ2	2.47	0.50
1:C:246:GLU:H	1:C:428:GLU:CD	2.14	0.50
1:C:482:TYR:CE1	1:C:488:THR:HG23	2.47	0.50
1:C:499:PHE:O	1:C:503:ASN:ND2	2.43	0.50
1:C:2515:LEU:HB3	1:C:2516:PRO:HD3	1.93	0.50
1:D:370:LEU:HD23	1:D:390:LEU:HD13	1.93	0.50
1:D:444:ASP:O	1:D:448:ASP:HB3	2.11	0.50
1:D:2339:SER:O	1:D:2342:LEU:HG	2.11	0.50
1:D:2726:GLN:HA	1:D:2729:GLN:OE1	2.11	0.50
1:A:191:GLN:HA	1:A:192:PRO:O	2.11	0.50
1:A:376:ARG:HH12	1:D:178:ILE:HB	1.76	0.50
1:A:1302:HIS:CA	1:A:1303:GLY:CA	2.89	0.50
1:A:2333:ILE:HD13	1:A:2380:THR:OG1	2.11	0.50
1:A:2559:GLU:O	1:A:2561:PRO:HD3	2.10	0.50
1:B:117:TYR:CE1	1:B:181:LYS:HD2	2.46	0.50
1:B:2339:SER:O	1:B:2342:LEU:HG	2.12	0.50
1:B:2413:TYR:O	1:B:2416:LEU:HB3	2.11	0.50
1:C:185:ASN:HB2	1:C:191:GLN:H	1.76	0.50
1:C:2458:VAL:HG13	1:C:2569:TYR:CE1	2.46	0.50
1:C:2726:GLN:HA	1:C:2729:GLN:OE1	2.10	0.50
1:D:389:ARG:NH2	1:D:426:ASP:O	2.44	0.50
1:D:2583:ASN:OD1	1:D:2584:LEU:N	2.44	0.50
1:A:168:LYS:HD3	1:B:246:GLU:O	2.11	0.50
1:A:249:LYS:HE3	1:A:264:LEU:CD2	2.42	0.50
1:A:2707:LYS:HE2	1:D:2712:LEU:HD13	1.94	0.50
1:B:166:PHE:CG	1:B:167:TYR:N	2.78	0.50
1:B:178:ILE:HB	1:C:376:ARG:HH12	1.76	0.50
1:B:432:ILE:HG22	1:B:433:VAL:O	2.11	0.50
1:B:2353:THR:HA	1:B:2354:LEU:HD23	1.94	0.50
1:B:2423:ARG:O	1:B:2426:THR:HG22	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:183:VAL:O	1:C:191:GLN:NE2	2.45	0.50
1:C:438:ALA:O	1:C:441:ARG:HB3	2.12	0.50
1:C:2389:ASP:CA	1:C:2390:VAL:CA	2.90	0.50
1:D:27:ILE:HG23	1:D:39:VAL:HG12	1.93	0.50
1:A:246:GLU:H	1:A:428:GLU:CD	2.14	0.50
1:A:259:LYS:HB3	1:A:261:HIS:NE2	2.27	0.50
1:A:444:ASP:O	1:A:448:ASP:HB3	2.11	0.50
1:A:479:ASP:HA	1:A:482:TYR:CE2	2.46	0.50
1:A:2329:LYS:HG2	1:A:2330:PRO:HD3	1.94	0.50
1:B:191:GLN:HA	1:B:192:PRO:O	2.11	0.50
1:B:257:ARG:HH12	1:B:408:LYS:HD3	1.75	0.50
1:B:2326:ALA:CA	1:B:2329:LYS:HE2	2.27	0.50
1:B:2548:GLY:HA2	1:B:2574:PHE:HE2	1.77	0.50
1:B:2563:PHE:C	1:B:2567:VAL:HG12	2.32	0.50
1:C:497:VAL:HG12	1:C:501:LYS:HG3	1.94	0.50
1:C:2540:SER:HG	1:C:2541:HIS:H	1.60	0.50
1:D:499:PHE:O	1:D:503:ASN:ND2	2.44	0.50
1:D:2433:SER:OG	1:D:2593:PHE:CE1	2.64	0.50
1:D:2548:GLY:HA2	1:D:2574:PHE:CE2	2.46	0.50
1:A:497:VAL:O	1:A:501:LYS:HG3	2.12	0.50
1:A:2389:ASP:CA	1:A:2390:VAL:CA	2.89	0.50
1:A:2714:GLY:O	1:A:2718:GLU:HG2	2.12	0.50
1:B:2389:ASP:CA	1:B:2390:VAL:CA	2.89	0.50
1:B:2524:LYS:HD2	1:B:2526:HIS:CD2	2.41	0.50
1:B:2559:GLU:O	1:B:2561:PRO:HD3	2.10	0.50
1:C:400:HIS:CE1	1:C:422:PRO:HB3	2.46	0.50
1:C:446:ALA:HB1	1:C:513:GLN:HE22	1.77	0.50
1:C:518:GLN:H	1:C:518:GLN:CD	2.14	0.50
1:C:2339:SER:O	1:C:2342:LEU:HG	2.12	0.50
1:C:2458:VAL:HG13	1:C:2569:TYR:HE1	1.77	0.50
1:D:136:LYS:N	1:D:137:ARG:HB3	2.27	0.50
1:D:398:TRP:N	1:D:422:PRO:HG2	2.25	0.50
1:D:497:VAL:HG12	1:D:501:LYS:HG3	1.93	0.50
1:D:2353:THR:HA	1:D:2354:LEU:HD23	1.94	0.50
1:A:166:PHE:CG	1:A:167:TYR:N	2.79	0.50
1:A:476:LEU:O	1:A:479:ASP:HB2	2.12	0.50
1:A:543:ASP:OD1	1:A:550:ARG:NH2	2.37	0.50
1:A:2413:TYR:O	1:A:2416:LEU:HB3	2.11	0.50
1:A:2563:PHE:C	1:A:2567:VAL:HG12	2.31	0.50
1:B:249:LYS:HE3	1:B:264:LEU:CD2	2.42	0.50
1:B:364:ILE:HG23	1:B:367:ILE:HG13	1.94	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:389:ARG:NH2	1:B:426:ASP:O	2.44	0.50
1:B:2458:VAL:HG13	1:B:2569:TYR:HE1	1.75	0.50
1:C:194:HIS:O	1:C:209:VAL:HG22	2.11	0.50
1:C:238:ASP:OD1	1:C:238:ASP:N	2.43	0.50
1:C:1302:HIS:CA	1:C:1303:GLY:CA	2.89	0.50
1:C:2353:THR:HA	1:C:2354:LEU:HD23	1.93	0.50
1:C:2603:LYS:N	1:C:2604:GLU:OE1	2.43	0.50
1:D:518:GLN:CD	1:D:518:GLN:H	2.14	0.50
1:D:1302:HIS:CA	1:D:1303:GLY:CA	2.89	0.50
1:D:2458:VAL:HG13	1:D:2569:TYR:CE1	2.46	0.50
1:A:55:ASP:HA	1:A:127:LYS:HG2	1.92	0.50
1:A:289:HIS:NE2	1:D:2730:LYS:HD3	2.26	0.50
1:B:124:LEU:HD12	1:B:131:TYR:HB2	1.94	0.50
1:B:285:GLU:N	1:B:303:PHE:CE2	2.80	0.50
1:B:2324:VAL:C	1:B:2326:ALA:H	2.16	0.50
1:B:2431:ILE:HD12	1:B:2431:ILE:N	2.08	0.50
1:C:2721:ASP:O	1:C:2724:THR:HB	2.11	0.50
1:D:2563:PHE:O	1:D:2567:VAL:HG12	2.12	0.50
1:A:438:ALA:O	1:A:441:ARG:HB3	2.12	0.49
1:A:2339:SER:O	1:A:2342:LEU:HG	2.12	0.49
1:B:1302:HIS:CA	1:B:1303:GLY:CA	2.89	0.49
1:C:98:LEU:HD12	1:C:101:LYS:HZ1	1.77	0.49
1:C:131:TYR:O	1:C:152:ASP:N	2.45	0.49
1:C:136:LYS:N	1:C:137:ARG:HB3	2.28	0.49
1:C:240:VAL:HG22	1:C:241:ARG:N	2.27	0.49
1:C:309:ALA:HB3	1:C:310:THR:HA	1.94	0.49
1:C:370:LEU:HD23	1:C:390:LEU:HD13	1.95	0.49
1:C:497:VAL:O	1:C:501:LYS:HG3	2.12	0.49
1:C:2693:ASN:OD1	1:C:2694:GLU:N	2.44	0.49
1:D:21:GLY:H	1:D:24:ASN:HA	1.76	0.49
1:D:240:VAL:HG22	1:D:241:ARG:N	2.27	0.49
1:D:424:LYS:HD2	1:D:425:GLU:HG2	1.94	0.49
1:D:476:LEU:O	1:D:479:ASP:HB2	2.12	0.49
1:D:2333:ILE:HD13	1:D:2380:THR:OG1	2.12	0.49
1:D:2423:ARG:O	1:D:2426:THR:HG22	2.12	0.49
1:A:194:HIS:O	1:A:209:VAL:HG22	2.12	0.49
1:A:2458:VAL:HG13	1:A:2569:TYR:CE1	2.46	0.49
1:B:390:LEU:HD23	1:B:399:VAL:HG21	1.94	0.49
1:B:2721:ASP:O	1:B:2724:THR:HB	2.11	0.49
1:C:466:THR:OG1	1:C:469:GLU:HG3	2.12	0.49
1:C:2415:LEU:HA	1:C:2418:PHE:CE2	2.47	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:124:LEU:HD12	1:D:131:TYR:HB2	1.94	0.49
1:D:246:GLU:H	1:D:428:GLU:CD	2.14	0.49
1:D:2459:GLY:O	1:D:2461:LEU:N	2.41	0.49
1:A:183:VAL:O	1:A:191:GLN:NE2	2.45	0.49
1:A:209:VAL:HG11	1:A:218:TRP:CZ2	2.47	0.49
1:A:312:HIS:N	1:A:358:VAL:O	2.44	0.49
1:A:458:GLY:HA2	1:A:461:GLU:OE2	2.13	0.49
1:A:2712:LEU:HD13	1:B:2707:LYS:HE2	1.94	0.49
1:B:97:ASP:OD1	1:B:98:LEU:N	2.46	0.49
1:B:136:LYS:N	1:B:137:ARG:HB3	2.27	0.49
1:B:518:GLN:H	1:B:518:GLN:CD	2.14	0.49
1:B:2515:LEU:HB3	1:B:2516:PRO:HD3	1.93	0.49
1:C:135:ASN:HB2	1:C:138:LEU:O	2.12	0.49
1:C:364:ILE:HG23	1:C:367:ILE:HG13	1.95	0.49
1:C:543:ASP:OD1	1:C:550:ARG:NH2	2.36	0.49
1:C:2712:LEU:HD13	1:D:2707:LYS:HE2	1.94	0.49
1:D:2428:LEU:CD1	1:D:2429:ASN:ND2	2.73	0.49
1:D:2524:LYS:HB3	1:D:2526:HIS:CD2	2.47	0.49
1:D:2574:PHE:HA	1:D:2577:VAL:HG12	1.93	0.49
1:A:131:TYR:O	1:A:152:ASP:N	2.45	0.49
1:A:251:LEU:HG	1:A:264:LEU:HB2	1.94	0.49
1:A:364:ILE:HG23	1:A:367:ILE:HG13	1.94	0.49
1:A:2457:ILE:O	1:A:2461:LEU:HB2	2.11	0.49
1:B:2326:ALA:HA	1:B:2329:LYS:HE2	1.93	0.49
1:B:2437:ASN:CB	1:B:2592:THR:HG22	2.33	0.49
1:C:160:TRP:CD1	1:C:185:ASN:O	2.66	0.49
1:C:476:LEU:O	1:C:479:ASP:HB2	2.12	0.49
1:D:135:ASN:ND2	1:D:148:ARG:H	2.10	0.49
1:D:185:ASN:CB	1:D:191:GLN:HG3	2.42	0.49
1:D:438:ALA:O	1:D:441:ARG:HB3	2.11	0.49
1:D:507:GLN:HB2	1:D:567:TYR:HE2	1.78	0.49
1:A:545:ARG:HG3	1:A:549:PHE:CE2	2.47	0.49
1:A:2308:HIS:ND1	1:A:2308:HIS:O	2.46	0.49
1:B:2333:ILE:HD13	1:B:2380:THR:OG1	2.13	0.49
1:B:2586:PHE:HE2	1:D:2586:PHE:HE2	1.60	0.49
1:B:2603:LYS:N	1:B:2604:GLU:OE1	2.45	0.49
1:B:2712:LEU:HD13	1:C:2707:LYS:HE2	1.94	0.49
1:C:228:ASP:OD1	1:C:229:ASN:N	2.46	0.49
1:C:2333:ILE:HD13	1:C:2380:THR:OG1	2.12	0.49
1:C:2730:LYS:HD3	1:D:289:HIS:NE2	2.27	0.49
1:D:228:ASP:OD1	1:D:229:ASN:N	2.45	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2413:TYR:O	1:D:2416:LEU:HB3	2.12	0.49
1:D:2587:GLY:HA2	1:D:2590:ILE:HG12	1.95	0.49
1:D:2721:ASP:O	1:D:2724:THR:HB	2.11	0.49
1:A:415:MET:CA	1:A:417:LYS:HE2	2.34	0.49
1:B:27:ILE:HG23	1:B:39:VAL:HG12	1.93	0.49
1:B:160:TRP:CD1	1:B:185:ASN:O	2.65	0.49
1:B:240:VAL:HG22	1:B:241:ARG:N	2.27	0.49
1:B:389:ARG:HD2	1:B:398:TRP:HE1	1.78	0.49
1:B:424:LYS:HD2	1:B:425:GLU:HG2	1.94	0.49
1:D:312:HIS:N	1:D:358:VAL:O	2.46	0.49
1:D:479:ASP:HA	1:D:482:TYR:CE2	2.48	0.49
1:D:545:ARG:HG3	1:D:549:PHE:CE2	2.47	0.49
1:D:2288:ASN:HD22	1:D:2416:LEU:HD23	1.78	0.49
1:A:94:HIS:O	1:A:98:LEU:HB2	2.13	0.49
1:A:104:GLU:O	1:A:108:ARG:HG3	2.12	0.49
1:A:104:GLU:HA	1:A:107:ASN:ND2	2.28	0.49
1:A:228:ASP:OD1	1:A:229:ASN:N	2.46	0.49
1:A:497:VAL:HG12	1:A:501:LYS:HG3	1.94	0.49
1:B:251:LEU:HG	1:B:264:LEU:HB2	1.94	0.49
1:B:259:LYS:HB3	1:B:261:HIS:NE2	2.28	0.49
1:B:476:LEU:O	1:B:479:ASP:HB2	2.12	0.49
1:B:2459:GLY:O	1:B:2461:LEU:N	2.41	0.49
1:B:2548:GLY:HA2	1:B:2574:PHE:CE2	2.46	0.49
1:B:2586:PHE:CD2	1:C:2586:PHE:CE2	2.80	0.49
1:C:104:GLU:O	1:C:108:ARG:HG3	2.12	0.49
1:C:251:LEU:HG	1:C:264:LEU:HB2	1.94	0.49
1:C:259:LYS:HB3	1:C:261:HIS:NE2	2.26	0.49
1:D:160:TRP:CD1	1:D:185:ASN:O	2.65	0.49
1:D:358:VAL:HG12	1:D:359:PRO:O	2.13	0.49
1:D:2308:HIS:ND1	1:D:2308:HIS:O	2.46	0.49
1:A:432:ILE:HG22	1:A:433:VAL:O	2.12	0.49
1:A:2730:LYS:HD3	1:B:289:HIS:NE2	2.27	0.49
1:B:86:ALA:HA	1:B:89:LEU:HB2	1.93	0.49
1:B:127:LYS:NZ	1:B:444:ASP:OD2	2.39	0.49
1:B:246:GLU:H	1:B:428:GLU:CD	2.14	0.49
1:B:572:GLU:OE1	1:B:572:GLU:N	2.38	0.49
1:C:97:ASP:OD1	1:C:98:LEU:N	2.46	0.49
1:C:2308:HIS:ND1	1:C:2308:HIS:O	2.46	0.49
1:C:2583:ASN:OD1	1:C:2584:LEU:N	2.45	0.49
1:C:2714:GLY:O	1:C:2718:GLU:HG2	2.12	0.49
1:D:196:SER:O	1:D:207:ASN:ND2	2.46	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:364:ILE:HG23	1:D:367:ILE:HG13	1.95	0.49
1:D:466:THR:OG1	1:D:469:GLU:HG3	2.13	0.49
1:A:97:ASP:OD1	1:A:98:LEU:N	2.46	0.49
1:A:507:GLN:HB2	1:A:567:TYR:HE2	1.78	0.49
1:B:398:TRP:N	1:B:422:PRO:HG2	2.25	0.49
1:B:545:ARG:HG3	1:B:549:PHE:CE2	2.47	0.49
1:C:545:ARG:HG3	1:C:549:PHE:CE2	2.47	0.49
1:D:2274:SER:O	1:D:2277:SER:HB2	2.13	0.49
1:A:28:SER:OG	1:A:29:THR:N	2.46	0.49
1:A:160:TRP:CD1	1:A:185:ASN:O	2.66	0.49
1:A:314:LEU:HD23	1:A:366:SER:HB2	1.95	0.49
1:A:466:THR:OG1	1:A:469:GLU:HG3	2.12	0.49
1:A:2415:LEU:HA	1:A:2418:PHE:CE2	2.48	0.49
1:A:2458:VAL:HG13	1:A:2569:TYR:HE1	1.77	0.49
1:B:10:HIS:NE2	1:B:177:VAL:HA	2.28	0.49
1:B:98:LEU:HD12	1:B:101:LYS:HZ1	1.77	0.49
1:B:228:ASP:OD1	1:B:229:ASN:N	2.45	0.49
1:B:466:THR:OG1	1:B:469:GLU:HG3	2.13	0.49
1:B:515:ILE:HA	1:B:518:GLN:HE22	1.78	0.49
1:C:358:VAL:HG12	1:C:359:PRO:O	2.13	0.49
1:C:458:GLY:HA2	1:C:461:GLU:OE2	2.13	0.49
1:C:2291:VAL:HG21	1:C:2324:VAL:HG11	1.94	0.49
1:D:390:LEU:HD23	1:D:399:VAL:HG21	1.94	0.49
1:A:98:LEU:HD12	1:A:101:LYS:HZ1	1.78	0.48
1:A:135:ASN:HB2	1:A:138:LEU:O	2.12	0.48
1:A:370:LEU:HD23	1:A:390:LEU:HD13	1.95	0.48
1:A:2291:VAL:HG21	1:A:2324:VAL:HG11	1.94	0.48
1:B:6:SER:O	1:C:376:ARG:HG3	2.13	0.48
1:B:45:ASP:HB3	1:B:48:ASN:CB	2.43	0.48
1:B:104:GLU:HA	1:B:107:ASN:ND2	2.28	0.48
1:B:309:ALA:HB3	1:B:310:THR:HA	1.95	0.48
1:B:314:LEU:HD23	1:B:366:SER:HB2	1.95	0.48
1:C:432:ILE:HG22	1:C:433:VAL:O	2.13	0.48
1:C:479:ASP:HA	1:C:482:TYR:CE2	2.46	0.48
1:C:2703:GLU:O	1:C:2707:LYS:HG2	2.13	0.48
1:D:231:ASP:H	1:D:384:ARG:NH2	2.11	0.48
1:D:285:GLU:N	1:D:303:PHE:CE2	2.80	0.48
1:A:136:LYS:N	1:A:137:ARG:HB3	2.27	0.48
1:A:139:PRO:HG2	1:A:148:ARG:NH1	2.28	0.48
1:A:160:TRP:CG	1:A:187:VAL:HG13	2.49	0.48
1:B:94:HIS:O	1:B:98:LEU:HB2	2.12	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:135:ASN:HB2	1:B:138:LEU:O	2.12	0.48
1:B:162:TYR:N	1:B:185:ASN:H	2.11	0.48
1:B:183:VAL:O	1:B:191:GLN:NE2	2.46	0.48
1:B:2703:GLU:O	1:B:2707:LYS:HG2	2.14	0.48
1:C:117:TYR:CG	1:C:176:VAL:HG23	2.48	0.48
1:C:139:PRO:HG2	1:C:148:ARG:NH1	2.28	0.48
1:C:484:VAL:HA	1:C:562:HIS:CE1	2.48	0.48
1:D:94:HIS:O	1:D:98:LEU:HB2	2.12	0.48
1:D:238:ASP:OD1	1:D:238:ASP:N	2.46	0.48
1:D:2378:THR:HA	1:D:2412:PHE:CE1	2.48	0.48
1:A:86:ALA:HA	1:A:89:LEU:HB2	1.94	0.48
1:A:117:TYR:CG	1:A:176:VAL:HG23	2.48	0.48
1:A:135:ASN:ND2	1:A:148:ARG:H	2.11	0.48
1:A:424:LYS:HD2	1:A:425:GLU:HG2	1.94	0.48
1:A:2274:SER:O	1:A:2277:SER:HB2	2.13	0.48
1:B:160:TRP:CG	1:B:187:VAL:HG13	2.48	0.48
1:B:484:VAL:HA	1:B:562:HIS:CE1	2.48	0.48
1:C:177:VAL:HG21	1:D:375:LEU:HG	1.94	0.48
1:C:2535:ILE:HG13	1:C:2536:VAL:N	2.28	0.48
1:D:10:HIS:NE2	1:D:177:VAL:HA	2.28	0.48
1:D:29:THR:OG1	1:D:38:VAL:N	2.31	0.48
1:D:117:TYR:CG	1:D:176:VAL:HG23	2.48	0.48
1:D:314:LEU:HD23	1:D:366:SER:HB2	1.96	0.48
1:D:484:VAL:HA	1:D:562:HIS:CE1	2.48	0.48
1:A:136:LYS:CB	1:A:188:ASN:HD22	2.26	0.48
1:A:309:ALA:HB3	1:A:310:THR:HA	1.95	0.48
1:A:2432:LYS:CA	1:A:2435:THR:CG2	2.91	0.48
1:A:2703:GLU:O	1:A:2707:LYS:HG2	2.13	0.48
1:B:135:ASN:ND2	1:B:148:ARG:H	2.10	0.48
1:B:479:ASP:HA	1:B:482:TYR:CE2	2.48	0.48
1:B:2732:ARG:CA	1:B:2733:ILE:CA	2.92	0.48
1:C:86:ALA:HA	1:C:89:LEU:HB2	1.95	0.48
1:C:94:HIS:O	1:C:98:LEU:HB2	2.13	0.48
1:C:136:LYS:CB	1:C:188:ASN:HD22	2.26	0.48
1:C:424:LYS:HD2	1:C:425:GLU:HG2	1.94	0.48
1:C:2437:ASN:O	1:C:2441:ILE:HG13	2.14	0.48
1:D:98:LEU:HD12	1:D:101:LYS:HZ1	1.78	0.48
1:D:2560:GLU:OE1	1:D:2560:GLU:N	2.43	0.48
1:A:389:ARG:NH2	1:A:426:ASP:O	2.47	0.48
1:A:518:GLN:CD	1:A:518:GLN:H	2.14	0.48
1:A:2583:ASN:OD1	1:A:2584:LEU:N	2.45	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:109:LYS:O	1:B:113:THR:HG23	2.13	0.48
1:B:312:HIS:N	1:B:358:VAL:O	2.46	0.48
1:B:458:GLY:HA2	1:B:461:GLU:OE2	2.13	0.48
1:B:507:GLN:HB2	1:B:567:TYR:HE2	1.78	0.48
1:B:2239:LYS:CA	1:B:2240:ILE:CA	2.92	0.48
1:B:2587:GLY:HA2	1:B:2590:ILE:HG12	1.95	0.48
1:D:160:TRP:CG	1:D:187:VAL:HG13	2.48	0.48
1:D:200:LEU:HD12	1:D:202:ASP:H	1.79	0.48
1:D:251:LEU:HG	1:D:264:LEU:HB2	1.95	0.48
1:D:2381:ARG:HG3	1:D:2412:PHE:CZ	2.49	0.48
1:D:2702:LEU:HA	1:D:2705:THR:HG22	1.96	0.48
1:A:303:PHE:CD1	1:A:303:PHE:CB	2.77	0.48
1:A:400:HIS:H	1:A:420:THR:HG21	1.79	0.48
1:A:2274:SER:HB2	1:A:2343:ARG:CZ	2.44	0.48
1:B:395:THR:O	1:B:397:THR:HG22	2.14	0.48
1:C:249:LYS:HE3	1:C:264:LEU:CD2	2.42	0.48
1:D:69:GLN:HE22	1:D:100:LYS:CG	2.26	0.48
1:D:139:PRO:HG2	1:D:148:ARG:NH1	2.28	0.48
1:D:162:TYR:N	1:D:185:ASN:H	2.11	0.48
1:D:2548:GLY:HA2	1:D:2574:PHE:HE2	1.77	0.48
1:A:285:GLU:N	1:A:303:PHE:CE2	2.81	0.48
1:A:484:VAL:HA	1:A:562:HIS:CE1	2.48	0.48
1:A:2535:ILE:HG13	1:A:2536:VAL:N	2.28	0.48
1:B:139:PRO:HG2	1:B:148:ARG:NH1	2.28	0.48
1:B:234:LEU:HB2	1:B:383:PRO:HG2	1.95	0.48
1:B:243:PHE:CE2	1:B:432:ILE:HA	2.49	0.48
1:B:358:VAL:HG12	1:B:359:PRO:O	2.13	0.48
1:B:2308:HIS:ND1	1:B:2308:HIS:O	2.46	0.48
1:C:135:ASN:ND2	1:C:148:ARG:H	2.11	0.48
1:C:314:LEU:HD23	1:C:366:SER:HB2	1.95	0.48
1:C:2324:VAL:C	1:C:2326:ALA:H	2.16	0.48
1:D:104:GLU:HA	1:D:107:ASN:ND2	2.28	0.48
1:D:183:VAL:O	1:D:191:GLN:NE2	2.46	0.48
1:D:2274:SER:HB2	1:D:2343:ARG:CZ	2.44	0.48
1:D:2714:GLY:O	1:D:2718:GLU:HG2	2.13	0.48
1:A:197:SER:HA	1:A:207:ASN:HD21	1.79	0.48
1:B:90:ASN:O	1:B:93:HIS:HB2	2.14	0.48
1:B:196:SER:O	1:B:207:ASN:ND2	2.46	0.48
1:B:231:ASP:H	1:B:384:ARG:NH2	2.12	0.48
1:B:2274:SER:HB2	1:B:2343:ARG:CZ	2.44	0.48
1:B:2274:SER:O	1:B:2277:SER:HB2	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:285:GLU:HA	1:C:303:PHE:CG	2.46	0.48
1:C:2560:GLU:OE1	1:C:2560:GLU:N	2.44	0.48
1:D:132:LEU:HB3	1:D:150:THR:O	2.14	0.48
1:D:2239:LYS:CA	1:D:2240:ILE:CA	2.92	0.48
1:D:2324:VAL:C	1:D:2326:ALA:H	2.16	0.48
1:A:240:VAL:HG22	1:A:241:ARG:N	2.28	0.48
1:A:376:ARG:HG3	1:D:6:SER:O	2.13	0.48
1:A:2524:LYS:HD2	1:A:2526:HIS:CD2	2.41	0.48
1:A:2587:GLY:HA2	1:A:2590:ILE:HG12	1.95	0.48
1:B:2381:ARG:HG3	1:B:2412:PHE:CZ	2.49	0.48
1:C:417:LYS:HB2	1:C:418:ILE:CD1	2.44	0.48
1:C:2286:LEU:O	1:C:2289:LEU:HB3	2.13	0.48
1:C:2432:LYS:CA	1:C:2435:THR:CG2	2.91	0.48
1:D:97:ASP:OD1	1:D:98:LEU:N	2.46	0.48
1:D:458:GLY:HA2	1:D:461:GLU:OE2	2.13	0.48
1:A:177:VAL:HG21	1:B:375:LEU:HG	1.95	0.48
1:A:358:VAL:HG12	1:A:359:PRO:O	2.13	0.48
1:A:555:LEU:HA	1:A:558:ARG:HB3	1.96	0.48
1:A:2571:LEU:HB3	1:B:2544:ARG:HH22	1.79	0.48
1:B:397:THR:OG1	1:B:422:PRO:HB2	2.14	0.48
1:B:2288:ASN:HD22	1:B:2416:LEU:HD23	1.78	0.48
1:C:392:HIS:HD2	1:C:395:THR:HG22	1.79	0.48
1:C:2378:THR:HA	1:C:2412:PHE:CE1	2.49	0.48
1:D:136:LYS:CB	1:D:188:ASN:HD22	2.27	0.48
1:D:197:SER:HA	1:D:207:ASN:HD21	1.79	0.48
1:D:259:LYS:HB3	1:D:261:HIS:NE2	2.28	0.48
1:D:397:THR:OG1	1:D:422:PRO:HB2	2.14	0.48
1:D:2288:ASN:ND2	1:D:2420:LEU:HD12	2.29	0.48
1:D:2428:LEU:CG	1:D:2429:ASN:CG	2.82	0.48
1:D:2703:GLU:O	1:D:2707:LYS:HG2	2.13	0.48
1:B:55:ASP:HA	1:B:127:LYS:HG2	1.96	0.47
1:B:1269:GLU:CA	1:B:1270:ALA:CA	2.92	0.47
1:C:104:GLU:HA	1:C:107:ASN:ND2	2.28	0.47
1:C:109:LYS:O	1:C:113:THR:HG23	2.14	0.47
1:C:388:VAL:HG12	1:C:389:ARG:N	2.29	0.47
1:C:389:ARG:NH2	1:C:426:ASP:O	2.47	0.47
1:C:2430:VAL:O	1:C:2430:VAL:HG12	2.14	0.47
1:D:135:ASN:HB2	1:D:138:LEU:O	2.13	0.47
1:D:373:THR:N	1:D:388:VAL:HG21	2.10	0.47
1:D:395:THR:O	1:D:397:THR:HG22	2.14	0.47
1:D:2372:PHE:HA	1:D:2375:ASN:OD1	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2434:VAL:CG1	1:D:2589:ILE:HD12	2.44	0.47
1:A:162:TYR:N	1:A:185:ASN:H	2.11	0.47
1:A:514:ASN:O	1:A:518:GLN:NE2	2.47	0.47
1:A:2333:ILE:O	1:A:2337:ILE:HG22	2.14	0.47
1:A:2372:PHE:HA	1:A:2375:ASN:OD1	2.14	0.47
1:B:117:TYR:CD2	1:B:176:VAL:N	2.79	0.47
1:B:2288:ASN:ND2	1:B:2420:LEU:HD12	2.29	0.47
1:B:2333:ILE:O	1:B:2337:ILE:HG22	2.15	0.47
1:B:2372:PHE:HA	1:B:2375:ASN:OD1	2.14	0.47
1:B:2430:VAL:O	1:B:2430:VAL:HG12	2.13	0.47
1:C:397:THR:OG1	1:C:422:PRO:HB2	2.15	0.47
1:C:2554:ARG:HH22	1:D:2519:GLU:HB2	1.79	0.47
1:D:133:THR:OG1	1:D:159:SER:OG	2.23	0.47
1:D:389:ARG:HD2	1:D:398:TRP:HE1	1.78	0.47
1:A:257:ARG:HH12	1:A:408:LYS:HD3	1.79	0.47
1:A:2286:LEU:O	1:A:2289:LEU:HB3	2.13	0.47
1:A:2586:PHE:HE2	1:C:2586:PHE:HE2	1.61	0.47
1:A:2732:ARG:CA	1:A:2733:ILE:CA	2.92	0.47
1:B:197:SER:HA	1:B:207:ASN:HD21	1.79	0.47
1:B:200:LEU:HD12	1:B:202:ASP:H	1.79	0.47
1:B:290:ASP:HB3	1:B:291:PRO:HD2	1.96	0.47
1:C:2274:SER:O	1:C:2277:SER:HB2	2.13	0.47
1:C:2333:ILE:O	1:C:2337:ILE:HG22	2.14	0.47
1:C:2459:GLY:O	1:C:2461:LEU:N	2.44	0.47
1:C:2459:GLY:C	1:C:2461:LEU:H	2.17	0.47
1:D:65:ARG:NH2	1:D:100:LYS:HA	2.29	0.47
1:D:109:LYS:O	1:D:113:THR:HG23	2.13	0.47
1:D:515:ILE:HA	1:D:518:GLN:HE22	1.78	0.47
1:A:399:VAL:HA	1:A:420:THR:HB	1.95	0.47
1:A:417:LYS:HB2	1:A:418:ILE:CD1	2.44	0.47
1:B:64:ASN:O	1:B:66:TYR:N	2.48	0.47
1:B:136:LYS:CB	1:B:188:ASN:HD22	2.27	0.47
1:B:388:VAL:HG12	1:B:389:ARG:N	2.29	0.47
1:B:2535:ILE:HG13	1:B:2536:VAL:N	2.29	0.47
1:B:2560:GLU:OE1	1:B:2560:GLU:N	2.44	0.47
1:B:2714:GLY:O	1:B:2718:GLU:HG2	2.13	0.47
1:C:515:ILE:HA	1:C:518:GLN:HE22	1.80	0.47
1:D:28:SER:OG	1:D:29:THR:N	2.48	0.47
1:D:117:TYR:CD2	1:D:176:VAL:N	2.79	0.47
1:D:234:LEU:HB2	1:D:383:PRO:HG2	1.95	0.47
1:D:243:PHE:CE2	1:D:432:ILE:HA	2.49	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:388:VAL:HG12	1:D:389:ARG:N	2.29	0.47
1:D:2732:ARG:CA	1:D:2733:ILE:CA	2.92	0.47
1:A:2285:VAL:HG12	1:A:2420:LEU:HD13	1.96	0.47
1:B:415:MET:CA	1:B:417:LYS:HE2	2.34	0.47
1:B:546:HIS:H	1:B:549:PHE:HE2	1.58	0.47
1:B:2378:THR:HA	1:B:2412:PHE:CE1	2.48	0.47
1:B:2702:LEU:HA	1:B:2705:THR:HG22	1.96	0.47
1:C:18:TYR:CE2	1:C:20:GLU:HB3	2.49	0.47
1:C:2732:ARG:CA	1:C:2733:ILE:CA	2.92	0.47
1:D:18:TYR:CE2	1:D:20:GLU:HB3	2.49	0.47
1:D:90:ASN:O	1:D:93:HIS:HB2	2.14	0.47
1:D:388:VAL:HG12	1:D:389:ARG:H	1.80	0.47
1:A:200:LEU:HD12	1:A:202:ASP:H	1.80	0.47
1:A:410:GLU:HA	1:A:411:GLU:CB	2.43	0.47
1:A:2567:VAL:O	1:A:2571:LEU:HD12	2.15	0.47
1:B:2581:VAL:O	1:B:2585:ILE:HG12	2.15	0.47
1:C:28:SER:OG	1:C:29:THR:N	2.46	0.47
1:C:162:TYR:N	1:C:185:ASN:H	2.11	0.47
1:C:197:SER:HA	1:C:207:ASN:HD21	1.78	0.47
1:C:285:GLU:N	1:C:303:PHE:CE2	2.81	0.47
1:C:2288:ASN:ND2	1:C:2420:LEU:HD12	2.30	0.47
1:C:2355:PHE:CE2	1:C:2357:LEU:HB2	2.50	0.47
1:C:2391:GLU:CA	1:C:2392:PHE:CA	2.92	0.47
1:D:309:ALA:HB3	1:D:310:THR:HA	1.95	0.47
1:D:2704:SER:O	1:D:2708:LEU:HD13	2.15	0.47
1:A:18:TYR:CE2	1:A:20:GLU:HB3	2.49	0.47
1:A:69:GLN:HE22	1:A:100:LYS:CG	2.26	0.47
1:A:134:VAL:HA	1:A:137:ARG:HH12	1.79	0.47
1:A:283:GLU:HG2	1:A:284:VAL:HG23	1.96	0.47
1:A:1269:GLU:CA	1:A:1270:ALA:CA	2.92	0.47
1:A:2239:LYS:CA	1:A:2240:ILE:CA	2.92	0.47
