Full wwPDB EM Validation Report ⓘ

Nov 19, 2022 – 08:28 pm GMT

PDB ID	:	6G2I
EMDB ID	:	EMD-4344
Title	:	Filament of acetyl-CoA carboxylase and BRCT domains of BRCA1 (ACC-BRCT) at 5.9 A resolution
Authors	:	Hunkeler, M.; Hagmann, A.; Stuttfeld, E.; Chami, M.; Stahlberg, H.; Maier, T.
Deposited on	:	2018-03-23
Resolution	:	5.90 Å(reported)

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

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

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

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

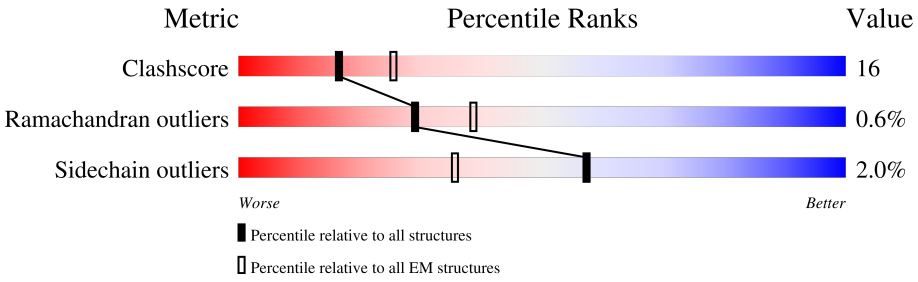
EMDB validation analysis	:	0.0.1.dev43
Mogul	:	1.8.4, CSD as541be (2020)
MolProbity	:	4.02b-467
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ	:	1.9.9
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation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

1 Overall quality at a glance

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

The reported resolution of this entry is 5.90 Å.

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



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

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for >=3, 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions <=5% The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion < 40%). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A	2346	65% 58% 28% • 11%
1	B	2346	65% 58% 28% • 11%
1	C	2346	45% 54% 32% • 11%
1	D	2346	27% 48% 35% • • 11%
1	E	2346	27% 50% 36% • 11%
1	F	2346	45% 56% 30% • 11%
1	G	2346	31% 23% 9% 68%
1	J	2346	56% 41% 14% • 44%

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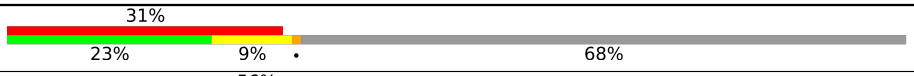
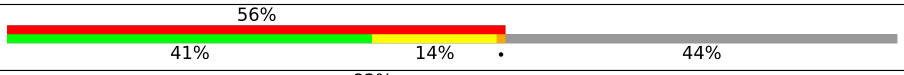
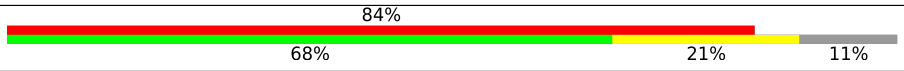
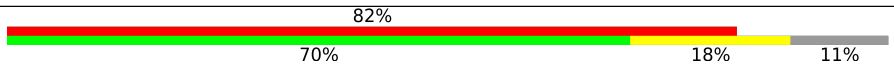
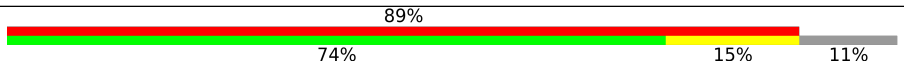
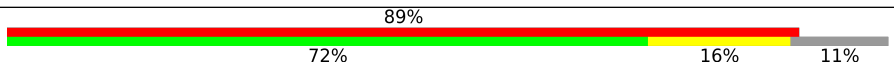
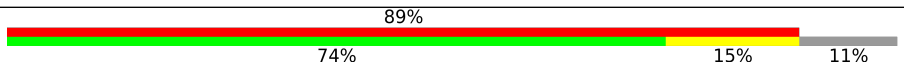
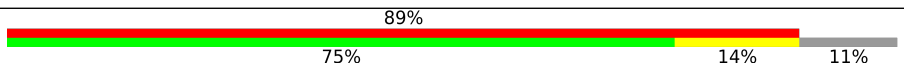
Mol	Chain	Length	Quality of chain
1	Q	2346	
1	R	2346	
2	H	240	
2	K	240	
2	M	240	
2	O	240	
2	S	240	
2	U	240	
2	W	240	
2	Y	240	

2 Entry composition (i)

There are 2 unique types of molecules in this entry. The entry contains 288810 atoms, of which 143374 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 Acetyl-CoA carboxylase 1.

Mol	Chain	Residues	Atoms							AltConf	Trace
1	D	2080	Total	C	H	N	O	P	S	0	0
			32758	10493	16276	2855	3033	1	100		
1	E	2080	Total	C	H	N	O	P	S	0	0
			32758	10493	16276	2855	3033	1	100		
1	C	2080	Total	C	H	N	O	P	S	0	0
			32757	10493	16275	2855	3033	1	100		
1	F	2080	Total	C	H	N	O	P	S	0	0
			32757	10493	16275	2855	3033	1	100		
1	B	2080	Total	C	H	N	O	P	S	0	0
			32758	10493	16276	2855	3033	1	100		
1	A	2080	Total	C	H	N	O	P	S	0	0
			32758	10493	16276	2855	3033	1	100		
1	G	757	Total	C	H	N	O	S		0	0
			12055	3855	5997	1050	1124	29			
1	Q	757	Total	C	H	N	O	S		0	0
			12055	3855	5997	1050	1124	29			
1	J	1323	Total	C	H	N	O	P	S	0	0
			20703	6638	10279	1805	1909	1	71		
1	R	1323	Total	C	H	N	O	P	S	0	0
			20703	6638	10279	1805	1909	1	71		

- Molecule 2 is a protein called Breast cancer type 1 susceptibility protein.

Mol	Chain	Residues	Atoms						AltConf	Trace
2	H	214	Total	C	H	N	O	S	0	0
			3347	1084	1648	289	312	14		
2	K	214	Total	C	H	N	O	S	0	0
			3340	1083	1644	286	313	14		
2	M	214	Total	C	H	N	O	S	0	0
			3347	1084	1648	289	312	14		
2	O	214	Total	C	H	N	O	S	0	0
			3340	1083	1644	286	313	14		
2	S	214	Total	C	H	N	O	S	0	0
			3347	1084	1648	289	312	14		

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Mol	Chain	Residues	Atoms						AltConf	Trace
2	U	214	Total	C	H	N	O	S	0	0
			3340	1083	1644	286	313	14		
2	Y	214	Total	C	H	N	O	S	0	0
			3347	1084	1648	289	312	14		
2	W	214	Total	C	H	N	O	S	0	0
			3340	1083	1644	286	313	14		

There are 208 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
H	1620	MET	-	initiating methionine	UNP P38398
H	1621	LYS	-	expression tag	UNP P38398
H	1622	HIS	-	expression tag	UNP P38398
H	1623	HIS	-	expression tag	UNP P38398
H	1624	HIS	-	expression tag	UNP P38398
H	1625	HIS	-	expression tag	UNP P38398
H	1626	HIS	-	expression tag	UNP P38398
H	1627	HIS	-	expression tag	UNP P38398
H	1628	PRO	-	expression tag	UNP P38398
H	1629	MET	-	expression tag	UNP P38398
H	1630	THR	-	expression tag	UNP P38398
H	1631	SER	-	expression tag	UNP P38398
H	1632	LEU	-	expression tag	UNP P38398
H	1633	TYR	-	expression tag	UNP P38398
H	1634	LYS	-	expression tag	UNP P38398
H	1635	LYS	-	expression tag	UNP P38398
H	1636	ALA	-	expression tag	UNP P38398
H	1637	GLY	-	expression tag	UNP P38398
H	1638	LEU	-	expression tag	UNP P38398
H	1639	GLU	-	expression tag	UNP P38398
H	1640	ASN	-	expression tag	UNP P38398
H	1641	LEU	-	expression tag	UNP P38398
H	1642	TYR	-	expression tag	UNP P38398
H	1643	PHE	-	expression tag	UNP P38398
H	1644	GLN	-	expression tag	UNP P38398
H	1645	GLY	-	expression tag	UNP P38398
K	1620	MET	-	initiating methionine	UNP P38398
K	1621	LYS	-	expression tag	UNP P38398
K	1622	HIS	-	expression tag	UNP P38398
K	1623	HIS	-	expression tag	UNP P38398
K	1624	HIS	-	expression tag	UNP P38398
K	1625	HIS	-	expression tag	UNP P38398

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Chain	Residue	Modelled	Actual	Comment	Reference
K	1626	HIS	-	expression tag	UNP P38398
K	1627	HIS	-	expression tag	UNP P38398
K	1628	PRO	-	expression tag	UNP P38398
K	1629	MET	-	expression tag	UNP P38398
K	1630	THR	-	expression tag	UNP P38398
K	1631	SER	-	expression tag	UNP P38398
K	1632	LEU	-	expression tag	UNP P38398
K	1633	TYR	-	expression tag	UNP P38398
K	1634	LYS	-	expression tag	UNP P38398
K	1635	LYS	-	expression tag	UNP P38398
K	1636	ALA	-	expression tag	UNP P38398
K	1637	GLY	-	expression tag	UNP P38398
K	1638	LEU	-	expression tag	UNP P38398
K	1639	GLU	-	expression tag	UNP P38398
K	1640	ASN	-	expression tag	UNP P38398
K	1641	LEU	-	expression tag	UNP P38398
K	1642	TYR	-	expression tag	UNP P38398
K	1643	PHE	-	expression tag	UNP P38398
K	1644	GLN	-	expression tag	UNP P38398
K	1645	GLY	-	expression tag	UNP P38398
M	1620	MET	-	initiating methionine	UNP P38398
M	1621	LYS	-	expression tag	UNP P38398
M	1622	HIS	-	expression tag	UNP P38398
M	1623	HIS	-	expression tag	UNP P38398
M	1624	HIS	-	expression tag	UNP P38398
M	1625	HIS	-	expression tag	UNP P38398
M	1626	HIS	-	expression tag	UNP P38398
M	1627	HIS	-	expression tag	UNP P38398
M	1628	PRO	-	expression tag	UNP P38398
M	1629	MET	-	expression tag	UNP P38398
M	1630	THR	-	expression tag	UNP P38398
M	1631	SER	-	expression tag	UNP P38398
M	1632	LEU	-	expression tag	UNP P38398
M	1633	TYR	-	expression tag	UNP P38398
M	1634	LYS	-	expression tag	UNP P38398
M	1635	LYS	-	expression tag	UNP P38398
M	1636	ALA	-	expression tag	UNP P38398
M	1637	GLY	-	expression tag	UNP P38398
M	1638	LEU	-	expression tag	UNP P38398
M	1639	GLU	-	expression tag	UNP P38398
M	1640	ASN	-	expression tag	UNP P38398
M	1641	LEU	-	expression tag	UNP P38398

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Chain	Residue	Modelled	Actual	Comment	Reference
M	1642	TYR	-	expression tag	UNP P38398
M	1643	PHE	-	expression tag	UNP P38398
M	1644	GLN	-	expression tag	UNP P38398
M	1645	GLY	-	expression tag	UNP P38398
O	1620	MET	-	initiating methionine	UNP P38398
O	1621	LYS	-	expression tag	UNP P38398
O	1622	HIS	-	expression tag	UNP P38398
O	1623	HIS	-	expression tag	UNP P38398
O	1624	HIS	-	expression tag	UNP P38398
O	1625	HIS	-	expression tag	UNP P38398
O	1626	HIS	-	expression tag	UNP P38398
O	1627	HIS	-	expression tag	UNP P38398
O	1628	PRO	-	expression tag	UNP P38398
O	1629	MET	-	expression tag	UNP P38398
O	1630	THR	-	expression tag	UNP P38398
O	1631	SER	-	expression tag	UNP P38398
O	1632	LEU	-	expression tag	UNP P38398
O	1633	TYR	-	expression tag	UNP P38398
O	1634	LYS	-	expression tag	UNP P38398
O	1635	LYS	-	expression tag	UNP P38398
O	1636	ALA	-	expression tag	UNP P38398
O	1637	GLY	-	expression tag	UNP P38398
O	1638	LEU	-	expression tag	UNP P38398
O	1639	GLU	-	expression tag	UNP P38398
O	1640	ASN	-	expression tag	UNP P38398
O	1641	LEU	-	expression tag	UNP P38398
O	1642	TYR	-	expression tag	UNP P38398
O	1643	PHE	-	expression tag	UNP P38398
O	1644	GLN	-	expression tag	UNP P38398
O	1645	GLY	-	expression tag	UNP P38398
S	1620	MET	-	initiating methionine	UNP P38398
S	1621	LYS	-	expression tag	UNP P38398
S	1622	HIS	-	expression tag	UNP P38398
S	1623	HIS	-	expression tag	UNP P38398
S	1624	HIS	-	expression tag	UNP P38398
S	1625	HIS	-	expression tag	UNP P38398
S	1626	HIS	-	expression tag	UNP P38398
S	1627	HIS	-	expression tag	UNP P38398
S	1628	PRO	-	expression tag	UNP P38398
S	1629	MET	-	expression tag	UNP P38398
S	1630	THR	-	expression tag	UNP P38398
S	1631	SER	-	expression tag	UNP P38398

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Chain	Residue	Modelled	Actual	Comment	Reference
S	1632	LEU	-	expression tag	UNP P38398
S	1633	TYR	-	expression tag	UNP P38398
S	1634	LYS	-	expression tag	UNP P38398
S	1635	LYS	-	expression tag	UNP P38398
S	1636	ALA	-	expression tag	UNP P38398
S	1637	GLY	-	expression tag	UNP P38398
S	1638	LEU	-	expression tag	UNP P38398
S	1639	GLU	-	expression tag	UNP P38398
S	1640	ASN	-	expression tag	UNP P38398
S	1641	LEU	-	expression tag	UNP P38398
S	1642	TYR	-	expression tag	UNP P38398
S	1643	PHE	-	expression tag	UNP P38398
S	1644	GLN	-	expression tag	UNP P38398
S	1645	GLY	-	expression tag	UNP P38398
U	1620	MET	-	initiating methionine	UNP P38398
U	1621	LYS	-	expression tag	UNP P38398
U	1622	HIS	-	expression tag	UNP P38398
U	1623	HIS	-	expression tag	UNP P38398
U	1624	HIS	-	expression tag	UNP P38398
U	1625	HIS	-	expression tag	UNP P38398
U	1626	HIS	-	expression tag	UNP P38398
U	1627	HIS	-	expression tag	UNP P38398
U	1628	PRO	-	expression tag	UNP P38398
U	1629	MET	-	expression tag	UNP P38398
U	1630	THR	-	expression tag	UNP P38398
U	1631	SER	-	expression tag	UNP P38398
U	1632	LEU	-	expression tag	UNP P38398
U	1633	TYR	-	expression tag	UNP P38398
U	1634	LYS	-	expression tag	UNP P38398
U	1635	LYS	-	expression tag	UNP P38398
U	1636	ALA	-	expression tag	UNP P38398
U	1637	GLY	-	expression tag	UNP P38398
U	1638	LEU	-	expression tag	UNP P38398
U	1639	GLU	-	expression tag	UNP P38398
U	1640	ASN	-	expression tag	UNP P38398
U	1641	LEU	-	expression tag	UNP P38398
U	1642	TYR	-	expression tag	UNP P38398
U	1643	PHE	-	expression tag	UNP P38398
U	1644	GLN	-	expression tag	UNP P38398
U	1645	GLY	-	expression tag	UNP P38398
Y	1620	MET	-	initiating methionine	UNP P38398
Y	1621	LYS	-	expression tag	UNP P38398

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Chain	Residue	Modelled	Actual	Comment	Reference
Y	1622	HIS	-	expression tag	UNP P38398
Y	1623	HIS	-	expression tag	UNP P38398
Y	1624	HIS	-	expression tag	UNP P38398
Y	1625	HIS	-	expression tag	UNP P38398
Y	1626	HIS	-	expression tag	UNP P38398
Y	1627	HIS	-	expression tag	UNP P38398
Y	1628	PRO	-	expression tag	UNP P38398
Y	1629	MET	-	expression tag	UNP P38398
Y	1630	THR	-	expression tag	UNP P38398
Y	1631	SER	-	expression tag	UNP P38398
Y	1632	LEU	-	expression tag	UNP P38398
Y	1633	TYR	-	expression tag	UNP P38398
Y	1634	LYS	-	expression tag	UNP P38398
Y	1635	LYS	-	expression tag	UNP P38398
Y	1636	ALA	-	expression tag	UNP P38398
Y	1637	GLY	-	expression tag	UNP P38398
Y	1638	LEU	-	expression tag	UNP P38398
Y	1639	GLU	-	expression tag	UNP P38398
Y	1640	ASN	-	expression tag	UNP P38398
Y	1641	LEU	-	expression tag	UNP P38398
Y	1642	TYR	-	expression tag	UNP P38398
Y	1643	PHE	-	expression tag	UNP P38398
Y	1644	GLN	-	expression tag	UNP P38398
Y	1645	GLY	-	expression tag	UNP P38398
W	1620	MET	-	initiating methionine	UNP P38398
W	1621	LYS	-	expression tag	UNP P38398
W	1622	HIS	-	expression tag	UNP P38398
W	1623	HIS	-	expression tag	UNP P38398
W	1624	HIS	-	expression tag	UNP P38398
W	1625	HIS	-	expression tag	UNP P38398
W	1626	HIS	-	expression tag	UNP P38398
W	1627	HIS	-	expression tag	UNP P38398
W	1628	PRO	-	expression tag	UNP P38398
W	1629	MET	-	expression tag	UNP P38398
W	1630	THR	-	expression tag	UNP P38398
W	1631	SER	-	expression tag	UNP P38398
W	1632	LEU	-	expression tag	UNP P38398
W	1633	TYR	-	expression tag	UNP P38398
W	1634	LYS	-	expression tag	UNP P38398
W	1635	LYS	-	expression tag	UNP P38398
W	1636	ALA	-	expression tag	UNP P38398
W	1637	GLY	-	expression tag	UNP P38398

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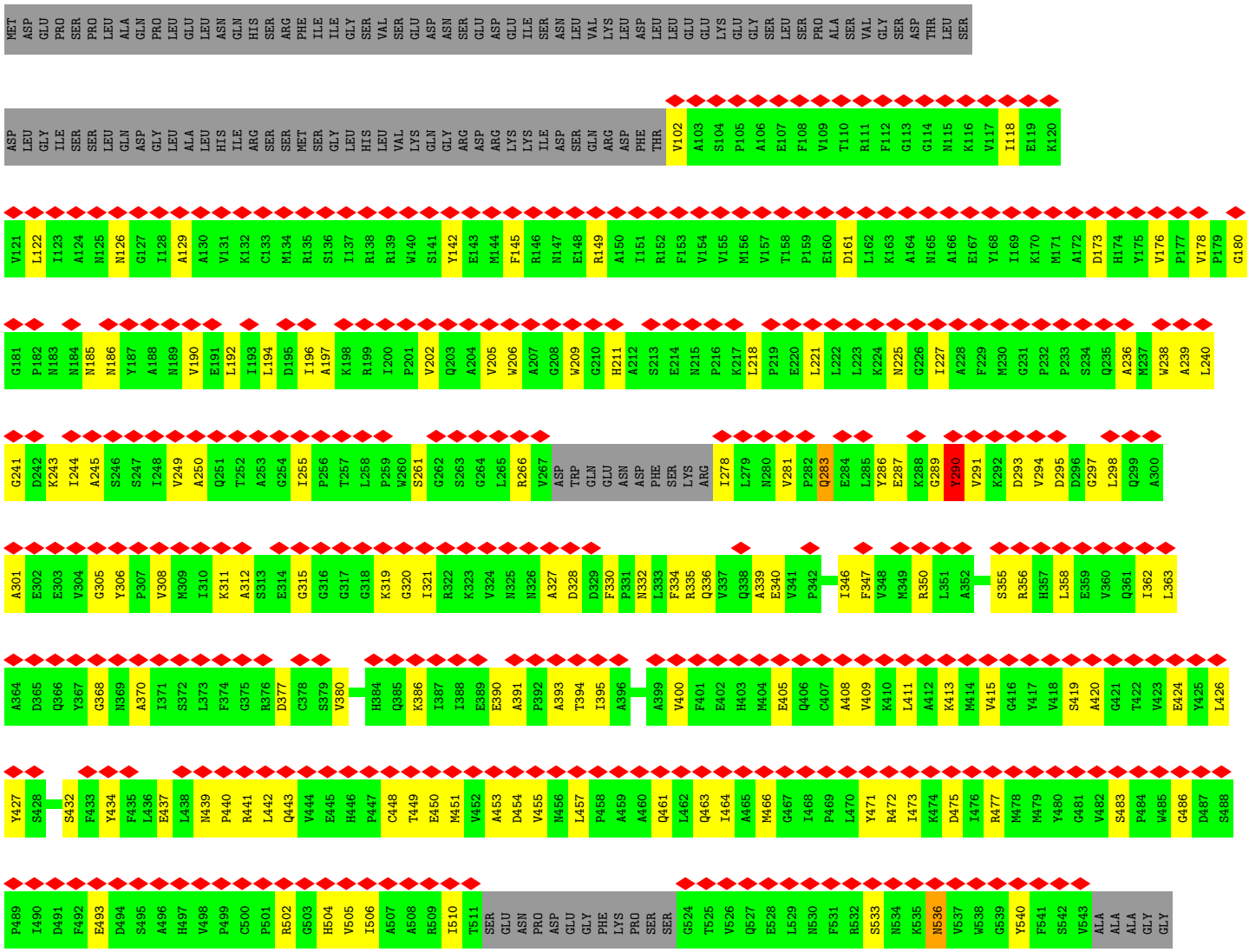
Chain	Residue	Modelled	Actual	Comment	Reference
W	1638	LEU	-	expression tag	UNP P38398
W	1639	GLU	-	expression tag	UNP P38398
W	1640	ASN	-	expression tag	UNP P38398
W	1641	LEU	-	expression tag	UNP P38398
W	1642	TYR	-	expression tag	UNP P38398
W	1643	PHE	-	expression tag	UNP P38398
W	1644	GLN	-	expression tag	UNP P38398
W	1645	GLY	-	expression tag	UNP P38398

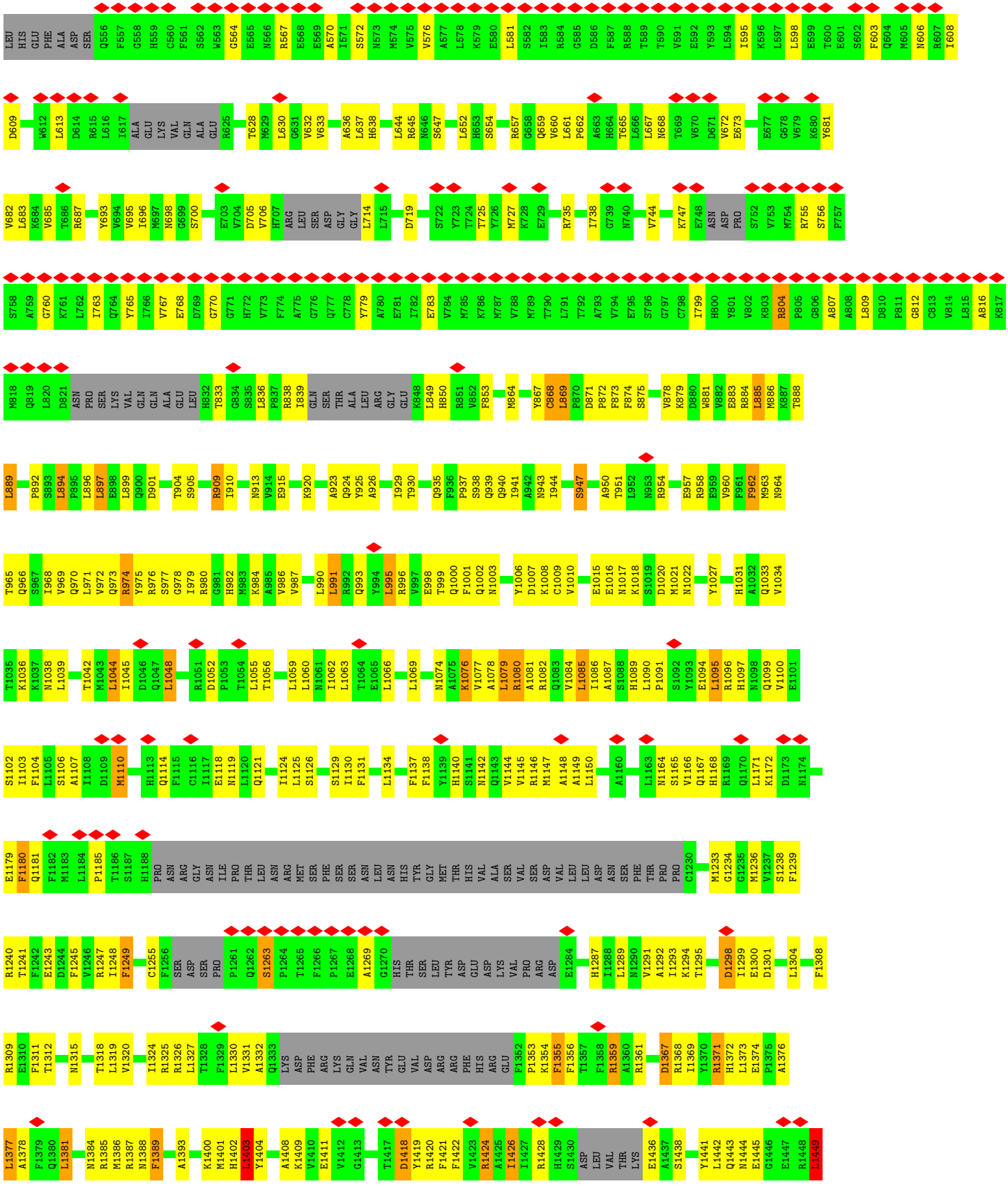
3 Residue-property plots (i)

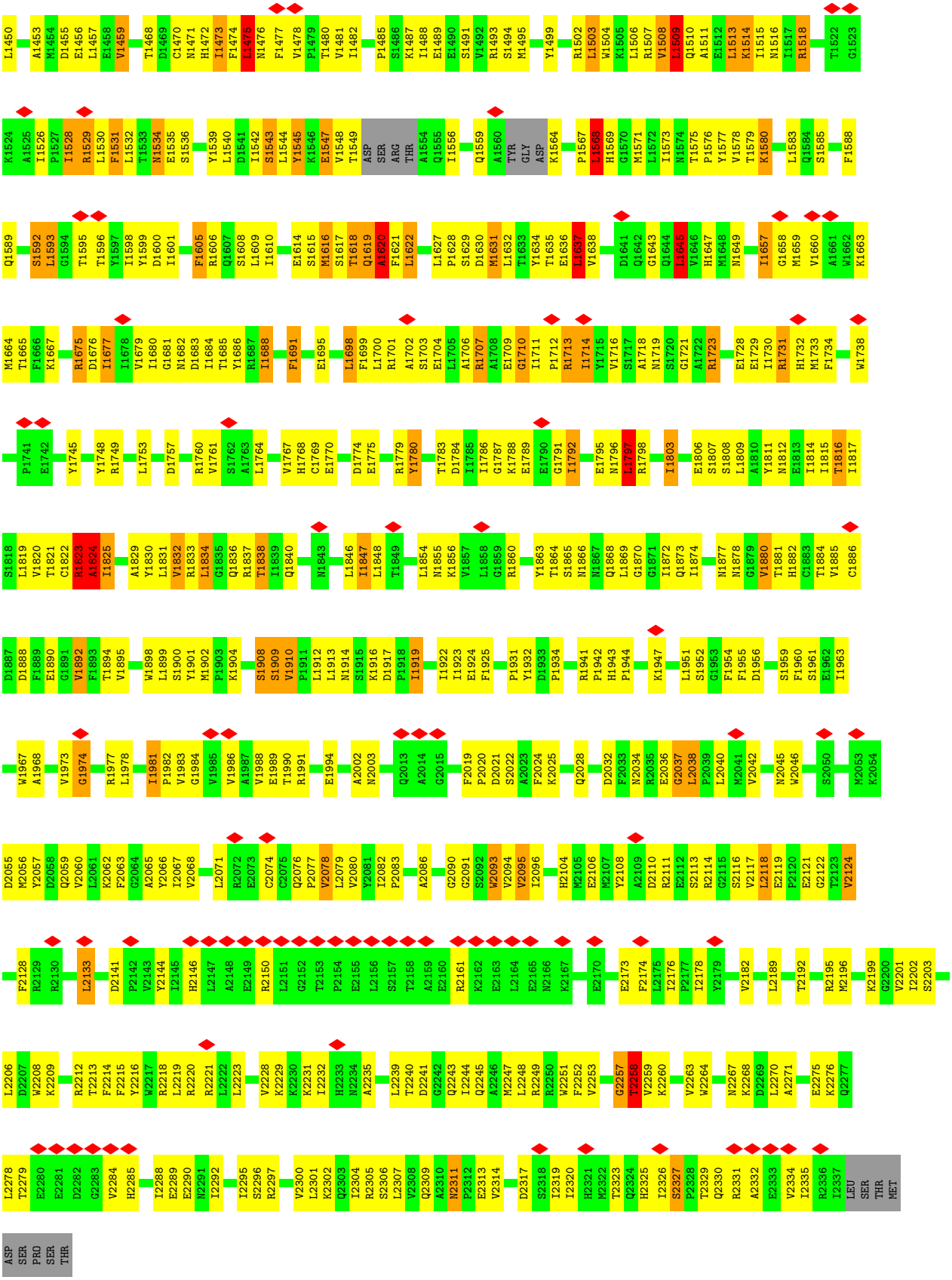
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion 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: Acetyl-CoA carboxylase 1

Chain D:



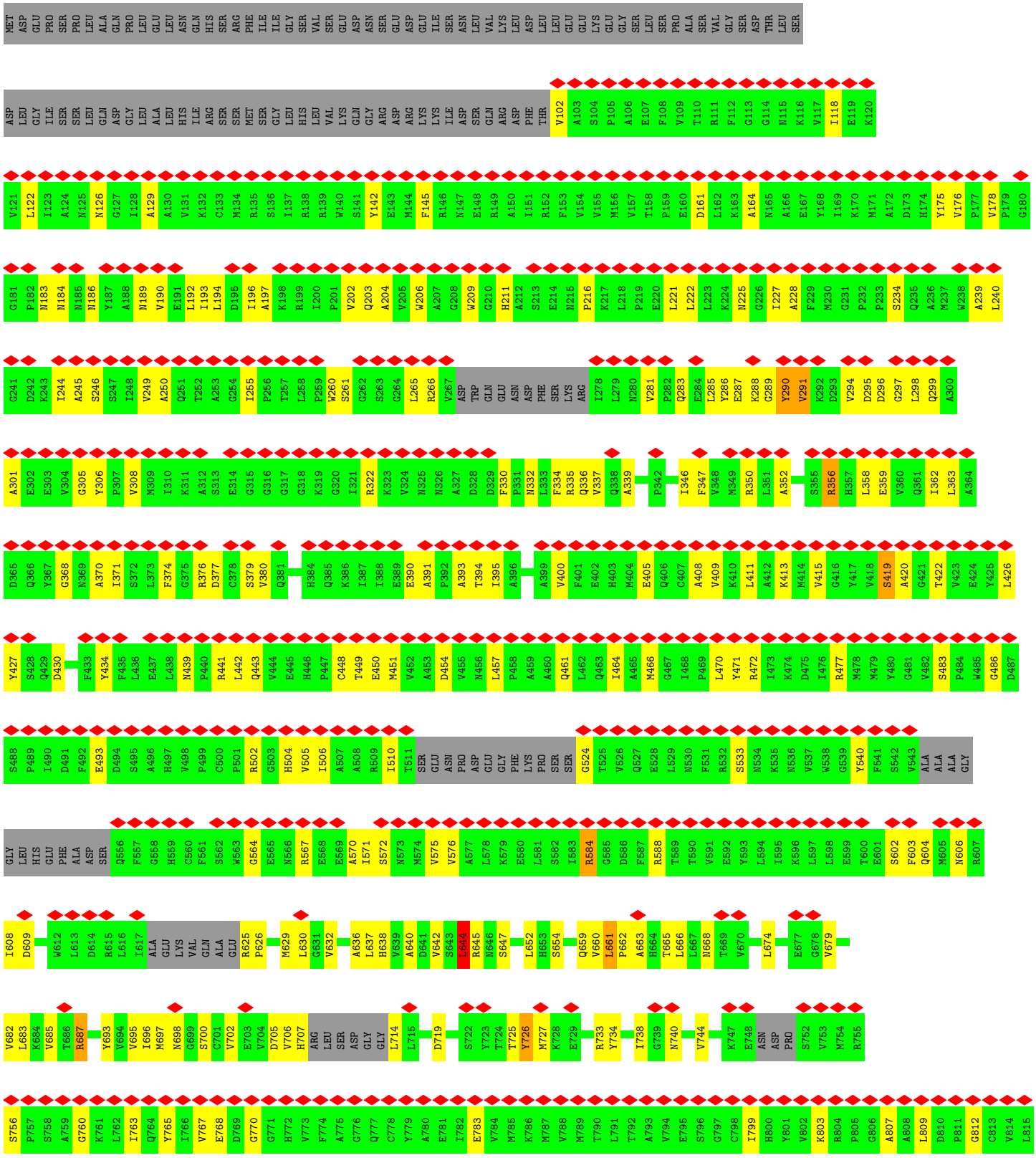




• Molecule 1: Acetyl-CoA carboxylase 1

Chain E:


27%
50%
36%
11%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ASP LEU GLY ILE SER SER LEU GLN GLY ASP GLY LEU ALA LEU HIS ILE ARG SER SER MET SER GLY LEU HIS LEU VAL LYS GLN GLY ARG ASP ARG LYS LYS ILE ASP SER GLN ARG ASP PHE THR V102 A103 S104 P105 A106 E107 F108 V109 T110 R111 F112 G113 G114 N115 K116 V117 I118 E119 K120
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A301 E302 E303 V304 G305 Y306 P307 V308 M309 I310 K311 A312 S313 E314 G315 G316 G317 G318 K319 G320 I321 R322 K323 V324 N325 N326 A327 D328 D329 F330 P331 N332 L333 F334 R335 Q336 V337 Q338 A339 P342 I346 F347 V348 M349 R350 L351 A352 S355 R356 H357 L358 E359 V360 Q361 I362 L363 A364
D365 Q366 Y367 G368 N369 A370 I371 S372 L373 F374 G375 R376 D377 C378 S379 V380 Q381 H384 Q385 K386 I387 I388 E389 E390 A391 P392 A393 T394 I395 A396 A399 V400 F401 E402 H403 M404 E405 Q406 C407 A408 V409 K410 L411 A412 K413 M414 V415 G416 Y417 V418 S419 A420 G421 T422 V423 E424 Y425 L426
Y427 S428 Q429 D430 F433 Y434 F435 L436 E437 L438 N439 P440 R441 L442 Q443 V444 E445 H446 P447 C448 T449 E450 M451 V452 A453 D454 V455 N456 L457 P458 A459 A460 Q461 L462 Q463 I464 A465 M466 G467 I468 P469 L470 Y471 R472 I473 K474 D475 I476 R477 M478 M479 Y480 G481 V482 S483 P484 W485 G486 D487
S488 P489 I490 D491 F492 E493 D494 S495 A496 H497 V498 P499 C500 P501 R502 G503 H504 V505 I506 A507 A508 R509 I510 T511 SER GLU ASN PRO ASP GLU GLY PHE LYS PRO SER SER G524 T525 V526 Q527 E528 L529 N530 F531 R532 S533 N534 K535 N536 V537 W538 G539 Y540 F541 S542 V543 ALA ALA ALA GLY
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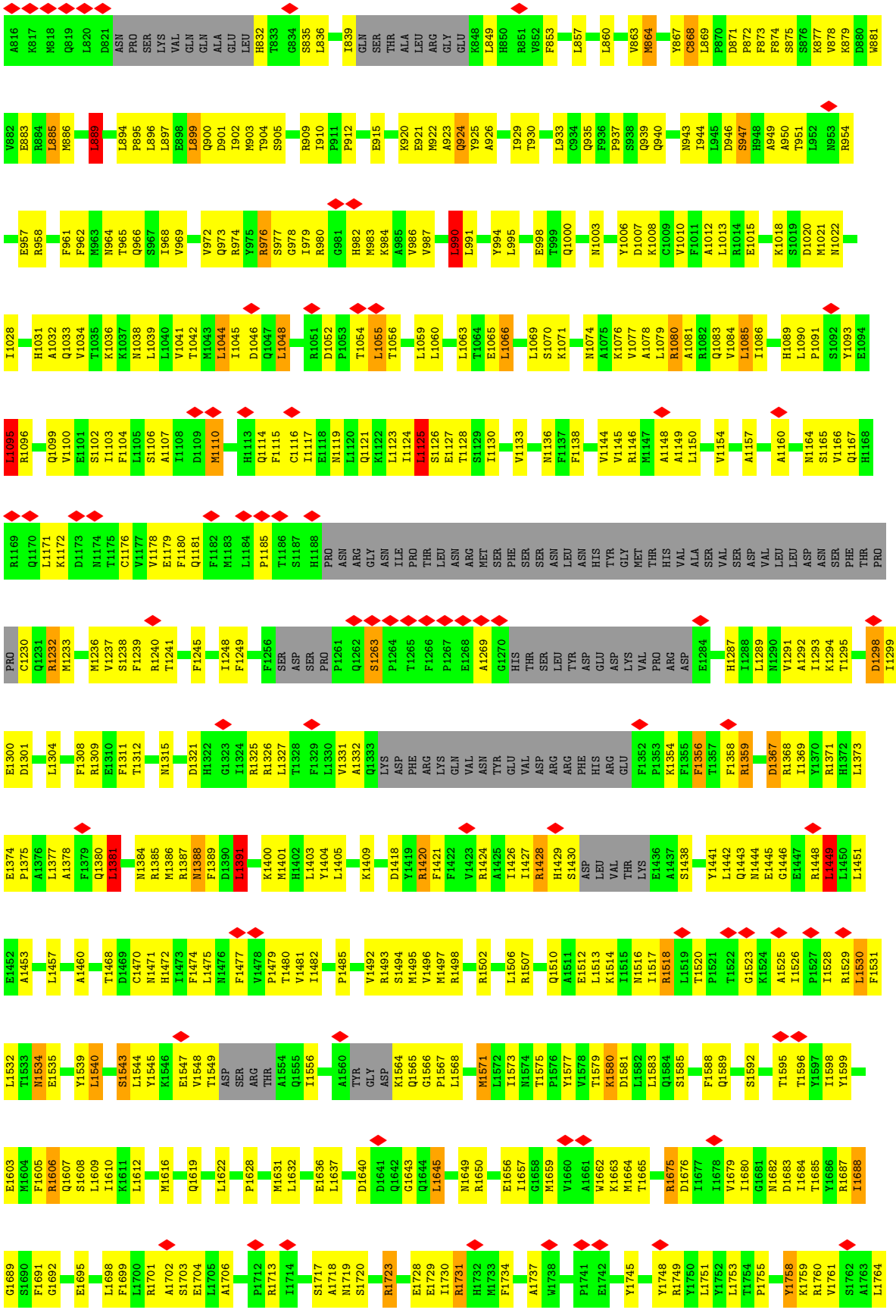
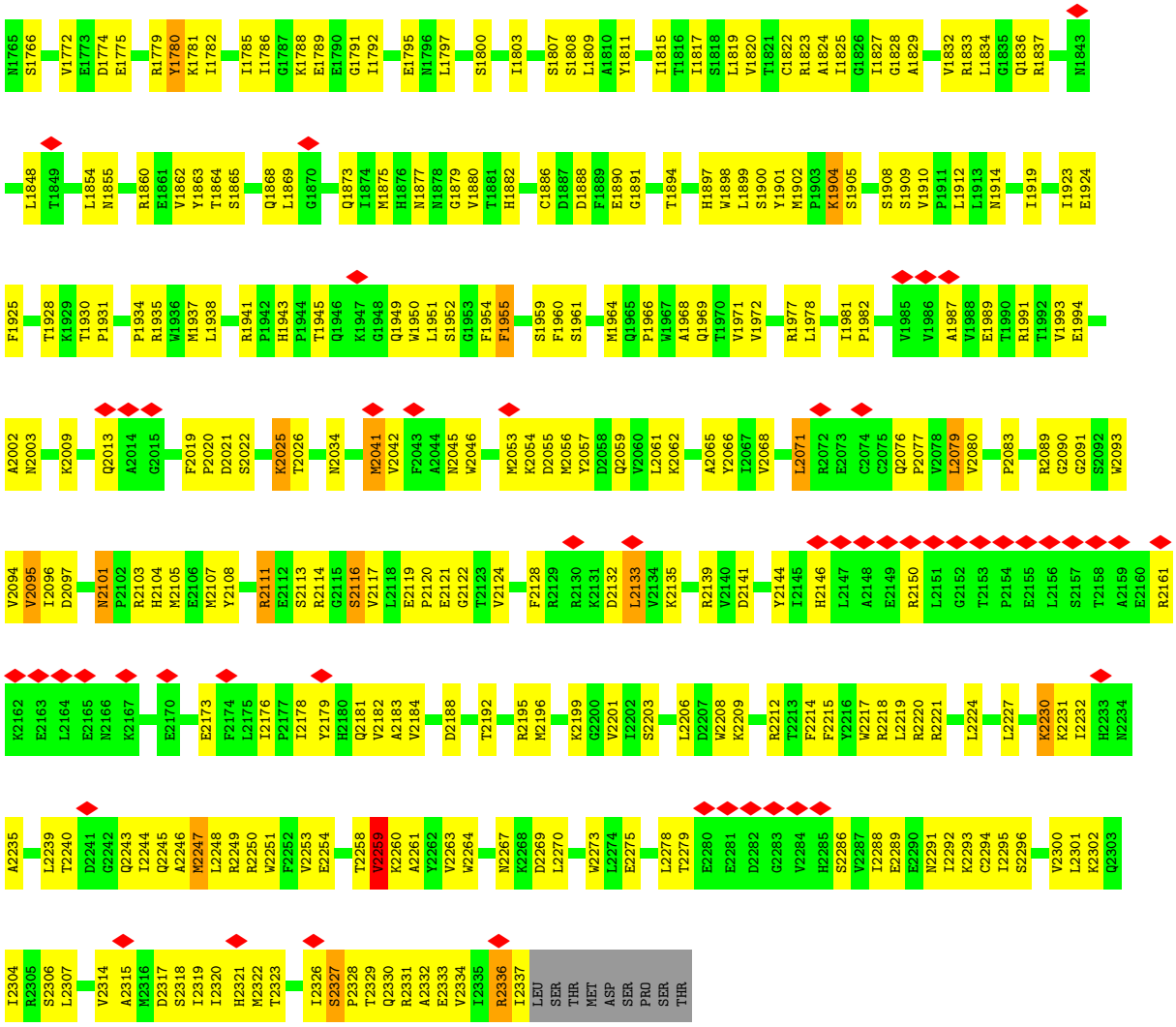
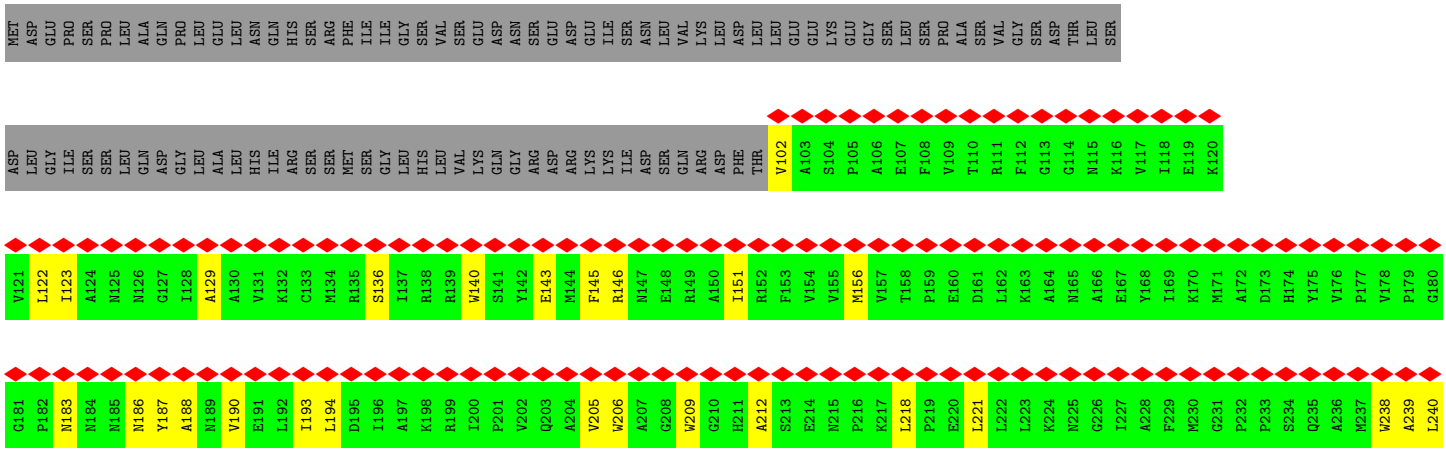
V682 L683 K684 V685 T686 R687 Y693 V694 V695 I696 M697 N698 G699 S700 C701 V702 E703 V704 D705 V706 H707 ARG LEU SER ASP GLY GLY L714 L715 D719 S722 Y723 T724 T725 Y726 M727 K728 E729 R733 Y734 I738 G739 N740 V744 K747 E748 ASN ASP PRO S752 V753 M754 R755
S756 P757 S758 A759 G760 K761 L762 I763 Q764 Y765 I766 V767 E768 D769 G770 G771 H772 V773 F774 A775 G776 Q777 C778 Y779 A780 E781 I782 E783 V784 M785 K786 M787 V788 M789 T790 L791 T792 A793 V794 E795 S796 G797 C798 I799 H800 Y801 V802 K803 R804 P805 G806 A807 A808 L809 D810 P811 G812 C813 V814 L815

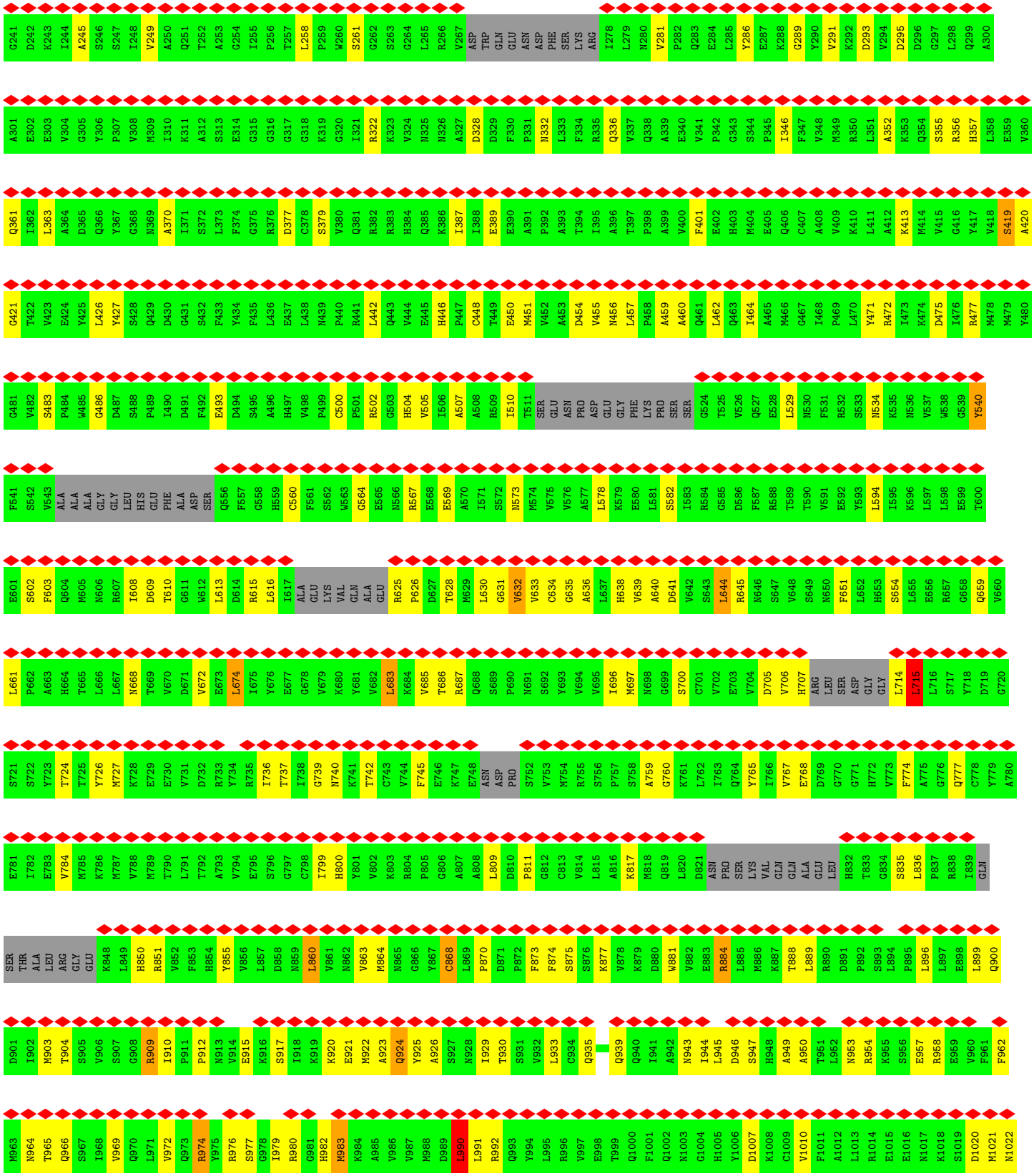




• Molecule 1: Acetyl-CoA carboxylase 1

Chain C:

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A301 E302 E303 V304 G305 Y306 P307 V308 M309 I310 K311 A312 S313 E314 G315 G316 G317 G318 K319 G320 I321 R322 K323 V324 N325 N326 A327 D328 D329 F330 P331 N332 L333 F334 R335 Q336 V337 Q338 A339 E340 V341 P342 G343 S344 P345 I346 F347 V348 M349 R350 L351 A352 K353 Q354 S355 R356 H357 L358 E359 V360
Q361 I362 L363 A364 D365 Q366 Y367 G368 N369 A370 I371 S372 L373 F374 G375 R376 D377 C378 S379 V380 Q381 R382 R383 H384 Q385 K386 I387 I388 E389 E390 A391 P392 A393 T394 I395 A396 T397 P398 A399 V400 F401 E402 H403 M404 E405 Q406 C407 A408 V409 K410 L411 A412 K413 M414 V415 G416 Y417 V418 S419 A420
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G481 V482 S483 P484 W485 G486 D487 S488 P489 I490 D491 F492 E493 D494 S495 A496 H497 V498 P499 C500 P501 R502 G503 H504 V505 I506 A507 A508 R509 I510 T511 SER GLU ASN PRO ASP GLU GLY PHE LYS PRO SER SER G524 T525 V526 Q527 E528 L529 N530 F531 R532 S533 N534 K535 N536 V537 W538 G539 Y540
F541 S542 V543 ALA ALA ALA GLY GLY LEU HIS GLU PHE ALA ASP SER Q556 F557 G558 H559 C560 F561 S562 W563 G564 E565 N566 R567 E568 E569 A570 I571 S572 N573 M574 V575 V576 A577 L578 K579 E580 L581 S582 I583 R584 G585 D586 F587 R588 T589 T590 V591 E592 Y593 L594 I595 K596 L597 L598 E599 T600
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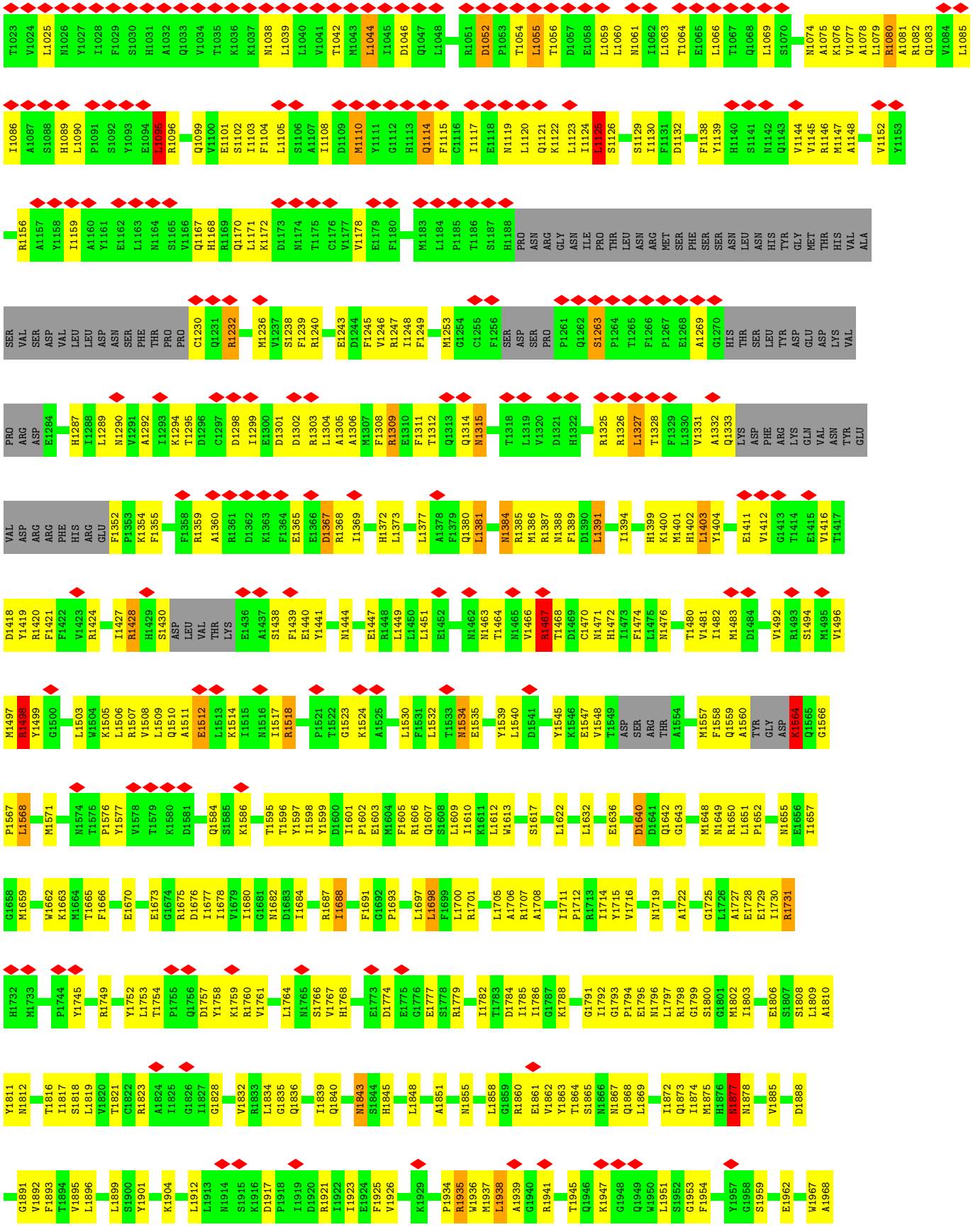
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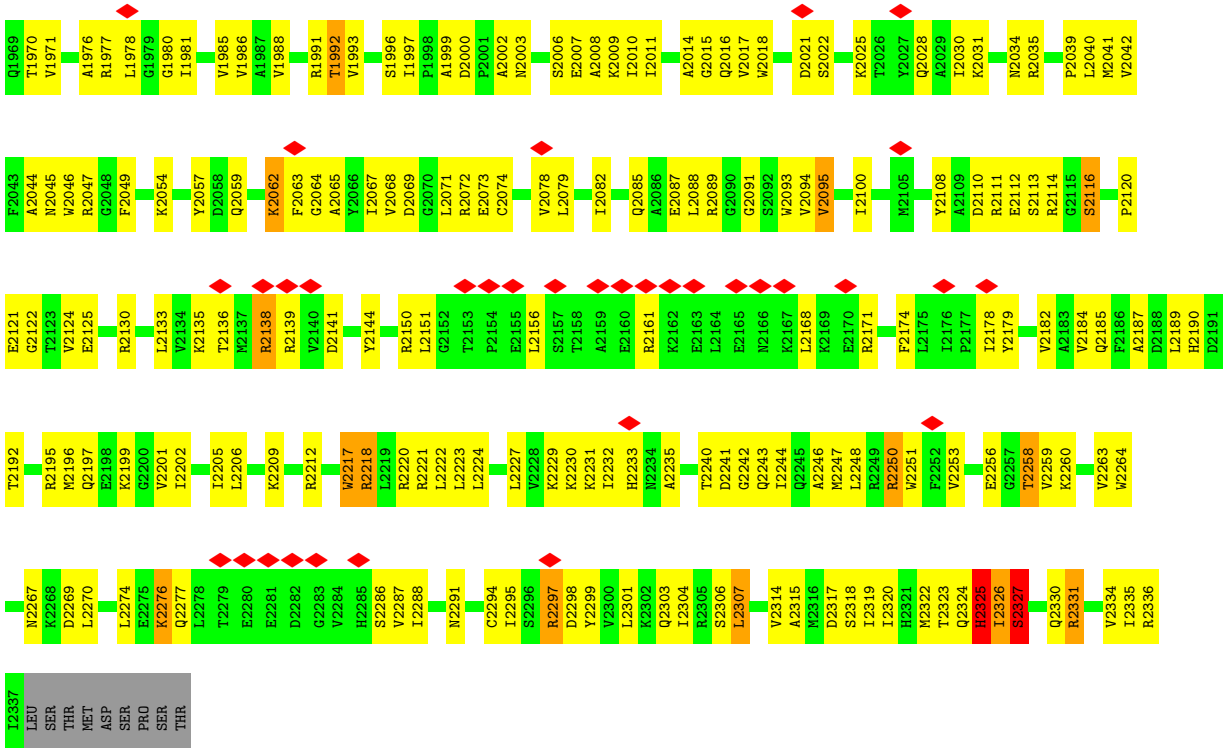
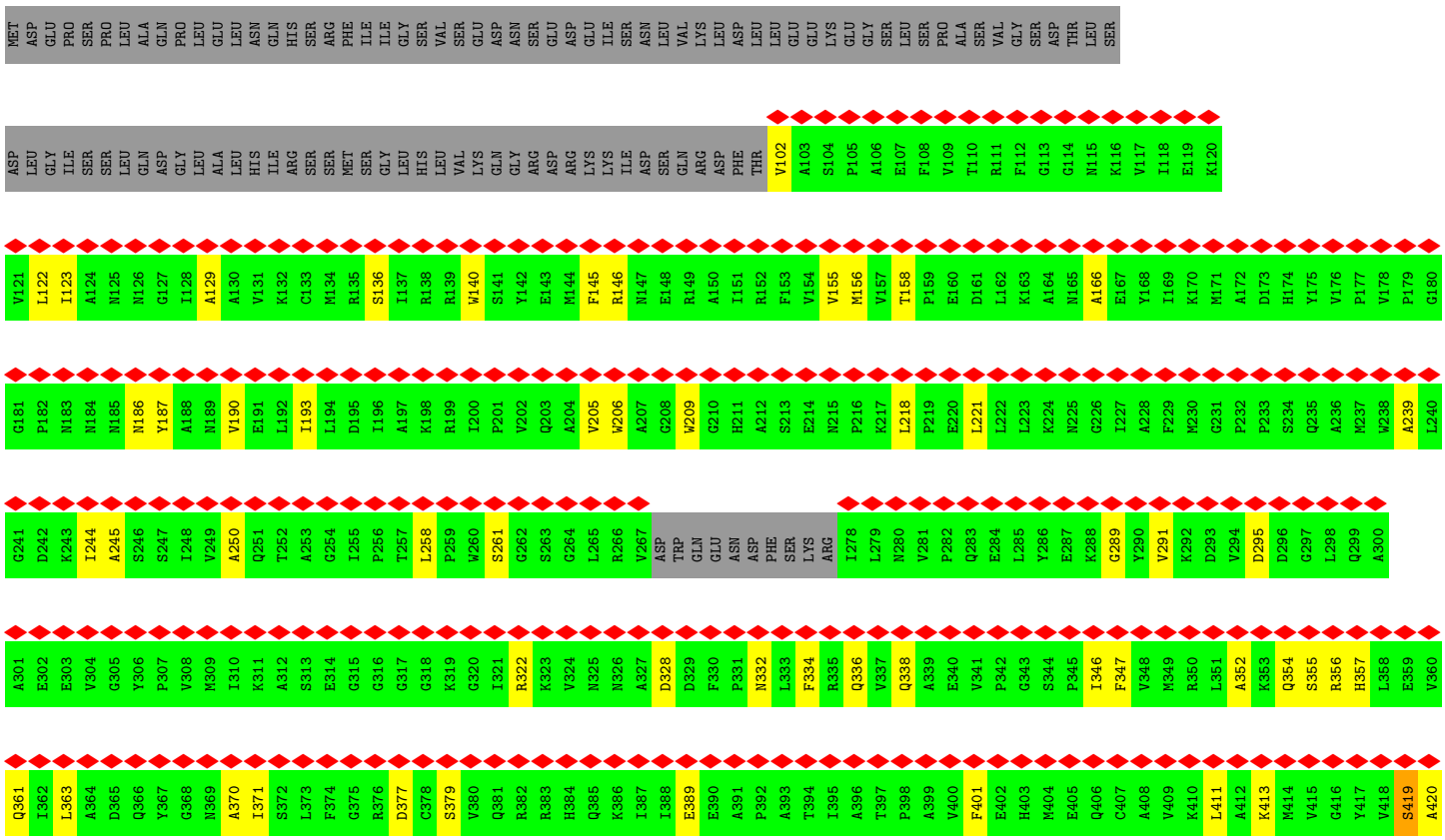
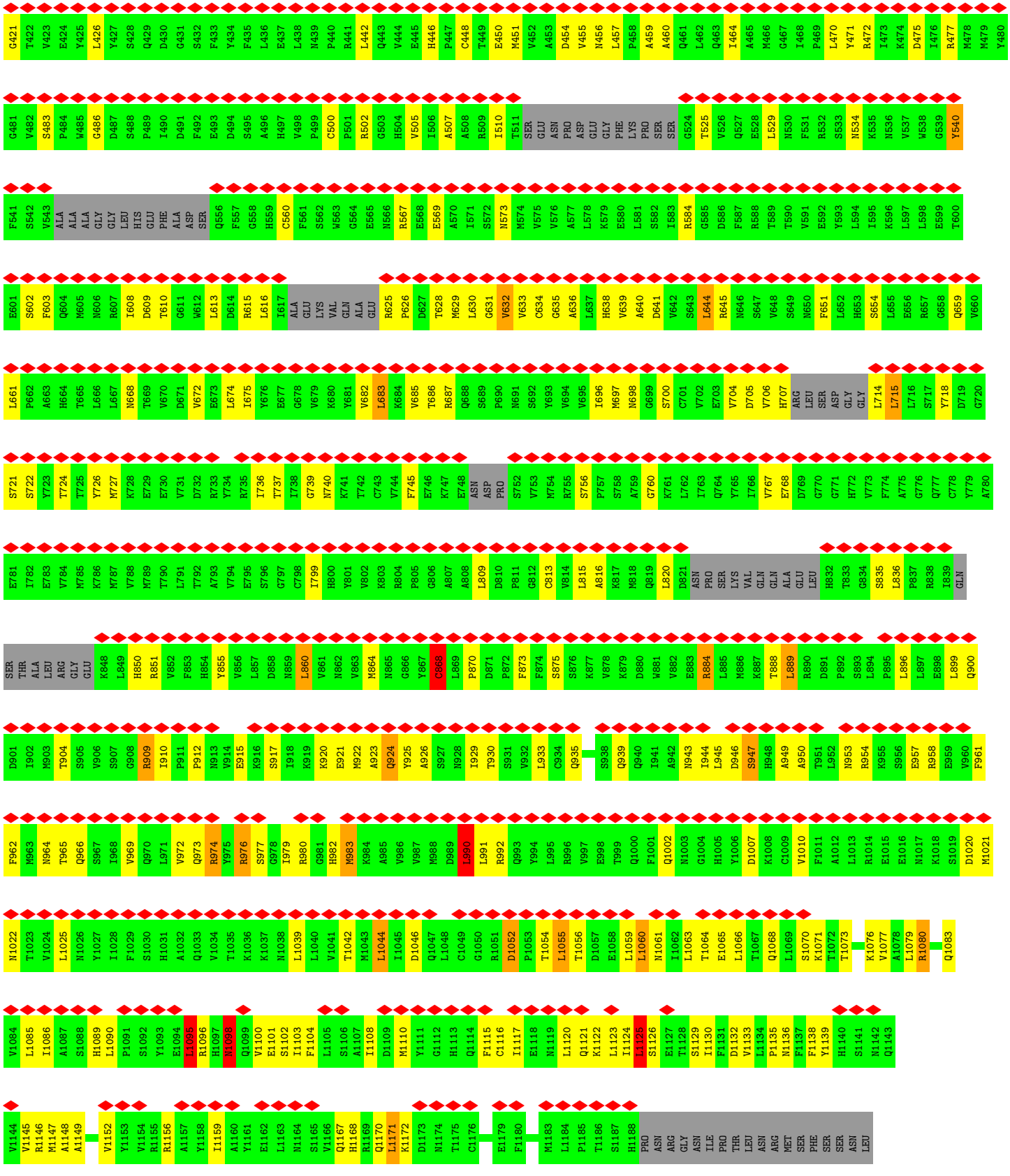


• Molecule 1: Acetyl-CoA carboxylase 1

Chain F:

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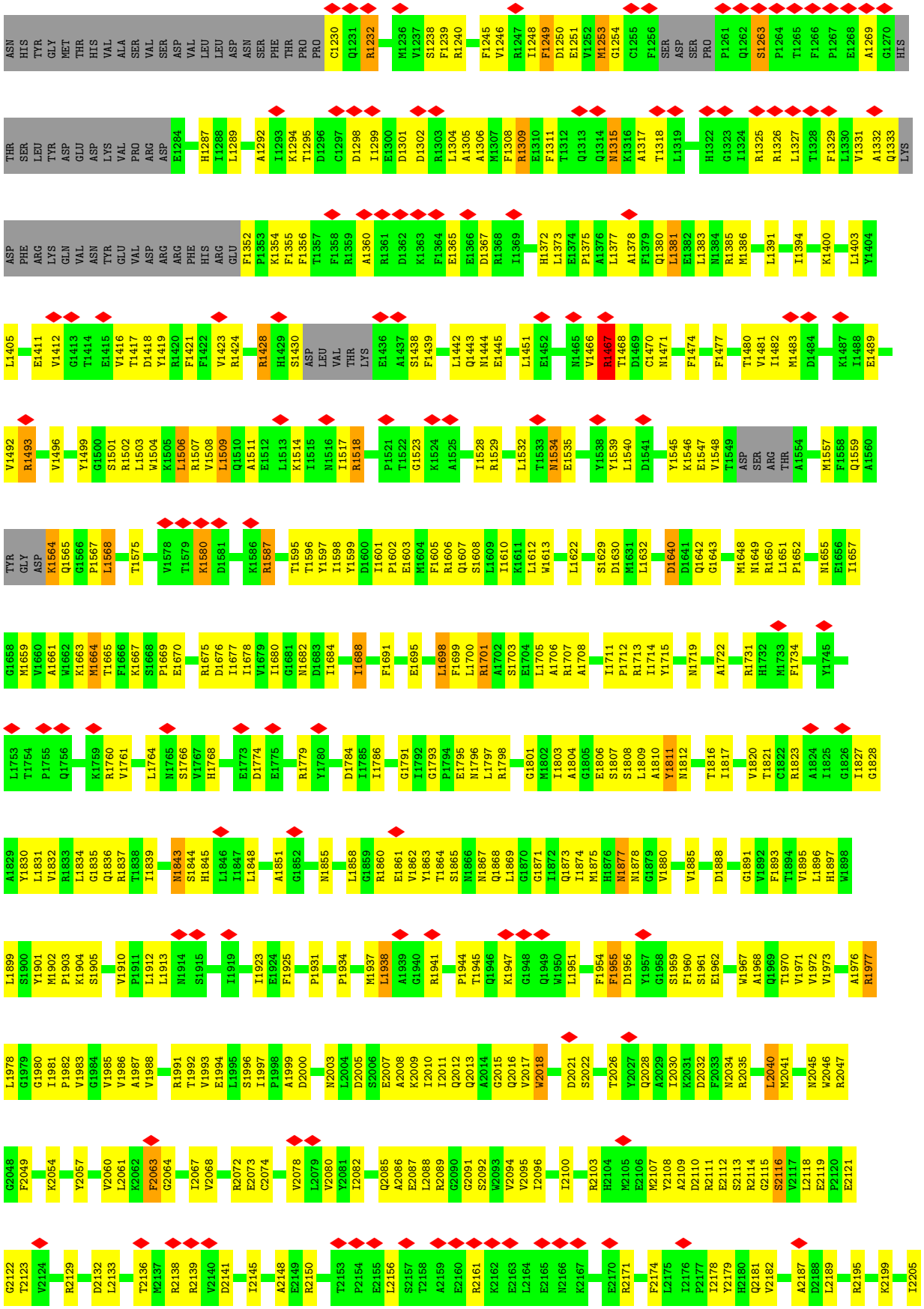
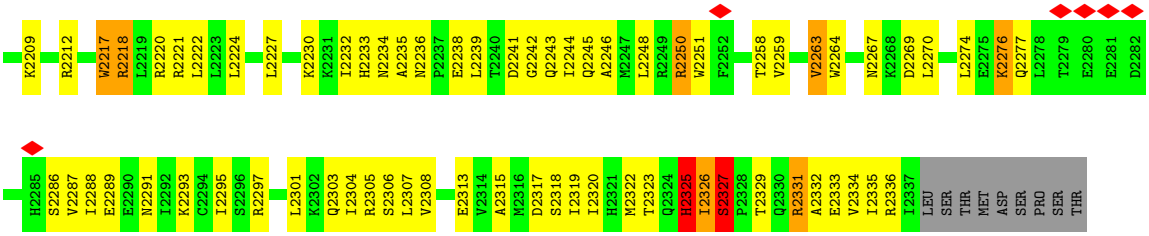
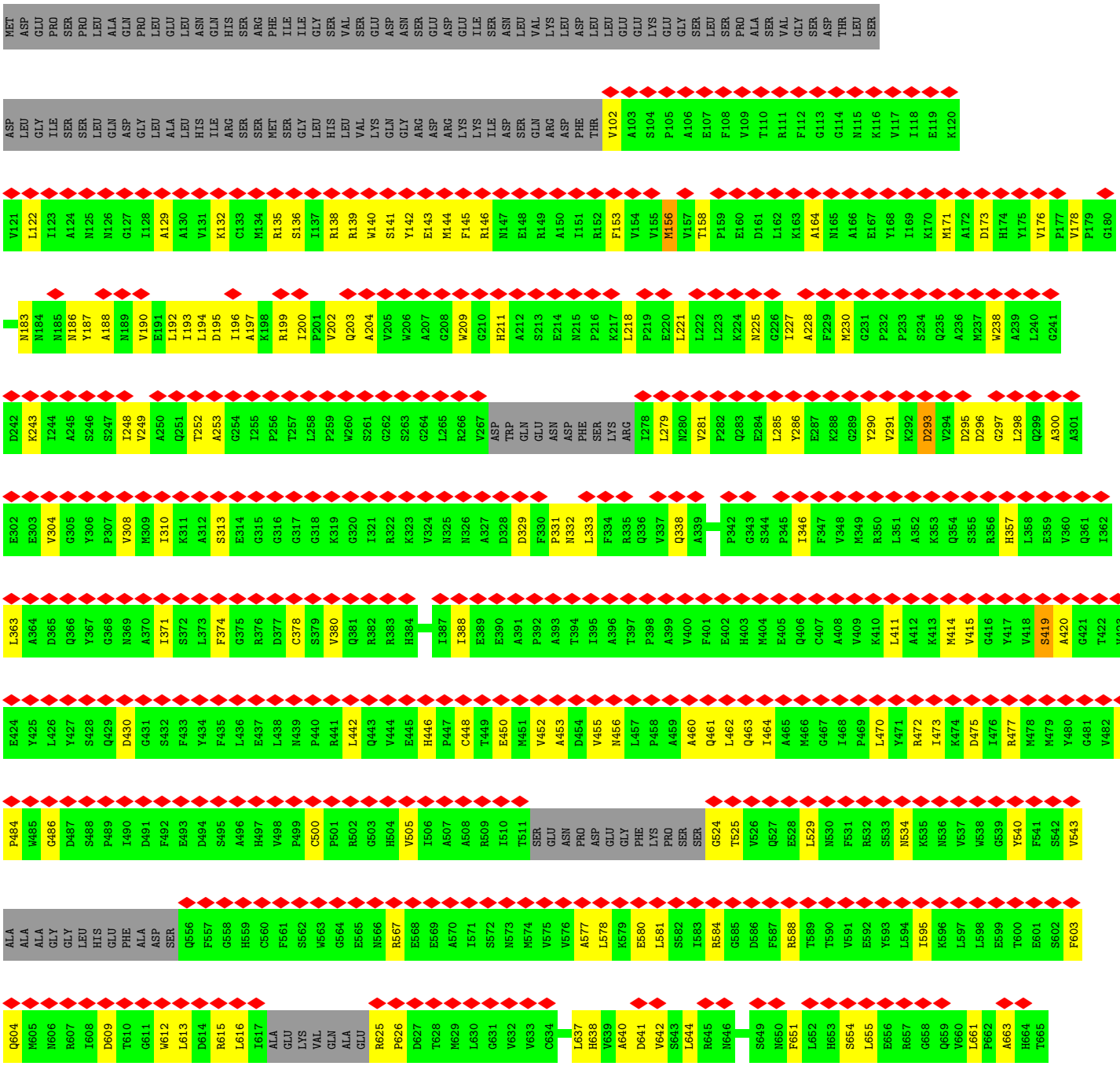
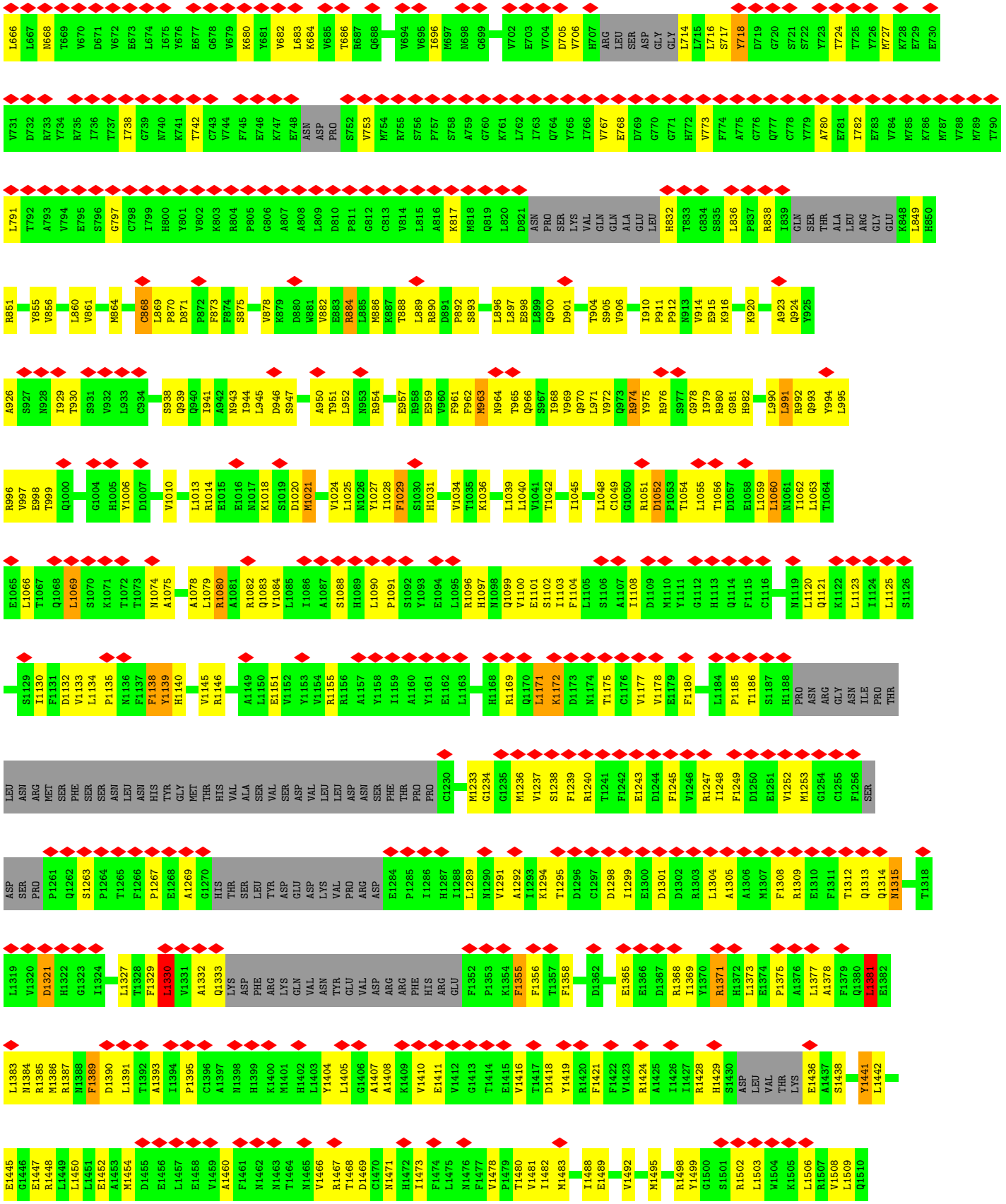




• Molecule 1: Acetyl-CoA carboxylase 1

Chain B:

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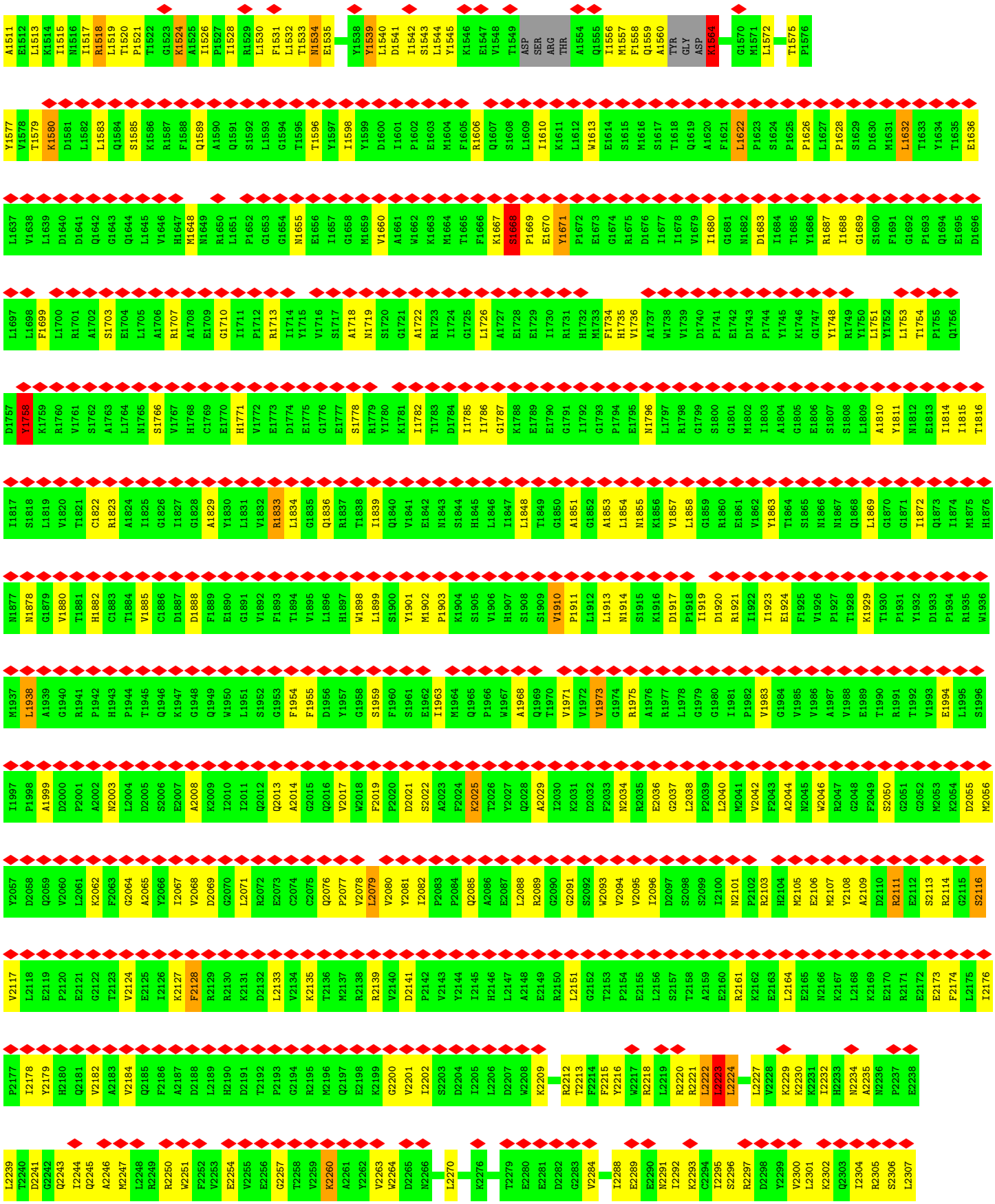
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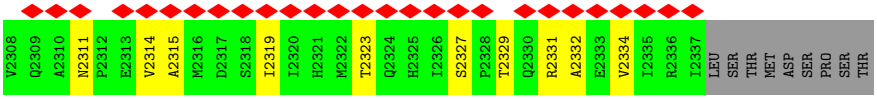
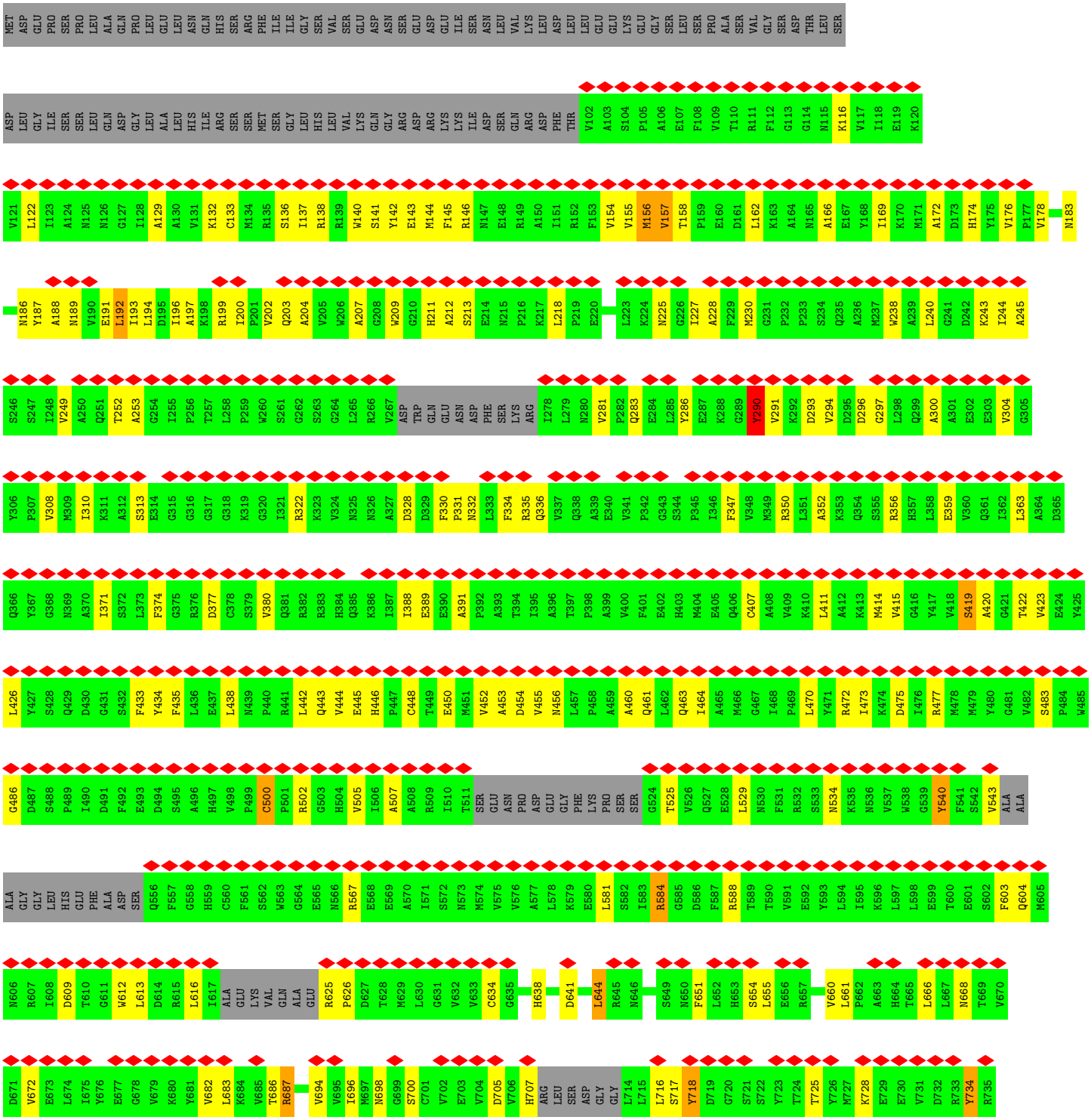
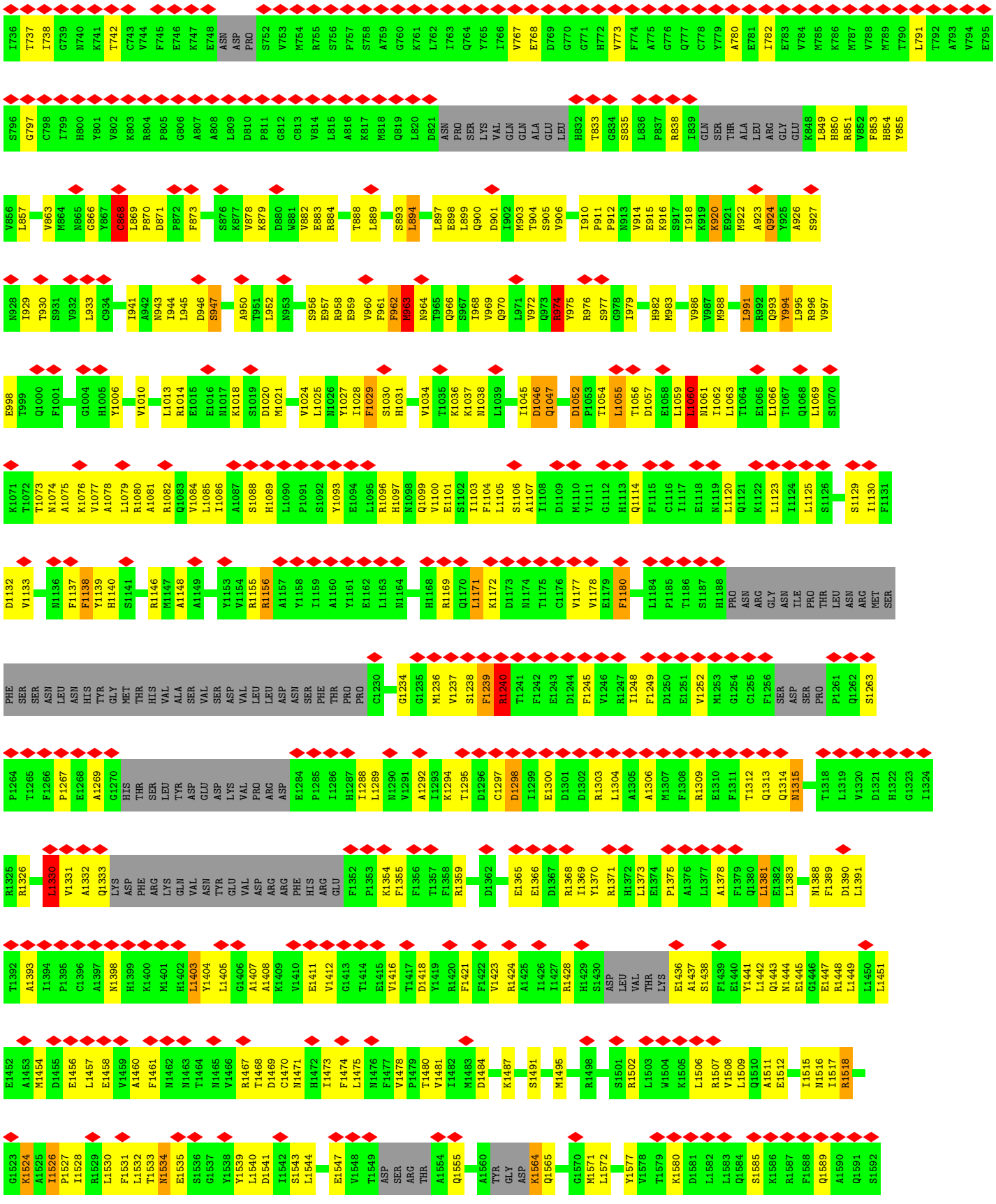


• Molecule 1: Acetyl-CoA carboxylase 1

Chain A:

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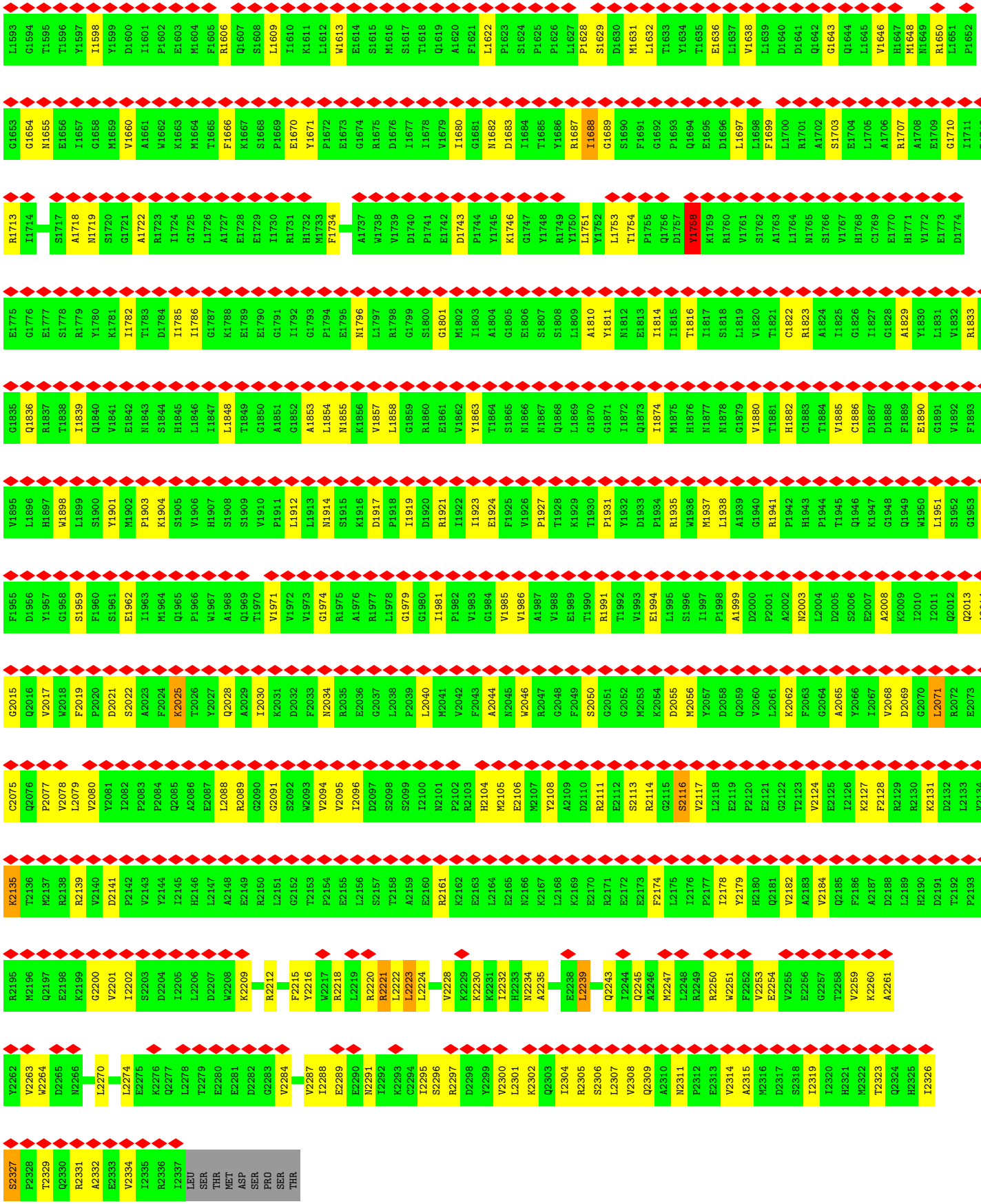
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• Molecule 1: Acetyl-CoA carboxylase 1

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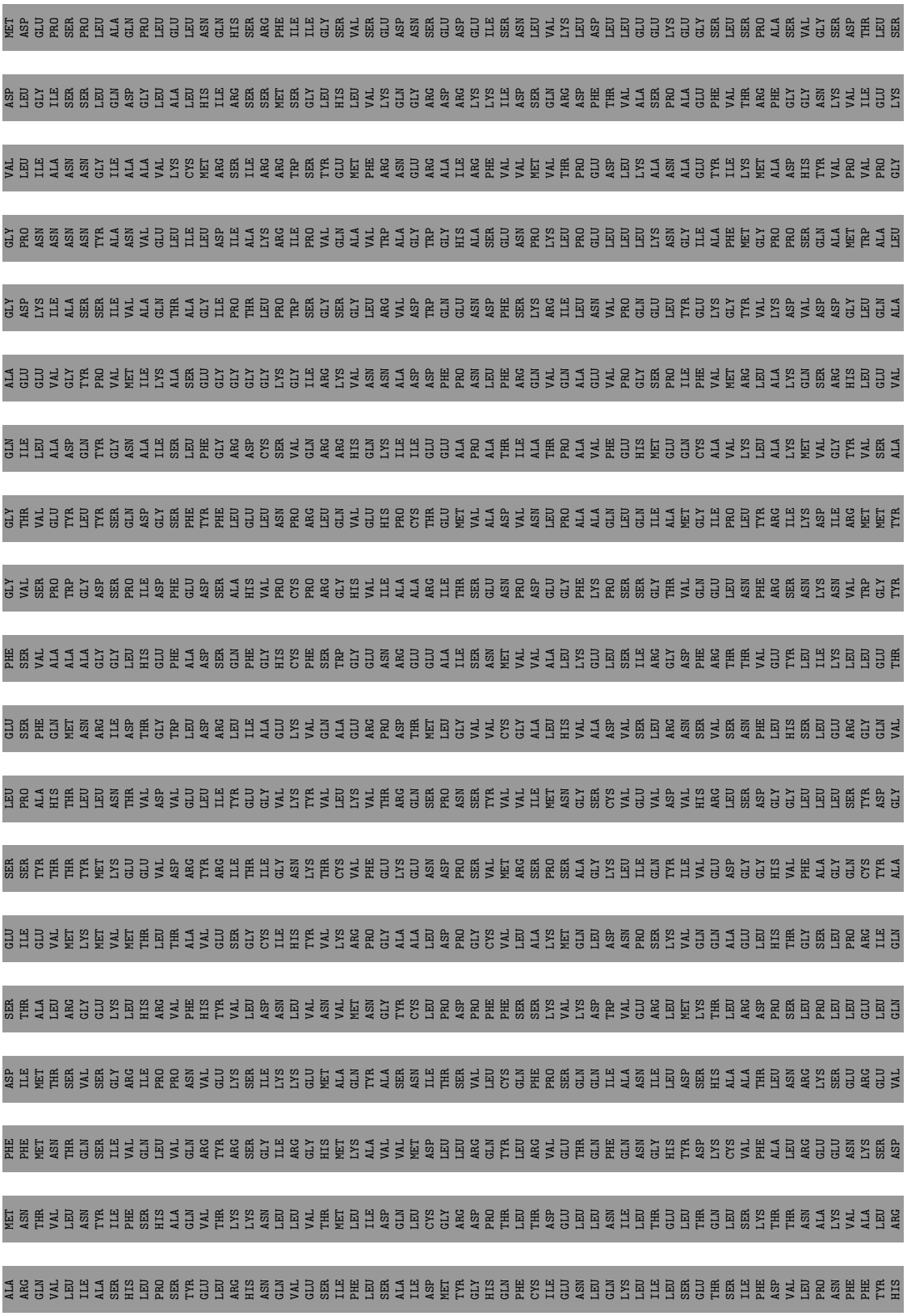

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SER PHE SER SER ASN LEU ASN HIS TYR GLY MET THR HIS VAL ALA SER VAL SER ASP VAL LEU LEU ASP ASN SER PHE THR PRO PRO CYS GLN ARG MET GLY GLY MET VAL SER PHE ARG THR PHE GLU ASP PHE VAL ARG ILE PHE ASP GLU VAL MET GLY CYS PHE SER ASP SER PRO

PRO GLN SEP PRO THR PHE PRO GLU ALA GLY HIS THR SER LEU TYR ASP GLU ASP LYS VAL PRO ARG ASP GLU PRO ILE HIS ILE LEU ASN VAL ALA ILE LYS THR ASP CYS ASP ILE GLU ASP ASP ARG LEU ALA ALA MET PHE ARG GLU PHE THR GLN GLN ASN LYS ALA THR LEU VAL

ASP HIS GLY ILE ARG ARG LEU THR PHE LEU VAL ALA GLN LYS ASP PHE ARG LYS GLN VAL ASN TYR GLU VAL ASP ARG ARG PHE HIS ARG GLU PHE PRO LYS PHE PHE THR PHE ARG ALA ARG ASP LYS PHE GLU GLU ASP ARG ILE TYR ARG HIS LEU GLU PRO ALA LEU ALA PHE GLN

LEU GLU LEU ASN ARG MET ARG ASN PHE ASP LEU THR ALA ILE PRO CYS ALA ASN HIS LYS MET HIS LEU TYR LEU GLY ALA ALA LYS VAL GLU VAL GLY THR GLU VAL THR ASP TYR ARG PHE PHE VAL ARG ALA ILE ILE ARG HIS SER ASP LEU VAL THR LYS GLU ALA SER PHE GLU

TYR LEU GLN ASN GLU GLY GLU ARG LEU LEU LEU GLU ALA MET ASP GLU LEU GLU VAL ALA PHE ASN ASN THR ASN VAL ARG THR ASP CYS ASN HIS ILE PHE LEU ASN PHE VAL PRO THR VAL ILE MET ASP PRO SER LYS ILE GLU GLU SER VAL ARG SER MET VAL MET ARG TYR GLY

SER ARG LEU TRP LYS LEU ARG VAL LEU GLN ALA GLU LEU LYS ILE ASN ILE ARG LEU THR PRO THR GLY LYS ALA ILE PRO ILE ARG LEU PHE LEU THR ASN GLU SER GLY TYR TYR LEU ASP ILE SER LEU TYR LYS GLU VAL THR ASP SER ARG THR ALA GLN ILE MET PHE GLN ALA

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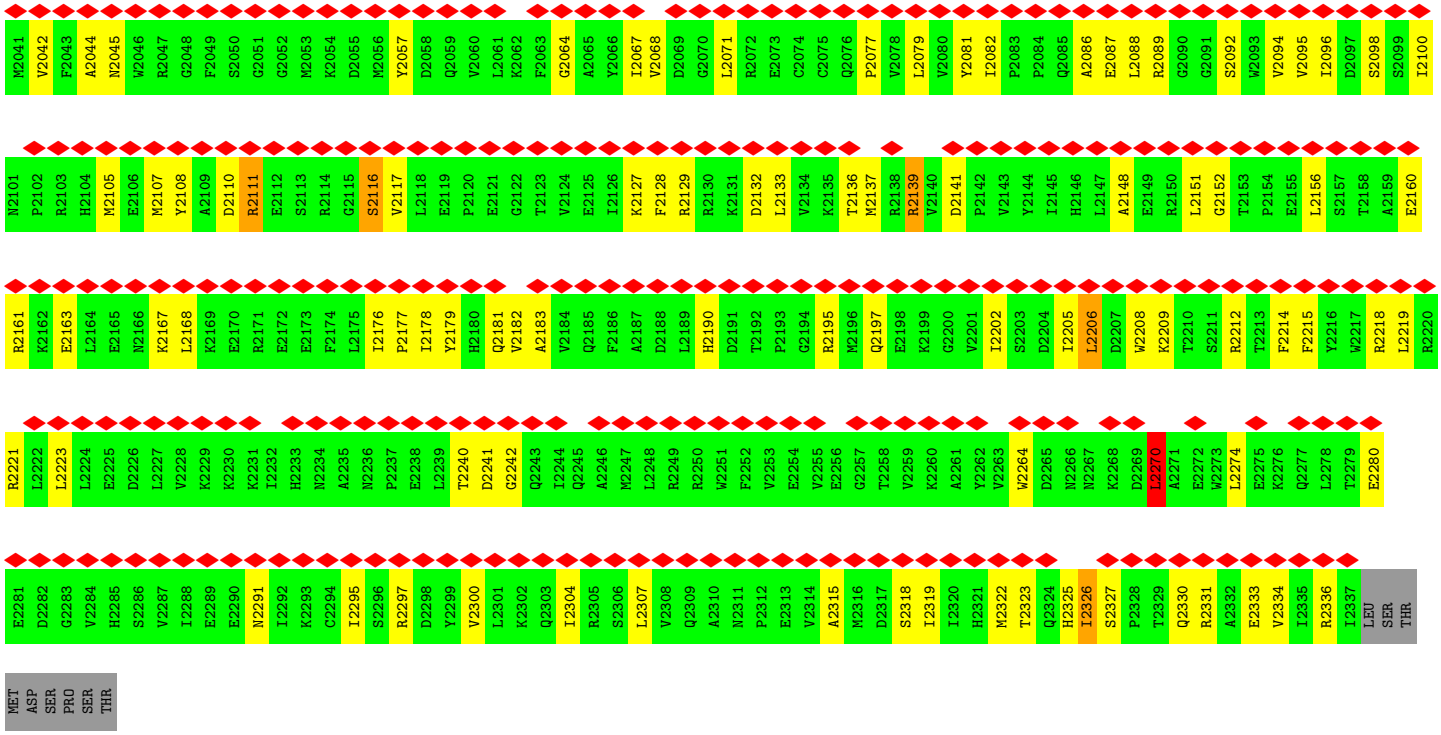
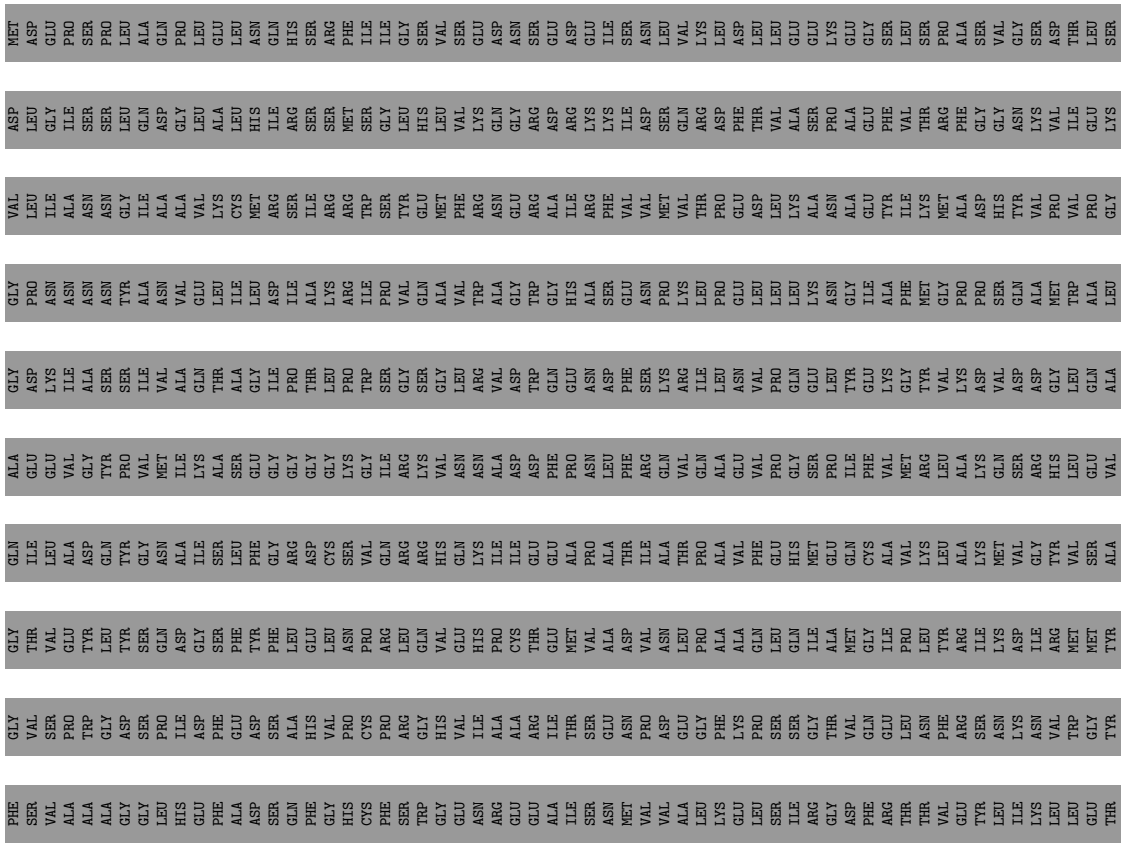


- Molecule 1: Acetyl-CoA carboxylase 1

Chain Q:



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LEU PRO ALA HIS THR LEU LEU ASN THR VAL ASP VAL GLU LEU ILE TYR GLU GLY VAL LYS TYR VAL LEU LYS VAL THR ARG GLN SER PRO ASN SER TYR VAL VAL ILE MET ASN GLY SER CYS VAL GLU VAL ASP VAL HIS ARG LEU SER ASP GLY GLY LEU LEU LEU SER TYR ASP GLY

SER SER TYR THR THR TYR MET LYS GLU GLU VAL ASP ARG TYR ARG ILE THR ILE GLY ASN LYS THR CYS VAL PHE GLU LYS GLU ASN ASP PRO SER VAL MET ARG SER PRO SER ALA GLY LYS LEU ILE GLN TYR ILE VAL GLU ASP GLY GLY HIS VAL PHE ALA GLY GLN CYS TYR ALA

GLU ILE GLU VAL MET LYS MET VAL MET THR LEU THR ALA VAL GLU SER GLY CYS ILE HIS TYR VAL LYS ARG PRO GLY ALA ALA LEU ASP PRO GLY CYS VAL LEU ALA LYS MET GLN LEU ASP ASN PRO SER LYS VAL GLN GLN ALA GLU LEU HIS THR GLY SER LEU PRO ARG ILE GLN

SER THR ALA LEU ARG GLY GLU LYS LEU HIS ARG VAL PHE HIS TYR VAL LEU ASP ASN LEU VAL ASN VAL MET ASN GLY TYR CYS LEU PRO ASP PRO PHE PHE SER SER LYS VAL LYS ASP TRP VAL GLU ARG LEU MET LYS THR LEU ARG ASP PRO SER LEU PRO LEU LEU GLU LEU GLN

ASP ILE MET THR SER VAL SER GLY ARG ILE PRO PRO ASN VAL GLU LYS SER ILE LYS LYS GLU MET ALA GLN TYR ALA SER ASN ILE THR SER VAL LEU CYS GLN PHE PRO SER GLN GLN ILE ALA ASN ILE LEU ASP SER HIS ALA ALA THR LEU ASN ARG LYS SER GLU ARG GLU VAL

PHE PHE MET ASN THR GLN SER ILE VAL GLN LEU VAL GLN ARG TYR ARG SER GLY ILE ARG GLY HIS MET LYS ALA VAL VAL MET ASP LEU LEU ARG GLN TYR LEU ARG VAL GLU THR GLN PHE GLN ASN GLY HIS TYR ASP LYS CYS VAL PHE ALA LEU ARG GLU GLU ASN LYS SER ASP

MET ASN THR VAL LEU ASN TYR ILE PHE SER HIS ALA GLN VAL THR LYS LYS ASN LEU LEU VAL THR MET LEU ILE ASP GLN LEU CYS GLY ARG ASP PRO THR LEU THR ASP GLU LEU LEU ASN ILE LEU THR GLU LEU THR GLN LEU SER LYS THR THR ASN ALA LYS VAL ALA LEU ARG

ALA ARG GLN VAL LEU ILE ALA SER HIS LEU PRO SER TYR GLU LEU ARG HIS ASN GLN VAL GLU SER ILE PHE LEU SER ALA ILE ASP MET TYR GLY HIS GLN PHE CYS ILE GLU ASN LEU GLN LYS LEU ILE LEU SER GLU THR SER ILE PHE ASP VAL LEU PRO ASN PHE PHE TYR HIS

SER ASN GLN VAL VAL ARG MET ALA ALA LEU GLU VAL TYR VAL ARG ARG ALA TYR ILE ALA TYR GLU LEU ASN SER VAL GLN HIS ARG GLN LEU LYS ASP ASN THR CYS VAL VAL GLU PHE GLN PHE MET LEU PRO THR SER HIS PRO ASN ARG GLY ASN ILE PRO THR LEU ASN ARG MET

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ASP HIS GLY ILE ARG ARG LEU THR PHE LEU VAL ALA GLN LYS ASP PHE ARG LYS GLN VAL ASN TYR GLU VAL ASP ARG ARG PHE HIS ARG GLU PHE PRO LYS PHE PHE THR PHE ARG ALA ARG ASP LYS PHE GLU GLU ASP ARG ILE TYR ARG HIS LEU GLU PRO ALA LEU ALA PHE GLN

LEU GLU LEU ASN ARG MET ARG ASN PHE ASP LEU THR ALA ILE PRO CYS ALA ASN HIS LYS MET HIS LEU TYR LEU GLY ALA ALA LYS VAL GLU VAL GLY THR GLU VAL THR ASP TYR ARG PHE PHE VAL ARG ALA ILE ILE ARG HIS SER ASP LEU VAL THR LYS GLU ALA SER PHE GLU

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SER ARG LEU TRP LYS LEU ARG VAL LEU GLN ALA GLU LEU LYS ILE ASN ILE ARG LEU THR PRO THR GLY LYS ALA ILE PRO ILE ARG LEU PHE LEU THR ASN GLU SER GLY TYR TYR LEU ASP ILE SER LEU TYR LYS GLU VAL THR ASP SER ARG THR ALA GLN ILE MET PHE GLN ALA

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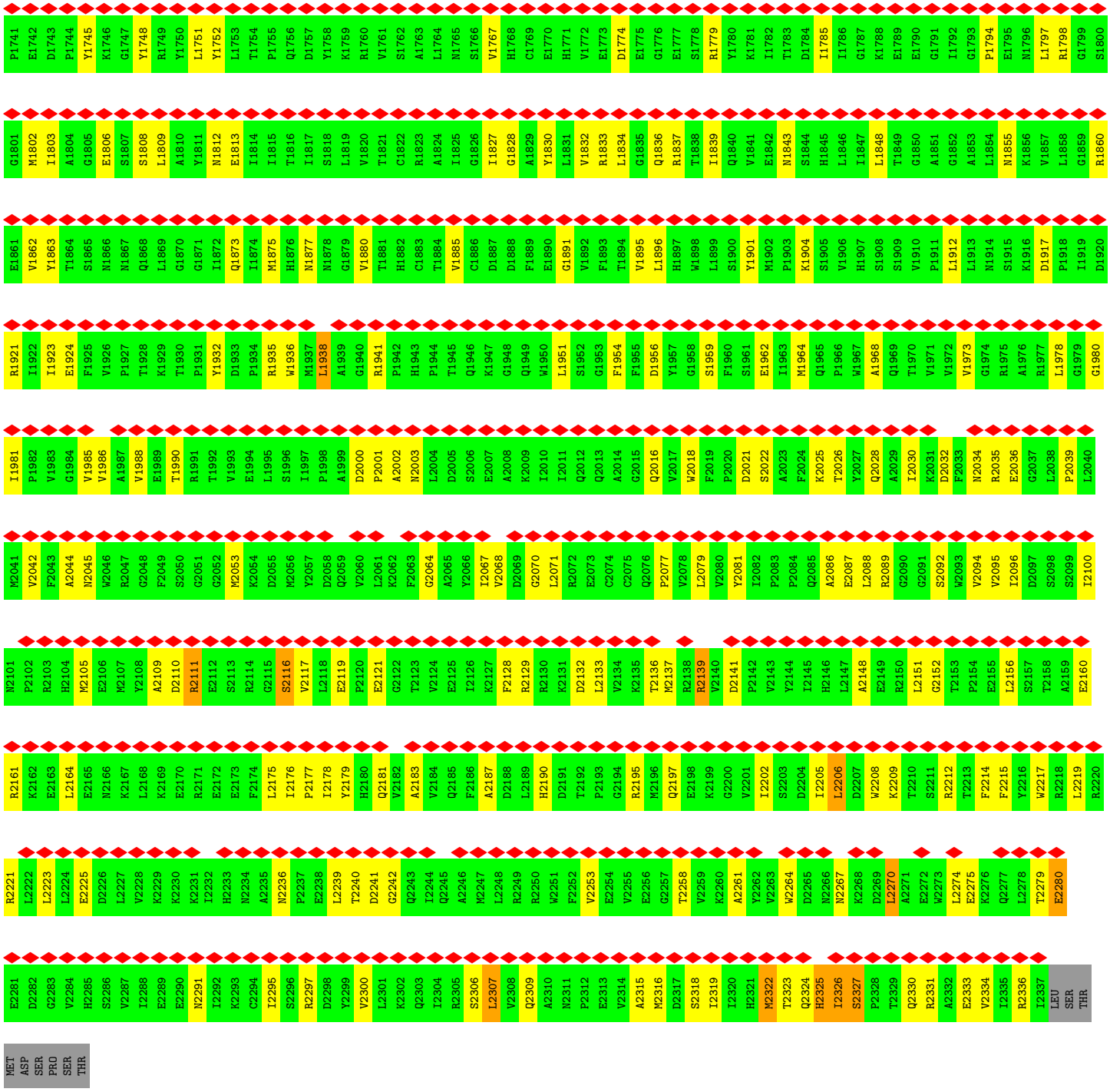
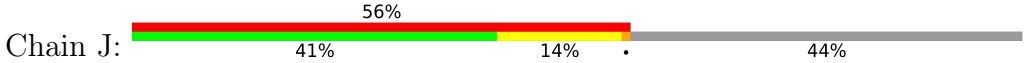
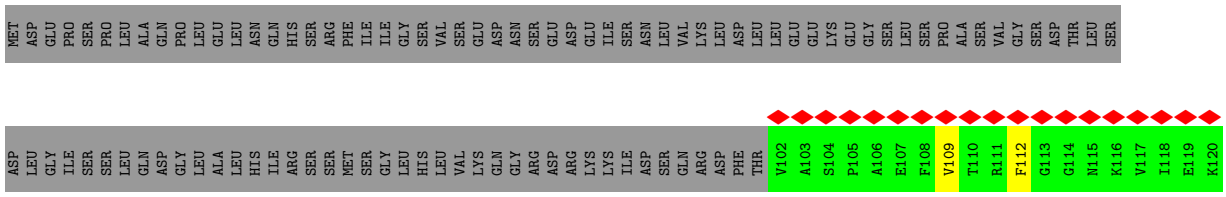
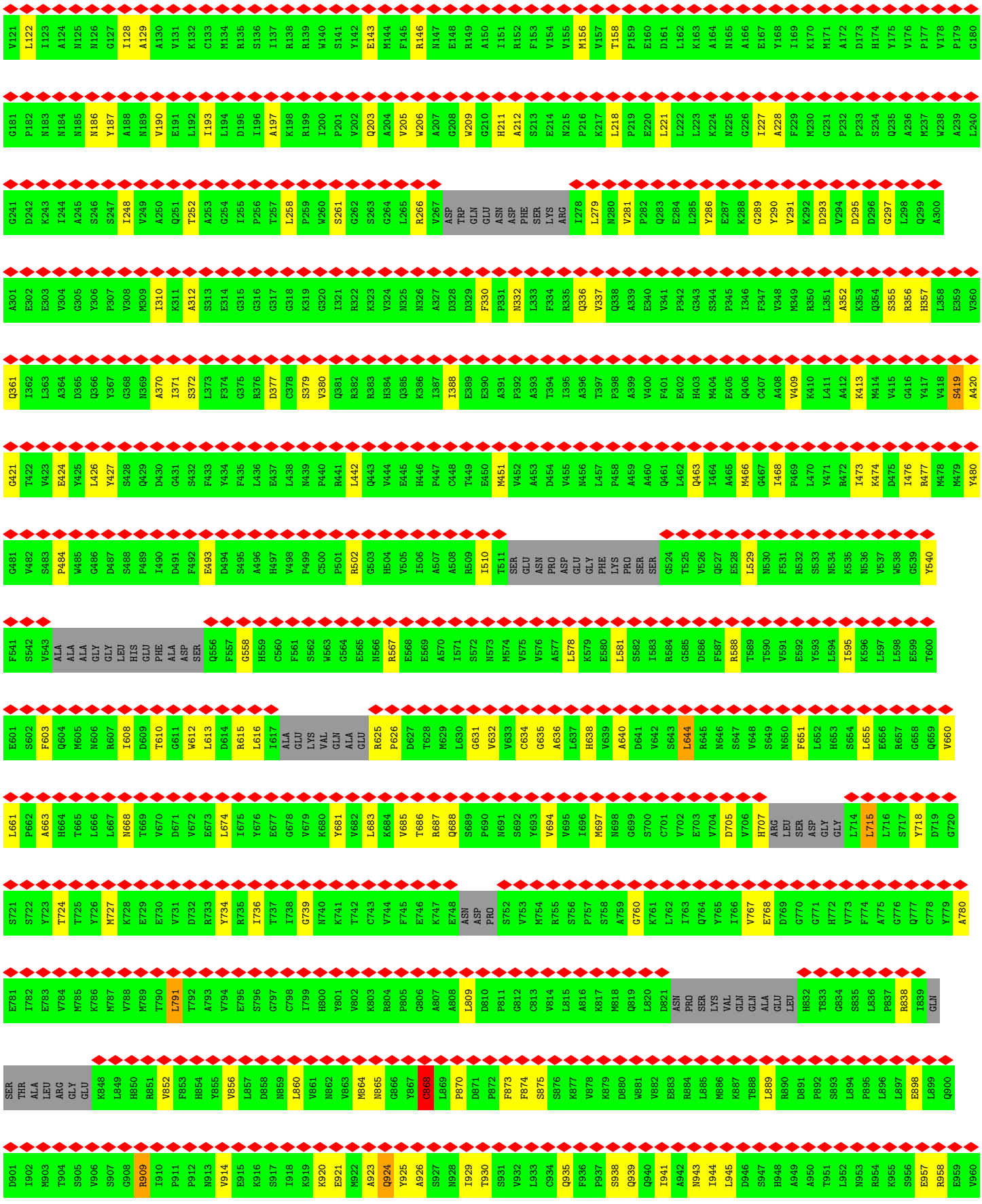


• Molecule 1: Acetyl-CoA carboxylase 1



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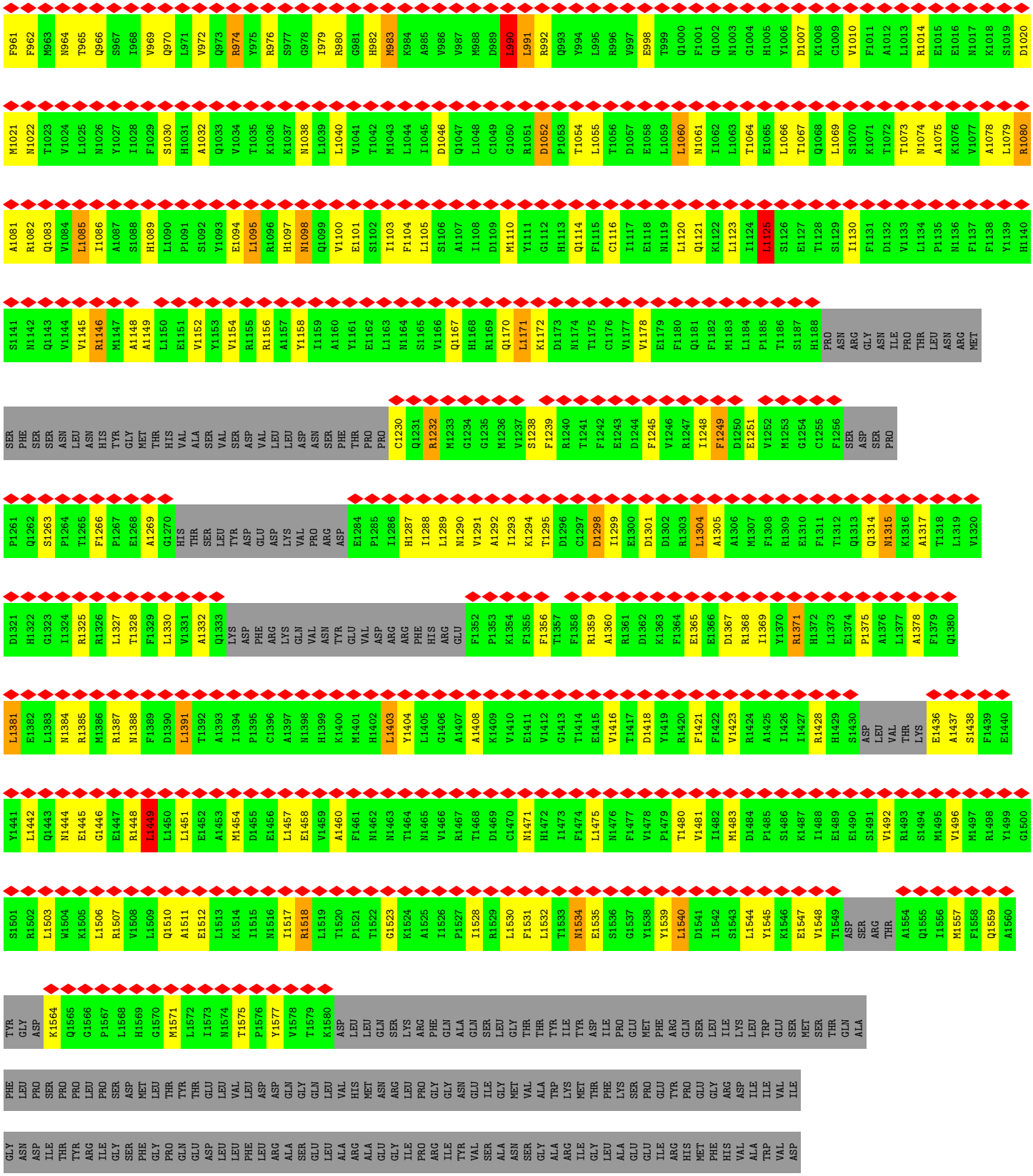
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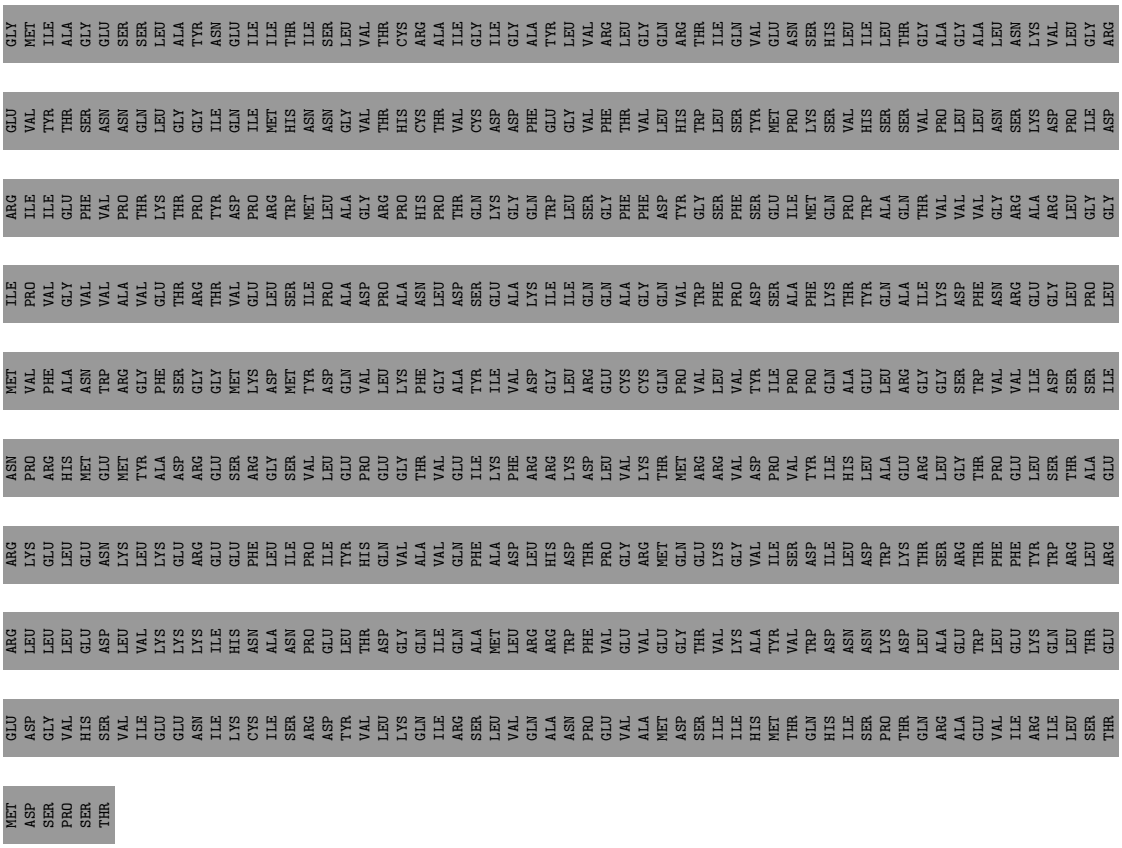
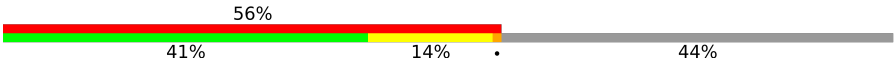
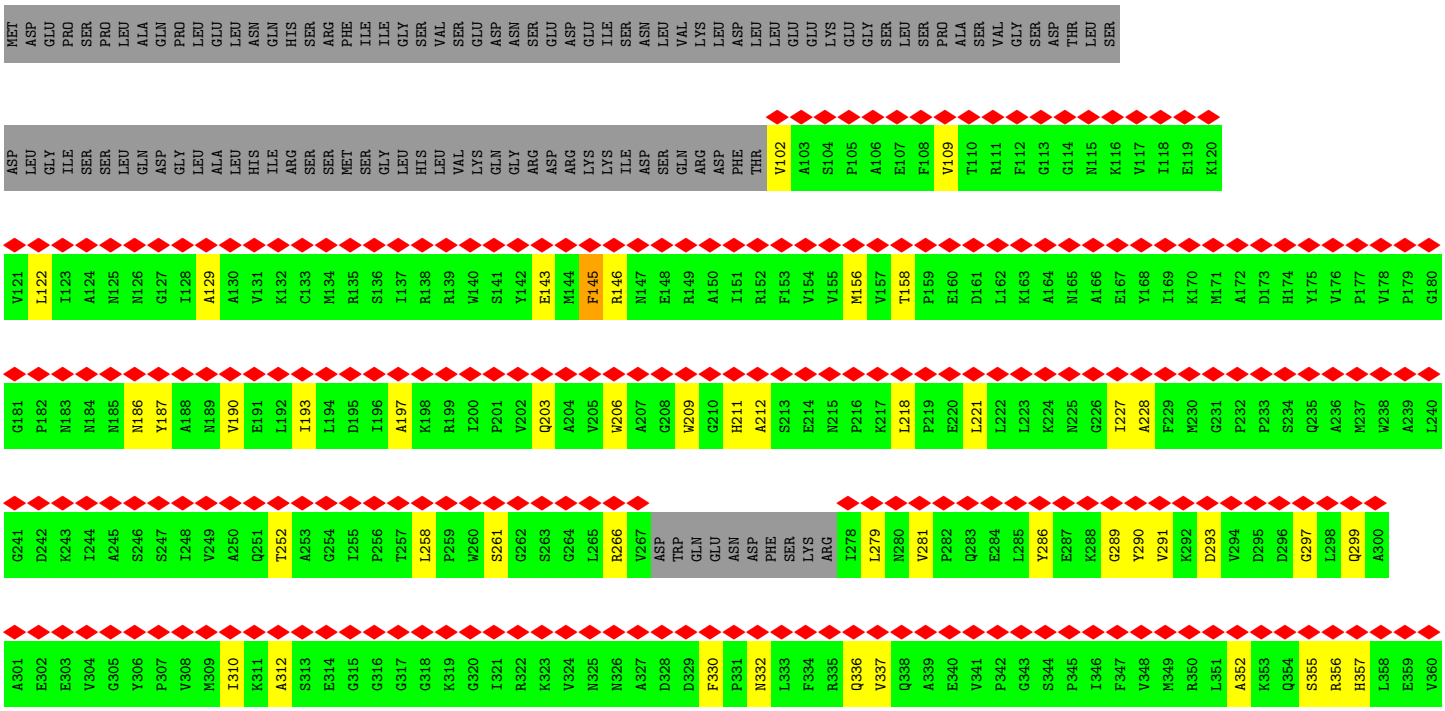
TYR GLY ASP K1564 Q1565 G1566 P1567 L1568 H1569 G1570 M1571 L1572 I1573 N1574 T1575 P1576 Y1577 V1578 T1579 K1580 ASP LEU LEU GLN SER LYS ARG PHE GLN ALA GLN SER LEU GLY THR THR TYR ILE TYR ASP ILE PRO GLU MET PHE ARG GLN SER LEU ILE LYS LEU TRP GLU SER MET SER THR GLN ALA
PHE LEU PRO SER PRO PRO LEU PRO SER ASP MET LEU THR TYR THR GLU LEU VAL LEU ASP ASP GLN GLY GLN LEU VAL ALA ASP SER ALA LEU ASN SER VAL HIS MET ASN ARG LEU PRO GLY GLY ASN GLU ILE GLY MET VAL ALA TRP LYS MET THR PHE LYS SER PRO GLU GLY ARG ASP ILE ILE VAL ILE
GLY ASN ASP ILE THR TYR ARG ILE GLY SER PHE GLY PRO GLN GLU ASP LEU LEU PHE LEU ARG ALA SER GLU LEU ALA ARG ALA GLU GLY ILE PRO ARG ILE TYR VAL SER ALA ASN SER GLY ALA ARG ILE GLY LEU ALA GLU GLU ILE ARG HIS MET PHE HIS VAL ALA TRP VAL ASP
PRO GLU ASP PRO TYR LYS GLY TYR ARG TYR LEU TYR LEU THR PRO GLN ASP TYR LYS ARG VAL SER ALA LEU ASN SER VAL HIS CYS GLU HIS VAL GLU ASP GLU GLY GLU SER ARG TYR LYS ILE THR ASP ILE ILE GLY LYS GLU GLU GLY ILE GLY PRO GLU ASN LEU ARG GLY SER

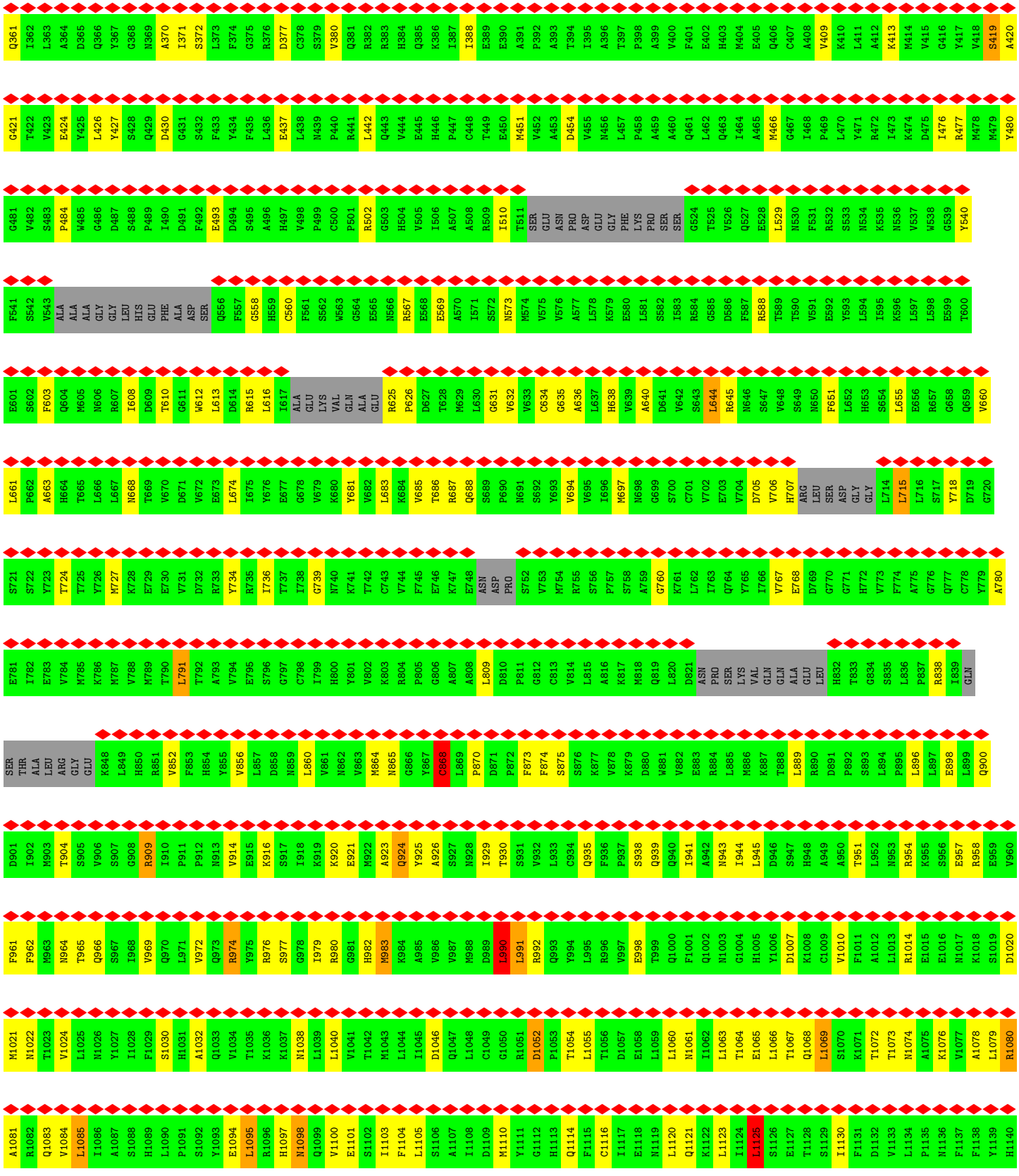


- Molecule 1: Acetyl-CoA carboxylase 1

Chain R:



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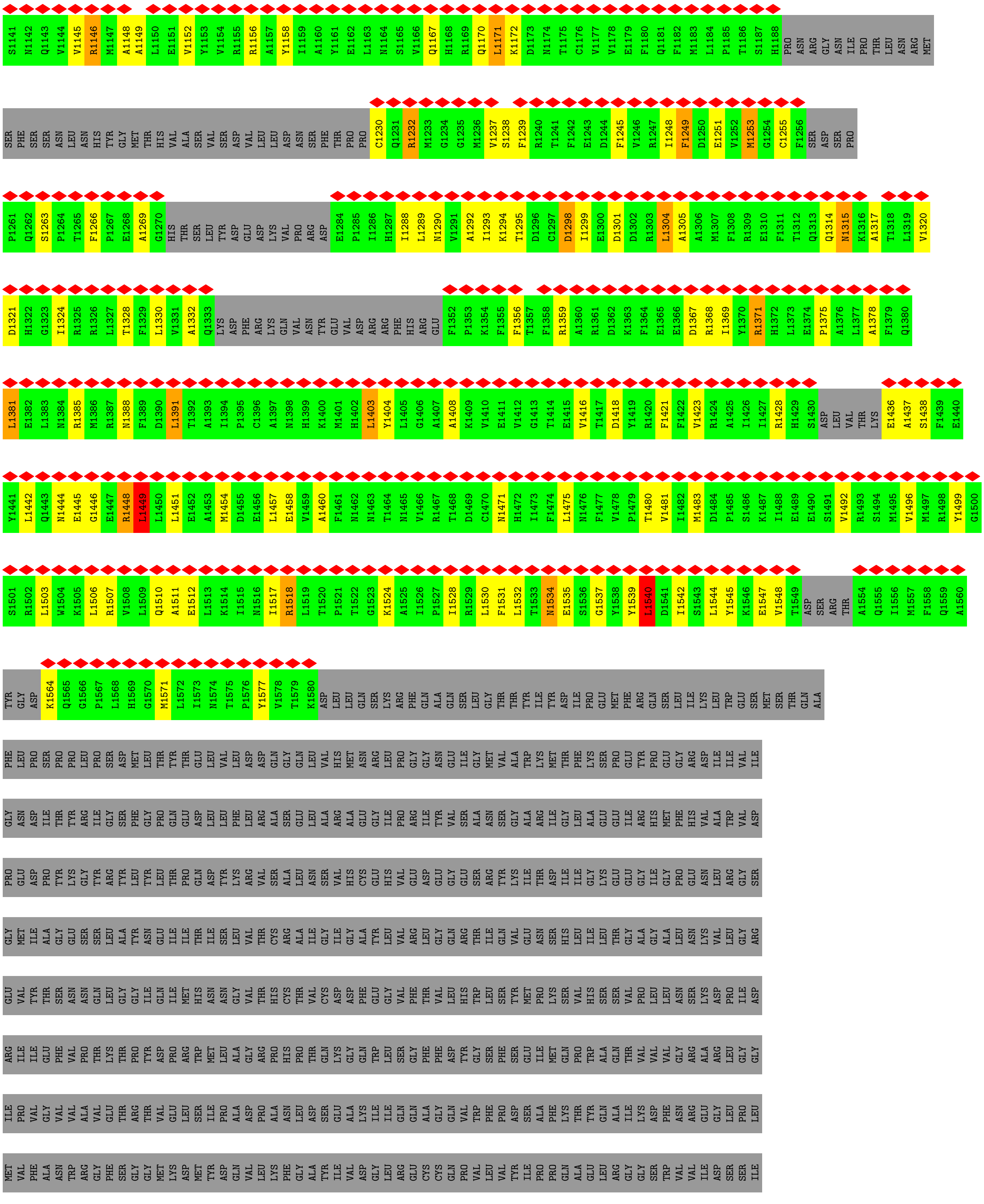
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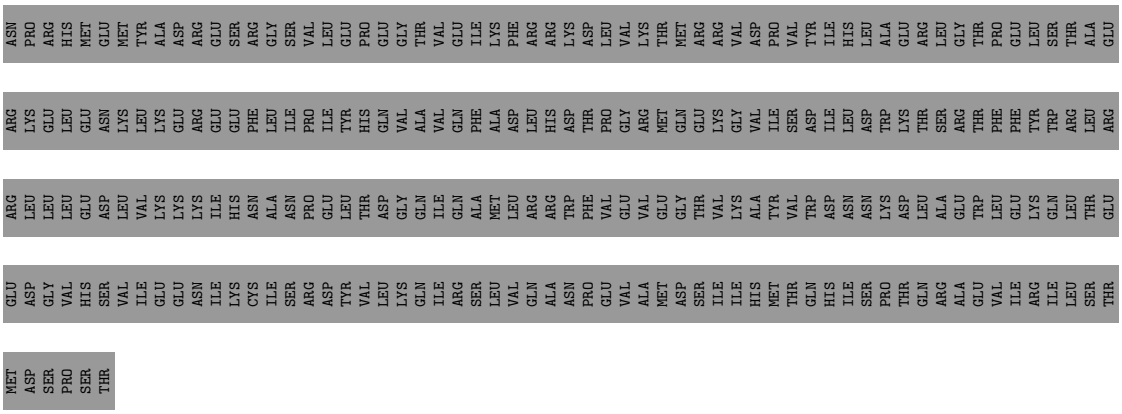
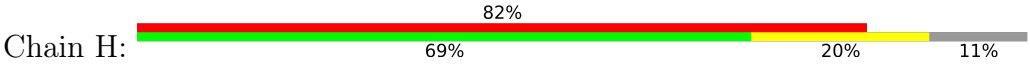
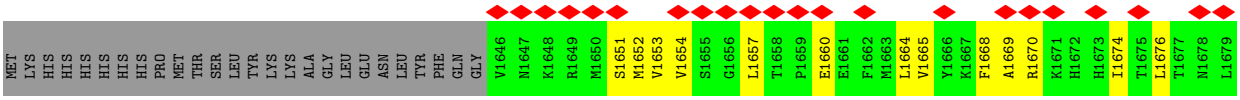
GLY ASN ASP ILE THR TYR ARG ILE GLY SER PHE GLY PRO GLN GLU ASP LEU LEU PHE LEU ARG ALA SER GLU LEU ALA ARG ALA GLU GLY ILE PRO ARG ILE TYR VAL SER ALA ASN SER GLY ALA ARG ILE GLY LEU ALA GLU GLU ILE ARG HIS MET PHE HIS VAL ALA TRP VAL ASP
PRO GLU ASP PRO TYR LYS GLY TYR ARG TYR LEU TYR LEU THR PRO GLN ASP TYR LYS ARG VAL SER ALA LEU ASN SER VAL HIS CYS GLU HIS VAL GLU ASP GLU GLY GLU SER ARG TYR LYS ILE THR ASP ILE ILE GLY LYS GLU GLU GLY ILE GLY PRO GLU ASN LEU ARG GLY SER
GLY MET ILE ALA GLY GLU SER SER LEU ALA TYR ASN GLU ILE ILE THR ILE SER LEU VAL THR CYS ARG ALA ILE GLY ILE GLY ALA TYR LEU VAL ARG LEU GLY GLN ARG THR ILE GLN VAL GLU ASN SER HIS LEU ILE LEU THR GLY ALA GLY ALA LEU ASN LYS VAL LEU GLY ARG
GLU VAL TYR THR SER ASN ASN GLN LEU GLY GLY ILE GLN ILE MET HIS ASN ASN GLY VAL THR HIS CYS THR VAL CYS ASP ASP PHE GLU GLY VAL PHE THR VAL LEU HIS TRP LEU SER TYR MET PRO LYS SER VAL HIS SER SER VAL PRO LEU LEU ASN SER LYS ASP PRO ILE ASP
ARG ILE ILE GLU PHE VAL PRO THR LYS THR PRO TYR ASP PRO ARG TRP MET LEU ALA GLY ARG PRO HIS PRO THR GLN LYS GLY GLN TRP LEU SER GLY PHE PHE ASP TYR GLY SER PHE SER GLU ILE MET GLN PRO TRP ALA GLN THR VAL VAL GLY ARG ALA ARG LEU GLY GLY
ILE PRO VAL GLY VAL VAL ALA VAL GLU THR ARG THR VAL GLU LEU SER ILE PRO ALA ASP PRO ALA ASN LEU ASP SER GLU ALA LYS ILE ILE GLN GLN ALA GLY GLN VAL TRP PHE PRO ASP SER ALA PHE LYS THR TYR GLN ALA ILE LYS ASP PHE ASN ARG GLU GLY LEU PRO LEU
MET VAL PHE ALA ASN TRP ARG GLY PHE SER GLY GLY MET LYS ASP MET TYR ASP GLN VAL LEU LYS PHE GLY ALA TYR ILE VAL ASP GLY LEU ARG GLU CYS CYS GLN PRO VAL LEU VAL TYR ILE PRO PRO GLN ALA GLU LEU ARG GLY GLY SER TRP VAL VAL ILE ASP SER SER ILE

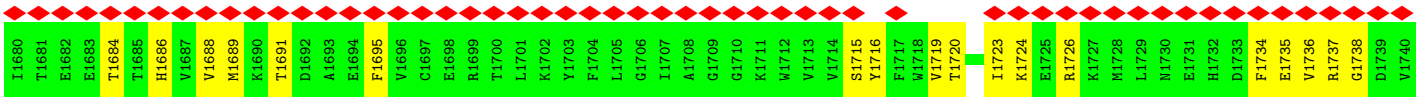


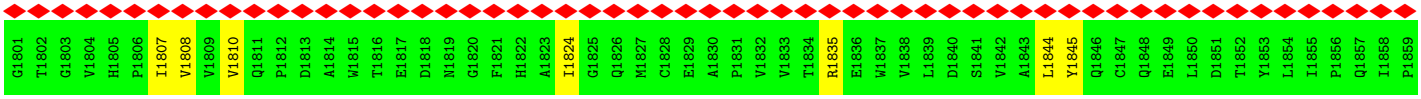
• Molecule 2: Breast cancer type 1 susceptibility protein

Chain H:



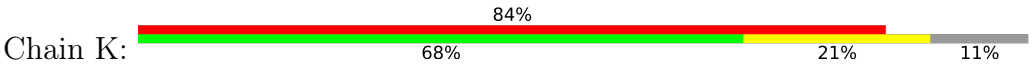


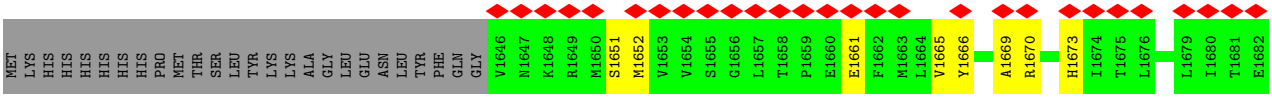


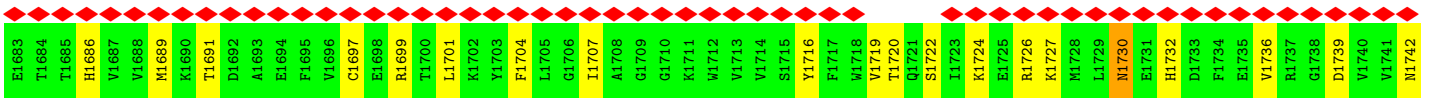


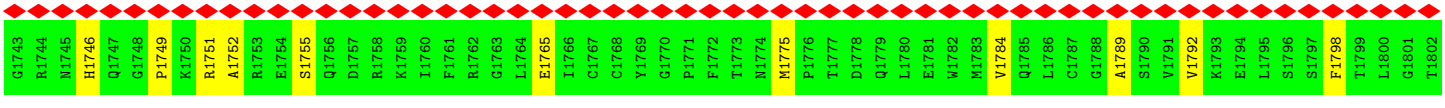
• Molecule 2: Breast cancer type 1 susceptibility protein

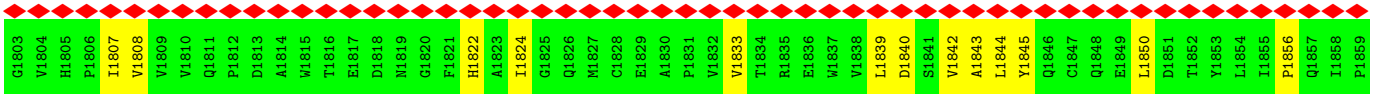
Chain K:





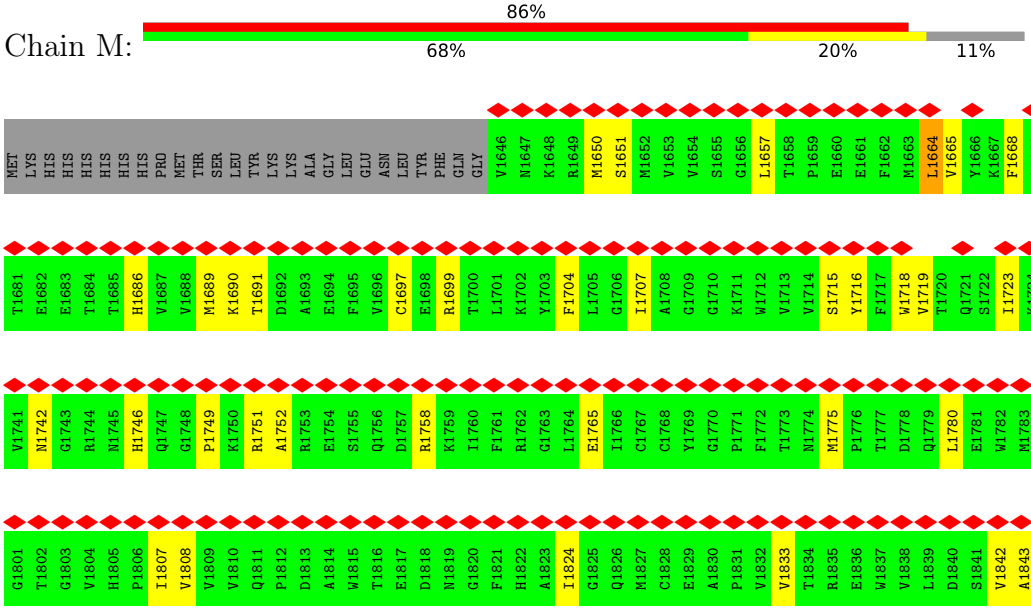






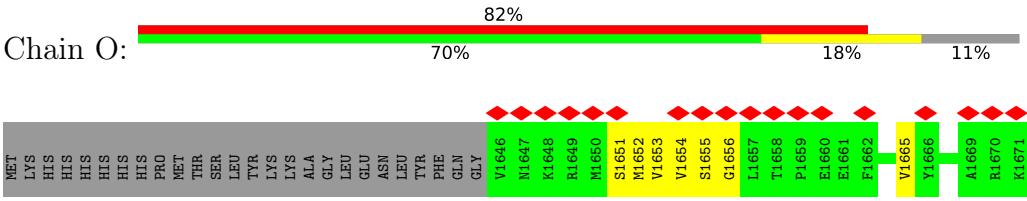
• Molecule 2: Breast cancer type 1 susceptibility protein

Chain M:



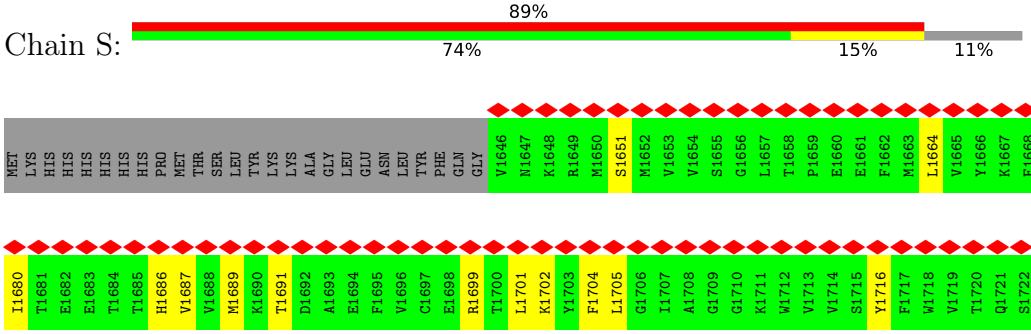
• Molecule 2: Breast cancer type 1 susceptibility protein

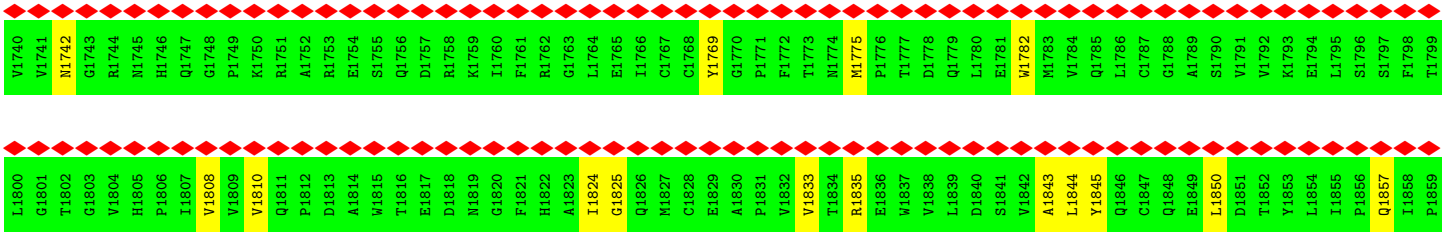
Chain O:



• Molecule 2: Breast cancer type 1 susceptibility protein

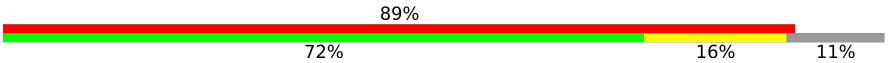
Chain S:

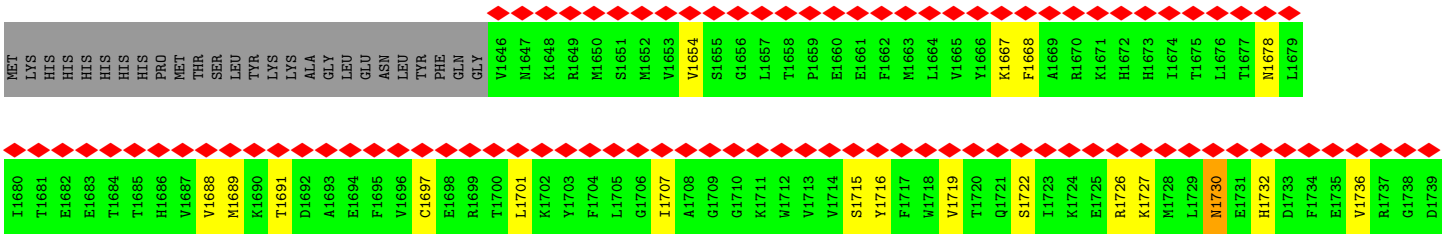




• Molecule 2: Breast cancer type 1 susceptibility protein

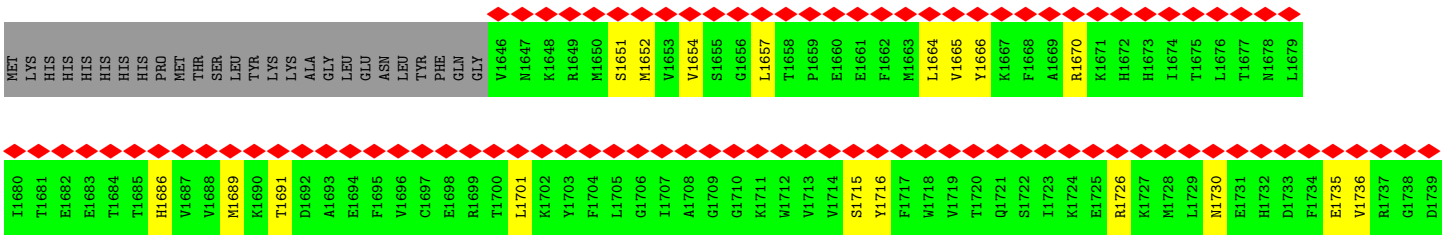
Chain U:





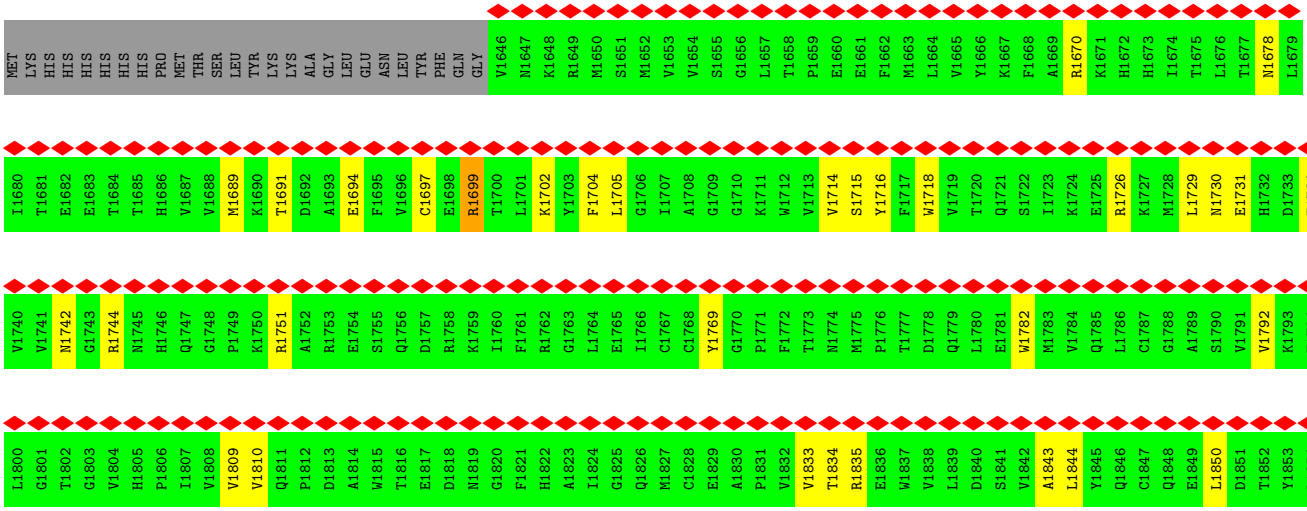
• Molecule 2: Breast cancer type 1 susceptibility protein

Chain Y:



• Molecule 2: Breast cancer type 1 susceptibility protein

Chain W:


MET LYS HIS HIS HIS HIS HIS PRO MET THR SER LEU TYR LYS LYS ALA GLY LEU GLU ASN LEU TYR PHE GLN GLY
V1646 N1647 K1648 R1649 M1650 S1651 M1652 V1653 V1654 S1655 G1656 L1657 T1658 P1659 E1660 E1661 F1662 M1663 L1664 V1665 Y1666 K1667 F1668 A1669 R1670 K1671 H1672 H1673 I1674 T1675 L1676 T1677 N1678 L1679
I1680 T1681 E1682 E1683 T1684 T1685 H1686 V1687 V1688 M1689 K1690 T1691 D1692 A1693 E1694 F1695 V1696 C1697 E1698 R1699 T1700 L1701 K1702 Y1703 F1704 L1705 G1706 I1707 A1708 G1709 G1710 K1711 W1712 V1713 V1714 S1715 Y1716 F1717 W1718 V1719 T1720 Q1721 S1722 I1723 K1724 E1725 R1726 K1727 M1728 L1729 N1730 E1731 H1732 D1733 F1734 E1735 V1736 R1737 G1738 D1739
V1740 V1741 N1742 G1743 R1744 N1745 H1746 Q1747 G1748 P1749 K1750 R1751 A1752 R1753 E1754 S1755 Q1756 D1757 R1758 K1759 I1760 F1761 R1762 G1763 L1764 E1765 I1766 C1767 C1768 Y1769 G1770 P1771 F1772 T1773 N1774 M1775 P1776 T1777 D1778 Q1779 L1780 E1781 W1782 M1783 V1784 Q1785 L1786 C1787 G1788 A1789 S1790 V1791 V1792 K1793 E1794 L1795 S1796 S1797 F1798 T1799
L1800 G1801 T1802 G1803 V1804 H1805 P1806 I1807 V1808 V1809 V1810 Q1811 P1812 D1813 A1814 W1815 T1816 E1817 D1818 N1819 G1820 F1821 H1822 A1823 I1824 G1825 Q1826 M1827 C1828 E1829 A1830 P1831 V1832 V1833 T1834 R1835 E1836 W1837 V1838 L1839 D1840 S1841 V1842 A1843 L1844 Y1845 Q1846 C1847 Q1848 E1849 L1850 D1851 T1852 Y1853 L1854 I1855 P1856 Q1857 I1858 P1859

4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C2	Depositor
Number of particles used	48483	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	1.0	Depositor
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	Not provided	
Image detector	GATAN K2 SUMMIT (4k x 4k)	Depositor
Maximum map value	0.081	Depositor
Minimum map value	-0.033	Depositor
Average map value	0.001	Depositor
Map value standard deviation	0.003	Depositor
Recommended contour level	0.015	Depositor
Map size (Å)	397.80798, 397.80798, 397.80798	wwPDB
Map dimensions	376, 376, 376	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.058, 1.058, 1.058	Depositor

5 Model quality (i)

5.1 Standard geometry (i)

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

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#$\|Z\|$ >5	RMSZ	#$\|Z\|$ >5
1	A	0.51	3/16819 (0.0%)	1.02	65/22785 (0.3%)
1	B	0.52	4/16819 (0.0%)	1.06	76/22785 (0.3%)
1	C	0.60	3/16819 (0.0%)	1.05	63/22785 (0.3%)
1	D	0.67	8/16819 (0.0%)	1.20	144/22785 (0.6%)
1	E	0.66	4/16819 (0.0%)	1.11	72/22785 (0.3%)
1	F	0.59	3/16819 (0.0%)	1.04	56/22785 (0.2%)
1	G	0.43	0/6199	0.87	7/8406 (0.1%)
1	J	0.41	0/10619	0.91	26/14376 (0.2%)
1	Q	0.43	0/6199	0.88	10/8406 (0.1%)
1	R	0.41	0/10619	0.92	32/14376 (0.2%)
2	H	0.44	0/1740	0.87	1/2364 (0.0%)
2	K	0.40	0/1737	0.79	0/2360
2	M	0.40	0/1740	0.81	0/2364
2	O	0.43	0/1737	0.84	1/2360 (0.0%)
2	S	0.36	0/1740	0.81	4/2364 (0.2%)
2	U	0.36	0/1737	0.75	0/2360
2	W	0.37	0/1737	0.77	2/2360 (0.1%)
2	Y	0.37	0/1740	0.78	0/2364
All	All	0.54	25/148458 (0.0%)	1.02	559/201170 (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	13
1	B	0	13
1	C	0	12
1	D	1	18
1	E	0	11

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Mol	Chain	#Chirality outliers	#Planarity outliers
1	F	0	12
1	J	0	11
1	R	0	11
All	All	1	101

All (25) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	F	2018	TRP	CB-CG	-7.39	1.36	1.50
1	B	1539	TYR	CB-CG	-7.33	1.40	1.51
1	C	2018	TRP	CB-CG	-7.25	1.37	1.50
1	E	1116	CYS	CB-SG	-7.02	1.70	1.82
1	D	1780	TYR	CD2-CE2	-6.97	1.28	1.39
1	D	2046	TRP	CB-CG	-6.97	1.37	1.50
1	B	1539	TYR	CD2-CE2	-6.85	1.29	1.39
1	B	1049	CYS	CB-SG	-6.65	1.71	1.82
1	F	2217	TRP	CB-CG	-6.46	1.38	1.50
1	A	157	VAL	C-N	6.42	1.48	1.34
1	D	2093	TRP	CB-CG	-6.25	1.39	1.50
1	E	2046	TRP	CB-CG	-6.18	1.39	1.50
1	A	1138	PHE	CA-C	5.90	1.68	1.52
1	C	1992	THR	C-N	-5.83	1.20	1.34
1	E	1780	TYR	CD1-CE1	-5.78	1.30	1.39
1	C	2217	TRP	CB-CG	-5.74	1.40	1.50
1	D	1738	TRP	CB-CG	-5.24	1.40	1.50
1	D	1691	PHE	CD2-CE2	-5.21	1.28	1.39
1	F	2263	VAL	CB-CG1	-5.20	1.42	1.52
1	D	1620	ALA	CA-CB	-5.18	1.41	1.52
1	D	2037	GLY	C-N	5.14	1.45	1.34
1	D	1255	CYS	CB-SG	-5.09	1.73	1.81
1	A	962	PHE	CB-CG	-5.03	1.42	1.51
1	B	1101	GLU	CB-CG	-5.01	1.42	1.52
1	E	1955	PHE	CB-CG	-5.00	1.42	1.51

All (559) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	D	1503	LEU	CA-CB-CG	10.94	140.47	115.30
1	E	1449	LEU	CA-CB-CG	10.48	139.40	115.30
1	A	991	LEU	CA-CB-CG	10.27	138.93	115.30
1	E	290	TYR	CB-CG-CD2	10.07	127.04	121.00
1	B	290	TYR	CB-CG-CD2	9.91	126.95	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	C	715	LEU	CA-CB-CG	9.88	138.02	115.30
1	A	1055	LEU	CA-CB-CG	9.77	137.77	115.30
1	C	1938	LEU	CA-CB-CG	9.76	137.75	115.30
1	F	1095	LEU	CA-CB-CG	9.59	137.36	115.30
1	D	1834	LEU	CA-CB-CG	9.56	137.29	115.30
1	A	963	MET	CG-SD-CE	9.31	115.10	100.20
1	A	1403	LEU	CA-CB-CG	9.31	136.71	115.30
1	R	715	LEU	CA-CB-CG	9.21	136.48	115.30
1	J	715	LEU	CA-CB-CG	9.02	136.04	115.30
1	B	2079	LEU	CA-CB-CG	8.99	135.97	115.30
1	R	1381	LEU	CA-CB-CG	8.88	135.73	115.30
1	B	290	TYR	CB-CG-CD1	-8.84	115.70	121.00
1	A	2079	LEU	CA-CB-CG	8.80	135.55	115.30
1	E	290	TYR	CB-CG-CD1	-8.78	115.73	121.00
1	J	1381	LEU	CA-CB-CG	8.76	135.45	115.30
1	D	1601	ILE	CG1-CB-CG2	8.65	130.44	111.40
1	J	687	ARG	NE-CZ-NH2	-8.44	116.08	120.30
1	E	175	TYR	CB-CG-CD1	-8.42	115.95	121.00
1	B	1441	TYR	CA-CB-CG	8.41	129.37	113.40
1	E	1381	LEU	CA-CB-CG	8.36	134.53	115.30
1	B	2223	LEU	CB-CG-CD2	8.35	125.20	111.00
1	D	2223	LEU	CB-CG-CD1	-8.33	96.83	111.00
1	R	1449	LEU	CA-CB-CG	8.32	134.43	115.30
1	J	1449	LEU	CA-CB-CG	8.28	134.34	115.30
1	R	687	ARG	NE-CZ-NH2	-8.25	116.17	120.30
1	C	1044	LEU	CA-CB-CG	8.21	134.18	115.30
1	B	1450	LEU	CA-CB-CG	8.21	134.18	115.30
1	F	715	LEU	CA-CB-CG	8.18	134.11	115.30
1	A	1381	LEU	CA-CB-CG	8.18	134.10	115.30
1	D	1622	LEU	CB-CG-CD1	8.16	124.86	111.00
1	D	1847	ILE	CG1-CB-CG2	8.06	129.12	111.40
1	J	1125	LEU	CA-CB-CG	8.05	133.82	115.30
1	D	2078	VAL	CG1-CB-CG2	8.04	123.77	110.90
1	A	122	LEU	CA-CB-CG	8.03	133.76	115.30
1	R	1125	LEU	CA-CB-CG	8.02	133.73	115.30
1	C	687	ARG	NE-CZ-NH2	-8.01	116.29	120.30
1	B	1622	LEU	CB-CG-CD2	8.01	124.62	111.00
1	D	1638	VAL	CG1-CB-CG2	8.00	123.70	110.90
1	E	175	TYR	CB-CG-CD2	7.97	125.78	121.00
1	D	1922	ILE	CG1-CB-CG2	7.96	128.91	111.40
1	F	1381	LEU	CA-CB-CG	7.95	133.58	115.30
1	D	1815	ILE	CG1-CB-CG2	7.93	128.85	111.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	C	2299	TYR	CA-CB-CG	7.92	128.44	113.40
1	A	1571	MET	CA-CB-CG	7.91	126.74	113.30
1	F	687	ARG	NE-CZ-NH2	-7.89	116.35	120.30
1	F	1044	LEU	CA-CB-CG	7.82	133.29	115.30
1	D	1508	VAL	CG1-CB-CG2	7.82	123.41	110.90
1	D	1973	VAL	CG1-CB-CG2	7.82	123.41	110.90
1	D	1716	VAL	CG1-CB-CG2	7.73	123.27	110.90
1	E	1609	LEU	CA-CB-CG	7.71	133.03	115.30
1	D	1885	VAL	CG1-CB-CG2	7.69	123.20	110.90
1	D	1545	TYR	C-N-CA	7.68	140.91	121.70
1	A	963	MET	CB-CG-SD	-7.67	89.39	112.40
1	B	1381	LEU	CA-CB-CG	7.65	132.90	115.30
1	D	1657	ILE	CG1-CB-CG2	7.65	128.23	111.40
1	E	897	LEU	CA-CB-CG	7.63	132.84	115.30
1	C	1698	LEU	CA-CB-CG	7.55	132.66	115.30
1	C	1095	LEU	CA-CB-CG	7.52	132.60	115.30
1	B	1963	ILE	CG1-CB-CG2	7.51	127.92	111.40
1	E	2230	LYS	CB-CG-CD	7.47	131.03	111.60
1	C	1687	ARG	NE-CZ-NH2	-7.46	116.57	120.30
1	B	1539	TYR	CA-CB-CG	7.45	127.55	113.40
1	C	1991	ARG	CB-CA-C	-7.44	95.52	110.40
1	Q	2270	LEU	CB-CG-CD2	7.41	123.60	111.00
1	D	1710	GLY	C-N-CA	7.39	140.17	121.70
1	E	702	VAL	CG1-CB-CG2	7.38	122.71	110.90
1	B	1330	LEU	CA-CB-CG	7.30	132.09	115.30
1	C	1125	LEU	CA-CB-CG	7.29	132.06	115.30
1	F	1125	LEU	CA-CB-CG	7.28	132.03	115.30
1	E	1359	ARG	NE-CZ-NH1	7.25	123.92	120.30
1	D	1909	SER	C-N-CA	7.23	139.77	121.70
1	D	2071	LEU	CA-CB-CG	7.22	131.92	115.30
1	B	156	MET	CB-CG-SD	-7.16	90.91	112.40
1	D	1085	LEU	CA-CB-CG	7.16	131.76	115.30
1	A	2239	LEU	CB-CG-CD2	7.16	123.16	111.00
1	B	718	TYR	CB-CA-C	7.14	124.67	110.40
1	B	2042	VAL	CG1-CB-CG2	7.13	122.31	110.90
1	D	1593	LEU	CB-CG-CD1	7.13	123.11	111.00
1	B	1539	TYR	CB-CA-C	-7.12	96.16	110.40
1	A	1758	TYR	CA-CB-CG	7.11	126.91	113.40
1	R	1237	VAL	CG1-CB-CG2	7.04	122.16	110.90
1	C	2189	LEU	CA-CB-CG	7.03	131.47	115.30
1	D	1797	LEU	CB-CG-CD2	7.03	122.95	111.00
1	F	2040	LEU	CB-CG-CD2	7.02	122.94	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	F	1938	LEU	CA-CB-CG	7.02	131.44	115.30
1	D	142	TYR	CA-CB-CG	7.01	126.72	113.40
1	B	1758	TYR	CA-CB-CG	7.00	126.70	113.40
1	A	963	MET	CB-CA-C	-7.00	96.41	110.40
1	A	1571	MET	CB-CG-SD	-7.00	91.41	112.40
1	E	142	TYR	CA-CB-CG	6.98	126.67	113.40
1	D	1371	ARG	NE-CZ-NH2	-6.97	116.81	120.30
1	B	1667	LYS	C-N-CA	6.97	139.12	121.70
1	A	156	MET	CB-CG-SD	-6.96	91.53	112.40
1	B	1371	ARG	NE-CZ-NH2	-6.92	116.84	120.30
2	S	1723	ILE	CG1-CB-CG2	6.91	126.60	111.40
1	B	1899	LEU	CB-CG-CD2	6.91	122.74	111.00
1	B	1938	LEU	CA-CB-CG	6.91	131.19	115.30
1	B	2222	LEU	CB-CG-CD2	6.91	122.74	111.00
1	J	1371	ARG	NE-CZ-NH2	-6.90	116.85	120.30
1	D	1974	GLY	C-N-CA	6.90	138.96	121.70
1	D	652	LEU	CA-CB-CG	6.90	131.16	115.30
1	J	791	LEU	CB-CG-CD2	6.90	122.72	111.00
1	E	374	PHE	CB-CG-CD1	-6.89	115.97	120.80
1	D	540	TYR	CB-CG-CD2	6.89	125.14	121.00
1	C	1428	ARG	N-CA-C	-6.87	92.44	111.00
1	A	1326	ARG	NE-CZ-NH1	6.85	123.72	120.30
1	C	540	TYR	CB-CG-CD1	-6.85	116.89	121.00
1	B	1671	TYR	CB-CG-CD2	-6.85	116.89	121.00
1	Q	2322	MET	CA-CB-CG	6.84	124.92	113.30
1	E	1044	LEU	CA-CB-CG	6.81	130.97	115.30
1	E	1403	LEU	CA-CB-CG	6.81	130.96	115.30
1	E	540	TYR	CB-CG-CD2	6.79	125.08	121.00
1	E	1645	LEU	CB-CG-CD1	6.79	122.54	111.00
1	G	2270	LEU	CB-CG-CD1	6.79	122.54	111.00
1	D	1485	PRO	N-CA-C	6.78	129.72	112.10
2	S	1845	TYR	CB-CG-CD2	-6.77	116.94	121.00
1	B	122	LEU	CA-CB-CG	6.76	130.86	115.30
1	E	1125	LEU	CA-CB-CG	6.75	130.82	115.30
1	F	540	TYR	CB-CG-CD1	-6.74	116.96	121.00
1	D	1044	LEU	CA-CB-CG	6.74	130.79	115.30
1	D	1389	PHE	CB-CG-CD2	-6.73	116.09	120.80
1	D	971	LEU	CA-CB-CG	6.72	130.75	115.30
1	D	1600	ASP	CB-CG-OD1	6.71	124.34	118.30
1	F	976	ARG	NE-CZ-NH2	-6.70	116.95	120.30
1	F	1587	ARG	CG-CD-NE	6.69	125.85	111.80
1	A	1046	ASP	CB-CG-OD1	6.69	124.32	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	D	1832	VAL	CG1-CB-CG2	6.69	121.60	110.90
1	D	1426	ILE	CG1-CB-CG2	6.68	126.09	111.40
1	A	350	ARG	NE-CZ-NH1	6.67	123.63	120.30
1	D	1488	ILE	CG1-CB-CG2	6.66	126.06	111.40
1	A	868	CYS	CA-CB-SG	6.66	125.98	114.00
1	D	1816	THR	N-CA-CB	6.64	122.91	110.30
1	R	1371	ARG	NE-CZ-NH2	-6.61	116.99	120.30
1	D	1543	SER	N-CA-C	-6.61	93.17	111.00
1	D	1892	VAL	CG1-CB-CG2	6.60	121.46	110.90
1	J	1428	ARG	CB-CA-C	6.59	123.58	110.40
1	D	290	TYR	CB-CG-CD2	6.59	124.95	121.00
1	R	1428	ARG	CB-CA-C	6.58	123.56	110.40
1	D	1475	LEU	CB-CG-CD2	-6.54	99.87	111.00
1	C	661	LEU	CA-CB-CG	6.54	130.35	115.30
1	R	145	PHE	CB-CG-CD1	-6.53	116.23	120.80
1	E	2259	VAL	CB-CA-C	-6.51	99.02	111.40
1	R	1289	LEU	CB-CG-CD2	6.51	122.07	111.00
1	F	1428	ARG	N-CA-C	-6.49	93.47	111.00
1	D	290	TYR	CB-CG-CD1	-6.49	117.11	121.00
1	D	290	TYR	CA-CB-CG	6.48	125.71	113.40
1	B	1882	HIS	C-N-CA	6.47	137.88	121.70
2	S	1845	TYR	CB-CG-CD1	6.47	124.88	121.00
1	D	1880	VAL	CG1-CB-CG2	6.47	121.25	110.90
1	F	1640	ASP	CB-CG-OD1	6.46	124.11	118.30
1	D	897	LEU	CA-CB-CG	6.46	130.15	115.30
1	A	1442	LEU	CA-CB-CG	6.45	130.14	115.30
1	D	1509	LEU	CA-CB-CG	6.45	130.12	115.30
1	A	1139	TYR	CB-CG-CD1	-6.44	117.13	121.00
1	C	2297	ARG	CA-CB-CG	6.44	127.56	113.40
1	D	1645	LEU	CB-CG-CD2	6.43	121.94	111.00
1	B	2082	ILE	CG1-CB-CG2	6.43	125.55	111.40
1	D	1459	VAL	CG1-CB-CG2	6.43	121.19	110.90
1	B	868	CYS	CA-CB-SG	6.42	125.55	114.00
1	F	661	LEU	CA-CB-CG	6.41	130.04	115.30
1	C	2062	LYS	CA-CB-CG	6.40	127.49	113.40
1	F	2129	ARG	CG-CD-NE	6.40	125.24	111.80
1	F	884	ARG	CA-CB-CG	6.40	127.47	113.40
1	B	884	ARG	CA-CB-CG	6.39	127.47	113.40
1	E	374	PHE	CB-CG-CD2	6.39	125.27	120.80
1	A	540	TYR	CB-CG-CD1	-6.38	117.17	121.00
1	C	1640	ASP	CB-CG-OD1	6.37	124.04	118.30
1	D	1667	LYS	C-N-CA	6.37	137.63	121.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	D	1714	ILE	CG1-CB-CG2	6.36	125.39	111.40
1	Q	1622	LEU	CA-CB-CG	6.36	129.93	115.30
1	R	540	TYR	CB-CG-CD1	-6.36	117.19	121.00
1	F	2250	ARG	NE-CZ-NH1	6.35	123.47	120.30
1	D	1707	ARG	N-CA-CB	6.34	122.02	110.60
1	B	500	CYS	N-CA-C	-6.34	93.88	111.00
1	D	1060	LEU	CB-CG-CD2	6.34	121.77	111.00
1	D	1792	ILE	CG1-CB-CG2	6.33	125.32	111.40
1	A	644	LEU	CA-CB-CG	6.32	129.84	115.30
1	A	1938	LEU	CA-CB-CG	6.31	129.81	115.30
1	D	1441	TYR	CA-CB-CG	6.30	125.38	113.40
1	J	540	TYR	CB-CG-CD1	-6.30	117.22	121.00
1	E	540	TYR	CB-CG-CD1	-6.29	117.22	121.00
1	C	2250	ARG	NE-CZ-NH1	6.29	123.44	120.30
1	C	884	ARG	CA-CB-CG	6.26	127.17	113.40
1	B	991	LEU	CA-CB-CG	6.26	129.70	115.30
1	J	1428	ARG	N-CA-C	-6.26	94.10	111.00
1	C	2258	THR	OG1-CB-CG2	-6.25	95.61	110.00
1	B	1082	ARG	CB-CG-CD	6.25	127.86	111.60
1	D	540	TYR	CB-CG-CD1	-6.25	117.25	121.00
1	E	889	LEU	CA-CB-CG	6.25	129.67	115.30
1	C	401	PHE	CB-CG-CD2	-6.24	116.43	120.80
1	E	1543	SER	N-CA-C	-6.24	94.15	111.00
1	D	962	PHE	CB-CG-CD1	-6.23	116.44	120.80
1	A	718	TYR	N-CA-CB	-6.23	99.39	110.60
1	F	1253	MET	CG-SD-CE	6.23	110.17	100.20
1	C	540	TYR	CB-CG-CD2	6.22	124.73	121.00
1	E	644	LEU	CB-CG-CD1	6.22	121.58	111.00
1	C	2151	LEU	CA-CB-CG	6.22	129.61	115.30
1	B	540	TYR	CB-CG-CD1	-6.22	117.27	121.00
1	A	644	LEU	CB-CG-CD2	6.21	121.56	111.00
1	D	1377	LEU	CA-CB-CG	6.20	129.56	115.30
1	E	1428	ARG	N-CA-C	-6.19	94.28	111.00
1	E	1485	PRO	N-CA-C	6.19	128.20	112.10
1	A	1156	ARG	CG-CD-NE	6.18	124.78	111.80
1	D	1675	ARG	N-CA-CB	6.18	121.72	110.60
1	G	1622	LEU	CA-CB-CG	6.18	129.51	115.30
1	F	540	TYR	CB-CG-CD2	6.18	124.71	121.00
1	R	1428	ARG	N-CA-C	-6.17	94.34	111.00
1	D	881	TRP	CA-CB-CG	6.17	125.42	113.70
1	R	990	LEU	CA-CB-CG	6.17	129.48	115.30
1	C	2218	ARG	NE-CZ-NH1	6.15	123.38	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	D	1577	TYR	N-CA-C	-6.15	94.39	111.00
1	F	2297	ARG	CA-CB-CG	6.15	126.92	113.40
1	D	1910	VAL	CG1-CB-CG2	6.14	120.73	110.90
1	J	990	LEU	CA-CB-CG	6.13	129.40	115.30
1	B	1021	MET	CA-CB-CG	6.12	123.71	113.30
1	B	1321	ASP	C-N-CA	6.11	136.98	121.70
1	C	2095	VAL	CG1-CB-CG2	6.11	120.67	110.90
1	B	2215	PHE	CB-CA-C	-6.10	98.20	110.40
1	D	1820	VAL	CG1-CB-CG2	6.10	120.66	110.90
2	O	1724	LYS	CA-CB-CG	6.10	126.82	113.40
1	F	2139	ARG	NE-CZ-NH2	-6.10	117.25	120.30
1	D	1478	VAL	CG1-CB-CG2	6.09	120.65	110.90
1	R	1069	LEU	CA-CB-CG	6.08	129.29	115.30
1	B	238	TRP	CA-CB-CG	6.08	125.26	113.70
1	E	1356	PHE	N-CA-C	-6.07	94.62	111.00
1	E	2071	LEU	CA-CB-CG	6.07	129.25	115.30
1	R	791	LEU	CB-CG-CD2	6.07	121.31	111.00
1	Q	2139	ARG	NE-CZ-NH2	-6.06	117.27	120.30
1	R	540	TYR	CB-CG-CD2	6.06	124.64	121.00
1	C	2336	ARG	CA-CB-CG	6.06	126.72	113.40
1	D	1473	ILE	CG1-CB-CG2	6.05	124.71	111.40
1	D	1731	ARG	NE-CZ-NH2	-6.04	117.28	120.30
1	E	1123	LEU	CB-CG-CD2	6.04	121.28	111.00
1	B	718	TYR	CA-CB-CG	6.04	124.88	113.40
1	E	652	LEU	CA-CB-CG	6.04	129.19	115.30
1	A	1451	LEU	CB-CG-CD2	-6.04	100.73	111.00
1	B	1872	ILE	CG1-CB-CG2	6.03	124.67	111.40
1	B	1938	LEU	CB-CG-CD2	6.03	121.26	111.00
1	A	391	ALA	C-N-CD	-6.03	107.33	120.60
1	E	2041	MET	CA-CB-CG	6.03	123.56	113.30
1	F	1568	LEU	CB-CG-CD2	6.03	121.25	111.00
1	B	1389	PHE	CB-CG-CD2	-6.03	116.58	120.80
1	Q	2111	ARG	NE-CZ-NH2	-6.02	117.29	120.30
2	W	1699	ARG	NE-CZ-NH2	-6.01	117.30	120.30
1	C	2331	ARG	CA-CB-CG	6.01	126.62	113.40
1	J	540	TYR	CB-CG-CD2	6.01	124.61	121.00
1	D	1359	ARG	NE-CZ-NH2	6.01	123.30	120.30
1	B	718	TYR	N-CA-CB	-6.01	99.79	110.60
1	D	2258	THR	C-N-CA	6.00	136.69	121.70
1	R	1320	VAL	CG1-CB-CG2	5.99	120.49	110.90
1	D	1150	LEU	CA-CB-CG	5.99	129.07	115.30
1	B	1442	LEU	CA-CB-CG	5.99	129.06	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	B	2257	GLY	N-CA-C	-5.98	98.14	113.10
1	B	1355	PHE	CB-CG-CD2	-5.98	116.62	120.80
1	R	1448	ARG	NE-CZ-NH2	-5.97	117.31	120.30
1	D	1824	ALA	N-CA-C	5.96	127.09	111.00
1	C	990	LEU	CA-CB-CG	5.96	129.01	115.30
1	F	990	LEU	CA-CB-CG	5.96	129.01	115.30
1	C	1935	ARG	NE-CZ-NH1	5.95	123.28	120.30
1	B	293	ASP	CB-CA-C	5.95	122.29	110.40
1	A	718	TYR	CA-CB-CG	5.94	124.68	113.40
1	E	885	LEU	CA-CB-CG	5.94	128.96	115.30
1	B	1610	ILE	CG1-CB-CG2	5.93	124.44	111.40
1	R	145	PHE	CB-CG-CD2	5.92	124.94	120.80
1	D	1356	PHE	N-CA-C	-5.92	95.03	111.00
1	F	1977	ARG	NE-CZ-NH1	5.92	123.26	120.30
1	G	2111	ARG	NE-CZ-NH2	-5.92	117.34	120.30
1	C	1622	LEU	CA-CB-CG	5.91	128.90	115.30
1	D	1874	ILE	CG1-CB-CG2	5.90	124.39	111.40
1	F	2218	ARG	NE-CZ-NH1	5.90	123.25	120.30
1	B	1138	PHE	CB-CG-CD2	5.89	124.92	120.80
1	E	2247	MET	CA-CB-CG	5.88	123.30	113.30
1	D	962	PHE	CB-CG-CD2	5.88	124.92	120.80
1	F	683	LEU	CA-CB-CG	5.87	128.81	115.30
1	D	885	LEU	CA-CB-CG	5.86	128.79	115.30
1	A	540	TYR	CB-CG-CD2	5.86	124.52	121.00
1	F	401	PHE	CB-CG-CD2	-5.86	116.70	120.80
2	H	1670	ARG	CG-CD-NE	-5.85	99.51	111.80
1	E	881	TRP	CA-CB-CG	5.84	124.80	113.70
1	E	1904	LYS	CB-CG-CD	5.84	126.80	111.60
1	F	2301	LEU	CA-CB-CG	5.84	128.74	115.30
1	D	1579	THR	C-N-CA	5.84	136.30	121.70
1	D	1803	ILE	CG1-CB-CG2	5.83	124.22	111.40
1	A	1330	LEU	CB-CG-CD1	5.83	120.91	111.00
1	D	1880	VAL	CA-CB-CG2	5.83	119.64	110.90
1	D	1529	ARG	CG-CD-NE	5.83	124.03	111.80
1	B	1632	LEU	CA-CB-CG	5.82	128.68	115.30
1	B	2128	PHE	CB-CG-CD2	-5.82	116.73	120.80
1	R	1095	LEU	CA-CB-CG	5.81	128.66	115.30
1	A	983	MET	CA-CB-CG	5.80	123.16	113.30
1	C	683	LEU	CA-CB-CG	5.80	128.64	115.30
1	B	1069	LEU	CB-CG-CD1	5.80	120.86	111.00
1	E	899	LEU	CB-CG-CD1	5.79	120.84	111.00
1	C	1403	LEU	CA-CB-CG	5.79	128.62	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	D	1449	LEU	CB-CG-CD1	5.79	120.84	111.00
1	D	1823	ARG	CG-CD-NE	-5.78	99.65	111.80
1	E	1675	ARG	N-CA-CB	5.78	121.01	110.60
1	A	1330	LEU	CA-CB-CG	5.78	128.60	115.30
1	R	1368	ARG	CA-CB-CG	5.77	126.09	113.40
1	B	1973	VAL	CG1-CB-CG2	5.76	120.11	110.90
1	A	1047	GLN	CA-CB-CG	5.76	126.07	113.40
1	B	1668	SER	C-N-CA	-5.75	97.85	122.00
1	F	1811	TYR	N-CA-CB	5.74	120.94	110.60
1	D	1531	PHE	CB-CG-CD1	-5.74	116.78	120.80
1	J	1368	ARG	CA-CB-CG	5.74	126.03	113.40
1	R	1253	MET	CB-CA-C	5.74	121.87	110.40
1	D	1079	LEU	CB-CA-C	5.73	121.09	110.20
1	D	1513	LEU	CA-CB-CG	5.73	128.48	115.30
1	E	2111	ARG	NE-CZ-NH2	-5.72	117.44	120.30
1	A	1029	PHE	N-CA-CB	-5.72	100.30	110.60
1	D	1616	MET	CA-CB-CG	-5.72	103.57	113.30
1	E	1854	LEU	CA-CB-CG	5.72	128.45	115.30
1	R	1540	LEU	CA-CB-CG	5.72	128.45	115.30
1	D	1077	VAL	CG1-CB-CG2	5.72	120.05	110.90
1	D	1838	THR	OG1-CB-CG2	5.71	123.12	110.00
1	F	2139	ARG	CB-CA-C	-5.70	98.99	110.40
1	D	238	TRP	CB-CA-C	5.70	121.80	110.40
1	A	1632	LEU	CA-CB-CG	5.69	128.39	115.30
1	E	391	ALA	C-N-CD	-5.69	108.08	120.60
1	A	1403	LEU	CB-CG-CD2	-5.69	101.33	111.00
1	D	1422	PHE	N-CA-CB	5.67	120.81	110.60
1	C	401	PHE	CB-CG-CD1	5.67	124.77	120.80
1	C	1512	GLU	N-CA-CB	5.67	120.80	110.60
1	D	1418	ASP	CB-CG-OD2	-5.66	113.21	118.30
1	D	391	ALA	C-N-CD	-5.65	108.16	120.60
1	D	1531	PHE	CB-CG-CD2	5.64	124.75	120.80
1	E	1731	ARG	NE-CZ-NH2	-5.64	117.48	120.30
1	E	1723	ARG	CG-CD-NE	5.64	123.64	111.80
1	C	500	CYS	N-CA-C	-5.64	95.78	111.00
1	C	2299	TYR	N-CA-CB	-5.63	100.47	110.60
1	B	171	MET	CB-CG-SD	5.63	129.29	112.40
1	D	1568	LEU	CB-CG-CD2	5.62	120.56	111.00
1	D	991	LEU	CA-CB-CG	5.62	128.22	115.30
1	B	1983	VAL	CG1-CB-CG2	5.62	119.89	110.90
1	J	1448	ARG	NE-CZ-NH2	-5.61	117.50	120.30
1	J	279	LEU	CA-CB-CG	5.60	128.18	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	J	1095	LEU	CA-CB-CG	5.60	128.17	115.30
1	C	1935	ARG	NE-CZ-NH2	-5.59	117.50	120.30
1	B	1834	LEU	C-N-CA	5.59	134.04	122.30
1	A	2215	PHE	CB-CA-C	-5.58	99.23	110.40
1	D	2038	LEU	CB-CG-CD1	5.58	120.48	111.00
1	A	2223	LEU	CB-CG-CD1	5.58	120.48	111.00
1	D	1048	LEU	CB-CG-CD1	-5.57	101.53	111.00
1	A	994	TYR	CB-CG-CD2	5.57	124.34	121.00
1	F	500	CYS	N-CA-C	-5.57	95.95	111.00
1	D	2095	VAL	CB-CA-C	-5.57	100.82	111.40
1	E	1389	PHE	CB-CG-CD2	-5.57	116.90	120.80
1	F	1095	LEU	CB-CA-C	5.56	120.77	110.20
1	E	2079	LEU	CA-CB-CG	5.56	128.09	115.30
1	E	1060	LEU	CA-CB-CG	5.56	128.09	115.30
1	D	1592	SER	C-N-CA	5.55	135.58	121.70
1	D	1713	ARG	CG-CD-NE	5.55	123.46	111.80
1	D	2118	LEU	CB-CG-CD1	5.55	120.44	111.00
1	F	1664	MET	CG-SD-CE	5.55	109.08	100.20
1	J	1146	ARG	NE-CZ-NH2	5.55	123.07	120.30
1	C	1367	ASP	CB-CG-OD1	5.55	123.29	118.30
1	Q	2322	MET	CB-CG-SD	5.55	129.04	112.40
1	D	1981	ILE	N-CA-C	5.54	125.96	111.00
1	C	1391	LEU	CA-CB-CG	5.54	128.04	115.30
1	D	1631	MET	CB-CA-C	-5.54	99.33	110.40
1	E	976	ARG	NE-CZ-NH2	-5.54	117.53	120.30
1	A	979	ILE	C-N-CA	5.53	135.53	121.70
1	A	156	MET	CA-CB-CG	5.53	122.70	113.30
1	D	1637	LEU	CB-CG-CD1	5.52	120.39	111.00
1	D	1605	PHE	CB-CG-CD2	-5.52	116.94	120.80
1	E	2095	VAL	CB-CA-C	-5.52	100.91	111.40
2	S	1769	TYR	CB-CG-CD2	-5.51	117.69	121.00
1	D	1487	LYS	N-CA-CB	-5.51	100.68	110.60
1	A	238	TRP	CA-CB-CG	5.50	124.15	113.70
1	E	990	LEU	CB-CG-CD1	5.50	120.34	111.00
1	B	2038	LEU	CA-CB-CG	5.49	127.93	115.30
1	C	1498	ARG	NE-CZ-NH1	5.49	123.04	120.30
1	E	290	TYR	CA-CB-CG	5.49	123.82	113.40
1	D	1616	MET	CB-CA-C	5.48	121.36	110.40
1	A	2250	ARG	NE-CZ-NH1	5.47	123.03	120.30
1	F	1701	ARG	NE-CZ-NH1	5.47	123.03	120.30
1	A	2215	PHE	CB-CG-CD2	-5.46	116.97	120.80
1	D	2257	GLY	N-CA-C	-5.46	99.44	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	E	1095	LEU	CB-CG-CD1	5.46	120.28	111.00
1	D	1854	LEU	CA-CB-CG	5.46	127.85	115.30
1	D	889	LEU	CA-CB-CG	5.45	127.84	115.30
1	F	1098	ASN	CB-CA-C	-5.45	99.50	110.40
1	D	1631	MET	CA-CB-CG	5.45	122.57	113.30
1	D	1825	ILE	CG1-CB-CG2	5.45	123.39	111.40
1	C	2068	VAL	CG1-CB-CG2	5.45	119.62	110.90
1	A	1139	TYR	CB-CG-CD2	5.45	124.27	121.00
1	B	1975	ARG	N-CA-CB	5.44	120.40	110.60
1	B	1082	ARG	CG-CD-NE	5.44	123.23	111.80
1	A	994	TYR	CB-CG-CD1	-5.44	117.73	121.00
1	A	1060	LEU	CB-CG-CD1	5.44	120.24	111.00
1	F	2250	ARG	NE-CZ-NH2	-5.43	117.58	120.30
1	J	1055	LEU	CA-CB-CG	5.43	127.79	115.30
1	B	2250	ARG	NE-CZ-NH1	5.43	123.01	120.30
1	A	290	TYR	CA-CB-CG	5.43	123.71	113.40
1	E	1403	LEU	N-CA-CB	5.42	121.24	110.40
1	B	290	TYR	CA-CB-CG	5.42	123.70	113.40
1	B	2111	ARG	CA-CB-CG	5.42	125.31	113.40
1	D	1961	SER	N-CA-CB	-5.42	102.38	110.50
1	C	2196	MET	CB-CG-SD	-5.41	96.17	112.40
1	R	868	CYS	CA-CB-SG	5.41	123.73	114.00
1	B	717	SER	N-CA-C	-5.41	96.40	111.00
1	D	1355	PHE	CB-CG-CD2	-5.40	117.02	120.80
1	G	2139	ARG	NE-CZ-NH1	5.40	123.00	120.30
1	F	1139	TYR	CB-CG-CD1	-5.40	117.76	121.00
1	A	500	CYS	N-CA-C	-5.39	96.44	111.00
1	C	1586	LYS	CA-CB-CG	5.39	125.25	113.40
1	F	868	CYS	CA-CB-SG	5.37	123.67	114.00
1	J	868	CYS	CA-CB-SG	5.37	123.67	114.00
1	D	1723	ARG	CG-CD-NE	5.37	123.08	111.80
1	D	1180	PHE	CB-CG-CD2	-5.37	117.04	120.80
1	C	2325	HIS	C-N-CA	5.37	135.11	121.70
1	B	1029	PHE	N-CA-CB	-5.37	100.94	110.60
1	B	1139	TYR	CB-CG-CD1	-5.36	117.79	121.00
1	J	1060	LEU	CA-CB-CG	5.35	127.60	115.30
1	C	2049	PHE	CB-CG-CD2	-5.35	117.06	120.80
1	B	2215	PHE	CB-CG-CD2	-5.34	117.06	120.80
1	E	2330	GLN	CB-CA-C	5.34	121.07	110.40
1	C	2139	ARG	CB-CA-C	-5.34	99.73	110.40
1	G	2139	ARG	NE-CZ-NH2	-5.34	117.63	120.30
1	D	350	ARG	NE-CZ-NH1	5.33	122.97	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	F	2325	HIS	C-N-CA	5.33	135.04	121.70
1	Q	2139	ARG	NE-CZ-NH1	5.33	122.97	120.30
1	E	661	LEU	CA-CB-CG	5.33	127.56	115.30
1	F	1367	ASP	CB-CG-OD1	5.33	123.10	118.30
1	D	869	LEU	CB-CG-CD2	5.33	120.06	111.00
1	F	401	PHE	CB-CG-CD1	5.33	124.53	120.80
1	F	2331	ARG	CA-CB-CG	5.33	125.12	113.40
1	R	1146	ARG	NE-CZ-NH2	5.33	122.96	120.30
1	F	1055	LEU	CA-CB-CG	5.32	127.54	115.30
1	E	1420	ARG	NE-CZ-NH1	5.32	122.96	120.30
1	D	1450	LEU	CA-CB-CG	5.32	127.53	115.30
1	B	2260	LYS	CA-CB-CG	5.32	125.10	113.40
1	B	430	ASP	CB-CG-OD2	-5.31	113.52	118.30
1	F	146	ARG	NE-CZ-NH1	5.31	122.95	120.30
1	F	2118	LEU	CB-CG-CD1	5.31	120.03	111.00
1	R	1055	LEU	CA-CB-CG	5.31	127.52	115.30
1	D	1002	GLN	C-N-CA	5.30	134.95	121.70
1	D	1577	TYR	CB-CA-C	5.30	121.00	110.40
1	A	894	LEU	CA-CB-CG	5.30	127.48	115.30
1	C	1055	LEU	CA-CB-CG	5.30	127.48	115.30
1	D	2124	VAL	CA-CB-CG1	5.29	118.84	110.90
1	E	1367	ASP	CB-CG-OD1	5.29	123.06	118.30
1	J	1327	LEU	CA-CB-CG	5.29	127.47	115.30
1	F	1467	ARG	CA-CB-CG	5.28	125.02	113.40
1	Q	2307	LEU	CB-CG-CD2	5.28	119.97	111.00
1	E	1640	ASP	CB-CG-OD1	5.27	123.05	118.30
1	E	356	ARG	NE-CZ-NH1	5.27	122.94	120.30
1	E	1391	LEU	CA-CB-CG	5.27	127.41	115.30
1	E	726	TYR	N-CA-CB	5.26	120.08	110.60
1	A	718	TYR	CB-CA-C	5.26	120.93	110.40
1	D	1424	ARG	NE-CZ-NH2	-5.26	117.67	120.30
1	D	1677	ILE	CG1-CB-CG2	5.26	122.97	111.40
1	A	1670	GLU	CB-CA-C	5.26	120.91	110.40
1	D	1008	LYS	CA-CB-CG	5.25	124.95	113.40
1	A	356	ARG	CA-CB-CG	5.25	124.94	113.40
1	E	1359	ARG	NE-CZ-NH2	-5.25	117.68	120.30
1	E	350	ARG	NE-CZ-NH1	5.25	122.92	120.30
1	D	238	TRP	CA-CB-CG	5.24	123.66	113.70
1	R	1356	PHE	N-CA-C	-5.24	96.84	111.00
1	E	1150	LEU	CA-CB-CG	5.24	127.34	115.30
1	F	1698	LEU	CA-CB-CG	5.23	127.34	115.30
1	D	1449	LEU	CA-CB-CG	5.23	127.32	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	D	1787	GLY	N-CA-C	-5.23	100.03	113.10
1	C	2307	LEU	CB-CG-CD2	5.22	119.88	111.00
1	F	2063	PHE	CB-CG-CD1	5.22	124.45	120.80
1	D	1919	ILE	N-CA-CB	5.22	122.81	110.80
1	R	279	LEU	CA-CB-CG	5.22	127.31	115.30
1	D	1048	LEU	CA-CB-CG	5.22	127.30	115.30
1	A	2221	ARG	NE-CZ-NH1	5.21	122.91	120.30
1	D	1698	LEU	CA-CB-CG	5.21	127.28	115.30
1	C	2139	ARG	NE-CZ-NH2	-5.21	117.69	120.30
1	A	290	TYR	CB-CG-CD2	5.21	124.12	121.00
1	A	871	ASP	N-CA-CB	-5.21	101.23	110.60
1	D	2133	LEU	CA-CB-CG	5.20	127.26	115.30
1	C	1467	ARG	CA-CB-CG	5.20	124.84	113.40
1	B	1377	LEU	CA-CB-CG	5.20	127.25	115.30
1	R	661	LEU	CA-CB-CG	5.20	127.25	115.30
1	E	291	VAL	CA-CB-CG2	5.19	118.68	110.90
1	D	1721	GLY	C-N-CA	5.19	134.67	121.70
1	D	1514	LYS	N-CA-CB	5.19	119.94	110.60
1	C	1977	ARG	CB-CA-C	5.19	120.77	110.40
1	D	1180	PHE	CB-CA-C	-5.18	100.04	110.40
1	C	1421	PHE	CB-CG-CD2	-5.18	117.17	120.80
1	G	1935	ARG	NE-CZ-NH2	-5.18	117.71	120.30
1	E	1055	LEU	CA-CB-CG	5.18	127.21	115.30
1	F	1580	LYS	N-CA-CB	-5.18	101.28	110.60
1	A	1239	PHE	C-N-CA	5.18	134.64	121.70
1	C	632	VAL	CG1-CB-CG2	-5.17	102.62	110.90
1	D	1838	THR	CA-CB-CG2	5.17	119.64	112.40
1	R	1403	LEU	CA-CB-CG	5.17	127.18	115.30
1	C	1568	LEU	CB-CG-CD2	5.16	119.77	111.00
1	J	661	LEU	CA-CB-CG	5.16	127.17	115.30
1	D	291	VAL	CA-CB-CG2	5.16	118.64	110.90
1	E	1403	LEU	CB-CG-CD2	-5.15	102.24	111.00
1	C	1327	LEU	CA-CB-CG	5.15	127.15	115.30
1	C	1170	GLN	N-CA-C	-5.15	97.09	111.00
1	A	1180	PHE	CB-CG-CD2	-5.15	117.19	120.80
1	Q	1938	LEU	CA-CB-CG	5.15	127.15	115.30
1	D	1713	ARG	CB-CG-CD	-5.15	98.22	111.60
1	C	1877	ASN	N-CA-CB	-5.15	101.34	110.60
1	D	1355	PHE	N-CA-CB	5.15	119.86	110.60
1	B	1355	PHE	CB-CG-CD1	5.15	124.40	120.80
1	F	1060	LEU	CA-CB-CG	5.14	127.13	115.30
1	E	2133	LEU	CA-CB-CG	5.14	127.11	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	B	871	ASP	N-CA-CB	-5.14	101.35	110.60
1	J	1170	GLN	N-CA-C	-5.14	97.13	111.00
1	C	1687	ARG	NE-CZ-NH1	5.12	122.86	120.30
1	F	1391	LEU	CA-CB-CG	5.12	127.07	115.30
1	A	2071	LEU	CA-CB-CG	5.12	127.07	115.30
1	C	238	TRP	CA-CB-CG	5.11	123.40	113.70
1	F	1509	LEU	CA-CB-CG	5.11	127.04	115.30
1	F	2139	ARG	NE-CZ-NH1	5.11	122.85	120.30
1	A	687	ARG	NE-CZ-NH1	5.11	122.85	120.30
1	A	2079	LEU	CB-CG-CD2	-5.10	102.32	111.00
1	B	884	ARG	CB-CA-C	-5.10	100.19	110.40
1	J	991	LEU	CA-CB-CG	5.10	127.03	115.30
1	F	632	VAL	CG1-CB-CG2	-5.10	102.74	110.90
1	D	1528	ILE	CG1-CB-CG2	5.09	122.61	111.40
1	F	1170	GLN	N-CA-C	-5.09	97.25	111.00
1	B	1671	TYR	CB-CG-CD1	5.09	124.05	121.00
1	R	991	LEU	CA-CB-CG	5.09	127.00	115.30
1	A	963	MET	CA-CB-CG	5.09	121.95	113.30
1	E	734	TYR	CB-CG-CD2	-5.08	117.95	121.00
1	E	2336	ARG	CB-CG-CD	5.08	124.81	111.60
1	G	2270	LEU	CB-CG-CD2	5.08	119.64	111.00
2	W	1769	TYR	CB-CG-CD2	-5.08	117.95	121.00
1	C	1566	GLY	N-CA-C	-5.08	100.40	113.10
1	C	1731	ARG	NE-CZ-NH1	5.08	122.84	120.30
1	B	540	TYR	CB-CG-CD2	5.08	124.05	121.00
1	D	1403	LEU	N-CA-CB	5.07	120.55	110.40
1	B	1104	PHE	CB-CG-CD2	-5.06	117.26	120.80
1	D	1663	LYS	C-N-CA	5.05	134.33	121.70
1	D	894	LEU	CA-CB-CG	-5.05	103.68	115.30
1	E	1691	PHE	CB-CG-CD2	-5.05	117.27	120.80
1	C	2324	GLN	C-N-CA	5.05	134.32	121.70
1	J	1403	LEU	CA-CB-CG	5.05	126.91	115.30
1	R	1170	GLN	N-CA-C	-5.04	97.39	111.00
1	E	687	ARG	NE-CZ-NH2	-5.04	117.78	120.30
1	B	2224	LEU	CA-CB-CG	5.04	126.89	115.30
1	E	1797	LEU	CA-CB-CG	5.03	126.86	115.30
1	B	1833	ARG	CG-CD-NE	5.03	122.35	111.80
1	A	728	LYS	N-CA-C	-5.03	97.43	111.00
1	J	1356	PHE	N-CA-C	-5.02	97.44	111.00
1	D	1403	LEU	CA-CB-CG	5.02	126.84	115.30
1	D	1529	ARG	CB-CA-C	5.02	120.43	110.40
1	D	1618	THR	OG1-CB-CG2	5.01	121.53	110.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	E	1606	ARG	N-CA-CB	-5.01	101.58	110.60
1	C	1114	GLN	CA-CB-CG	5.01	124.42	113.40
1	B	238	TRP	CB-CA-C	5.01	120.42	110.40
1	D	1076	LYS	CB-CG-CD	5.01	124.62	111.60
1	Q	2175	LEU	CA-CB-CG	5.01	126.82	115.30
1	F	1955	PHE	CB-CG-CD2	-5.01	117.29	120.80
1	D	1367	ASP	CB-CG-OD1	5.00	122.80	118.30
1	A	192	LEU	CB-CG-CD2	-5.00	102.49	111.00

All (1) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
1	D	1838	THR	CB

All (101) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	1052	ASP	Peptide
1	A	1171	LEU	Peptide
1	A	1240	ARG	Mainchain
1	A	1249	PHE	Peptide
1	A	1298	ASP	Peptide
1	A	1315	ASN	Peptide
1	A	1332	ALA	Peptide
1	A	1526	ILE	Mainchain
1	A	1564	LYS	Peptide
1	A	924	GLN	Peptide
1	A	957	GLU	Peptide
1	A	963	MET	Mainchain
1	A	974	ARG	Peptide
1	B	1052	ASP	Peptide
1	B	1171	LEU	Peptide
1	B	1249	PHE	Peptide
1	B	1298	ASP	Peptide
1	B	1315	ASN	Peptide
1	B	1332	ALA	Peptide
1	B	1564	LYS	Peptide
1	B	1668	SER	Peptide,Mainchain
1	B	1910	VAL	Peptide
1	B	924	GLN	Peptide
1	B	957	GLU	Peptide
1	B	963	MET	Mainchain

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Mol	Chain	Res	Type	Group
1	C	1052	ASP	Peptide
1	C	1110	MET	Peptide
1	C	1171	LEU	Peptide
1	C	1249	PHE	Peptide
1	C	1298	ASP	Peptide
1	C	1315	ASN	Peptide
1	C	1332	ALA	Peptide
1	C	1547	GLU	Peptide
1	C	1564	LYS	Peptide
1	C	1877	ASN	Sidechain
1	C	924	GLN	Peptide
1	C	957	GLU	Peptide
1	D	1052	ASP	Peptide
1	D	1087	ALA	Peptide
1	D	1110	MET	Peptide
1	D	1171	LEU	Peptide
1	D	1249	PHE	Peptide
1	D	1298	ASP	Peptide
1	D	1315	ASN	Peptide
1	D	1332	ALA	Peptide
1	D	1547	GLU	Peptide
1	D	1564	LYS	Peptide
1	D	1568	LEU	Mainchain
1	D	1619	GLN	Peptide
1	D	1823	ARG	Peptide
1	D	1824	ALA	Peptide
1	D	1908	SER	Peptide
1	D	2278	LEU	Peptide
1	D	924	GLN	Peptide
1	D	957	GLU	Peptide
1	E	1052	ASP	Peptide
1	E	1110	MET	Peptide
1	E	1171	LEU	Peptide
1	E	1249	PHE	Peptide
1	E	1298	ASP	Peptide
1	E	1315	ASN	Peptide
1	E	1332	ALA	Peptide
1	E	1547	GLU	Peptide
1	E	1564	LYS	Peptide
1	E	924	GLN	Peptide
1	E	957	GLU	Peptide
1	F	1052	ASP	Peptide

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Mol	Chain	Res	Type	Group
1	F	1110	MET	Peptide
1	F	1171	LEU	Peptide
1	F	1249	PHE	Peptide
1	F	1298	ASP	Peptide
1	F	1315	ASN	Peptide
1	F	1332	ALA	Peptide
1	F	1547	GLU	Peptide
1	F	1564	LYS	Peptide
1	F	1877	ASN	Sidechain
1	F	924	GLN	Peptide
1	F	957	GLU	Peptide
1	J	1052	ASP	Peptide
1	J	1110	MET	Peptide
1	J	1171	LEU	Peptide
1	J	1249	PHE	Peptide
1	J	1298	ASP	Peptide
1	J	1315	ASN	Peptide
1	J	1332	ALA	Peptide
1	J	1547	GLU	Peptide
1	J	1564	LYS	Peptide
1	J	924	GLN	Peptide
1	J	957	GLU	Peptide
1	R	1052	ASP	Peptide
1	R	1110	MET	Peptide
1	R	1171	LEU	Peptide
1	R	1249	PHE	Peptide
1	R	1298	ASP	Peptide
1	R	1315	ASN	Peptide
1	R	1332	ALA	Peptide
1	R	1547	GLU	Peptide
1	R	1564	LYS	Peptide
1	R	924	GLN	Peptide
1	R	957	GLU	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	16482	16276	16330	551	0
1	B	16482	16276	16330	552	0
1	C	16482	16275	16329	647	0
1	D	16482	16276	16329	769	0
1	E	16482	16276	16330	704	0
1	F	16482	16275	16330	615	0
1	G	6058	5997	6015	151	0
1	J	10424	10279	10314	212	0
1	Q	6058	5997	6015	159	0
1	R	10424	10279	10314	217	0
2	H	1699	1648	1655	30	0
2	K	1696	1644	1651	35	0
2	M	1699	1648	1655	36	0
2	O	1696	1644	1651	30	0
2	S	1699	1648	1655	20	0
2	U	1696	1644	1651	29	0
2	W	1696	1644	1651	23	0
2	Y	1699	1648	1655	20	0
All	All	145436	143374	143860	4549	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 16.