1:A:2324:VAL:C	1:A:2326:ALA:H	2.16	0.47
1:A:2430:VAL:O	1:A:2430:VAL:HG12	2.14	0.47
1:A:2583:ASN:HA	1:B:2586:PHE:CE1	2.50	0.47
1:B:28:SER:OG	1:B:29:THR:N	2.48	0.47
1:B:69:GLN:HE22	1:B:100:LYS:CG	2.26	0.47
1:B:132:LEU:HB3	1:B:150:THR:O	2.14	0.47
1:B:392:HIS:CD2	1:B:394:CYS:HG	2.17	0.47
1:B:392:HIS:HD2	1:B:395:THR:HG22	1.80	0.47
1:B:2391:GLU:CA	1:B:2392:PHE:CA	2.93	0.47
1:B:2432:LYS:CA	1:B:2435:THR:CG2	2.92	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:45:ASP:HB3	1:C:48:ASN:CB	2.42	0.47
1:C:69:GLN:HE22	1:C:100:LYS:CG	2.26	0.47
1:C:139:PRO:HG2	1:C:148:ARG:HH22	1.80	0.47
1:C:160:TRP:CG	1:C:187:VAL:HG13	2.49	0.47
1:C:388:VAL:HG12	1:C:389:ARG:H	1.79	0.47
1:C:392:HIS:CD2	1:C:394:CYS:HG	2.16	0.47
1:C:399:VAL:HA	1:C:420:THR:HB	1.96	0.47
1:C:507:GLN:HB2	1:C:567:TYR:HE2	1.78	0.47
1:C:2571:LEU:HB3	1:D:2544:ARG:HH22	1.78	0.47
1:D:2288:ASN:ND2	1:D:2417:LEU:HA	2.30	0.47
1:D:2581:VAL:O	1:D:2585:ILE:HG12	2.15	0.47
1:D:2603:LYS:N	1:D:2604:GLU:OE1	2.45	0.47
1:A:139:PRO:HG2	1:A:148:ARG:HH22	1.79	0.47
1:A:2378:THR:HA	1:A:2412:PHE:CE1	2.49	0.47
1:A:2459:GLY:C	1:A:2461:LEU:H	2.17	0.47
1:A:2586:PHE:CD2	1:B:2586:PHE:CE2	2.75	0.47
1:B:18:TYR:CE2	1:B:20:GLU:HB3	2.49	0.47
1:B:388:VAL:HG12	1:B:389:ARG:H	1.80	0.47
1:B:2288:ASN:ND2	1:B:2417:LEU:HA	2.30	0.47
1:C:257:ARG:HH12	1:C:408:LYS:HD3	1.79	0.47
1:C:299:TRP:C	1:C:301:SER:H	2.18	0.47
1:C:555:LEU:HA	1:C:558:ARG:HB3	1.96	0.47
1:C:2239:LYS:CA	1:C:2240:ILE:CA	2.92	0.47
1:C:2274:SER:HB2	1:C:2343:ARG:CZ	2.44	0.47
1:C:2372:PHE:HZ	1:C:2423:ARG:HE	1.63	0.47
1:D:156:ASN:OD1	1:D:156:ASN:N	2.47	0.47
1:D:248:GLU:OE2	1:D:271:SER:N	2.48	0.47
1:D:390:LEU:HD12	1:D:391:ARG:H	1.80	0.47
1:D:2535:ILE:HG13	1:D:2536:VAL:N	2.29	0.47
1:A:69:GLN:HG3	1:A:99:GLU:OE1	2.15	0.47
1:A:90:ASN:O	1:A:93:HIS:HB2	2.14	0.47
1:A:519:ILE:O	1:A:522:LEU:HB3	2.15	0.47
1:A:2355:PHE:CE2	1:A:2357:LEU:HB2	2.50	0.47
1:A:2441:ILE:O	1:A:2444:THR:OG1	2.11	0.47
1:A:2540:SER:O	1:A:2544:ARG:NH2	2.48	0.47
1:B:178:ILE:HB	1:C:376:ARG:NH1	2.30	0.47
1:B:283:GLU:HG2	1:B:284:VAL:HG23	1.97	0.47
1:B:537:ARG:HA	1:B:540:GLU:HG2	1.97	0.47
1:B:2704:SER:O	1:B:2708:LEU:HD13	2.15	0.47
1:C:132:LEU:HB3	1:C:150:THR:O	2.15	0.47
1:C:134:VAL:HA	1:C:137:ARG:HH12	1.79	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:283:GLU:HG2	1:C:284:VAL:HG23	1.96	0.47
1:C:485:THR:HG23	1:C:487:GLY:H	1.80	0.47
1:C:514:ASN:O	1:C:518:GLN:NE2	2.48	0.47
1:C:2340:THR:HG21	1:C:2368:PHE:CZ	2.50	0.47
1:C:2575:PHE:CZ	1:C:2579:ILE:HD13	2.50	0.47
1:C:2704:SER:O	1:C:2708:LEU:HD13	2.14	0.47
1:D:185:ASN:HB2	1:D:191:GLN:N	2.30	0.47
1:D:2379:PHE:HB2	1:D:2416:LEU:CD1	2.42	0.47
1:D:2391:GLU:CA	1:D:2392:PHE:CA	2.93	0.47
1:A:132:LEU:HB3	1:A:150:THR:O	2.15	0.47
1:A:515:ILE:HA	1:A:518:GLN:HE22	1.80	0.47
1:A:2326:ALA:HA	1:A:2329:LYS:HE2	1.96	0.47
1:B:7:SER:HB2	1:B:178:ILE:HD13	1.97	0.47
1:B:2728:LYS:HA	1:B:2732:ARG:HB2	1.97	0.47
1:C:200:LEU:HD12	1:C:202:ASP:H	1.80	0.47
1:D:65:ARG:HE	1:D:103:ASN:HB2	1.80	0.47
1:D:249:LYS:HZ3	1:D:267:THR:N	2.12	0.47
1:A:161:PHE:CD1	1:A:184:LEU:HD12	2.50	0.46
1:A:376:ARG:NH1	1:D:178:ILE:HB	2.30	0.46
1:A:2288:ASN:ND2	1:A:2420:LEU:HD12	2.30	0.46
1:B:374:THR:OG1	1:B:375:LEU:N	2.48	0.46
1:B:390:LEU:HD12	1:B:391:ARG:H	1.80	0.46
1:B:2355:PHE:CE2	1:B:2357:LEU:HB2	2.50	0.46
1:C:9:LEU:HD23	1:C:226:TRP:CZ2	2.50	0.46
1:C:90:ASN:O	1:C:93:HIS:HB2	2.14	0.46
1:C:395:THR:O	1:C:397:THR:HG22	2.16	0.46
1:C:537:ARG:HA	1:C:540:GLU:HG2	1.98	0.46
1:C:2285:VAL:HG12	1:C:2420:LEU:HD13	1.97	0.46
1:C:2583:ASN:HA	1:D:2586:PHE:CE1	2.50	0.46
1:D:290:ASP:HB3	1:D:291:PRO:HD2	1.97	0.46
1:D:2340:THR:HG21	1:D:2368:PHE:CZ	2.49	0.46
1:A:9:LEU:HD23	1:A:226:TRP:CZ2	2.50	0.46
1:A:45:ASP:HB3	1:A:48:ASN:CB	2.43	0.46
1:A:388:VAL:HG12	1:A:389:ARG:H	1.80	0.46
1:A:2391:GLU:CA	1:A:2392:PHE:CA	2.92	0.46
1:A:2554:ARG:HH22	1:B:2519:GLU:HB2	1.79	0.46
1:A:2575:PHE:CZ	1:A:2579:ILE:HD13	2.50	0.46
1:A:2704:SER:O	1:A:2708:LEU:HD13	2.14	0.46
1:B:104:GLU:HA	1:B:107:ASN:HD21	1.80	0.46
1:B:117:TYR:CG	1:B:176:VAL:HG23	2.48	0.46
1:B:184:LEU:O	1:B:191:GLN:NE2	2.46	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:417:LYS:HB2	1:B:418:ILE:CD1	2.46	0.46
1:C:226:TRP:N	1:C:226:TRP:CD1	2.83	0.46
1:C:410:GLU:HA	1:C:411:GLU:CB	2.43	0.46
1:C:1269:GLU:CA	1:C:1270:ALA:CA	2.93	0.46
1:C:2372:PHE:HA	1:C:2375:ASN:OD1	2.14	0.46
1:C:2381:ARG:HG3	1:C:2412:PHE:CZ	2.50	0.46
1:D:45:ASP:HB3	1:D:48:ASN:CB	2.43	0.46
1:D:64:ASN:O	1:D:66:TYR:N	2.48	0.46
1:D:249:LYS:HE3	1:D:264:LEU:CD2	2.42	0.46
1:D:374:THR:OG1	1:D:375:LEU:N	2.48	0.46
1:D:529:ASP:OD1	1:D:530:CYS:N	2.48	0.46
1:D:1269:GLU:CA	1:D:1270:ALA:CA	2.92	0.46
1:D:2286:LEU:O	1:D:2289:LEU:HB3	2.15	0.46
1:A:39:VAL:HG13	1:A:208:GLU:HG3	1.98	0.46
1:A:185:ASN:HB2	1:A:191:GLN:N	2.31	0.46
1:A:192:PRO:HB2	1:A:213:ASN:HA	1.97	0.46
1:A:388:VAL:HG12	1:A:389:ARG:N	2.29	0.46
1:A:465:ILE:HA	1:A:469:GLU:OE1	2.16	0.46
1:A:2587:GLY:O	1:A:2590:ILE:HG12	2.16	0.46
1:B:65:ARG:NH2	1:B:100:LYS:HA	2.29	0.46
1:B:514:ASN:O	1:B:518:GLN:NE2	2.47	0.46
1:B:529:ASP:OD1	1:B:530:CYS:N	2.49	0.46
1:B:1087:PHE:CA	1:B:1088:SER:CA	2.94	0.46
1:C:2348:VAL:HA	1:C:2351:GLN:CD	2.36	0.46
1:C:2567:VAL:O	1:C:2571:LEU:HD12	2.15	0.46
1:D:46:LEU:H	1:D:46:LEU:HD12	1.81	0.46
1:D:127:LYS:NZ	1:D:444:ASP:OD2	2.39	0.46
1:D:2428:LEU:HG	1:D:2429:ASN:OD1	2.16	0.46
1:D:2567:VAL:O	1:D:2571:LEU:HD12	2.15	0.46
1:A:64:ASN:O	1:A:66:TYR:N	2.48	0.46
1:A:390:LEU:HD12	1:A:391:ARG:H	1.81	0.46
1:A:1637:PHE:CA	1:A:1638:PRO:CA	2.94	0.46
1:A:2724:THR:HG23	1:A:2727:ARG:HE	1.81	0.46
1:B:58:PHE:CD2	1:B:123:LEU:HD21	2.51	0.46
1:B:2285:VAL:HG12	1:B:2420:LEU:HD13	1.97	0.46
1:B:2379:PHE:HB2	1:B:2416:LEU:CD1	2.42	0.46
1:B:2459:GLY:C	1:B:2461:LEU:H	2.19	0.46
1:B:2555:LYS:NZ	1:B:2562:LEU:HD21	2.31	0.46
1:C:104:GLU:HA	1:C:107:ASN:HD21	1.81	0.46
1:C:390:LEU:HD23	1:C:399:VAL:HG21	1.97	0.46
1:C:572:GLU:OE1	1:C:572:GLU:N	2.38	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2587:GLY:HA2	1:C:2590:ILE:HG12	1.95	0.46
1:D:240:VAL:HG22	1:D:241:ARG:H	1.80	0.46
1:D:514:ASN:O	1:D:518:GLN:NE2	2.47	0.46
1:D:2333:ILE:O	1:D:2337:ILE:HG22	2.14	0.46
1:D:2355:PHE:CE2	1:D:2357:LEU:HB2	2.51	0.46
1:A:65:ARG:NH2	1:A:100:LYS:HA	2.31	0.46
1:A:231:ASP:H	1:A:384:ARG:NH2	2.14	0.46
1:A:2340:THR:HG21	1:A:2368:PHE:CZ	2.50	0.46
1:A:2555:LYS:NZ	1:A:2562:LEU:HD21	2.31	0.46
1:B:226:TRP:N	1:B:226:TRP:CD1	2.83	0.46
1:B:2372:PHE:HZ	1:B:2423:ARG:HE	1.62	0.46
1:B:2554:ARG:HH22	1:C:2519:GLU:HB2	1.80	0.46
1:C:46:LEU:H	1:C:46:LEU:HD12	1.81	0.46
1:C:185:ASN:HB2	1:C:191:GLN:N	2.31	0.46
1:C:1087:PHE:CA	1:C:1088:SER:CA	2.94	0.46
1:C:2516:PRO:O	1:C:2520:THR:OG1	2.30	0.46
1:C:2587:GLY:O	1:C:2590:ILE:HG12	2.16	0.46
1:D:55:ASP:HA	1:D:127:LYS:HG2	1.96	0.46
1:D:161:PHE:CD1	1:D:184:LEU:HD12	2.51	0.46
1:D:208:GLU:HG2	1:D:209:VAL:N	2.26	0.46
1:D:283:GLU:HG2	1:D:284:VAL:HG23	1.97	0.46
1:D:381:LEU:HD12	1:D:381:LEU:O	2.16	0.46
1:D:465:ILE:HD11	1:D:470:ARG:NH2	2.31	0.46
1:D:2372:PHE:HZ	1:D:2423:ARG:HE	1.63	0.46
1:A:104:GLU:HA	1:A:107:ASN:HD21	1.81	0.46
1:A:397:THR:OG1	1:A:422:PRO:HB2	2.14	0.46
1:A:2559:GLU:OE1	1:C:2301:ARG:HB3	2.16	0.46
1:B:381:LEU:O	1:B:381:LEU:HD12	2.16	0.46
1:B:545:ARG:HG3	1:B:549:PHE:HE2	1.81	0.46
1:B:2286:LEU:O	1:B:2289:LEU:HB3	2.15	0.46
1:C:447:ASN:OD1	1:C:448:ASP:N	2.49	0.46
1:C:2581:VAL:O	1:C:2585:ILE:HG12	2.15	0.46
1:D:139:PRO:HG2	1:D:148:ARG:HH22	1.79	0.46
1:D:264:LEU:HB3	1:D:415:MET:HE1	1.98	0.46
1:D:417:LYS:HB2	1:D:418:ILE:CD1	2.46	0.46
1:D:537:ARG:HA	1:D:540:GLU:HG2	1.97	0.46
1:D:2541:HIS:HA	1:D:2544:ARG:HG2	1.98	0.46
1:A:9:LEU:HD23	1:A:226:TRP:CE2	2.51	0.46
1:A:395:THR:O	1:A:397:THR:HG22	2.16	0.46
1:A:2348:VAL:HA	1:A:2351:GLN:CD	2.36	0.46
1:B:248:GLU:OE2	1:B:271:SER:N	2.48	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:249:LYS:HE2	1:B:415:MET:HE1	1.98	0.46
1:B:2355:PHE:CE2	1:B:2357:LEU:HD23	2.51	0.46
1:C:9:LEU:HD23	1:C:226:TRP:CE2	2.51	0.46
1:C:161:PHE:CD1	1:C:184:LEU:HD12	2.50	0.46
1:C:390:LEU:HD12	1:C:391:ARG:H	1.81	0.46
1:C:2431:ILE:HD12	1:C:2431:ILE:N	2.08	0.46
1:D:299:TRP:C	1:D:301:SER:H	2.19	0.46
1:D:555:LEU:HA	1:D:558:ARG:HB3	1.96	0.46
1:D:2355:PHE:CE2	1:D:2357:LEU:HD23	2.51	0.46
1:D:2535:ILE:O	1:D:2539:LEU:HD13	2.16	0.46
1:D:2575:PHE:CZ	1:D:2579:ILE:HD13	2.51	0.46
1:A:1012:SER:CA	1:A:1013:SER:CA	2.94	0.46
1:A:2437:ASN:O	1:A:2441:ILE:HG13	2.14	0.46
1:A:2568:ILE:O	1:A:2572:LEU:HB2	2.16	0.46
1:A:2581:VAL:O	1:A:2585:ILE:HG12	2.16	0.46
1:B:161:PHE:CD1	1:B:184:LEU:HD12	2.51	0.46
1:B:168:LYS:HZ2	1:C:247:GLN:HA	1.81	0.46
1:B:2340:THR:HG21	1:B:2368:PHE:CZ	2.50	0.46
1:B:2437:ASN:O	1:B:2441:ILE:HG13	2.16	0.46
1:B:2568:ILE:O	1:B:2572:LEU:HB2	2.15	0.46
1:C:374:THR:OG1	1:C:375:LEU:N	2.49	0.46
1:C:529:ASP:OD1	1:C:530:CYS:N	2.49	0.46
1:C:2540:SER:O	1:C:2544:ARG:NH2	2.48	0.46
1:D:7:SER:HB2	1:D:178:ILE:HD13	1.97	0.46
1:D:545:ARG:HG3	1:D:549:PHE:HE2	1.81	0.46
1:D:1087:PHE:CA	1:D:1088:SER:CA	2.94	0.46
1:D:2568:ILE:O	1:D:2572:LEU:HB2	2.16	0.46
1:D:2587:GLY:O	1:D:2590:ILE:HG12	2.16	0.46
1:A:46:LEU:H	1:A:46:LEU:HD12	1.81	0.46
1:A:68:ALA:O	1:A:71:GLN:HB3	2.16	0.46
1:A:240:VAL:HG22	1:A:241:ARG:H	1.80	0.46
1:A:404:ILE:HB	1:A:417:LYS:NZ	2.31	0.46
1:A:485:THR:HG23	1:A:487:GLY:H	1.80	0.46
1:A:2372:PHE:HZ	1:A:2423:ARG:HE	1.62	0.46
1:B:69:GLN:HG3	1:B:99:GLU:OE1	2.16	0.46
1:B:185:ASN:HB2	1:B:191:GLN:N	2.30	0.46
1:B:362:ASN:HB3	1:B:363:ASP:H	1.55	0.46
1:B:465:ILE:HA	1:B:469:GLU:OE1	2.16	0.46
1:B:465:ILE:HD11	1:B:470:ARG:NH2	2.31	0.46
1:B:2296:PRO:HB3	1:B:2321:LEU:HD21	1.98	0.46
1:B:2587:GLY:O	1:B:2590:ILE:HG12	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:65:ARG:NH2	1:C:100:LYS:HA	2.30	0.46
1:C:231:ASP:H	1:C:384:ARG:NH2	2.14	0.46
1:D:242:LEU:HD11	1:D:305:PHE:O	2.16	0.46
1:D:2358:GLY:O	1:D:2362:VAL:HG22	2.16	0.46
1:A:507:GLN:O	1:A:510:MET:HB3	2.16	0.46
1:A:1087:PHE:CA	1:A:1088:SER:CA	2.94	0.46
1:A:2355:PHE:CE2	1:A:2357:LEU:HD23	2.51	0.46
1:B:242:LEU:HD11	1:B:305:PHE:O	2.16	0.46
1:B:249:LYS:HZ3	1:B:267:THR:N	2.14	0.46
1:B:1012:SER:CA	1:B:1013:SER:CA	2.94	0.46
1:B:1637:PHE:CA	1:B:1638:PRO:CA	2.94	0.46
1:B:2078:GLY:CA	1:B:2079:LYS:CA	2.94	0.46
1:B:2290:LEU:HD22	1:B:2304:THR:HB	1.98	0.46
1:C:64:ASN:O	1:C:66:TYR:N	2.48	0.46
1:C:69:GLN:HG3	1:C:99:GLU:OE1	2.16	0.46
1:C:246:GLU:O	1:C:248:GLU:N	2.42	0.46
1:C:260:GLN:HB3	1:C:357:SER:OG	2.16	0.46
1:C:519:ILE:O	1:C:522:LEU:HB3	2.15	0.46
1:C:545:ARG:HG3	1:C:549:PHE:HE2	1.81	0.46
1:D:58:PHE:CD2	1:D:123:LEU:HD21	2.51	0.46
1:D:511:ARG:HD2	1:D:515:ILE:HG12	1.98	0.46
1:D:571:GLN:HA	1:D:574:ILE:HD13	1.98	0.46
1:D:572:GLU:OE1	1:D:572:GLU:N	2.38	0.46
1:D:1012:SER:CA	1:D:1013:SER:CA	2.94	0.46
1:D:2290:LEU:HD22	1:D:2304:THR:HB	1.98	0.46
1:A:65:ARG:HE	1:A:103:ASN:HB2	1.81	0.45
1:A:2078:GLY:CA	1:A:2079:LYS:CA	2.94	0.45
1:A:2326:ALA:CA	1:A:2329:LYS:HE2	2.33	0.45
1:A:2329:LYS:HG3	1:A:2330:PRO:CD	2.45	0.45
1:B:139:PRO:HG2	1:B:148:ARG:HH22	1.80	0.45
1:B:238:ASP:OD1	1:B:238:ASP:N	2.46	0.45
1:B:485:THR:HG23	1:B:487:GLY:H	1.81	0.45
1:B:571:GLN:HA	1:B:574:ILE:HD13	1.98	0.45
1:B:2358:GLY:O	1:B:2362:VAL:HG22	2.16	0.45
1:B:2740:PRO:CA	1:B:2741:HIS:CA	2.94	0.45
1:C:312:HIS:HB3	1:C:313:TYR:H	1.47	0.45
1:C:400:HIS:H	1:C:420:THR:HG21	1.80	0.45
1:C:2379:PHE:HB2	1:C:2416:LEU:CD1	2.44	0.45
1:C:2429:ASN:C	1:C:2431:ILE:CD1	2.85	0.45
1:C:2524:LYS:HD2	1:C:2526:HIS:CD2	2.41	0.45
1:C:2724:THR:HG23	1:C:2727:ARG:HE	1.81	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2728:LYS:HA	1:C:2732:ARG:HB2	1.98	0.45
1:D:37:CYS:HB2	1:D:150:THR:HA	1.97	0.45
1:D:192:PRO:HB2	1:D:213:ASN:HA	1.98	0.45
1:D:447:ASN:OD1	1:D:448:ASP:N	2.49	0.45
1:D:465:ILE:HA	1:D:469:GLU:OE1	2.16	0.45
1:D:2540:SER:HG	1:D:2541:HIS:H	1.64	0.45
1:A:109:LYS:O	1:A:113:THR:HG23	2.14	0.45
1:A:134:VAL:HG12	1:A:138:LEU:HD22	1.98	0.45
1:A:234:LEU:HB2	1:A:383:PRO:HG2	1.98	0.45
1:A:248:GLU:OE2	1:A:271:SER:N	2.49	0.45
1:A:260:GLN:HB3	1:A:357:SER:OG	2.16	0.45
1:A:264:LEU:HB3	1:A:415:MET:HE1	1.98	0.45
1:A:381:LEU:HD12	1:A:381:LEU:O	2.17	0.45
1:A:2301:ARG:HB3	1:C:2559:GLU:OE1	2.16	0.45
1:B:6:SER:H	1:C:377:GLY:HA2	1.81	0.45
1:B:266:THR:O	1:B:267:THR:OG1	2.30	0.45
1:B:555:LEU:HA	1:B:558:ARG:HB3	1.97	0.45
1:B:2429:ASN:C	1:B:2431:ILE:CD1	2.85	0.45
1:B:2535:ILE:O	1:B:2539:LEU:HD13	2.16	0.45
1:B:2575:PHE:CZ	1:B:2579:ILE:HD13	2.51	0.45
1:B:2580:ILE:HG23	1:B:2584:LEU:HD13	1.98	0.45
1:C:65:ARG:HE	1:C:103:ASN:HB2	1.81	0.45
1:C:192:PRO:HB2	1:C:213:ASN:HA	1.97	0.45
1:C:234:LEU:HB2	1:C:383:PRO:HG2	1.97	0.45
1:C:1634:PHE:CA	1:C:1635:PRO:CA	2.94	0.45
1:D:2285:VAL:HG12	1:D:2420:LEU:HD13	1.97	0.45
1:D:2728:LYS:HA	1:D:2732:ARG:HB2	1.97	0.45
1:A:8:PHE:HD1	1:B:375:LEU:HB3	1.81	0.45
1:A:128:SER:O	1:A:130:LYS:HG2	2.16	0.45
1:A:375:LEU:HB3	1:D:8:PHE:HD1	1.81	0.45
1:A:537:ARG:HA	1:A:540:GLU:HG2	1.98	0.45
1:A:2703:GLU:HA	1:A:2706:MET:CE	2.45	0.45
1:B:9:LEU:HD23	1:B:226:TRP:CZ2	2.51	0.45
1:B:514:ASN:ND2	1:B:518:GLN:HE21	2.14	0.45
1:B:2341:ILE:O	1:B:2345:ILE:HG22	2.16	0.45
1:B:2567:VAL:O	1:B:2571:LEU:HD12	2.15	0.45
1:C:127:LYS:NZ	1:C:444:ASP:OD2	2.39	0.45
1:C:134:VAL:HG12	1:C:138:LEU:HD22	1.97	0.45
1:C:248:GLU:OE2	1:C:271:SER:N	2.49	0.45
1:C:465:ILE:HA	1:C:469:GLU:OE1	2.16	0.45
1:C:2355:PHE:CE2	1:C:2357:LEU:HD23	2.51	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2358:GLY:O	1:C:2362:VAL:HG22	2.16	0.45
1:D:9:LEU:HD23	1:D:226:TRP:CZ2	2.51	0.45
1:D:104:GLU:HA	1:D:107:ASN:HD21	1.80	0.45
1:D:514:ASN:ND2	1:D:518:GLN:HE21	2.14	0.45
1:D:2725:GLU:HA	1:D:2728:LYS:HG2	1.97	0.45
1:A:7:SER:HB2	1:A:178:ILE:HD13	1.99	0.45
1:A:2519:GLU:HB2	1:D:2554:ARG:HH22	1.80	0.45
1:A:2725:GLU:HA	1:A:2728:LYS:HG2	1.98	0.45
1:A:2728:LYS:HA	1:A:2732:ARG:HB2	1.98	0.45
1:B:65:ARG:HH21	1:B:103:ASN:HB3	1.82	0.45
1:B:519:ILE:O	1:B:522:LEU:HB3	2.17	0.45
1:C:405:PRO:HD2	1:C:417:LYS:HD2	1.99	0.45
1:C:507:GLN:O	1:C:510:MET:HB3	2.16	0.45
1:C:1012:SER:CA	1:C:1013:SER:CA	2.94	0.45
1:C:2326:ALA:HA	1:C:2329:LYS:HE2	1.97	0.45
1:C:2568:ILE:O	1:C:2572:LEU:HB2	2.16	0.45
1:C:2702:LEU:HA	1:C:2705:THR:HG22	1.99	0.45
1:D:69:GLN:HG3	1:D:99:GLU:OE1	2.16	0.45
1:D:2319:ILE:HG22	1:D:2322:ALA:HB3	1.97	0.45
1:A:18:TYR:CE2	1:A:46:LEU:HG	2.51	0.45
1:A:2290:LEU:HD22	1:A:2304:THR:HB	1.98	0.45
1:A:2379:PHE:HB2	1:A:2416:LEU:CD1	2.44	0.45
1:A:2381:ARG:HG3	1:A:2412:PHE:CZ	2.51	0.45
1:A:2535:ILE:O	1:A:2539:LEU:HD13	2.16	0.45
1:B:240:VAL:HG22	1:B:241:ARG:H	1.81	0.45
1:B:404:ILE:HB	1:B:417:LYS:NZ	2.31	0.45
1:B:2725:GLU:HA	1:B:2728:LYS:HG2	1.97	0.45
1:C:8:PHE:HD1	1:D:375:LEU:HB3	1.81	0.45
1:C:2535:ILE:O	1:C:2539:LEU:HD13	2.16	0.45
1:D:131:TYR:O	1:D:152:ASP:N	2.46	0.45
1:D:469:GLU:O	1:D:473:VAL:HG12	2.17	0.45
1:D:2436:ARG:HD2	1:D:2436:ARG:HA	1.83	0.45
1:A:120:VAL:CG1	1:A:161:PHE:H	2.30	0.45
1:A:242:LEU:HD11	1:A:305:PHE:O	2.17	0.45
1:A:290:ASP:HB3	1:A:291:PRO:HD2	1.99	0.45
1:A:2541:HIS:HA	1:A:2544:ARG:HG2	1.99	0.45
1:B:8:PHE:HD1	1:C:375:LEU:HB3	1.81	0.45
1:B:64:ASN:ND2	1:B:103:ASN:OD1	2.49	0.45
1:B:312:HIS:HB3	1:B:313:TYR:H	1.47	0.45
1:B:410:GLU:HA	1:B:411:GLU:CB	2.43	0.45
1:C:242:LEU:HD11	1:C:305:PHE:O	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2319:ILE:HG22	1:C:2322:ALA:HB3	1.98	0.45
1:D:68:ALA:O	1:D:71:GLN:HB3	2.17	0.45
1:D:246:GLU:O	1:D:248:GLU:N	2.45	0.45
1:D:415:MET:CA	1:D:417:LYS:HE2	2.34	0.45
1:D:2078:GLY:CA	1:D:2079:LYS:CA	2.94	0.45
1:D:2341:ILE:O	1:D:2345:ILE:HG22	2.17	0.45
1:D:2689:GLU:HA	1:D:2692:GLN:HB3	1.98	0.45
1:A:199:GLN:HG3	1:A:204:PRO:O	2.17	0.45
1:A:208:GLU:HG2	1:A:209:VAL:N	2.27	0.45
1:A:243:PHE:CE2	1:A:432:ILE:HA	2.52	0.45
1:A:2429:ASN:C	1:A:2431:ILE:CD1	2.85	0.45
1:A:2532:LEU:O	1:A:2536:VAL:HG23	2.16	0.45
1:B:37:CYS:HB2	1:B:150:THR:HA	1.98	0.45
1:B:65:ARG:HE	1:B:103:ASN:HB2	1.80	0.45
1:B:511:ARG:HD2	1:B:515:ILE:HG12	1.98	0.45
1:B:2319:ILE:HG22	1:B:2322:ALA:HB3	1.97	0.45
1:C:39:VAL:HG13	1:C:208:GLU:HG3	1.98	0.45
1:C:128:SER:O	1:C:130:LYS:HG2	2.16	0.45
1:C:526:PRO:O	1:C:532:ASP:HB2	2.17	0.45
1:C:2078:GLY:CA	1:C:2079:LYS:CA	2.94	0.45
1:C:2725:GLU:HA	1:C:2728:LYS:HG2	1.98	0.45
1:D:117:TYR:CD2	1:D:170:ARG:HD3	2.52	0.45
1:D:404:ILE:HB	1:D:417:LYS:NZ	2.31	0.45
1:A:219:LYS:HD3	1:A:219:LYS:HA	1.80	0.45
1:A:223:PHE:CE1	1:A:293:ARG:HB2	2.52	0.45
1:A:374:THR:OG1	1:A:375:LEU:N	2.49	0.45
1:A:405:PRO:HD2	1:A:417:LYS:HD2	1.99	0.45
1:A:526:PRO:O	1:A:532:ASP:HB2	2.17	0.45
1:A:529:ASP:OD1	1:A:530:CYS:N	2.48	0.45
1:A:2589:ILE:O	1:A:2592:THR:OG1	2.27	0.45
1:A:2702:LEU:HA	1:A:2705:THR:HG22	1.99	0.45
1:B:223:PHE:CE1	1:B:293:ARG:HB2	2.52	0.45
1:B:447:ASN:OD1	1:B:448:ASP:N	2.50	0.45
1:B:2698:LEU:HD11	1:C:2693:ASN:HB3	1.98	0.45
1:C:68:ALA:O	1:C:71:GLN:HB3	2.16	0.45
1:C:381:LEU:HD12	1:C:381:LEU:O	2.17	0.45
1:D:485:THR:HG23	1:D:487:GLY:H	1.81	0.45
1:D:2296:PRO:HB3	1:D:2321:LEU:HD21	1.98	0.45
1:B:192:PRO:HB2	1:B:213:ASN:HA	1.98	0.45
1:B:199:GLN:HG3	1:B:204:PRO:O	2.17	0.45
1:B:299:TRP:C	1:B:301:SER:H	2.19	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:469:GLU:O	1:B:473:VAL:HG12	2.17	0.45
1:C:290:ASP:HB3	1:C:291:PRO:HD2	1.99	0.45
1:C:2290:LEU:HD22	1:C:2304:THR:HB	1.98	0.45
1:C:2740:PRO:CA	1:C:2741:HIS:CA	2.94	0.45
1:D:128:SER:O	1:D:130:LYS:HG2	2.17	0.45
1:D:1637:PHE:CA	1:D:1638:PRO:CA	2.94	0.45
1:D:2290:LEU:HA	1:D:2293:PHE:CE2	2.52	0.45
1:D:2740:PRO:CA	1:D:2741:HIS:CA	2.94	0.45
1:A:13:ASP:OD1	1:A:225:LYS:HD3	2.17	0.45
1:A:39:VAL:HG22	1:A:207:ASN:C	2.38	0.45
1:A:2431:ILE:HD12	1:A:2431:ILE:N	2.08	0.45
1:A:2703:GLU:HG3	1:A:2706:MET:HE3	1.99	0.45
1:A:2740:PRO:CA	1:A:2741:HIS:CA	2.94	0.45
1:B:260:GLN:HB3	1:B:357:SER:OG	2.17	0.45
1:C:7:SER:HB2	1:C:178:ILE:HD13	1.98	0.45
1:C:27:ILE:HG23	1:C:39:VAL:HG12	1.99	0.45
1:C:39:VAL:HG22	1:C:207:ASN:C	2.37	0.45
1:C:136:LYS:HG2	1:C:147:MET:SD	2.57	0.45
1:C:404:ILE:HB	1:C:417:LYS:NZ	2.31	0.45
1:C:405:PRO:HD2	1:C:417:LYS:HA	1.99	0.45
1:C:2288:ASN:ND2	1:C:2417:LEU:HA	2.32	0.45
1:C:2296:PRO:HB3	1:C:2321:LEU:HD21	1.99	0.45
1:C:2326:ALA:CA	1:C:2329:LYS:HE2	2.30	0.45
1:C:2353:THR:HA	1:C:2354:LEU:HA	1.70	0.45
1:D:199:GLN:HG3	1:D:204:PRO:O	2.17	0.45
1:D:2428:LEU:CG	1:D:2429:ASN:N	2.71	0.45
1:D:2732:ARG:HA	1:D:2733:ILE:CA	2.47	0.45
1:A:38:VAL:HB	1:A:39:VAL:H	1.60	0.44
1:A:299:TRP:C	1:A:301:SER:H	2.18	0.44
1:A:377:GLY:HA2	1:D:6:SER:H	1.81	0.44
1:A:2288:ASN:ND2	1:A:2417:LEU:HA	2.32	0.44
1:B:68:ALA:O	1:B:71:GLN:HB3	2.17	0.44
1:B:2290:LEU:HA	1:B:2293:PHE:CE2	2.52	0.44
1:C:39:VAL:HG22	1:C:207:ASN:O	2.17	0.44
1:C:240:VAL:HG22	1:C:241:ARG:H	1.80	0.44
1:C:554:ARG:O	1:C:558:ARG:N	2.50	0.44
1:C:2541:HIS:HA	1:C:2544:ARG:HG2	1.99	0.44
1:D:66:TYR:CZ	1:D:160:TRP:HB2	2.53	0.44
1:D:136:LYS:HG2	1:D:147:MET:SD	2.57	0.44
1:D:312:HIS:HB2	1:D:356:VAL:HG23	1.99	0.44
1:D:519:ILE:O	1:D:522:LEU:HB3	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2274:SER:CB	1:D:2339:SER:HB3	2.44	0.44
1:A:64:ASN:ND2	1:A:103:ASN:OD1	2.50	0.44
1:A:253:CYS:O	1:A:281:LEU:HD22	2.18	0.44
1:A:390:LEU:HD23	1:A:399:VAL:HG21	1.97	0.44
1:A:447:ASN:OD1	1:A:448:ASP:N	2.49	0.44
1:A:484:VAL:HA	1:A:506:ARG:HH11	1.82	0.44
1:A:2358:GLY:O	1:A:2362:VAL:HG22	2.16	0.44
1:A:2576:MET:O	1:A:2580:ILE:HG12	2.16	0.44
1:B:46:LEU:H	1:B:46:LEU:HD12	1.81	0.44
1:B:117:TYR:CD2	1:B:170:ARG:HD3	2.52	0.44
1:B:131:TYR:O	1:B:152:ASP:N	2.45	0.44
1:B:2541:HIS:HA	1:B:2544:ARG:HG2	1.99	0.44
1:B:2576:MET:O	1:B:2580:ILE:HG12	2.17	0.44
1:B:2689:GLU:HA	1:B:2692:GLN:HB3	1.98	0.44
1:C:58:PHE:CD2	1:C:123:LEU:HD21	2.53	0.44
1:C:136:LYS:HB3	1:C:188:ASN:HD22	1.81	0.44
1:C:249:LYS:HZ3	1:C:267:THR:N	2.14	0.44
1:C:253:CYS:O	1:C:281:LEU:HD22	2.18	0.44
1:C:2296:PRO:O	1:C:2297:PHE:CG	2.71	0.44
1:D:260:GLN:HB3	1:D:357:SER:OG	2.17	0.44
1:D:489:ASN:HA	1:D:490:SER:HA	1.76	0.44
1:A:469:GLU:O	1:A:473:VAL:HG12	2.17	0.44
1:A:2422:TYR:O	1:A:2425:GLU:HB3	2.17	0.44
1:B:117:TYR:CD1	1:B:176:VAL:N	2.84	0.44
1:B:128:SER:O	1:B:130:LYS:HG2	2.17	0.44
1:B:312:HIS:HB2	1:B:356:VAL:HG23	1.98	0.44
1:B:507:GLN:O	1:B:510:MET:HB3	2.16	0.44
1:B:2287:MET:HA	1:B:2290:LEU:HG	2.00	0.44
1:B:2589:ILE:O	1:B:2592:THR:OG1	2.29	0.44
1:C:18:TYR:CE2	1:C:46:LEU:HG	2.51	0.44
1:C:469:GLU:O	1:C:473:VAL:HG12	2.17	0.44
1:C:2532:LEU:O	1:C:2536:VAL:HG23	2.16	0.44
1:C:2576:MET:O	1:C:2580:ILE:HG12	2.17	0.44
1:D:18:TYR:CE2	1:D:46:LEU:HG	2.52	0.44
1:D:507:GLN:O	1:D:510:MET:HB3	2.17	0.44
1:D:2296:PRO:O	1:D:2297:PHE:CG	2.71	0.44
1:D:2428:LEU:CG	1:D:2429:ASN:ND2	2.81	0.44
1:D:2576:MET:O	1:D:2580:ILE:HG12	2.17	0.44
1:A:45:ASP:N	1:A:48:ASN:O	2.50	0.44
1:A:70:LYS:O	1:A:74:LYS:HG2	2.17	0.44
1:A:226:TRP:N	1:A:226:TRP:CD1	2.83	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:392:HIS:HD2	1:A:395:THR:HG22	1.80	0.44
1:A:554:ARG:O	1:A:558:ARG:N	2.50	0.44
1:A:2290:LEU:HA	1:A:2293:PHE:CE2	2.53	0.44
1:A:2353:THR:HA	1:A:2354:LEU:HA	1.70	0.44
1:B:174:ASP:OD1	1:B:174:ASP:N	2.51	0.44
1:B:399:VAL:HA	1:B:420:THR:HB	2.00	0.44
1:C:2288:ASN:HD22	1:C:2416:LEU:HD23	1.82	0.44
1:C:2355:PHE:O	1:C:2358:GLY:N	2.51	0.44
1:C:2724:THR:HG23	1:C:2727:ARG:NE	2.33	0.44
1:D:163:ILE:H	1:D:163:ILE:HD12	1.83	0.44
1:D:515:ILE:HB	1:D:573:TYR:CE2	2.53	0.44
1:D:2532:LEU:O	1:D:2536:VAL:HG23	2.16	0.44
1:A:136:LYS:HG2	1:A:147:MET:SD	2.57	0.44
1:A:400:HIS:O	1:A:420:THR:OG1	2.36	0.44
1:A:2319:ILE:HG22	1:A:2322:ALA:HB3	1.99	0.44
1:B:18:TYR:CE2	1:B:46:LEU:HG	2.52	0.44
1:B:163:ILE:HD12	1:B:163:ILE:H	1.83	0.44
1:B:309:ALA:H	1:B:310:THR:HB	1.83	0.44
1:B:389:ARG:NH2	1:B:427:LYS:HA	2.33	0.44
1:C:64:ASN:ND2	1:C:103:ASN:OD1	2.50	0.44
1:C:311:GLY:HA2	1:C:359:PRO:CD	2.48	0.44
1:C:2703:GLU:HA	1:C:2706:MET:CE	2.45	0.44
1:D:2555:LYS:NZ	1:D:2562:LEU:HD21	2.31	0.44
1:D:2580:ILE:HA	1:D:2583:ASN:OD1	2.17	0.44
1:D:2703:GLU:HA	1:D:2706:MET:CE	2.46	0.44
1:A:58:PHE:CD2	1:A:123:LEU:HD21	2.53	0.44
1:A:178:ILE:HB	1:B:376:ARG:NH1	2.33	0.44
1:A:511:ARG:HD2	1:A:515:ILE:HG12	1.99	0.44
1:A:2287:MET:HA	1:A:2290:LEU:HG	2.00	0.44
1:A:2368:PHE:O	1:A:2372:PHE:HD2	2.01	0.44
1:A:2516:PRO:O	1:A:2520:THR:OG1	2.30	0.44
1:B:311:GLY:HA2	1:B:359:PRO:CD	2.47	0.44
1:B:2532:LEU:O	1:B:2536:VAL:HG23	2.17	0.44
1:C:45:ASP:N	1:C:48:ASN:O	2.50	0.44
1:C:117:TYR:CD1	1:C:176:VAL:N	2.83	0.44
1:C:249:LYS:HE2	1:C:415:MET:HE1	2.00	0.44
1:D:134:VAL:HA	1:D:137:ARG:HH12	1.82	0.44
1:D:223:PHE:CE1	1:D:293:ARG:HB2	2.52	0.44
1:D:484:VAL:HA	1:D:506:ARG:HH11	1.83	0.44
1:D:2580:ILE:HG23	1:D:2584:LEU:HD13	1.98	0.44
1:A:29:THR:OG1	1:A:38:VAL:N	2.31	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:134:VAL:HB	1:A:135:ASN:HB3	1.99	0.44
1:A:163:ILE:H	1:A:163:ILE:HD12	1.83	0.44
1:A:401:SER:HA	1:A:418:ILE:HG12	2.00	0.44
1:A:405:PRO:HD2	1:A:417:LYS:HA	1.99	0.44
1:A:2728:LYS:O	1:A:2732:ARG:N	2.41	0.44
1:B:39:VAL:HG22	1:B:207:ASN:O	2.18	0.44
1:B:282:TRP:H	1:B:308:LEU:N	2.16	0.44
1:B:439:GLU:O	1:B:442:ASP:HB3	2.18	0.44
1:B:2353:THR:HA	1:B:2354:LEU:HA	1.70	0.44
1:B:2460:TYR:HA	1:B:2566:ARG:CZ	2.48	0.44
1:B:2580:ILE:HA	1:B:2583:ASN:OD1	2.18	0.44
1:C:25:GLY:HA2	1:C:43:ALA:HB2	1.99	0.44
1:C:70:LYS:O	1:C:74:LYS:HG2	2.18	0.44
1:C:120:VAL:HG11	1:C:160:TRP:CE3	2.53	0.44
1:C:120:VAL:CG1	1:C:161:PHE:H	2.30	0.44
1:C:243:PHE:CE2	1:C:432:ILE:HA	2.52	0.44
1:C:484:VAL:HA	1:C:506:ARG:HH11	1.82	0.44
1:C:2287:MET:HA	1:C:2290:LEU:HG	2.00	0.44
1:C:2422:TYR:O	1:C:2425:GLU:HB3	2.17	0.44
1:D:64:ASN:ND2	1:D:103:ASN:OD1	2.49	0.44
1:D:120:VAL:CG1	1:D:161:PHE:H	2.30	0.44
1:D:311:GLY:HA2	1:D:359:PRO:CD	2.47	0.44
1:D:389:ARG:NH2	1:D:427:LYS:HA	2.33	0.44
1:D:410:GLU:HA	1:D:411:GLU:CB	2.43	0.44
1:A:25:GLY:HA2	1:A:43:ALA:HB2	1.99	0.44
1:A:52:LYS:O	1:A:55:ASP:N	2.47	0.44
1:A:117:TYR:CD1	1:A:176:VAL:N	2.84	0.44
1:A:279:LYS:O	1:A:281:LEU:HD13	2.18	0.44
1:A:2288:ASN:HD22	1:A:2416:LEU:HD23	1.82	0.44
1:A:2296:PRO:HB3	1:A:2321:LEU:HD21	1.99	0.44
1:A:2547:GLY:H	1:B:2544:ARG:HD2	1.83	0.44
1:C:13:ASP:OD1	1:C:225:LYS:HD3	2.18	0.44
1:C:199:GLN:HG3	1:C:204:PRO:O	2.17	0.44
1:C:282:TRP:H	1:C:308:LEU:N	2.16	0.44
1:C:389:ARG:NH2	1:C:427:LYS:HA	2.33	0.44
1:C:524:GLN:HA	1:C:527:PHE:CB	2.48	0.44
1:D:120:VAL:HG13	1:D:161:PHE:HB2	2.00	0.44
1:D:2422:TYR:O	1:D:2425:GLU:HB3	2.18	0.44
1:D:2534:CYS:O	1:D:2538:VAL:HG13	2.18	0.44
1:A:362:ASN:HB3	1:A:363:ASP:H	1.54	0.44
1:A:389:ARG:NH2	1:A:427:LYS:HA	2.33	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2460:TYR:HA	1:A:2566:ARG:CZ	2.48	0.44
1:A:2544:ARG:HH22	1:D:2571:LEU:HB3	1.82	0.44
1:A:2693:ASN:HB3	1:D:2698:LEU:HD11	1.98	0.44
1:B:116:GLN:HA	1:B:175:SER:HA	2.00	0.44
1:B:140:ALA:HA	1:B:147:MET:HA	2.00	0.44
1:B:405:PRO:HD2	1:B:417:LYS:HD2	2.00	0.44
1:B:2457:ILE:O	1:B:2461:LEU:HB2	2.18	0.44
1:B:2559:GLU:OE1	1:D:2301:ARG:HB3	2.18	0.44
1:B:2703:GLU:HA	1:B:2706:MET:CE	2.46	0.44
1:C:37:CYS:HB2	1:C:150:THR:HA	1.99	0.44
1:C:65:ARG:HH21	1:C:103:ASN:HB3	1.82	0.44
1:C:168:LYS:HZ2	1:D:247:GLN:HA	1.82	0.44
1:C:2290:LEU:HA	1:C:2293:PHE:CE2	2.53	0.44
1:D:69:GLN:NE2	1:D:100:LYS:HG2	2.33	0.44
1:D:2348:VAL:HA	1:D:2351:GLN:CD	2.38	0.44
1:D:2459:GLY:C	1:D:2461:LEU:H	2.19	0.44
1:A:27:ILE:HG23	1:A:39:VAL:HG12	1.98	0.43
1:A:65:ARG:HH21	1:A:103:ASN:HB3	1.82	0.43
1:A:134:VAL:HA	1:A:135:ASN:HA	1.87	0.43
1:A:246:GLU:O	1:A:248:GLU:N	2.42	0.43
1:A:392:HIS:CD2	1:A:394:CYS:HG	2.16	0.43
1:A:2724:THR:HG23	1:A:2727:ARG:NE	2.33	0.43
1:B:38:VAL:HB	1:B:39:VAL:H	1.58	0.43
1:B:39:VAL:HG22	1:B:207:ASN:C	2.39	0.43
1:B:66:TYR:CZ	1:B:160:TRP:HB2	2.53	0.43
1:B:533:GLY:HA2	1:B:537:ARG:CB	2.47	0.43
1:C:2349:GLY:N	1:C:2351:GLN:OE1	2.35	0.43
1:C:2580:ILE:HG23	1:C:2584:LEU:HD13	2.01	0.43
1:D:11:ILE:HG12	1:D:115:ILE:HG13	2.00	0.43
1:D:65:ARG:HH21	1:D:103:ASN:HB3	1.82	0.43
1:D:147:MET:O	1:D:210:ASN:ND2	2.37	0.43
1:D:309:ALA:H	1:D:310:THR:HB	1.82	0.43
1:D:2430:VAL:N	1:D:2431:ILE:CD1	2.73	0.43
1:D:2540:SER:O	1:D:2544:ARG:NH2	2.51	0.43
1:A:136:LYS:HB3	1:A:188:ASN:HD22	1.82	0.43
1:A:197:SER:HA	1:A:207:ASN:ND2	2.34	0.43
1:A:233:ILE:H	1:A:384:ARG:HE	1.66	0.43
1:A:465:ILE:HD11	1:A:470:ARG:NH2	2.32	0.43
1:A:2689:GLU:HA	1:A:2692:GLN:HB3	2.00	0.43
1:B:71:GLN:HA	1:B:74:LYS:NZ	2.33	0.43
1:B:120:VAL:CG1	1:B:161:PHE:H	2.30	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:136:LYS:HG2	1:B:147:MET:SD	2.57	0.43
1:B:253:CYS:O	1:B:281:LEU:HD22	2.18	0.43
1:B:526:PRO:O	1:B:532:ASP:HB2	2.18	0.43
1:B:682:THR:CA	1:B:683:GLY:CA	2.96	0.43
1:B:2571:LEU:HB3	1:C:2544:ARG:HH22	1.82	0.43
1:C:71:GLN:HA	1:C:74:LYS:NZ	2.34	0.43
1:C:117:TYR:CD2	1:C:170:ARG:HD3	2.53	0.43
1:C:143:GLU:HG3	1:C:144:LYS:N	2.33	0.43
1:C:163:ILE:H	1:C:163:ILE:HD12	1.83	0.43
1:C:239:VAL:HB	1:C:283:GLU:HG3	2.00	0.43
1:C:482:TYR:HB2	1:C:488:THR:HA	2.00	0.43
1:C:2460:TYR:HA	1:C:2566:ARG:CZ	2.48	0.43
1:D:439:GLU:O	1:D:442:ASP:HB3	2.18	0.43
1:D:2287:MET:HA	1:D:2290:LEU:HG	2.00	0.43
1:D:2532:LEU:HD23	1:D:2532:LEU:HA	1.85	0.43
1:A:2296:PRO:O	1:A:2297:PHE:CG	2.70	0.43
1:A:2540:SER:HG	1:A:2541:HIS:H	1.67	0.43
1:B:120:VAL:HG13	1:B:161:PHE:HB2	2.00	0.43
1:B:131:TYR:CZ	1:B:132:LEU:HG	2.54	0.43
1:B:2301:ARG:HB3	1:D:2559:GLU:OE1	2.18	0.43
1:C:133:THR:OG1	1:C:159:SER:OG	2.22	0.43
1:C:208:GLU:HG2	1:C:209:VAL:N	2.28	0.43
1:C:514:ASN:ND2	1:C:518:GLN:HE21	2.17	0.43
1:D:193:LEU:HD13	1:D:209:VAL:HG13	2.00	0.43
1:D:219:LYS:HD3	1:D:219:LYS:HA	1.79	0.43
1:D:2362:VAL:O	1:D:2365:LYS:HB3	2.19	0.43
1:A:16:SER:O	1:A:17:LEU:HG	2.19	0.43
1:A:39:VAL:HG22	1:A:207:ASN:O	2.17	0.43
1:A:86:ALA:O	1:A:89:LEU:HB2	2.18	0.43
1:A:120:VAL:HG13	1:A:161:PHE:HB2	2.01	0.43
1:A:184:LEU:O	1:A:191:GLN:NE2	2.48	0.43
1:A:514:ASN:ND2	1:A:518:GLN:HE21	2.17	0.43
1:A:2586:PHE:O	1:A:2590:ILE:HG23	2.18	0.43
1:A:2732:ARG:HA	1:A:2733:ILE:CA	2.48	0.43
1:C:223:PHE:CE1	1:C:293:ARG:HB2	2.52	0.43
1:C:266:THR:O	1:C:267:THR:OG1	2.28	0.43
1:C:309:ALA:H	1:C:310:THR:HB	1.83	0.43
1:C:2325:ILE:HG22	1:C:2329:LYS:HZ2	1.71	0.43
1:C:2689:GLU:HA	1:C:2692:GLN:HB3	2.00	0.43
1:A:127:LYS:NZ	1:A:444:ASP:OD2	2.39	0.43
1:A:128:SER:C	1:A:441:ARG:HE	2.22	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:174:ASP:N	1:A:174:ASP:OD1	2.51	0.43
1:A:239:VAL:HB	1:A:283:GLU:HG3	2.00	0.43
1:A:312:HIS:HB2	1:A:356:VAL:HG23	2.01	0.43
1:A:439:GLU:O	1:A:442:ASP:HB3	2.19	0.43
1:A:545:ARG:HG3	1:A:549:PHE:HE2	1.82	0.43
1:A:2341:ILE:O	1:A:2345:ILE:HG22	2.19	0.43
1:B:131:TYR:C	1:B:151:LEU:HA	2.39	0.43
1:B:279:LYS:O	1:B:281:LEU:HD13	2.19	0.43
1:B:481:VAL:CG2	1:B:555:LEU:HD21	2.48	0.43
1:B:2326:ALA:CA	1:B:2329:LYS:CE	2.95	0.43
1:B:2422:TYR:O	1:B:2425:GLU:HB3	2.18	0.43
1:B:2534:CYS:O	1:B:2538:VAL:HG13	2.18	0.43
1:B:2732:ARG:HA	1:B:2733:ILE:CA	2.47	0.43
1:C:484:VAL:HG13	1:C:562:HIS:NE2	2.34	0.43
1:C:2314:TRP:HA	1:C:2317:MET:HG2	1.99	0.43
1:C:2555:LYS:NZ	1:C:2562:LEU:HD21	2.30	0.43
1:C:2580:ILE:HA	1:C:2583:ASN:OD1	2.18	0.43
1:C:2698:LEU:HD11	1:D:2693:ASN:HB3	2.00	0.43
1:C:2732:ARG:HA	1:C:2733:ILE:CA	2.48	0.43
1:D:65:ARG:CZ	1:D:100:LYS:HD3	2.48	0.43
1:D:70:LYS:O	1:D:74:LYS:HG2	2.19	0.43
1:D:282:TRP:H	1:D:308:LEU:N	2.16	0.43
1:A:494:VAL:O	1:A:497:VAL:HB	2.18	0.43
1:A:2349:GLY:N	1:A:2351:GLN:OE1	2.34	0.43
1:A:2456:SER:CB	1:A:2535:ILE:HG22	2.49	0.43
1:A:2534:CYS:O	1:A:2538:VAL:HG13	2.18	0.43
1:A:2698:LEU:HD11	1:B:2693:ASN:HB3	2.01	0.43
1:B:11:ILE:HG12	1:B:115:ILE:HG13	2.00	0.43
1:B:16:SER:O	1:B:17:LEU:HG	2.19	0.43
1:B:134:VAL:HA	1:B:135:ASN:HA	1.87	0.43
1:B:134:VAL:HG12	1:B:138:LEU:HD22	2.00	0.43
1:B:418:ILE:HG23	1:B:420:THR:OG1	2.19	0.43
1:B:477:LEU:CG	1:B:555:LEU:HD22	2.47	0.43
1:B:2296:PRO:O	1:B:2297:PHE:CG	2.71	0.43
1:B:2348:VAL:HA	1:B:2351:GLN:CD	2.38	0.43
1:B:2461:LEU:HB3	1:C:2411:PHE:HE2	1.83	0.43
1:C:134:VAL:HB	1:C:135:ASN:HB3	1.99	0.43
1:C:682:THR:CA	1:C:683:GLY:CA	2.97	0.43
1:D:39:VAL:HG22	1:D:207:ASN:C	2.39	0.43
1:D:120:VAL:HG11	1:D:160:TRP:CE3	2.53	0.43
1:D:131:TYR:C	1:D:151:LEU:HA	2.39	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:160:TRP:CD1	1:D:187:VAL:HG13	2.54	0.43
1:D:253:CYS:O	1:D:281:LEU:HD22	2.18	0.43
1:D:392:HIS:HD2	1:D:395:THR:HG22	1.80	0.43
1:A:484:VAL:HG13	1:A:562:HIS:NE2	2.34	0.43
1:A:2195:GLN:CA	1:A:2196:ILE:CA	2.97	0.43
1:A:2314:TRP:HA	1:A:2317:MET:HG2	1.99	0.43
1:B:9:LEU:HD23	1:B:226:TRP:CE2	2.54	0.43
1:C:131:TYR:CZ	1:C:132:LEU:HG	2.53	0.43
1:C:2341:ILE:O	1:C:2345:ILE:HG22	2.18	0.43
1:C:2432:LYS:HA	1:C:2435:THR:HG21	2.00	0.43
1:C:2534:CYS:O	1:C:2538:VAL:HG13	2.18	0.43
1:D:39:VAL:HG22	1:D:207:ASN:O	2.18	0.43
1:D:67:SER:OG	1:D:68:ALA:N	2.52	0.43
1:D:134:VAL:HG12	1:D:138:LEU:HD22	2.01	0.43
1:D:405:PRO:HD2	1:D:417:LYS:HD2	2.00	0.43
1:D:418:ILE:HG23	1:D:420:THR:OG1	2.19	0.43
1:D:524:GLN:HA	1:D:527:PHE:CB	2.48	0.43
1:D:526:PRO:O	1:D:532:ASP:HB2	2.18	0.43
1:D:554:ARG:O	1:D:558:ARG:N	2.51	0.43
1:A:117:TYR:CD2	1:A:170:ARG:HD3	2.53	0.43
1:A:193:LEU:HD13	1:A:209:VAL:HG13	2.01	0.43
1:A:482:TYR:HB2	1:A:488:THR:HA	2.00	0.43
1:A:2523:ASP:HB2	1:D:2552:VAL:HB	2.01	0.43
1:A:2560:GLU:OE1	1:A:2560:GLU:N	2.44	0.43
1:B:70:LYS:O	1:B:74:LYS:HG2	2.19	0.43
1:B:134:VAL:HA	1:B:137:ARG:HH12	1.82	0.43
1:B:136:LYS:HB3	1:B:188:ASN:HD22	1.84	0.43
1:B:246:GLU:O	1:B:248:GLU:N	2.44	0.43
1:B:405:PRO:HD2	1:B:417:LYS:HA	2.01	0.43
1:B:484:VAL:HA	1:B:506:ARG:HH11	1.83	0.43
1:B:2195:GLN:CA	1:B:2196:ILE:CA	2.96	0.43
1:C:16:SER:HB3	1:C:57:LEU:HA	2.01	0.43
1:C:97:ASP:O	1:C:100:LYS:HB2	2.19	0.43
1:C:160:TRP:CD1	1:C:187:VAL:HG13	2.54	0.43
1:C:184:LEU:O	1:C:191:GLN:NE2	2.48	0.43
1:C:193:LEU:HD13	1:C:209:VAL:HG13	2.01	0.43
1:C:279:LYS:O	1:C:281:LEU:HD13	2.18	0.43
1:C:465:ILE:HD11	1:C:470:ARG:NH2	2.33	0.43
1:C:2368:PHE:O	1:C:2372:PHE:HD2	2.01	0.43
1:C:2552:VAL:HB	1:D:2523:ASP:HB2	2.01	0.43
1:D:9:LEU:HD23	1:D:226:TRP:CE2	2.54	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:136:LYS:HB3	1:D:188:ASN:HD22	1.84	0.43
1:D:2601:GLN:HA	1:D:2604:GLU:OE2	2.19	0.43
1:A:131:TYR:C	1:A:151:LEU:HA	2.39	0.43
1:A:202:ASP:OD1	1:A:203:ASN:N	2.52	0.43
1:A:249:LYS:HZ3	1:A:267:THR:N	2.17	0.43
1:B:65:ARG:CZ	1:B:100:LYS:HD3	2.49	0.43
1:B:120:VAL:HG11	1:B:160:TRP:CE3	2.53	0.43
1:B:133:THR:OG1	1:B:159:SER:OG	2.23	0.43
1:B:134:VAL:HB	1:B:135:ASN:HB3	2.00	0.43
1:B:160:TRP:CD1	1:B:187:VAL:HG13	2.54	0.43
1:B:208:GLU:HG2	1:B:209:VAL:N	2.27	0.43
1:B:219:LYS:HA	1:B:219:LYS:HD3	1.79	0.43
1:B:482:TYR:HB2	1:B:488:THR:HA	2.01	0.43
1:B:494:VAL:O	1:B:497:VAL:HB	2.19	0.43
1:B:2368:PHE:O	1:B:2372:PHE:HD2	2.01	0.43
1:C:86:ALA:O	1:C:89:LEU:HB2	2.18	0.43
1:C:216:THR:HG22	1:C:217:SER:O	2.19	0.43
1:C:244:HIS:HA	1:C:430:PHE:HA	2.01	0.43
1:C:2364:ASN:HA	1:C:2367:ILE:HG22	2.01	0.43
1:C:2456:SER:CB	1:C:2535:ILE:HG22	2.48	0.43
1:D:216:THR:HG22	1:D:217:SER:O	2.18	0.43
1:D:743:MET:CA	1:D:744:CYS:CA	2.97	0.43
1:D:2349:GLY:N	1:D:2351:GLN:OE1	2.36	0.43
1:D:2456:SER:CB	1:D:2535:ILE:HG22	2.49	0.43
1:A:45:ASP:HB3	1:A:48:ASN:H	1.83	0.43
1:A:231:ASP:O	1:A:233:ILE:HG23	2.19	0.43
1:A:2319:ILE:HB	1:A:2323:ILE:HD13	2.01	0.43
1:A:2437:ASN:CB	1:A:2592:THR:CB	2.96	0.43
1:A:2459:GLY:O	1:A:2461:LEU:N	2.44	0.43
1:A:2580:ILE:HG23	1:A:2584:LEU:HD13	2.00	0.43
1:A:2726:GLN:CD	1:A:2729:GLN:HE22	2.22	0.43
1:B:20:GLU:OE1	1:B:46:LEU:HG	2.19	0.43
1:B:45:ASP:N	1:B:48:ASN:O	2.52	0.43
1:B:554:ARG:O	1:B:558:ARG:N	2.51	0.43
1:B:2364:ASN:HA	1:B:2367:ILE:HG22	2.01	0.43
1:B:2540:SER:O	1:B:2544:ARG:NH2	2.51	0.43
1:D:279:LYS:O	1:D:281:LEU:HD13	2.19	0.43
1:D:298:TYR:O	1:D:301:SER:OG	2.15	0.43
1:A:37:CYS:HB2	1:A:150:THR:HA	1.99	0.42
1:A:120:VAL:HG11	1:A:160:TRP:CE3	2.53	0.42
1:A:140:ALA:HA	1:A:147:MET:HA	2.00	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:216:THR:HG22	1:A:217:SER:O	2.19	0.42
1:A:256:HIS:CE1	1:A:257:ARG:HG3	2.54	0.42
1:A:382:VAL:HA	1:A:383:PRO:HD2	1.92	0.42
1:A:460:LEU:C	1:A:463:GLY:H	2.23	0.42
1:A:517:LYS:HE3	1:A:517:LYS:HB3	1.74	0.42
1:A:682:THR:CA	1:A:683:GLY:CA	2.97	0.42
1:A:2411:PHE:HE2	1:D:2461:LEU:HB3	1.84	0.42
1:B:193:LEU:HD13	1:B:209:VAL:HG13	2.00	0.42
1:B:517:LYS:HE3	1:B:517:LYS:HB3	1.74	0.42
1:B:2319:ILE:HB	1:B:2323:ILE:HD13	2.01	0.42
1:C:45:ASP:HB3	1:C:48:ASN:H	1.83	0.42
1:C:517:LYS:HE3	1:C:517:LYS:HB3	1.75	0.42
1:D:134:VAL:HB	1:D:135:ASN:HB3	2.00	0.42
1:D:184:LEU:O	1:D:191:GLN:NE2	2.46	0.42
1:D:460:LEU:C	1:D:463:GLY:H	2.23	0.42
1:A:131:TYR:CZ	1:A:132:LEU:HG	2.53	0.42
1:A:309:ALA:H	1:A:310:THR:HB	1.83	0.42
1:A:2571:LEU:HD23	1:B:2543:LEU:HD12	2.00	0.42
1:A:2580:ILE:HA	1:A:2583:ASN:OD1	2.18	0.42
1:B:143:GLU:HG3	1:B:144:LYS:N	2.33	0.42
1:B:515:ILE:HB	1:B:573:TYR:CE2	2.53	0.42
1:B:2583:ASN:HA	1:C:2586:PHE:CE1	2.54	0.42
1:C:16:SER:O	1:C:17:LEU:HG	2.19	0.42
1:C:65:ARG:CZ	1:C:100:LYS:HD3	2.49	0.42
1:C:66:TYR:CZ	1:C:160:TRP:HB2	2.54	0.42
1:C:80:ALA:H	1:C:82:SER:HB2	1.84	0.42
1:C:128:SER:C	1:C:441:ARG:HE	2.22	0.42
1:C:178:ILE:HB	1:D:376:ARG:NH1	2.32	0.42
1:C:233:ILE:H	1:C:384:ARG:HE	1.66	0.42
1:C:256:HIS:CE1	1:C:257:ARG:HG3	2.54	0.42
1:C:511:ARG:HD2	1:C:515:ILE:HG12	2.00	0.42
1:C:515:ILE:HB	1:C:573:TYR:CE2	2.54	0.42
1:C:2579:ILE:O	1:C:2583:ASN:ND2	2.52	0.42
1:C:2589:ILE:O	1:C:2592:THR:OG1	2.27	0.42
1:D:97:ASP:O	1:D:100:LYS:HB2	2.19	0.42
1:D:117:TYR:CD1	1:D:176:VAL:N	2.84	0.42
1:D:143:GLU:HG3	1:D:144:LYS:N	2.33	0.42
1:D:226:TRP:N	1:D:226:TRP:CD1	2.84	0.42
1:D:399:VAL:HA	1:D:420:THR:HB	2.00	0.42
1:D:2368:PHE:O	1:D:2372:PHE:HD2	2.02	0.42
1:D:2443:LEU:O	1:D:2446:ALA:HB3	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:116:GLN:HA	1:A:175:SER:HA	2.00	0.42
1:A:542:GLY:HA2	1:A:549:PHE:CZ	2.54	0.42
1:A:2579:ILE:O	1:A:2583:ASN:ND2	2.52	0.42
1:C:71:GLN:HA	1:C:74:LYS:HG2	2.01	0.42
1:C:197:SER:HA	1:C:207:ASN:ND2	2.34	0.42
1:C:425:GLU:O	1:C:426:ASP:HB2	2.20	0.42
1:C:2319:ILE:HB	1:C:2323:ILE:HD13	2.01	0.42
1:D:52:LYS:O	1:D:55:ASP:N	2.48	0.42
1:D:80:ALA:H	1:D:82:SER:HB2	1.85	0.42
1:D:2589:ILE:O	1:D:2592:THR:OG1	2.29	0.42
1:D:2726:GLN:CD	1:D:2729:GLN:HE22	2.22	0.42
1:A:66:TYR:CZ	1:A:160:TRP:HB2	2.54	0.42
1:A:452:VAL:HG13	1:A:453:LEU:HD12	2.01	0.42
1:A:572:GLU:OE1	1:A:572:GLU:N	2.38	0.42
1:B:97:ASP:O	1:B:100:LYS:HB2	2.19	0.42
1:B:145:ASN:HB2	1:B:212:VAL:HG23	2.02	0.42
1:B:202:ASP:OD1	1:B:203:ASN:N	2.52	0.42
1:B:216:THR:HG22	1:B:217:SER:O	2.18	0.42
1:B:359:PRO:CB	1:B:360:GLU:HA	2.48	0.42
1:C:247:GLN:N	1:C:428:GLU:OE2	2.52	0.42
1:C:439:GLU:O	1:C:442:ASP:HB3	2.19	0.42
1:C:538:LEU:HD12	1:C:539:GLU:N	2.35	0.42
1:C:2586:PHE:O	1:C:2590:ILE:HG23	2.18	0.42
1:D:116:GLN:HA	1:D:175:SER:HA	2.00	0.42
1:D:128:SER:C	1:D:441:ARG:HE	2.23	0.42
1:D:134:VAL:HA	1:D:137:ARG:HH22	1.84	0.42
1:D:197:SER:HA	1:D:207:ASN:ND2	2.33	0.42
1:D:494:VAL:O	1:D:497:VAL:HB	2.19	0.42
1:D:682:THR:CA	1:D:683:GLY:CA	2.96	0.42
1:A:69:GLN:NE2	1:A:100:LYS:HG2	2.34	0.42
1:A:515:ILE:HB	1:A:573:TYR:CE2	2.54	0.42
1:A:524:GLN:HA	1:A:527:PHE:CB	2.48	0.42
1:B:80:ALA:H	1:B:82:SER:HB2	1.85	0.42
1:B:484:VAL:HG13	1:B:562:HIS:NE2	2.35	0.42
1:B:2456:SER:CB	1:B:2535:ILE:HG22	2.49	0.42
1:B:2571:LEU:HD23	1:C:2543:LEU:HD12	2.01	0.42
1:C:38:VAL:HB	1:C:39:VAL:H	1.60	0.42
1:C:120:VAL:HG13	1:C:161:PHE:HB2	2.01	0.42
1:C:312:HIS:HB2	1:C:356:VAL:HG23	2.01	0.42
1:C:477:LEU:CG	1:C:555:LEU:HD22	2.47	0.42
1:C:494:VAL:O	1:C:497:VAL:HB	2.18	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2532:LEU:HD23	1:C:2532:LEU:HA	1.86	0.42
1:D:131:TYR:CZ	1:D:132:LEU:HG	2.54	0.42
1:D:481:VAL:CG2	1:D:555:LEU:HD21	2.48	0.42
1:D:484:VAL:HG13	1:D:562:HIS:NE2	2.35	0.42
1:D:2460:TYR:HA	1:D:2566:ARG:CZ	2.48	0.42
1:D:2552:VAL:CA	1:D:2553:LEU:HB2	2.38	0.42
1:D:2563:PHE:HD1	1:D:2563:PHE:HA	1.73	0.42
1:D:2703:GLU:HG3	1:D:2706:MET:HE3	2.00	0.42
1:A:11:ILE:HG12	1:A:115:ILE:HG13	2.02	0.42
1:A:282:TRP:H	1:A:308:LEU:N	2.16	0.42
1:A:481:VAL:CG2	1:A:555:LEU:HD21	2.49	0.42
1:A:2321:LEU:O	1:A:2325:ILE:HD12	2.20	0.42
1:A:2586:PHE:CE1	1:D:2583:ASN:HA	2.54	0.42
1:B:425:GLU:O	1:B:426:ASP:HB2	2.20	0.42
1:B:489:ASN:HA	1:B:490:SER:HA	1.76	0.42
1:B:2355:PHE:O	1:B:2358:GLY:N	2.50	0.42
1:B:2552:VAL:HB	1:C:2523:ASP:HB2	2.01	0.42
1:C:136:LYS:HB3	1:C:136:LYS:HE3	1.82	0.42
1:C:140:ALA:HA	1:C:147:MET:HA	2.00	0.42
1:C:231:ASP:O	1:C:233:ILE:HG23	2.20	0.42
1:C:359:PRO:CB	1:C:360:GLU:HA	2.48	0.42
1:C:743:MET:CA	1:C:744:CYS:CA	2.98	0.42
1:C:2195:GLN:CA	1:C:2196:ILE:CA	2.96	0.42
1:C:2290:LEU:HA	1:C:2293:PHE:CD2	2.54	0.42
1:D:405:PRO:HD2	1:D:417:LYS:HA	2.01	0.42
1:D:2195:GLN:CA	1:D:2196:ILE:CA	2.97	0.42
1:D:2327:LEU:O	1:D:2330:PRO:HD2	2.20	0.42
1:A:2364:ASN:HA	1:A:2367:ILE:HG22	2.01	0.42
1:B:16:SER:HB3	1:B:57:LEU:HA	2.02	0.42
1:B:116:GLN:N	1:B:119:ASN:OD1	2.39	0.42
1:B:134:VAL:HA	1:B:137:ARG:HH22	1.84	0.42