All (4549) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2264:TRP:HA	1:B:2270:LEU:HD21	1.42	1.00
1:A:197:ALA:HB1	1:A:227:ILE:HD13	1.42	0.98
1:B:197:ALA:HB1	1:B:227:ILE:HD13	1.44	0.97
1:F:1123:LEU:HD12	1:F:1152:VAL:HG21	1.48	0.95
1:C:1123:LEU:HD12	1:C:1152:VAL:HG21	1.48	0.93
1:D:2095:VAL:HG23	1:D:2096:ILE:HG23	1.50	0.93
1:E:632:VAL:HG12	1:E:683:LEU:HD11	1.50	0.91
1:D:1784:ASP:OD1	1:C:2192:THR:OG1	1.88	0.91
1:E:2095:VAL:HG23	1:E:2096:ILE:HG23	1.50	0.91
1:D:1684:ILE:O	1:D:1688:ILE:HA	1.69	0.90
1:F:2015:GLY:O	1:F:2047:ARG:NH1	2.04	0.90
1:F:1923:ILE:O	1:F:2209:LYS:NZ	2.05	0.90
1:B:1833:ARG:NH1	1:B:1880:VAL:O	2.05	0.89
1:C:1066:LEU:HD22	1:C:1081:ALA:HB2	1.54	0.88
1:E:1443:GLN:NE2	1:E:1495:MET:SD	2.46	0.88
1:F:1468:THR:O	1:F:1507:ARG:NE	2.06	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2323:THR:O	1:C:2327:SER:OG	1.92	0.88
1:A:945:LEU:HD11	1:A:968:ILE:HD13	1.55	0.88
1:D:1919:ILE:O	1:D:2213:THR:OG1	1.93	0.87
1:E:668:ASN:ND2	1:E:868:CYS:SG	2.47	0.87
1:F:1098:ASN:OD1	1:A:2332:ALA:N	2.07	0.87
1:D:1745:TYR:OH	1:C:2174:PHE:O	1.93	0.87
1:E:1471:ASN:ND2	1:E:1506:LEU:O	2.08	0.87
1:F:2323:THR:O	1:F:2327:SER:OG	1.91	0.86
1:D:295:ASP:OD1	1:D:970:GLN:NE2	2.08	0.86
1:A:1137:PHE:O	1:A:1140:HIS:ND1	2.07	0.86
1:A:1014:ARG:O	1:A:1018:LYS:HA	1.74	0.86
1:D:1954:PHE:O	1:D:2212:ARG:NH2	2.09	0.86
1:Q:2323:THR:O	1:Q:2327:SER:OG	1.92	0.86
1:D:1063:LEU:HD23	1:D:1085:LEU:HD13	1.57	0.85
1:B:1606:ARG:NH1	1:B:1628:PRO:O	2.09	0.85
1:C:1684:ILE:O	1:C:1688:ILE:HA	1.76	0.85
1:C:2015:GLY:O	1:C:2047:ARG:NH1	2.09	0.85
1:F:2156:LEU:O	1:F:2161:ARG:NH1	2.10	0.84
1:F:1971:VAL:HG22	1:F:1988:VAL:HG22	1.58	0.84
1:B:994:TYR:OH	1:B:1074:ASN:ND2	2.11	0.84
1:E:2117:VAL:HG23	1:F:1797:LEU:HD21	1.57	0.84
1:B:1655:ASN:ND2	1:B:1683:ASP:OD2	2.11	0.84
1:D:1545:TYR:OH	1:D:1567:PRO:O	1.96	0.84
1:D:1791:GLY:O	1:D:1796:ASN:ND2	2.09	0.84
1:A:869:LEU:HD12	1:A:1036:LYS:HB3	1.59	0.84
1:B:1120:LEU:HD22	1:B:1155:ARG:HE	1.41	0.84
1:A:363:LEU:HD11	1:A:460:ALA:HB1	1.59	0.84
1:D:1419:TYR:HB3	1:D:1468:THR:HA	1.59	0.83
1:C:2156:LEU:O	1:C:2161:ARG:NH1	2.11	0.83
1:B:718:TYR:OH	1:B:838:ARG:NH1	2.10	0.83
1:E:725:THR:HG22	1:E:738:ILE:HG23	1.59	0.83
1:A:1531:PHE:O	1:A:1543:SER:OG	1.95	0.83
1:B:1531:PHE:O	1:B:1543:SER:OG	1.96	0.83
1:B:2094:VAL:HG11	1:G:1827:ILE:HD13	1.60	0.83
1:D:979:ILE:HD12	1:D:980:ARG:HG3	1.58	0.83
1:F:1837:ARG:NH2	1:F:2032:ASP:OD2	2.11	0.83
1:A:1689:GLY:O	1:A:1719:ASN:ND2	2.11	0.83
1:D:1967:TRP:O	1:D:2025:LYS:NZ	2.12	0.83
1:F:1655:ASN:ND2	1:F:1659:MET:O	2.11	0.83
1:A:2069:ASP:OD1	1:Q:1808:SER:OG	1.96	0.83
1:G:2323:THR:O	1:G:2327:SER:OG	1.97	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:1612:LEU:HD22	1:Q:1896:LEU:HD13	1.60	0.83
1:R:1146:ARG:NH1	1:R:1238:SER:O	2.12	0.82
1:F:1684:ILE:O	1:F:1688:ILE:HA	1.79	0.82
1:E:1834:LEU:O	1:E:1836:GLN:NE2	2.11	0.82
1:D:1086:ILE:O	1:D:1089:HIS:N	2.13	0.82
1:E:609:ASP:OD2	1:E:714:LEU:N	2.11	0.82
1:C:632:VAL:HG12	1:C:683:LEU:HD11	1.59	0.82
1:A:1833:ARG:NH1	1:A:1880:VAL:O	2.13	0.82
1:A:1954:PHE:O	1:A:2212:ARG:NH1	2.12	0.82
1:D:1079:LEU:O	1:D:1444:ASN:ND2	2.11	0.82
1:F:1682:ASN:OD1	1:F:1715:TYR:OH	1.97	0.82
1:B:1014:ARG:O	1:B:1018:LYS:HA	1.78	0.82
1:F:632:VAL:HG12	1:F:683:LEU:HD11	1.62	0.82
1:B:1140:HIS:O	1:B:1146:ARG:NH2	2.12	0.82
2:U:1722:SER:OG	2:U:1727:LYS:O	1.98	0.82
1:D:1956:ASP:OD1	1:D:2212:ARG:NH1	2.12	0.82
1:C:1663:LYS:NZ	1:C:1665:THR:OG1	2.12	0.82
1:Q:2279:THR:OG1	1:Q:2280:GLU:OE1	1.97	0.82
1:J:1146:ARG:NH1	1:J:1238:SER:O	2.13	0.82
1:D:1908:SER:OG	1:D:1909:SER:O	1.97	0.81
1:A:1703:SER:OG	1:A:1713:ARG:NH1	2.13	0.81
1:D:1780:TYR:OH	1:B:195:ASP:OD1	1.99	0.81
1:D:2297:ARG:HE	1:C:2314:VAL:HG13	1.45	0.81
1:B:1689:GLY:O	1:B:1719:ASN:ND2	2.13	0.81
1:D:995:LEU:HD22	1:D:1066:LEU:HD21	1.63	0.81
1:D:1436:GLU:N	1:D:1482:ILE:O	2.12	0.81
1:C:2258:THR:OG1	1:B:293:ASP:OD1	1.97	0.81
1:C:2030:ILE:HG23	1:C:2040:LEU:HD21	1.59	0.81
1:B:2069:ASP:OD1	1:G:1808:SER:OG	1.97	0.81
1:E:296:ASP:OD1	1:E:299:GLN:NE2	2.14	0.81
1:E:1643:GLY:O	1:E:1701:ARG:NE	2.13	0.81
1:C:1480:THR:O	1:C:1518:ARG:NH1	2.13	0.81
1:E:951:THR:O	1:E:954:ARG:NH1	2.14	0.81
1:E:1359:ARG:NH2	1:E:1367:ASP:OD2	2.14	0.81
1:C:1682:ASN:OD1	1:C:1715:TYR:OH	1.99	0.81
1:R:632:VAL:HG12	1:R:683:LEU:HD11	1.63	0.81
1:D:2199:LYS:NZ	1:C:1795:GLU:OE1	2.13	0.81
1:J:632:VAL:HG12	1:J:683:LEU:HD11	1.63	0.81
1:D:1471:ASN:ND2	1:D:1506:LEU:O	2.14	0.81
1:E:1703:SER:OG	1:E:1713:ARG:NH1	2.14	0.80
1:F:909:ARG:O	1:F:964:ASN:ND2	2.14	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2258:THR:HG22	1:B:296:ASP:HB2	1.60	0.80
1:A:2094:VAL:HG11	1:Q:1827:ILE:HD13	1.63	0.80
1:D:2066:TYR:OH	1:C:2028:GLN:OE1	1.99	0.80
1:B:666:LEU:HD13	1:B:1025:LEU:HD21	1.63	0.80
1:E:1745:TYR:OH	1:F:2174:PHE:O	1.99	0.80
1:C:909:ARG:O	1:C:964:ASN:ND2	2.14	0.80
1:C:1253:MET:O	2:W:1726:ARG:NH2	2.15	0.80
1:C:1388:ASN:ND2	1:C:1577:TYR:O	2.14	0.80
1:D:974:ARG:O	1:D:982:HIS:NE2	2.14	0.80
1:E:857:LEU:HD21	1:E:885:LEU:HD11	1.64	0.80
1:E:1565:GLN:NE2	1:E:1566:GLY:O	2.15	0.80
1:B:1833:ARG:NH2	1:B:1836:GLN:O	2.16	0.79
1:B:615:ARG:NH2	1:B:724:THR:OG1	2.14	0.79
2:O:1722:SER:OG	2:O:1727:LYS:O	1.99	0.79
1:R:1471:ASN:ND2	1:R:1506:LEU:O	2.16	0.79
1:D:1615:SER:O	1:D:1618:THR:HB	1.82	0.79
1:F:1471:ASN:ND2	1:F:1506:LEU:O	2.15	0.79
1:B:2319:ILE:HD12	1:G:2330:GLN:HE21	1.45	0.79
1:C:1545:TYR:OH	1:C:1567:PRO:O	2.00	0.79
2:H:1689:MET:O	2:H:1716:TYR:N	2.16	0.79
1:J:1557:MET:SD	1:J:1559:GLN:NE2	2.56	0.79
1:D:2124:VAL:O	1:D:2128:PHE:N	2.16	0.79
1:C:1796:ASN:O	1:C:1800:SER:OG	2.00	0.79
1:F:2030:ILE:HG23	1:F:2040:LEU:HD11	1.63	0.79
1:G:1986:VAL:HG23	1:G:2042:VAL:HG13	1.65	0.79
1:B:898:GLU:OE1	1:B:975:TYR:OH	1.99	0.79
2:S:1678:ASN:O	2:S:1702:LYS:NZ	2.11	0.79
1:E:1468:THR:O	1:E:1507:ARG:NH1	2.16	0.78
1:A:638:HIS:NE2	1:A:725:THR:OG1	2.15	0.78
1:A:2319:ILE:HD12	1:Q:2330:GLN:HE21	1.47	0.78
1:Q:1606:ARG:NH1	1:Q:1628:PRO:O	2.16	0.78
1:E:1126:SER:OG	1:E:1428:ARG:NH2	2.16	0.78
1:A:1066:LEU:HD22	1:A:1081:ALA:HB2	1.65	0.78
1:D:332:ASN:ND2	1:D:905:SER:OG	2.16	0.78
1:D:609:ASP:OD2	1:D:714:LEU:N	2.16	0.78
1:B:1703:SER:OG	1:B:1713:ARG:NH1	2.15	0.78
1:F:917:SER:HB3	1:F:944:ILE:HD13	1.63	0.78
1:Q:1837:ARG:NH1	1:Q:2032:ASP:OD2	2.17	0.78
1:J:451:MET:O	1:J:502:ARG:NH2	2.16	0.78
1:D:332:ASN:ND2	1:D:905:SER:O	2.16	0.78
1:F:2246:ALA:HB3	1:A:946:ASP:OD1	1.84	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:1707:ARG:NE	1:Q:1806:GLU:OE2	2.17	0.78
1:A:910:ILE:HD11	1:A:914:VAL:HG12	1.65	0.78
1:J:1471:ASN:ND2	1:J:1506:LEU:O	2.16	0.78
1:C:1612:LEU:HD22	1:C:1896:LEU:HG	1.66	0.78
1:E:1954:PHE:O	1:E:2212:ARG:NH1	2.17	0.78
1:G:1606:ARG:NH1	1:G:1628:PRO:O	2.17	0.78
1:G:1812:ASN:OD1	1:G:2035:ARG:NH1	2.17	0.78
1:D:294:VAL:HG22	1:D:298:LEU:HD12	1.65	0.77
1:F:1480:THR:O	1:F:1518:ARG:NH1	2.17	0.77
1:B:2221:ARG:NH1	1:B:2264:TRP:O	2.17	0.77
1:R:451:MET:O	1:R:502:ARG:NH2	2.17	0.77
1:D:1007:ASP:O	1:D:1010:VAL:HG12	1.84	0.77
1:F:2221:ARG:NH1	1:F:2264:TRP:O	2.18	0.77
1:A:1655:ASN:ND2	1:A:1683:ASP:OD2	2.17	0.77
1:E:1910:VAL:HG23	1:E:1912:LEU:HD21	1.67	0.77
1:E:2293:LYS:NZ	1:F:2313:GLU:OE2	2.17	0.77
1:R:951:THR:O	1:R:954:ARG:NH1	2.18	0.77
1:E:472:ARG:NH1	1:E:486:GLY:O	2.18	0.77
2:W:1833:VAL:HG11	2:W:1850:LEU:HD22	1.66	0.77
1:R:1038:ASN:ND2	1:R:1073:THR:O	2.17	0.77
1:C:2259:VAL:HG23	1:B:296:ASP:OD2	1.83	0.77
1:F:567:ARG:NH2	1:F:603:PHE:O	2.18	0.77
1:R:372:SER:O	1:R:480:TYR:OH	2.03	0.77
1:C:2246:ALA:HB3	1:B:946:ASP:OD1	1.84	0.77
1:B:1734:PHE:O	1:G:2139:ARG:NE	2.18	0.77
2:O:1735:GLU:OE2	2:O:1753:ARG:NE	2.16	0.77
1:E:1079:LEU:O	1:E:1444:ASN:ND2	2.17	0.77
1:C:1808:SER:O	1:C:1812:ASN:ND2	2.18	0.77
1:F:2289:GLU:OE1	1:F:2293:LYS:NZ	2.18	0.77
2:K:1722:SER:OG	2:K:1727:LYS:O	2.02	0.77
1:D:261:SER:OG	1:D:289:GLY:O	2.03	0.76
1:E:1003:ASN:O	1:E:1008:LYS:NZ	2.17	0.76
1:A:1238:SER:HA	1:A:1292:ALA:HB3	1.67	0.76
1:D:451:MET:O	1:D:502:ARG:NH2	2.18	0.76
1:D:471:TYR:O	1:D:477:ARG:NH1	2.18	0.76
1:D:1331:VAL:HG22	1:D:1354:LYS:O	1.85	0.76
1:B:1013:LEU:HD13	1:B:1024:VAL:HG13	1.65	0.76
1:A:1013:LEU:HD13	1:A:1024:VAL:HG13	1.67	0.76
2:S:1833:VAL:HG11	2:S:1850:LEU:HD22	1.65	0.76
1:E:126:ASN:ND2	1:E:161:ASP:OD2	2.16	0.76
1:B:1480:THR:O	1:B:1518:ARG:NH1	2.18	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1539:TYR:OH	1:B:1606:ARG:NH2	2.19	0.76
1:Q:2089:ARG:NH1	1:Q:2116:SER:OG	2.18	0.76
1:D:951:THR:O	1:D:954:ARG:NH1	2.18	0.76
1:D:1082:ARG:HA	1:D:1085:LEU:HD23	1.67	0.76
1:C:567:ARG:NH2	1:C:603:PHE:O	2.17	0.76
1:C:2325:HIS:O	1:C:2327:SER:OG	2.04	0.76
1:B:363:LEU:HD11	1:B:460:ALA:HB1	1.66	0.76
1:E:1086:ILE:O	1:E:1089:HIS:N	2.18	0.76
1:D:1531:PHE:O	1:D:1543:SER:OG	2.04	0.76
1:D:1658:GLY:O	1:D:1683:ASP:N	2.17	0.76
1:C:1655:ASN:ND2	1:C:1659:MET:O	2.18	0.76
1:C:1860:ARG:NH1	1:C:1862:VAL:HG22	2.00	0.76
1:F:1901:TYR:OH	1:F:1959:SER:O	2.04	0.76
1:B:2200:GLY:O	1:G:1798:ARG:NH1	2.19	0.76
1:D:2195:ARG:NE	1:C:1786:ILE:O	2.18	0.76
1:E:1238:SER:HA	1:E:1292:ALA:HB3	1.66	0.76
1:A:1480:THR:O	1:A:1518:ARG:NH1	2.19	0.76
1:Q:2156:LEU:O	1:Q:2161:ARG:NH1	2.19	0.76
1:E:608:ILE:O	1:E:726:TYR:OH	2.03	0.76
1:E:1904:LYS:NZ	1:E:1905:SER:OG	2.18	0.76
1:D:725:THR:HG22	1:D:738:ILE:HG23	1.68	0.76
1:R:261:SER:OG	1:R:289:GLY:O	2.03	0.76
1:C:451:MET:O	1:C:502:ARG:NH2	2.18	0.75
1:A:1369:ILE:HA	1:A:1393:ALA:HB2	1.67	0.75
1:Q:2280:GLU:OE1	1:Q:2280:GLU:N	2.18	0.75
1:D:1606:ARG:NH1	1:D:1628:PRO:O	2.19	0.75
1:D:1764:LEU:O	1:D:1788:LYS:NZ	2.18	0.75
1:E:1076:LYS:O	1:E:1448:ARG:NH2	2.18	0.75
1:E:1099:GLN:O	1:E:1102:SER:OG	2.00	0.75
1:E:1901:TYR:OH	1:E:1959:SER:O	2.04	0.75
1:F:602:SER:OG	1:F:740:ASN:OD1	2.02	0.75
1:C:1401:MET:HE3	1:C:1449:LEU:HB3	1.69	0.75
1:F:451:MET:O	1:F:502:ARG:NH2	2.18	0.75
1:B:1471:ASN:ND2	1:B:1506:LEU:O	2.20	0.75
1:D:1359:ARG:NH1	1:D:1367:ASP:OD2	2.18	0.75
1:D:1643:GLY:O	1:D:1701:ARG:NE	2.18	0.75
1:E:1007:ASP:O	1:E:1010:VAL:HG12	1.86	0.75
1:A:945:LEU:HD13	1:A:968:ILE:HG21	1.67	0.75
1:A:1534:ASN:ND2	1:A:1539:TYR:O	2.20	0.75
1:G:2156:LEU:O	1:G:2161:ARG:NH1	2.20	0.75
1:J:1123:LEU:O	1:J:1156:ARG:NH1	2.19	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:283:GLN:O	1:D:287:GLU:N	2.20	0.75
1:D:1834:LEU:O	1:D:1836:GLN:NE2	2.20	0.75
1:E:332:ASN:ND2	1:E:905:SER:O	2.20	0.75
1:E:567:ARG:NH2	1:E:603:PHE:O	2.19	0.75
1:B:613:LEU:HD23	1:B:616:LEU:HD12	1.68	0.75
1:J:477:ARG:NH1	1:J:484:PRO:O	2.20	0.75
1:B:1968:ALA:O	1:B:2025:LYS:NZ	2.16	0.75
1:J:372:SER:O	1:J:480:TYR:OH	2.05	0.75
2:U:1810:VAL:O	2:U:1835:ARG:N	2.20	0.75
1:D:1238:SER:HA	1:D:1292:ALA:HB3	1.68	0.75
1:D:1369:ILE:O	1:D:1404:TYR:OH	2.02	0.75
1:C:958:ARG:O	1:C:962:PHE:N	2.20	0.75
1:C:2221:ARG:NH1	1:C:2264:TRP:O	2.19	0.75
1:F:1263:SEP:O3P	2:S:1670:ARG:NH1	2.19	0.75
1:G:1837:ARG:NH1	1:G:2032:ASP:OD2	2.20	0.74
1:J:972:VAL:O	1:J:976:ARG:N	2.20	0.74
1:R:1123:LEU:O	1:R:1156:ARG:NH1	2.19	0.74
1:D:1443:GLN:NE2	1:D:1495:MET:SD	2.60	0.74
1:E:184:ASN:O	1:E:189:ASN:ND2	2.19	0.74
1:F:1665:THR:OG1	1:F:1676:ASP:OD1	2.04	0.74
1:B:996:ARG:NH1	1:B:1027:TYR:OH	2.20	0.74
1:Q:1855:ASN:ND2	1:Q:1863:TYR:O	2.20	0.74
1:E:719:ASP:OD2	1:E:839:ILE:N	2.19	0.74
1:C:2110:ASP:O	1:C:2113:SER:OG	2.02	0.74
1:F:1079:LEU:O	1:F:1444:ASN:ND2	2.20	0.74
1:D:1099:GLN:O	1:D:1102:SER:OG	2.03	0.74
1:E:1263:SEP:O3P	2:K:1666:TYR:OH	2.03	0.74
1:C:2089:ARG:NH1	1:C:2116:SER:OG	2.20	0.74
1:F:2110:ASP:O	1:F:2113:SER:OG	2.03	0.74
1:A:1734:PHE:O	1:Q:2139:ARG:NE	2.19	0.74
1:D:293:ASP:OD1	1:D:293:ASP:N	2.19	0.74
1:D:973:GLN:NE2	1:E:2254:GLU:OE2	2.21	0.74
1:A:1069:LEU:HD21	1:A:1078:ALA:HB2	1.69	0.74
1:G:2089:ARG:NH1	1:G:2116:SER:OG	2.19	0.74
1:B:1520:THR:HG23	1:B:1521:PRO:HD3	1.70	0.74
1:B:136:SER:O	1:B:456:ASN:ND2	2.20	0.74
1:B:910:ILE:HD11	1:B:914:VAL:HG12	1.68	0.74
2:K:1689:MET:O	2:K:1716:TYR:N	2.21	0.74
1:D:180:GLY:O	1:D:185:ASN:ND2	2.20	0.74
1:D:1605:PHE:O	1:D:1608:SER:OG	2.05	0.74
1:C:972:VAL:O	1:C:976:ARG:N	2.20	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1728:GLU:OE1	1:C:1731:ARG:NH1	2.21	0.74
1:F:2243:GLN:NE2	1:A:947:SER:OG	2.20	0.74
1:D:1878:ASN:OD1	1:D:1880:VAL:HG23	1.87	0.74
1:B:1544:LEU:O	1:B:1564:LYS:NZ	2.19	0.74
1:C:1864:THR:OG1	1:C:1868:GLN:NE2	2.21	0.74
1:F:2259:VAL:HG23	1:A:296:ASP:OD2	1.88	0.73
1:B:1313:GLN:NE2	1:B:1365:GLU:OE1	2.20	0.73
1:D:1499:TYR:CD2	1:D:1503:LEU:HD22	2.24	0.73
1:C:1560:ALA:O	1:C:1564:LYS:NZ	2.20	0.73
1:Q:1986:VAL:HG23	1:Q:2042:VAL:HG13	1.70	0.73
1:D:1748:TYR:CE1	1:C:2182:VAL:HG22	2.23	0.73
1:E:1603:GLU:OE2	1:E:1607:GLN:NE2	2.21	0.73
1:B:1386:MET:SD	1:B:1424:ARG:NH2	2.62	0.73
1:E:451:MET:O	1:E:502:ARG:NH2	2.20	0.73
1:E:972:VAL:O	1:E:976:ARG:N	2.20	0.73
1:E:1445:GLU:O	1:E:1449:LEU:HD13	1.89	0.73
1:E:1786:ILE:O	1:F:2195:ARG:NE	2.21	0.73
1:F:1808:SER:O	1:F:1812:ASN:ND2	2.21	0.73
1:G:2315:ALA:O	1:G:2318:SER:OG	2.04	0.73
1:C:1463:ASN:OD1	1:C:1464:THR:N	2.21	0.73
1:B:1045:ILE:HD13	1:B:1080:ARG:HG2	1.70	0.73
1:A:1722:ALA:HB3	1:Q:2117:VAL:HG21	1.69	0.73
1:D:995:LEU:O	1:D:999:THR:HG22	1.88	0.73
1:D:2106:GLU:OE1	1:D:2218:ARG:NH2	2.22	0.73
1:F:1860:ARG:NH1	1:F:1862:VAL:HG22	2.04	0.73
1:E:1091:PRO:HB2	1:E:1095:LEU:HD21	1.70	0.73
1:B:1039:LEU:O	1:B:1042:THR:OG1	2.02	0.73
2:Y:1810:VAL:O	2:Y:1835:ARG:N	2.21	0.73
1:D:472:ARG:NH1	1:D:486:GLY:O	2.22	0.73
1:E:1114:GLN:NE2	1:E:1144:VAL:O	2.22	0.73
1:R:1290:ASN:OD1	1:R:1328:THR:OG1	2.04	0.73
1:E:1829:ALA:O	1:E:1832:VAL:HG22	1.89	0.72
1:B:1375:PRO:HA	1:B:1378:ALA:HB3	1.71	0.72
1:A:705:ASP:O	1:A:717:SER:OG	2.06	0.72
1:E:1545:TYR:OH	1:E:1567:PRO:O	2.06	0.72
1:A:1390:ASP:N	1:A:1407:ALA:O	2.22	0.72
1:D:1445:GLU:O	1:D:1449:LEU:HD13	1.87	0.72
1:D:2304:ILE:HD12	1:C:2304:ILE:HG23	1.71	0.72
1:E:1925:PHE:O	1:E:2208:TRP:NE1	2.22	0.72
1:F:1864:THR:OG1	1:F:1868:GLN:NE2	2.22	0.72
1:D:1442:LEU:HD21	1:D:1477:PHE:CE2	2.25	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1108:ILE:HG21	1:B:1145:VAL:HG13	1.71	0.72
1:A:1388:ASN:ND2	1:A:1577:TYR:O	2.19	0.72
1:D:1514:LYS:HA	1:D:1529:ARG:HA	1.72	0.72
1:F:1417:THR:OG1	1:F:1467:ARG:NH2	2.22	0.72
1:Q:2291:ASN:O	1:Q:2295:ILE:HD12	1.89	0.72
1:F:190:VAL:HG12	1:F:221:LEU:HD12	1.71	0.72
1:Q:2336:ARG:NH1	1:R:1098:ASN:OD1	2.21	0.72
1:D:567:ARG:NH2	1:D:603:PHE:O	2.23	0.72
1:D:1811:TYR:OH	1:D:2032:ASP:OD1	2.05	0.72
1:D:1925:PHE:O	1:D:2208:TRP:NE1	2.21	0.72
1:E:244:ILE:HD11	1:E:347:PHE:HB3	1.69	0.72
1:F:958:ARG:O	1:F:962:PHE:N	2.20	0.72
1:B:1309:ARG:O	1:B:1312:THR:OG1	2.03	0.72
1:E:255:ILE:HD11	1:E:411:LEU:HB2	1.72	0.72
1:E:1114:GLN:HE21	1:E:1148:ALA:HB2	1.53	0.72
1:E:1775:GLU:OE1	1:E:1779:ARG:NH2	2.23	0.72
1:E:2057:TYR:OH	1:F:1877:ASN:O	2.05	0.72
1:B:1480:THR:OG1	1:B:1518:ARG:NH1	2.23	0.72
1:B:2174:PHE:O	1:G:1745:TYR:OH	2.06	0.72
1:D:1418:ASP:OD2	1:D:1420:ARG:NH1	2.23	0.72
1:E:2196:MET:O	1:E:2201:VAL:HG22	1.89	0.72
1:F:972:VAL:O	1:F:976:ARG:N	2.23	0.72
1:B:2089:ARG:NH1	1:B:2116:SER:OG	2.23	0.72
1:B:2302:LYS:O	1:B:2306:SER:OG	2.02	0.72
1:A:1375:PRO:HA	1:A:1378:ALA:HB3	1.72	0.72
1:A:2200:GLY:O	1:Q:1798:ARG:NH1	2.22	0.72
1:G:1707:ARG:NE	1:G:1806:GLU:OE2	2.22	0.72
1:D:2124:VAL:HG13	1:D:2128:PHE:HB3	1.71	0.72
1:E:1494:SER:OG	1:E:1498:ARG:NH2	2.23	0.72
1:C:602:SER:OG	1:C:740:ASN:OD1	2.02	0.72
1:B:901:ASP:O	1:B:904:THR:OG1	2.07	0.72
1:D:2196:MET:O	1:D:2201:VAL:HG22	1.90	0.71
1:E:1900:SER:OG	1:E:1977:ARG:NH2	2.22	0.71
1:C:1476:ASN:OD1	1:C:1514:LYS:NZ	2.18	0.71
1:C:1753:LEU:HD11	1:C:1757:ASP:HB3	1.71	0.71
1:A:1833:ARG:NH2	1:A:1836:GLN:O	2.23	0.71
1:D:2329:THR:HG21	1:E:1054:THR:HG21	1.72	0.71
1:E:2066:TYR:OH	1:F:2028:GLN:OE1	2.08	0.71
1:C:1996:SER:HA	1:C:2010:ILE:HD12	1.70	0.71
1:A:666:LEU:HD13	1:A:1025:LEU:HD21	1.71	0.71
1:A:1606:ARG:NH1	1:A:1628:PRO:O	2.23	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:126:ASN:ND2	1:D:161:ASP:OD2	2.23	0.71
1:D:1713:ARG:O	1:D:1816:THR:HA	1.89	0.71
1:F:2258:THR:OG1	1:A:293:ASP:N	2.24	0.71
1:D:1892:VAL:HA	1:D:1895:VAL:HG23	1.72	0.71
1:E:2094:VAL:HG11	1:F:1827:ILE:HD13	1.72	0.71
1:F:471:TYR:O	1:F:477:ARG:NH1	2.23	0.71
1:J:1290:ASN:OD1	1:J:1328:THR:OG1	2.05	0.71
1:R:1266:PHE:O	2:S:1699:ARG:NH2	2.23	0.71
1:D:1900:SER:OG	1:D:1977:ARG:NH2	2.22	0.71
1:E:1637:LEU:HB3	1:E:1645:LEU:HD11	1.70	0.71
1:E:2124:VAL:O	1:E:2128:PHE:N	2.22	0.71
1:E:413:LYS:NZ	1:E:493:GLU:OE2	2.23	0.71
1:C:2082:ILE:HG12	1:C:2088:LEU:HD13	1.73	0.71
1:C:2224:LEU:HB2	1:C:2274:LEU:HD13	1.73	0.71
1:B:1534:ASN:ND2	1:B:1539:TYR:O	2.24	0.71
1:R:567:ARG:NH2	1:R:603:PHE:O	2.23	0.71
1:D:2253:VAL:O	1:D:2257:GLY:C	2.28	0.71
1:E:332:ASN:ND2	1:E:905:SER:OG	2.18	0.71
1:E:961:PHE:O	1:E:965:THR:HG22	1.89	0.71
1:C:1670:GLU:OE2	1:C:1675:ARG:NH1	2.23	0.71
1:F:1430:SER:O	1:F:1430:SER:OG	2.07	0.71
1:B:567:ARG:NH2	1:B:603:PHE:O	2.23	0.71
1:D:1934:PRO:HG3	1:D:1989:GLU:HA	1.73	0.71
1:E:968:ILE:O	1:E:972:VAL:HG12	1.91	0.71
1:E:2334:VAL:HG21	1:F:2334:VAL:HG21	1.73	0.71
1:G:1901:TYR:OH	1:G:1959:SER:O	2.09	0.71
1:D:293:ASP:OD2	1:E:2259:VAL:N	2.23	0.71
1:E:978:GLY:O	1:E:982:HIS:ND1	2.23	0.71
1:E:1386:MET:SD	1:E:1424:ARG:NE	2.61	0.71
1:G:2323:THR:OG1	1:G:2331:ARG:NH2	2.23	0.71
1:Q:1901:TYR:OH	1:Q:1959:SER:O	2.06	0.71
1:J:567:ARG:NH2	1:J:603:PHE:O	2.24	0.71
1:D:413:LYS:NZ	1:D:493:GLU:OE2	2.21	0.71
1:C:1294:LYS:O	1:C:1295:THR:OG1	2.09	0.71
1:F:1123:LEU:O	1:F:1156:ARG:NH1	2.24	0.71
1:G:2291:ASN:O	1:G:2295:ILE:HD12	1.91	0.71
1:G:2336:ARG:NH1	1:J:1098:ASN:OD1	2.24	0.71
1:C:295:ASP:OD1	1:C:966:GLN:NE2	2.22	0.70
1:F:1661:ALA:HB2	1:F:1680:ILE:HG22	1.73	0.70
1:B:1786:ILE:O	1:G:2195:ARG:NE	2.23	0.70
1:B:2117:VAL:HA	1:G:1797:LEU:HD21	1.73	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2046:TRP:N	1:F:2087:GLU:O	2.24	0.70
1:F:2089:ARG:NH1	1:F:2116:SER:OG	2.25	0.70
1:A:2089:ARG:NH1	1:A:2116:SER:OG	2.24	0.70
1:D:1637:LEU:HB3	1:D:1645:LEU:HD21	1.73	0.70
1:E:2304:ILE:HG12	1:F:2304:ILE:HD12	1.73	0.70
1:F:1545:TYR:OH	1:F:1567:PRO:O	2.07	0.70
1:R:1238:SER:HA	1:R:1292:ALA:HB3	1.73	0.70
2:M:1742:ASN:HB3	2:M:1844:LEU:HD21	1.73	0.70
1:F:760:GLY:O	1:F:809:LEU:N	2.24	0.70
1:B:1369:ILE:HA	1:B:1393:ALA:HB2	1.71	0.70
1:A:926:ALA:O	1:A:929:ILE:HG22	1.91	0.70
1:R:655:LEU:O	1:R:1014:ARG:NH1	2.24	0.70
2:K:1742:ASN:HB3	2:K:1844:LEU:HD21	1.72	0.70
2:O:1810:VAL:O	2:O:1835:ARG:N	2.24	0.70
1:C:471:TYR:O	1:C:477:ARG:NH1	2.24	0.70
1:D:1114:GLN:HE21	1:D:1148:ALA:HB2	1.56	0.70
1:D:1695:GLU:HA	1:D:1698:LEU:CD2	2.22	0.70
1:D:1753:LEU:HD22	1:D:1757:ASP:HB3	1.74	0.70
1:E:1331:VAL:HG22	1:E:1354:LYS:O	1.92	0.70
1:C:1707:ARG:NE	1:C:1806:GLU:OE2	2.23	0.70
1:F:2258:THR:HG22	1:A:296:ASP:H	1.55	0.70
1:F:1007:ASP:O	1:F:1010:VAL:HG12	1.90	0.70
1:B:1815:ILE:HD13	1:B:1902:MET:SD	2.31	0.70
1:A:1544:LEU:O	1:A:1564:LYS:NZ	2.24	0.70
1:C:1290:ASN:OD1	1:C:1328:THR:OG1	2.07	0.70
1:A:1901:TYR:OH	1:A:1959:SER:O	2.10	0.70
1:A:2117:VAL:HA	1:Q:1797:LEU:HD21	1.74	0.70
1:J:958:ARG:O	1:J:962:PHE:N	2.25	0.70
1:C:1511:ALA:HB3	1:C:1532:LEU:HB2	1.73	0.70
1:G:1612:LEU:HD22	1:G:1896:LEU:HD13	1.72	0.70
1:J:668:ASN:ND2	1:J:868:CYS:SG	2.65	0.70
1:E:283:GLN:O	1:E:287:GLU:N	2.25	0.70
1:C:1079:LEU:O	1:C:1444:ASN:ND2	2.25	0.70
1:F:1098:ASN:HB2	1:A:2332:ALA:HB2	1.74	0.69
1:F:1816:THR:OG1	1:F:1835:GLY:O	2.09	0.69
1:A:2050:SER:OG	1:A:2055:ASP:OD2	2.05	0.69
1:D:1614:GLU:O	1:D:1617:SER:OG	2.05	0.69
1:E:1518:ARG:NH1	1:E:1523:GLY:O	2.25	0.69
1:C:129:ALA:HB2	1:C:209:TRP:CZ3	2.27	0.69
1:C:921:GLU:OE1	1:C:924:GLN:NE2	2.25	0.69
1:F:1096:ARG:NH2	1:F:1129:SER:O	2.25	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1636:GLU:OE2	1:E:1650:ARG:N	2.21	0.69
1:E:1822:CYS:SG	1:E:1823:ARG:N	2.64	0.69
1:A:1971:VAL:O	1:A:2025:LYS:NZ	2.25	0.69
1:D:660:VAL:HB	1:D:1010:VAL:HG11	1.75	0.69
1:C:1007:ASP:O	1:C:1010:VAL:HG12	1.91	0.69
1:G:1682:ASN:OD1	1:G:1715:TYR:OH	2.07	0.69
1:F:2224:LEU:HB2	1:F:2274:LEU:HD13	1.74	0.69
1:A:294:VAL:HG11	1:A:966:GLN:HB2	1.74	0.69
1:R:1503:LEU:O	1:R:1507:ARG:N	2.24	0.69
1:E:1683:ASP:OD2	1:E:1685:THR:OG1	2.05	0.69
1:C:1123:LEU:O	1:C:1156:ARG:NH1	2.25	0.69
1:C:1851:ALA:N	1:C:1869:LEU:HD11	2.07	0.69
1:F:129:ALA:HB2	1:F:209:TRP:CZ3	2.27	0.69
1:F:1996:SER:HA	1:F:2010:ILE:HD12	1.75	0.69
1:F:2325:HIS:O	1:F:2327:SER:OG	2.11	0.69
1:D:1817:ILE:HD12	1:D:1837:ARG:HB2	1.75	0.69
1:C:760:GLY:O	1:C:809:LEU:N	2.26	0.69
1:B:567:ARG:NH1	1:B:604:GLN:O	2.25	0.69
1:J:1038:ASN:ND2	1:J:1073:THR:O	2.24	0.69
2:W:1678:ASN:O	2:W:1702:LYS:NZ	2.21	0.69
1:D:244:ILE:HD11	1:D:347:PHE:HB3	1.75	0.69
1:D:1932:TYR:O	1:D:1990:THR:OG1	2.09	0.69
1:F:370:ALA:HB3	1:F:413:LYS:HG3	1.75	0.69
1:B:477:ARG:NH2	1:B:483:SER:O	2.24	0.69
1:A:901:ASP:O	1:A:904:THR:OG1	2.10	0.69
1:D:1635:THR:HG21	1:D:1647:HIS:HB3	1.75	0.69
1:E:1309:ARG:O	1:E:1312:THR:OG1	2.05	0.69
1:F:2258:THR:HG22	1:A:296:ASP:HB2	1.75	0.69
1:A:1331:VAL:HG22	1:A:1354:LYS:O	1.93	0.69
1:D:2290:GLU:OE1	1:D:2290:GLU:N	2.26	0.69
1:B:1390:ASP:N	1:B:1407:ALA:O	2.26	0.68
1:J:1445:GLU:O	1:J:1449:LEU:HD13	1.93	0.68
1:D:1309:ARG:O	1:D:1312:THR:OG1	2.06	0.68
1:F:1839:ILE:HD12	1:F:1895:VAL:HG22	1.75	0.68
1:D:420:ALA:HB3	1:D:461:GLN:HE21	1.57	0.68
1:E:377:ASP:N	1:E:390:GLU:O	2.26	0.68
1:E:2195:ARG:NE	1:F:1786:ILE:O	2.27	0.68
1:Q:1682:ASN:OD1	1:Q:1715:TYR:OH	2.07	0.68
1:J:1007:ASP:O	1:J:1010:VAL:HG12	1.94	0.68
1:E:2220:ARG:NH1	1:E:2224:LEU:HD11	2.07	0.68
2:M:1689:MET:O	2:M:1716:TYR:N	2.26	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1372:HIS:O	1:D:1373:LEU:HD22	1.94	0.68
1:C:370:ALA:HB3	1:C:413:LYS:HG3	1.75	0.68
1:F:1511:ALA:HB3	1:F:1532:LEU:HB2	1.75	0.68
1:B:2050:SER:OG	1:B:2055:ASP:OD2	2.04	0.68
1:A:2331:ARG:O	1:A:2334:VAL:HG12	1.93	0.68
1:G:1855:ASN:ND2	1:G:1863:TYR:O	2.26	0.68
1:J:197:ALA:HB1	1:J:227:ILE:HD13	1.73	0.68
1:R:668:ASN:ND2	1:R:868:CYS:SG	2.67	0.68
1:D:1233:MET:SD	1:D:1233:MET:N	2.66	0.68
1:D:1320:VAL:O	2:M:1726:ARG:NE	2.26	0.68
1:F:1670:GLU:OE2	1:F:1675:ARG:NH1	2.25	0.68
1:R:1445:GLU:O	1:R:1449:LEU:HD13	1.94	0.68
1:D:1475:LEU:HD11	1:D:1477:PHE:CD1	2.28	0.68
1:D:186:ASN:OD1	1:D:186:ASN:N	2.25	0.68
1:D:804:ARG:HH22	1:D:807:ALA:HB2	1.58	0.68
1:D:1748:TYR:OH	1:C:2185:GLN:NE2	2.26	0.68
1:D:2296:SER:O	1:D:2300:VAL:HG23	1.94	0.68
1:F:2333:GLU:OE1	1:F:2336:ARG:NH2	2.27	0.68
1:A:1405:LEU:HD23	1:A:1421:PHE:CD1	2.28	0.68
1:R:1294:LYS:O	1:R:1295:THR:OG1	2.11	0.68
2:O:1665:VAL:HG22	2:O:1719:VAL:HG21	1.74	0.68
1:D:901:ASP:O	1:D:904:THR:OG1	2.10	0.68
1:E:1848:LEU:HD13	1:F:2049:PHE:CE2	2.29	0.68
1:A:2300:VAL:HG13	1:Q:2307:LEU:HD22	1.75	0.68
1:D:1769:CYS:SG	1:D:1770:GLU:N	2.67	0.68
1:D:1968:ALA:HB3	1:D:2025:LYS:NZ	2.09	0.68
1:F:1955:PHE:HZ	1:F:1985:VAL:HG11	1.59	0.68
1:J:655:LEU:O	1:J:1014:ARG:NH1	2.27	0.68
1:D:968:ILE:O	1:D:972:VAL:HG12	1.94	0.67
1:B:1722:ALA:HB3	1:G:2117:VAL:HG21	1.76	0.67
1:B:2040:LEU:O	1:B:2078:VAL:HA	1.94	0.67
1:A:1855:ASN:ND2	1:A:1863:TYR:O	2.27	0.67
1:R:1121:GLN:O	1:R:1125:LEU:N	2.27	0.67
1:E:178:VAL:HG12	1:E:196:ILE:HD11	1.75	0.67
1:E:602:SER:OG	1:E:740:ASN:OD1	2.04	0.67
1:R:370:ALA:HB3	1:R:413:LYS:HG3	1.77	0.67
1:E:756:SER:O	1:E:812:GLY:N	2.27	0.67
1:C:609:ASP:OD2	1:C:714:LEU:N	2.27	0.67
1:A:941:ILE:HD11	1:A:972:VAL:HB	1.76	0.67
1:J:1359:ARG:NH2	1:J:1367:ASP:OD2	2.27	0.67
1:E:203:GLN:O	1:E:228:ALA:N	2.26	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:976:ARG:NE	1:B:2254:GLU:OE1	2.27	0.67
1:B:626:PRO:HB3	1:B:738:ILE:HD12	1.77	0.67
1:G:2178:ILE:HD12	1:G:2181:GLN:HE21	1.59	0.67
1:D:1419:TYR:CB	1:D:1468:THR:HA	2.24	0.67
1:E:471:TYR:O	1:E:477:ARG:NH1	2.26	0.67
1:J:361:GLN:NE2	1:J:421:GLY:O	2.28	0.67
1:R:1359:ARG:NH2	1:R:1367:ASP:OD2	2.27	0.67
1:E:935:GLN:OE1	1:E:935:GLN:N	2.28	0.67
1:E:1146:ARG:NH1	1:E:1238:SER:O	2.27	0.67
1:C:1643:GLY:O	1:C:1701:ARG:NE	2.27	0.67
1:G:1655:ASN:ND2	1:G:1657:ILE:O	2.28	0.67
1:D:799:ILE:HG23	1:D:816:ALA:HB1	1.77	0.67
1:D:129:ALA:HB2	1:D:209:TRP:CZ3	2.30	0.67
1:D:1378:ALA:HB1	1:D:1381:LEU:HD11	1.75	0.67
1:D:2276:LYS:O	1:D:2285:HIS:ND1	2.26	0.67
1:E:2224:LEU:HD23	1:E:2227:LEU:HD13	1.77	0.67
1:B:1312:THR:O	1:B:1315:ASN:O	2.13	0.67
1:E:921:GLU:OE1	1:E:924:GLN:NE2	2.28	0.67
1:E:2300:VAL:HG13	1:F:2307:LEU:HD22	1.77	0.67
1:C:472:ARG:NH1	1:C:486:GLY:O	2.28	0.67
1:F:1988:VAL:HG21	1:F:2046:TRP:CZ2	2.30	0.67
1:R:361:GLN:NE2	1:R:421:GLY:O	2.28	0.67
1:E:261:SER:OG	1:E:289:GLY:O	2.13	0.67
1:E:1785:ILE:CD1	1:F:2189:LEU:HD13	2.25	0.67
1:B:1175:THR:HG23	1:B:1239:PHE:CE1	2.30	0.67
1:A:2182:VAL:HG22	1:Q:1748:TYR:CE1	2.30	0.67
2:U:1691:THR:HG1	2:U:1715:SER:HG	1.22	0.67
1:E:2009:LYS:NZ	1:F:2005:ASP:OD2	2.28	0.66
1:E:2021:ASP:OD1	1:E:2022:SER:N	2.27	0.66
1:C:2187:ALA:O	1:C:2190:HIS:ND1	2.28	0.66
1:F:1992:THR:HG21	1:F:2012:GLN:HB2	1.77	0.66
1:B:2080:VAL:O	1:B:2108:TYR:N	2.25	0.66
1:A:207:ALA:HB1	1:A:213:SER:HA	1.76	0.66
1:J:1066:LEU:HD22	1:J:1081:ALA:HB2	1.76	0.66
1:D:2093:TRP:CD1	1:C:1797:LEU:HD22	2.31	0.66
1:E:129:ALA:HB2	1:E:209:TRP:CZ3	2.31	0.66
1:E:332:ASN:O	1:E:336:GLN:N	2.28	0.66
1:E:654:SER:CB	1:E:661:LEU:HD13	2.25	0.66
1:E:1321:ASP:OD1	2:K:1726:ARG:NH2	2.29	0.66
1:E:1549:THR:HG23	1:E:1556:ILE:HD13	1.76	0.66
1:F:1056:THR:HG23	1:F:1059:LEU:HB3	1.78	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1238:SER:HA	1:B:1292:ALA:HB3	1.76	0.66
1:D:2300:VAL:HG13	1:C:2307:LEU:HD22	1.76	0.66
1:E:1381:LEU:HD11	1:E:1426:ILE:HD11	1.75	0.66
1:C:190:VAL:HG12	1:C:221:LEU:HD12	1.76	0.66
1:A:176:VAL:HG11	1:A:196:ILE:HG12	1.77	0.66
1:A:1437:ALA:O	1:A:1441:TYR:N	2.27	0.66
1:A:1533:THR:OG1	1:A:1541:ASP:O	2.10	0.66
1:Q:1986:VAL:CG2	1:Q:2042:VAL:HG13	2.25	0.66
1:B:1901:TYR:OH	1:B:1959:SER:O	2.08	0.66
1:A:419:SER:OG	1:A:420:ALA:N	2.29	0.66
1:Q:1655:ASN:ND2	1:Q:1657:ILE:O	2.28	0.66
1:E:197:ALA:HA	1:E:202:VAL:HG22	1.78	0.66
1:C:976:ARG:NH2	1:B:2254:GLU:OE2	2.28	0.66
1:F:472:ARG:NH1	1:F:486:GLY:O	2.28	0.66
1:B:2331:ARG:O	1:B:2334:VAL:HG12	1.96	0.66
1:A:1786:ILE:O	1:Q:2195:ARG:NE	2.28	0.66
2:H:1735:GLU:O	2:H:1750:LYS:NZ	2.27	0.66
2:M:1718:TRP:NE1	2:M:1729:LEU:O	2.29	0.66
1:E:1864:THR:OG1	1:E:1868:GLN:NE2	2.28	0.66
1:C:950:ALA:O	1:C:954:ARG:NH2	2.29	0.66
1:J:1123:LEU:HD12	1:J:1152:VAL:HG21	1.78	0.66
1:R:958:ARG:O	1:R:962:PHE:N	2.28	0.66
2:H:1810:VAL:O	2:H:1835:ARG:N	2.28	0.66
1:D:972:VAL:O	1:D:976:ARG:N	2.29	0.66
1:D:1114:GLN:NE2	1:D:1144:VAL:O	2.29	0.66
1:E:186:ASN:N	1:E:186:ASN:OD1	2.26	0.66
1:E:998:GLU:OE1	1:E:1074:ASN:ND2	2.28	0.66
1:R:1421:PHE:CE2	1:R:1457:LEU:HD21	2.30	0.66
2:O:1689:MET:O	2:O:1716:TYR:N	2.28	0.66
1:E:770:GLY:N	1:E:799:ILE:O	2.29	0.66
1:C:2021:ASP:OD1	1:C:2022:SER:N	2.28	0.66
1:D:1892:VAL:HA	1:D:1895:VAL:CG2	2.26	0.66
1:A:1917:ASP:OD1	1:A:1921:ARG:NE	2.28	0.66
1:D:377:ASP:N	1:D:390:GLU:O	2.29	0.66
1:E:1115:PHE:CD1	1:E:1117:ILE:HD13	2.32	0.66
1:C:1471:ASN:ND2	1:C:1506:LEU:O	2.29	0.66
1:F:1676:ASP:O	1:F:1904:LYS:NZ	2.27	0.66
1:F:2291:ASN:O	1:F:2295:ILE:HD12	1.96	0.66
1:B:1917:ASP:OD1	1:B:1921:ARG:NE	2.29	0.66
1:J:1421:PHE:CE2	1:J:1457:LEU:HD21	2.31	0.66
1:D:2021:ASP:OD1	1:D:2022:SER:N	2.28	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:132:LYS:NZ	1:A:450:GLU:OE1	2.29	0.65
1:R:1123:LEU:HD12	1:R:1152:VAL:HG21	1.77	0.65
1:D:197:ALA:HA	1:D:202:VAL:HG22	1.79	0.65
1:D:654:SER:CB	1:D:661:LEU:HD13	2.26	0.65
1:E:760:GLY:O	1:E:809:LEU:N	2.29	0.65
1:E:2091:GLY:O	1:E:2095:VAL:HG22	1.95	0.65
1:C:2230:LYS:O	1:C:2233:HIS:ND1	2.29	0.65
1:F:1613:TRP:CZ3	1:F:1622:LEU:HD11	2.32	0.65
1:B:1454:MET:HG2	1:B:1506:LEU:HD21	1.79	0.65
1:A:477:ARG:NH2	1:A:483:SER:O	2.29	0.65
1:A:1069:LEU:O	1:A:1069:LEU:HD12	1.96	0.65
1:Q:2178:ILE:HD12	1:Q:2181:GLN:HE21	1.61	0.65
1:J:1121:GLN:O	1:J:1125:LEU:N	2.29	0.65
1:D:719:ASP:OD2	1:D:839:ILE:N	2.30	0.65
1:E:990:LEU:HD12	1:E:991:LEU:N	2.11	0.65
1:E:1034:VAL:O	1:E:1038:ASN:N	2.29	0.65
1:R:355:SER:O	1:R:610:THR:N	2.29	0.65
1:D:328:ASP:OD2	1:D:850:HIS:NE2	2.24	0.65
1:D:1374:GLU:OE1	1:D:1376:ALA:HB3	1.96	0.65
1:D:1830:TYR:OH	1:C:2064:GLY:O	2.14	0.65
1:E:1066:LEU:HA	1:E:1069:LEU:HD23	1.79	0.65
1:C:2034:ASN:ND2	1:C:2073:GLU:O	2.29	0.65
1:B:1481:VAL:HG22	1:B:1517:ILE:HG22	1.77	0.65
1:A:389:GLU:HB2	1:A:507:ALA:HB3	1.76	0.65
1:Q:2315:ALA:O	1:Q:2318:SER:OG	2.11	0.65
1:C:1727:ALA:O	1:C:1730:ILE:HG22	1.96	0.65
1:F:295:ASP:OD1	1:F:966:GLN:NE2	2.29	0.65
1:J:413:LYS:NZ	1:J:493:GLU:OE2	2.30	0.65
1:J:1266:PHE:O	2:W:1699:ARG:NH2	2.30	0.65
1:E:1568:LEU:HD11	1:E:1571:MET:HB3	1.78	0.65
1:C:1439:PHE:CE1	1:C:1481:VAL:HG21	2.32	0.65
1:C:1471:ASN:ND2	1:C:1507:ARG:O	2.30	0.65
1:C:1676:ASP:O	1:C:1904:LYS:NZ	2.30	0.65
1:F:1643:GLY:O	1:F:1701:ARG:NE	2.26	0.65
1:B:970:GLN:O	1:B:974:ARG:NE	2.29	0.65
2:H:1654:VAL:HG11	2:H:1665:VAL:HG21	1.78	0.65
1:D:1824:ALA:O	1:D:1829:ALA:N	2.29	0.65
1:R:1158:TYR:OH	1:R:1288:ILE:HG21	1.96	0.65
1:C:2291:ASN:O	1:C:2295:ILE:HD12	1.97	0.65
1:F:1294:LYS:O	1:F:1295:THR:OG1	2.12	0.65
1:G:1941:ARG:O	1:G:1951:LEU:N	2.30	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:190:VAL:HG12	1:J:221:LEU:HD12	1.79	0.65
1:R:972:VAL:O	1:R:976:ARG:N	2.30	0.65
1:D:1707:ARG:HA	1:D:1814:ILE:HD11	1.79	0.65
1:D:2063:PHE:O	1:D:2067:ILE:HD12	1.97	0.65
1:E:281:VAL:HG12	1:E:286:TYR:HB2	1.79	0.65
1:C:1146:ARG:NH1	1:C:1238:SER:O	2.29	0.65
1:C:1439:PHE:HE1	1:C:1481:VAL:HG21	1.62	0.65
1:B:1100:VAL:HG21	1:B:1133:VAL:HG21	1.77	0.65
1:B:2037:GLY:O	1:B:2076:GLN:NE2	2.30	0.65
1:A:203:GLN:O	1:A:228:ALA:HB3	1.97	0.65
1:J:355:SER:O	1:J:610:THR:N	2.29	0.65
2:O:1654:VAL:HG12	2:O:1688:VAL:HB	1.77	0.65
1:E:439:ASN:HD22	1:E:443:GLN:HG2	1.62	0.65
1:C:1764:LEU:HD13	1:C:1788:LYS:NZ	2.12	0.65
1:F:896:LEU:HD11	1:F:926:ALA:HB2	1.77	0.65
1:F:2138:ARG:NH1	1:F:2145:ILE:O	2.29	0.65
1:B:183:ASN:O	1:B:188:ALA:HB3	1.96	0.65
1:A:136:SER:O	1:A:456:ASN:ND2	2.29	0.65
1:A:1069:LEU:HD11	1:A:1078:ALA:HB2	1.78	0.65
1:A:1086:ILE:O	1:A:1089:HIS:N	2.30	0.65
1:A:2319:ILE:HD11	1:Q:2322:MET:HB3	1.79	0.65
1:J:909:ARG:O	1:J:964:ASN:ND2	2.29	0.65
1:D:960:VAL:HG12	1:D:964:ASN:HD21	1.62	0.64
1:E:1531:PHE:O	1:E:1543:SER:OG	2.09	0.64
1:D:332:ASN:HD22	1:D:905:SER:HG	1.42	0.64
1:E:1924:GLU:O	1:E:2209:LYS:NZ	2.30	0.64
1:C:1901:TYR:OH	1:C:1959:SER:O	2.14	0.64
1:F:1120:LEU:HD12	1:F:1152:VAL:HG23	1.78	0.64
1:B:1289:LEU:HD11	1:B:1291:VAL:HG13	1.77	0.64
1:J:1158:TYR:OH	1:J:1288:ILE:HG21	1.97	0.64
2:S:1689:MET:O	2:S:1716:TYR:N	2.29	0.64
1:D:636:ALA:HB2	1:D:683:LEU:HD22	1.79	0.64
1:D:920:LYS:O	1:D:923:ALA:HB3	1.97	0.64
1:E:2227:LEU:O	1:E:2230:LYS:HG2	1.97	0.64
1:C:1673:GLU:N	1:C:1673:GLU:OE1	2.30	0.64
1:C:2059:GLN:HE21	1:C:2062:LYS:HE2	1.62	0.64
1:R:898:GLU:OE2	1:R:974:ARG:NH1	2.30	0.64
2:H:1755:SER:O	2:H:1845:TYR:OH	2.14	0.64
1:D:1471:ASN:ND2	1:D:1507:ARG:O	2.31	0.64
2:M:1691:THR:HG21	2:M:1736:VAL:HG12	1.80	0.64
1:D:332:ASN:O	1:D:336:GLN:N	2.28	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1707:ARG:HA	1:D:1814:ILE:CD1	2.27	0.64
1:F:1318:THR:HA	2:S:1726:ARG:NH1	2.12	0.64
1:F:1851:ALA:N	1:F:1869:LEU:HD11	2.13	0.64
1:R:1437:ALA:HB3	1:R:1481:VAL:HG23	1.77	0.64
2:M:1707:ILE:HG23	2:M:1752:ALA:CB	2.27	0.64
1:D:662:PRO:HG2	1:D:665:THR:HG23	1.80	0.64
1:C:2044:ALA:HB1	1:C:2088:LEU:HD21	1.79	0.64
1:B:1052:ASP:O	1:B:1054:THR:N	2.30	0.64
1:B:2141:ASP:OD1	1:B:2179:TYR:OH	2.15	0.64
1:J:371:ILE:HD11	1:J:476:ILE:HD12	1.79	0.64
1:J:1293:ILE:N	1:J:1330:LEU:O	2.30	0.64
1:E:477:ARG:NE	1:E:483:SER:O	2.30	0.64
1:E:1128:THR:HG22	1:E:1430:SER:CB	2.28	0.64
1:C:1839:ILE:HD12	1:C:1895:VAL:HG22	1.78	0.64
1:F:950:ALA:O	1:F:954:ARG:NH2	2.30	0.64
1:F:2021:ASP:OD1	1:F:2022:SER:N	2.30	0.64
1:J:1503:LEU:O	1:J:1507:ARG:N	2.31	0.64
1:R:1066:LEU:HD22	1:R:1081:ALA:HB2	1.79	0.64
2:H:1808:VAL:HG11	2:H:1824:ILE:HD13	1.80	0.64
1:F:1595:THR:OG1	1:F:1596:THR:N	2.31	0.64
1:B:1954:PHE:O	1:B:2212:ARG:NH1	2.30	0.64
1:B:2091:GLY:O	1:B:2095:VAL:HG22	1.98	0.64
1:R:477:ARG:NH1	1:R:484:PRO:O	2.31	0.64
1:E:1446:GLY:HA2	1:E:1449:LEU:HD22	1.79	0.64
1:C:615:ARG:CZ	1:C:715:LEU:HD13	2.27	0.64
1:F:136:SER:O	1:F:456:ASN:ND2	2.31	0.64
1:F:2034:ASN:ND2	1:F:2073:GLU:O	2.30	0.64
1:B:1386:MET:CE	1:B:1391:LEU:HD23	2.28	0.64
1:R:909:ARG:O	1:R:964:ASN:ND2	2.31	0.64
1:D:2065:ALA:O	1:D:2068:VAL:HG12	1.98	0.64
1:B:197:ALA:HA	1:B:202:VAL:HG22	1.80	0.64
1:B:1386:MET:SD	1:B:1391:LEU:HD23	2.38	0.64
1:A:1722:ALA:HB1	1:A:1796:ASN:HB3	1.80	0.64
1:A:2021:ASP:OD1	1:A:2022:SER:N	2.30	0.64
1:Q:1808:SER:N	1:Q:1834:LEU:HD11	2.12	0.64
1:J:1114:GLN:HE21	1:J:1148:ALA:HB2	1.63	0.64
1:D:1493:ARG:HH21	1:D:1540:LEU:HD11	1.63	0.63
1:E:2253:VAL:HG13	1:E:2258:THR:HA	1.79	0.63
1:C:2258:THR:HG21	1:B:293:ASP:O	1.98	0.63
1:B:419:SER:OG	1:B:420:ALA:N	2.30	0.63
1:J:261:SER:OG	1:J:289:GLY:O	2.17	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:1238:SER:HA	1:J:1292:ALA:HB3	1.80	0.63
1:D:1066:LEU:HA	1:D:1069:LEU:HD23	1.79	0.63
1:D:1384:ASN:HA	1:D:1387:ARG:HG3	1.80	0.63
1:E:2061:LEU:HD11	1:F:1848:LEU:HD11	1.78	0.63
1:F:1502:ARG:O	1:F:1506:LEU:HD23	1.98	0.63
1:F:2068:VAL:HG13	1:F:2100:ILE:HG12	1.80	0.63
1:B:1069:LEU:HD12	1:B:1069:LEU:O	1.98	0.63
1:E:1384:ASN:HA	1:E:1387:ARG:HB2	1.80	0.63
1:E:1695:GLU:O	1:E:1698:LEU:HD23	1.98	0.63
1:F:900:GLN:O	1:F:904:THR:HG23	1.98	0.63
1:F:1250:ASP:O	1:F:1254:GLY:N	2.31	0.63
1:G:2128:PHE:CD1	1:G:2183:ALA:HB1	2.33	0.63
1:Q:1941:ARG:O	1:Q:1951:LEU:N	2.31	0.63
1:D:853:PHE:CE1	1:D:885:LEU:HD12	2.34	0.63
1:F:1539:TYR:OH	1:F:1606:ARG:NH1	2.31	0.63
1:B:2264:TRP:HA	1:B:2270:LEU:CD2	2.25	0.63
1:A:281:VAL:HG12	1:A:286:TYR:HB2	1.80	0.63
1:A:666:LEU:CD1	1:A:1025:LEU:HD21	2.28	0.63
1:D:1532:LEU:HD21	1:D:1542:ILE:HG23	1.81	0.63
1:D:1798:ARG:HE	1:C:2201:VAL:HG12	1.62	0.63
1:D:1803:ILE:O	1:D:1807:SER:OG	2.08	0.63
1:D:1803:ILE:HD13	1:D:1831:LEU:HD11	1.79	0.63
1:E:1128:THR:HG22	1:E:1430:SER:HB2	1.80	0.63
1:E:1928:THR:OG1	1:E:1930:THR:O	2.16	0.63
1:C:1096:ARG:NH2	1:C:1129:SER:O	2.31	0.63
1:C:1839:ILE:HD12	1:C:1895:VAL:CG2	2.28	0.63
1:F:1707:ARG:NE	1:F:1806:GLU:OE2	2.32	0.63
1:F:1968:ALA:HB2	1:F:2021:ASP:HB2	1.80	0.63
1:F:2319:ILE:HA	1:F:2322:MET:HB2	1.81	0.63
1:J:258:LEU:HD21	1:J:352:ALA:HB2	1.80	0.63
1:R:510:ILE:O	1:R:558:GLY:N	2.32	0.63
2:U:1689:MET:O	2:U:1716:TYR:N	2.29	0.63
2:Y:1689:MET:O	2:Y:1716:TYR:N	2.30	0.63
1:D:450:GLU:HG3	1:D:457:LEU:HD12	1.81	0.63
1:E:1828:GLY:O	1:E:1832:VAL:HG13	1.98	0.63
1:E:1912:LEU:HD13	1:E:1981:ILE:HG13	1.80	0.63
1:G:1986:VAL:HG22	1:G:2042:VAL:HG22	1.81	0.63
1:J:258:LEU:CD2	1:J:352:ALA:HB2	2.29	0.63
1:D:1020:ASP:OD1	1:D:1021:MET:N	2.32	0.63
1:D:1840:GLN:NE2	1:D:1870:GLY:O	2.30	0.63
1:D:1864:THR:OG1	1:D:1868:GLN:NE2	2.31	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2220:ARG:HH11	1:E:2224:LEU:HD11	1.63	0.63
1:C:1120:LEU:HD12	1:C:1152:VAL:HG23	1.81	0.63
1:C:1774:ASP:O	1:C:1779:ARG:NH1	2.32	0.63
1:C:1978:LEU:HD11	1:C:2212:ARG:HG3	1.81	0.63
1:D:1470:CYS:HA	1:D:1509:LEU:HD22	1.80	0.63
1:D:1534:ASN:ND2	1:D:1539:TYR:O	2.32	0.63
1:C:921:GLU:O	1:C:925:TYR:N	2.31	0.63
1:C:2016:GLN:O	1:C:2047:ARG:N	2.22	0.63
1:F:921:GLU:O	1:F:925:TYR:N	2.32	0.63
1:F:1375:PRO:HA	1:F:1378:ALA:HB3	1.80	0.63
1:B:666:LEU:CD1	1:B:1025:LEU:HD21	2.28	0.63
2:K:1661:GLU:O	2:K:1716:TYR:OH	2.11	0.63
1:D:1438:SER:OG	1:D:1481:VAL:HG21	1.99	0.63
1:E:1427:ILE:CD1	1:E:1449:LEU:HD21	2.28	0.63
1:C:638:HIS:CD2	1:C:736:ILE:HG23	2.34	0.63
1:C:1595:THR:OG1	1:C:1596:THR:N	2.31	0.63
1:C:2250:ARG:HD2	1:B:969:VAL:HG11	1.80	0.63
1:A:296:ASP:O	1:A:300:ALA:N	2.28	0.63
1:D:1480:THR:O	1:D:1518:ARG:NH1	2.32	0.62
1:C:896:LEU:HD11	1:C:926:ALA:HB2	1.80	0.62
1:C:1056:THR:HG23	1:C:1059:LEU:HB3	1.81	0.62
1:C:2229:LYS:HG2	1:C:2248:LEU:HD22	1.81	0.62
1:G:1873:GLN:O	1:G:1877:ASN:ND2	2.27	0.62
1:R:258:LEU:HD21	1:R:352:ALA:HB2	1.81	0.62
1:D:533:SER:OG	1:D:576:VAL:HG13	1.99	0.62
1:D:995:LEU:HD11	1:D:1069:LEU:HD21	1.80	0.62
1:D:998:GLU:OE1	1:D:1074:ASN:ND2	2.31	0.62
1:F:1104:PHE:HE2	1:F:1145:VAL:HG13	1.64	0.62
1:E:1385:ARG:NE	1:E:1512:GLU:OE2	2.32	0.62
1:F:2096:ILE:HD12	1:F:2096:ILE:O	2.00	0.62
1:B:651:PHE:CG	1:B:1025:LEU:HD22	2.34	0.62
1:B:1855:ASN:ND2	1:B:1863:TYR:O	2.33	0.62
1:A:1132:ASP:OD1	1:A:1333:GLN:NE2	2.32	0.62
1:R:1114:GLN:HE21	1:R:1148:ALA:HB2	1.64	0.62
1:D:2247:MET:SD	1:D:2248:LEU:N	2.73	0.62
1:E:1091:PRO:CB	1:E:1095:LEU:HD21	2.28	0.62
1:E:2296:SER:O	1:E:2300:VAL:HG23	2.00	0.62
1:F:1020:ASP:OD1	1:F:1021:MET:N	2.32	0.62
1:A:1038:ASN:ND2	1:A:1073:THR:O	2.32	0.62
1:Q:2034:ASN:ND2	1:Q:2070:GLY:O	2.33	0.62