1:B:256:HIS:CE1	1:B:257:ARG:HG3	2.54	0.42
1:B:572:GLU:C	1:B:574:ILE:H	2.23	0.42
1:B:743:MET:CA	1:B:744:CYS:CA	2.97	0.42
1:B:2552:VAL:CA	1:B:2553:LEU:HB2	2.38	0.42
1:B:2601:GLN:HA	1:B:2604:GLU:OE2	2.19	0.42
1:B:2726:GLN:CD	1:B:2729:GLN:HE22	2.22	0.42
1:B:2728:LYS:O	1:B:2732:ARG:N	2.42	0.42
1:C:116:GLN:HA	1:C:175:SER:HA	2.00	0.42
1:C:131:TYR:C	1:C:151:LEU:HA	2.39	0.42
1:C:266:THR:HA	1:C:415:MET:SD	2.60	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:471:ARG:O	1:C:475:LYS:HB2	2.20	0.42
1:C:481:VAL:CG2	1:C:555:LEU:HD21	2.49	0.42
1:C:2552:VAL:CA	1:C:2553:LEU:HB2	2.38	0.42
1:D:16:SER:O	1:D:17:LEU:HG	2.19	0.42
1:D:239:VAL:HB	1:D:283:GLU:HG3	2.02	0.42
1:D:244:HIS:HE1	1:D:428:GLU:O	2.03	0.42
1:D:256:HIS:CE1	1:D:257:ARG:HG3	2.54	0.42
1:D:572:GLU:C	1:D:574:ILE:H	2.23	0.42
1:D:2364:ASN:HA	1:D:2367:ILE:HG22	2.01	0.42
1:D:2541:HIS:HA	1:D:2544:ARG:CG	2.50	0.42
1:D:2724:THR:HG23	1:D:2727:ARG:HE	1.85	0.42
1:A:16:SER:HB3	1:A:57:LEU:HA	2.01	0.42
1:A:65:ARG:CZ	1:A:100:LYS:HD3	2.49	0.42
1:A:160:TRP:CD1	1:A:187:VAL:HG13	2.54	0.42
1:A:244:HIS:HA	1:A:430:PHE:HA	2.01	0.42
1:A:743:MET:CA	1:A:744:CYS:CA	2.98	0.42
1:A:2290:LEU:HA	1:A:2293:PHE:CD2	2.54	0.42
1:A:2355:PHE:O	1:A:2358:GLY:N	2.51	0.42
1:A:2362:VAL:O	1:A:2365:LYS:HB3	2.20	0.42
1:B:197:SER:HA	1:B:207:ASN:ND2	2.34	0.42
1:B:244:HIS:ND1	1:B:429:ALA:O	2.53	0.42
1:B:565:GLN:O	1:B:570:ASN:ND2	2.52	0.42
1:C:286:VAL:N	1:C:303:PHE:CZ	2.86	0.42
1:C:2571:LEU:HD23	1:D:2543:LEU:HD12	2.00	0.42
1:C:2726:GLN:CD	1:C:2729:GLN:HE22	2.22	0.42
1:D:140:ALA:HA	1:D:147:MET:HA	2.00	0.42
1:A:97:ASP:O	1:A:100:LYS:HB2	2.19	0.42
1:A:137:ARG:HH21	1:A:138:LEU:HD13	1.85	0.42
1:A:221:VAL:HB	1:A:222:LEU:H	1.56	0.42
1:A:266:THR:HA	1:A:415:MET:SD	2.60	0.42
1:A:485:THR:HG23	1:A:487:GLY:N	2.35	0.42
1:A:2443:LEU:O	1:A:2446:ALA:HB3	2.20	0.42
1:B:25:GLY:HA2	1:B:43:ALA:HB2	2.02	0.42
1:B:542:GLY:HA2	1:B:549:PHE:CZ	2.55	0.42
1:B:2724:THR:HG23	1:B:2727:ARG:NE	2.35	0.42
1:C:134:VAL:HA	1:C:135:ASN:HA	1.86	0.42
1:C:219:LYS:HD3	1:C:219:LYS:HA	1.80	0.42
1:C:572:GLU:C	1:C:574:ILE:H	2.24	0.42
1:D:45:ASP:N	1:D:48:ASN:O	2.52	0.42
1:D:174:ASP:N	1:D:174:ASP:OD1	2.51	0.42
1:D:202:ASP:OD1	1:D:203:ASN:N	2.52	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2314:TRP:HA	1:D:2317:MET:HG2	2.02	0.42
1:A:60:LEU:HD23	1:A:123:LEU:HD13	2.02	0.42
1:A:247:GLN:N	1:A:428:GLU:OE2	2.52	0.42
1:A:538:LEU:HD12	1:A:539:GLU:N	2.35	0.42
1:A:2437:ASN:HB2	1:A:2592:THR:HB	2.02	0.42
1:B:60:LEU:HD23	1:B:123:LEU:HD13	2.01	0.42
1:B:280:ALA:HB1	1:B:282:TRP:HE3	1.85	0.42
1:B:452:VAL:HG13	1:B:453:LEU:HD12	2.02	0.42
1:B:554:ARG:O	1:B:557:TYR:HB3	2.20	0.42
1:B:556:CYS:O	1:B:559:VAL:HG22	2.20	0.42
1:B:2314:TRP:HA	1:B:2317:MET:HG2	2.02	0.42
1:C:485:THR:HG23	1:C:487:GLY:N	2.35	0.42
1:D:60:LEU:HD23	1:D:123:LEU:HD13	2.01	0.42
1:D:135:ASN:HD22	1:D:139:PRO:C	2.23	0.42
1:D:145:ASN:HB2	1:D:212:VAL:HG23	2.02	0.42
1:A:477:LEU:CG	1:A:555:LEU:HD22	2.47	0.41
1:A:2461:LEU:HD12	1:B:2411:PHE:HE2	1.85	0.41
1:A:2541:HIS:HA	1:A:2544:ARG:CG	2.50	0.41
1:A:2552:VAL:HG12	1:A:2554:ARG:HG3	2.02	0.41
1:B:392:HIS:CD2	1:B:395:THR:H	2.38	0.41
1:B:446:ALA:O	1:B:449:ALA:N	2.53	0.41
1:B:460:LEU:C	1:B:463:GLY:H	2.23	0.41
1:B:2290:LEU:HA	1:B:2293:PHE:CD2	2.55	0.41
1:B:2444:THR:O	1:B:2447:LEU:HB3	2.20	0.41
1:C:11:ILE:HG12	1:C:115:ILE:HG13	2.02	0.41
1:C:460:LEU:C	1:C:463:GLY:H	2.23	0.41
1:C:498:VAL:HA	1:C:501:LYS:HD2	2.02	0.41
1:C:2321:LEU:O	1:C:2325:ILE:HD12	2.20	0.41
1:C:2728:LYS:O	1:C:2732:ARG:N	2.41	0.41
1:D:117:TYR:CD2	1:D:176:VAL:HG22	2.55	0.41
1:D:135:ASN:C	1:D:137:ARG:HB3	2.40	0.41
1:D:359:PRO:CB	1:D:360:GLU:HA	2.48	0.41
1:D:482:TYR:HB2	1:D:488:THR:HA	2.01	0.41
1:D:2465:ASP:OD1	1:D:2562:LEU:HA	2.20	0.41
1:A:65:ARG:HD3	1:A:69:GLN:OE1	2.20	0.41
1:A:180:ASP:OD1	1:A:180:ASP:N	2.53	0.41
1:A:247:GLN:HA	1:D:168:LYS:HZ2	1.84	0.41
1:A:312:HIS:HB3	1:A:313:TYR:H	1.47	0.41
1:A:392:HIS:CD2	1:A:395:THR:H	2.38	0.41
1:A:430:PHE:HB2	1:A:431:ALA:H	1.45	0.41
1:A:471:ARG:O	1:A:475:LYS:HB2	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:135:ASN:HD21	1:B:140:ALA:HA	1.85	0.41
1:B:239:VAL:HB	1:B:283:GLU:HG3	2.02	0.41
1:B:474:THR:HB	1:B:552:ILE:HD11	2.03	0.41
1:B:2327:LEU:O	1:B:2330:PRO:HD2	2.20	0.41
1:C:202:ASP:OD1	1:C:203:ASN:N	2.52	0.41
1:C:231:ASP:OD1	1:C:232:ASP:N	2.52	0.41
1:C:431:ALA:HB1	1:C:432:ILE:HD12	2.02	0.41
1:C:2541:HIS:HA	1:C:2544:ARG:CG	2.50	0.41
1:C:2543:LEU:HD23	1:C:2543:LEU:HA	1.82	0.41
1:D:71:GLN:HA	1:D:74:LYS:NZ	2.33	0.41
1:D:425:GLU:O	1:D:426:ASP:HB2	2.20	0.41
1:D:2288:ASN:OD1	1:D:2289:LEU:N	2.53	0.41
1:D:2337:ILE:HG23	1:D:2338:ALA:N	2.35	0.41
1:A:2273:MET:O	1:A:2276:TRP:HB2	2.20	0.41
1:A:2411:PHE:CE2	1:D:2461:LEU:HD12	2.55	0.41
1:B:117:TYR:CD2	1:B:176:VAL:HG22	2.55	0.41
1:B:391:ARG:HB2	1:B:398:TRP:CE3	2.56	0.41
1:B:2459:GLY:C	1:B:2461:LEU:N	2.74	0.41
1:C:10:HIS:HE2	1:C:177:VAL:HA	1.86	0.41
1:C:65:ARG:HD3	1:C:69:GLN:OE1	2.20	0.41
1:C:137:ARG:HH21	1:C:138:LEU:HD13	1.85	0.41
1:C:309:ALA:N	1:C:310:THR:HA	2.35	0.41
1:D:10:HIS:HE2	1:D:177:VAL:HA	1.85	0.41
1:D:86:ALA:O	1:D:89:LEU:HB2	2.20	0.41
1:D:392:HIS:CD2	1:D:394:CYS:HG	2.17	0.41
1:A:133:THR:OG1	1:A:159:SER:OG	2.22	0.41
1:A:143:GLU:HG3	1:A:144:LYS:N	2.33	0.41
1:A:517:LYS:O	1:A:520:PHE:HB3	2.21	0.41
1:A:2327:LEU:O	1:A:2330:PRO:HD2	2.20	0.41
1:A:2543:LEU:HD12	1:D:2571:LEU:HD23	2.01	0.41
1:A:2731:GLN:HB3	1:B:393:LEU:HD23	2.02	0.41
1:B:247:GLN:N	1:B:428:GLU:OE2	2.54	0.41
1:B:2362:VAL:O	1:B:2365:LYS:HB3	2.19	0.41
1:B:2443:LEU:O	1:B:2446:ALA:HB3	2.20	0.41
1:B:2543:LEU:HA	1:B:2543:LEU:HD23	1.82	0.41
1:C:135:ASN:HD22	1:C:139:PRO:C	2.24	0.41
1:C:135:ASN:HD21	1:C:140:ALA:HA	1.86	0.41
1:C:418:ILE:HG22	1:C:419:GLY:H	1.83	0.41
1:C:452:VAL:HG13	1:C:453:LEU:HD12	2.02	0.41
1:C:554:ARG:O	1:C:557:TYR:HB3	2.20	0.41
1:C:2443:LEU:O	1:C:2446:ALA:HB3	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:13:ASP:OD1	1:D:225:LYS:HD3	2.20	0.41
1:D:38:VAL:HB	1:D:39:VAL:H	1.59	0.41
1:D:65:ARG:HD3	1:D:69:GLN:OE1	2.20	0.41
1:D:446:ALA:O	1:D:449:ALA:N	2.54	0.41
1:D:542:GLY:HA2	1:D:549:PHE:CZ	2.55	0.41
1:D:2724:THR:HG23	1:D:2727:ARG:NE	2.35	0.41
1:A:71:GLN:HA	1:A:74:LYS:HG2	2.01	0.41
1:A:231:ASP:CG	1:A:232:ASP:H	2.23	0.41
1:B:45:ASP:HB3	1:B:48:ASN:H	1.84	0.41
1:B:86:ALA:O	1:B:89:LEU:HB2	2.20	0.41
1:B:135:ASN:C	1:B:137:ARG:HB3	2.41	0.41
1:B:244:HIS:HE1	1:B:428:GLU:O	2.03	0.41
1:B:481:VAL:HG23	1:B:555:LEU:HD21	2.02	0.41
1:B:2717:SER:HA	1:B:2720:LYS:HG2	2.02	0.41
1:C:180:ASP:OD1	1:C:180:ASP:N	2.53	0.41
1:C:244:HIS:ND1	1:C:429:ALA:O	2.53	0.41
1:C:557:TYR:HA	1:C:560:LEU:HG	2.03	0.41
1:C:2437:ASN:CB	1:C:2592:THR:CB	2.96	0.41
1:D:16:SER:HB3	1:D:57:LEU:HA	2.02	0.41
1:D:20:GLU:OE1	1:D:46:LEU:HG	2.19	0.41
1:D:44:GLY:CA	1:D:50:PRO:HD3	2.51	0.41
1:D:287:VAL:HB	1:D:289:HIS:HA	2.02	0.41
1:D:554:ARG:O	1:D:557:TYR:HB3	2.20	0.41
1:D:576:LYS:HB3	1:D:580:PHE:CZ	2.55	0.41
1:D:2273:MET:O	1:D:2276:TRP:HB2	2.21	0.41
1:D:2290:LEU:HA	1:D:2293:PHE:CD2	2.55	0.41
1:D:2455:PHE:CE1	1:D:2569:TYR:CZ	3.09	0.41
1:D:2552:VAL:HG12	1:D:2554:ARG:HG3	2.02	0.41
1:A:67:SER:OG	1:A:68:ALA:N	2.51	0.41
1:A:371:ASP:N	1:A:389:ARG:O	2.49	0.41
1:A:446:ALA:O	1:A:449:ALA:N	2.53	0.41
1:A:554:ARG:O	1:A:557:TYR:HB3	2.20	0.41
1:A:576:LYS:HB3	1:A:580:PHE:CZ	2.56	0.41
1:A:2552:VAL:HB	1:B:2523:ASP:HB2	2.01	0.41
1:A:2584:LEU:O	1:A:2585:ILE:C	2.59	0.41
1:A:2703:GLU:O	1:A:2706:MET:HG2	2.20	0.41
1:B:10:HIS:HE2	1:B:177:VAL:HA	1.85	0.41
1:B:69:GLN:NE2	1:B:100:LYS:HG2	2.33	0.41
1:B:400:HIS:HB3	1:B:401:SER:H	1.68	0.41
1:B:430:PHE:HB2	1:B:431:ALA:H	1.43	0.41
1:B:524:GLN:HA	1:B:527:PHE:CB	2.48	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:538:LEU:HD12	1:B:539:GLU:N	2.36	0.41
1:B:2541:HIS:HA	1:B:2544:ARG:CG	2.51	0.41
1:C:117:TYR:CD2	1:C:176:VAL:HG22	2.55	0.41
1:C:371:ASP:N	1:C:389:ARG:O	2.49	0.41
1:C:533:GLY:HA2	1:C:537:ARG:CB	2.47	0.41
1:C:542:GLY:HA2	1:C:549:PHE:CZ	2.55	0.41
1:C:2581:VAL:HG13	1:C:2582:LEU:HD12	2.03	0.41
1:D:25:GLY:HA2	1:D:43:ALA:HB2	2.02	0.41
1:D:71:GLN:HA	1:D:74:LYS:HG2	2.03	0.41
1:D:180:ASP:OD1	1:D:180:ASP:N	2.53	0.41
1:D:392:HIS:CD2	1:D:395:THR:H	2.38	0.41
1:D:485:THR:HG23	1:D:487:GLY:N	2.36	0.41
1:A:282:TRP:HH2	1:A:443:LEU:HD22	1.85	0.41
1:A:400:HIS:HB3	1:A:401:SER:H	1.69	0.41
1:A:425:GLU:O	1:A:426:ASP:HB2	2.20	0.41
1:A:505:GLU:N	1:A:505:GLU:OE1	2.53	0.41
1:A:565:GLN:O	1:A:566:ASP:HB2	2.20	0.41
1:A:572:GLU:C	1:A:574:ILE:H	2.24	0.41
1:A:2337:ILE:HG23	1:A:2338:ALA:N	2.35	0.41
1:A:2465:ASP:OD1	1:A:2562:LEU:HA	2.21	0.41
1:A:2601:GLN:HA	1:A:2604:GLU:OE2	2.21	0.41
1:B:65:ARG:HD3	1:B:69:GLN:OE1	2.20	0.41
1:B:80:ALA:HB3	1:B:81:ASN:HB2	2.03	0.41
1:B:128:SER:C	1:B:441:ARG:HE	2.23	0.41
1:B:314:LEU:HA	1:B:366:SER:CB	2.51	0.41
1:B:2598:SER:HA	1:B:2601:GLN:HG2	2.02	0.41
1:C:80:ALA:H	1:C:82:SER:N	2.19	0.41
1:C:124:LEU:HG	1:C:125:HIS:H	1.85	0.41
1:C:565:GLN:O	1:C:566:ASP:HB2	2.20	0.41
1:C:2274:SER:CB	1:C:2339:SER:HB3	2.44	0.41
1:D:45:ASP:HB3	1:D:48:ASN:H	1.84	0.41
1:D:77:LYS:H	1:D:78:PRO:HD2	1.85	0.41
1:D:244:HIS:ND1	1:D:429:ALA:O	2.53	0.41
1:D:501:LYS:HB2	1:D:502:PRO:HD3	2.03	0.41
1:D:2584:LEU:O	1:D:2585:ILE:C	2.59	0.41
1:A:20:GLU:OE1	1:A:46:LEU:HG	2.20	0.41
1:A:77:LYS:H	1:A:78:PRO:HD2	1.85	0.41
1:A:311:GLY:HA2	1:A:359:PRO:CD	2.48	0.41
1:A:2432:LYS:HA	1:A:2435:THR:HG21	2.00	0.41
1:A:2544:ARG:HD2	1:D:2547:GLY:H	1.86	0.41
1:A:2555:LYS:N	1:A:2556:PRO:HD3	2.36	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:21:GLY:N	1:B:24:ASN:OD1	2.54	0.41
1:B:505:GLU:OE1	1:B:505:GLU:N	2.53	0.41
1:B:2367:ILE:O	1:B:2371:SER:OG	2.30	0.41
1:B:2531:LEU:HA	1:B:2534:CYS:SG	2.61	0.41
1:B:2546:GLY:HA2	1:B:2547:GLY:HA3	1.86	0.41
1:B:2724:THR:HG23	1:B:2727:ARG:HE	1.85	0.41
1:C:135:ASN:C	1:C:137:ARG:HB3	2.42	0.41
1:C:392:HIS:CD2	1:C:395:THR:H	2.38	0.41
1:C:400:HIS:O	1:C:420:THR:OG1	2.36	0.41
1:C:2281:PHE:CE2	1:C:2372:PHE:HE1	2.39	0.41
1:C:2327:LEU:O	1:C:2330:PRO:HD2	2.20	0.41
1:C:2362:VAL:O	1:C:2365:LYS:HB3	2.20	0.41
1:C:2555:LYS:N	1:C:2556:PRO:HD3	2.36	0.41
1:C:2601:GLN:HA	1:C:2604:GLU:OE2	2.21	0.41
1:D:405:PRO:HD2	1:D:417:LYS:CD	2.51	0.41
1:D:477:LEU:CG	1:D:555:LEU:HD22	2.47	0.41
1:D:565:GLN:O	1:D:566:ASP:HB2	2.21	0.41
1:D:2459:GLY:C	1:D:2461:LEU:N	2.74	0.41
1:A:71:GLN:HA	1:A:74:LYS:NZ	2.33	0.41
1:A:124:LEU:HG	1:A:125:HIS:H	1.85	0.41
1:A:239:VAL:HB	1:A:283:GLU:CA	2.51	0.41
1:A:244:HIS:ND1	1:A:429:ALA:O	2.53	0.41
1:A:309:ALA:N	1:A:310:THR:HA	2.35	0.41
1:A:314:LEU:HA	1:A:366:SER:CB	2.51	0.41
1:A:431:ALA:HB1	1:A:432:ILE:HD12	2.02	0.41
1:A:2411:PHE:O	1:A:2414:SER:OG	2.26	0.41
1:A:2543:LEU:HD23	1:A:2543:LEU:HA	1.82	0.41
1:A:2552:VAL:CA	1:A:2553:LEU:HB2	2.38	0.41
1:B:13:ASP:OD1	1:B:225:LYS:HD3	2.20	0.41
1:B:71:GLN:HA	1:B:74:LYS:HG2	2.03	0.41
1:B:80:ALA:H	1:B:82:SER:N	2.19	0.41
1:B:221:VAL:HB	1:B:222:LEU:H	1.56	0.41
1:B:231:ASP:OD1	1:B:232:ASP:N	2.52	0.41
1:B:404:ILE:HB	1:B:417:LYS:HZ2	1.86	0.41
1:B:405:PRO:HD2	1:B:417:LYS:CD	2.51	0.41
1:B:2288:ASN:OD1	1:B:2289:LEU:N	2.54	0.41
1:B:2321:LEU:O	1:B:2325:ILE:HD12	2.21	0.41
1:B:2337:ILE:HG23	1:B:2338:ALA:N	2.35	0.41
1:B:2455:PHE:CE1	1:B:2569:TYR:CZ	3.09	0.41
1:C:10:HIS:HB2	1:C:115:ILE:HB	2.03	0.41
1:C:91:LYS:HA	1:C:94:HIS:HD2	1.86	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:135:ASN:HB2	1:C:138:LEU:C	2.41	0.41
1:C:137:ARG:HB2	1:C:188:ASN:ND2	2.36	0.41
1:C:231:ASP:CG	1:C:232:ASP:H	2.23	0.41
1:C:244:HIS:HE1	1:C:428:GLU:O	2.04	0.41
1:C:505:GLU:OE1	1:C:505:GLU:N	2.53	0.41
1:C:576:LYS:HB3	1:C:580:PHE:CZ	2.55	0.41
1:C:2337:ILE:HG23	1:C:2338:ALA:N	2.35	0.41
1:C:2437:ASN:HB2	1:C:2592:THR:HB	2.02	0.41
1:C:2447:LEU:HD23	1:C:2451:LEU:HD13	2.03	0.41
1:C:2465:ASP:OD1	1:C:2562:LEU:HA	2.21	0.41
1:C:2564:ALA:HA	1:C:2568:ILE:HG12	2.03	0.41
1:C:2724:THR:HG22	1:C:2728:LYS:HE3	2.03	0.41
1:D:79:GLY:HA3	1:D:82:SER:O	2.21	0.41
1:D:135:ASN:HD21	1:D:140:ALA:HA	1.85	0.41
1:D:147:MET:CE	1:D:211:SER:HB3	2.51	0.41
1:D:239:VAL:HB	1:D:283:GLU:CA	2.50	0.41
1:D:266:THR:O	1:D:267:THR:OG1	2.30	0.41
1:D:282:TRP:HH2	1:D:443:LEU:HD22	1.85	0.41
1:D:282:TRP:N	1:D:308:LEU:H	2.17	0.41
1:D:474:THR:HB	1:D:552:ILE:HD11	2.02	0.41
1:D:481:VAL:HG23	1:D:555:LEU:HD21	2.02	0.41
1:D:2313:LEU:HD12	1:D:2316:ALA:HB3	2.03	0.41
1:D:2319:ILE:HB	1:D:2323:ILE:HD13	2.01	0.41
1:D:2598:SER:HA	1:D:2601:GLN:HG2	2.03	0.41
1:D:2705:THR:O	1:D:2709:VAL:HG23	2.21	0.41
1:A:10:HIS:HE2	1:A:177:VAL:HA	1.85	0.41
1:A:48:ASN:HA	1:A:49:PRO:HD2	1.88	0.41
1:A:80:ALA:H	1:A:82:SER:HB2	1.85	0.41
1:A:137:ARG:HG2	1:A:138:LEU:N	2.36	0.41
1:A:512:GLU:HB3	1:A:513:GLN:OE1	2.21	0.41
1:A:557:TYR:HA	1:A:560:LEU:HG	2.03	0.41
1:A:2288:ASN:OD1	1:A:2289:LEU:N	2.54	0.41
1:A:2459:GLY:C	1:A:2461:LEU:N	2.74	0.41
1:B:565:GLN:O	1:B:566:ASP:HB2	2.21	0.41
1:B:576:LYS:HB3	1:B:580:PHE:CZ	2.55	0.41
1:B:2461:LEU:HD12	1:C:2411:PHE:CE2	2.56	0.41
1:B:2574:PHE:HA	1:B:2574:PHE:HD1	1.78	0.41
1:C:60:LEU:HD23	1:C:123:LEU:HD13	2.02	0.41
1:C:282:TRP:HH2	1:C:443:LEU:HD22	1.85	0.41
1:C:314:LEU:HA	1:C:366:SER:CB	2.51	0.41
1:C:2273:MET:O	1:C:2276:TRP:HB2	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2444:THR:O	1:C:2447:LEU:HB3	2.21	0.41
1:C:2731:GLN:HB3	1:D:393:LEU:HD23	2.02	0.41
1:D:400:HIS:HB3	1:D:401:SER:H	1.69	0.41
1:D:2444:THR:O	1:D:2447:LEU:HB3	2.20	0.41
1:D:2575:PHE:O	1:D:2579:ILE:HG12	2.21	0.41
1:D:2581:VAL:HG13	1:D:2582:LEU:HD12	2.03	0.41
1:A:117:TYR:CD2	1:A:176:VAL:HG22	2.56	0.40
1:A:135:ASN:HB2	1:A:138:LEU:C	2.41	0.40
1:A:286:VAL:N	1:A:303:PHE:CZ	2.86	0.40
1:A:2447:LEU:HD23	1:A:2451:LEU:HD13	2.03	0.40
1:A:2455:PHE:CE1	1:A:2569:TYR:CZ	3.09	0.40
1:A:2531:LEU:HA	1:A:2534:CYS:SG	2.61	0.40
1:A:2567:VAL:HG13	1:A:2568:ILE:N	2.36	0.40
1:B:64:ASN:ND2	1:B:103:ASN:HD21	2.19	0.40
1:B:79:GLY:HA3	1:B:82:SER:O	2.21	0.40
1:B:147:MET:CE	1:B:211:SER:HB3	2.51	0.40
1:B:192:PRO:CG	1:B:213:ASN:HA	2.51	0.40
1:B:266:THR:HA	1:B:415:MET:SD	2.61	0.40
1:B:287:VAL:HB	1:B:289:HIS:HA	2.02	0.40
1:B:501:LYS:HB2	1:B:502:PRO:HD3	2.03	0.40
1:B:2324:VAL:C	1:B:2326:ALA:N	2.74	0.40
1:B:2325:ILE:HG22	1:B:2329:LYS:HZ2	1.75	0.40
1:B:2584:LEU:O	1:B:2585:ILE:C	2.59	0.40
1:C:446:ALA:O	1:C:449:ALA:N	2.53	0.40
1:C:2288:ASN:OD1	1:C:2289:LEU:N	2.54	0.40
1:C:2459:GLY:C	1:C:2461:LEU:N	2.74	0.40
1:C:2715:GLN:HE21	1:D:2710:THR:HB	1.86	0.40
1:D:80:ALA:H	1:D:82:SER:N	2.19	0.40
1:D:480:LEU:HA	1:D:483:PHE:HB3	2.03	0.40
1:D:556:CYS:O	1:D:559:VAL:HG22	2.20	0.40
1:A:21:GLY:N	1:A:24:ASN:OD1	2.54	0.40
1:A:80:ALA:HB3	1:A:81:ASN:HB2	2.03	0.40
1:A:186:PRO:CD	1:A:190:GLY:HA3	2.51	0.40
1:B:312:HIS:NE2	1:B:360:GLU:O	2.55	0.40
1:B:480:LEU:HA	1:B:483:PHE:HB3	2.03	0.40
1:B:2273:MET:O	1:B:2276:TRP:HB2	2.21	0.40
1:B:2579:ILE:O	1:B:2583:ASN:ND2	2.53	0.40
1:B:2581:VAL:HG13	1:B:2582:LEU:HD12	2.03	0.40
1:B:2705:THR:O	1:B:2709:VAL:HG23	2.21	0.40
1:C:20:GLU:OE1	1:C:46:LEU:HG	2.21	0.40
1:C:52:LYS:O	1:C:55:ASP:N	2.47	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:79:GLY:HA3	1:C:82:SER:O	2.21	0.40
1:C:304:ARG:NH2	1:C:362:ASN:O	2.55	0.40
1:C:512:GLU:HB3	1:C:513:GLN:OE1	2.21	0.40
1:C:2324:VAL:C	1:C:2326:ALA:N	2.74	0.40
1:D:80:ALA:HB3	1:D:81:ASN:HB2	2.03	0.40
1:D:192:PRO:CG	1:D:213:ASN:HA	2.51	0.40
1:D:314:LEU:HA	1:D:366:SER:CB	2.51	0.40
1:D:538:LEU:HD12	1:D:539:GLU:N	2.36	0.40
1:D:2322:ALA:HA	1:D:2325:ILE:HD12	2.03	0.40
1:D:2531:LEU:HA	1:D:2534:CYS:SG	2.61	0.40
1:D:2579:ILE:O	1:D:2583:ASN:ND2	2.53	0.40
1:D:2717:SER:HA	1:D:2720:LYS:HG2	2.02	0.40
1:A:79:GLY:HA3	1:A:82:SER:O	2.21	0.40
1:A:131:TYR:CG	1:A:132:LEU:N	2.90	0.40
1:A:2281:PHE:CE2	1:A:2372:PHE:HE1	2.39	0.40
1:A:2531:LEU:O	1:A:2535:ILE:HG23	2.21	0.40
1:B:103:ASN:HA	1:B:106:GLU:CD	2.42	0.40
1:B:180:ASP:N	1:B:180:ASP:OD1	2.53	0.40
1:C:21:GLY:N	1:C:24:ASN:OD1	2.54	0.40
1:C:574:ILE:CA	1:C:577:GLN:HB2	2.49	0.40
1:C:2518:GLU:O	1:C:2521:GLU:HB2	2.21	0.40
1:C:2531:LEU:HA	1:C:2534:CYS:SG	2.62	0.40
1:C:2552:VAL:HG12	1:C:2554:ARG:HG3	2.02	0.40
1:C:2683:LEU:O	1:C:2686:SER:OG	2.26	0.40
1:C:2703:GLU:O	1:C:2706:MET:HG2	2.20	0.40
1:D:440:VAL:O	1:D:443:LEU:HB2	2.21	0.40
1:D:557:TYR:HA	1:D:560:LEU:HG	2.04	0.40
1:D:567:TYR:CD1	1:D:569:LYS:HB2	2.57	0.40
1:D:2555:LYS:N	1:D:2556:PRO:HD3	2.37	0.40
1:D:2564:ALA:HA	1:D:2568:ILE:HG12	2.02	0.40
1:D:2567:VAL:HG13	1:D:2568:ILE:N	2.36	0.40
1:A:135:ASN:HD22	1:A:139:PRO:C	2.24	0.40
1:A:135:ASN:HD21	1:A:140:ALA:HA	1.86	0.40
1:A:474:THR:HB	1:A:552:ILE:HD11	2.04	0.40
1:A:2327:LEU:C	1:A:2330:PRO:HD2	2.42	0.40
1:A:2361:ASN:OD1	1:A:2362:VAL:N	2.55	0.40
1:A:2444:THR:O	1:A:2447:LEU:HB3	2.21	0.40
1:B:22:SER:HA	1:B:23:THR:HA	1.92	0.40
1:B:135:ASN:HB2	1:B:138:LEU:C	2.42	0.40
1:B:253:CYS:CA	1:B:262:VAL:HA	2.46	0.40
1:B:287:VAL:HB	1:B:289:HIS:CA	2.52	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:309:ALA:N	1:B:310:THR:HA	2.36	0.40
1:B:557:TYR:HA	1:B:560:LEU:HG	2.04	0.40
1:B:2313:LEU:HD12	1:B:2316:ALA:HB3	2.02	0.40
1:B:2322:ALA:HA	1:B:2325:ILE:HD12	2.03	0.40
1:B:2432:LYS:NZ	1:B:2436:ARG:HD3	2.36	0.40
1:B:2518:GLU:O	1:B:2521:GLU:HB2	2.22	0.40
1:B:2531:LEU:O	1:B:2535:ILE:HG23	2.21	0.40
1:C:77:LYS:H	1:C:78:PRO:HD2	1.85	0.40
1:C:137:ARG:HG2	1:C:138:LEU:N	2.36	0.40
1:C:174:ASP:N	1:C:174:ASP:OD1	2.51	0.40
1:C:186:PRO:CD	1:C:190:GLY:HA3	2.51	0.40
1:C:2455:PHE:CE1	1:C:2569:TYR:CZ	3.09	0.40
1:C:2461:LEU:HD12	1:D:2411:PHE:HE2	1.86	0.40
1:C:2531:LEU:O	1:C:2535:ILE:HG23	2.21	0.40
1:C:2567:VAL:HG13	1:C:2568:ILE:N	2.36	0.40
1:D:64:ASN:ND2	1:D:103:ASN:HD21	2.19	0.40
1:D:278:SER:OG	1:D:512:GLU:HG3	2.22	0.40
1:D:391:ARG:HB2	1:D:398:TRP:CE3	2.56	0.40
1:D:400:HIS:H	1:D:422:PRO:HG3	1.87	0.40
1:D:517:LYS:O	1:D:520:PHE:HB3	2.21	0.40
1:D:2518:GLU:O	1:D:2521:GLU:HB2	2.22	0.40
1:D:2724:THR:HG23	1:D:2727:ARG:NH2	2.37	0.40
1:A:231:ASP:OD1	1:A:232:ASP:N	2.52	0.40
1:A:484:VAL:HG22	1:A:562:HIS:ND1	2.37	0.40
1:A:2274:SER:CB	1:A:2339:SER:HB3	2.44	0.40
1:A:2324:VAL:C	1:A:2326:ALA:N	2.74	0.40
1:A:2532:LEU:HA	1:A:2535:ILE:HG12	2.04	0.40
1:B:10:HIS:HB2	1:B:115:ILE:HB	2.04	0.40
1:B:131:TYR:CG	1:B:132:LEU:N	2.90	0.40
1:B:168:LYS:HD3	1:C:246:GLU:C	2.42	0.40
1:B:282:TRP:N	1:B:308:LEU:H	2.17	0.40
1:B:282:TRP:HH2	1:B:443:LEU:HD22	1.86	0.40
1:B:400:HIS:H	1:B:420:THR:HG21	1.87	0.40
1:B:411:GLU:CD	1:B:412:LYS:HG3	2.42	0.40
1:B:485:THR:HG23	1:B:487:GLY:N	2.36	0.40
1:B:2437:ASN:HB2	1:B:2592:THR:HB	2.04	0.40
1:B:2532:LEU:HA	1:B:2535:ILE:HG12	2.04	0.40
1:B:2552:VAL:HG12	1:B:2554:ARG:HG3	2.02	0.40
1:B:2567:VAL:HG13	1:B:2568:ILE:N	2.36	0.40
1:C:243:PHE:CZ	1:C:432:ILE:HA	2.57	0.40
1:C:480:LEU:HA	1:C:483:PHE:HB3	2.04	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2584:LEU:O	1:C:2587:GLY:N	2.55	0.40
1:C:2701:LYS:HE3	1:D:2700:GLU:CD	2.42	0.40
1:D:488:THR:O	1:D:489:ASN:ND2	2.55	0.40
1:D:505:GLU:OE1	1:D:505:GLU:N	2.53	0.40
1:D:2543:LEU:HD23	1:D:2543:LEU:HA	1.81	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	856/2750 (31%)	645 (75%)	137 (16%)	74 (9%)	1 13
1	B	856/2750 (31%)	647 (76%)	135 (16%)	74 (9%)	1 13
1	C	856/2750 (31%)	646 (76%)	137 (16%)	73 (8%)	1 13
1	D	856/2750 (31%)	649 (76%)	133 (16%)	74 (9%)	1 13
All	All	3424/11000 (31%)	2587 (76%)	542 (16%)	295 (9%)	2 13

All (295) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	16	SER
1	A	20	GLU
1	A	144	LYS
1	A	165	PRO
1	A	166	PHE
1	A	183	VAL
1	A	204	PRO
1	A	245	ALA
1	A	284	VAL
1	A	313	TYR

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Mol	Chain	Res	Type
1	A	317	GLU
1	A	385	ASN
1	A	399	VAL
1	A	426	ASP
1	A	431	ALA
1	A	506	ARG
1	A	534	PRO
1	A	547	ALA
1	A	2297	PHE
1	A	2440	PRO
1	A	2460	TYR
1	A	2465	ASP
1	A	2565	ALA
1	A	2584	LEU
1	B	16	SER
1	B	20	GLU
1	B	144	LYS
1	B	165	PRO
1	B	166	PHE
1	B	183	VAL
1	B	204	PRO
1	B	245	ALA
1	B	284	VAL
1	B	313	TYR
1	B	317	GLU
1	B	385	ASN
1	B	399	VAL
1	B	426	ASP
1	B	431	ALA
1	B	506	ARG
1	B	534	PRO
1	B	547	ALA
1	B	2297	PHE
1	B	2440	PRO
1	B	2460	TYR
1	B	2465	ASP
1	B	2565	ALA
1	B	2584	LEU
1	C	16	SER
1	C	20	GLU
1	C	144	LYS
1	C	165	PRO