1:J:718:TYR:OH	1:J:838:ARG:NH1	2.32	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:1385:ARG:NH2	1:J:1512:GLU:OE2	2.32	0.62
1:R:1007:ASP:O	1:R:1010:VAL:HG12	2.00	0.62
1:D:2110:ASP:O	1:D:2113:SER:OG	2.16	0.62
1:F:1417:THR:O	1:F:1467:ARG:NH1	2.31	0.62
1:F:2034:ASN:ND2	1:F:2074:CYS:HA	2.15	0.62
1:B:1445:GLU:OE1	1:B:1448:ARG:NH2	2.32	0.62
1:A:641:ASP:HA	1:A:644:LEU:HD12	1.81	0.62
1:D:1749:ARG:NE	1:D:1775:GLU:OE2	2.26	0.62
1:B:926:ALA:O	1:B:929:ILE:HG22	1.99	0.62
1:A:1052:ASP:O	1:A:1054:THR:N	2.32	0.62
1:J:613:LEU:HD23	1:J:616:LEU:HD12	1.81	0.62
1:R:190:VAL:HG12	1:R:221:LEU:HD12	1.81	0.62
1:R:718:TYR:OH	1:R:838:ARG:NH1	2.32	0.62
1:D:995:LEU:HD22	1:D:1066:LEU:CD2	2.30	0.62
1:C:917:SER:HB3	1:C:944:ILE:HD13	1.82	0.62
1:C:2046:TRP:N	1:C:2087:GLU:O	2.33	0.62
1:B:472:ARG:NH1	1:B:486:GLY:O	2.33	0.62
1:G:1917:ASP:OD1	1:G:1921:ARG:NE	2.33	0.62
1:G:1986:VAL:CG2	1:G:2042:VAL:HG13	2.29	0.62
1:J:419:SER:OG	1:J:420:ALA:N	2.32	0.62
1:D:892:PRO:O	1:D:925:TYR:OH	2.13	0.62
1:E:1377:LEU:HD12	1:E:1380:GLN:HG3	1.81	0.62
1:E:1891:GLY:O	1:E:1894:THR:HG22	1.99	0.62
1:E:1897:HIS:NE2	1:E:1901:TYR:OH	2.32	0.62
1:C:1539:TYR:OH	1:C:1606:ARG:NH1	2.33	0.62
1:A:2224:LEU:HB3	1:A:2274:LEU:HD22	1.81	0.62
1:A:2253:VAL:HG22	1:A:2261:ALA:HA	1.81	0.62
1:C:1020:ASP:OD1	1:C:1021:MET:N	2.32	0.62
1:A:2302:LYS:O	1:A:2306:SER:OG	2.08	0.62
1:J:1083:GLN:OE1	1:J:1444:ASN:ND2	2.33	0.62
2:W:1742:ASN:HB3	2:W:1844:LEU:HD21	1.81	0.62
1:B:1671:TYR:OH	1:B:1902:MET:O	2.11	0.62
1:B:2300:VAL:HG13	1:G:2307:LEU:HD22	1.81	0.62
1:A:1294:LYS:O	1:A:1295:THR:OG1	2.11	0.62
1:G:1968:ALA:HB2	1:G:2021:ASP:HB2	1.81	0.62
1:R:356:ARG:NH2	1:R:377:ASP:OD2	2.33	0.62
1:R:1385:ARG:NH2	1:R:1512:GLU:OE2	2.33	0.62
2:O:1654:VAL:HG11	2:O:1665:VAL:HG21	1.80	0.62
1:D:394:THR:OG1	1:D:606:ASN:ND2	2.33	0.61
1:E:2094:VAL:CG1	1:F:1827:ILE:HD13	2.30	0.61
1:C:419:SER:OG	1:C:420:ALA:N	2.33	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:296:ASP:O	1:B:300:ALA:N	2.27	0.61
1:B:2108:TYR:OH	1:B:2218:ARG:NE	2.23	0.61
1:G:2081:TYR:OH	1:G:2110:ASP:OD1	2.18	0.61
1:R:258:LEU:CD2	1:R:352:ALA:HB2	2.29	0.61
1:D:1733:MET:HG3	1:D:1753:LEU:HD21	1.82	0.61
1:D:2302:LYS:O	1:D:2306:SER:OG	2.13	0.61
1:C:1557:MET:SD	1:C:1559:GLN:NE2	2.72	0.61
1:C:2201:VAL:HG23	1:C:2202:ILE:HG23	1.83	0.61
1:E:1233:MET:N	1:E:1233:MET:SD	2.72	0.61
1:F:638:HIS:CD2	1:F:736:ILE:HG23	2.35	0.61
1:A:911:PRO:O	1:A:914:VAL:N	2.32	0.61
1:A:1458:GLU:HA	1:A:1461:PHE:HD2	1.65	0.61
1:D:756:SER:O	1:D:812:GLY:N	2.33	0.61
1:D:1684:ILE:O	1:D:1688:ILE:CA	2.46	0.61
1:E:441:ARG:NH1	1:E:442:LEU:O	2.33	0.61
1:E:1811:TYR:OH	1:E:1837:ARG:NH1	2.34	0.61
1:E:1943:HIS:NE2	1:E:1945:THR:OG1	2.34	0.61
1:C:1076:LYS:O	1:C:1080:ARG:N	2.33	0.61
1:C:1986:VAL:HG23	1:C:2042:VAL:HG23	1.81	0.61
1:B:1069:LEU:HD13	1:B:1074:ASN:O	2.00	0.61
1:A:686:THR:O	1:A:694:VAL:HG12	2.01	0.61
1:A:2117:VAL:CG1	1:Q:1722:ALA:HB3	2.30	0.61
2:K:1691:THR:HG22	2:K:1697:CYS:HB3	1.81	0.61
1:E:1682:ASN:ND2	1:E:1718:ALA:O	2.33	0.61
1:C:1039:LEU:O	1:C:1042:THR:OG1	2.12	0.61
1:C:1714:ILE:HD12	1:C:1817:ILE:HB	1.82	0.61
1:C:1968:ALA:HB2	1:C:2021:ASP:HB2	1.81	0.61
1:F:613:LEU:HD23	1:F:616:LEU:HD12	1.83	0.61
1:F:946:ASP:HA	1:F:949:ALA:HB3	1.82	0.61
1:B:102:VAL:HG23	1:B:145:PHE:CE1	2.34	0.61
1:B:1385:ARG:NE	1:B:1575:THR:O	2.34	0.61
1:B:1810:ALA:O	1:B:1814:ILE:N	2.32	0.61
1:B:2307:LEU:O	1:B:2311:ASN:N	2.33	0.61
1:A:183:ASN:O	1:A:188:ALA:HB3	2.01	0.61
1:Q:2128:PHE:CD1	1:Q:2183:ALA:HB1	2.35	0.61
2:O:1691:THR:HG22	2:O:1697:CYS:HB3	1.82	0.61
1:E:1873:GLN:O	1:E:1877:ASN:ND2	2.27	0.61
1:C:625:ARG:NH1	1:C:742:THR:O	2.33	0.61
1:C:1996:SER:CA	1:C:2010:ILE:HD12	2.30	0.61
1:F:884:ARG:O	1:F:888:THR:OG1	2.13	0.61
1:F:933:LEU:HD22	1:A:2305:ARG:HD3	1.83	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1253:MET:SD	2:S:1724:LYS:HA	2.40	0.61
1:F:2303:GLN:O	1:F:2306:SER:OG	2.15	0.61
1:B:911:PRO:O	1:B:914:VAL:N	2.31	0.61
1:B:1312:THR:O	1:B:1315:ASN:C	2.39	0.61
1:J:921:GLU:O	1:J:925:TYR:N	2.33	0.61
1:D:1556:ILE:HB	1:D:1573:ILE:HD11	1.83	0.61
1:D:1588:PHE:O	1:D:1592:SER:OG	2.14	0.61
1:E:1556:ILE:HB	1:E:1573:ILE:HD11	1.83	0.61
1:C:2258:THR:HG22	1:B:296:ASP:CB	2.30	0.61
1:A:898:GLU:OE1	1:A:975:TYR:OH	2.16	0.61
1:Q:1808:SER:O	1:Q:1812:ASN:ND2	2.33	0.61
1:J:1317:ALA:HB1	2:Y:1726:ARG:HB2	1.82	0.61
1:R:686:THR:HG21	1:R:870:PRO:HB3	1.83	0.61
1:D:760:GLY:O	1:D:809:LEU:N	2.34	0.61
1:C:1121:GLN:O	1:C:1125:LEU:HD23	2.00	0.61
1:C:1240:ARG:O	1:C:1294:LYS:N	2.34	0.61
1:C:1497:MET:SD	1:C:1498:ARG:N	2.74	0.61
1:B:129:ALA:HB2	1:B:209:TRP:CH2	2.36	0.61
1:B:951:THR:O	1:B:954:ARG:NH1	2.33	0.61
1:J:972:VAL:HG22	1:J:976:ARG:HB3	1.83	0.61
1:R:1253:MET:SD	2:U:1726:ARG:NE	2.74	0.61
1:R:1293:ILE:N	1:R:1330:LEU:O	2.32	0.61
2:M:1833:VAL:HG11	2:M:1850:LEU:HD22	1.82	0.61
1:D:1880:VAL:HG22	1:C:2059:GLN:OE1	2.00	0.61
1:D:2334:VAL:HG21	1:C:2334:VAL:HG21	1.83	0.61
1:E:979:ILE:HD12	1:E:980:ARG:N	2.16	0.61
1:E:2178:ILE:O	1:E:2182:VAL:HG23	1.99	0.61
1:F:1121:GLN:O	1:F:1125:LEU:HD23	2.00	0.61
1:F:1245:PHE:O	1:F:1249:PHE:N	2.34	0.61
1:B:2021:ASP:OD1	1:B:2022:SER:N	2.34	0.61
1:E:194:LEU:HD11	1:E:225:ASN:CB	2.30	0.61
1:E:1020:ASP:OD1	1:E:1021:MET:N	2.33	0.61
1:E:2289:GLU:N	1:E:2289:GLU:OE1	2.32	0.61
1:C:946:ASP:HA	1:C:949:ALA:HB3	1.82	0.61
1:B:248:ILE:HG21	1:B:285:LEU:HD21	1.82	0.61
1:B:298:LEU:HD21	1:B:331:PRO:HG3	1.82	0.61
1:E:1493:ARG:NE	1:E:1540:LEU:HD21	2.16	0.60
1:E:1680:ILE:HG21	1:E:1699:PHE:CD1	2.36	0.60
1:C:1843:ASN:O	1:C:1843:ASN:ND2	2.31	0.60
1:C:2034:ASN:ND2	1:C:2074:CYS:HA	2.16	0.60
1:F:1360:ALA:HB2	1:F:1365:GLU:HA	1.82	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:2132:ASP:O	1:G:2136:THR:HG23	2.00	0.60
1:G:2280:GLU:OE1	1:G:2280:GLU:N	2.34	0.60
1:R:613:LEU:HD23	1:R:616:LEU:HD12	1.82	0.60
1:E:363:LEU:HD11	1:E:464:ILE:HD11	1.84	0.60
1:E:2065:ALA:O	1:E:2068:VAL:HG12	2.01	0.60
1:E:2221:ARG:NH1	1:E:2264:TRP:O	2.31	0.60
1:F:1509:LEU:HD12	1:F:1534:ASN:O	2.01	0.60
1:B:1075:ALA:O	1:B:1079:LEU:HD13	2.01	0.60
1:A:443:GLN:NE2	1:A:445:GLU:OE1	2.35	0.60
1:A:472:ARG:NH1	1:A:486:GLY:O	2.33	0.60
1:Q:2039:PRO:HG3	1:Q:2223:LEU:HD21	1.83	0.60
1:J:370:ALA:HB3	1:J:413:LYS:HG3	1.81	0.60
1:D:965:THR:O	1:D:969:VAL:HG13	2.02	0.60
1:D:2174:PHE:O	1:C:1745:TYR:OH	2.18	0.60
1:E:129:ALA:HB1	1:E:206:TRP:CH2	2.36	0.60
1:E:1289:LEU:HD21	1:E:1291:VAL:HG13	1.83	0.60
1:F:419:SER:OG	1:F:420:ALA:N	2.33	0.60
1:B:969:VAL:HA	1:B:972:VAL:HG12	1.82	0.60
1:B:1421:PHE:CE1	1:B:1460:ALA:HB1	2.35	0.60
1:G:2021:ASP:OD1	1:G:2022:SER:N	2.35	0.60
1:R:1321:ASP:HB2	2:U:1726:ARG:HB3	1.82	0.60
2:H:1668:PHE:HB2	2:H:1723:ILE:HD11	1.82	0.60
1:D:747:LYS:O	1:D:755:ARG:NH2	2.34	0.60
1:D:1532:LEU:CD2	1:D:1542:ILE:HG23	2.31	0.60
1:E:449:THR:HB	1:E:457:LEU:HD11	1.83	0.60
1:E:2124:VAL:HG13	1:E:2128:PHE:HB3	1.84	0.60
1:F:1827:ILE:HD12	1:F:1830:TYR:HB2	1.83	0.60
1:F:1996:SER:CA	1:F:2010:ILE:HD12	2.32	0.60
1:F:2178:ILE:HD12	1:F:2181:GLN:HE21	1.65	0.60
1:B:1480:THR:O	1:B:1480:THR:OG1	2.20	0.60
1:B:1718:ALA:HB1	1:B:1822:CYS:SG	2.41	0.60
1:A:2014:ALA:HB3	1:A:2017:VAL:HG21	1.84	0.60
1:J:356:ARG:NH2	1:J:377:ASP:OD2	2.33	0.60
2:H:1665:VAL:HA	2:H:1719:VAL:HG11	1.82	0.60
1:D:1499:TYR:OH	1:D:1506:LEU:HD12	2.01	0.60
1:E:1039:LEU:O	1:E:1042:THR:OG1	2.05	0.60
1:E:1369:ILE:HG23	1:E:1404:TYR:CE2	2.37	0.60
1:E:1755:PRO:HA	1:E:1758:TYR:CD1	2.36	0.60
1:E:2230:LYS:HG3	1:E:2231:LYS:N	2.14	0.60
1:C:926:ALA:O	1:C:929:ILE:HG22	2.02	0.60
1:C:1613:TRP:O	1:C:1617:SER:OG	2.11	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1060:LEU:O	1:F:1064:THR:N	2.31	0.60
1:F:1306:ALA:O	1:F:1309:ARG:NH1	2.34	0.60
1:F:1418:ASP:OD1	1:F:1419:TYR:N	2.34	0.60
1:A:1403:LEU:HD21	1:A:1456:GLU:HB2	1.82	0.60
1:A:2117:VAL:HG13	1:Q:1722:ALA:HB3	1.83	0.60
1:R:1083:GLN:OE1	1:R:1444:ASN:ND2	2.33	0.60
1:D:668:ASN:ND2	1:D:868:CYS:SG	2.75	0.60
1:D:1824:ALA:HB1	1:D:1846:LEU:HD13	1.84	0.60
1:E:1154:VAL:HG13	1:E:1180:PHE:CE1	2.37	0.60
1:F:926:ALA:O	1:F:929:ILE:HG22	2.02	0.60
1:B:991:LEU:HD21	1:B:1062:ILE:HG21	1.83	0.60
1:G:1671:TYR:OH	1:G:1904:LYS:N	2.35	0.60
2:M:1664:LEU:HD23	2:M:1723:ILE:HD12	1.83	0.60
2:O:1689:MET:HB2	2:O:1736:VAL:HG11	1.83	0.60
1:E:1482:ILE:HG22	1:E:1518:ARG:HG2	1.82	0.60
1:E:1530:LEU:HD11	1:E:1544:LEU:HD12	1.83	0.60
1:C:1123:LEU:CD1	1:C:1152:VAL:HG21	2.29	0.60
1:C:1360:ALA:HB2	1:C:1365:GLU:HA	1.83	0.60
1:C:1545:TYR:OH	1:C:1568:LEU:O	2.19	0.60
1:F:1991:ARG:NH1	1:F:1992:THR:O	2.35	0.60
1:R:419:SER:OG	1:R:420:ALA:N	2.32	0.60
1:R:1020:ASP:OD1	1:R:1021:MET:N	2.35	0.60
1:D:178:VAL:HG21	1:D:186:ASN:HB3	1.82	0.60
1:E:1115:PHE:CE1	1:E:1117:ILE:HD13	2.37	0.60
1:B:641:ASP:HA	1:B:644:LEU:HD12	1.83	0.60
1:B:1919:ILE:HG21	1:B:2216:TYR:CG	2.37	0.60
1:R:1496:VAL:HG11	1:R:1540:LEU:HD11	1.84	0.60
1:D:194:LEU:HD11	1:D:225:ASN:CB	2.32	0.60
1:D:661:LEU:O	1:D:1006:TYR:OH	2.20	0.60
1:D:1856:LYS:NZ	1:C:2121:GLU:OE2	2.33	0.60
1:E:2337:ILE:HG22	1:F:2331:ARG:HE	1.66	0.60
1:F:1612:LEU:HD22	1:F:1896:LEU:HD13	1.83	0.60
2:K:1665:VAL:HA	2:K:1719:VAL:HG11	1.84	0.60
1:D:1657:ILE:HA	1:D:1686:TYR:CE2	2.36	0.60
1:D:1775:GLU:OE1	1:D:1779:ARG:NH2	2.35	0.60
1:C:136:SER:O	1:C:456:ASN:ND2	2.34	0.60
1:C:636:ALA:HB1	1:C:685:VAL:CG2	2.31	0.60
1:C:2232:ILE:CD1	1:C:2248:LEU:HD21	2.32	0.60
1:C:2286:SER:OG	1:C:2287:VAL:N	2.34	0.60
1:F:1146:ARG:NH1	1:F:1238:SER:O	2.35	0.60
1:F:2026:THR:HG22	1:F:2030:ILE:HD12	1.84	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:188:ALA:HB2	1:A:212:ALA:HB2	1.82	0.60
1:J:686:THR:HG21	1:J:870:PRO:HB3	1.82	0.60
2:W:1691:THR:HG21	2:W:1736:VAL:HG12	1.84	0.60
1:E:533:SER:HB2	1:E:576:VAL:HG13	1.83	0.59
1:C:1138:PHE:O	1:C:1238:SER:OG	2.18	0.59
1:A:964:ASN:O	1:A:968:ILE:HG22	2.02	0.59
2:H:1654:VAL:HG12	2:H:1688:VAL:HB	1.84	0.59
1:C:1123:LEU:O	1:C:1428:ARG:NH2	2.34	0.59
1:C:1999:ALA:HB2	1:C:2008:ALA:N	2.17	0.59
1:F:1394:ILE:HB	1:F:1403:LEU:HD12	1.83	0.59
1:F:1999:ALA:HB2	1:F:2008:ALA:N	2.17	0.59
1:B:1014:ARG:NH2	1:B:1018:LYS:O	2.35	0.59
1:B:2263:VAL:HG12	1:B:2270:LEU:CD1	2.32	0.59
1:A:700:SER:OG	1:A:835:SER:N	2.35	0.59
1:A:2220:ARG:NH1	1:A:2223:LEU:HD12	2.17	0.59
1:Q:1917:ASP:OD1	1:Q:1921:ARG:NE	2.35	0.59
1:J:1245:PHE:O	1:J:1249:PHE:N	2.36	0.59
1:D:1103:ILE:O	1:D:1106:SER:OG	2.20	0.59
1:E:430:ASP:OD1	1:E:645:ARG:NE	2.35	0.59
1:E:1968:ALA:HB3	1:E:2025:LYS:HE2	1.84	0.59
1:C:972:VAL:HG22	1:C:976:ARG:HB3	1.85	0.59
1:B:941:ILE:HD13	1:B:968:ILE:HG12	1.83	0.59
1:B:943:ASN:OD1	1:B:944:ILE:N	2.34	0.59
1:A:929:ILE:O	1:A:930:THR:OG1	2.18	0.59
1:A:1076:LYS:NZ	1:A:1448:ARG:O	2.34	0.59
1:A:1719:ASN:N	1:A:1823:ARG:O	2.34	0.59
1:D:1107:ALA:HB1	1:D:1119:ASN:ND2	2.17	0.59
1:F:1885:VAL:HG11	1:F:1891:GLY:HA2	1.84	0.59
1:A:1014:ARG:NH2	1:A:1018:LYS:O	2.35	0.59
1:J:663:ALA:HB1	1:J:1032:ALA:CB	2.32	0.59
1:R:636:ALA:HB2	1:R:683:LEU:HG	1.85	0.59
1:D:1374:GLU:HB3	1:D:1377:LEU:HD13	1.84	0.59
1:D:1386:MET:SD	1:D:1424:ARG:NH1	2.75	0.59
1:E:933:LEU:HB2	1:C:2320:ILE:HD12	1.84	0.59
1:C:939:GLN:OE1	1:B:2239:LEU:HD22	2.01	0.59
1:C:1099:GLN:HB2	1:B:2329:THR:HG22	1.83	0.59
1:F:976:ARG:NE	1:A:2254:GLU:OE2	2.30	0.59
1:B:706:VAL:HG12	1:B:716:LEU:HD12	1.84	0.59
1:A:943:ASN:OD1	1:A:944:ILE:N	2.35	0.59
1:D:947:SER:O	1:D:950:ALA:HB3	2.03	0.59
1:D:2289:GLU:OE1	1:D:2289:GLU:N	2.35	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:666:LEU:O	1:E:687:ARG:NH2	2.35	0.59
1:C:1138:PHE:CE2	1:C:1292:ALA:HB2	2.38	0.59
1:C:2016:GLN:HB2	1:C:2047:ARG:HG3	1.83	0.59
1:C:2135:LYS:O	1:C:2138:ARG:NH1	2.35	0.59
1:F:328:ASP:OD2	1:F:850:HIS:NE2	2.35	0.59
1:B:941:ILE:HD11	1:B:972:VAL:HB	1.85	0.59
1:A:2220:ARG:HH12	1:A:2223:LEU:HD12	1.67	0.59
1:G:1983:VAL:HG12	1:G:2039:PRO:HG2	1.85	0.59
1:Q:2021:ASP:OD1	1:Q:2022:SER:N	2.35	0.59
1:J:1294:LYS:O	1:J:1295:THR:OG1	2.12	0.59
1:R:972:VAL:HG22	1:R:976:ARG:HB3	1.82	0.59
2:S:1810:VAL:O	2:S:1835:ARG:N	2.36	0.59
1:D:197:ALA:CB	1:D:227:ILE:HD13	2.31	0.59
1:D:363:LEU:HD11	1:D:464:ILE:CD1	2.33	0.59
1:E:1808:SER:HA	1:E:1834:LEU:HD11	1.84	0.59
1:C:187:TYR:O	1:C:193:ILE:HD11	2.02	0.59
1:F:363:LEU:HD11	1:F:460:ALA:HB1	1.83	0.59
1:F:1613:TRP:HZ3	1:F:1622:LEU:HD11	1.68	0.59
1:A:291:VAL:HG21	1:A:297:GLY:CA	2.33	0.59
1:A:1481:VAL:CG2	1:A:1517:ILE:HG22	2.33	0.59
1:G:2129:ARG:O	1:G:2133:LEU:HD23	2.02	0.59
1:D:1378:ALA:HB1	1:D:1381:LEU:CD1	2.33	0.59
1:D:1808:SER:O	1:D:1812:ASN:ND2	2.36	0.59
1:E:2059:GLN:HE21	1:F:1878:ASN:HB2	1.67	0.59
1:F:921:GLU:OE1	1:F:924:GLN:NE2	2.35	0.59
1:F:1981:ILE:HD11	1:F:2220:ARG:HB2	1.84	0.59
1:B:668:ASN:HB3	1:B:686:THR:HG23	1.83	0.59
1:B:1069:LEU:HD21	1:B:1078:ALA:H	1.67	0.59
1:B:1923:ILE:HD11	1:B:2212:ARG:HB2	1.85	0.59
1:G:1808:SER:N	1:G:1834:LEU:HD11	2.17	0.59
1:J:143:GLU:OE2	1:J:474:LYS:NZ	2.32	0.59
1:J:663:ALA:HB1	1:J:1032:ALA:HB1	1.84	0.59
1:R:1305:ALA:HB2	1:R:1371:ARG:HH22	1.68	0.59
1:D:129:ALA:HB1	1:D:206:TRP:CH2	2.38	0.59
1:D:370:ALA:HB3	1:D:413:LYS:HG3	1.83	0.59
1:D:1680:ILE:HG21	1:D:1699:PHE:CD1	2.38	0.59
1:E:1807:SER:HB2	1:E:1834:LEU:HD21	1.84	0.59
1:F:2304:ILE:HD13	1:F:2307:LEU:HD12	1.83	0.59
1:G:2178:ILE:CD1	1:G:2181:GLN:HE21	2.16	0.59
1:Q:2275:GLU:O	1:Q:2279:THR:OG1	2.21	0.59
1:R:663:ALA:HB1	1:R:1032:ALA:CB	2.33	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1819:LEU:HD23	1:E:1819:LEU:H	1.68	0.59
1:C:1601:ILE:HD12	1:C:1602:PRO:N	2.18	0.59
1:F:2276:LYS:O	1:F:2277:GLN:NE2	2.36	0.59
1:B:1100:VAL:HA	1:B:1103:ILE:HG22	1.85	0.59
1:D:1167:GLN:N	1:D:1167:GLN:OE1	2.36	0.58
1:E:1534:ASN:ND2	1:E:1539:TYR:O	2.36	0.58
1:E:1588:PHE:O	1:E:1592:SER:OG	2.18	0.58
1:E:2221:ARG:NH1	1:E:2270:LEU:HD12	2.18	0.58
1:C:1075:ALA:O	1:C:1079:LEU:HD23	2.03	0.58
1:F:1836:GLN:OE1	1:F:2028:GLN:NE2	2.35	0.58
1:B:1710:GLY:HA2	1:B:1814:ILE:HG22	1.84	0.58
1:B:1751:LEU:O	1:B:1782:ILE:HG22	2.02	0.58
1:A:1924:GLU:O	1:A:2209:LYS:NZ	2.36	0.58
1:D:295:ASP:OD2	1:E:2258:THR:N	2.33	0.58
1:E:925:TYR:OH	1:E:929:ILE:HD13	2.03	0.58
1:C:2287:VAL:O	1:C:2291:ASN:ND2	2.37	0.58
1:B:1524:LYS:HD3	1:B:1526:ILE:HD11	1.84	0.58
1:A:2174:PHE:O	1:Q:1745:TYR:OH	2.20	0.58
1:G:1973:VAL:HG12	1:G:1986:VAL:HG12	1.85	0.58
1:J:1020:ASP:OD1	1:J:1021:MET:N	2.35	0.58
1:R:663:ALA:HB1	1:R:1032:ALA:HB1	1.85	0.58
1:D:1078:ALA:O	1:D:1081:ALA:HB3	2.03	0.58
1:D:1489:GLU:OE2	1:D:1493:ARG:NH2	2.37	0.58
1:D:1872:ILE:HG21	1:D:1884:THR:HG21	1.84	0.58
1:D:2093:TRP:NE1	1:C:1797:LEU:HD22	2.18	0.58
1:D:2251:TRP:CE3	1:D:2288:ILE:HG23	2.37	0.58
1:D:2275:GLU:O	1:D:2279:THR:OG1	2.13	0.58
1:E:1090:LEU:HD11	1:E:1096:ARG:NH1	2.19	0.58
1:E:1287:HIS:O	1:E:1325:ARG:N	2.32	0.58
1:C:1289:LEU:HD22	1:C:1327:LEU:CD1	2.33	0.58
1:C:933:LEU:HD22	1:B:2305:ARG:HD3	1.86	0.58
1:C:2258:THR:HG22	1:B:296:ASP:H	1.69	0.58
1:F:707:HIS:N	1:F:715:LEU:O	2.35	0.58
1:B:1239:PHE:CZ	1:B:1248:ILE:HG21	2.39	0.58
1:A:1470:CYS:HA	1:A:1509:LEU:HD12	1.85	0.58
1:A:1743:ASP:OD2	1:A:1746:LYS:NZ	2.35	0.58
1:J:187:TYR:O	1:J:193:ILE:HD11	2.03	0.58
1:J:636:ALA:HB2	1:J:683:LEU:HG	1.84	0.58
2:K:1792:VAL:HG11	2:K:1798:PHE:CD1	2.39	0.58
1:D:1473:ILE:HB	1:D:1510:GLN:O	2.02	0.58
1:C:1385:ARG:NH2	1:C:1510:GLN:HE21	2.01	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1670:GLU:HA	1:F:1913:LEU:HD21	1.84	0.58
1:F:2217:TRP:HB3	1:F:2267:ASN:HB3	1.84	0.58
1:B:2128:PHE:CZ	1:B:2133:LEU:HD11	2.39	0.58
1:A:1020:ASP:OD1	1:A:1021:MET:N	2.37	0.58
1:R:1069:LEU:HB2	1:R:1078:ALA:HB2	1.85	0.58
1:D:1838:THR:HG22	1:D:1881:THR:HA	1.86	0.58
1:E:920:LYS:O	1:E:923:ALA:HB3	2.03	0.58
1:C:707:HIS:N	1:C:715:LEU:O	2.37	0.58
1:C:1418:ASP:OD1	1:C:1419:TYR:N	2.32	0.58
1:F:675:ILE:HG21	1:F:820:LEU:HD11	1.85	0.58
1:B:1006:TYR:O	1:B:1010:VAL:HG23	2.02	0.58
1:A:310:ILE:HD13	1:A:334:PHE:HA	1.86	0.58
1:Q:2109:ALA:HB2	1:Q:2202:ILE:HG21	1.86	0.58
1:J:640:ALA:O	1:J:644:LEU:HD13	2.04	0.58
1:J:1436:GLU:N	1:J:1483:MET:SD	2.76	0.58
1:R:129:ALA:HB2	1:R:209:TRP:CZ3	2.39	0.58
1:R:413:LYS:NZ	1:R:493:GLU:OE2	2.37	0.58
1:D:194:LEU:HD11	1:D:225:ASN:HB2	1.86	0.58
1:D:1620:ALA:HB3	1:D:1916:LYS:HG3	1.86	0.58
1:F:122:LEU:HD23	1:F:205:VAL:HG22	1.85	0.58
1:F:636:ALA:HB1	1:F:685:VAL:CG2	2.34	0.58
1:F:1083:GLN:NE2	1:F:1445:GLU:OE2	2.37	0.58
1:F:1123:LEU:CD1	1:F:1152:VAL:HG21	2.29	0.58
1:F:1657:ILE:HD12	1:F:1695:GLU:HA	1.86	0.58
1:F:1962:GLU:CD	1:F:1972:VAL:HG13	2.23	0.58
1:A:945:LEU:CD1	1:A:968:ILE:HG21	2.32	0.58
1:A:1383:LEU:CD1	1:A:1391:LEU:HD21	2.34	0.58
1:E:370:ALA:HB3	1:E:413:LYS:HG3	1.85	0.58
1:E:1619:GLN:OE1	1:E:1977:ARG:NH1	2.37	0.58
1:E:1824:ALA:CB	1:E:1832:VAL:HG11	2.34	0.58
1:F:2080:VAL:HB	1:F:2107:MET:HG3	1.86	0.58
1:B:609:ASP:OD2	1:B:714:LEU:N	2.36	0.58
1:B:963:MET:HA	1:B:966:GLN:HG2	1.84	0.58
1:D:439:ASN:HD22	1:D:443:GLN:HG2	1.69	0.58
1:D:1369:ILE:HG23	1:D:1404:TYR:CE2	2.39	0.58
1:E:450:GLU:HG3	1:E:457:LEU:HD12	1.86	0.58
1:C:613:LEU:HD23	1:C:616:LEU:HD12	1.86	0.58
1:C:1038:ASN:OD1	1:C:1077:VAL:HG21	2.04	0.58
1:B:1020:ASP:OD1	1:B:1021:MET:N	2.37	0.58
1:A:426:LEU:N	1:A:434:TYR:O	2.34	0.58
1:A:1480:THR:O	1:A:1480:THR:OG1	2.20	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:R:921:GLU:O	1:R:925:TYR:N	2.35	0.58
1:E:965:THR:O	1:E:969:VAL:HG13	2.03	0.58
1:C:2082:ILE:HD12	1:C:2108:TYR:O	2.03	0.58
1:B:442:LEU:HD11	1:B:446:HIS:CG	2.38	0.58
1:B:2117:VAL:CG1	1:G:1722:ALA:HB3	2.34	0.58
1:B:2315:ALA:HB1	1:G:2330:GLN:HE22	1.68	0.58
1:D:449:THR:HB	1:D:457:LEU:HD11	1.87	0.57
1:D:2201:VAL:HG23	1:D:2202:ILE:HG23	1.85	0.57
1:C:1430:SER:O	1:C:1430:SER:OG	2.11	0.57
1:B:132:LYS:NZ	1:B:450:GLU:OE1	2.36	0.57
1:G:2331:ARG:O	1:G:2334:VAL:HG12	2.04	0.57
1:R:640:ALA:O	1:R:644:LEU:HD13	2.04	0.57
2:Y:1691:THR:HG21	2:Y:1736:VAL:HG12	1.83	0.57
1:D:1589:GLN:O	1:D:1593:LEU:HD13	2.04	0.57
1:D:1986:VAL:HG23	1:D:2040:LEU:HD12	1.86	0.57
1:E:2333:GLU:O	1:E:2336:ARG:HG2	2.04	0.57
1:Q:1655:ASN:ND2	1:Q:1659:MET:O	2.36	0.57
2:H:1651:SER:O	2:H:1686:HIS:N	2.37	0.57
2:M:1765:GLU:O	2:M:1807:ILE:N	2.37	0.57
2:Y:1751:ARG:NH2	2:Y:1844:LEU:O	2.37	0.57
1:D:1978:LEU:HD21	1:D:1983:VAL:HG11	1.86	0.57
1:E:1044:LEU:C	1:E:1048:LEU:HD22	2.24	0.57
1:E:1167:GLN:OE1	1:E:1167:GLN:N	2.37	0.57
1:F:1076:LYS:O	1:F:1080:ARG:N	2.37	0.57
1:B:190:VAL:HG11	1:B:221:LEU:HD12	1.86	0.57
1:A:920:LYS:O	1:A:923:ALA:HB3	2.04	0.57
1:R:865:ASN:O	1:R:1030:SER:OG	2.15	0.57
1:R:1298:ASP:O	1:R:1304:LEU:HD11	2.03	0.57
1:D:1803:ILE:CD1	1:D:1831:LEU:HD11	2.34	0.57
1:E:1095:LEU:HD22	1:E:1096:ARG:N	2.19	0.57
1:F:609:ASP:OD2	1:F:714:LEU:N	2.38	0.57
1:F:1489:GLU:O	1:F:1493:ARG:NE	2.26	0.57
1:F:1956:ASP:OD2	1:F:1980:GLY:N	2.37	0.57
1:A:1178:VAL:HG12	1:A:1236:MET:HB3	1.86	0.57
1:A:1480:THR:OG1	1:A:1518:ARG:NH1	2.38	0.57
1:R:1437:ALA:HB3	1:R:1481:VAL:CG2	2.35	0.57
2:K:1833:VAL:HG11	2:K:1850:LEU:HD22	1.86	0.57
2:W:1689:MET:O	2:W:1716:TYR:N	2.34	0.57
1:D:244:ILE:HD11	1:D:347:PHE:CB	2.34	0.57
1:D:1636:GLU:OE1	1:D:1636:GLU:N	2.36	0.57
1:E:1528:ILE:HD12	1:E:1530:LEU:HD13	1.87	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2195:ARG:NH2	1:F:1795:GLU:OE2	2.37	0.57
1:E:2319:ILE:O	1:E:2323:THR:N	2.37	0.57
1:C:361:GLN:NE2	1:C:421:GLY:O	2.37	0.57
1:C:2133:LEU:O	1:C:2136:THR:HG22	2.04	0.57
1:C:2221:ARG:HD2	1:C:2270:LEU:HD23	1.86	0.57
1:F:1971:VAL:CG2	1:F:1988:VAL:HG22	2.32	0.57
1:B:939:GLN:HG2	1:B:976:ARG:HE	1.68	0.57
1:A:780:ALA:HB3	1:A:791:LEU:HD12	1.84	0.57
1:A:1822:CYS:SG	1:A:1823:ARG:N	2.78	0.57
1:R:1454:MET:O	1:R:1458:GLU:N	2.38	0.57
1:D:982:HIS:O	1:D:986:VAL:HG22	2.03	0.57
1:D:1924:GLU:N	1:D:1952:SER:OG	2.36	0.57
1:E:661:LEU:O	1:E:1006:TYR:OH	2.23	0.57
1:E:857:LEU:CD2	1:E:885:LEU:HD11	2.32	0.57
1:E:1719:ASN:OD1	1:E:1720:SER:N	2.31	0.57
1:C:413:LYS:NZ	1:C:493:GLU:OE2	2.37	0.57
1:C:2130:ARG:O	1:C:2133:LEU:N	2.38	0.57
1:F:683:LEU:HD13	1:F:697:MET:HG2	1.86	0.57
1:F:1678:ILE:HG12	1:F:1706:ALA:HB2	1.87	0.57
1:F:2094:VAL:HG13	1:F:2095:VAL:HG23	1.86	0.57
1:A:941:ILE:HD13	1:A:968:ILE:HD11	1.84	0.57
1:G:2077:PRO:HD2	1:G:2223:LEU:HD23	1.86	0.57
1:Q:1830:TYR:CE2	1:Q:1848:LEU:HD22	2.40	0.57
1:J:1305:ALA:HB2	1:J:1371:ARG:HH22	1.68	0.57
2:O:1707:ILE:HD11	2:O:1749:PRO:HG3	1.86	0.57
1:D:884:ARG:O	1:D:888:THR:HG23	2.05	0.57
1:D:1243:GLU:O	1:D:1247:ARG:NE	2.36	0.57
1:D:1373:LEU:HD23	1:D:1402:HIS:CE1	2.39	0.57
1:E:571:ILE:O	1:E:575:VAL:HG23	2.03	0.57
1:E:910:ILE:HG12	1:E:915:GLU:HB2	1.85	0.57
1:E:1421:PHE:CE2	1:E:1457:LEU:HD21	2.39	0.57
1:C:1138:PHE:HE2	1:C:1292:ALA:HB2	1.68	0.57
1:C:1636:GLU:OE1	1:C:1636:GLU:N	2.37	0.57
1:C:2217:TRP:HB3	1:C:2267:ASN:HB3	1.87	0.57
1:B:612:TRP:CZ2	1:B:616:LEU:HD11	2.39	0.57
1:B:943:ASN:OD1	1:B:944:ILE:HG23	2.04	0.57
1:B:1294:LYS:O	1:B:1295:THR:OG1	2.13	0.57
1:A:143:GLU:O	1:A:146:ARG:NH1	2.38	0.57
1:J:1248:ILE:HG22	1:J:1248:ILE:O	2.05	0.57
1:R:1052:ASP:O	1:R:1054:THR:N	2.37	0.57
1:D:1680:ILE:HD11	1:D:1702:ALA:HB3	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1683:ASP:OD2	1:D:1685:THR:OG1	2.16	0.57
1:E:420:ALA:HB3	1:E:461:GLN:HE21	1.70	0.57
1:E:644:LEU:O	1:E:647:SER:OG	2.20	0.57
1:E:662:PRO:HG2	1:E:665:THR:HG23	1.87	0.57
1:E:923:ALA:O	1:E:926:ALA:HB3	2.04	0.57
1:E:2113:SER:O	1:E:2114:ARG:NH1	2.36	0.57
1:B:1305:ALA:HB2	1:B:1371:ARG:HH22	1.70	0.57
1:A:197:ALA:HA	1:A:202:VAL:HG22	1.85	0.57
1:A:1006:TYR:O	1:A:1010:VAL:HG23	2.05	0.57
1:A:1056:THR:HG23	1:A:1059:LEU:CB	2.35	0.57
1:A:1120:LEU:HD22	1:A:1155:ARG:HE	1.69	0.57
1:Q:1968:ALA:HB2	1:Q:2021:ASP:HB2	1.86	0.57
1:Q:2128:PHE:HE2	1:Q:2187:ALA:HB2	1.70	0.57
1:J:1052:ASP:O	1:J:1054:THR:N	2.37	0.57
1:D:197:ALA:HB3	1:D:227:ILE:HD13	1.87	0.57
1:D:1588:PHE:O	1:D:1592:SER:CB	2.52	0.57
1:D:1619:GLN:HE22	1:D:1959:SER:HA	1.70	0.57
1:D:1872:ILE:CG2	1:D:1884:THR:HG21	2.35	0.57
1:D:1956:ASP:CG	1:D:1978:LEU:HA	2.25	0.57
1:D:2042:VAL:HB	1:D:2080:VAL:HG22	1.86	0.57
1:E:964:ASN:O	1:E:968:ILE:HG22	2.04	0.57
1:E:1090:LEU:HD21	1:E:1096:ARG:NH1	2.20	0.57
1:E:1605:PHE:O	1:E:1608:SER:OG	2.21	0.57
1:F:1138:PHE:O	1:F:1238:SER:OG	2.22	0.57
1:F:1970:THR:HA	1:F:1993:VAL:HG21	1.86	0.57
1:Q:2129:ARG:O	1:Q:2133:LEU:HD23	2.05	0.57
1:D:644:LEU:O	1:D:647:SER:OG	2.18	0.57
1:D:2059:GLN:HE21	1:C:1878:ASN:HB2	1.70	0.57
1:D:2311:ASN:O	1:D:2314:VAL:HG22	2.05	0.57
1:E:2093:TRP:NE1	1:F:1797:LEU:HD13	2.20	0.57
1:B:1056:THR:HG23	1:B:1059:LEU:HB3	1.87	0.57
1:B:1829:ALA:HB3	1:B:1848:LEU:HD23	1.87	0.57
1:A:651:PHE:CG	1:A:1025:LEU:HD22	2.39	0.57
1:G:1833:ARG:HD3	1:G:1880:VAL:HG13	1.87	0.57
1:R:1239:PHE:CZ	1:R:1248:ILE:HG21	2.39	0.57
1:D:939:GLN:NE2	1:D:940:GLN:HE22	2.03	0.56
1:B:1815:ILE:HD11	1:B:2036:GLU:OE2	2.05	0.56
1:B:2081:TYR:HA	1:B:2108:TYR:O	2.05	0.56
1:B:2263:VAL:HG12	1:B:2270:LEU:HD11	1.87	0.56
1:A:158:THR:HG21	1:A:186:ASN:HD22	1.68	0.56
1:G:2333:GLU:OE1	1:G:2336:ARG:NH2	2.37	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:O:1735:GLU:O	2:O:1750:LYS:NZ	2.37	0.56
1:D:1146:ARG:NH1	1:D:1238:SER:O	2.37	0.56
1:C:2315:ALA:O	1:C:2318:SER:OG	2.07	0.56
1:F:2230:LYS:O	1:F:2233:HIS:ND1	2.38	0.56
1:B:1090:LEU:HD22	1:B:1091:PRO:HD2	1.86	0.56
1:B:1418:ASP:OD2	1:B:1579:THR:OG1	2.18	0.56
1:B:1473:ILE:HD11	1:B:1508:VAL:HG11	1.87	0.56
1:Q:1833:ARG:HD3	1:Q:1880:VAL:HG13	1.86	0.56
1:D:966:GLN:HA	1:D:969:VAL:HG22	1.86	0.56
1:D:1688:ILE:O	1:D:1823:ARG:NH2	2.38	0.56
1:D:2119:GLU:OE1	1:D:2121:GLU:N	2.37	0.56
1:D:2304:ILE:HD12	1:C:2304:ILE:HD12	1.87	0.56
1:E:1429:HIS:O	1:E:1441:TYR:OH	2.09	0.56
1:E:1497:MET:CE	1:E:1540:LEU:HD22	2.35	0.56
1:E:2307:LEU:HD22	1:F:2304:ILE:HD11	1.86	0.56
1:C:442:LEU:HD11	1:C:446:HIS:CG	2.41	0.56
1:C:1245:PHE:O	1:C:1248:ILE:N	2.38	0.56
1:F:1534:ASN:ND2	1:F:1539:TYR:O	2.37	0.56
1:B:780:ALA:HB3	1:B:791:LEU:HD12	1.87	0.56
1:B:1013:LEU:CD1	1:B:1024:VAL:HG13	2.35	0.56
1:B:1132:ASP:O	1:B:1333:GLN:NE2	2.38	0.56
1:B:1171:LEU:HD12	1:B:1177:VAL:HG21	1.87	0.56
1:A:454:ASP:OD2	1:A:502:ARG:NH2	2.38	0.56
1:A:1038:ASN:HD22	1:A:1073:THR:HG22	1.70	0.56
1:A:1585:SER:O	1:A:1589:GLN:NE2	2.38	0.56
1:A:1886:CYS:N	1:A:1890:GLU:OE2	2.34	0.56
1:A:2108:TYR:C	1:A:2202:ILE:HD11	2.26	0.56
1:Q:1735:HIS:N	1:Q:1752:TYR:O	2.38	0.56
1:Q:2077:PRO:HD2	1:Q:2223:LEU:HD23	1.86	0.56
1:Q:2087:GLU:O	1:Q:2088:LEU:HD22	2.05	0.56
1:J:1239:PHE:CZ	1:J:1248:ILE:HG21	2.41	0.56
1:R:187:TYR:O	1:R:193:ILE:HD11	2.05	0.56
1:R:332:ASN:OD1	1:R:909:ARG:NH2	2.37	0.56
2:M:1668:PHE:CG	2:M:1719:VAL:HG13	2.40	0.56
1:D:1515:ILE:HG13	1:D:1528:ILE:HB	1.88	0.56
1:E:2302:LYS:O	1:E:2306:SER:OG	2.18	0.56
1:F:2241:ASP:OD1	1:F:2242:GLY:N	2.39	0.56
1:B:1722:ALA:HB1	1:B:1796:ASN:HB3	1.86	0.56
1:Q:1809:LEU:O	1:Q:1813:GLU:N	2.39	0.56
1:Q:2178:ILE:CD1	1:Q:2181:GLN:HE21	2.17	0.56
1:J:1534:ASN:ND2	1:J:1539:TYR:O	2.38	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:572:SER:O	1:D:576:VAL:HG12	2.06	0.56
1:D:1684:ILE:O	1:D:1688:ILE:C	2.43	0.56
1:D:2239:LEU:HB2	1:D:2244:ILE:HD11	1.88	0.56
1:E:1031:HIS:O	1:E:1034:VAL:HG23	2.04	0.56
1:E:1860:ARG:NH2	1:E:2002:ALA:O	2.39	0.56
1:E:1912:LEU:HD13	1:E:1981:ILE:CG1	2.35	0.56
1:E:1931:PRO:HB2	1:E:1991:ARG:CG	2.36	0.56
1:A:249:VAL:HG11	1:A:415:VAL:CG2	2.36	0.56
1:A:1084:VAL:O	1:A:1088:SER:OG	2.18	0.56
1:A:2260:LYS:HE3	1:A:2263:VAL:HG21	1.87	0.56
1:D:1627:LEU:O	1:D:1630:ASP:N	2.37	0.56
1:D:1924:GLU:O	1:D:2209:LYS:NZ	2.39	0.56
1:E:2275:GLU:O	1:E:2279:THR:N	2.34	0.56
1:C:2276:LYS:O	1:C:2277:GLN:NE2	2.39	0.56
1:F:899:LEU:HD13	1:F:922:MET:HB2	1.86	0.56
1:F:1839:ILE:HD12	1:F:1895:VAL:CG2	2.35	0.56
1:A:328:ASP:OD2	1:A:850:HIS:NE2	2.35	0.56
1:A:1069:LEU:HD13	1:A:1074:ASN:O	2.06	0.56
1:A:1444:ASN:OD1	1:A:1445:GLU:N	2.39	0.56
1:Q:2132:ASP:O	1:Q:2136:THR:HG23	2.06	0.56
2:K:1751:ARG:NH2	2:K:1844:LEU:O	2.39	0.56
2:O:1822:HIS:ND1	2:O:1856:PRO:O	2.35	0.56
1:D:632:VAL:HG21	1:D:681:TYR:CD2	2.41	0.56
1:C:258:LEU:CD2	1:C:352:ALA:HB2	2.36	0.56
1:C:2030:ILE:CG2	1:C:2040:LEU:HD21	2.32	0.56
1:F:361:GLN:NE2	1:F:421:GLY:O	2.39	0.56
1:B:1636:GLU:N	1:B:1636:GLU:OE1	2.39	0.56
1:B:1822:CYS:SG	1:B:1823:ARG:N	2.78	0.56
1:B:2139:ARG:NH2	1:G:1731:ARG:O	2.38	0.56
1:J:187:TYR:O	1:J:212:ALA:HB2	2.05	0.56
1:R:998:GLU:OE1	1:R:1074:ASN:ND2	2.33	0.56
1:E:979:ILE:HD12	1:E:980:ARG:HB2	1.88	0.56
1:C:2319:ILE:HA	1:C:2322:MET:HB2	1.87	0.56
1:F:1843:ASN:O	1:F:1843:ASN:ND2	2.31	0.56
1:B:1267:PRO:O	2:K:1699:ARG:NH2	2.38	0.56
1:A:666:LEU:HD23	1:A:1029:PHE:CZ	2.40	0.56
1:A:1079:LEU:HD21	1:A:1447:GLU:HB2	1.87	0.56
1:A:1636:GLU:OE1	1:A:1636:GLU:N	2.39	0.56
1:G:1830:TYR:CE2	1:G:1848:LEU:HD22	2.41	0.56
2:Y:1654:VAL:HG11	2:Y:1665:VAL:HG21	1.87	0.56
1:D:1091:PRO:HB2	1:D:1095:LEU:HD21	1.88	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1588:PHE:O	1:E:1592:SER:CB	2.54	0.56
1:E:2239:LEU:CB	1:E:2244:ILE:HD11	2.36	0.56
1:C:1289:LEU:HD22	1:C:1327:LEU:HD13	1.88	0.56
1:C:1935:ARG:NH2	1:C:1962:GLU:OE1	2.37	0.56
1:Q:1924:GLU:O	1:Q:2209:LYS:NZ	2.39	0.56
1:J:510:ILE:O	1:J:558:GLY:N	2.36	0.56
2:K:1699:ARG:NH1	2:K:1840:ASP:OD1	2.37	0.56
2:U:1691:THR:HG21	2:U:1736:VAL:HG12	1.88	0.56
1:C:1239:PHE:HZ	1:C:1248:ILE:HG21	1.70	0.56
1:F:1768:HIS:ND1	1:F:1784:ASP:OD2	2.38	0.56
1:B:963:MET:HA	1:B:966:GLN:HE21	1.71	0.56
1:B:1052:ASP:HA	1:B:1055:LEU:HD21	1.87	0.56
1:G:2087:GLU:O	1:G:2088:LEU:HD22	2.06	0.56
1:J:1298:ASP:O	1:J:1304:LEU:HD11	2.06	0.56
1:R:1104:PHE:HE2	1:R:1145:VAL:HG13	1.71	0.56
1:D:454:ASP:OD2	1:D:502:ARG:NE	2.40	0.55
1:D:477:ARG:NH2	1:D:483:SER:O	2.39	0.55
1:F:1250:ASP:HA	1:F:1253:MET:HG2	1.88	0.55
1:F:1557:MET:SD	1:F:1559:GLN:NE2	2.80	0.55
1:B:836:LEU:HD13	1:B:838:ARG:HD2	1.87	0.55
1:B:910:ILE:HG12	1:B:915:GLU:HB2	1.88	0.55
1:A:129:ALA:HB2	1:A:209:TRP:CH2	2.42	0.55
1:A:1912:LEU:HD22	1:A:1981:ILE:HG23	1.88	0.55
1:G:2241:ASP:OD1	1:G:2242:GLY:N	2.39	0.55
1:Q:1964:MET:O	1:Q:2025:LYS:NZ	2.29	0.55
2:M:1691:THR:HG22	2:M:1697:CYS:HB3	1.87	0.55
2:S:1676:LEU:N	2:U:1678:ASN:OD1	2.37	0.55
1:D:506:ILE:HG12	1:D:570:ALA:HB1	1.88	0.55
1:D:705:ASP:OD1	1:D:705:ASP:N	2.39	0.55
1:D:767:VAL:HG12	1:D:768:GLU:H	1.71	0.55
1:D:1245:PHE:O	1:D:1248:ILE:N	2.39	0.55
1:E:1675:ARG:NH1	1:E:1902:MET:O	2.39	0.55
1:E:1680:ILE:HD11	1:E:1702:ALA:HB3	1.89	0.55
1:C:1534:ASN:ND2	1:C:1539:TYR:O	2.38	0.55
1:F:1973:VAL:HG12	1:F:1986:VAL:HG12	1.89	0.55
1:A:959:GLU:HA	1:A:962:PHE:HB3	1.88	0.55
1:G:1736:VAL:HG22	1:G:1751:LEU:CD2	2.35	0.55
1:Q:2111:ARG:HG2	1:Q:2205:ILE:HG21	1.87	0.55
1:J:356:ARG:N	1:J:427:TYR:O	2.39	0.55
1:R:767:VAL:HG12	1:R:768:GLU:H	1.71	0.55
2:M:1676:LEU:N	2:O:1678:ASN:OD1	2.34	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:W:1694:GLU:OE1	2:W:1744:ARG:NH2	2.38	0.55
1:F:2132:ASP:O	1:F:2136:THR:HG23	2.07	0.55
1:B:638:HIS:O	1:B:642:VAL:HG23	2.07	0.55
1:B:1408:ALA:O	1:B:1416:VAL:HG12	2.06	0.55
1:A:958:ARG:O	1:A:962:PHE:N	2.36	0.55
1:R:129:ALA:HB1	1:R:206:TRP:HH2	1.71	0.55
2:K:1707:ILE:HG23	2:K:1752:ALA:CB	2.35	0.55
1:D:1824:ALA:HB3	1:D:1825:ILE:HD13	1.89	0.55
1:E:1622:LEU:HD23	1:E:1622:LEU:H	1.71	0.55
1:E:1968:ALA:HB3	1:E:2025:LYS:CE	2.37	0.55
1:C:640:ALA:O	1:C:644:LEU:HD13	2.06	0.55
1:C:736:ILE:HD12	1:C:745:PHE:CE2	2.42	0.55
1:C:1768:HIS:ND1	1:C:1784:ASP:OD2	2.39	0.55
1:F:258:LEU:CD2	1:F:352:ALA:HB2	2.36	0.55
1:B:651:PHE:CD1	1:B:1025:LEU:HD22	2.41	0.55
1:B:705:ASP:N	1:B:705:ASP:OD1	2.40	0.55
1:B:2232:ILE:HG13	1:B:2292:ILE:HG22	1.88	0.55
2:W:1751:ARG:NH2	2:W:1844:LEU:O	2.39	0.55
1:D:441:ARG:NH1	1:D:442:LEU:O	2.36	0.55
1:D:1319:LEU:HD11	1:D:1361:ARG:O	2.06	0.55
1:D:1576:PRO:O	1:D:1578:VAL:HG23	2.07	0.55
1:E:705:ASP:N	1:E:705:ASP:OD1	2.40	0.55
1:E:994:TYR:OH	1:E:1074:ASN:OD1	2.23	0.55
1:C:1099:GLN:O	1:C:1103:ILE:HG22	2.06	0.55
1:C:1230:CYS:O	1:C:1232:ARG:NH1	2.39	0.55
1:B:668:ASN:CB	1:B:686:THR:HG23	2.36	0.55
1:B:1243:GLU:OE2	1:B:1247:ARG:NH1	2.39	0.55
1:A:660:VAL:HG23	1:A:1010:VAL:HG11	1.88	0.55
1:J:129:ALA:HB1	1:J:206:TRP:HH2	1.72	0.55
2:O:1736:VAL:HG23	2:O:1749:PRO:HG2	1.88	0.55
2:U:1833:VAL:HG11	2:U:1850:LEU:HD22	1.88	0.55
1:D:1568:LEU:HD21	1:D:1571:MET:HG2	1.88	0.55
1:D:2055:ASP:OD1	1:D:2056:MET:N	2.40	0.55
1:D:2240:THR:O	1:D:2244:ILE:HD12	2.07	0.55
1:C:356:ARG:NH2	1:C:377:ASP:OD2	2.38	0.55
1:C:363:LEU:HD11	1:C:460:ALA:HB1	1.89	0.55
1:F:356:ARG:NH2	1:F:377:ASP:OD2	2.39	0.55
1:B:2108:TYR:C	1:B:2202:ILE:HD11	2.27	0.55
1:A:994:TYR:OH	1:A:1074:ASN:OD1	2.24	0.55
1:G:1964:MET:O	1:G:2025:LYS:NZ	2.25	0.55
1:J:1454:MET:O	1:J:1458:GLU:N	2.38	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:1511:ALA:HB3	1:J:1532:LEU:HD22	1.89	0.55
1:R:1317:ALA:HB1	2:U:1726:ARG:HB2	1.87	0.55
1:D:1031:HIS:O	1:D:1034:VAL:HG23	2.06	0.55
1:D:1784:ASP:OD2	1:D:1786:ILE:HD13	2.06	0.55
1:D:1931:PRO:HB2	1:D:1991:ARG:HG2	1.89	0.55
1:D:2113:SER:O	1:D:2114:ARG:NH1	2.37	0.55
1:E:2101:ASN:ND2	1:E:2103:ARG:HB3	2.22	0.55
1:E:2201:VAL:HG12	1:F:1798:ARG:HD3	1.89	0.55
1:F:442:LEU:HD11	1:F:446:HIS:CG	2.42	0.55
1:F:990:LEU:HD12	1:F:991:LEU:N	2.22	0.55
1:F:1238:SER:HA	1:F:1292:ALA:HB3	1.87	0.55
1:B:612:TRP:CE2	1:B:616:LEU:HD11	2.42	0.55
1:B:2329:THR:O	1:B:2332:ALA:HB3	2.06	0.55
1:A:140:TRP:HB2	1:A:456:ASN:HD22	1.72	0.55
1:A:773:VAL:HG22	1:A:797:GLY:O	2.06	0.55
1:A:889:LEU:HD11	1:A:982:HIS:HB2	1.89	0.55
1:A:900:GLN:O	1:A:904:THR:HG23	2.07	0.55
1:A:1443:GLN:HA	1:A:1495:MET:HE2	1.89	0.55
2:H:1660:GLU:O	2:H:1664:LEU:N	2.38	0.55
2:K:1666:TYR:O	2:K:1670:ARG:N	2.37	0.55
1:D:836:LEU:HD22	1:D:838:ARG:CZ	2.36	0.55
1:D:2034:ASN:ND2	1:D:2074:CYS:SG	2.80	0.55
1:E:358:LEU:HD22	1:E:393:ALA:HB2	1.89	0.55
1:E:1245:PHE:O	1:E:1248:ILE:N	2.39	0.55
1:C:455:VAL:HA	1:C:475:ASP:HB3	1.88	0.55
1:C:615:ARG:HH12	1:C:715:LEU:HA	1.70	0.55
1:C:1938:LEU:O	1:C:1954:PHE:N	2.40	0.55
1:B:135:ARG:O	1:B:139:ARG:N	2.33	0.55
1:B:1299:ILE:O	1:B:1301:ASP:N	2.40	0.55
1:B:2139:ARG:NH1	1:G:1734:PHE:O	2.39	0.55
1:A:947:SER:O	1:A:950:ALA:HB3	2.07	0.55
1:A:1751:LEU:O	1:A:1782:ILE:HG22	2.07	0.55
2:M:1707:ILE:HG23	2:M:1752:ALA:HB2	1.88	0.55
1:D:1616:MET:O	1:D:1620:ALA:HA	2.07	0.55
1:D:1902:MET:SD	1:D:1902:MET:N	2.80	0.55
1:E:901:ASP:O	1:E:904:THR:OG1	2.24	0.55
1:C:654:SER:O	1:C:659:GLN:N	2.40	0.55
1:F:1055:LEU:HD11	1:F:1059:LEU:HD22	1.89	0.55
1:A:1014:ARG:O	1:A:1018:LYS:CA	2.51	0.55
1:A:1082:ARG:HH21	1:A:1085:LEU:HD22	1.72	0.55
1:A:1682:ASN:ND2	1:A:1718:ALA:O	2.38	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:2079:LEU:HD13	1:Q:2215:PHE:HD1	1.71	0.55
1:J:767:VAL:HG12	1:J:768:GLU:H	1.71	0.55
1:R:1534:ASN:ND2	1:R:1539:TYR:O	2.40	0.55
1:D:1797:LEU:HD21	1:C:2094:VAL:HA	1.89	0.55
1:E:2173:GLU:HA	1:E:2176:ILE:HD12	1.89	0.55
1:C:683:LEU:HD13	1:C:697:MET:HG2	1.89	0.55
1:C:899:LEU:HD13	1:C:922:MET:HB2	1.89	0.55
1:F:654:SER:O	1:F:659:GLN:N	2.39	0.55
1:B:773:VAL:HG22	1:B:797:GLY:O	2.07	0.55
1:A:1810:ALA:O	1:A:1814:ILE:N	2.36	0.55
1:A:2201:VAL:HG11	1:Q:1794:PRO:HB2	1.88	0.55
1:Q:1671:TYR:OH	1:Q:1904:LYS:N	2.40	0.55
1:J:898:GLU:OE2	1:J:974:ARG:NH1	2.39	0.55
1:J:1083:GLN:HG2	1:J:1444:ASN:HD21	1.71	0.55
1:D:923:ALA:O	1:D:926:ALA:HB3	2.07	0.54
1:C:990:LEU:HD12	1:C:991:LEU:N	2.22	0.54
1:F:640:ALA:O	1:F:644:LEU:HD13	2.05	0.54
1:F:980:ARG:HA	1:F:983:MET:HG3	1.89	0.54
1:F:2087:GLU:O	1:F:2088:LEU:HD22	2.07	0.54
1:F:2286:SER:OG	1:F:2287:VAL:N	2.40	0.54
1:R:1457:LEU:HD22	1:R:1506:LEU:HG	1.89	0.54
2:U:1751:ARG:NH2	2:U:1844:LEU:O	2.39	0.54
1:D:630:LEU:HD21	1:D:738:ILE:HG21	1.88	0.54
1:D:804:ARG:NH2	1:D:807:ALA:HB2	2.22	0.54
1:D:853:PHE:CZ	1:D:889:LEU:HB3	2.42	0.54
1:D:1956:ASP:OD1	1:D:1978:LEU:HA	2.06	0.54
1:D:1968:ALA:HB3	1:D:2025:LYS:HZ3	1.71	0.54
1:D:2082:ILE:HD11	1:D:2086:ALA:HB1	1.88	0.54
1:C:2224:LEU:HD13	1:C:2274:LEU:CB	2.37	0.54
1:F:455:VAL:HA	1:F:475:ASP:HB3	1.89	0.54
1:B:203:GLN:O	1:B:228:ALA:HB3	2.07	0.54
1:B:767:VAL:HG12	1:B:768:GLU:H	1.72	0.54
1:A:194:LEU:HD11	1:A:225:ASN:OD1	2.06	0.54
1:A:363:LEU:CD1	1:A:460:ALA:HB1	2.33	0.54
1:A:1245:PHE:O	1:A:1248:ILE:N	2.41	0.54
1:R:1083:GLN:HG2	1:R:1444:ASN:HD21	1.71	0.54
1:R:1511:ALA:HB3	1:R:1532:LEU:HD22	1.88	0.54
2:K:1704:PHE:HB3	2:K:1842:VAL:HG11	1.89	0.54
1:D:937:PRO:CB	1:D:940:GLN:HE21	2.21	0.54
1:D:1748:TYR:CD1	1:C:2182:VAL:HG22	2.41	0.54
1:E:1795:GLU:OE1	1:F:2199:LYS:NZ	2.36	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:477:ARG:NE	1:C:483:SER:O	2.40	0.54
1:F:1138:PHE:HE2	1:F:1292:ALA:HB1	1.71	0.54
1:F:2138:ARG:NH1	1:F:2148:ALA:HB3	2.22	0.54
1:F:2224:LEU:HD13	1:F:2274:LEU:CB	2.37	0.54
1:J:252:THR:O	1:J:266:ARG:NH2	2.40	0.54
2:K:1822:HIS:ND1	2:K:1856:PRO:O	2.34	0.54
1:D:332:ASN:OD1	1:D:909:ARG:NH2	2.40	0.54
1:D:1682:ASN:OD1	1:D:1683:ASP:N	2.40	0.54
1:E:958:ARG:O	1:E:962:PHE:N	2.38	0.54
1:B:2044:ALA:HB1	1:B:2088:LEU:HD13	1.89	0.54
1:A:1509:LEU:HD22	1:A:1535:GLU:O	2.07	0.54
1:A:2141:ASP:OD1	1:A:2179:TYR:OH	2.22	0.54
1:R:1248:ILE:HG22	1:R:1248:ILE:O	2.06	0.54
2:M:1775:MET:SD	2:M:1780:LEU:HD13	2.47	0.54
1:D:1368:ARG:HG3	1:D:1393:ALA:HB3	1.89	0.54
1:D:1913:LEU:HD12	1:D:1913:LEU:N	2.22	0.54
1:D:2114:ARG:NE	1:D:2192:THR:HG22	2.23	0.54
1:E:1121:GLN:O	1:E:1125:LEU:HD23	2.08	0.54
1:E:2239:LEU:HB2	1:E:2244:ILE:HD11	1.89	0.54
1:C:980:ARG:HA	1:C:983:MET:HG3	1.90	0.54
1:C:1584:GLN:OE1	1:C:1584:GLN:N	2.40	0.54
1:C:2263:VAL:HG13	1:C:2269:ASP:HB2	1.88	0.54
1:F:1230:CYS:O	1:F:1232:ARG:NH1	2.40	0.54
1:F:1468:THR:OG1	1:F:1507:ARG:NH2	2.41	0.54
1:F:1774:ASP:O	1:F:1779:ARG:NH1	2.37	0.54
1:F:1938:LEU:O	1:F:1954:PHE:N	2.41	0.54
1:B:279:LEU:HB2	1:B:415:VAL:HG13	1.90	0.54
1:A:767:VAL:HG12	1:A:768:GLU:H	1.72	0.54
1:A:969:VAL:HA	1:A:972:VAL:HG12	1.90	0.54
1:G:1924:GLU:O	1:G:2209:LYS:NZ	2.41	0.54
1:J:281:VAL:HG12	1:J:286:TYR:HB2	1.90	0.54
1:J:463:GLN:OE1	1:J:473:ILE:HG23	2.08	0.54
1:R:991:LEU:HD12	1:R:992:ARG:HE	1.72	0.54
1:D:1919:ILE:HG21	1:D:2216:TYR:CG	2.43	0.54
1:E:265:LEU:HD21	1:E:288:LYS:CB	2.37	0.54
1:E:377:ASP:O	1:E:390:GLU:N	2.34	0.54
1:E:2132:ASP:OD1	1:F:1731:ARG:NH2	2.41	0.54
1:B:869:LEU:HD12	1:B:1036:LYS:HB3	1.90	0.54
1:B:1055:LEU:HB3	1:B:1056:THR:HG22	1.90	0.54
1:B:1680:ILE:HG21	1:B:1699:PHE:HD1	1.73	0.54
1:J:1046:ASP:OD1	1:J:1080:ARG:NH2	2.41	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:R:660:VAL:CG2	1:R:1010:VAL:HG11	2.38	0.54
1:E:244:ILE:HD11	1:E:347:PHE:CB	2.36	0.54
1:E:1056:THR:HG23	1:E:1059:LEU:HB3	1.90	0.54
1:E:1457:LEU:O	1:E:1457:LEU:HD23	2.07	0.54
1:F:767:VAL:HG12	1:F:768:GLU:H	1.72	0.54
1:B:332:ASN:CG	1:B:906:VAL:HG13	2.28	0.54
1:B:782:ILE:HG23	1:B:791:LEU:HD11	1.90	0.54
1:A:2264:TRP:HA	1:A:2270:LEU:HD11	1.89	0.54
2:K:1707:ILE:HG23	2:K:1752:ALA:HB2	1.88	0.54
2:M:1792:VAL:HG11	2:M:1798:PHE:CD1	2.42	0.54
1:D:240:LEU:HD21	1:D:249:VAL:HG11	1.89	0.54
1:D:1549:THR:HA	1:D:1556:ILE:HD13	1.89	0.54
1:D:2251:TRP:HE3	1:D:2288:ILE:HD12	1.72	0.54
1:C:1601:ILE:HD11	1:C:1662:TRP:CZ3	2.43	0.54
1:A:651:PHE:CD1	1:A:1025:LEU:HD13	2.43	0.54
2:U:1832:VAL:HG12	2:U:1855:ILE:HD12	1.89	0.54
1:E:1160:ALA:HB2	1:E:1380:GLN:HE21	1.73	0.54
1:C:974:ARG:O	1:C:982:HIS:ND1	2.41	0.54
1:F:187:TYR:O	1:F:193:ILE:HD11	2.08	0.54
1:F:1052:ASP:O	1:F:1054:THR:N	2.40	0.54
1:F:1931:PRO:HG2	1:F:1991:ARG:HB3	1.90	0.54
1:G:2039:PRO:HG3	1:G:2223:LEU:HD21	1.89	0.54
1:J:129:ALA:HB2	1:J:209:TRP:CH2	2.43	0.54
1:J:1496:VAL:HG11	1:J:1540:LEU:HD11	1.90	0.54
2:W:1704:PHE:CE1	2:W:1843:ALA:HB2	2.42	0.54
1:D:896:LEU:HD13	1:D:925:TYR:CD2	2.43	0.54
1:D:1099:GLN:HE21	1:D:1103:ILE:HD11	1.73	0.54
1:D:1683:ASP:OD2	1:D:1686:TYR:N	2.41	0.54
1:E:2022:SER:O	1:E:2026:THR:OG1	2.07	0.54
1:E:2329:THR:O	1:E:2332:ALA:HB3	2.08	0.54
1:C:1052:ASP:O	1:C:1054:THR:N	2.40	0.54
1:C:1083:GLN:HG2	1:C:1444:ASN:HD21	1.73	0.54
1:C:1263:SEP:OG	2:W:1670:ARG:NH2	2.41	0.54
1:C:1861:GLU:OE2	1:C:1864:THR:HG22	2.08	0.54
1:F:1086:ILE:O	1:F:1089:HIS:N	2.40	0.54
1:B:1329:PHE:HB2	1:B:1356:PHE:HB2	1.90	0.54
1:A:335:ARG:CB	1:A:963:MET:HG3	2.38	0.54
1:Q:2331:ARG:O	1:Q:2334:VAL:HG12	2.07	0.54
1:R:705:ASP:N	1:R:705:ASP:OD1	2.41	0.54
2:M:1715:SER:N	2:M:1734:PHE:O	2.40	0.54
1:D:925:TYR:OH	1:D:929:ILE:HD13	2.08	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2178:ILE:O	1:D:2182:VAL:HG23	2.06	0.53
1:E:394:THR:OG1	1:E:606:ASN:ND2	2.41	0.53
1:E:767:VAL:HG12	1:E:768:GLU:H	1.73	0.53
1:E:1090:LEU:HD11	1:E:1096:ARG:HH11	1.73	0.53
1:C:1121:GLN:O	1:C:1125:LEU:N	2.41	0.53
1:C:1705:LEU:O	1:C:1708:ALA:HB3	2.08	0.53
1:C:2087:GLU:C	1:C:2088:LEU:HD12	2.28	0.53
1:F:258:LEU:HD11	1:F:426:LEU:HD23	1.90	0.53
1:F:1121:GLN:O	1:F:1125:LEU:N	2.41	0.53
1:B:158:THR:HG21	1:B:186:ASN:HD22	1.74	0.53
1:B:1138:PHE:CE2	1:B:1292:ALA:HB1	2.43	0.53
1:A:1056:THR:HG23	1:A:1059:LEU:HB3	1.90	0.53
1:A:1467:ARG:NH2	1:A:1468:THR:O	2.40	0.53
1:A:1650:ARG:NH2	1:A:1654:GLY:O	2.41	0.53
1:A:1671:TYR:OH	1:A:1904:LYS:N	2.37	0.53
1:A:2013:GLN:NE2	1:A:2021:ASP:OD2	2.41	0.53
1:Q:1986:VAL:HG22	1:Q:2042:VAL:HG22	1.89	0.53
1:D:978:GLY:O	1:D:982:HIS:ND1	2.41	0.53
1:D:1499:TYR:HD2	1:D:1503:LEU:HD22	1.71	0.53
1:D:2117:VAL:HG23	1:C:1797:LEU:CD2	2.37	0.53
1:E:572:SER:O	1:E:576:VAL:HG12	2.09	0.53
1:E:1517:ILE:HG12	1:E:1518:ARG:H	1.74	0.53
1:E:1994:GLU:N	1:E:1994:GLU:OE1	2.42	0.53
1:E:2264:TRP:CD2	1:E:2270:LEU:HD11	2.44	0.53
1:E:2322:MET:HG2	1:F:2308:VAL:HG11	1.88	0.53
1:C:1524:LYS:HG3	1:C:1524:LYS:O	2.09	0.53
1:C:1601:ILE:HG13	1:C:1602:PRO:HD3	1.90	0.53
1:F:1622:LEU:HD13	1:F:1669:PRO:HB3	1.90	0.53
1:F:1944:PRO:O	1:F:1947:LYS:NZ	2.41	0.53
1:B:363:LEU:CD1	1:B:460:ALA:HB1	2.37	0.53
1:B:1042:THR:HA	1:B:1045:ILE:HG22	1.90	0.53
1:B:1405:LEU:HD23	1:B:1421:PHE:CD1	2.43	0.53
1:B:1833:ARG:HH21	1:B:1836:GLN:HA	1.73	0.53
1:B:1878:ASN:HD22	1:G:2057:TYR:HA	1.74	0.53
1:B:2229:LYS:HB2	1:B:2244:ILE:HG21	1.90	0.53
1:A:156:MET:CE	1:A:193:ILE:HG12	2.39	0.53
1:A:1055:LEU:HB3	1:A:1056:THR:HG22	1.91	0.53
1:Q:2094:VAL:HG13	1:Q:2095:VAL:HG23	1.89	0.53
1:Q:2128:PHE:CG	1:Q:2183:ALA:HB1	2.44	0.53
1:R:312:ALA:HB2	1:R:337:VAL:CG1	2.38	0.53
1:D:1475:LEU:HD12	1:D:1513:LEU:HD13	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1530:LEU:HD12	1:D:1543:SER:O	2.08	0.53
1:E:1579:THR:HG23	1:E:1581:ASP:OD1	2.08	0.53
1:F:935:GLN:OE1	1:F:935:GLN:N	2.42	0.53
1:F:1700:LEU:HB2	1:F:1803:ILE:HD11	1.89	0.53
1:F:2113:SER:O	1:F:2114:ARG:NH1	2.39	0.53
1:B:878:VAL:O	1:B:882:VAL:HG23	2.09	0.53
1:G:1969:GLN:OE1	1:G:1991:ARG:NH2	2.42	0.53
2:U:1689:MET:HB2	2:U:1736:VAL:HG11	1.90	0.53
1:D:1595:THR:OG1	1:D:1596:THR:N	2.40	0.53
1:F:634:CYS:O	1:F:638:HIS:N	2.41	0.53
1:F:736:ILE:HD12	1:F:745:PHE:CE2	2.44	0.53
1:F:2315:ALA:O	1:F:2318:SER:OG	2.09	0.53
1:B:178:VAL:HG12	1:B:192:LEU:CD2	2.39	0.53
1:B:252:THR:HG22	1:B:414:MET:HE3	1.90	0.53
1:A:166:ALA:O	1:A:169:ILE:HD12	2.09	0.53
1:A:1609:LEU:HD11	1:A:1666:PHE:CD2	2.43	0.53
1:E:2061:LEU:CD1	1:F:1848:LEU:HD11	2.38	0.53
1:E:2334:VAL:CG2	1:F:2334:VAL:HG21	2.38	0.53
1:B:1368:ARG:NE	1:B:1393:ALA:O	2.41	0.53
1:B:1557:MET:SD	1:B:1559:GLN:NE2	2.81	0.53
1:B:1938:LEU:HD23	1:B:1955:PHE:CD2	2.43	0.53
1:B:1971:VAL:HG13	1:B:2025:LYS:HZ2	1.73	0.53
1:A:448:CYS:SG	1:A:507:ALA:HB2	2.49	0.53
1:R:129:ALA:HB2	1:R:209:TRP:CH2	2.44	0.53
1:D:301:ALA:HB1	1:D:308:VAL:HG11	1.90	0.53
1:E:129:ALA:HB1	1:E:206:TRP:HH2	1.74	0.53
1:E:1472:HIS:HB2	1:E:1510:GLN:HE21	1.73	0.53
1:E:1774:ASP:O	1:E:1779:ARG:NH1	2.41	0.53
1:E:2119:GLU:OE1	1:E:2121:GLU:N	2.40	0.53
1:C:727:MET:SD	1:C:727:MET:N	2.82	0.53
1:C:1988:VAL:HG21	1:C:2046:TRP:CZ2	2.43	0.53
1:B:186:ASN:OD1	1:B:186:ASN:N	2.41	0.53
1:R:356:ARG:N	1:R:427:TYR:O	2.38	0.53
1:R:1391:LEU:HD23	1:R:1404:TYR:CD2	2.43	0.53
2:M:1651:SER:O	2:M:1686:HIS:N	2.41	0.53
1:D:1472:HIS:HA	1:D:1510:GLN:HB3	1.90	0.53
1:E:1091:PRO:CG	1:E:1095:LEU:HD21	2.39	0.53
1:C:1139:TYR:CE2	1:C:1294:LYS:HB2	2.43	0.53
1:C:2224:LEU:HD13	1:C:2274:LEU:HB2	1.91	0.53
1:F:1606:ARG:HH22	1:F:1632:LEU:HD23	1.72	0.53
1:F:2251:TRP:CG	1:F:2288:ILE:HD11	2.43	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:164:ALA:O	1:B:524:GLY:N	2.41	0.53
1:B:680:LYS:O	1:B:832:HIS:NE2	2.41	0.53
1:A:2139:ARG:NH1	1:Q:1734:PHE:O	2.36	0.53
1:G:1935:ARG:O	1:G:1939:ALA:N	2.34	0.53
1:D:1860:ARG:NH2	1:D:2002:ALA:O	2.42	0.53
1:D:1919:ILE:HG21	1:D:2216:TYR:CD2	2.44	0.53
1:D:2252:PHE:HD2	1:D:2253:VAL:HG23	1.73	0.53
1:E:197:ALA:CB	1:E:227:ILE:HD13	2.38	0.53
1:C:800:HIS:N	1:C:817:LYS:O	2.39	0.53
1:C:1385:ARG:NE	1:C:1512:GLU:OE2	2.42	0.53
1:C:2298:ASP:HB3	1:B:939:GLN:HE22	1.74	0.53
1:F:974:ARG:O	1:F:982:HIS:ND1	2.41	0.53
1:B:1248:ILE:HG22	1:B:1248:ILE:O	2.08	0.53
1:B:2201:VAL:HG11	1:G:1794:PRO:HB2	1.91	0.53
1:B:2289:GLU:OE1	1:B:2289:GLU:N	2.41	0.53
1:J:1104:PHE:HE2	1:J:1145:VAL:HG13	1.72	0.53
2:S:1701:LEU:HD13	2:S:1775:MET:HG3	1.89	0.53
1:D:874:PHE:CZ	1:D:878:VAL:HG11	2.43	0.53
1:D:2045:ASN:HD21	1:D:2083:PRO:HD2	1.73	0.53
1:E:1931:PRO:HB2	1:E:1991:ARG:HG2	1.90	0.53
1:C:1885:VAL:HG11	1:C:1891:GLY:HA2	1.91	0.53
1:F:727:MET:N	1:F:727:MET:SD	2.81	0.53
1:F:972:VAL:HG22	1:F:976:ARG:HB3	1.90	0.53
1:F:1677:ILE:HA	1:F:1711:ILE:HD13	1.91	0.53
1:F:1861:GLU:OE2	1:F:1864:THR:HG22	2.08	0.53
1:F:2178:ILE:CD1	1:F:2181:GLN:HE21	2.22	0.53
1:B:1245:PHE:CZ	1:B:1291:VAL:HG11	2.44	0.53
1:B:2311:ASN:O	1:B:2314:VAL:HG12	2.08	0.53
1:A:352:ALA:O	1:A:707:HIS:NE2	2.42	0.53
1:A:1481:VAL:HG22	1:A:1517:ILE:HG22	1.89	0.53
1:Q:1837:ARG:NH2	1:Q:2036:GLU:OE2	2.42	0.53
1:Q:2236:ASN:HB2	1:Q:2239:LEU:HD12	1.91	0.53
1:J:921:GLU:OE1	1:J:924:GLN:NE2	2.42	0.53
1:J:1391:LEU:HD23	1:J:1404:TYR:CD2	2.43	0.53
1:J:1437:ALA:HB3	1:J:1481:VAL:HG23	1.90	0.53
1:R:660:VAL:HG23	1:R:1010:VAL:HG11	1.90	0.53
1:D:1299:ILE:O	1:D:1301:ASP:N	2.37	0.53
1:E:660:VAL:HB	1:E:1010:VAL:HG11	1.90	0.53
1:E:668:ASN:OD1	1:E:687:ARG:NE	2.41	0.53
1:E:1480:THR:O	1:E:1480:THR:OG1	2.23	0.53
1:C:1401:MET:CE	1:C:1449:LEU:HB3	2.38	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:581:LEU:O	1:A:584:ARG:HG3	2.09	0.53
1:A:943:ASN:OD1	1:A:944:ILE:HG23	2.09	0.53
1:G:2068:VAL:HG13	1:G:2100:ILE:HG12	1.91	0.53
2:K:1765:GLU:O	2:K:1807:ILE:N	2.40	0.53
1:D:2118:LEU:HD12	1:D:2119:GLU:HG3	1.92	0.52
1:D:2268:LYS:O	1:D:2271:ALA:HB3	2.09	0.52
1:E:1063:LEU:HD12	1:E:1085:LEU:HD13	1.91	0.52
1:C:705:ASP:N	1:C:705:ASP:OD1	2.41	0.52
1:C:935:GLN:OE1	1:C:935:GLN:N	2.42	0.52
1:C:2085:GLN:N	1:C:2112:GLU:O	2.40	0.52
1:G:1809:LEU:O	1:G:1813:GLU:N	2.42	0.52
2:H:1720:THR:O	2:H:1724:LYS:N	2.36	0.52
1:D:628:THR:O	1:D:632:VAL:HG23	2.09	0.52
1:D:1596:THR:OG1	1:D:1888:ASP:OD2	2.26	0.52
1:E:683:LEU:HD13	1:E:697:MET:HG2	1.91	0.52
1:C:261:SER:OG	1:C:289:GLY:O	2.26	0.52
1:C:767:VAL:HG12	1:C:768:GLU:H	1.74	0.52
1:C:2000:ASP:N	1:C:2006:SER:OG	2.37	0.52
1:F:1664:MET:N	1:F:1664:MET:SD	2.83	0.52
1:B:193:ILE:HG21	1:B:218:LEU:HD11	1.92	0.52
1:B:580:GLU:OE2	1:B:584:ARG:NH2	2.42	0.52
1:B:1481:VAL:CG2	1:B:1517:ILE:HG22	2.39	0.52
1:J:864:MET:SD	1:J:990:LEU:HD13	2.49	0.52
1:R:864:MET:SD	1:R:990:LEU:HD13	2.49	0.52
1:D:2173:GLU:HA	1:D:2176:ILE:HD12	1.91	0.52
1:E:2089:ARG:NH2	1:E:2188:ASP:OD1	2.41	0.52
1:C:651:PHE:CE2	1:C:1025:LEU:HD12	2.45	0.52
1:C:1394:ILE:HB	1:C:1403:LEU:HD12	1.90	0.52
1:F:1677:ILE:HD13	1:F:1714:ILE:HG12	1.90	0.52
1:B:1178:VAL:HG12	1:B:1236:MET:HB3	1.91	0.52
1:B:1467:ARG:NH2	1:B:1468:THR:O	2.39	0.52
1:A:966:GLN:HA	1:A:969:VAL:HG12	1.90	0.52
1:A:1680:ILE:HG21	1:A:1699:PHE:HD1	1.73	0.52
1:Q:1839:ILE:HD12	1:Q:1895:VAL:HG22	1.90	0.52
1:R:197:ALA:HB1	1:R:227:ILE:HD13	1.92	0.52
1:D:849:LEU:HD22	1:D:894:LEU:CD2	2.39	0.52
1:D:1102:SER:OG	1:D:1103:ILE:N	2.39	0.52
1:D:1688:ILE:HG22	1:D:1823:ARG:NH2	2.24	0.52
1:D:2221:ARG:HG2	1:D:2271:ALA:HB2	1.91	0.52
1:D:2307:LEU:HD22	1:C:2304:ILE:HD11	1.92	0.52
1:C:1874:ILE:HG22	1:C:1875:MET:HE2	1.92	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:705:ASP:OD1	1:F:705:ASP:N	2.41	0.52
1:F:2067:ILE:HD11	1:F:2095:VAL:HG12	1.91	0.52
1:B:947:SER:O	1:B:950:ALA:HB3	2.09	0.52
1:B:1448:ARG:NH1	1:B:1452:GLU:OE2	2.41	0.52
1:A:187:TYR:O	1:A:193:ILE:HD11	2.10	0.52
1:R:252:THR:O	1:R:266:ARG:NH2	2.42	0.52
1:D:358:LEU:HD22	1:D:393:ALA:CB	2.39	0.52
1:D:1059:LEU:O	1:D:1062:ILE:N	2.42	0.52
1:D:2253:VAL:O	1:D:2258:THR:N	2.42	0.52
1:E:696:ILE:HG23	1:E:700:SER:O	2.09	0.52
1:E:1475:LEU:HD11	1:E:1477:PHE:CZ	2.44	0.52
1:F:1039:LEU:O	1:F:1042:THR:OG1	2.14	0.52
1:F:1630:ASP:O	1:F:1667:LYS:NZ	2.35	0.52
1:B:249:VAL:HG11	1:B:415:VAL:CG2	2.40	0.52
1:B:964:ASN:O	1:B:968:ILE:HG22	2.09	0.52
1:A:294:VAL:HG11	1:A:966:GLN:CB	2.39	0.52
1:A:991:LEU:HD13	1:A:1062:ILE:HG21	1.92	0.52
1:A:1312:THR:O	1:A:1315:ASN:O	2.27	0.52
1:G:1736:VAL:HG22	1:G:1751:LEU:HD22	1.92	0.52
1:D:194:LEU:HD12	1:D:227:ILE:HD12	1.90	0.52
1:D:239:ALA:HA	1:D:245:ALA:HB1	1.90	0.52
1:D:1110:MET:HA	1:D:1144:VAL:HG21	1.92	0.52
1:D:1130:ILE:O	1:D:1130:ILE:HG22	2.09	0.52
1:D:1664:MET:SD	1:D:1679:VAL:HG21	2.50	0.52
1:D:2253:VAL:HG13	1:D:2258:THR:HA	1.90	0.52
1:E:294:VAL:HG22	1:E:298:LEU:HD12	1.91	0.52
1:E:966:GLN:HA	1:E:969:VAL:HG22	1.91	0.52
1:C:1509:LEU:HD12	1:C:1534:ASN:O	2.09	0.52
1:C:1895:VAL:HG12	1:C:1899:LEU:CD1	2.40	0.52
1:F:608:ILE:O	1:F:726:TYR:OH	2.22	0.52
1:B:2124:VAL:O	1:B:2128:PHE:N	2.43	0.52
1:B:2178:ILE:HG23	1:B:2179:TYR:CD2	2.45	0.52
1:A:1021:MET:SD	1:A:1024:VAL:HG11	2.49	0.52
1:A:1935:ARG:NH2	1:A:1962:GLU:OE1	2.40	0.52
1:G:1655:ASN:ND2	1:G:1659:MET:O	2.42	0.52
1:Q:2319:ILE:HA	1:Q:2322:MET:HB2	1.91	0.52
1:J:705:ASP:N	1:J:705:ASP:OD1	2.41	0.52
1:D:1679:VAL:HG22	1:D:1714:ILE:HD11	1.91	0.52
1:E:306:TYR:HA	1:E:308:VAL:HG13	1.91	0.52
1:B:281:VAL:CG1	1:B:286:TYR:HB2	2.40	0.52
1:B:1045:ILE:HD13	1:B:1080:ARG:CG	2.38	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1971:VAL:O	1:B:2025:LYS:NZ	2.42	0.52
1:A:737:THR:HG22	1:A:742:THR:HG23	1.90	0.52
1:A:1078:ALA:O	1:A:1081:ALA:HB3	2.10	0.52
1:A:1530:LEU:HD12	1:A:1544:LEU:HD13	1.92	0.52
1:A:1638:VAL:O	1:A:1646:VAL:N	2.42	0.52
1:A:2080:VAL:O	1:A:2108:TYR:N	2.38	0.52
1:A:2311:ASN:O	1:A:2314:VAL:HG12	2.10	0.52
1:R:1528:ILE:HG22	1:R:1545:TYR:O	2.09	0.52
1:D:190:VAL:HG11	1:D:221:LEU:HB2	1.92	0.52
1:D:380:VAL:HG23	1:D:608:ILE:HD13	1.92	0.52
1:D:1833:ARG:HD3	1:C:2062:LYS:HG2	1.92	0.52
1:D:2206:LEU:HD11	1:D:2214:PHE:CD2	2.45	0.52
1:E:642:VAL:O	1:E:645:ARG:HB3	2.10	0.52
1:E:1045:ILE:HD13	1:E:1080:ARG:HE	1.75	0.52
1:E:1923:ILE:HD11	1:E:2212:ARG:HB2	1.92	0.52
1:C:884:ARG:O	1:C:888:THR:OG1	2.11	0.52
1:C:943:ASN:OD1	1:C:944:ILE:N	2.43	0.52
1:C:1598:ILE:HD13	1:C:1682:ASN:O	2.10	0.52
1:F:1002:GLN:OE1	1:F:1071:LYS:NZ	2.40	0.52
1:A:626:PRO:HB3	1:A:738:ILE:HD12	1.90	0.52
1:A:2251:TRP:CE3	1:A:2288:ILE:HG23	2.45	0.52
1:Q:2241:ASP:OD1	1:Q:2242:GLY:N	2.42	0.52
1:R:186:ASN:OD1	1:R:186:ASN:N	2.42	0.52
1:D:377:ASP:O	1:D:390:GLU:N	2.40	0.52
1:D:1568:LEU:O	1:D:1568:LEU:HD23	2.10	0.52
1:D:2045:ASN:ND2	1:D:2086:ALA:HB2	2.24	0.52
1:D:2295:ILE:HD13	1:E:939:GLN:NE2	2.23	0.52
1:D:2304:ILE:CD1	1:C:2304:ILE:HD12	2.40	0.52
1:E:1424:ARG:HA	1:E:1474:PHE:HB3	1.92	0.52
1:E:2243:GLN:O	1:E:2246:ALA:HB3	2.10	0.52
1:C:186:ASN:OD1	1:C:186:ASN:N	2.43	0.52
1:C:1060:LEU:O	1:C:1064:THR:N	2.38	0.52
1:F:939:GLN:HE21	1:A:2247:MET:CE	2.23	0.52
1:F:1424:ARG:HG2	1:F:1474:PHE:HB3	1.90	0.52
1:F:1587:ARG:HD2	1:F:1597:TYR:HB2	1.92	0.52
1:B:869:LEU:HD12	1:B:1036:LYS:HG3	1.92	0.52
1:B:1021:MET:SD	1:B:1024:VAL:HG11	2.49	0.52
1:B:1099:GLN:O	1:B:1102:SER:OG	2.18	0.52
1:B:1853:ALA:O	1:B:1857:VAL:HG23	2.09	0.52
1:A:1839:ILE:HD11	1:A:1898:TRP:CH2	2.45	0.52
1:A:2201:VAL:HG12	1:Q:1798:ARG:HB2	1.90	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:2079:LEU:HD13	1:G:2215:PHE:HD1	1.75	0.52
2:M:1792:VAL:HG11	2:M:1798:PHE:HD1	1.75	0.52
2:O:1654:VAL:CG1	2:O:1665:VAL:HG11	2.40	0.52
1:D:311:LYS:HG2	1:D:321:ILE:HG23	1.92	0.52
1:D:603:PHE:HD1	1:D:608:ILE:HG21	1.75	0.52
1:E:1107:ALA:HB1	1:E:1119:ASN:ND2	2.24	0.52
1:E:2315:ALA:O	1:E:2318:SER:OG	2.28	0.52
1:C:1132:ASP:OD1	1:C:1333:GLN:NE2	2.41	0.52
1:C:1411:GLU:OE2	1:C:1412:VAL:HG22	2.08	0.52
1:C:1749:ARG:NH2	1:C:1774:ASP:OD2	2.43	0.52
1:C:2064:GLY:O	1:C:2067:ILE:HG13	2.10	0.52
1:B:856:VAL:O	1:B:860:LEU:HD13	2.09	0.52
1:B:896:LEU:HD11	1:B:926:ALA:HB2	1.92	0.52
1:B:1407:ALA:HB1	1:B:1416:VAL:HG21	1.91	0.52
1:B:1636:GLU:N	1:B:1648:MET:O	2.42	0.52
1:A:291:VAL:HG21	1:A:297:GLY:HA2	1.91	0.52
1:A:463:GLN:OE1	1:A:473:ILE:HG23	2.10	0.52
1:A:1130:ILE:O	1:A:1130:ILE:HG22	2.09	0.52
1:A:2289:GLU:OE1	1:A:2289:GLU:N	2.40	0.52
1:J:143:GLU:O	1:J:146:ARG:NH1	2.42	0.52
2:O:1808:VAL:HG11	2:O:1824:ILE:HD13	1.92	0.52
1:D:1180:PHE:HB2	1:D:1234:GLY:N	2.24	0.51
1:E:874:PHE:CZ	1:E:878:VAL:HG11	2.44	0.51
1:E:886:MET:HA	1:E:889:LEU:HG	1.92	0.51
1:E:2079:LEU:HD13	1:E:2215:PHE:CD1	2.45	0.51
1:C:1598:ILE:HG23	1:C:1599:TYR:CD2	2.45	0.51
1:C:1727:ALA:HB1	1:C:1729:GLU:CD	2.31	0.51
1:F:939:GLN:NE2	1:A:2247:MET:SD	2.79	0.51
1:F:1442:LEU:HD13	1:F:1477:PHE:CD2	2.46	0.51
1:F:1499:TYR:O	1:F:1503:LEU:HD13	2.10	0.51
1:F:2082:ILE:HD12	1:F:2108:TYR:O	2.10	0.51
1:F:2319:ILE:O	1:F:2323:THR:HG23	2.10	0.51
1:B:1130:ILE:O	1:B:1130:ILE:HG22	2.10	0.51
1:A:186:ASN:OD1	1:A:186:ASN:N	2.43	0.51
1:A:332:ASN:ND2	1:A:905:SER:O	2.42	0.51
1:A:782:ILE:HG23	1:A:791:LEU:HD11	1.93	0.51
1:A:1330:LEU:HD13	1:A:1355:PHE:CE1	2.46	0.51
1:A:1391:LEU:HD22	1:A:1404:TYR:HD2	1.74	0.51
1:A:2078:VAL:CG1	1:A:2105:MET:HG2	2.40	0.51
1:J:1528:ILE:HG22	1:J:1545:TYR:O	2.09	0.51
1:R:1245:PHE:O	1:R:1249:PHE:N	2.43	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2228:VAL:O	1:D:2231:LYS:N	2.44	0.51
1:C:759:ALA:HB2	1:C:811:PRO:HD3	1.92	0.51
1:C:1568:LEU:O	1:C:1568:LEU:HD23	2.10	0.51
1:F:186:ASN:OD1	1:F:186:ASN:N	2.42	0.51
1:F:1466:VAL:O	1:F:1467:ARG:HG3	2.09	0.51
1:F:1941:ARG:O	1:F:1951:LEU:N	2.43	0.51
1:F:2064:GLY:O	1:F:2067:ILE:HG13	2.11	0.51
1:B:638:HIS:CE1	1:B:714:LEU:HD12	2.45	0.51
1:B:1707:ARG:HA	1:B:1814:ILE:HG21	1.92	0.51
1:B:1971:VAL:CG1	1:B:2025:LYS:HZ2	2.23	0.51
1:A:694:VAL:HG11	1:A:870:PRO:HG3	1.90	0.51
1:A:851:ARG:O	1:A:855:TYR:HB3	2.10	0.51
1:A:1069:LEU:CD2	1:A:1078:ALA:HB2	2.39	0.51
1:A:1288:ILE:O	1:A:1289:LEU:HD22	2.10	0.51
1:A:1981:ILE:HD13	1:A:2216:TYR:CE1	2.45	0.51
1:Q:1609:LEU:HD23	1:Q:1631:MET:SD	2.50	0.51
1:Q:2137:MET:O	1:Q:2141:ASP:N	2.42	0.51
2:K:1691:THR:HG21	2:K:1736:VAL:HG12	1.91	0.51
1:D:1540:LEU:HD12	1:D:1540:LEU:O	2.11	0.51
1:D:2221:ARG:NH1	1:D:2267:ASN:OD1	2.44	0.51
1:E:899:LEU:HD13	1:E:922:MET:CE	2.41	0.51
1:E:1388:ASN:HA	1:E:1409:LYS:HE2	1.92	0.51
1:F:1068:GLN:O	1:F:1070:SER:OG	2.25	0.51
1:B:187:TYR:O	1:B:193:ILE:HD11	2.10	0.51
1:B:864:MET:CE	1:B:1040:LEU:HD22	2.40	0.51
1:B:1530:LEU:HD12	1:B:1544:LEU:HD13	1.91	0.51
1:B:1598:ILE:CD1	1:B:1660:VAL:HG21	2.40	0.51
1:B:1878:ASN:OD1	1:B:1880:VAL:HG23	2.10	0.51
1:A:455:VAL:HG22	1:A:475:ASP:HB3	1.92	0.51
1:A:705:ASP:OD1	1:A:705:ASP:N	2.41	0.51
1:G:1767:VAL:HG12	1:G:1785:ILE:HA	1.93	0.51
1:Q:2326:ILE:O	1:Q:2326:ILE:HG22	2.10	0.51
1:D:1419:TYR:HB3	1:D:1468:THR:HG22	1.93	0.51
1:D:1657:ILE:HD11	1:D:1698:LEU:HD13	1.92	0.51
1:E:706:VAL:HG22	1:E:707:HIS:H	1.74	0.51
1:E:2291:ASN:O	1:E:2295:ILE:HD12	2.10	0.51
1:E:2328:PRO:HA	1:E:2331:ARG:HG3	1.92	0.51
1:C:143:GLU:O	1:C:146:ARG:NH1	2.43	0.51
1:C:1997:ILE:HG13	1:C:2011:ILE:HD12	1.91	0.51
1:F:1056:THR:HG23	1:F:1059:LEU:CB	2.40	0.51
1:F:2138:ARG:HH11	1:F:2148:ALA:HB3	1.75	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2320:ILE:O	1:F:2323:THR:OG1	2.29	0.51
1:B:878:VAL:HG11	1:B:1040:LEU:HD12	1.91	0.51
1:B:1489:GLU:HG2	1:B:1542:ILE:HD13	1.91	0.51
1:A:1312:THR:O	1:A:1315:ASN:C	2.49	0.51
1:A:1437:ALA:HB1	1:A:1441:TYR:CZ	2.45	0.51
1:Q:2026:THR:HG22	1:Q:2030:ILE:HD12	1.91	0.51
1:J:1442:LEU:O	1:J:1446:GLY:N	2.40	0.51
1:R:688:GLN:HB2	1:R:694:VAL:HG12	1.93	0.51
1:R:926:ALA:O	1:R:929:ILE:HG22	2.10	0.51
1:R:1324:ILE:HD11	2:U:1726:ARG:CZ	2.40	0.51
2:M:1678:ASN:OD1	2:O:1676:LEU:N	2.39	0.51
1:D:1513:LEU:HD21	1:D:1532:LEU:HD12	1.93	0.51
1:D:1840:GLN:O	1:D:1884:THR:HG23	2.11	0.51
1:E:377:ASP:OD1	1:E:379:SER:OG	2.24	0.51
1:E:912:PRO:HA	1:E:915:GLU:HB3	1.93	0.51
1:C:1470:CYS:HA	1:C:1509:LEU:HB3	1.91	0.51
1:C:1657:ILE:HD11	1:C:1698:LEU:HD12	1.93	0.51
1:C:1761:VAL:HA	1:C:1764:LEU:HD12	1.91	0.51
1:B:129:ALA:HB2	1:B:209:TRP:CZ3	2.46	0.51
1:A:1034:VAL:O	1:A:1038:ASN:N	2.44	0.51
1:G:2111:ARG:HG2	1:G:2205:ILE:HG21	1.93	0.51
1:G:2178:ILE:HG23	1:G:2179:TYR:CD2	2.45	0.51
1:J:926:ALA:O	1:J:929:ILE:HG22	2.10	0.51
1:R:1324:ILE:HD11	2:U:1726:ARG:NH1	2.26	0.51
2:W:1718:TRP:NE1	2:W:1729:LEU:O	2.44	0.51
1:D:1034:VAL:O	1:D:1038:ASN:N	2.42	0.51
1:D:1289:LEU:HD21	1:D:1291:VAL:HG13	1.93	0.51
1:D:1713:ARG:HH11	1:D:1816:THR:HG21	1.75	0.51
1:D:2111:ARG:O	1:D:2114:ARG:NH1	2.42	0.51
1:E:947:SER:O	1:E:950:ALA:HB3	2.11	0.51
1:E:2301:LEU:HA	1:E:2304:ILE:HD12	1.91	0.51
1:C:1055:LEU:HD11	1:C:1059:LEU:HD22	1.93	0.51
1:C:1066:LEU:CD2	1:C:1081:ALA:HB2	2.36	0.51
1:C:1971:VAL:HG22	1:C:1988:VAL:HG22	1.92	0.51
1:F:615:ARG:HH12	1:F:715:LEU:HA	1.76	0.51
1:A:2113:SER:O	1:A:2114:ARG:NH1	2.39	0.51
1:G:1935:ARG:NH2	1:G:1962:GLU:OE1	2.44	0.51
1:G:2044:ALA:HB1	1:G:2088:LEU:HD11	1.92	0.51
1:J:332:ASN:OD1	1:J:909:ARG:NH2	2.44	0.51
1:D:698:ASN:HD22	1:D:833:THR:HG22	1.76	0.51
1:D:943:ASN:OD1	1:D:944:ILE:N	2.44	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1873:GLN:HA	1:D:1877:ASN:ND2	2.25	0.51
1:D:2284:VAL:O	1:D:2284:VAL:HG12	2.11	0.51
1:E:1684:ILE:HD12	1:E:1719:ASN:N	2.25	0.51
1:E:1688:ILE:HG22	1:E:1720:SER:HB3	1.92	0.51
1:C:122:LEU:HD23	1:C:205:VAL:HG22	1.92	0.51
1:C:1086:ILE:HG21	1:C:1441:TYR:CD1	2.45	0.51
1:F:1287:HIS:O	1:F:1325:ARG:N	2.41	0.51
1:F:1640:ASP:OD1	1:F:1642:GLN:N	2.44	0.51
1:B:666:LEU:HD23	1:B:1029:PHE:CZ	2.45	0.51
1:B:1048:LEU:HD21	1:B:1055:LEU:HD11	1.91	0.51
1:B:1373:LEU:HG	1:B:1378:ALA:HB2	1.93	0.51
1:A:963:MET:HA	1:A:966:GLN:HG2	1.92	0.51
1:A:1811:TYR:CD1	1:A:1816:THR:HG22	2.46	0.51
1:Q:2221:ARG:NH1	1:Q:2264:TRP:O	2.40	0.51
1:R:1375:PRO:HA	1:R:1378:ALA:HB3	1.92	0.51
2:O:1652:MET:HG3	2:O:1674:ILE:HG21	1.91	0.51
2:Y:1833:VAL:HG11	2:Y:1850:LEU:HD22	1.93	0.51
1:D:1548:VAL:HG21	1:D:1559:GLN:OE1	2.09	0.51
1:E:1126:SER:CB	1:E:1130:ILE:HD11	2.41	0.51
1:E:1418:ASP:OD2	1:E:1420:ARG:HD2	2.11	0.51
1:E:1978:LEU:HD23	1:E:1978:LEU:H	1.76	0.51
1:C:258:LEU:HD11	1:C:426:LEU:HD23	1.92	0.51
1:C:1079:LEU:HD12	1:C:1444:ASN:HA	1.92	0.51
1:C:1239:PHE:CZ	1:C:1248:ILE:HG21	2.45	0.51
1:C:1492:VAL:HG22	1:C:1532:LEU:HD11	1.93	0.51
1:F:1289:LEU:HD22	1:F:1327:LEU:CD1	2.41	0.51
1:B:1436:GLU:OE1	1:B:1436:GLU:N	2.44	0.51
1:B:2077:PRO:HG2	1:B:2223:LEU:N	2.25	0.51
1:B:2220:ARG:O	1:B:2224:LEU:HD13	2.11	0.51
1:A:154:VAL:HG13	1:A:174:HIS:O	2.10	0.51
1:A:1454:MET:HB2	1:A:1506:LEU:HD21	1.93	0.51
1:A:2091:GLY:O	1:A:2095:VAL:HG22	2.11	0.51
1:J:935:GLN:N	1:J:935:GLN:OE1	2.44	0.51
1:R:310:ILE:HD11	1:R:330:PHE:CD1	2.45	0.51
1:D:879:LYS:O	1:D:883:GLU:HG2	2.11	0.51
1:D:1091:PRO:CB	1:D:1095:LEU:HD21	2.41	0.51
1:E:835:SER:C	1:E:836:LEU:HD12	2.31	0.51
1:E:1427:ILE:HD12	1:E:1449:LEU:HD21	1.93	0.51
1:E:2114:ARG:NE	1:E:2192:THR:HG22	2.26	0.51
1:C:2224:LEU:CB	1:C:2274:LEU:HD13	2.39	0.51
1:C:2258:THR:CG2	1:B:296:ASP:H	2.23	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1098:ASN:CB	1:A:2332:ALA:HB2	2.40	0.51
1:F:1411:GLU:OE2	1:F:1412:VAL:HG12	2.11	0.51
1:F:2221:ARG:HD2	1:F:2270:LEU:HD23	1.93	0.51
1:B:869:LEU:HD12	1:B:1036:LYS:CG	2.40	0.51
1:B:2295:ILE:H	1:B:2295:ILE:HD12	1.76	0.51
1:J:990:LEU:HD12	1:J:991:LEU:N	2.26	0.51
2:H:1742:ASN:HB3	2:H:1844:LEU:HD21	1.92	0.51
2:W:1691:THR:HG22	2:W:1697:CYS:HB3	1.93	0.51
1:D:129:ALA:HB1	1:D:206:TRP:HH2	1.74	0.51
1:D:1529:ARG:N	1:D:1547:GLU:OE2	2.44	0.51
1:D:2020:PRO:N	1:D:2060:VAL:HG23	2.26	0.51
1:D:2232:ILE:O	1:D:2235:ALA:HB3	2.10	0.51
1:E:189:ASN:HB2	1:E:192:LEU:HB3	1.92	0.51
1:E:1421:PHE:CD2	1:E:1457:LEU:HD21	2.46	0.51
1:C:1095:LEU:O	1:C:1099:GLN:N	2.44	0.51
1:C:1451:LEU:HD21	1:C:1499:TYR:OH	2.11	0.51
1:A:1467:ARG:NE	1:A:1468:THR:O	2.42	0.51
1:A:2291:ASN:O	1:A:2295:ILE:HD12	2.10	0.51
1:G:2026:THR:HG22	1:G:2030:ILE:HD12	1.93	0.51
1:J:651:PHE:CZ	1:J:655:LEU:HD22	2.46	0.51
1:D:363:LEU:HD11	1:D:464:ILE:HD11	1.92	0.50
1:E:504:HIS:N	1:E:564:GLY:O	2.37	0.50
1:E:937:PRO:CB	1:E:940:GLN:HE21	2.24	0.50
1:E:1723:ARG:NH1	1:E:1791:GLY:O	2.44	0.50
1:C:1466:VAL:O	1:C:1467:ARG:HG3	2.11	0.50
1:F:1100:VAL:HG12	1:F:1130:ILE:HG23	1.93	0.50
1:F:1568:LEU:HD23	1:F:1568:LEU:O	2.11	0.50
1:F:1954:PHE:O	1:F:2212:ARG:NH1	2.43	0.50
1:F:2232:ILE:CD1	1:F:2248:LEU:HD11	2.40	0.50
1:A:1129:SER:HB2	1:A:1428:ARG:HE	1.76	0.50
1:D:987:VAL:HG21	1:D:1048:LEU:HD11	1.93	0.50
1:D:1677:ILE:HD12	1:D:1714:ILE:CD1	2.41	0.50
1:D:1901:TYR:OH	1:D:1959:SER:O	2.29	0.50
1:E:448:CYS:HA	1:E:505:VAL:HG11	1.93	0.50
1:E:1657:ILE:HD11	1:E:1698:LEU:HD13	1.93	0.50
1:E:1910:VAL:CG2	1:E:1912:LEU:HD21	2.40	0.50
1:C:1609:LEU:HD11	1:C:1666:PHE:CD2	2.46	0.50
1:C:1941:ARG:O	1:C:1951:LEU:N	2.42	0.50
1:C:2218:ARG:CD	1:C:2221:ARG:HE	2.25	0.50
1:F:912:PRO:HA	1:F:915:GLU:HB3	1.93	0.50
1:F:1492:VAL:O	1:F:1496:VAL:HG12	2.11	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:952:LEU:HD23	1:B:961:PHE:CD2	2.47	0.50
1:A:423:VAL:HG13	1:A:435:PHE:HE1	1.75	0.50
1:A:941:ILE:HD13	1:A:968:ILE:CD1	2.41	0.50
1:A:970:GLN:O	1:A:974:ARG:NE	2.42	0.50
1:A:1013:LEU:CD1	1:A:1024:VAL:HG13	2.39	0.50
1:A:1636:GLU:N	1:A:1648:MET:O	2.42	0.50
1:R:608:ILE:HG22	1:R:612:TRP:CE2	2.47	0.50
1:R:1475:LEU:HD12	1:R:1475:LEU:O	2.11	0.50
2:H:1736:VAL:HG23	2:H:1749:PRO:HG2	1.91	0.50
1:D:1954:PHE:CE1	1:D:2212:ARG:HA	2.46	0.50
1:C:724:THR:O	1:C:739:GLY:N	2.44	0.50
1:C:1816:THR:OG1	1:C:1835:GLY:O	2.24	0.50
1:C:1821:THR:HG23	1:C:1888:ASP:OD1	2.12	0.50
1:F:2224:LEU:HD13	1:F:2274:LEU:HB2	1.93	0.50
1:B:666:LEU:HD23	1:B:1029:PHE:CE2	2.46	0.50
1:B:2319:ILE:HG23	1:G:2319:ILE:HG12	1.93	0.50
1:A:567:ARG:NH2	1:A:603:PHE:O	2.44	0.50
1:R:992:ARG:NH1	1:R:1065:GLU:OE1	2.43	0.50
1:D:1529:ARG:NH2	1:D:1573:ILE:O	2.44	0.50
1:D:1955:PHE:CE1	1:D:1978:LEU:HD22	2.47	0.50
1:D:2045:ASN:HD22	1:D:2086:ALA:HB2	1.76	0.50
1:E:510:ILE:HD12	1:E:584:ARG:NH1	2.27	0.50
1:E:1157:ALA:HB1	1:E:1374:GLU:OE2	2.11	0.50
1:B:2319:ILE:HD11	1:G:2322:MET:HB3	1.94	0.50
1:A:1511:ALA:HB3	1:A:1532:LEU:HB2	1.94	0.50
1:A:2304:ILE:HG13	1:Q:2307:LEU:HD13	1.93	0.50
1:J:1457:LEU:HD22	1:J:1506:LEU:HG	1.92	0.50
1:J:1518:ARG:NH1	1:J:1523:GLY:O	2.44	0.50
2:K:1730:ASN:HD21	2:K:1732:HIS:HD2	1.60	0.50
1:D:386:LYS:NZ	1:D:424:GLU:OE2	2.44	0.50
1:D:1017:ASN:ND2	1:D:1027:TYR:OH	2.45	0.50
1:D:1033:GLN:HG3	1:D:1036:LYS:HB2	1.94	0.50
1:D:2259:VAL:HG13	1:E:296:ASP:OD1	2.10	0.50
1:C:634:CYS:O	1:C:638:HIS:N	2.43	0.50
1:C:1302:ASP:O	1:C:1306:ALA:N	2.44	0.50
1:F:675:ILE:HG21	1:F:820:LEU:CD1	2.41	0.50
1:F:990:LEU:CD1	1:F:1044:LEU:HD11	2.42	0.50
1:F:1977:ARG:NH2	1:F:1980:GLY:O	2.42	0.50
1:A:245:ALA:CB	1:A:281:VAL:HG21	2.41	0.50
1:A:567:ARG:NH1	1:A:604:GLN:O	2.44	0.50
1:A:2077:PRO:HG2	1:A:2223:LEU:N	2.26	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:310:ILE:HD11	1:J:330:PHE:CD1	2.47	0.50
1:J:370:ALA:O	1:J:409:VAL:HG13	2.11	0.50
1:J:688:GLN:HB2	1:J:694:VAL:HG12	1.93	0.50
1:J:1060:LEU:O	1:J:1064:THR:N	2.40	0.50
1:R:707:HIS:N	1:R:715:LEU:O	2.45	0.50
2:K:1669:ALA:O	2:K:1673:HIS:N	2.44	0.50
1:D:849:LEU:HD22	1:D:894:LEU:HD22	1.93	0.50
1:D:1797:LEU:CD2	1:C:2094:VAL:HA	2.41	0.50
1:D:2243:GLN:HE22	1:E:947:SER:N	2.09	0.50
1:E:2269:ASP:O	1:E:2273:TRP:N	2.45	0.50
1:C:615:ARG:NH1	1:C:715:LEU:HA	2.27	0.50
1:C:1895:VAL:HG12	1:C:1899:LEU:HD12	1.94	0.50
1:F:920:LYS:O	1:F:923:ALA:HB3	2.12	0.50
1:F:1858:LEU:HD12	1:F:1862:VAL:HG21	1.93	0.50
1:F:2103:ARG:HD2	1:F:2245:GLN:HE21	1.76	0.50
1:B:938:SER:CB	1:B:972:VAL:HG23	2.42	0.50
1:A:1046:ASP:OD1	1:A:1047:GLN:N	2.44	0.50
1:A:1177:VAL:HG22	1:A:1237:VAL:HG22	1.94	0.50
1:A:1829:ALA:HB3	1:A:1848:LEU:HD23	1.92	0.50
1:A:2230:LYS:O	1:A:2234:ASN:N	2.44	0.50
1:J:203:GLN:O	1:J:228:ALA:HB3	2.12	0.50
1:J:998:GLU:OE1	1:J:1074:ASN:ND2	2.42	0.50
1:J:1069:LEU:HB2	1:J:1078:ALA:HB2	1.93	0.50
1:R:510:ILE:HD13	1:R:560:CYS:SG	2.51	0.50
1:D:1445:GLU:OE1	1:D:1449:LEU:HD21	2.12	0.50
1:D:1503:LEU:CD1	1:D:1508:VAL:HB	2.42	0.50
1:D:1760:ARG:HG3	1:D:1761:VAL:H	1.75	0.50
1:E:1299:ILE:O	1:E:1301:ASP:N	2.36	0.50
1:F:2119:GLU:OE1	1:F:2121:GLU:N	2.43	0.50
1:B:463:GLN:OE1	1:B:473:ILE:HG23	2.11	0.50
1:A:199:ARG:HE	1:A:200:ILE:HD13	1.76	0.50
1:A:1146:ARG:NH1	1:A:1238:SER:O	2.45	0.50
1:A:1169:ARG:HB2	1:A:1177:VAL:HB	1.93	0.50
1:J:1475:LEU:HD12	1:J:1475:LEU:O	2.12	0.50
1:R:636:ALA:HB1	1:R:685:VAL:CG2	2.42	0.50
2:K:1792:VAL:HG11	2:K:1798:PHE:HD1	1.77	0.50
1:D:335:ARG:O	1:D:339:ALA:N	2.40	0.50
1:D:1994:GLU:OE1	1:D:1994:GLU:N	2.44	0.50
1:E:301:ALA:HB1	1:E:308:VAL:HG11	1.92	0.50
1:E:426:LEU:N	1:E:434:TYR:O	2.37	0.50
1:E:1482:ILE:HD13	1:E:1520:THR:HA	1.94	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1513:LEU:HD13	1:E:1532:LEU:HD13	1.92	0.50
1:C:510:ILE:HD11	1:C:540:TYR:O	2.11	0.50
1:C:1101:GLU:O	1:C:1105:LEU:HD23	2.11	0.50
1:F:910:ILE:HG12	1:F:915:GLU:HB2	1.93	0.50
1:F:1263:SEP:OG	2:S:1670:ARG:NH2	2.45	0.50
1:F:1471:ASN:ND2	1:F:1507:ARG:O	2.45	0.50
1:F:2119:GLU:OE2	1:F:2122:GLY:N	2.45	0.50
1:F:2289:GLU:O	1:F:2293:LYS:HD2	2.11	0.50
1:B:1530:LEU:HD23	1:B:1531:PHE:N	2.26	0.50
1:B:2232:ILE:O	1:B:2235:ALA:HB3	2.11	0.50
1:A:1240:ARG:O	1:A:1294:LYS:HB3	2.12	0.50
1:A:1688:ILE:O	1:A:1688:ILE:HG22	2.11	0.50
1:G:2094:VAL:HG13	1:G:2095:VAL:HG23	1.92	0.50
1:Q:2160:GLU:O	1:Q:2164:LEU:N	2.42	0.50
2:M:1704:PHE:HB3	2:M:1842:VAL:HG11	1.93	0.50
2:O:1784:VAL:HB	2:O:1789:ALA:HB3	1.93	0.50
2:S:1704:PHE:CE1	2:S:1843:ALA:HB2	2.47	0.50
1:D:1039:LEU:O	1:D:1042:THR:OG1	2.12	0.50
1:D:1456:GLU:O	1:D:1459:VAL:HB	2.12	0.50
1:D:1767:VAL:HA	1:D:1786:ILE:HG12	1.94	0.50
1:E:2317:ASP:O	1:E:2320:ILE:HG12	2.12	0.50
1:C:920:LYS:O	1:C:923:ALA:HB3	2.12	0.50
1:C:1056:THR:HG23	1:C:1059:LEU:CB	2.41	0.50
1:C:2232:ILE:O	1:C:2235:ALA:HB3	2.12	0.50
1:F:332:ASN:OD1	1:F:909:ARG:NH2	2.45	0.50
1:F:1897:HIS:HE2	1:F:1961:SER:HB2	1.76	0.50
1:F:2007:GLU:O	1:F:2009:LYS:NZ	2.40	0.50
1:B:1330:LEU:HD13	1:B:1355:PHE:CE1	2.46	0.50
1:B:1919:ILE:HG21	1:B:2216:TYR:HB2	1.93	0.50
1:G:2128:PHE:CG	1:G:2183:ALA:HB1	2.47	0.50
1:J:510:ILE:HG22	1:J:581:LEU:HD21	1.94	0.50
1:J:1375:PRO:HA	1:J:1378:ALA:HB3	1.93	0.50
1:D:1838:THR:CG2	1:D:1881:THR:HA	2.41	0.49
1:D:2036:GLU:OE1	1:D:2038:LEU:HD13	2.12	0.49
1:C:2111:ARG:HG2	1:C:2205:ILE:HG22	1.94	0.49
1:F:477:ARG:NE	1:F:483:SER:O	2.42	0.49
1:F:1248:ILE:O	1:F:1248:ILE:HG22	2.12	0.49
1:F:1651:LEU:HD12	1:F:1652:PRO:HD2	1.94	0.49
1:F:1821:THR:HG23	1:F:1888:ASP:OD1	2.12	0.49
1:B:1014:ARG:O	1:B:1018:LYS:CA	2.54	0.49
1:B:1096:ARG:O	1:B:1100:VAL:HG22	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1097:HIS:HA	1:B:1100:VAL:HG22	1.94	0.49
1:B:1560:ALA:HB2	1:B:1564:LYS:NZ	2.27	0.49
1:B:1919:ILE:HG21	1:B:2216:TYR:CB	2.42	0.49
1:G:2137:MET:O	1:G:2141:ASP:N	2.42	0.49
1:R:1072:THR:O	1:R:1499:TYR:OH	2.16	0.49
1:D:2045:ASN:ND2	1:D:2083:PRO:HD2	2.27	0.49
1:E:763:ILE:HD11	1:E:783:GLU:HB2	1.93	0.49
1:E:1598:ILE:HG13	1:E:1599:TYR:H	1.76	0.49
1:F:651:PHE:CE2	1:F:1025:LEU:HD12	2.47	0.49
1:F:1587:ARG:CD	1:F:1597:TYR:HB2	2.41	0.49
1:B:374:PHE:CD2	1:B:453:ALA:HB2	2.47	0.49
1:B:1613:TRP:CE3	1:B:1622:LEU:HD12	2.46	0.49
1:A:1288:ILE:C	1:A:1289:LEU:HD22	2.32	0.49
1:A:2315:ALA:HB1	1:Q:2330:GLN:HE22	1.75	0.49
1:R:1046:ASP:OD1	1:R:1080:ARG:NH2	2.45	0.49
1:E:430:ASP:HA	1:E:645:ARG:HD2	1.94	0.49
1:E:687:ARG:HB3	1:E:867:TYR:HE2	1.76	0.49
1:E:2221:ARG:NE	1:E:2267:ASN:OD1	2.46	0.49
1:C:140:TRP:CE3	1:C:459:ALA:HB1	2.47	0.49
1:C:510:ILE:HD13	1:C:560:CYS:SG	2.53	0.49
1:C:1104:PHE:CE2	1:C:1145:VAL:HG13	2.47	0.49
1:C:1299:ILE:O	1:C:1301:ASP:N	2.42	0.49
1:F:2015:GLY:O	1:F:2017:VAL:HG23	2.12	0.49
1:B:204:ALA:HB1	1:B:230:MET:HG3	1.94	0.49
1:B:1530:LEU:HD21	1:B:1542:ILE:HG23	1.93	0.49
1:B:1572:LEU:O	1:B:1575:THR:OG1	2.30	0.49
1:B:1670:GLU:HG2	1:B:1913:LEU:HD21	1.94	0.49
1:B:1811:TYR:CD1	1:B:1816:THR:HG22	2.47	0.49
1:A:331:PRO:HB3	1:A:966:GLN:HG3	1.93	0.49
1:G:2148:ALA:O	1:G:2152:GLY:N	2.44	0.49
1:J:291:VAL:HG11	1:J:297:GLY:HA2	1.94	0.49
1:J:660:VAL:CG2	1:J:1010:VAL:HG11	2.43	0.49
1:R:357:HIS:HE2	1:R:424:GLU:HB3	1.77	0.49
1:D:1403:LEU:HG	1:D:1456:GLU:HB3	1.95	0.49
1:D:1665:THR:HG23	1:D:1676:ASP:OD1	2.12	0.49
1:D:2037:GLY:O	1:D:2076:GLN:NE2	2.45	0.49
1:D:2059:GLN:HB3	1:D:2062:LYS:HD3	1.94	0.49
1:E:853:PHE:CE1	1:E:885:LEU:HD12	2.47	0.49
1:E:1078:ALA:O	1:E:1081:ALA:HB3	2.12	0.49
1:E:1367:ASP:OD1	1:E:1368:ARG:N	2.45	0.49
1:E:1514:LYS:HA	1:E:1529:ARG:HA	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1571:MET:SD	1:E:1575:THR:OG1	2.63	0.49
1:E:1949:GLN:HG3	1:E:1950:TRP:H	1.77	0.49
1:C:2062:LYS:O	1:C:2065:ALA:HB3	2.13	0.49
1:C:2113:SER:O	1:C:2114:ARG:NH1	2.39	0.49
1:F:1661:ALA:HB2	1:F:1680:ILE:CG2	2.41	0.49
1:F:2218:ARG:CD	1:F:2221:ARG:HE	2.25	0.49
1:F:2224:LEU:CB	1:F:2274:LEU:HD13	2.40	0.49
1:B:1585:SER:O	1:B:1589:GLN:NE2	2.45	0.49
1:A:910:ILE:HG12	1:A:915:GLU:HB2	1.94	0.49
1:A:1140:HIS:O	1:A:1146:ARG:NH2	2.34	0.49
1:J:186:ASN:OD1	1:J:186:ASN:N	2.42	0.49
1:J:312:ALA:HB2	1:J:337:VAL:HG13	1.94	0.49
1:J:608:ILE:HG22	1:J:612:TRP:CE2	2.46	0.49
1:J:1075:ALA:O	1:J:1079:LEU:HD23	2.13	0.49
1:J:1230:CYS:O	1:J:1232:ARG:NH1	2.45	0.49
1:R:1530:LEU:HD11	1:R:1544:LEU:HD13	1.94	0.49
1:D:244:ILE:HD13	1:D:290:TYR:CB	2.42	0.49
1:D:637:LEU:HD12	1:D:685:VAL:HG13	1.93	0.49
1:D:1701:ARG:HA	1:D:1704:GLU:HG2	1.94	0.49
1:D:2325:HIS:O	1:D:2326:ILE:HD13	2.12	0.49
1:C:1640:ASP:OD1	1:C:1642:GLN:N	2.45	0.49
1:F:261:SER:OG	1:F:289:GLY:O	2.31	0.49
1:B:851:ARG:O	1:B:855:TYR:HB3	2.13	0.49
1:B:930:THR:O	1:B:930:THR:HG22	2.13	0.49
1:A:644:LEU:HD22	1:A:687:ARG:HD3	1.94	0.49
1:A:655:LEU:HD11	1:A:1021:MET:H	1.77	0.49
1:A:972:VAL:O	1:A:976:ARG:HD3	2.13	0.49
1:A:1682:ASN:HD21	1:A:1718:ALA:C	2.15	0.49
1:A:1853:ALA:O	1:A:1857:VAL:HG23	2.12	0.49
1:R:896:LEU:O	1:R:900:GLN:N	2.44	0.49
1:D:306:TYR:HA	1:D:308:VAL:HG13	1.94	0.49
1:D:636:ALA:HA	1:D:672:VAL:HG11	1.94	0.49
1:D:1095:LEU:HD22	1:D:1096:ARG:N	2.26	0.49
1:D:1886:CYS:N	1:D:1890:GLU:OE2	2.41	0.49
1:E:197:ALA:HB1	1:E:227:ILE:HD13	1.95	0.49
1:E:362:ILE:HD11	1:E:408:ALA:HB1	1.95	0.49
1:F:943:ASN:OD1	1:F:944:ILE:N	2.45	0.49
1:F:1509:LEU:HD11	1:F:1535:GLU:CD	2.33	0.49
1:F:2061:LEU:HD23	1:F:2061:LEU:H	1.78	0.49
1:A:988:MET:HA	1:A:991:LEU:HD12	1.92	0.49
1:A:1171:LEU:HD12	1:A:1177:VAL:HG21	1.93	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1471:ASN:HB2	1:A:1508:VAL:HA	1.95	0.49
1:R:203:GLN:O	1:R:228:ALA:HB3	2.12	0.49
1:R:651:PHE:CZ	1:R:655:LEU:HD22	2.48	0.49
1:R:961:PHE:O	1:R:965:THR:HG22	2.13	0.49
2:H:1691:THR:HG21	2:H:1736:VAL:HG12	1.94	0.49
2:Y:1666:TYR:O	2:Y:1670:ARG:N	2.42	0.49
1:D:2019:PHE:HB2	1:D:2021:ASP:OD1	2.13	0.49
1:E:244:ILE:HG23	1:E:260:TRP:CZ3	2.48	0.49
1:E:896:LEU:HD12	1:E:899:LEU:HD11	1.95	0.49
1:E:1526:ILE:HD12	1:E:1526:ILE:O	2.13	0.49
1:E:1730:ILE:CD1	1:E:1761:VAL:HG11	2.43	0.49
1:C:1855:ASN:OD1	1:C:1862:VAL:N	2.46	0.49
1:F:1680:ILE:HD11	1:F:1713:ARG:HD3	1.94	0.49
1:F:2315:ALA:O	1:F:2319:ILE:N	2.43	0.49
1:B:1289:LEU:CD1	1:B:1291:VAL:HG13	2.43	0.49
1:B:1518:ARG:C	1:B:1519:LEU:HD22	2.33	0.49
1:A:869:LEU:CD1	1:A:1036:LYS:HB3	2.38	0.49
1:A:2297:ARG:O	1:A:2301:LEU:N	2.43	0.49
1:A:2308:VAL:HG11	1:Q:2322:MET:SD	2.52	0.49
1:G:1735:HIS:N	1:G:1752:TYR:O	2.43	0.49
1:Q:1932:TYR:CE1	1:Q:1990:THR:HG21	2.48	0.49
1:J:109:VAL:HG22	1:J:466:MET:HB3	1.94	0.49
2:U:1755:SER:O	2:U:1845:TYR:OH	2.26	0.49
1:D:355:SER:OG	1:D:426:LEU:HD11	2.13	0.49
1:D:849:LEU:HD23	1:D:849:LEU:O	2.13	0.49
1:D:2036:GLU:CD	1:D:2038:LEU:HD13	2.33	0.49
1:E:334:PHE:CE1	1:E:346:ILE:HG21	2.48	0.49
1:E:853:PHE:CZ	1:E:889:LEU:HB3	2.48	0.49
1:E:1044:LEU:O	1:E:1048:LEU:HD22	2.12	0.49
1:C:1306:ALA:O	1:C:1309:ARG:NH1	2.44	0.49
1:C:1680:ILE:N	1:C:1680:ILE:HD12	2.28	0.49
1:C:2108:TYR:HB3	1:C:2206:LEU:HD13	1.95	0.49
1:F:1073:THR:OG1	1:F:1502:ARG:NH2	2.42	0.49
1:F:1121:GLN:C	1:F:1125:LEU:HD23	2.33	0.49
1:B:2251:TRP:CE3	1:B:2288:ILE:HG23	2.48	0.49
1:G:1664:MET:HE1	1:G:1679:VAL:HG12	1.93	0.49
1:G:2176:ILE:HG22	1:G:2177:PRO:HD3	1.95	0.49
1:Q:2068:VAL:HG13	1:Q:2100:ILE:HG12	1.94	0.49
1:Q:2270:LEU:HD23	1:Q:2274:LEU:HD11	1.95	0.49
1:D:2057:TYR:OH	1:C:1877:ASN:O	2.23	0.49
1:E:1045:ILE:HD13	1:E:1080:ARG:HD3	1.95	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2219:LEU:C	1:E:2219:LEU:HD13	2.33	0.49
1:C:183:ASN:O	1:C:188:ALA:HB3	2.13	0.49
1:C:912:PRO:HA	1:C:915:GLU:HB3	1.95	0.49
1:C:1372:HIS:HB3	1:C:1399:HIS:HB3	1.93	0.49
1:C:1381:LEU:HD13	1:C:1386:MET:CE	2.43	0.49
1:C:1505:LYS:O	1:C:1507:ARG:NH1	2.46	0.49
1:C:1828:GLY:O	1:C:1832:VAL:HG23	2.12	0.49
1:F:140:TRP:CD2	1:F:459:ALA:HB1	2.47	0.49
1:F:1812:ASN:HA	1:F:2035:ARG:HD2	1.94	0.49
1:B:1994:GLU:OE1	1:B:1994:GLU:N	2.46	0.49
1:A:612:TRP:NE1	1:A:616:LEU:HD21	2.27	0.49
1:A:634:CYS:CB	1:A:725:THR:HG21	2.42	0.49
1:A:1598:ILE:HG21	1:A:1683:ASP:HB3	1.94	0.49
1:A:2307:LEU:O	1:A:2311:ASN:N	2.45	0.49
1:Q:1595:THR:OG1	1:Q:1596:THR:N	2.46	0.49
1:J:293:ASP:N	1:J:293:ASP:OD1	2.45	0.49
1:R:370:ALA:O	1:R:409:VAL:HG13	2.13	0.49
1:D:358:LEU:HD22	1:D:393:ALA:HB2	1.94	0.49
1:D:1421:PHE:CD1	1:D:1457:LEU:HD12	2.48	0.49
1:E:240:LEU:HD21	1:E:249:VAL:HG11	1.94	0.49
1:E:1886:CYS:N	1:E:1890:GLU:OE2	2.38	0.49
1:F:1973:VAL:HG12	1:F:1986:VAL:CG1	2.43	0.49
1:B:156:MET:CE	1:B:193:ILE:HG12	2.43	0.49
1:B:249:VAL:HG11	1:B:415:VAL:HG23	1.95	0.49
1:A:863:VAL:HG13	1:A:869:LEU:HD21	1.93	0.49
1:A:1079:LEU:HD23	1:A:1448:ARG:HB2	1.94	0.49
1:A:2178:ILE:HG23	1:A:2179:TYR:CD2	2.48	0.49
1:J:636:ALA:HB1	1:J:685:VAL:CG2	2.42	0.49
1:R:293:ASP:OD1	1:R:293:ASP:N	2.45	0.49
1:R:921:GLU:OE1	1:R:924:GLN:NE2	2.46	0.49
1:R:990:LEU:HD12	1:R:991:LEU:N	2.27	0.49
1:D:2128:PHE:CE2	1:D:2133:LEU:HD23	2.48	0.48
1:E:1723:ARG:HD3	1:E:1792:ILE:HG22	1.94	0.48
1:E:1730:ILE:HD13	1:E:1761:VAL:HG11	1.95	0.48
1:E:1764:LEU:HD12	1:E:1788:LYS:HE3	1.94	0.48
1:E:2042:VAL:HB	1:E:2080:VAL:HG22	1.94	0.48
1:C:900:GLN:HE21	1:C:904:THR:CG2	2.26	0.48
1:C:1606:ARG:O	1:C:1610:ILE:HG13	2.13	0.48
1:F:1126:SER:OG	1:F:1428:ARG:NH2	2.41	0.48
1:F:1960:PHE:HA	1:F:1976:ALA:HB2	1.94	0.48
1:B:1169:ARG:HB2	1:B:1177:VAL:HB	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2229:LYS:CB	1:B:2244:ILE:HG21	2.43	0.48
1:A:2287:VAL:HG12	1:A:2291:ASN:OD1	2.12	0.48
1:D:504:HIS:N	1:D:564:GLY:O	2.38	0.48
1:D:1165:SER:O	1:D:1181:GLN:HB2	2.13	0.48
1:D:1385:ARG:NE	1:D:1575:THR:O	2.46	0.48
1:E:1045:ILE:HD13	1:E:1080:ARG:NE	2.28	0.48
1:E:1780:TYR:OH	1:A:191:GLU:OE2	2.21	0.48
1:E:2097:ASP:HA	1:E:2107:MET:HE1	1.95	0.48
1:C:1534:ASN:HD22	1:C:1535:GLU:N	2.12	0.48
1:C:1657:ILE:HD11	1:C:1698:LEU:CD1	2.43	0.48
1:C:1865:SER:O	1:C:1868:GLN:HB2	2.13	0.48
1:F:2091:GLY:HA2	1:F:2094:VAL:HG12	1.95	0.48
1:F:2232:ILE:O	1:F:2235:ALA:HB3	2.13	0.48
1:F:2315:ALA:O	1:F:2319:ILE:HG13	2.13	0.48
1:A:1038:ASN:ND2	1:A:1073:THR:HG22	2.28	0.48
1:A:1524:LYS:HD3	1:A:1526:ILE:HD11	1.94	0.48
1:A:2124:VAL:HG13	1:A:2128:PHE:HB2	1.95	0.48