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Mol	Chain	Res	Type
1	C	166	PHE
1	C	183	VAL
1	C	204	PRO
1	C	245	ALA
1	C	284	VAL
1	C	313	TYR
1	C	317	GLU
1	C	385	ASN
1	C	399	VAL
1	C	426	ASP
1	C	431	ALA
1	C	506	ARG
1	C	534	PRO
1	C	547	ALA
1	C	2297	PHE
1	C	2440	PRO
1	C	2460	TYR
1	C	2465	ASP
1	C	2565	ALA
1	C	2584	LEU
1	D	16	SER
1	D	20	GLU
1	D	144	LYS
1	D	165	PRO
1	D	166	PHE
1	D	183	VAL
1	D	204	PRO
1	D	245	ALA
1	D	284	VAL
1	D	313	TYR
1	D	317	GLU
1	D	385	ASN
1	D	399	VAL
1	D	426	ASP
1	D	431	ALA
1	D	506	ARG
1	D	534	PRO
1	D	547	ALA
1	D	2297	PHE
1	D	2440	PRO
1	D	2460	TYR
1	D	2465	ASP

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Mol	Chain	Res	Type
1	D	2565	ALA
1	D	2584	LEU
1	A	38	VAL
1	A	136	LYS
1	A	160	TRP
1	A	168	LYS
1	A	221	VAL
1	A	232	ASP
1	A	233	ILE
1	A	309	ALA
1	A	312	HIS
1	A	363	ASP
1	A	398	TRP
1	A	409	GLU
1	A	484	VAL
1	A	566	ASP
1	B	38	VAL
1	B	136	LYS
1	B	160	TRP
1	B	168	LYS
1	B	221	VAL
1	B	232	ASP
1	B	233	ILE
1	B	309	ALA
1	B	312	HIS
1	B	363	ASP
1	B	398	TRP
1	B	409	GLU
1	B	484	VAL
1	B	566	ASP
1	B	2553	LEU
1	C	38	VAL
1	C	136	LYS
1	C	160	TRP
1	C	168	LYS
1	C	221	VAL
1	C	232	ASP
1	C	233	ILE
1	C	309	ALA
1	C	312	HIS
1	C	363	ASP
1	C	398	TRP