1:Q:1954:PHE:CE2	1:Q:1978:LEU:HD13	2.48	0.48
1:J:1121:GLN:C	1:J:1125:LEU:HD23	2.33	0.48
1:R:1442:LEU:O	1:R:1446:GLY:N	2.40	0.48
2:K:1720:THR:O	2:K:1724:LYS:N	2.39	0.48
1:D:644:LEU:HD23	1:D:667:LEU:O	2.13	0.48
1:D:1576:PRO:O	1:D:1578:VAL:N	2.46	0.48
1:E:864:MET:SD	1:E:990:LEU:HD13	2.53	0.48
1:E:1045:ILE:HD12	1:E:1046:ASP:N	2.27	0.48
1:E:2260:LYS:HD2	1:E:2263:VAL:HG21	1.95	0.48
1:C:1104:PHE:HE2	1:C:1145:VAL:HG13	1.77	0.48
1:F:636:ALA:HB2	1:F:683:LEU:HG	1.94	0.48
1:F:1534:ASN:HD22	1:F:1535:GLU:N	2.11	0.48
1:F:1608:SER:HB3	1:F:1896:LEU:HD21	1.94	0.48
1:F:1612:LEU:HD22	1:F:1896:LEU:CD1	2.42	0.48
1:J:1369:ILE:HD12	1:J:1391:LEU:HD22	1.94	0.48
1:D:1706:ALA:HA	1:D:1711:ILE:HD11	1.94	0.48
1:D:1734:PHE:HA	1:D:1753:LEU:HD23	1.95	0.48
1:D:1955:PHE:HA	1:D:2212:ARG:NH2	2.28	0.48
1:D:2093:TRP:HE1	1:C:1797:LEU:HB3	1.77	0.48
1:D:2221:ARG:CG	1:D:2271:ALA:HB2	2.44	0.48
1:E:359:GLU:N	1:E:376:ARG:O	2.41	0.48
1:E:1718:ALA:HB1	1:E:1822:CYS:SG	2.54	0.48
1:E:2053:MET:HB2	1:F:1863:TYR:CE1	2.49	0.48
1:F:1663:LYS:NZ	1:F:1665:THR:OG1	2.46	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1403:LEU:HD21	1:A:1456:GLU:CB	2.43	0.48
1:A:1974:GLY:O	1:A:1985:VAL:N	2.43	0.48
1:A:2221:ARG:HD2	1:A:2270:LEU:CD1	2.44	0.48
1:J:1121:GLN:O	1:J:1125:LEU:HD23	2.13	0.48
1:R:935:GLN:N	1:R:935:GLN:OE1	2.45	0.48
2:M:1808:VAL:HG11	2:M:1824:ILE:HD13	1.95	0.48
1:D:1684:ILE:HD12	1:D:1718:ALA:C	2.33	0.48
1:D:1817:ILE:HG23	1:D:1837:ARG:HB2	1.94	0.48
1:D:2079:LEU:HD22	1:D:2215:PHE:HE1	1.77	0.48
1:E:943:ASN:OD1	1:E:944:ILE:N	2.47	0.48
1:C:943:ASN:HB3	1:B:2243:GLN:HB3	1.96	0.48
1:C:1782:ILE:N	1:C:1782:ILE:HD12	2.29	0.48
1:C:1865:SER:O	1:C:1868:GLN:N	2.45	0.48
1:F:1711:ILE:HG22	1:F:1905:SER:HB3	1.94	0.48
1:F:1901:TYR:HB2	1:F:1902:MET:HE3	1.95	0.48
1:B:2046:TRP:O	1:B:2088:LEU:HA	2.13	0.48
1:A:193:ILE:O	1:A:197:ALA:N	2.33	0.48
1:A:1454:MET:HG3	1:A:1506:LEU:HD21	1.94	0.48
1:Q:1873:GLN:O	1:Q:1877:ASN:ND2	2.33	0.48
1:Q:2148:ALA:O	1:Q:2152:GLY:N	2.44	0.48
1:Q:2178:ILE:HG23	1:Q:2179:TYR:CD2	2.48	0.48
1:J:112:PHE:HB2	1:J:468:ILE:HD12	1.96	0.48
1:J:129:ALA:HB2	1:J:209:TRP:CZ3	2.48	0.48
1:R:1121:GLN:C	1:R:1125:LEU:HD23	2.33	0.48
1:R:1255:CYS:SG	2:U:1667:LYS:NZ	2.79	0.48
1:R:1499:TYR:O	1:R:1503:LEU:HD13	2.13	0.48
2:S:1825:GLY:N	2:S:1857:GLN:OE1	2.41	0.48
2:U:1780:LEU:HD22	2:U:1835:ARG:HD2	1.95	0.48
1:D:118:ILE:HD12	1:D:466:MET:HG3	1.96	0.48
1:D:1695:GLU:HA	1:D:1698:LEU:HD23	1.96	0.48
1:E:1720:SER:HA	1:E:1825:ILE:HB	1.95	0.48
1:C:258:LEU:HD22	1:C:352:ALA:HB2	1.95	0.48
1:C:1651:LEU:HD12	1:C:1652:PRO:HD2	1.96	0.48
1:C:1912:LEU:HD22	1:C:1980:GLY:O	2.13	0.48
1:F:1518:ARG:HE	1:F:1523:GLY:HA2	1.77	0.48
1:F:1807:SER:O	1:F:1834:LEU:HD21	2.12	0.48
1:B:176:VAL:HG11	1:B:196:ILE:HG12	1.95	0.48
1:B:1069:LEU:HD21	1:B:1078:ALA:N	2.29	0.48
1:A:244:ILE:HD13	1:A:290:TYR:HB3	1.96	0.48
1:A:1475:LEU:N	1:A:1512:GLU:OE2	2.47	0.48
1:A:1710:GLY:HA2	1:A:1814:ILE:HG22	1.94	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1994:GLU:OE1	1:A:1994:GLU:N	2.47	0.48
1:J:707:HIS:N	1:J:715:LEU:O	2.45	0.48
1:J:991:LEU:HD12	1:J:992:ARG:HE	1.78	0.48
1:J:1299:ILE:O	1:J:1301:ASP:N	2.45	0.48
1:D:849:LEU:O	1:D:853:PHE:HB2	2.14	0.48
1:D:1475:LEU:C	1:D:1475:LEU:HD13	2.33	0.48
1:D:1713:ARG:O	1:D:1816:THR:OG1	2.19	0.48
1:E:118:ILE:HD12	1:E:466:MET:HG3	1.94	0.48
1:E:356:ARG:HG3	1:E:395:ILE:HG21	1.94	0.48
1:E:400:VAL:HG11	1:E:427:TYR:HE1	1.78	0.48
1:C:2007:GLU:O	1:C:2009:LYS:NZ	2.40	0.48
1:B:156:MET:HE2	1:B:193:ILE:HG12	1.96	0.48
1:B:380:VAL:HG11	1:B:388:ILE:HB	1.94	0.48
1:B:1719:ASN:N	1:B:1823:ARG:O	2.39	0.48
1:B:1785:ILE:HG21	1:G:2190:HIS:CD2	2.49	0.48
1:B:2113:SER:O	1:B:2114:ARG:NH1	2.40	0.48
1:B:2117:VAL:HG13	1:G:1722:ALA:HB3	1.96	0.48
1:Q:2064:GLY:O	1:Q:2067:ILE:HG22	2.14	0.48
1:Q:2323:THR:OG1	1:Q:2331:ARG:NH2	2.46	0.48
1:J:312:ALA:HB2	1:J:337:VAL:CG1	2.44	0.48
1:J:357:HIS:HE2	1:J:424:GLU:HB3	1.78	0.48
1:J:914:VAL:HG11	1:J:945:LEU:HD12	1.95	0.48
1:J:1530:LEU:HD11	1:J:1544:LEU:HD13	1.95	0.48
1:R:962:PHE:HA	1:R:965:THR:HG22	1.94	0.48
1:R:1060:LEU:O	1:R:1064:THR:OG1	2.24	0.48
1:R:1121:GLN:O	1:R:1125:LEU:HD23	2.13	0.48
1:D:118:ILE:HD12	1:D:466:MET:CG	2.44	0.48
1:D:122:LEU:HD23	1:D:205:VAL:HG22	1.96	0.48
1:D:510:ILE:HG22	1:D:581:LEU:HD21	1.96	0.48
1:D:935:GLN:OE1	1:D:935:GLN:N	2.47	0.48
1:D:1001:PHE:O	1:D:1009:CYS:HB3	2.13	0.48
1:D:1684:ILE:HD13	1:D:1822:CYS:HB3	1.95	0.48
1:E:630:LEU:HD11	1:E:738:ILE:HG21	1.95	0.48
1:E:1033:GLN:HB3	1:E:1036:LYS:HB2	1.95	0.48
1:E:1938:LEU:O	1:E:1955:PHE:N	2.36	0.48
1:E:2336:ARG:HG3	1:E:2337:ILE:HD12	1.95	0.48
1:C:239:ALA:HA	1:C:245:ALA:HB1	1.95	0.48
1:C:636:ALA:HB2	1:C:683:LEU:HG	1.96	0.48
1:C:1760:ARG:HG3	1:C:1761:VAL:N	2.28	0.48
1:C:1860:ARG:HH12	1:C:1862:VAL:HG22	1.79	0.48
1:C:1992:THR:HA	1:C:2014:ALA:HA	1.96	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2331:ARG:O	1:F:2335:ILE:HG13	2.13	0.48
1:B:1524:LYS:CD	1:B:1526:ILE:HD11	2.43	0.48
1:B:2065:ALA:HB1	1:G:1834:LEU:HA	1.96	0.48
1:A:1096:ARG:O	1:A:1100:VAL:HG22	2.14	0.48
1:Q:2018:TRP:NE1	1:Q:2092:SER:OG	2.45	0.48
1:J:1086:ILE:O	1:J:1089:HIS:N	2.43	0.48
1:J:1360:ALA:HB2	1:J:1365:GLU:HA	1.96	0.48
1:J:1496:VAL:HG23	1:J:1503:LEU:HD21	1.94	0.48
2:S:1808:VAL:HG11	2:S:1824:ILE:HG21	1.96	0.48
1:D:913:ASN:N	1:D:913:ASN:OD1	2.45	0.48
1:D:1684:ILE:HD11	1:D:1823:ARG:NH1	2.28	0.48
1:D:1695:GLU:O	1:D:1698:LEU:HD23	2.14	0.48
1:D:1809:LEU:HD12	1:C:2072:ARG:HH11	1.79	0.48
1:D:2317:ASP:O	1:D:2320:ILE:HG12	2.14	0.48
1:E:194:LEU:HD11	1:E:225:ASN:HB2	1.94	0.48
1:E:294:VAL:HG23	1:E:330:PHE:CE2	2.48	0.48
1:E:1063:LEU:HD11	1:E:1081:ALA:O	2.14	0.48
1:E:1481:VAL:HG22	1:E:1482:ILE:H	1.79	0.48
1:E:1595:THR:OG1	1:E:1596:THR:N	2.47	0.48
1:C:1811:TYR:O	1:C:2035:ARG:HD2	2.14	0.48
1:C:1923:ILE:HG23	1:C:1953:GLY:C	2.34	0.48
1:C:2206:LEU:HD12	1:C:2206:LEU:N	2.29	0.48
1:F:102:VAL:HG23	1:F:145:PHE:CE1	2.48	0.48
1:F:569:GLU:OE2	1:F:573:ASN:ND2	2.40	0.48
1:F:1239:PHE:CZ	1:F:1248:ILE:HG21	2.48	0.48
1:F:2063:PHE:O	1:F:2067:ILE:HG23	2.14	0.48
1:B:374:PHE:HD2	1:B:453:ALA:HB2	1.78	0.48
1:B:1488:ILE:O	1:B:1492:VAL:HG22	2.14	0.48
1:B:1535:GLU:N	1:B:1535:GLU:OE1	2.47	0.48
1:B:2315:ALA:CB	1:G:2330:GLN:HE22	2.26	0.48
1:A:863:VAL:O	1:A:1037:LYS:NZ	2.46	0.48
1:A:1359:ARG:N	1:A:1365:GLU:O	2.47	0.48
1:A:1753:LEU:HB2	1:A:1758:TYR:HB3	1.95	0.48
1:A:2228:VAL:O	1:A:2232:ILE:HD12	2.14	0.48
1:Q:2333:GLU:OE1	1:Q:2336:ARG:NH2	2.43	0.48
1:J:371:ILE:HD11	1:J:476:ILE:CD1	2.44	0.48
1:R:1369:ILE:HD12	1:R:1391:LEU:HD22	1.95	0.48
2:S:1742:ASN:HB3	2:S:1844:LEU:HD21	1.95	0.48
1:D:637:LEU:HD11	1:D:693:TYR:CD2	2.49	0.48
1:D:1442:LEU:HD21	1:D:1477:PHE:HE2	1.77	0.48
1:E:1130:ILE:O	1:E:1130:ILE:HG22	2.14	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:851:ARG:O	1:C:855:TYR:N	2.37	0.48
1:C:1355:PHE:O	1:C:1372:HIS:N	2.43	0.48
1:C:2251:TRP:CD1	1:C:2288:ILE:HD11	2.49	0.48
1:F:809:LEU:HD11	1:F:815:LEU:HD21	1.95	0.48
1:F:1299:ILE:O	1:F:1301:ASP:N	2.41	0.48
1:F:1971:VAL:HG13	1:F:1987:ALA:O	2.14	0.48
1:B:136:SER:C	1:B:456:ASN:HD21	2.15	0.48
1:B:1419:TYR:HB3	1:B:1466:VAL:HG21	1.95	0.48
1:B:1924:GLU:O	1:B:2209:LYS:NZ	2.47	0.48
1:G:2319:ILE:HA	1:G:2322:MET:HB2	1.96	0.48
1:J:961:PHE:O	1:J:965:THR:HG22	2.13	0.48
1:J:1289:LEU:HD21	1:J:1291:VAL:HG13	1.95	0.48
1:R:979:ILE:HD12	1:R:980:ARG:N	2.29	0.48
1:D:1664:MET:CE	1:D:1679:VAL:HG21	2.43	0.47
1:D:1917:ASP:OD2	1:D:1956:ASP:HA	2.14	0.47
1:C:569:GLU:OE2	1:C:573:ASN:ND2	2.39	0.47
1:C:863:VAL:HG21	1:C:881:TRP:CH2	2.49	0.47
1:C:910:ILE:HG12	1:C:915:GLU:HB2	1.94	0.47
1:C:1114:GLN:HE22	1:C:1147:MET:HB3	1.79	0.47
1:C:1494:SER:HA	1:C:1497:MET:HG3	1.96	0.47
1:B:197:ALA:HB1	1:B:227:ILE:CD1	2.32	0.47
1:B:249:VAL:HG12	1:B:411:LEU:HD12	1.96	0.47
1:A:866:GLY:HA3	1:A:1030:SER:HB2	1.96	0.47
1:G:1860:ARG:NH2	1:G:2001:PRO:O	2.47	0.47
1:Q:2079:LEU:HD12	1:Q:2219:LEU:HB2	1.95	0.47
1:J:962:PHE:HA	1:J:965:THR:HG22	1.94	0.47
1:J:1457:LEU:HD13	1:J:1506:LEU:HD23	1.96	0.47
1:R:638:HIS:CD2	1:R:736:ILE:HG23	2.49	0.47
1:D:306:TYR:CZ	1:D:327:ALA:HB2	2.49	0.47
1:D:1369:ILE:HA	1:D:1393:ALA:HB2	1.96	0.47
1:D:2068:VAL:HB	1:D:2095:VAL:HG12	1.96	0.47
1:E:1405:LEU:HD23	1:E:1421:PHE:CD1	2.48	0.47
1:E:1789:GLU:OE1	1:E:1792:ILE:HG23	2.14	0.47
1:E:2108:TYR:OH	1:E:2218:ARG:NE	2.46	0.47
1:C:1873:GLN:C	1:C:1877:ASN:HD22	2.17	0.47
1:F:953:ASN:HA	1:F:958:ARG:HD3	1.96	0.47
1:F:954:ARG:HG3	1:A:2200:GLY:HA3	1.95	0.47
1:F:1602:PRO:HA	1:F:1605:PHE:CD1	2.49	0.47
1:F:1992:THR:HG23	1:F:2013:GLN:C	2.34	0.47
1:F:2236:ASN:HB3	1:F:2239:LEU:HD12	1.96	0.47
1:F:2258:THR:HG21	1:A:293:ASP:O	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1083:GLN:NE2	1:B:1445:GLU:OE2	2.45	0.47
1:B:1172:LYS:HZ2	1:B:1248:ILE:HG23	1.78	0.47
1:A:698:ASN:HB3	1:A:833:THR:HG22	1.97	0.47
1:A:1421:PHE:HB3	1:A:1457:LEU:HD11	1.96	0.47
1:G:1836:GLN:OE1	1:G:2028:GLN:NE2	2.47	0.47
1:G:2064:GLY:O	1:G:2067:ILE:HG22	2.14	0.47
1:Q:1696:ASP:O	1:Q:1803:ILE:HD11	2.13	0.47
1:Q:1973:VAL:HG11	1:Q:2026:THR:HA	1.96	0.47
1:R:109:VAL:HG22	1:R:466:MET:HB3	1.96	0.47
1:R:1314:GLN:NE2	1:R:1315:ASN:OD1	2.47	0.47
2:H:1652:MET:HA	2:H:1686:HIS:HB2	1.96	0.47
2:M:1758:ARG:O	2:M:1845:TYR:OH	2.26	0.47
2:W:1689:MET:HB2	2:W:1736:VAL:HG11	1.96	0.47
1:D:1294:LYS:O	1:D:1295:THR:OG1	2.20	0.47
1:D:1438:SER:O	1:D:1442:LEU:N	2.29	0.47
1:D:2077:PRO:HA	1:D:2104:HIS:O	2.14	0.47
1:D:2146:HIS:CE1	1:D:2150:ARG:HE	2.31	0.47
1:E:1375:PRO:HA	1:E:1378:ALA:HB3	1.96	0.47
1:C:1287:HIS:O	1:C:1325:ARG:N	2.43	0.47
1:C:1499:TYR:O	1:C:1503:LEU:HD13	2.14	0.47
1:C:1794:PRO:HA	1:C:1797:LEU:HD12	1.95	0.47
1:F:258:LEU:HD22	1:F:352:ALA:HB2	1.96	0.47
1:F:973:GLN:HE21	1:A:2254:GLU:HA	1.79	0.47
1:F:1405:LEU:HD23	1:F:1421:PHE:HD1	1.79	0.47
1:F:1828:GLY:O	1:F:1832:VAL:HG23	2.14	0.47
1:B:626:PRO:CB	1:B:738:ILE:HD12	2.43	0.47
1:B:2230:LYS:O	1:B:2234:ASN:N	2.43	0.47
1:B:2291:ASN:O	1:B:2295:ILE:HD12	2.14	0.47
1:A:1999:ALA:HB2	1:A:2008:ALA:N	2.29	0.47
1:G:1680:ILE:HG21	1:G:1699:PHE:HD1	1.79	0.47
1:J:979:ILE:HD12	1:J:980:ARG:N	2.29	0.47
1:R:1230:CYS:O	1:R:1232:ARG:NH1	2.47	0.47
1:D:1684:ILE:HD12	1:D:1719:ASN:N	2.29	0.47
1:D:1816:THR:O	1:D:1817:ILE:HD13	2.14	0.47
1:D:2090:GLY:O	1:D:2094:VAL:HG23	2.13	0.47
1:E:869:LEU:HD22	1:E:874:PHE:CD1	2.49	0.47
1:E:1166:VAL:HG22	1:E:1179:GLU:O	2.15	0.47
1:E:2288:ILE:H	1:E:2288:ILE:HD12	1.78	0.47
1:C:123:ILE:HG23	1:C:206:TRP:CE3	2.49	0.47
1:C:193:ILE:HG21	1:C:218:LEU:HD11	1.97	0.47
1:C:1129:SER:H	1:C:1430:SER:HB2	1.79	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:193:ILE:HG21	1:F:218:LEU:HD11	1.95	0.47
1:F:2016:GLN:HB2	1:F:2047:ARG:HG3	1.96	0.47
1:F:2258:THR:HG22	1:A:296:ASP:CB	2.42	0.47
1:B:1240:ARG:O	1:B:1294:LYS:HB3	2.14	0.47
1:B:1390:ASP:HB3	1:B:1407:ALA:HB3	1.96	0.47
1:B:1539:TYR:HH	1:B:1606:ARG:NH2	2.11	0.47
1:A:204:ALA:HB1	1:A:230:MET:HG3	1.95	0.47
1:A:2296:SER:O	1:A:2300:VAL:HG23	2.15	0.47
1:G:1595:THR:OG1	1:G:1596:THR:N	2.48	0.47
1:J:158:THR:HG22	1:J:186:ASN:HD22	1.79	0.47
1:R:1532:LEU:HD12	1:R:1542:ILE:HG23	1.96	0.47
2:M:1664:LEU:CD2	2:M:1723:ILE:HD12	2.44	0.47
2:U:1707:ILE:HG21	2:U:1842:VAL:O	2.14	0.47
1:D:1455:ASP:O	1:D:1459:VAL:HG23	2.13	0.47
1:E:937:PRO:HB2	1:E:940:GLN:HE21	1.80	0.47
1:E:969:VAL:O	1:E:973:GLN:HB2	2.15	0.47
1:E:1665:THR:HG23	1:E:1676:ASP:OD1	2.13	0.47
1:E:1692:GLY:HA3	1:E:1723:ARG:NH2	2.30	0.47
1:E:1971:VAL:HG23	1:E:1987:ALA:O	2.14	0.47
1:C:640:ALA:CB	1:C:685:VAL:HG11	2.45	0.47
1:C:1121:GLN:C	1:C:1125:LEU:HD23	2.33	0.47
1:C:1152:VAL:HG22	1:C:1156:ARG:HG3	1.97	0.47
1:F:239:ALA:HA	1:F:245:ALA:HB1	1.96	0.47
1:F:1598:ILE:HG23	1:F:1599:TYR:CD2	2.49	0.47
1:F:1705:LEU:O	1:F:1708:ALA:HB3	2.13	0.47
1:B:1839:ILE:HD11	1:B:1898:TRP:CH2	2.50	0.47
1:A:1408:ALA:O	1:A:1416:VAL:HG12	2.14	0.47
1:Q:2096:ILE:HD12	1:Q:2096:ILE:O	2.14	0.47
1:J:578:LEU:O	1:J:595:ILE:HD11	2.15	0.47
1:J:941:ILE:HD11	1:J:972:VAL:HB	1.97	0.47
1:J:1067:THR:HG21	1:J:1085:LEU:HD23	1.97	0.47
1:J:1571:MET:SD	1:J:1575:THR:HG21	2.55	0.47
2:M:1650:MET:HB3	2:M:1674:ILE:HG23	1.94	0.47
2:U:1654:VAL:HG12	2:U:1688:VAL:HB	1.96	0.47
2:U:1691:THR:HG22	2:U:1697:CYS:HB3	1.95	0.47
1:D:362:ILE:HD11	1:D:408:ALA:HB1	1.94	0.47
1:D:682:VAL:O	1:D:698:ASN:N	2.47	0.47
1:D:937:PRO:HB2	1:D:940:GLN:HE21	1.78	0.47
1:D:1063:LEU:HD12	1:D:1081:ALA:HB1	1.96	0.47
1:D:1526:ILE:CD1	1:D:1528:ILE:HD11	2.44	0.47
1:D:1598:ILE:HG13	1:D:1599:TYR:H	1.80	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1691:PHE:HE2	1:D:1719:ASN:HB2	1.80	0.47
1:D:1789:GLU:HB3	1:D:1792:ILE:HD13	1.96	0.47
1:D:1840:GLN:O	1:D:1884:THR:HA	2.15	0.47
1:E:216:PRO:O	1:E:234:SER:OG	2.31	0.47
1:E:910:ILE:CG1	1:E:915:GLU:HB2	2.43	0.47
1:E:1070:SER:O	1:E:1070:SER:OG	2.29	0.47
1:E:1076:LYS:HG3	1:E:1077:VAL:HG23	1.96	0.47
1:E:1481:VAL:HG22	1:E:1482:ILE:N	2.29	0.47
1:E:1680:ILE:HG21	1:E:1699:PHE:HD1	1.77	0.47
1:F:2238:GLU:OE1	1:F:2238:GLU:N	2.40	0.47
1:B:1483:MET:HB2	1:B:1488:ILE:HD11	1.96	0.47
1:B:1753:LEU:HB2	1:B:1758:TYR:HB3	1.96	0.47
1:B:2095:VAL:HG23	1:B:2096:ILE:HG23	1.96	0.47
1:A:138:ARG:O	1:A:142:TYR:N	2.43	0.47
1:A:941:ILE:HD13	1:A:968:ILE:HG12	1.96	0.47
1:J:1079:LEU:HD12	1:J:1444:ASN:HA	1.97	0.47
1:R:1457:LEU:HD13	1:R:1506:LEU:HD23	1.95	0.47
2:Y:1691:THR:OG1	2:Y:1715:SER:OG	2.29	0.47
1:D:869:LEU:HD13	1:D:874:PHE:CG	2.49	0.47
1:D:1381:LEU:O	1:D:1381:LEU:HD12	2.14	0.47
1:D:1418:ASP:OD1	1:D:1419:TYR:N	2.48	0.47
1:D:1910:VAL:HG11	1:D:1982:PRO:CG	2.44	0.47
1:D:2251:TRP:HE3	1:D:2288:ILE:HG23	1.76	0.47
1:D:2319:ILE:HD11	1:C:2322:MET:HB3	1.95	0.47
1:D:2329:THR:O	1:D:2332:ALA:HB3	2.14	0.47
1:E:190:VAL:HG11	1:E:221:LEU:HB2	1.97	0.47
1:E:291:VAL:HA	1:E:296:ASP:HB3	1.96	0.47
1:E:629:MET:HB3	1:E:836:LEU:HD11	1.95	0.47
1:E:869:LEU:HD12	1:E:1036:LYS:HD2	1.95	0.47
1:E:1127:GLU:OE1	1:E:1479:PRO:HB3	2.15	0.47
1:E:2221:ARG:HD3	1:E:2267:ASN:O	2.14	0.47
1:C:976:ARG:NH1	1:C:977:SER:OG	2.48	0.47
1:C:990:LEU:CD1	1:C:1044:LEU:HD11	2.44	0.47
1:C:1248:ILE:O	1:C:1248:ILE:HG22	2.14	0.47
1:C:2218:ARG:CZ	1:C:2222:LEU:HD21	2.44	0.47
1:C:2221:ARG:CZ	1:C:2267:ASN:HA	2.45	0.47
1:F:1102:SER:OG	1:F:1103:ILE:N	2.47	0.47
1:F:1129:SER:H	1:F:1430:SER:HB2	1.80	0.47
1:F:1865:SER:O	1:F:1868:GLN:HB2	2.14	0.47
1:F:2221:ARG:CZ	1:F:2267:ASN:HA	2.45	0.47
1:B:176:VAL:HG21	1:B:196:ILE:HG12	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:889:LEU:O	1:B:979:ILE:HG22	2.15	0.47
1:B:900:GLN:O	1:B:904:THR:HG23	2.14	0.47
1:B:1534:ASN:HD22	1:B:1535:GLU:N	2.12	0.47
1:A:116:LYS:HE2	1:A:228:ALA:HB2	1.95	0.47
1:A:253:ALA:HB2	1:A:414:MET:SD	2.55	0.47
1:A:1097:HIS:CD2	1:A:1133:VAL:HG12	2.50	0.47
1:A:1248:ILE:HG22	1:A:1248:ILE:O	2.15	0.47
1:A:1436:GLU:OE1	1:A:1436:GLU:N	2.47	0.47
1:G:1839:ILE:HD12	1:G:1895:VAL:HG22	1.97	0.47
1:G:2221:ARG:NH1	1:G:2264:TRP:O	2.46	0.47
1:Q:2071:LEU:HD21	1:Q:2105:MET:SD	2.54	0.47
1:J:974:ARG:O	1:J:982:HIS:ND1	2.48	0.47
1:J:1100:VAL:HA	1:J:1103:ILE:HG22	1.97	0.47
1:R:974:ARG:O	1:R:982:HIS:ND1	2.47	0.47
1:D:849:LEU:HD21	1:D:888:THR:HB	1.96	0.47
1:D:2059:GLN:NE2	1:C:1878:ASN:O	2.48	0.47
1:E:118:ILE:HD12	1:E:466:MET:CG	2.45	0.47
1:E:636:ALA:HB2	1:E:683:LEU:HG	1.95	0.47
1:E:1934:PRO:HD3	1:E:1989:GLU:HA	1.96	0.47
1:E:2307:LEU:CD2	1:F:2304:ILE:HD11	2.44	0.47
1:F:123:ILE:HG23	1:F:206:TRP:CE3	2.50	0.47
1:F:756:SER:N	1:F:813:CYS:O	2.47	0.47
1:F:1606:ARG:O	1:F:1610:ILE:HG13	2.15	0.47
1:F:1855:ASN:OD1	1:F:1862:VAL:N	2.48	0.47
1:F:2018:TRP:HE1	1:F:2092:SER:HG	1.61	0.47
1:F:2082:ILE:HG22	1:F:2086:ALA:HB3	1.97	0.47
1:F:2082:ILE:HD13	1:F:2109:ALA:HB2	1.96	0.47
1:F:2224:LEU:HD13	1:F:2274:LEU:HB3	1.97	0.47
1:A:1785:ILE:HG21	1:Q:2190:HIS:CD2	2.49	0.47
1:R:943:ASN:OD1	1:R:944:ILE:N	2.47	0.47
2:H:1689:MET:HB2	2:H:1736:VAL:HG11	1.97	0.47
2:K:1652:MET:HG2	2:K:1686:HIS:HB2	1.96	0.47
2:W:1809:VAL:HG13	2:W:1835:ARG:HA	1.97	0.47
1:D:1138:PHE:HB3	1:D:1149:ALA:HB3	1.97	0.47
1:D:1723:ARG:NH1	1:D:1789:GLU:OE2	2.48	0.47
1:D:1910:VAL:HG21	1:D:1982:PRO:HD2	1.97	0.47
1:E:1124:ILE:O	1:E:1124:ILE:HG22	2.15	0.47
1:E:1138:PHE:HB3	1:E:1149:ALA:CB	2.45	0.47
1:E:1405:LEU:HD22	1:E:1420:ARG:O	2.15	0.47
1:E:1421:PHE:CE1	1:E:1460:ALA:HB1	2.50	0.47
1:E:2261:ALA:O	1:E:2264:TRP:HB3	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:194:LEU:HD22	1:C:221:LEU:HB3	1.96	0.47
1:C:328:ASP:OD2	1:C:850:HIS:NE2	2.47	0.47
1:C:1090:LEU:HD11	1:C:1096:ARG:CZ	2.45	0.47
1:C:1921:ARG:NH1	1:C:1953:GLY:O	2.43	0.47
1:F:140:TRP:CE3	1:F:459:ALA:HB1	2.49	0.47
1:F:1132:ASP:OD1	1:F:1333:GLN:NE2	2.48	0.47
1:F:1895:VAL:HG12	1:F:1899:LEU:HD12	1.96	0.47
1:B:920:LYS:O	1:B:923:ALA:HB3	2.14	0.47
1:B:1502:ARG:HE	1:B:1503:LEU:HD12	1.80	0.47
1:B:1999:ALA:HB2	1:B:2008:ALA:N	2.30	0.47
1:A:912:PRO:HA	1:A:915:GLU:HB3	1.97	0.47
1:A:1079:LEU:HD21	1:A:1447:GLU:CB	2.44	0.47
1:A:1314:GLN:HE22	1:A:1315:ASN:ND2	2.13	0.47
1:A:1707:ARG:HA	1:A:1814:ILE:HG21	1.97	0.47
1:G:1843:ASN:O	1:G:1843:ASN:ND2	2.47	0.47
1:G:2096:ILE:O	1:G:2096:ILE:HD12	2.15	0.47
1:R:206:TRP:HZ2	1:R:442:LEU:HD22	1.80	0.47
1:R:1123:LEU:HD12	1:R:1152:VAL:HG11	1.97	0.47
2:H:1665:VAL:HG22	2:H:1719:VAL:HG11	1.97	0.47
2:Y:1780:LEU:HD22	2:Y:1835:ARG:HD2	1.97	0.47
1:D:638:HIS:ND1	1:D:727:MET:HB3	2.30	0.47
1:D:1138:PHE:HB3	1:D:1149:ALA:CB	2.45	0.47
1:D:1955:PHE:HA	1:D:2212:ARG:HH22	1.80	0.47
1:D:2082:ILE:HG12	1:D:2113:SER:HB2	1.95	0.47
1:D:2091:GLY:O	1:D:2095:VAL:HG22	2.15	0.47
1:D:2229:LYS:HG2	1:D:2244:ILE:HG21	1.96	0.47
1:E:239:ALA:HA	1:E:245:ALA:HB1	1.97	0.47
1:E:1612:LEU:HD21	1:E:1616:MET:HG3	1.97	0.47
1:E:2055:ASP:OD1	1:E:2056:MET:N	2.47	0.47
1:C:608:ILE:O	1:C:726:TYR:OH	2.24	0.47
1:C:630:LEU:O	1:C:634:CYS:N	2.42	0.47
1:C:1548:VAL:HG21	1:C:1559:GLN:O	2.15	0.47
1:C:1873:GLN:HA	1:C:1877:ASN:ND2	2.30	0.47
1:C:1954:PHE:O	1:C:2212:ARG:NH1	2.43	0.47
1:F:1090:LEU:HD11	1:F:1096:ARG:CZ	2.45	0.47
1:B:448:CYS:HA	1:B:505:VAL:HG11	1.97	0.47
1:B:577:ALA:O	1:B:581:LEU:N	2.44	0.47
1:B:1469:ASP:O	1:B:1509:LEU:HD12	2.14	0.47
1:A:178:VAL:HG12	1:A:192:LEU:CD2	2.45	0.47
1:A:374:PHE:CD2	1:A:453:ALA:HB2	2.50	0.47
1:A:1069:LEU:HD21	1:A:1078:ALA:CB	2.44	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1643:GLY:HA3	1:A:1697:LEU:HD21	1.97	0.47
1:J:1101:GLU:O	1:J:1105:LEU:HD23	2.15	0.47
1:R:158:THR:HG22	1:R:186:ASN:HD22	1.80	0.47
1:R:760:GLY:O	1:R:809:LEU:N	2.48	0.47
1:R:941:ILE:HD11	1:R:972:VAL:HB	1.97	0.47
1:D:1491:SER:O	1:D:1494:SER:OG	2.23	0.46
1:D:2288:ILE:O	1:D:2292:ILE:HG13	2.14	0.46
1:E:291:VAL:HG22	1:E:346:ILE:O	2.15	0.46
1:E:1038:ASN:OD1	1:E:1077:VAL:HG21	2.15	0.46
1:E:1908:SER:OG	1:E:1909:SER:O	2.33	0.46
1:E:2019:PHE:HB2	1:E:2021:ASP:OD1	2.14	0.46
1:E:2089:ARG:NH1	1:E:2116:SER:OG	2.49	0.46
1:E:2139:ARG:NH1	1:F:1734:PHE:O	2.47	0.46
1:E:2247:MET:SD	1:E:2248:LEU:N	2.88	0.46
1:E:2291:ASN:O	1:E:2294:CYS:N	2.48	0.46
1:C:615:ARG:NH1	1:C:714:LEU:O	2.46	0.46
1:C:1819:LEU:CD2	1:C:1892:VAL:HG12	2.45	0.46
1:C:2082:ILE:CG1	1:C:2088:LEU:HD13	2.43	0.46
1:C:2303:GLN:O	1:C:2306:SER:OG	2.24	0.46
1:F:1108:ILE:HD13	1:F:1116:CYS:SG	2.55	0.46
1:F:1809:LEU:HD12	1:F:1810:ALA:N	2.30	0.46
1:F:2295:ILE:HD12	1:F:2295:ILE:H	1.79	0.46
1:B:978:GLY:O	1:B:982:HIS:ND1	2.39	0.46
1:B:1140:HIS:O	1:B:1146:ARG:HD3	2.15	0.46
1:A:1882:HIS:HE1	1:A:2028:GLN:HE22	1.62	0.46
1:R:102:VAL:HG23	1:R:145:PHE:CE1	2.51	0.46
2:H:1765:GLU:O	2:H:1807:ILE:N	2.45	0.46
1:D:102:VAL:HG23	1:D:145:PHE:CD1	2.50	0.46
1:D:332:ASN:HD21	1:D:336:GLN:HE21	1.63	0.46
1:D:442:LEU:HB2	1:D:461:GLN:HE22	1.80	0.46
1:D:765:TYR:OH	1:D:799:ILE:HG21	2.15	0.46
1:D:2331:ARG:O	1:D:2334:VAL:HG12	2.15	0.46
1:E:1737:ALA:HB2	1:E:1779:ARG:HE	1.80	0.46
1:E:2090:GLY:O	1:E:2094:VAL:HG23	2.15	0.46
1:C:863:VAL:HG21	1:C:881:TRP:HH2	1.80	0.46
1:C:1558:PHE:N	1:C:1571:MET:O	2.42	0.46
1:F:454:ASP:OD2	1:F:502:ARG:NE	2.48	0.46
1:F:640:ALA:CB	1:F:685:VAL:HG11	2.45	0.46
1:F:1598:ILE:HA	1:F:1601:ILE:HG12	1.97	0.46
1:F:1602:PRO:HA	1:F:1605:PHE:CE1	2.50	0.46
1:F:1605:PHE:HZ	1:F:1632:LEU:HD22	1.80	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:138:ARG:O	1:B:142:TYR:N	2.40	0.46
1:B:1321:ASP:OD1	2:H:1726:ARG:NH2	2.47	0.46
1:A:136:SER:C	1:A:456:ASN:HD21	2.19	0.46
1:A:899:LEU:HD21	1:A:922:MET:HA	1.96	0.46
1:A:1598:ILE:CD1	1:A:1660:VAL:HG21	2.45	0.46
1:A:2108:TYR:OH	1:A:2218:ARG:NE	2.46	0.46
2:M:1691:THR:CG2	2:M:1736:VAL:HG12	2.44	0.46
2:W:1810:VAL:O	2:W:1835:ARG:N	2.45	0.46
1:D:938:SER:OG	1:D:939:GLN:N	2.48	0.46
1:D:1700:LEU:HD22	1:D:1701:ARG:HH11	1.80	0.46
1:E:122:LEU:HB2	1:E:202:VAL:HG21	1.98	0.46
1:C:454:ASP:OD2	1:C:502:ARG:NE	2.48	0.46
1:C:1178:VAL:HG12	1:C:1236:MET:HB3	1.97	0.46
1:C:1492:VAL:O	1:C:1496:VAL:HG12	2.16	0.46
1:F:945:LEU:HD11	1:F:965:THR:HA	1.97	0.46
1:F:1305:ALA:HA	1:F:1308:PHE:HB2	1.97	0.46
1:B:1596:THR:N	1:B:1888:ASP:OD2	2.46	0.46
1:G:2071:LEU:HD21	1:G:2105:MET:SD	2.56	0.46
1:Q:1875:MET:SD	1:Q:1880:VAL:HG11	2.56	0.46
1:R:332:ASN:O	1:R:336:GLN:N	2.45	0.46
2:M:1784:VAL:HB	2:M:1789:ALA:HB3	1.96	0.46
1:D:1114:GLN:NE2	1:D:1148:ALA:HB2	2.27	0.46
1:D:1389:PHE:N	1:D:1409:LYS:HE3	2.30	0.46
1:E:335:ARG:O	1:E:339:ALA:N	2.38	0.46
1:E:1083:GLN:HG2	1:E:1444:ASN:ND2	2.31	0.46
1:E:2146:HIS:CE1	1:E:2150:ARG:HE	2.33	0.46
1:C:1845:HIS:HB3	1:C:1867:ASN:HA	1.98	0.46
1:B:304:VAL:HG23	1:B:308:VAL:HG12	1.96	0.46
1:B:1289:LEU:HD12	1:B:1327:LEU:HG	1.97	0.46
1:B:1308:PHE:HB3	1:B:1358:PHE:HE2	1.80	0.46
1:B:1668:SER:CB	1:B:1671:TYR:HB2	2.45	0.46
1:A:1555:GLN:HB2	1:A:1572:LEU:HD23	1.98	0.46
1:J:1408:ALA:HB2	1:J:1418:ASP:HB3	1.97	0.46
1:D:1055:LEU:HD12	1:D:1056:THR:HG22	1.96	0.46
1:D:1124:ILE:HG22	1:D:1124:ILE:O	2.16	0.46
1:D:2040:LEU:O	1:D:2078:VAL:HA	2.16	0.46
1:E:853:PHE:CE1	1:E:889:LEU:HB3	2.50	0.46
1:E:1369:ILE:O	1:E:1404:TYR:OH	2.22	0.46
1:E:1628:PRO:HA	1:E:1631:MET:HG2	1.97	0.46
1:E:2247:MET:HA	1:E:2250:ARG:CZ	2.45	0.46
1:C:504:HIS:N	1:C:564:GLY:O	2.43	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1086:ILE:HG21	1:C:1441:TYR:CE1	2.50	0.46
1:C:1167:GLN:OE1	1:C:1167:GLN:N	2.48	0.46
1:C:1612:LEU:HB2	1:C:1896:LEU:HD21	1.97	0.46
1:C:1967:TRP:O	1:C:2025:LYS:NZ	2.36	0.46
1:C:2258:THR:OG1	1:B:293:ASP:N	2.48	0.46
1:F:1167:GLN:OE1	1:F:1167:GLN:N	2.49	0.46
1:F:1691:PHE:HB2	1:F:1722:ALA:HA	1.96	0.46
1:F:1903:PRO:HD3	1:F:1910:VAL:HG12	1.96	0.46
1:B:371:ILE:HG12	1:B:470:LEU:HD13	1.97	0.46
1:B:1428:ARG:HB3	1:B:1478:VAL:HB	1.97	0.46
1:B:2107:MET:HB3	1:B:2202:ILE:HA	1.96	0.46
1:A:374:PHE:HD2	1:A:453:ALA:HB2	1.80	0.46
1:A:1059:LEU:O	1:A:1062:ILE:N	2.47	0.46
1:A:1075:ALA:O	1:A:1079:LEU:HD13	2.15	0.46
1:A:1565:GLN:HE21	1:A:1648:MET:HG3	1.80	0.46
1:A:1927:PRO:HG3	1:A:1937:MET:HG3	1.98	0.46
1:A:2221:ARG:HD2	1:A:2270:LEU:HD12	1.96	0.46
1:Q:1651:LEU:HD12	1:Q:1652:PRO:HD2	1.96	0.46
1:R:143:GLU:O	1:R:146:ARG:NH1	2.48	0.46
1:R:938:SER:OG	1:R:939:GLN:N	2.49	0.46
1:R:1171:LEU:HD12	1:R:1251:GLU:OE2	2.14	0.46
1:D:836:LEU:HD22	1:D:838:ARG:NH2	2.31	0.46
1:D:1438:SER:HB2	1:D:1481:VAL:HG11	1.98	0.46
1:E:102:VAL:HG23	1:E:145:PHE:CD1	2.50	0.46
1:E:176:VAL:HG11	1:E:196:ILE:HG23	1.97	0.46
1:E:869:LEU:HD22	1:E:874:PHE:CE1	2.50	0.46
1:E:1492:VAL:O	1:E:1496:VAL:HG12	2.15	0.46
1:E:2079:LEU:HD12	1:E:2079:LEU:O	2.15	0.46
1:C:860:LEU:O	1:C:864:MET:N	2.48	0.46
1:C:917:SER:CB	1:C:944:ILE:HD13	2.44	0.46
1:C:1326:ARG:HG3	1:C:1359:ARG:HG2	1.98	0.46
1:C:1812:ASN:HA	1:C:2035:ARG:HD2	1.96	0.46
1:F:979:ILE:HD12	1:F:980:ARG:N	2.31	0.46
1:B:963:MET:HA	1:B:966:GLN:NE2	2.30	0.46
1:A:634:CYS:SG	1:A:716:LEU:HD22	2.56	0.46
1:A:1028:ILE:HA	1:A:1031:HIS:CD2	2.50	0.46
1:A:1100:VAL:HA	1:A:1103:ILE:HG22	1.98	0.46
1:J:1480:THR:O	1:J:1480:THR:OG1	2.31	0.46
2:W:1715:SER:N	2:W:1734:PHE:O	2.47	0.46
1:D:455:VAL:HG22	1:D:475:ASP:HB3	1.97	0.46
1:D:1003:ASN:N	1:D:1003:ASN:OD1	2.47	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1539:TYR:CE2	1:D:1629:SER:HA	2.51	0.46
1:D:1956:ASP:OD2	1:D:1978:LEU:HA	2.16	0.46
1:E:322:ARG:NH1	1:E:337:VAL:HG22	2.31	0.46
1:E:1056:THR:HG23	1:E:1059:LEU:CB	2.46	0.46
1:C:2287:VAL:HG12	1:C:2291:ASN:HD21	1.81	0.46
1:F:630:LEU:O	1:F:634:CYS:N	2.43	0.46
1:F:1714:ILE:HD12	1:F:1817:ILE:HB	1.98	0.46
1:F:2085:GLN:N	1:F:2112:GLU:O	2.46	0.46
1:B:1121:GLN:O	1:B:1125:LEU:HB3	2.16	0.46
1:B:1151:GLU:O	1:B:1155:ARG:HG3	2.15	0.46
1:B:1482:ILE:HG23	1:B:1519:LEU:HA	1.97	0.46
1:B:2304:ILE:HA	1:G:2304:ILE:HD12	1.98	0.46
1:A:1056:THR:HG23	1:A:1059:LEU:HB2	1.97	0.46
1:G:1651:LEU:HD12	1:G:1652:PRO:HD2	1.98	0.46
1:Q:1956:ASP:OD1	1:Q:2212:ARG:NH2	2.42	0.46
1:Q:2225:GLU:HA	1:Q:2274:LEU:HD22	1.97	0.46
1:J:193:ILE:HG21	1:J:218:LEU:CD1	2.45	0.46
1:R:454:ASP:OD2	1:R:502:ARG:NE	2.48	0.46
2:H:1784:VAL:HB	2:H:1789:ALA:HB3	1.98	0.46
1:D:1709:GLU:HB3	1:D:1711:ILE:HG12	1.97	0.46
1:E:902:ILE:HG23	1:E:903:MET:N	2.31	0.46
1:C:1468:THR:O	1:C:1507:ARG:NE	2.46	0.46
1:F:991:LEU:HD12	1:F:992:ARG:HE	1.81	0.46
1:F:1970:THR:HG23	1:F:1971:VAL:HG23	1.98	0.46
1:F:2258:THR:CG2	1:A:296:ASP:HB2	2.44	0.46
1:B:1511:ALA:HB3	1:B:1532:LEU:HB2	1.98	0.46
1:A:157:VAL:HG11	1:A:162:LEU:HD12	1.98	0.46
1:A:879:LYS:O	1:A:883:GLU:HG2	2.15	0.46
1:A:889:LEU:HD21	1:A:982:HIS:HB2	1.98	0.46
1:A:1628:PRO:HA	1:A:1631:MET:HG2	1.98	0.46
1:A:2295:ILE:HD12	1:A:2295:ILE:H	1.81	0.46
1:G:2270:LEU:HD13	1:G:2274:LEU:CD1	2.46	0.46
1:J:1287:HIS:O	1:J:1325:ARG:N	2.49	0.46
1:R:380:VAL:HG11	1:R:388:ILE:HB	1.98	0.46
1:R:1299:ILE:O	1:R:1301:ASP:N	2.46	0.46
2:H:1669:ALA:HB1	2:H:1674:ILE:O	2.16	0.46
2:S:1651:SER:O	2:S:1686:HIS:N	2.43	0.46
2:W:1792:VAL:HG11	2:W:1798:PHE:HD1	1.81	0.46
1:D:637:LEU:HD12	1:D:685:VAL:CG1	2.46	0.46
1:D:1249:PHE:HE1	1:D:1318:THR:HG22	1.80	0.46
1:D:1768:HIS:O	1:D:1783:THR:OG1	2.21	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1912:LEU:CD2	1:D:1981:ILE:HG22	2.45	0.46
1:E:2141:ASP:OD1	1:E:2179:TYR:OH	2.34	0.46
1:C:140:TRP:CD2	1:C:459:ALA:HB1	2.51	0.46
1:C:1818:SER:C	1:C:1819:LEU:HD12	2.36	0.46
1:F:1138:PHE:CE2	1:F:1292:ALA:HB1	2.49	0.46
1:F:1482:ILE:HG23	1:F:1518:ARG:O	2.15	0.46
1:B:332:ASN:CB	1:B:906:VAL:HG22	2.46	0.46
1:B:849:LEU:HD23	1:B:849:LEU:O	2.16	0.46
1:B:2064:GLY:O	1:B:2067:ILE:HG22	2.15	0.46
1:A:780:ALA:HB3	1:A:791:LEU:CD1	2.45	0.46
1:G:2318:SER:O	1:G:2322:MET:N	2.45	0.46
1:Q:1988:VAL:HG11	1:Q:2016:GLN:HA	1.96	0.46
1:Q:2297:ARG:O	1:Q:2300:VAL:HG22	2.15	0.46
1:R:1512:GLU:HG2	1:R:1531:PHE:HA	1.98	0.46
1:D:883:GLU:HA	1:D:886:MET:HG2	1.98	0.46
1:D:2239:LEU:CB	1:D:2244:ILE:HD11	2.46	0.46
1:E:683:LEU:HD12	1:E:695:VAL:CG1	2.45	0.46
1:E:1875:MET:SD	1:E:1880:VAL:HG11	2.56	0.46
1:C:1678:ILE:HD12	1:C:1678:ILE:N	2.31	0.46
1:C:1684:ILE:O	1:C:1688:ILE:CA	2.56	0.46
1:C:1711:ILE:HG23	1:C:1712:PRO:HD2	1.98	0.46
1:C:2091:GLY:O	1:C:2094:VAL:HG12	2.16	0.46
1:C:2135:LYS:HA	1:C:2138:ARG:CD	2.46	0.46
1:F:1060:LEU:HA	1:F:1063:LEU:HB3	1.97	0.46
1:F:1528:ILE:HG22	1:F:1546:LYS:HA	1.98	0.46
1:F:1994:GLU:HG3	1:F:2010:ILE:HG13	1.98	0.46
1:F:2258:THR:HG22	1:A:296:ASP:N	2.27	0.46
1:B:767:VAL:HG12	1:B:768:GLU:N	2.31	0.46
1:A:1524:LYS:CD	1:A:1526:ILE:HD11	2.46	0.46
1:A:1535:GLU:OE1	1:A:1535:GLU:N	2.49	0.46
1:Q:2253:VAL:HG22	1:Q:2261:ALA:HA	1.97	0.46
1:R:681:TYR:HB3	1:R:683:LEU:HD21	1.98	0.46
2:U:1730:ASN:HD21	2:U:1732:HIS:HD2	1.63	0.46
1:D:853:PHE:CE1	1:D:889:LEU:HB3	2.52	0.45
1:D:1308:PHE:O	1:D:1311:PHE:HB3	2.16	0.45
1:D:1707:ARG:HA	1:D:1814:ILE:HD13	1.98	0.45
1:D:2119:GLU:OE2	1:D:2122:GLY:N	2.49	0.45
1:E:733:ARG:NH1	1:E:744:VAL:HG12	2.30	0.45
1:E:1000:GLN:OE1	1:E:1012:ALA:HB1	2.16	0.45
1:C:293:ASP:N	1:C:293:ASP:OD1	2.48	0.45
1:C:979:ILE:HD12	1:C:980:ARG:N	2.31	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1598:ILE:O	1:C:1601:ILE:HG13	2.16	0.45
1:F:510:ILE:HD13	1:F:560:CYS:SG	2.56	0.45
1:F:625:ARG:HB3	1:F:626:PRO:CD	2.46	0.45
1:F:726:TYR:O	1:F:737:THR:OG1	2.24	0.45
1:F:1820:VAL:HG12	1:F:1844:SER:HB2	1.98	0.45
1:B:199:ARG:HE	1:B:200:ILE:HD13	1.81	0.45
1:B:1513:LEU:HD21	1:B:1530:LEU:HD22	1.98	0.45
1:A:672:VAL:HG13	1:A:734:TYR:HE2	1.79	0.45
1:A:1411:GLU:OE2	1:A:1412:VAL:HG12	2.16	0.45
1:G:1691:PHE:N	1:G:1721:GLY:O	2.44	0.45
1:Q:1912:LEU:HD23	1:Q:1981:ILE:HG12	1.98	0.45
1:R:1510:GLN:OE1	1:R:1577:TYR:OH	2.32	0.45
2:M:1677:THR:HG22	2:O:1677:THR:HG22	1.98	0.45
1:D:1373:LEU:HD13	1:D:1373:LEU:HA	1.81	0.45
1:D:1675:ARG:NH1	1:D:1902:MET:O	2.50	0.45
1:D:1677:ILE:HD12	1:D:1714:ILE:HD11	1.98	0.45
1:D:2216:TYR:OH	1:D:2220:ARG:NH1	2.50	0.45
1:E:197:ALA:CA	1:E:202:VAL:HG22	2.45	0.45
1:E:419:SER:HA	1:E:464:ILE:HG21	1.97	0.45
1:E:1824:ALA:O	1:E:1829:ALA:HB2	2.17	0.45
1:E:2077:PRO:HA	1:E:2104:HIS:O	2.16	0.45
1:E:2203:SER:HB3	1:E:2218:ARG:NH2	2.31	0.45
1:E:2300:VAL:HG13	1:F:2307:LEU:CD2	2.45	0.45
1:E:2300:VAL:O	1:E:2304:ILE:HG13	2.16	0.45
1:C:939:GLN:HG2	1:B:2247:MET:HE3	1.97	0.45
1:C:1753:LEU:HD23	1:C:1758:TYR:HA	1.97	0.45
1:C:1858:LEU:HD12	1:C:1862:VAL:HG21	1.97	0.45
1:C:1938:LEU:HD22	1:C:1939:ALA:HB2	1.97	0.45
1:C:2135:LYS:O	1:C:2138:ARG:HD3	2.16	0.45
1:F:1152:VAL:HG22	1:F:1156:ARG:HG3	1.99	0.45
1:F:1912:LEU:HD13	1:F:1913:LEU:O	2.16	0.45
1:F:1962:GLU:OE2	1:F:1972:VAL:HG13	2.16	0.45
1:F:2218:ARG:CZ	1:F:2222:LEU:HD21	2.46	0.45
1:B:959:GLU:HA	1:B:962:PHE:HB3	1.97	0.45
1:B:1139:TYR:O	1:B:1240:ARG:NH1	2.49	0.45
1:B:1471:ASN:HB2	1:B:1508:VAL:HG13	1.98	0.45
1:B:2124:VAL:HG21	1:B:2184:VAL:HG12	1.98	0.45
1:B:2182:VAL:HG22	1:G:1748:TYR:CE1	2.51	0.45
1:A:1045:ILE:HG21	1:A:1080:ARG:NE	2.31	0.45
1:A:1060:LEU:HD12	1:A:1061:ASN:N	2.31	0.45
1:A:2065:ALA:HB1	1:Q:1834:LEU:HA	1.97	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1045:ILE:HD11	1:D:1080:ARG:NH2	2.32	0.45
1:D:1898:TRP:CZ2	1:D:1963:ILE:HG23	2.52	0.45
1:E:297:GLY:O	1:E:301:ALA:N	2.44	0.45
1:E:894:LEU:HD12	1:E:895:PRO:CD	2.45	0.45
1:C:1808:SER:HA	1:C:1834:LEU:HD12	1.99	0.45
1:C:2221:ARG:NH2	1:C:2267:ASN:OD1	2.50	0.45
1:F:1383:LEU:HD23	1:F:1383:LEU:H	1.82	0.45
1:F:1564:LYS:NZ	1:F:1565:GLN:O	2.33	0.45
1:F:1845:HIS:HB3	1:F:1867:ASN:HA	1.97	0.45
1:B:2096:ILE:O	1:B:2096:ILE:HD12	2.16	0.45
1:A:773:VAL:N	1:A:797:GLY:O	2.41	0.45
1:J:1116:CYS:O	1:J:1120:LEU:N	2.43	0.45
1:R:569:GLU:OE2	1:R:573:ASN:ND2	2.40	0.45
1:R:920:LYS:O	1:R:923:ALA:HB3	2.17	0.45
1:R:1483:MET:O	1:R:1517:ILE:HD11	2.16	0.45
2:U:1822:HIS:ND1	2:U:1856:PRO:O	2.49	0.45
1:D:178:VAL:HB	1:D:192:LEU:HD21	1.98	0.45
1:D:964:ASN:O	1:D:968:ILE:HD12	2.17	0.45
1:D:1504:TRP:HZ3	1:D:1536:SER:HG	1.60	0.45
1:D:1728:GLU:OE1	1:D:1731:ARG:NH2	2.50	0.45
1:D:1923:ILE:HD11	1:D:2212:ARG:HB2	1.97	0.45
1:D:2297:ARG:NE	1:C:2314:VAL:HG22	2.31	0.45
1:D:2335:ILE:HG23	1:C:2335:ILE:HG23	1.97	0.45
1:C:355:SER:O	1:C:610:THR:N	2.49	0.45
1:C:1568:LEU:HD21	1:C:1571:MET:HB2	1.98	0.45
1:C:2319:ILE:HG22	1:C:2323:THR:HG23	1.98	0.45
1:F:900:GLN:HE21	1:F:904:THR:HG21	1.81	0.45
1:F:2217:TRP:CB	1:F:2267:ASN:HB3	2.45	0.45
1:B:153:PHE:O	1:B:173:ASP:N	2.47	0.45
1:B:884:ARG:O	1:B:888:THR:HG23	2.16	0.45
1:B:893:SER:O	1:B:897:LEU:HD12	2.16	0.45
1:B:1454:MET:CG	1:B:1506:LEU:HD21	2.45	0.45
1:B:1482:ILE:HD13	1:B:1520:THR:HA	1.99	0.45
1:B:2296:SER:O	1:B:2300:VAL:HG23	2.15	0.45
1:A:332:ASN:CB	1:A:906:VAL:HG22	2.47	0.45
1:A:407:CYS:HG	1:A:433:PHE:HZ	1.62	0.45
1:A:941:ILE:HD13	1:A:968:ILE:CG1	2.47	0.45
1:A:1405:LEU:HD23	1:A:1421:PHE:CE1	2.51	0.45
1:A:1754:THR:O	1:A:1758:TYR:N	2.42	0.45
1:G:1875:MET:SD	1:G:1880:VAL:HG11	2.56	0.45
1:D:432:SER:OG	1:D:645:ARG:NH2	2.49	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:633:VAL:HG13	1:D:695:VAL:HG11	1.99	0.45
1:D:687:ARG:HB3	1:D:867:TYR:HE2	1.82	0.45
1:D:2229:LYS:NZ	1:D:2241:ASP:OD1	2.47	0.45
1:E:1516:ASN:HB3	1:E:1525:ALA:HB1	1.98	0.45
1:E:1664:MET:SD	1:E:1679:VAL:HG21	2.57	0.45
1:C:707:HIS:HB3	1:C:715:LEU:HB2	1.99	0.45
1:C:953:ASN:HA	1:C:958:ARG:HD3	1.97	0.45
1:C:2298:ASP:O	1:C:2301:LEU:HG	2.16	0.45
1:C:2315:ALA:O	1:C:2319:ILE:HG13	2.16	0.45
1:F:976:ARG:HE	1:A:2254:GLU:CD	2.15	0.45
1:F:2319:ILE:O	1:F:2322:MET:HB2	2.16	0.45
1:B:1314:GLN:HE22	1:B:1315:ASN:ND2	2.15	0.45
1:B:1598:ILE:HD13	1:B:1660:VAL:HG21	1.99	0.45
1:A:1132:ASP:O	1:A:1333:GLN:NE2	2.50	0.45
1:A:1267:PRO:O	2:M:1699:ARG:NH2	2.50	0.45
1:A:1423:VAL:CG1	1:A:1473:ILE:HD13	2.46	0.45
1:A:1598:ILE:HD13	1:A:1660:VAL:HG21	1.97	0.45
1:Q:1973:VAL:HG12	1:Q:1986:VAL:HG12	1.98	0.45
1:J:380:VAL:HG11	1:J:388:ILE:HB	1.99	0.45
1:R:980:ARG:HA	1:R:983:MET:HG3	1.97	0.45
1:R:1167:GLN:OE1	1:R:1167:GLN:N	2.50	0.45
2:M:1657:LEU:HD23	2:M:1690:LYS:HB2	1.99	0.45
1:D:938:SER:HG	1:D:939:GLN:H	1.64	0.45
1:D:1091:PRO:CG	1:D:1095:LEU:HD21	2.47	0.45
1:D:1384:ASN:HA	1:D:1387:ARG:CG	2.46	0.45
1:D:1728:GLU:OE1	1:D:1732:HIS:NE2	2.49	0.45
1:E:405:GLU:O	1:E:409:VAL:HG23	2.16	0.45
1:E:636:ALA:HB1	1:E:685:VAL:CG2	2.46	0.45
1:E:682:VAL:HG11	1:E:698:ASN:HB3	1.97	0.45
1:E:1138:PHE:HB3	1:E:1149:ALA:HB3	1.98	0.45
1:E:1165:SER:HB2	1:E:1181:GLN:HG3	1.97	0.45
1:C:1384:ASN:HA	1:C:1387:ARG:HB2	1.99	0.45
1:C:1874:ILE:HG22	1:C:1875:MET:CE	2.47	0.45
1:C:2100:ILE:H	1:C:2100:ILE:HD12	1.82	0.45
1:C:2230:LYS:HA	1:C:2233:HIS:HD1	1.81	0.45
1:F:334:PHE:HE2	1:F:338:GLN:HE21	1.65	0.45
1:F:352:ALA:HB3	1:F:426:LEU:HD21	1.97	0.45
1:F:1377:LEU:HD12	1:F:1380:GLN:HG3	1.99	0.45
1:F:1873:GLN:C	1:F:1877:ASN:HD22	2.18	0.45
1:F:1997:ILE:HG13	1:F:2011:ILE:HD12	1.98	0.45
1:F:2329:THR:O	1:F:2332:ALA:HB3	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:626:PRO:CG	1:B:738:ILE:HD12	2.46	0.45
1:B:663:ALA:HB2	1:B:1028:ILE:HG22	1.97	0.45
1:B:892:PRO:HG2	1:B:929:ILE:HD11	1.99	0.45
1:B:1028:ILE:HA	1:B:1031:HIS:CD2	2.52	0.45
1:B:1069:LEU:HD21	1:B:1078:ALA:HB2	1.98	0.45
1:A:304:VAL:HG23	1:A:308:VAL:HG12	1.99	0.45
1:A:1313:GLN:NE2	1:A:1365:GLU:OE1	2.31	0.45
1:A:1734:PHE:CE2	1:A:1751:LEU:HD22	2.51	0.45
1:A:2124:VAL:O	1:A:2128:PHE:N	2.50	0.45
1:Q:2197:GLN:HB3	1:Q:2202:ILE:HD11	1.98	0.45
1:J:724:THR:O	1:J:739:GLY:N	2.50	0.45
1:J:1123:LEU:HD12	1:J:1152:VAL:HG11	1.98	0.45
1:J:1171:LEU:HD12	1:J:1251:GLU:OE2	2.17	0.45
1:J:1437:ALA:HB3	1:J:1481:VAL:CG2	2.46	0.45
1:D:380:VAL:HG13	1:D:613:LEU:HG	1.97	0.45
1:D:453:ALA:HB1	1:D:455:VAL:HG23	1.99	0.45
1:E:849:LEU:O	1:E:853:PHE:HB2	2.17	0.45
1:E:2300:VAL:CG1	1:F:2307:LEU:HD22	2.45	0.45
1:C:332:ASN:OD1	1:C:909:ARG:NH2	2.49	0.45
1:C:1482:ILE:HG23	1:C:1518:ARG:O	2.15	0.45
1:F:389:GLU:HB2	1:F:507:ALA:HB3	1.99	0.45
1:F:419:SER:N	1:F:464:ILE:HG21	2.32	0.45
1:F:1385:ARG:HG3	1:F:1575:THR:O	2.17	0.45
1:F:1705:LEU:C	1:F:1705:LEU:HD13	2.36	0.45
1:F:2218:ARG:HD2	1:F:2221:ARG:HE	1.82	0.45
1:B:141:SER:O	1:B:145:PHE:N	2.39	0.45
1:B:455:VAL:HG13	1:B:475:ASP:HB3	1.98	0.45
1:B:2014:ALA:HB3	1:B:2017:VAL:HG21	1.97	0.45
1:A:2139:ARG:NH2	1:Q:1731:ARG:O	2.50	0.45
1:G:2079:LEU:HD12	1:G:2219:LEU:HB2	1.98	0.45
1:G:2136:THR:HG22	1:G:2139:ARG:HH22	1.82	0.45
1:Q:1936:TRP:CG	1:Q:1941:ARG:HB3	2.51	0.45
1:Q:2081:TYR:OH	1:Q:2110:ASP:OD1	2.28	0.45
2:U:1806:PRO:HG2	2:U:1830:ALA:HB2	1.99	0.45
1:D:426:LEU:N	1:D:434:TYR:O	2.36	0.45
1:D:1063:LEU:HD21	1:D:1084:VAL:HG12	1.97	0.45
1:D:1910:VAL:HG11	1:D:1982:PRO:HG3	1.99	0.45
1:E:1758:TYR:O	1:E:1760:ARG:N	2.50	0.45
1:E:1808:SER:CA	1:E:1834:LEU:HD11	2.45	0.45
1:C:102:VAL:HG23	1:C:145:PHE:CE1	2.52	0.45
1:C:352:ALA:HB3	1:C:426:LEU:HD21	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:387:ILE:CG2	1:C:594:LEU:HD21	2.47	0.45
1:C:2015:GLY:O	1:C:2017:VAL:HG23	2.17	0.45
1:C:2227:LEU:O	1:C:2230:LYS:HG2	2.17	0.45
1:F:1606:ARG:NH2	1:F:1632:LEU:HD23	2.31	0.45
1:F:1801:GLY:O	1:F:1804:ALA:HB3	2.17	0.45
1:F:1878:ASN:OD1	1:F:1880:VAL:HG23	2.16	0.45
1:F:1945:THR:O	1:F:1947:LYS:N	2.49	0.45
1:B:310:ILE:HG23	1:B:346:ILE:HG21	1.98	0.45
1:B:945:LEU:HB3	1:B:965:THR:HG22	1.99	0.45
1:B:1175:THR:HG23	1:B:1239:PHE:HE1	1.78	0.45
1:B:1245:PHE:HZ	1:B:1291:VAL:HG11	1.82	0.45
1:B:1687:ARG:O	1:B:1689:GLY:N	2.50	0.45
1:A:371:ILE:HG12	1:A:470:LEU:HD13	1.99	0.45
1:A:442:LEU:HD11	1:A:446:HIS:CG	2.52	0.45
1:A:1443:GLN:NE2	1:A:1491:SER:O	2.47	0.45
1:A:1931:PRO:HB3	1:A:1991:ARG:HG3	1.98	0.45
1:G:1841:VAL:HA	1:G:1885:VAL:HG23	1.99	0.45
1:G:2270:LEU:HD13	1:G:2274:LEU:HD11	1.99	0.45
1:Q:1691:PHE:N	1:Q:1721:GLY:O	2.45	0.45
1:J:206:TRP:HZ2	1:J:442:LEU:HD22	1.82	0.45
1:J:681:TYR:HB3	1:J:683:LEU:HD21	1.97	0.45
1:R:1457:LEU:HA	1:R:1460:ALA:HB3	1.98	0.45
2:K:1701:LEU:HD13	2:K:1775:MET:HG3	1.99	0.45
1:D:1589:GLN:O	1:D:1593:LEU:HB2	2.17	0.45
1:D:1786:ILE:O	1:C:2195:ARG:NE	2.49	0.45
1:D:1910:VAL:HG21	1:D:1982:PRO:CG	2.47	0.45