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Mol	Chain	Res	Type
1	C	484	VAL
1	C	566	ASP
1	D	38	VAL
1	D	136	LYS
1	D	160	TRP
1	D	168	LYS
1	D	221	VAL
1	D	232	ASP
1	D	233	ILE
1	D	309	ALA
1	D	312	HIS
1	D	363	ASP
1	D	398	TRP
1	D	409	GLU
1	D	484	VAL
1	D	566	ASP
1	D	2553	LEU
1	A	67	SER
1	A	388	VAL
1	A	403	ASN
1	A	418	ILE
1	A	493	ASP
1	A	527	PHE
1	A	2327	LEU
1	A	2553	LEU
1	B	67	SER
1	B	388	VAL
1	B	403	ASN
1	B	493	ASP
1	B	527	PHE
1	B	2327	LEU
1	C	67	SER
1	C	388	VAL
1	C	403	ASN
1	C	405	PRO
1	C	409	GLU
1	C	493	ASP
1	C	527	PHE
1	C	2327	LEU
1	C	2553	LEU
1	D	388	VAL
1	D	403	ASN

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Mol	Chain	Res	Type
1	D	493	ASP
1	D	527	PHE
1	D	2327	LEU
1	A	7	SER
1	A	21	GLY
1	A	65	ARG
1	A	77	LYS
1	A	354	SER
1	A	405	PRO
1	A	504	ARG
1	A	2330	PRO
1	A	2338	ALA
1	A	2540	SER
1	B	7	SER
1	B	21	GLY
1	B	65	ARG
1	B	77	LYS
1	B	354	SER
1	B	405	PRO
1	B	418	ILE
1	B	504	ARG
1	B	2330	PRO
1	B	2338	ALA
1	B	2350	LEU
1	C	7	SER
1	C	21	GLY
1	C	65	ARG
1	C	77	LYS
1	C	354	SER
1	C	418	ILE
1	C	504	ARG
1	C	2330	PRO
1	C	2338	ALA
1	C	2561	PRO
1	D	7	SER
1	D	21	GLY
1	D	65	ARG
1	D	67	SER
1	D	77	LYS
1	D	354	SER
1	D	405	PRO
1	D	418	ILE

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Mol	Chain	Res	Type
1	D	504	ARG
1	D	2330	PRO
1	D	2338	ALA
1	D	2350	LEU
1	D	2561	PRO
1	A	11	ILE
1	A	177	VAL
1	A	422	PRO
1	A	513	GLN
1	A	2561	PRO
1	B	11	ILE
1	B	422	PRO
1	B	513	GLN
1	B	2540	SER
1	B	2561	PRO
1	C	11	ILE
1	C	177	VAL
1	C	422	PRO
1	C	513	GLN
1	C	2540	SER
1	D	11	ILE
1	D	422	PRO
1	D	513	GLN
1	D	2540	SER
1	A	122	GLN
1	A	272	ALA
1	A	283	GLU
1	A	382	VAL
1	B	122	GLN
1	B	177	VAL
1	B	283	GLU
1	B	382	VAL
1	C	122	GLN
1	C	272	ALA
1	C	382	VAL
1	D	122	GLN
1	D	177	VAL
1	D	283	GLU
1	D	382	VAL
1	D	2439	ARG
1	A	491	GLY
1	A	2439	ARG

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Mol	Chain	Res	Type
1	A	2459	GLY
1	B	491	GLY
1	C	491	GLY
1	C	2439	ARG
1	C	2459	GLY
1	D	491	GLY
1	A	2349	GLY
1	A	2556	PRO
1	B	2439	ARG
1	B	2459	GLY
1	C	2349	GLY
1	D	2459	GLY
1	A	220	ILE
1	A	361	GLY
1	A	533	GLY
1	B	220	ILE
1	B	361	GLY
1	B	533	GLY
1	B	2349	GLY
1	C	220	ILE
1	C	361	GLY
1	C	533	GLY
1	C	2556	PRO
1	D	220	ILE
1	D	361	GLY
1	D	533	GLY
1	D	2349	GLY
1	B	2556	PRO
1	D	2556	PRO
1	A	192	PRO
1	C	192	PRO
1	B	192	PRO
1	D	192	PRO

5.3.2 Protein sidechains (i)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	769/2459 (31%)	764 (99%)	5 (1%)	84	90
1	B	769/2459 (31%)	764 (99%)	5 (1%)	84	90
1	C	769/2459 (31%)	764 (99%)	5 (1%)	84	90
1	D	769/2459 (31%)	764 (99%)	5 (1%)	84	90
All	All	3076/9836 (31%)	3056 (99%)	20 (1%)	84	90

All (20) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	2415	LEU
1	A	2431	ILE
1	A	2435	THR
1	A	2514	LEU
1	A	2571	LEU
1	B	2415	LEU
1	B	2431	ILE
1	B	2435	THR
1	B	2514	LEU
1	B	2571	LEU
1	C	2415	LEU
1	C	2431	ILE
1	C	2435	THR
1	C	2514	LEU
1	C	2571	LEU
1	D	2415	LEU
1	D	2431	ILE
1	D	2435	THR
1	D	2514	LEU
1	D	2571	LEU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (46) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	64	ASN
1	A	94	HIS
1	A	103	ASN
1	A	188	ASN
1	A	213	ASN
1	A	244	HIS
1	A	270	GLN

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Mol	Chain	Res	Type
1	A	289	HIS
1	A	385	ASN
1	A	489	ASN
1	A	518	GLN
1	A	2715	GLN
1	A	2731	GLN
1	B	64	ASN
1	B	94	HIS
1	B	103	ASN
1	B	188	ASN
1	B	213	ASN
1	B	289	HIS
1	B	385	ASN
1	B	489	ASN
1	B	518	GLN
1	B	2715	GLN
1	B	2731	GLN
1	C	64	ASN
1	C	94	HIS
1	C	103	ASN
1	C	188	ASN
1	C	213	ASN
1	C	244	HIS
1	C	270	GLN
1	C	289	HIS
1	C	385	ASN
1	C	489	ASN
1	C	518	GLN
1	C	2715	GLN
1	C	2731	GLN
1	D	94	HIS
1	D	188	ASN
1	D	213	ASN
1	D	289	HIS
1	D	385	ASN
1	D	489	ASN
1	D	518	GLN
1	D	2715	GLN
1	D	2731	GLN

5.3.3 RNA (i)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates (i)

There are no monosaccharides in this entry.

5.6 Ligand geometry (i)

There are no ligands in this entry.

5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

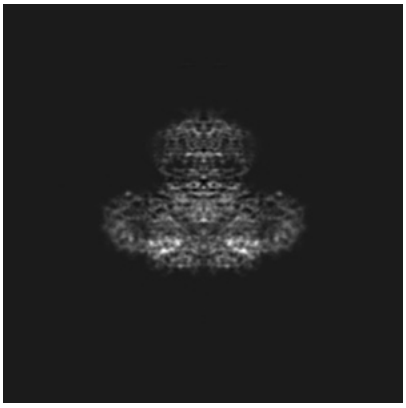
6 Map visualisation (i)

This section contains visualisations of the EMDB entry EMD-6369. These allow visual inspection of the internal detail of the map and identification of artifacts.

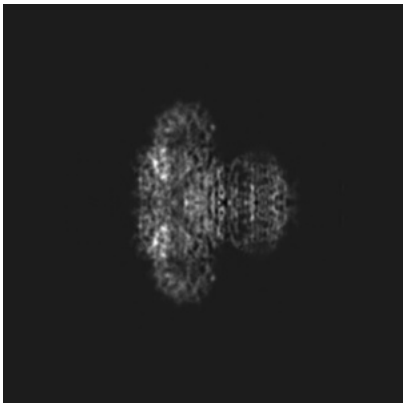
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections (i)

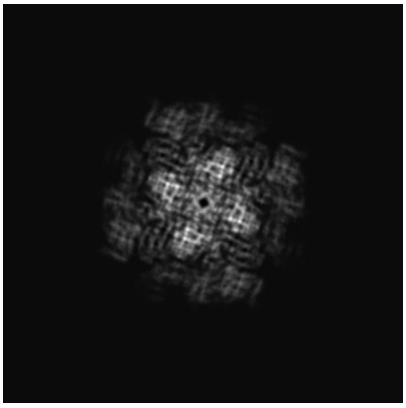
6.1.1 Primary map



X



Y



Z

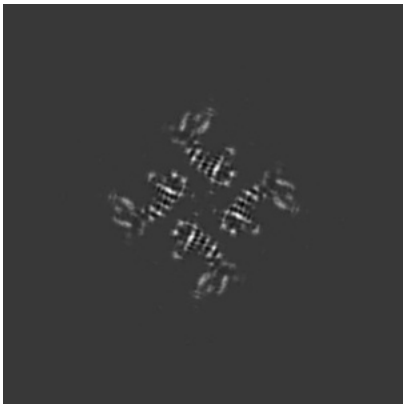
The images above show the map projected in three orthogonal directions.

6.2 Central slices (i)

6.2.1 Primary map

X Index: 128

Y Index: 128

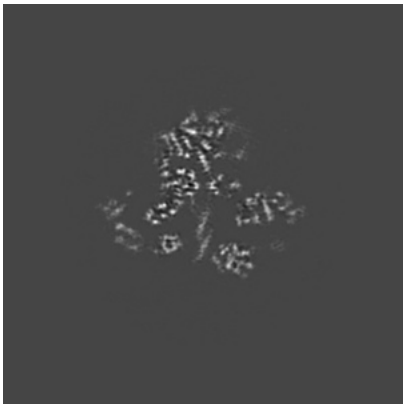


Z Index: 128

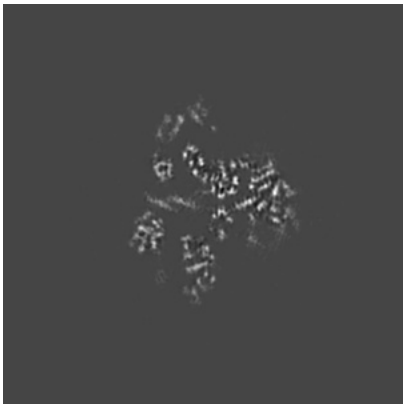
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

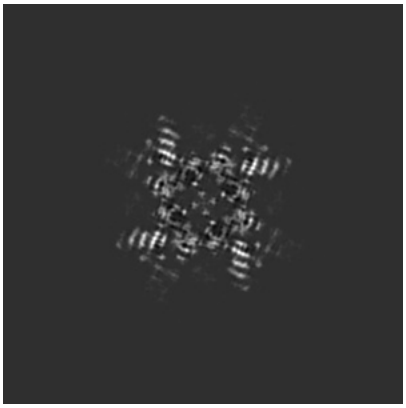
6.3.1 Primary map



X Index: 123



Y Index: 123



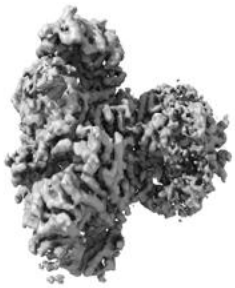
Z Index: 97

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

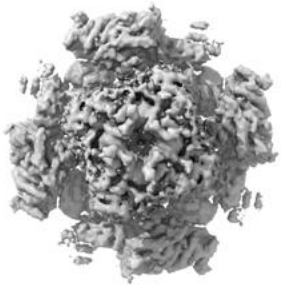
6.4 Orthogonal surface views (i)

6.4.1 Primary map

X



Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.7. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

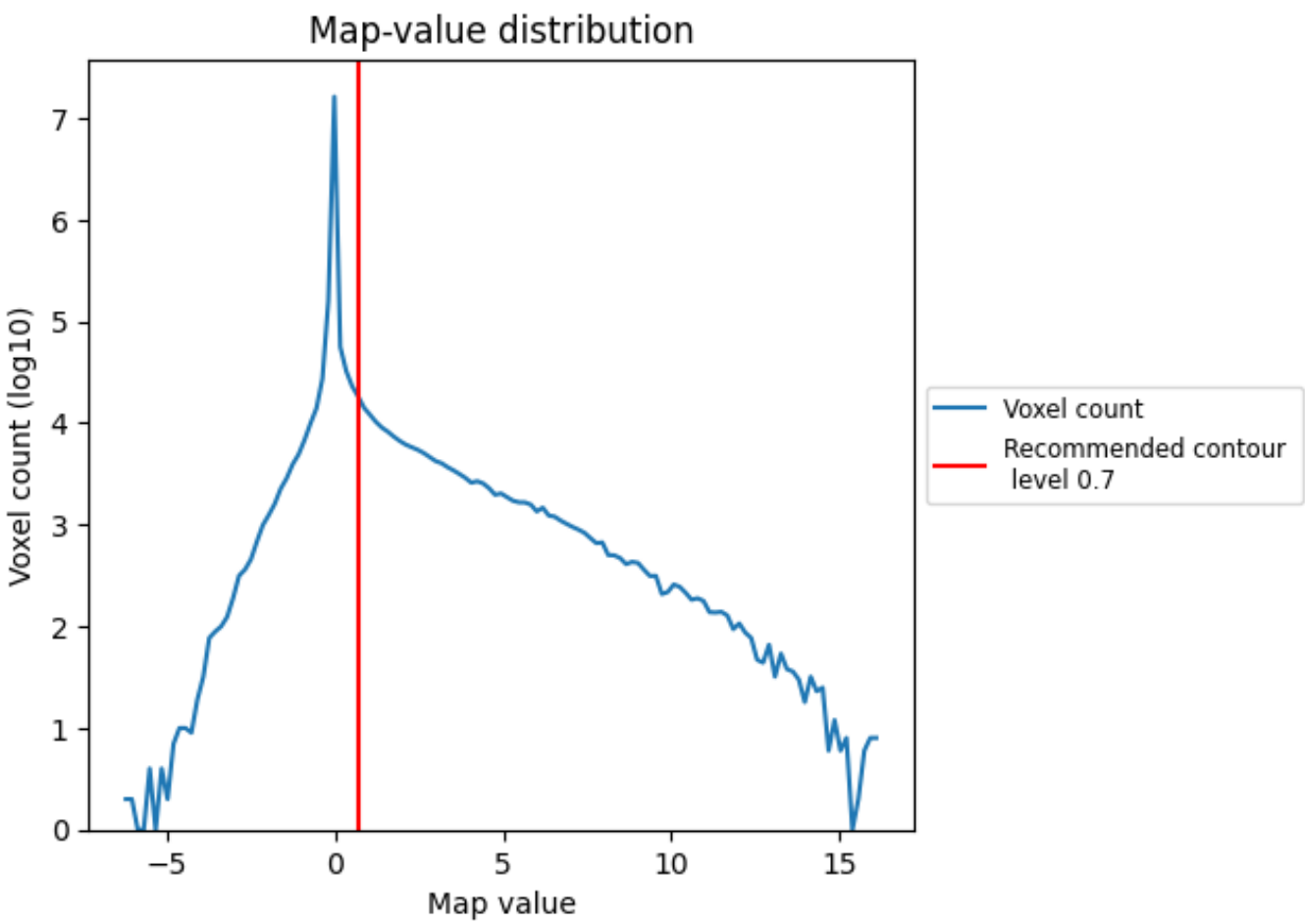
6.5 Mask visualisation (i)

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

7 Map analysis (i)

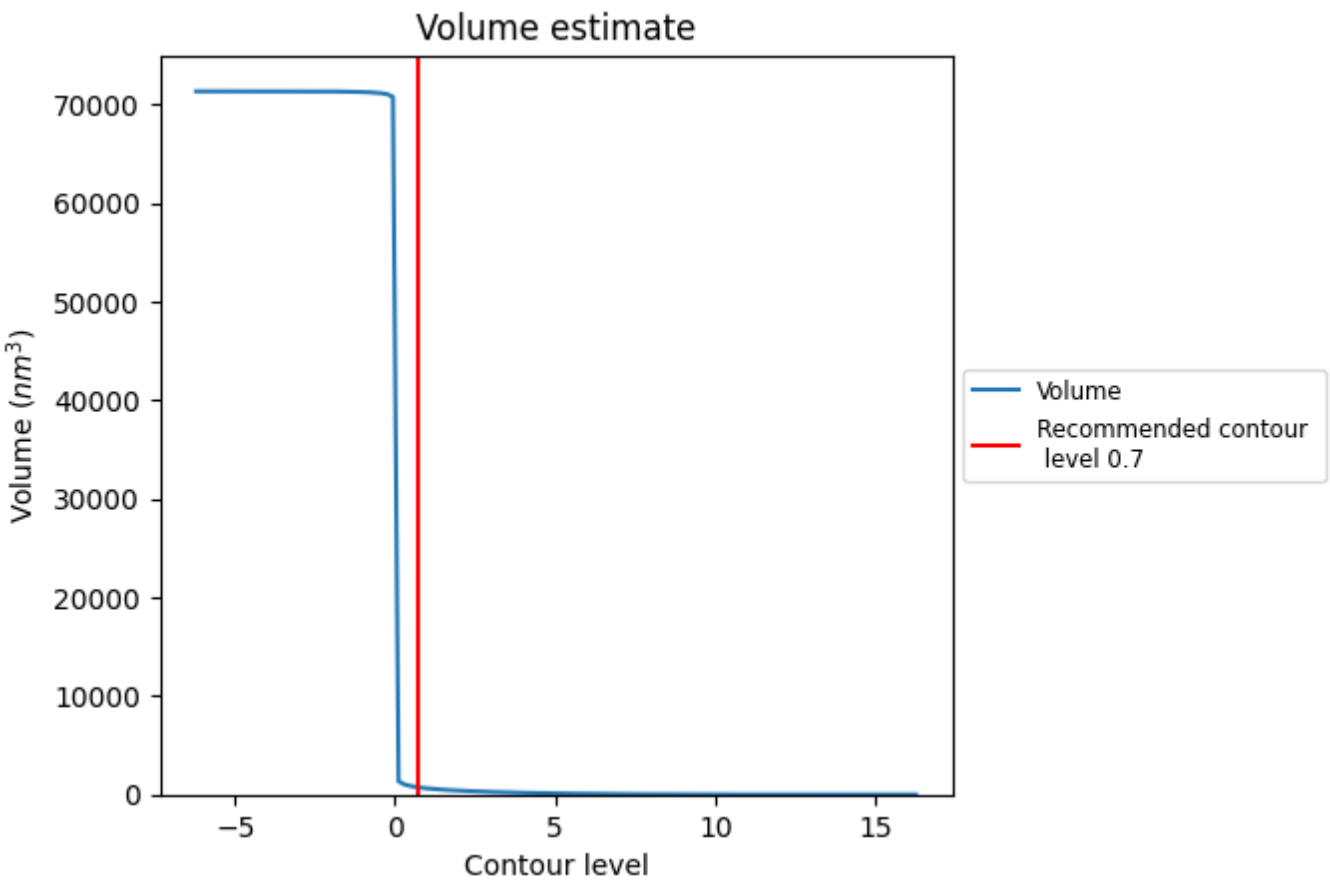
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution (i)



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

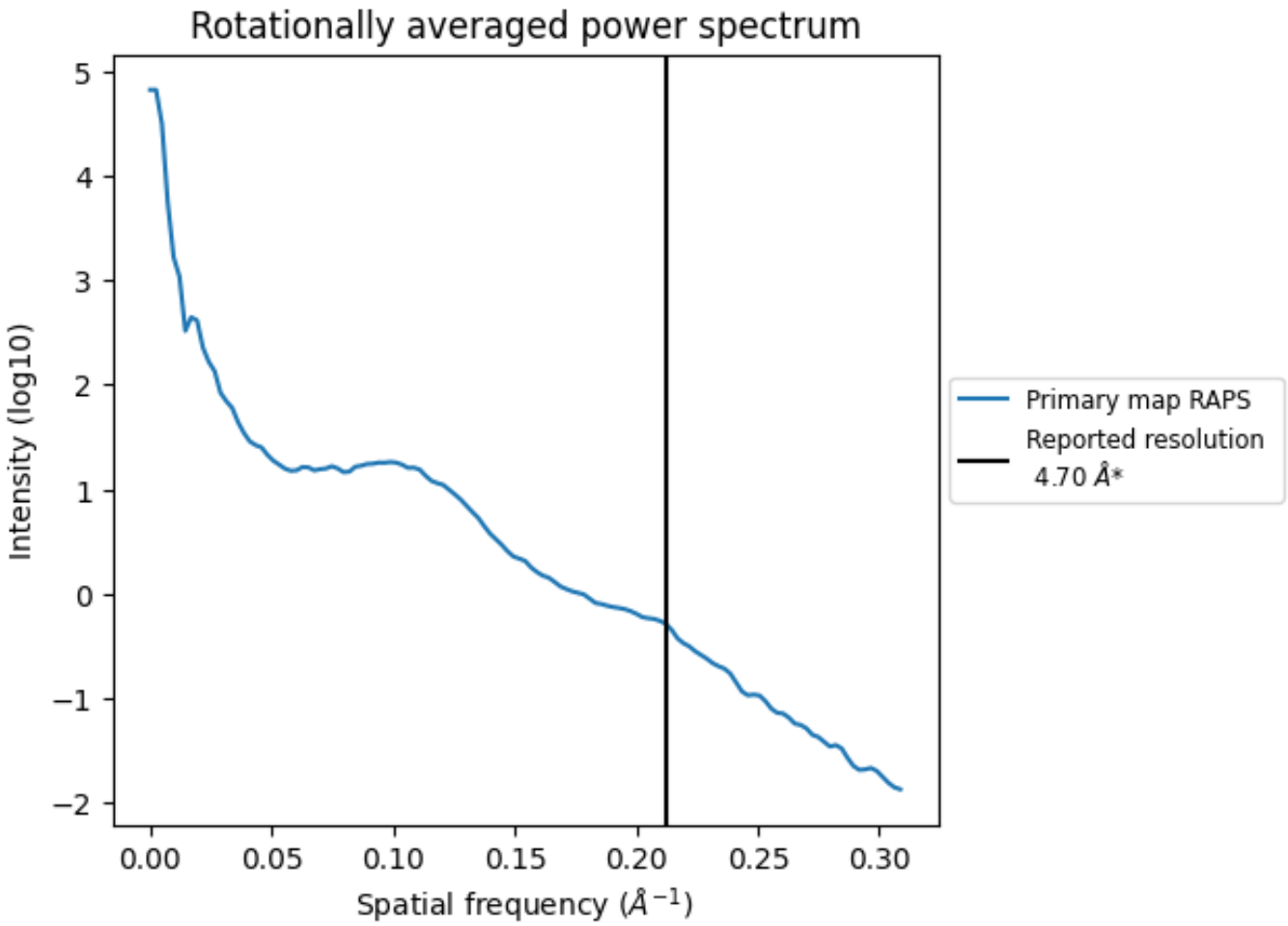
7.2 Volume estimate (i)



The volume at the recommended contour level is 745 nm^3; this corresponds to an approximate mass of 673 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 0.213 Å^{-1}

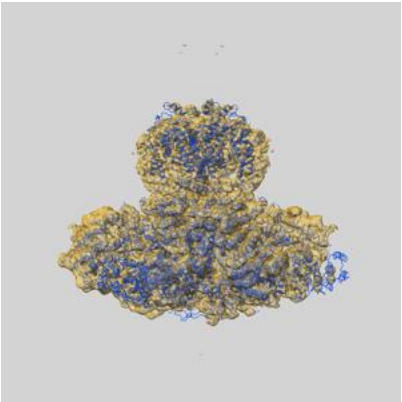
8 Fourier-Shell correlation (i)

This section was not generated. No FSC curve or half-maps provided.

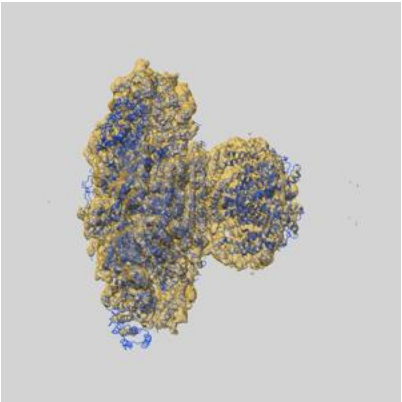
9 Map-model fit (i)

This section contains information regarding the fit between EMDB map EMD-6369 and PDB model 3JAV. Per-residue inclusion information can be found in section 3 on page 4.

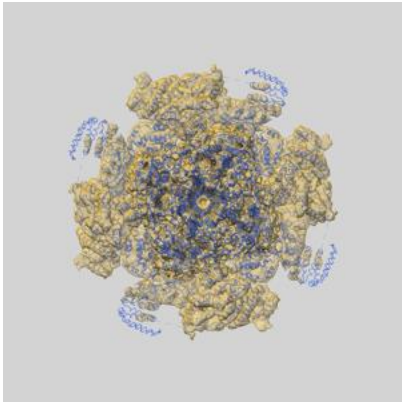
9.1 Map-model overlay (i)



X



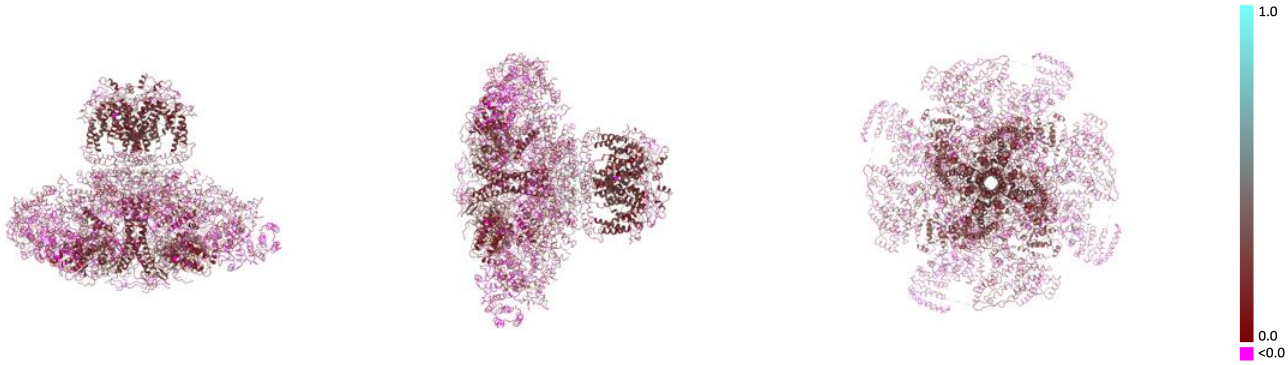
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.7 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.

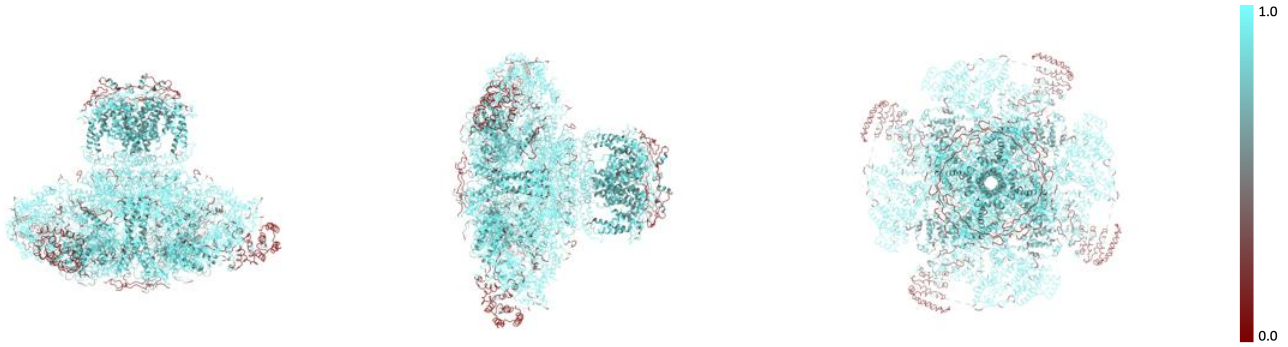
9.2 Q-score mapped to coordinate model (i)



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.

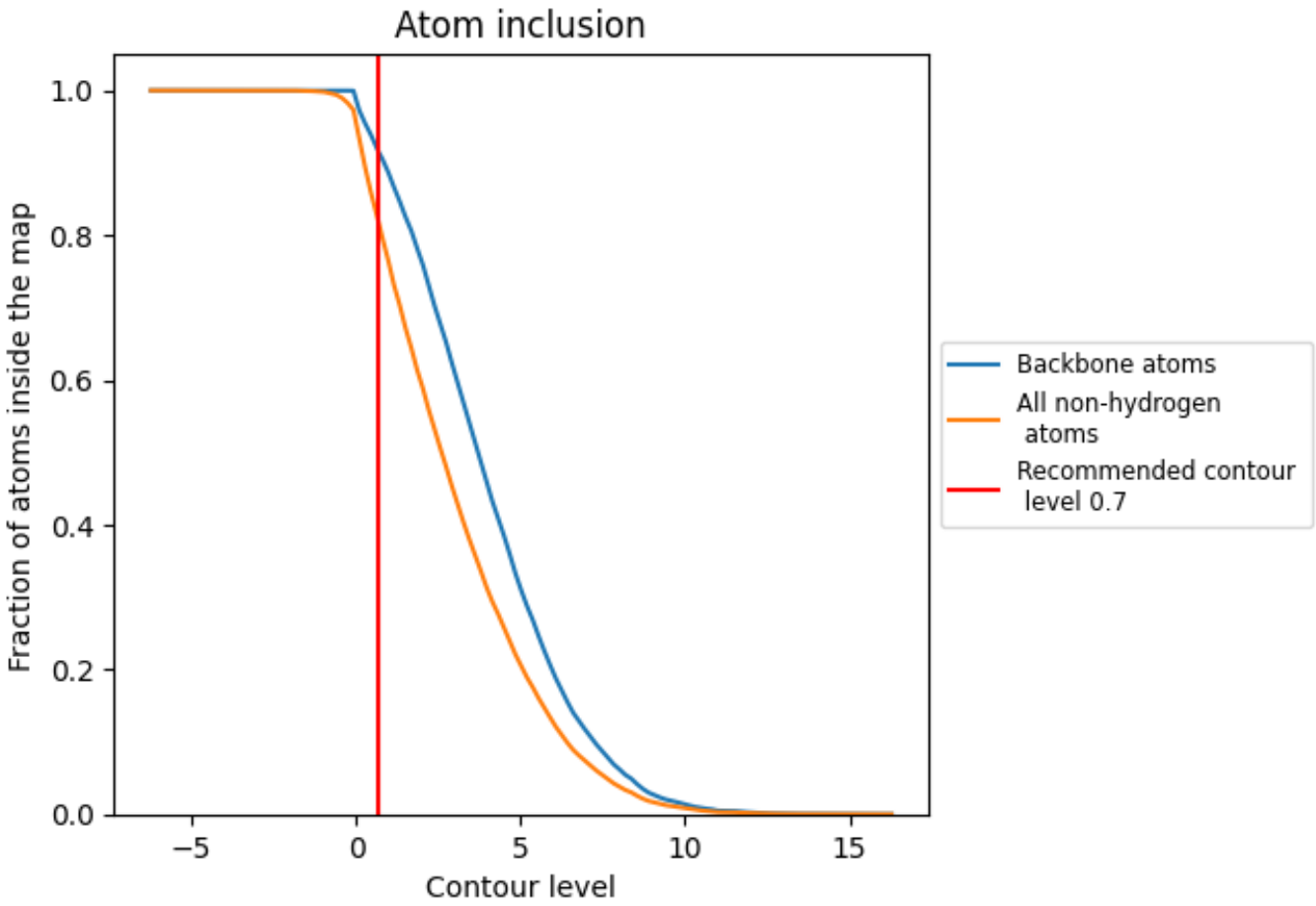
9.3 Atom inclusion mapped to coordinate model (i)



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 (0.7).

9.4 Atom inclusion (i)



At the recommended contour level, 91% of all backbone atoms, 82% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary (i)

The table lists the average atom inclusion at the recommended contour level (0.7) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.8175	0.2190
A	0.8165	0.2180
B	0.8185	0.2190
C	0.8168	0.2180
D	0.8181	0.2190