1:E:194:LEU:HD12	1:E:227:ILE:HD12	1.98	0.45
1:E:370:ALA:O	1:E:409:VAL:HG13	2.16	0.45
1:E:1110:MET:HA	1:E:1144:VAL:HG11	1.97	0.45
1:E:1176:CYS:O	1:E:1237:VAL:HG13	2.17	0.45
1:E:1904:LYS:HG3	1:E:1905:SER:N	2.31	0.45
1:E:2314:VAL:HG12	1:E:2318:SER:HB3	1.99	0.45
1:C:1042:THR:O	1:C:1046:ASP:N	2.48	0.45
1:C:1705:LEU:C	1:C:1705:LEU:HD13	2.37	0.45
1:F:1098:ASN:O	1:F:1098:ASN:ND2	2.50	0.45
1:F:2082:ILE:HD12	1:F:2082:ILE:H	1.82	0.45
1:F:2111:ARG:HG2	1:F:2205:ILE:HG22	1.98	0.45
1:B:1386:MET:HE3	1:B:1389:PHE:HB3	1.99	0.45
1:B:1771:HIS:NE2	1:B:1778:SER:OG	2.43	0.45
1:B:2078:VAL:HG13	1:B:2105:MET:HG2	1.99	0.45
1:A:133:CYS:SG	1:A:137:ILE:HD12	2.57	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:853:PHE:CE2	1:A:894:LEU:HD11	2.51	0.45
1:A:1100:VAL:CG2	1:A:1133:VAL:HG21	2.47	0.45
1:J:943:ASN:OD1	1:J:944:ILE:N	2.49	0.45
1:R:1101:GLU:O	1:R:1105:LEU:HD23	2.17	0.45
2:M:1668:PHE:HB2	2:M:1723:ILE:HD11	1.98	0.45
2:O:1651:SER:O	2:O:1686:HIS:N	2.44	0.45
1:D:1063:LEU:CD1	1:D:1081:ALA:HB1	2.47	0.45
1:D:1243:GLU:C	1:D:1247:ARG:HE	2.18	0.45
1:D:1475:LEU:HD11	1:D:1477:PHE:CG	2.51	0.45
1:D:1482:ILE:HG23	1:D:1518:ARG:O	2.17	0.45
1:D:1513:LEU:HB2	1:D:1530:LEU:HB3	1.99	0.45
1:D:1535:GLU:OE1	1:D:1535:GLU:N	2.50	0.45
1:D:1606:ARG:O	1:D:1610:ILE:HG13	2.17	0.45
1:D:1882:HIS:ND1	1:D:1963:ILE:HD12	2.32	0.45
1:E:984:LYS:O	1:E:987:VAL:HG12	2.16	0.45
1:E:1028:ILE:HA	1:E:1031:HIS:CD2	2.51	0.45
1:E:1580:LYS:O	1:E:1583:LEU:N	2.50	0.45
1:C:258:LEU:HD21	1:C:352:ALA:HB2	1.99	0.45
1:C:1427:ILE:HD11	1:C:1449:LEU:CD1	2.47	0.45
1:C:1509:LEU:HD11	1:C:1535:GLU:CD	2.37	0.45
1:C:2247:MET:HG2	1:C:2251:TRP:CE2	2.52	0.45
1:C:2253:VAL:HG12	1:B:295:ASP:OD2	2.17	0.45
1:F:1873:GLN:HA	1:F:1877:ASN:ND2	2.32	0.45
1:B:1123:LEU:HD22	1:B:1130:ILE:HG21	1.98	0.45
1:B:2013:GLN:NE2	1:B:2021:ASP:OD2	2.50	0.45
1:J:760:GLY:O	1:J:809:LEU:N	2.49	0.45
1:J:1079:LEU:HD12	1:J:1444:ASN:CA	2.47	0.45
1:R:724:THR:O	1:R:739:GLY:N	2.51	0.45
1:D:510:ILE:CG2	1:D:581:LEU:HD21	2.47	0.44
1:D:886:MET:HA	1:D:889:LEU:HG	1.99	0.44
1:D:976:ARG:NE	1:D:977:SER:OG	2.50	0.44
1:D:990:LEU:HA	1:D:993:GLN:OE1	2.16	0.44
1:D:1000:GLN:HE21	1:D:1016:GLU:CB	2.30	0.44
1:D:1239:PHE:O	1:D:1293:ILE:HA	2.17	0.44
1:D:2057:TYR:HA	1:C:1878:ASN:HD22	1.82	0.44
1:E:767:VAL:HG12	1:E:768:GLU:N	2.31	0.44
1:E:2019:PHE:HB3	1:E:2020:PRO:HD2	1.98	0.44
1:E:2101:ASN:H	1:E:2105:MET:CE	2.31	0.44
1:C:1102:SER:OG	1:C:1103:ILE:N	2.50	0.44
1:C:1246:VAL:HG23	1:C:1311:PHE:CE1	2.52	0.44
1:C:1498:ARG:HD3	1:C:1499:TYR:CD1	2.52	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1509:LEU:HD11	1:C:1535:GLU:OE2	2.17	0.44
1:C:2325:HIS:O	1:C:2327:SER:N	2.51	0.44
1:F:1171:LEU:HD13	1:F:1251:GLU:OE2	2.17	0.44
1:F:1677:ILE:HG22	1:F:1712:PRO:HD2	1.99	0.44
1:F:2082:ILE:HD12	1:F:2082:ILE:N	2.31	0.44
1:B:1186:THR:O	1:B:1186:THR:HG22	2.16	0.44
1:B:1580:LYS:NZ	1:B:1583:LEU:HD22	2.32	0.44
1:A:696:ILE:HD11	1:A:870:PRO:HB2	1.98	0.44
1:A:1484:ASP:HB2	1:A:1487:LYS:HE2	1.99	0.44
1:A:2040:LEU:HB3	1:A:2078:VAL:HG23	1.98	0.44
1:G:1932:TYR:CE1	1:G:1990:THR:HG21	2.52	0.44
1:J:865:ASN:O	1:J:1030:SER:OG	2.14	0.44
1:J:945:LEU:HD21	1:J:961:PHE:CZ	2.52	0.44
1:J:1154:VAL:HG21	1:J:1178:VAL:HG11	1.99	0.44
2:O:1695:PHE:O	2:O:1737:ARG:N	2.43	0.44
1:D:278:ILE:HG23	1:D:415:VAL:O	2.17	0.44
1:D:767:VAL:HG12	1:D:768:GLU:N	2.32	0.44
1:D:886:MET:O	1:D:889:LEU:HG	2.17	0.44
1:D:1130:ILE:HG22	1:D:1134:LEU:HB2	2.00	0.44
1:D:1894:THR:HG22	1:D:1898:TRP:CD1	2.53	0.44
1:D:2257:GLY:C	1:D:2259:VAL:H	2.21	0.44
1:D:2264:TRP:CE3	1:D:2270:LEU:HD11	2.53	0.44
1:D:2326:ILE:HG22	1:D:2327:SER:N	2.33	0.44
1:E:506:ILE:HG12	1:E:570:ALA:HB1	1.98	0.44
1:E:871:ASP:HB3	1:E:872:PRO:HD2	1.98	0.44
1:E:1070:SER:O	1:E:1071:LYS:HE2	2.17	0.44
1:E:1080:ARG:HD2	1:E:1448:ARG:HH12	1.82	0.44
1:E:1090:LEU:HD21	1:E:1096:ARG:CZ	2.47	0.44
1:E:1807:SER:CB	1:E:1834:LEU:HD21	2.48	0.44
1:C:188:ALA:HA	1:C:212:ALA:HB2	1.99	0.44
1:F:1514:LYS:CG	1:F:1529:ARG:HE	2.30	0.44
1:F:1978:LEU:HD11	1:F:2212:ARG:HG3	1.99	0.44
1:F:2040:LEU:HD12	1:F:2078:VAL:HG22	1.99	0.44
1:F:2325:HIS:CG	1:F:2326:ILE:H	2.35	0.44
1:B:889:LEU:HD21	1:B:979:ILE:O	2.17	0.44
1:A:194:LEU:HA	1:A:197:ALA:HB3	1.99	0.44
1:A:294:VAL:HG12	1:A:962:PHE:CZ	2.53	0.44
1:A:849:LEU:HD12	1:A:894:LEU:HA	1.98	0.44
1:G:2319:ILE:O	1:G:2323:THR:HG23	2.18	0.44
1:J:1457:LEU:HA	1:J:1460:ALA:HB3	1.98	0.44
1:R:212:ALA:HB1	1:R:218:LEU:HD22	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:1657:LEU:HD21	2:H:1716:TYR:CD1	2.53	0.44
1:D:693:TYR:CE2	1:D:706:VAL:HG11	2.51	0.44
1:D:1955:PHE:HE1	1:D:1978:LEU:HD22	1.82	0.44
1:E:1154:VAL:HG22	1:E:1180:PHE:CZ	2.53	0.44
1:E:2117:VAL:HG11	1:F:1722:ALA:HB3	2.00	0.44
1:C:628:THR:O	1:C:632:VAL:N	2.38	0.44
1:C:1705:LEU:O	1:C:1708:ALA:N	2.50	0.44
1:F:686:THR:HG21	1:F:870:PRO:HB3	1.99	0.44
1:F:1613:TRP:CE3	1:F:1622:LEU:HD21	2.53	0.44
1:B:419:SER:N	1:B:464:ILE:HG21	2.31	0.44
1:B:651:PHE:CD1	1:B:1025:LEU:HD13	2.52	0.44
1:B:1467:ARG:NE	1:B:1468:THR:O	2.47	0.44
1:A:1057:ASP:HA	1:A:1060:LEU:HG	1.99	0.44
1:A:1104:PHE:O	1:A:1107:ALA:HB3	2.17	0.44
1:A:1120:LEU:CD2	1:A:1155:ARG:HE	2.29	0.44
1:R:767:VAL:HG12	1:R:768:GLU:N	2.32	0.44
1:R:1100:VAL:HA	1:R:1103:ILE:HG22	1.99	0.44
2:O:1691:THR:HG21	2:O:1736:VAL:HG12	1.99	0.44
1:D:995:LEU:CD1	1:D:1069:LEU:HD21	2.47	0.44
1:D:1368:ARG:HA	1:D:1371:ARG:HG2	2.00	0.44
1:D:1599:TYR:CE1	1:D:1660:VAL:HG11	2.52	0.44
1:D:1701:ARG:O	1:D:1704:GLU:HG2	2.17	0.44
1:D:1830:TYR:OH	1:C:2095:VAL:HG13	2.16	0.44
1:E:853:PHE:CD1	1:E:885:LEU:HD12	2.52	0.44
1:E:1128:THR:HG22	1:E:1430:SER:OG	2.17	0.44
1:E:1734:PHE:HA	1:E:1753:LEU:HD23	1.99	0.44
1:E:1766:SER:HB2	1:E:1788:LYS:HD3	2.00	0.44
1:E:1924:GLU:N	1:E:1952:SER:OG	2.47	0.44
1:E:2331:ARG:O	1:E:2334:VAL:HG12	2.17	0.44
1:C:356:ARG:N	1:C:427:TYR:O	2.45	0.44
1:C:1238:SER:HA	1:C:1292:ALA:HB3	1.99	0.44
1:C:1678:ILE:HG22	1:C:1680:ILE:HD11	1.98	0.44
1:C:1945:THR:O	1:C:1947:LYS:N	2.51	0.44
1:F:799:ILE:HG23	1:F:816:ALA:HB3	2.00	0.44
1:F:1042:THR:O	1:F:1046:ASP:N	2.50	0.44
1:F:1539:TYR:CE2	1:F:1629:SER:HA	2.52	0.44
1:F:2016:GLN:O	1:F:2047:ARG:N	2.40	0.44
1:A:613:LEU:HD23	1:A:616:LEU:HD12	1.98	0.44
1:A:1138:PHE:O	1:A:1238:SER:OG	2.27	0.44
1:A:1854:LEU:O	1:A:1858:LEU:N	2.48	0.44
1:A:2044:ALA:HB1	1:A:2088:LEU:HD13	1.98	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:1863:TYR:OH	1:Q:2000:ASP:OD1	2.35	0.44
1:J:638:HIS:CD2	1:J:736:ILE:HG23	2.53	0.44
1:J:980:ARG:HA	1:J:983:MET:HG3	1.98	0.44
1:D:767:VAL:HG23	1:D:779:TYR:HA	1.99	0.44
1:E:194:LEU:HD11	1:E:225:ASN:CG	2.37	0.44
1:E:265:LEU:HD22	1:E:285:LEU:CD1	2.48	0.44
1:E:422:THR:HG21	1:E:443:GLN:HE22	1.83	0.44
1:E:663:ALA:HB1	1:E:1032:ALA:CB	2.48	0.44
1:E:1160:ALA:CB	1:E:1380:GLN:HE21	2.29	0.44
1:E:1230:CYS:O	1:E:1232:ARG:NH1	2.49	0.44
1:E:1438:SER:O	1:E:1442:LEU:N	2.31	0.44
1:E:1596:THR:OG1	1:E:1888:ASP:OD2	2.26	0.44
1:E:1800:SER:HB3	1:E:1827:ILE:HD13	1.99	0.44
1:E:1865:SER:O	1:E:1868:GLN:HB2	2.17	0.44
1:C:946:ASP:OD2	1:B:2246:ALA:HB2	2.17	0.44
1:C:1069:LEU:HB2	1:C:1078:ALA:HB2	1.99	0.44
1:C:1305:ALA:HA	1:C:1308:PHE:HB2	1.98	0.44
1:F:1711:ILE:HG22	1:F:1905:SER:CB	2.47	0.44
1:F:2244:ILE:O	1:F:2248:LEU:HD23	2.18	0.44
1:B:332:ASN:ND2	1:B:905:SER:O	2.50	0.44
1:B:525:THR:O	1:B:543:VAL:N	2.41	0.44
1:B:998:GLU:OE2	1:B:1034:VAL:HG13	2.16	0.44
1:B:1048:LEU:O	1:B:1051:ARG:N	2.45	0.44
1:B:1384:ASN:HA	1:B:1387:ARG:HG3	2.00	0.44
1:A:377:ASP:O	1:A:389:GLU:HA	2.16	0.44
1:A:1986:VAL:HG21	1:A:2030:ILE:HD11	1.98	0.44
1:J:966:GLN:HA	1:J:969:VAL:HG22	1.99	0.44
2:Y:1657:LEU:HD21	2:Y:1716:TYR:CG	2.53	0.44
1:D:984:LYS:NZ	1:D:1056:THR:HG22	2.31	0.44
1:D:1326:ARG:C	1:D:1327:LEU:HD12	2.38	0.44
1:D:1408:ALA:HB2	1:D:1418:ASP:HB3	2.00	0.44
1:D:1866:ASN:OD1	1:D:1869:LEU:HD12	2.18	0.44
1:D:1895:VAL:HG12	1:D:1899:LEU:HD13	1.98	0.44
1:E:567:ARG:NH1	1:E:604:GLN:O	2.45	0.44
1:E:714:LEU:HD22	1:E:725:THR:O	2.18	0.44
1:E:1377:LEU:CD2	1:E:1426:ILE:HD13	2.48	0.44
1:E:1815:ILE:HD11	1:E:1817:ILE:CG2	2.48	0.44
1:E:2045:ASN:HD21	1:E:2083:PRO:HD2	1.83	0.44
1:C:419:SER:N	1:C:464:ILE:HG21	2.33	0.44
1:C:628:THR:O	1:C:632:VAL:HG23	2.18	0.44
1:C:1492:VAL:HG11	1:C:1530:LEU:HD11	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1766:SER:O	1:C:1786:ILE:N	2.48	0.44
1:F:704:VAL:HG12	1:F:718:TYR:HD1	1.83	0.44
1:F:976:ARG:NH1	1:F:977:SER:OG	2.50	0.44
1:F:1100:VAL:CG1	1:F:1130:ILE:HG23	2.47	0.44
1:F:1355:PHE:O	1:F:1372:HIS:N	2.41	0.44
1:F:1962:GLU:HG3	1:F:1973:VAL:O	2.17	0.44
1:B:291:VAL:HG21	1:B:297:GLY:CA	2.47	0.44
1:B:753:VAL:HG13	1:B:817:LYS:HE2	1.99	0.44
1:B:970:GLN:C	1:B:974:ARG:HE	2.18	0.44
1:B:1135:PRO:HA	1:B:1138:PHE:CD1	2.53	0.44
1:B:2220:ARG:HH12	1:B:2223:LEU:HD22	1.81	0.44
1:A:335:ARG:CB	1:A:963:MET:HE3	2.47	0.44
1:A:1687:ARG:O	1:A:1689:GLY:N	2.50	0.44
1:A:1971:VAL:HG21	1:A:2046:TRP:HZ2	1.82	0.44
1:Q:1767:VAL:HG12	1:Q:1785:ILE:HA	1.99	0.44
1:J:634:CYS:O	1:J:638:HIS:N	2.51	0.44
1:J:1167:GLN:OE1	1:J:1167:GLN:N	2.50	0.44
1:R:780:ALA:HB3	1:R:791:LEU:HD12	1.99	0.44
1:R:945:LEU:HD21	1:R:961:PHE:CZ	2.52	0.44
2:Y:1657:LEU:HD21	2:Y:1716:TYR:CD1	2.52	0.44
1:D:197:ALA:HB1	1:D:227:ILE:HD13	1.98	0.44
1:D:306:TYR:CE1	1:D:327:ALA:HB2	2.53	0.44
1:D:1606:ARG:HH12	1:D:1631:MET:HB2	1.83	0.44
1:E:637:LEU:HD11	1:E:693:TYR:CD1	2.53	0.44
1:E:1045:ILE:HD13	1:E:1080:ARG:CD	2.48	0.44
1:E:1701:ARG:O	1:E:1704:GLU:HG2	2.16	0.44
1:C:1147:MET:O	1:C:1168:HIS:NE2	2.50	0.44
1:C:2229:LYS:CG	1:C:2248:LEU:HD22	2.46	0.44
1:F:1104:PHE:CE2	1:F:1145:VAL:HG13	2.48	0.44
1:F:1147:MET:SD	1:F:1168:HIS:HB3	2.58	0.44
1:F:1239:PHE:HZ	1:F:1248:ILE:HG21	1.83	0.44
1:F:2054:LYS:O	1:F:2057:TYR:HB3	2.18	0.44
1:F:2250:ARG:NH1	1:A:946:ASP:OD2	2.51	0.44
1:B:886:MET:SD	1:B:890:ARG:NH2	2.91	0.44
1:A:189:ASN:O	1:A:193:ILE:HG13	2.18	0.44
1:A:1801:GLY:N	1:Q:2094:VAL:HG23	2.32	0.44
1:A:2319:ILE:O	1:A:2323:THR:HG22	2.18	0.44
1:J:683:LEU:HD13	1:J:697:MET:HG2	2.00	0.44
1:R:1408:ALA:HB2	1:R:1418:ASP:HB3	1.99	0.44
2:M:1707:ILE:HD11	2:M:1749:PRO:HG3	2.00	0.44
2:Y:1652:MET:HA	2:Y:1686:HIS:HB2	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1632:LEU:HD21	1:D:1634:TYR:HB3	2.00	0.44
1:E:194:LEU:HD13	1:E:222:LEU:HD23	1.99	0.44
1:E:1055:LEU:HD11	1:E:1059:LEU:HD22	1.98	0.44
1:E:2286:SER:OG	1:E:2289:GLU:HB2	2.18	0.44
1:C:357:HIS:N	1:C:379:SER:OG	2.39	0.44
1:C:578:LEU:O	1:C:582:SER:N	2.49	0.44
1:C:674:LEU:HD11	1:C:745:PHE:CD1	2.53	0.44
1:C:1416:VAL:HG23	1:C:1419:TYR:CE1	2.53	0.44
1:C:2319:ILE:O	1:C:2323:THR:HG23	2.17	0.44
1:F:930:THR:HG22	1:F:930:THR:O	2.18	0.44
1:F:961:PHE:O	1:F:965:THR:HG22	2.17	0.44
1:B:655:LEU:HD13	1:B:1021:MET:HB3	2.00	0.44
1:B:2124:VAL:HG13	1:B:2128:PHE:HB2	2.00	0.44
1:A:252:THR:HB	1:A:414:MET:HE1	2.00	0.44
1:A:419:SER:N	1:A:464:ILE:HG21	2.32	0.44
1:A:625:ARG:HB3	1:A:626:PRO:CD	2.48	0.44
1:A:893:SER:O	1:A:897:LEU:HD12	2.18	0.44
1:A:995:LEU:CD1	1:A:1062:ILE:HG23	2.48	0.44
1:A:1389:PHE:HA	1:A:1408:ALA:HA	2.00	0.44
1:A:1445:GLU:O	1:A:1449:LEU:HD12	2.18	0.44
1:J:1145:VAL:O	1:J:1149:ALA:HB3	2.18	0.44
1:R:683:LEU:HD13	1:R:697:MET:HG2	1.99	0.44
1:R:1067:THR:HG21	1:R:1085:LEU:HD23	2.00	0.44
2:W:1714:VAL:HG11	2:W:1731:GLU:HB3	2.00	0.44
1:D:368:GLY:O	1:D:413:LYS:HG2	2.17	0.44
1:D:770:GLY:N	1:D:799:ILE:O	2.51	0.44
1:D:1044:LEU:O	1:D:1048:LEU:HB2	2.18	0.44
1:D:1248:ILE:HG22	1:D:1248:ILE:O	2.18	0.44
1:D:2045:ASN:HD22	1:D:2086:ALA:CB	2.31	0.44
1:E:1308:PHE:O	1:E:1311:PHE:HB3	2.18	0.44
1:E:1682:ASN:HD22	1:E:1719:ASN:ND2	2.15	0.44
1:E:1782:ILE:HG12	1:E:1785:ILE:HD11	2.00	0.44
1:E:2217:TRP:O	1:E:2267:ASN:ND2	2.51	0.44
1:C:874:PHE:O	1:C:877:LYS:N	2.50	0.44
1:C:943:ASN:CB	1:B:2243:GLN:HB3	2.48	0.44
1:C:1243:GLU:O	1:C:1246:VAL:HG12	2.18	0.44
1:C:1369:ILE:O	1:C:1404:TYR:OH	2.24	0.44
1:C:1926:VAL:HG22	1:C:2209:LYS:NZ	2.33	0.44
1:C:2240:THR:HG22	1:C:2242:GLY:H	1.82	0.44
1:C:2243:GLN:O	1:C:2247:MET:HB2	2.17	0.44
1:C:2295:ILE:HD12	1:C:2295:ILE:H	1.82	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:943:ASN:O	1:F:947:SER:N	2.49	0.44
1:F:1098:ASN:HB3	1:A:2329:THR:HA	1.99	0.44
1:F:1240:ARG:O	1:F:1294:LYS:N	2.47	0.44
1:B:2103:ARG:NH1	1:B:2241:ASP:OD1	2.45	0.44
1:A:330:PHE:O	1:A:334:PHE:N	2.45	0.44
1:A:651:PHE:CD2	1:A:1025:LEU:HD22	2.53	0.44
1:A:993:GLN:O	1:A:997:VAL:HG23	2.18	0.44
1:A:1103:ILE:O	1:A:1106:SER:OG	2.36	0.44
1:A:1369:ILE:HD11	1:A:1391:LEU:O	2.18	0.44
1:A:1941:ARG:O	1:A:1951:LEU:N	2.50	0.44
1:G:1774:ASP:O	1:G:1779:ARG:NH1	2.51	0.44
1:G:2160:GLU:HA	1:G:2163:GLU:HG2	2.00	0.44
1:J:638:HIS:NE2	1:J:736:ILE:HG23	2.33	0.44
1:D:243:LYS:HE2	1:D:437:GLU:HB3	2.00	0.43
1:D:991:LEU:HG	1:D:1066:LEU:HD11	2.00	0.43
1:D:1355:PHE:HB2	1:D:1372:HIS:HA	1.99	0.43
1:E:454:ASP:OD2	1:E:502:ARG:NE	2.51	0.43
1:E:980:ARG:O	1:E:984:LYS:HG3	2.18	0.43
1:E:1133:VAL:O	1:E:1136:ASN:N	2.49	0.43
1:E:1401:MET:SD	1:E:1453:ALA:HB2	2.58	0.43
1:E:1717:SER:HG	1:E:1820:VAL:HA	1.83	0.43
1:E:1855:ASN:OD1	1:E:1862:VAL:N	2.51	0.43
1:C:945:LEU:HD11	1:C:965:THR:HA	2.00	0.43
1:C:1518:ARG:HE	1:C:1523:GLY:HA2	1.83	0.43
1:C:1605:PHE:CE2	1:C:1609:LEU:HD12	2.53	0.43
1:C:1893:PHE:HA	1:C:1896:LEU:HD23	2.00	0.43
1:F:628:THR:O	1:F:632:VAL:N	2.38	0.43
1:F:851:ARG:O	1:F:855:TYR:N	2.40	0.43
1:F:1123:LEU:O	1:F:1428:ARG:NH2	2.51	0.43
1:F:1416:VAL:HG23	1:F:1419:TYR:CE1	2.52	0.43
1:F:2141:ASP:OD1	1:F:2171:ARG:NH2	2.51	0.43
1:F:2230:LYS:O	1:F:2234:ASN:ND2	2.51	0.43
1:B:682:VAL:C	1:B:683:LEU:HD12	2.38	0.43
1:B:1130:ILE:HG22	1:B:1134:LEU:HB2	1.99	0.43
1:B:2106:GLU:OE1	1:B:2222:LEU:HD11	2.18	0.43
1:B:2251:TRP:HA	1:B:2254:GLU:HG2	2.00	0.43
1:A:1469:ASP:HA	1:A:1507:ARG:HE	1.82	0.43
1:A:1839:ILE:HG22	1:A:1885:VAL:HG22	2.00	0.43
1:A:2019:PHE:HB2	1:A:2021:ASP:OD1	2.17	0.43
1:G:1619:GLN:HE22	1:G:1956:ASP:CB	2.30	0.43
1:Q:1956:ASP:OD2	1:Q:1980:GLY:N	2.48	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:938:SER:OG	1:J:939:GLN:N	2.51	0.43
2:H:1665:VAL:HG12	2:H:1676:LEU:HD22	1.99	0.43
2:M:1668:PHE:CD2	2:M:1719:VAL:HG13	2.52	0.43
2:Y:1701:LEU:HD13	2:Y:1775:MET:HG3	1.98	0.43
1:D:1142:ASN:HB3	1:D:1145:VAL:HG12	2.00	0.43
1:D:1503:LEU:HD12	1:D:1508:VAL:HB	1.99	0.43
1:D:1637:LEU:CB	1:D:1645:LEU:HD21	2.47	0.43
1:D:1910:VAL:HG21	1:D:1982:PRO:CD	2.48	0.43
1:D:2079:LEU:HD23	1:D:2080:VAL:N	2.33	0.43
1:D:2189:LEU:O	1:D:2192:THR:HG23	2.18	0.43
1:D:2251:TRP:HB3	1:D:2288:ILE:CD1	2.49	0.43
1:E:900:GLN:O	1:E:904:THR:HG23	2.18	0.43
1:E:1385:ARG:HG2	1:E:1577:TYR:HB2	2.00	0.43
1:E:1421:PHE:CG	1:E:1457:LEU:HD11	2.53	0.43
1:E:1442:LEU:HD11	1:E:1477:PHE:CZ	2.53	0.43
1:E:1966:PRO:HA	1:E:1969:GLN:NE2	2.33	0.43
1:C:194:LEU:HD22	1:C:221:LEU:HD13	2.00	0.43
1:C:1124:ILE:HG23	1:C:1159:ILE:HG21	1.99	0.43
1:C:2059:GLN:HE21	1:C:2062:LYS:CE	2.28	0.43
1:C:2224:LEU:HD13	1:C:2274:LEU:HB3	2.01	0.43
1:C:2287:VAL:HG12	1:C:2291:ASN:ND2	2.33	0.43
1:F:629:MET:O	1:F:633:VAL:HG23	2.18	0.43
1:F:835:SER:C	1:F:836:LEU:HD12	2.38	0.43
1:F:1133:VAL:O	1:F:1136:ASN:N	2.52	0.43
1:F:1438:SER:HB2	1:F:1481:VAL:HG11	1.99	0.43
1:F:1501:SER:O	1:F:1504:TRP:N	2.51	0.43
1:F:1931:PRO:CB	1:F:1991:ARG:HB3	2.48	0.43
1:B:194:LEU:HD11	1:B:225:ASN:CG	2.37	0.43
1:B:2068:VAL:HG22	1:B:2095:VAL:HG12	2.00	0.43
1:B:2079:LEU:HB2	1:B:2108:TYR:CE2	2.53	0.43
1:A:1306:ALA:O	1:A:1309:ARG:HG2	2.18	0.43
1:A:2044:ALA:HB1	1:A:2088:LEU:CD1	2.48	0.43
1:A:2178:ILE:O	1:A:2182:VAL:HG23	2.17	0.43
1:A:2326:ILE:HG21	1:Q:2316:MET:HE3	2.01	0.43
1:Q:1774:ASP:O	1:Q:1779:ARG:NH1	2.52	0.43
1:Q:1812:ASN:OD1	1:Q:2035:ARG:NH1	2.51	0.43
1:R:1492:VAL:O	1:R:1496:VAL:HG12	2.17	0.43
1:D:1475:LEU:HD21	1:D:1477:PHE:CE1	2.54	0.43
1:D:2319:ILE:HG22	1:D:2323:THR:HG23	2.00	0.43
1:E:1102:SER:OG	1:E:1103:ILE:N	2.51	0.43
1:E:1373:LEU:HD23	1:E:1374:GLU:N	2.33	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1687:ARG:O	1:E:1689:GLY:N	2.51	0.43
1:E:1910:VAL:HG11	1:E:1982:PRO:HG2	1.99	0.43
1:E:1935:ARG:CG	1:E:1972:VAL:HG11	2.48	0.43
1:E:2231:LYS:O	1:E:2231:LYS:HG3	2.18	0.43
1:E:2288:ILE:O	1:E:2292:ILE:HG13	2.17	0.43
1:C:1240:ARG:O	1:C:1294:LYS:HB3	2.18	0.43
1:C:1606:ARG:HH22	1:C:1632:LEU:HD23	1.82	0.43
1:C:1917:ASP:OD1	1:C:1921:ARG:NE	2.47	0.43
1:C:1934:PRO:O	1:C:1937:MET:HG3	2.18	0.43
1:C:1981:ILE:HD11	1:C:2220:ARG:HB2	2.00	0.43
1:C:2063:PHE:O	1:C:2067:ILE:HG23	2.18	0.43
1:F:767:VAL:HG12	1:F:768:GLU:N	2.33	0.43
1:F:2178:ILE:HG23	1:F:2179:TYR:CD1	2.54	0.43
1:B:992:ARG:HA	1:B:995:LEU:HB3	2.00	0.43
1:B:1059:LEU:HD13	1:B:1063:LEU:HD23	1.99	0.43
1:B:1069:LEU:HD11	1:B:1078:ALA:CB	2.48	0.43
1:B:1383:LEU:HD12	1:B:1424:ARG:NH1	2.33	0.43
1:B:2173:GLU:HA	1:B:2176:ILE:HD12	2.00	0.43
1:A:525:THR:O	1:A:543:VAL:N	2.43	0.43
1:A:884:ARG:O	1:A:888:THR:HG23	2.18	0.43
1:A:1066:LEU:HD21	1:A:1077:VAL:HG12	1.99	0.43
1:A:1539:TYR:CD1	1:A:1629:SER:HA	2.53	0.43
1:G:1978:LEU:HD12	1:G:2212:ARG:NH1	2.32	0.43
1:G:2326:ILE:HG22	1:G:2326:ILE:O	2.17	0.43
1:Q:2119:GLU:OE1	1:Q:2121:GLU:HG2	2.19	0.43
1:J:295:ASP:OD1	1:J:970:GLN:NE2	2.45	0.43
1:R:638:HIS:NE2	1:R:736:ILE:HG23	2.32	0.43
1:R:966:GLN:HA	1:R:969:VAL:HG22	2.00	0.43
1:R:1511:ALA:H	1:R:1532:LEU:HB2	1.84	0.43
1:D:405:GLU:O	1:D:409:VAL:HG23	2.18	0.43
1:D:1099:GLN:HE21	1:D:1103:ILE:CD1	2.31	0.43
1:D:1129:SER:HB3	1:D:1428:ARG:O	2.19	0.43
1:D:1147:MET:CE	1:D:1168:HIS:HB3	2.48	0.43
1:D:1872:ILE:HG22	1:D:1884:THR:OG1	2.19	0.43
1:E:879:LYS:O	1:E:883:GLU:HG2	2.18	0.43
1:E:946:ASP:HA	1:E:949:ALA:HB3	2.01	0.43
1:E:1943:HIS:CD2	1:E:1945:THR:HG1	2.36	0.43
1:E:2119:GLU:OE2	1:E:2122:GLY:N	2.52	0.43
1:C:631:GLY:O	1:C:635:GLY:N	2.46	0.43
1:C:991:LEU:HD12	1:C:992:ARG:HE	1.83	0.43
1:C:1083:GLN:HG2	1:C:1444:ASN:ND2	2.32	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1424:ARG:HG2	1:C:1474:PHE:HB3	2.00	0.43
1:C:2039:PRO:HG3	1:C:2223:LEU:HD21	2.00	0.43
1:F:696:ILE:HG23	1:F:700:SER:O	2.18	0.43
1:F:1403:LEU:HB3	1:F:1423:VAL:HG23	2.01	0.43
1:F:1481:VAL:HG23	1:F:1517:ILE:HG22	2.00	0.43
1:F:1663:LYS:HA	1:F:1678:ILE:HG22	1.99	0.43
1:F:1874:ILE:HG22	1:F:1875:MET:HE2	2.00	0.43
1:B:654:SER:OG	1:B:661:LEU:HD13	2.18	0.43
1:B:944:ILE:HG13	1:B:945:LEU:N	2.33	0.43
1:B:1839:ILE:HG22	1:B:1885:VAL:HG22	2.00	0.43
1:B:2046:TRP:H	1:B:2088:LEU:HD12	1.82	0.43
1:B:2127:LYS:HE2	1:G:1726:LEU:HG	2.00	0.43
1:A:654:SER:CB	1:A:661:LEU:HD22	2.48	0.43
1:A:767:VAL:HG12	1:A:768:GLU:N	2.32	0.43
1:A:1010:VAL:HG22	1:A:1028:ILE:HD11	2.00	0.43
1:A:1454:MET:CG	1:A:1506:LEU:HD21	2.47	0.43
1:Q:1935:ARG:NH2	1:Q:1962:GLU:OE1	2.52	0.43
1:Q:1938:LEU:HD11	1:Q:1985:VAL:HG11	1.99	0.43
1:J:1067:THR:HG22	1:J:1082:ARG:N	2.34	0.43
1:R:1094:GLU:HA	1:R:1097:HIS:HB3	1.99	0.43
1:R:1517:ILE:HG12	1:R:1518:ARG:H	1.83	0.43
2:K:1689:MET:HB2	2:K:1736:VAL:HG11	2.00	0.43
2:O:1652:MET:HG2	2:O:1686:HIS:HB2	2.01	0.43
1:D:281:VAL:HG12	1:D:286:TYR:HB2	2.01	0.43
1:D:1118:GLU:O	1:D:1121:GLN:HG2	2.19	0.43
1:D:1164:ASN:O	1:D:1165:SER:OG	2.28	0.43
1:D:1468:THR:O	1:D:1507:ARG:NH1	2.50	0.43
1:D:1865:SER:O	1:D:1868:GLN:N	2.50	0.43
1:D:2117:VAL:HG23	1:C:1797:LEU:HD21	2.00	0.43
1:E:352:ALA:CB	1:E:426:LEU:HD21	2.47	0.43
1:E:714:LEU:HD21	1:E:727:MET:HE1	1.99	0.43
1:E:899:LEU:HD12	1:E:900:GLN:N	2.34	0.43
1:E:1993:VAL:O	1:E:2013:GLN:N	2.43	0.43
1:C:1373:LEU:HB2	1:C:1402:HIS:CE1	2.53	0.43
1:B:1237:VAL:HG21	1:B:1252:VAL:HG13	1.99	0.43
1:A:1014:ARG:HA	1:A:1021:MET:HE2	2.00	0.43
1:A:1101:GLU:OE1	1:A:1105:LEU:HD11	2.17	0.43
1:G:1609:LEU:HD23	1:G:1631:MET:SD	2.58	0.43
1:G:2206:LEU:HD11	1:G:2214:PHE:CD2	2.53	0.43
1:J:332:ASN:O	1:J:336:GLN:N	2.47	0.43
1:J:1492:VAL:O	1:J:1496:VAL:HG12	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:R:625:ARG:HB3	1:R:626:PRO:CD	2.48	0.43
1:R:930:THR:O	1:R:930:THR:HG22	2.18	0.43
2:H:1653:VAL:HG13	2:H:1684:THR:CG2	2.48	0.43
1:D:1079:LEU:HA	1:D:1079:LEU:HD13	1.66	0.43
1:D:1730:ILE:CD1	1:D:1761:VAL:HG11	2.49	0.43
1:D:1797:LEU:HG	1:C:2094:VAL:HB	2.00	0.43
1:D:1803:ILE:HA	1:D:1806:GLU:OE1	2.17	0.43
1:D:1960:PHE:CE1	1:D:1974:GLY:HA3	2.54	0.43
1:D:2219:LEU:C	1:D:2219:LEU:HD13	2.39	0.43
1:E:204:ALA:HB2	1:E:228:ALA:HB3	2.00	0.43
1:E:371:ILE:HG23	1:E:470:LEU:HD13	2.01	0.43
1:E:894:LEU:HG	1:E:895:PRO:HD3	2.01	0.43
1:E:925:TYR:CZ	1:E:929:ILE:HD13	2.54	0.43
1:E:998:GLU:OE2	1:E:1034:VAL:HG13	2.18	0.43
1:E:1703:SER:O	1:E:1706:ALA:HB3	2.18	0.43
1:E:2059:GLN:HB3	1:E:2062:LYS:HD2	1.99	0.43
1:C:240:LEU:HD21	1:C:249:VAL:HG11	2.01	0.43
1:C:1104:PHE:CZ	1:C:1148:ALA:HB3	2.53	0.43
1:C:1289:LEU:HD22	1:C:1327:LEU:HD12	1.99	0.43
1:C:1760:ARG:O	1:C:1764:LEU:HG	2.19	0.43
1:C:2124:VAL:HG11	1:C:2184:VAL:HG12	2.01	0.43
1:F:510:ILE:HD12	1:F:584:ARG:HH22	1.83	0.43
1:F:1115:PHE:CD1	1:F:1117:ILE:HD13	2.53	0.43
1:B:1239:PHE:HZ	1:B:1248:ILE:HG21	1.82	0.43
1:B:1471:ASN:HB2	1:B:1508:VAL:HA	2.01	0.43
1:A:140:TRP:O	1:A:144:MET:N	2.47	0.43
1:A:956:SER:HA	1:A:958:ARG:HE	1.83	0.43
1:A:1059:LEU:HD13	1:A:1063:LEU:HD23	2.01	0.43
1:A:1237:VAL:HG21	1:A:1252:VAL:HG13	1.99	0.43
1:A:2075:CYS:O	1:A:2104:HIS:NE2	2.52	0.43
1:J:248:ILE:HD13	1:J:281:VAL:HG11	2.00	0.43
1:J:1512:GLU:HG2	1:J:1531:PHE:HA	2.01	0.43
1:R:1104:PHE:CE2	1:R:1145:VAL:HG13	2.53	0.43
2:W:1834:THR:HG22	2:W:1855:ILE:HD11	2.00	0.43
1:D:255:ILE:HD11	1:D:411:LEU:HB2	2.01	0.43
1:D:660:VAL:CB	1:D:1010:VAL:HG11	2.46	0.43
1:D:925:TYR:CZ	1:D:929:ILE:HD13	2.53	0.43
1:D:1659:MET:HA	1:D:1681:GLY:O	2.18	0.43
1:D:1803:ILE:O	1:D:1807:SER:CB	2.66	0.43
1:D:2019:PHE:HB3	1:D:2020:PRO:HD2	2.00	0.43
1:E:380:VAL:CG2	1:E:608:ILE:HD13	2.49	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1000:GLN:CG	1:E:1013:LEU:HD23	2.48	0.43
1:E:1326:ARG:C	1:E:1327:LEU:HD12	2.38	0.43
1:E:1391:LEU:H	1:E:1391:LEU:HD13	1.84	0.43
1:E:2054:LYS:HD2	1:F:2000:ASP:HB2	2.00	0.43
1:C:281:VAL:HG12	1:C:286:TYR:HB2	2.01	0.43
1:C:291:VAL:HG22	1:C:346:ILE:O	2.19	0.43
1:C:1597:TYR:O	1:C:1601:ILE:HG23	2.19	0.43
1:C:1716:VAL:HG22	1:C:1819:LEU:HB2	1.99	0.43
1:C:2256:GLU:O	1:C:2260:LYS:NZ	2.44	0.43
1:C:2320:ILE:O	1:C:2323:THR:OG1	2.37	0.43
1:F:510:ILE:HD11	1:F:540:TYR:O	2.18	0.43
1:F:1483:MET:O	1:F:1517:ILE:HD12	2.18	0.43
1:F:1868:GLN:O	1:F:1874:ILE:HD11	2.19	0.43
1:F:1925:PHE:HD2	1:F:1937:MET:HA	1.83	0.43
1:F:1954:PHE:CE2	1:F:1978:LEU:HD13	2.52	0.43
1:F:2123:THR:HG21	1:F:2187:ALA:HB1	2.01	0.43
1:B:140:TRP:O	1:B:144:MET:N	2.46	0.43
1:B:1060:LEU:O	1:B:1060:LEU:HD13	2.19	0.43
1:B:1613:TRP:HE3	1:B:1622:LEU:HD12	1.82	0.43
1:A:682:VAL:C	1:A:683:LEU:HD12	2.39	0.43
1:Q:1978:LEU:HD12	1:Q:2212:ARG:NH1	2.34	0.43
1:J:625:ARG:HB3	1:J:626:PRO:CD	2.48	0.43
1:J:874:PHE:CE2	1:J:1040:LEU:HD12	2.53	0.43
1:J:1535:GLU:N	1:J:1535:GLU:OE1	2.52	0.43
1:R:874:PHE:CE2	1:R:1040:LEU:HD12	2.54	0.43
1:R:900:GLN:O	1:R:904:THR:HG23	2.18	0.43
1:R:1063:LEU:HG	1:R:1084:VAL:HG11	1.99	0.43
1:D:536:ASN:O	1:D:536:ASN:ND2	2.48	0.43
1:D:980:ARG:O	1:D:984:LYS:HG2	2.18	0.43
1:D:1298:ASP:O	1:D:1300:GLU:N	2.52	0.43
1:D:1319:LEU:HD12	1:D:1324:ILE:H	1.84	0.43
1:D:1731:ARG:O	1:C:2135:LYS:NZ	2.52	0.43
1:E:654:SER:O	1:E:659:GLN:N	2.51	0.43
1:E:1093:TYR:HB3	1:E:1095:LEU:HD12	2.01	0.43
1:E:1166:VAL:HG13	1:E:1179:GLU:O	2.18	0.43
1:E:1421:PHE:CB	1:E:1457:LEU:HD11	2.49	0.43
1:E:1472:HIS:HE1	1:E:1512:GLU:HG3	1.84	0.43
1:E:1720:SER:CA	1:E:1825:ILE:HB	2.49	0.43
1:E:2253:VAL:HG13	1:E:2258:THR:CA	2.45	0.43
1:C:640:ALA:HB2	1:C:685:VAL:HG11	2.01	0.43
1:C:686:THR:HG21	1:C:870:PRO:HB3	1.99	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:696:ILE:HG23	1:C:700:SER:O	2.19	0.43
1:C:726:TYR:O	1:C:737:THR:OG1	2.22	0.43
1:C:1648:MET:HG2	1:C:1650:ARG:HB3	2.00	0.43
1:C:1862:VAL:HG11	1:C:2002:ALA:HB2	2.00	0.43
1:C:1877:ASN:C	1:C:1967:TRP:HB2	2.39	0.43
1:F:291:VAL:HG22	1:F:346:ILE:O	2.19	0.43
1:F:966:GLN:HA	1:F:969:VAL:HG22	2.01	0.43
1:F:1240:ARG:O	1:F:1294:LYS:HB3	2.19	0.43
1:F:1657:ILE:HD11	1:F:1698:LEU:HD22	2.01	0.43
1:F:1761:VAL:HA	1:F:1764:LEU:HD12	2.01	0.43
1:B:281:VAL:HG11	1:B:286:TYR:HB2	2.01	0.43
1:B:1734:PHE:CE2	1:B:1751:LEU:HD22	2.54	0.43
1:B:2109:ALA:HB1	1:B:2113:SER:OG	2.18	0.43
1:A:291:VAL:HG22	1:A:347:PHE:HA	2.00	0.43
1:A:1474:PHE:HA	1:A:1512:GLU:HG3	2.01	0.43
1:Q:2045:ASN:HA	1:Q:2086:ALA:HB1	2.01	0.43
1:Q:2128:PHE:CE2	1:Q:2187:ALA:HB2	2.52	0.43
1:J:631:GLY:O	1:J:635:GLY:N	2.45	0.43
1:J:852:VAL:O	1:J:856:VAL:HG23	2.18	0.43
1:J:930:THR:O	1:J:930:THR:HG22	2.18	0.43
1:J:1094:GLU:HA	1:J:1097:HIS:HB3	2.00	0.43
1:R:430:ASP:OD1	1:R:645:ARG:NH1	2.52	0.43
1:D:969:VAL:HG11	1:E:2250:ARG:HD2	2.00	0.43
1:D:1263:SEP:O1P	2:O:1656:GLY:N	2.41	0.43
1:D:1421:PHE:CG	1:D:1457:LEU:HD12	2.53	0.43
1:D:1677:ILE:HG22	1:D:1712:PRO:HB2	2.00	0.43
1:D:1703:SER:HA	1:D:1713:ARG:HD2	2.01	0.43
1:D:2093:TRP:HE1	1:C:1797:LEU:HD22	1.81	0.43
1:D:2108:TYR:HE1	1:D:2203:SER:HB2	1.84	0.43
1:D:2264:TRP:O	1:D:2270:LEU:HD22	2.19	0.43
1:E:2232:ILE:O	1:E:2235:ALA:HB3	2.19	0.43
1:E:2320:ILE:HA	1:E:2323:THR:HG22	2.01	0.43
1:C:930:THR:O	1:C:930:THR:HG22	2.19	0.43
1:C:1114:GLN:HE21	1:C:1148:ALA:HA	1.83	0.43
1:C:1767:VAL:HG12	1:C:1785:ILE:HA	2.01	0.43
1:C:2150:ARG:O	1:C:2156:LEU:HD11	2.19	0.43
1:F:158:THR:HG22	1:F:186:ASN:HD22	1.84	0.43
1:F:1439:PHE:O	1:F:1443:GLN:HB2	2.19	0.43
1:F:2221:ARG:NH2	1:F:2267:ASN:OD1	2.52	0.43
1:B:1289:LEU:C	1:B:1289:LEU:HD13	2.39	0.43
1:A:1123:LEU:HD13	1:A:1156:ARG:HD2	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1609:LEU:HD11	1:A:1666:PHE:CG	2.54	0.43
1:A:2326:ILE:HG22	1:A:2327:SER:N	2.34	0.43
1:Q:2151:LEU:HA	1:Q:2164:LEU:HD13	2.01	0.43
1:R:852:VAL:O	1:R:856:VAL:HG23	2.19	0.43
1:R:1535:GLU:N	1:R:1535:GLU:OE1	2.52	0.43
2:O:1792:VAL:HG11	2:O:1798:PHE:CD1	2.54	0.43
2:Y:1735:GLU:OE2	2:Y:1753:ARG:NH2	2.48	0.43
1:D:763:ILE:HD11	1:D:783:GLU:CG	2.48	0.43
1:D:991:LEU:CG	1:D:1066:LEU:HD11	2.49	0.43
1:D:998:GLU:OE2	1:D:1034:VAL:HG22	2.19	0.43
1:D:1287:HIS:O	1:D:1325:ARG:N	2.43	0.43
1:D:1621:PHE:CE2	1:D:1916:LYS:HG2	2.54	0.43
1:D:1718:ALA:HB2	1:D:1821:THR:OG1	2.19	0.43
1:D:1988:VAL:HG13	1:D:1988:VAL:O	2.18	0.43
1:E:625:ARG:HB3	1:E:626:PRO:CD	2.49	0.43
1:E:2206:LEU:HD21	1:E:2214:PHE:CE2	2.54	0.43
1:C:1114:GLN:HE21	1:C:1148:ALA:CA	2.32	0.43
1:C:1391:LEU:HD13	1:C:1404:TYR:CD2	2.54	0.43
1:C:1873:GLN:HA	1:C:1877:ASN:HD22	1.84	0.43
1:C:2217:TRP:CB	1:C:2267:ASN:HB3	2.49	0.43
1:C:2218:ARG:HD2	1:C:2221:ARG:HE	1.83	0.43
1:F:706:VAL:HG22	1:F:707:HIS:H	1.84	0.43
1:F:1934:PRO:O	1:F:1937:MET:HG3	2.19	0.43
1:B:1381:LEU:O	1:B:1383:LEU:N	2.52	0.43
1:B:2201:VAL:HG12	1:G:1798:ARG:HB2	2.01	0.43
1:A:452:VAL:CG1	1:A:505:VAL:HG23	2.48	0.43
1:A:609:ASP:OD1	1:A:612:TRP:N	2.52	0.43
1:A:668:ASN:HD22	1:A:868:CYS:HB2	1.84	0.43
1:A:924:GLN:HA	1:A:927:SER:H	1.84	0.43
1:A:2068:VAL:O	1:A:2071:LEU:HD23	2.18	0.43
1:G:2098:SER:H	1:G:2107:MET:HE3	1.84	0.43
1:J:1517:ILE:HG12	1:J:1518:ARG:H	1.84	0.43
2:M:1704:PHE:CE1	2:M:1843:ALA:HB2	2.54	0.43
2:Y:1691:THR:HG1	2:Y:1715:SER:HG	1.59	0.43
1:D:896:LEU:HD13	1:D:925:TYR:HD2	1.83	0.42
1:D:979:ILE:HD12	1:D:980:ARG:CG	2.40	0.42
1:D:1457:LEU:HD22	1:D:1457:LEU:N	2.34	0.42
1:D:1515:ILE:HG12	1:D:1528:ILE:O	2.19	0.42
1:D:1967:TRP:CZ2	1:D:2021:ASP:HB2	2.54	0.42
1:D:2114:ARG:CZ	1:D:2192:THR:HG22	2.49	0.42
1:D:2141:ASP:HB3	1:D:2144:TYR:HB3	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1535:GLU:N	1:E:1535:GLU:OE1	2.52	0.42
1:C:389:GLU:HB2	1:C:507:ALA:HB3	2.00	0.42
1:C:1060:LEU:HA	1:C:1063:LEU:HB3	2.01	0.42
1:C:2294:CYS:O	1:C:2297:ARG:HB3	2.19	0.42
1:F:258:LEU:HD21	1:F:352:ALA:HB2	2.00	0.42
1:F:943:ASN:CB	1:A:2243:GLN:HB3	2.49	0.42
1:F:1076:LYS:HG3	1:F:1077:VAL:HG13	2.00	0.42
1:F:1405:LEU:HD23	1:F:1421:PHE:CD1	2.54	0.42
1:F:1675:ARG:NH2	1:F:1899:LEU:O	2.46	0.42
1:F:1705:LEU:HD22	1:F:1708:ALA:HB3	2.01	0.42
1:F:1867:ASN:O	1:F:1871:GLY:N	2.45	0.42
1:F:1991:ARG:CZ	1:F:1993:VAL:HA	2.49	0.42
1:F:2150:ARG:O	1:F:2156:LEU:HD11	2.19	0.42
1:A:1391:LEU:HB2	1:A:1404:TYR:HB3	2.01	0.42
1:A:2106:GLU:OE1	1:A:2222:LEU:HD11	2.19	0.42
1:G:1710:GLY:HA2	1:G:1814:ILE:HG22	2.01	0.42
1:Q:2291:ASN:ND2	1:R:977:SER:OG	2.52	0.42
1:R:1079:LEU:HD12	1:R:1444:ASN:HA	2.00	0.42
1:D:910:ILE:CG1	1:D:915:GLU:HB2	2.50	0.42
1:D:1126:SER:OG	1:D:1428:ARG:NH2	2.52	0.42
1:D:1688:ILE:HG22	1:D:1823:ARG:HH22	1.83	0.42
1:E:679:VAL:HG23	1:E:832:HIS:CE1	2.55	0.42
1:E:965:THR:O	1:E:969:VAL:HG22	2.19	0.42
1:E:1065:GLU:OE1	1:E:1069:LEU:HD21	2.19	0.42
1:E:1530:LEU:HD21	1:E:1544:LEU:HD13	2.00	0.42
1:C:706:VAL:HG22	1:C:707:HIS:H	1.84	0.42
1:C:1693:PRO:CD	1:C:1791:GLY:HA2	2.49	0.42
1:C:2071:LEU:O	1:C:2071:LEU:HD23	2.18	0.42
1:C:2227:LEU:O	1:C:2231:LYS:HG2	2.18	0.42
1:F:355:SER:O	1:F:610:THR:N	2.51	0.42
1:F:1509:LEU:HD11	1:F:1535:GLU:OE2	2.18	0.42
1:F:2082:ILE:HG23	1:F:2088:LEU:HD23	2.00	0.42
1:B:998:GLU:OE1	1:B:1034:VAL:HG13	2.19	0.42
1:B:1670:GLU:CG	1:B:1913:LEU:HD21	2.49	0.42
1:A:155:VAL:HG22	1:A:172:ALA:HB3	2.01	0.42
1:A:240:LEU:HD21	1:A:415:VAL:HG21	2.01	0.42
1:A:1874:ILE:HD12	1:Q:2053:MET:SD	2.59	0.42
1:Q:1735:HIS:O	1:Q:1751:LEU:HA	2.20	0.42
1:Q:1736:VAL:HG22	1:Q:1751:LEU:CD2	2.49	0.42
1:J:1510:GLN:OE1	1:J:1577:TYR:OH	2.31	0.42
1:R:291:VAL:HG11	1:R:297:GLY:HA2	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:178:VAL:HG12	1:D:196:ILE:HD11	2.01	0.42
1:D:297:GLY:O	1:D:301:ALA:N	2.41	0.42
1:D:1104:PHE:O	1:D:1107:ALA:HB3	2.19	0.42
1:D:1585:SER:O	1:D:1589:GLN:NE2	2.52	0.42
1:D:2297:ARG:HE	1:C:2314:VAL:CG1	2.23	0.42
1:E:400:VAL:HG11	1:E:427:TYR:CE1	2.54	0.42
1:E:1513:LEU:HD12	1:E:1513:LEU:N	2.34	0.42
1:E:1598:ILE:HG13	1:E:1599:TYR:N	2.35	0.42
1:E:1882:HIS:HA	1:E:1964:MET:HE2	2.01	0.42
1:E:2128:PHE:HE2	1:E:2133:LEU:HD23	1.84	0.42
1:E:2244:ILE:O	1:E:2247:MET:HG3	2.19	0.42
1:C:1082:ARG:HD3	1:C:1440:GLU:HB2	2.00	0.42
1:C:1471:ASN:HD22	1:C:1507:ARG:C	2.21	0.42
1:C:1976:ALA:HB3	1:C:1985:VAL:HG21	2.01	0.42
1:F:682:VAL:HG11	1:F:698:ASN:HB3	2.01	0.42
1:F:724:THR:O	1:F:739:GLY:N	2.52	0.42
1:F:860:LEU:O	1:F:864:MET:N	2.49	0.42
1:F:1065:GLU:O	1:F:1068:GLN:HG2	2.19	0.42
1:F:1135:PRO:HA	1:F:1138:PHE:CE1	2.54	0.42
1:F:1976:ALA:O	1:F:1982:PRO:HA	2.19	0.42
1:F:2088:LEU:O	1:F:2115:GLY:HA2	2.19	0.42
1:B:1495:MET:O	1:B:1498:ARG:HB3	2.18	0.42
1:B:1854:LEU:O	1:B:1858:LEU:N	2.50	0.42
1:A:129:ALA:HB2	1:A:209:TRP:CZ3	2.54	0.42
1:A:625:ARG:NH1	1:A:742:THR:O	2.52	0.42
1:A:1024:VAL:O	1:A:1027:TYR:HB2	2.19	0.42
1:A:1069:LEU:CG	1:A:1078:ALA:HB2	2.49	0.42
1:A:1114:GLN:HE21	1:A:1148:ALA:HA	1.84	0.42
1:A:1373:LEU:HG	1:A:1378:ALA:HB2	2.02	0.42
1:A:1421:PHE:CE1	1:A:1460:ALA:HB1	2.55	0.42
1:A:2124:VAL:HG21	1:A:2184:VAL:HG12	2.00	0.42
1:J:128:ILE:HG23	1:J:209:TRP:HH2	1.83	0.42
1:J:920:LYS:O	1:J:923:ALA:HB3	2.19	0.42
1:J:1066:LEU:O	1:J:1069:LEU:HD23	2.20	0.42
1:R:1120:LEU:HD12	1:R:1152:VAL:HG23	2.01	0.42
2:K:1707:ILE:HD11	2:K:1749:PRO:HG3	2.01	0.42
2:U:1691:THR:CG2	2:U:1736:VAL:HG12	2.50	0.42
2:U:1764:LEU:HD23	2:U:1805:HIS:HB2	2.01	0.42
2:W:1705:LEU:HD22	2:W:1782:TRP:HE3	1.83	0.42
1:D:448:CYS:HA	1:D:505:VAL:HG11	2.00	0.42
1:D:735:ARG:HG3	1:D:744:VAL:HG22	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1411:GLU:OE1	1:D:1411:GLU:N	2.53	0.42
1:D:2057:TYR:HD1	1:C:1874:ILE:HG23	1.85	0.42
1:D:2295:ILE:HA	1:E:939:GLN:HE22	1.85	0.42
1:E:863:VAL:HG13	1:E:874:PHE:HZ	1.85	0.42
1:E:1429:HIS:O	1:E:1430:SER:HB3	2.19	0.42
1:E:2117:VAL:CG2	1:F:1797:LEU:HD21	2.40	0.42
1:C:625:ARG:HB3	1:C:626:PRO:CD	2.49	0.42
1:C:1377:LEU:HD12	1:C:1380:GLN:HG3	2.01	0.42
1:C:1677:ILE:HD13	1:C:1714:ILE:HG12	2.01	0.42
1:C:1752:TYR:HB2	1:C:1779:ARG:HB3	2.00	0.42
1:C:2046:TRP:O	1:C:2088:LEU:HA	2.19	0.42
1:C:2122:GLY:O	1:C:2125:GLU:HG2	2.19	0.42
1:F:631:GLY:O	1:F:635:GLY:N	2.46	0.42
1:F:939:GLN:OE1	1:A:2239:LEU:HD22	2.20	0.42
1:F:943:ASN:HB3	1:A:2243:GLN:HB3	2.02	0.42
1:F:1138:PHE:HA	1:F:1149:ALA:HB3	2.01	0.42
1:F:1534:ASN:HD22	1:F:1535:GLU:H	1.67	0.42
1:F:1877:ASN:C	1:F:1967:TRP:HB2	2.39	0.42
1:B:452:VAL:HG13	1:B:505:VAL:HG23	2.01	0.42
1:B:625:ARG:HB3	1:B:626:PRO:CD	2.48	0.42
1:B:1580:LYS:HE2	1:B:1583:LEU:HD22	2.02	0.42
1:B:2078:VAL:CG1	1:B:2105:MET:HG2	2.49	0.42
1:A:141:SER:O	1:A:145:PHE:N	2.37	0.42
1:A:331:PRO:O	1:A:966:GLN:NE2	2.52	0.42
1:A:634:CYS:SG	1:A:725:THR:HG21	2.59	0.42
1:A:666:LEU:HD23	1:A:1029:PHE:CE2	2.54	0.42
1:A:718:TYR:OH	1:A:838:ARG:NH2	2.52	0.42
1:A:977:SER:O	1:A:977:SER:OG	2.25	0.42
1:A:1370:TYR:CE1	1:A:1378:ALA:HB1	2.54	0.42
1:G:1936:TRP:CG	1:G:1941:ARG:HB3	2.55	0.42
1:Q:1836:GLN:OE1	1:Q:2028:GLN:NE2	2.52	0.42
1:Q:2306:SER:O	1:Q:2309:GLN:HG2	2.20	0.42
1:R:424:GLU:N	1:R:437:GLU:O	2.49	0.42
2:S:1691:THR:HG21	2:S:1736:VAL:HG12	2.01	0.42
1:D:149:ARG:NH1	1:D:173:ASP:OD1	2.52	0.42
1:D:241:GLY:HA3	1:D:440:PRO:HG3	2.01	0.42
1:D:370:ALA:O	1:D:409:VAL:HG13	2.20	0.42
1:D:463:GLN:OE1	1:D:473:ILE:HG23	2.20	0.42
1:D:871:ASP:HB3	1:D:872:PRO:HD2	2.02	0.42
1:D:1241:THR:HG22	1:D:1295:THR:CG2	2.49	0.42
1:E:193:ILE:O	1:E:197:ALA:N	2.39	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:638:HIS:ND1	1:E:727:MET:HB3	2.35	0.42
1:E:1240:ARG:HA	1:E:1294:LYS:HB3	2.00	0.42
1:E:1606:ARG:O	1:E:1610:ILE:HG13	2.19	0.42
1:E:1659:MET:HG3	1:E:1698:LEU:HD21	2.01	0.42
1:E:1751:LEU:O	1:E:1782:ILE:HG22	2.19	0.42
1:E:1863:TYR:CB	1:E:1869:LEU:HD21	2.49	0.42
1:E:1898:TRP:NE1	1:E:1961:SER:OG	2.50	0.42
1:E:2321:HIS:HE1	1:F:2305:ARG:HE	1.68	0.42
1:C:1333:GLN:HE21	1:C:1352:PHE:N	2.18	0.42
1:C:1675:ARG:NH2	1:C:1899:LEU:O	2.43	0.42
1:C:1725:GLY:C	1:C:1792:ILE:HD12	2.40	0.42
1:C:1782:ILE:HD12	1:C:1782:ILE:H	1.85	0.42
1:C:2141:ASP:OD1	1:C:2171:ARG:NH2	2.52	0.42
1:F:123:ILE:HB	1:F:155:VAL:HG12	2.01	0.42
1:F:1893:PHE:HA	1:F:1896:LEU:HD21	2.01	0.42
1:B:1084:VAL:O	1:B:1088:SER:OG	2.26	0.42
1:B:1766:SER:O	1:B:1787:GLY:N	2.44	0.42
1:B:2260:LYS:NZ	1:B:2263:VAL:HG11	2.35	0.42
1:B:2319:ILE:O	1:B:2323:THR:HG22	2.19	0.42
1:A:850:HIS:O	1:A:854:HIS:ND1	2.43	0.42
1:A:2309:GLN:NE2	1:Q:2324:GLN:OE1	2.47	0.42
1:G:1727:ALA:HB3	1:G:1785:ILE:HD11	2.02	0.42
1:G:1812:ASN:HA	1:G:2035:ARG:HD2	2.02	0.42
1:G:1954:PHE:CE2	1:G:1978:LEU:HD13	2.55	0.42
1:G:2151:LEU:HD21	1:G:2168:LEU:HD22	2.00	0.42
1:Q:1736:VAL:HG22	1:Q:1751:LEU:HD22	2.01	0.42
2:S:1705:LEU:HD22	2:S:1782:TRP:HE3	1.84	0.42
2:Y:1782:TRP:CE2	2:Y:1786:LEU:HD11	2.55	0.42
1:D:194:LEU:HD11	1:D:225:ASN:CG	2.38	0.42
1:D:249:VAL:HG11	1:D:415:VAL:HG21	2.02	0.42
1:D:975:TYR:HA	1:D:982:HIS:CE1	2.55	0.42
1:D:1978:LEU:O	1:D:1981:ILE:HG13	2.20	0.42
1:D:2301:LEU:HD12	1:D:2302:LYS:N	2.35	0.42
1:E:246:SER:O	1:E:250:ALA:N	2.32	0.42
1:E:930:THR:O	1:E:930:THR:HG22	2.19	0.42
1:E:1819:LEU:HD23	1:E:1819:LEU:N	2.31	0.42
1:E:2195:ARG:NH1	1:F:1793:GLY:HA3	2.35	0.42
1:E:2227:LEU:HD23	1:E:2227:LEU:C	2.40	0.42
1:E:2321:HIS:CE1	1:F:2305:ARG:HE	2.36	0.42
1:C:450:GLU:HG3	1:C:457:LEU:HD12	2.02	0.42
1:C:1246:VAL:HG23	1:C:1311:PHE:HE1	1.85	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1697:LEU:HA	1:C:1700:LEU:HB3	2.01	0.42
1:C:2232:ILE:HD12	1:C:2248:LEU:HD21	1.99	0.42
1:C:2325:HIS:CG	1:C:2326:ILE:H	2.36	0.42
1:F:707:HIS:HB3	1:F:715:LEU:HB2	2.00	0.42
1:F:1373:LEU:CD2	1:F:1378:ALA:HB2	2.50	0.42
1:F:2061:LEU:H	1:F:2061:LEU:CD2	2.33	0.42
1:A:194:LEU:HD11	1:A:225:ASN:CG	2.40	0.42
1:A:371:ILE:HG23	1:A:470:LEU:HD13	2.00	0.42
1:A:2095:VAL:HG23	1:A:2096:ILE:HG23	2.02	0.42
1:A:2326:ILE:HG22	1:A:2327:SER:H	1.84	0.42
1:Q:1862:VAL:HG11	1:Q:2002:ALA:HB2	2.02	0.42
1:R:312:ALA:HB2	1:R:337:VAL:HG13	2.01	0.42
2:U:1668:PHE:CG	2:U:1719:VAL:HG13	2.53	0.42
1:D:763:ILE:HD11	1:D:783:GLU:HG3	2.01	0.42
1:D:930:THR:HG22	1:D:930:THR:O	2.20	0.42
1:E:765:TYR:OH	1:E:799:ILE:HG21	2.19	0.42
1:E:1239:PHE:O	1:E:1293:ILE:HA	2.19	0.42
1:E:1585:SER:O	1:E:1589:GLN:NE2	2.53	0.42
1:E:2128:PHE:CE2	1:E:2183:ALA:HB2	2.54	0.42
1:E:2141:ASP:HB3	1:E:2144:TYR:HB3	2.02	0.42
1:E:2181:GLN:O	1:E:2184:VAL:HG22	2.20	0.42
1:C:759:ALA:O	1:C:784:VAL:HG22	2.20	0.42
1:C:1075:ALA:HB3	1:C:1447:GLU:OE2	2.20	0.42
1:C:1691:PHE:HB2	1:C:1722:ALA:HA	2.01	0.42
1:C:1817:ILE:HG21	1:C:1895:VAL:HG13	2.01	0.42
1:F:322:ARG:NE	1:F:336:GLN:OE1	2.51	0.42
1:F:371:ILE:HG12	1:F:470:LEU:HD13	2.02	0.42
1:F:1124:ILE:HG23	1:F:1159:ILE:HG21	2.02	0.42
1:F:1506:LEU:HB2	1:F:1508:VAL:HG23	2.01	0.42
1:B:993:GLN:O	1:B:997:VAL:HG23	2.20	0.42
1:B:1006:TYR:HE1	1:B:1028:ILE:HG23	1.85	0.42
1:B:1386:MET:O	1:B:1389:PHE:HB2	2.19	0.42
1:B:1515:ILE:CG2	1:B:1528:ILE:HD11	2.49	0.42
1:B:2323:THR:HG21	1:G:2334:VAL:HG21	2.01	0.42
1:A:197:ALA:CB	1:A:227:ILE:HD13	2.31	0.42
1:A:322:ARG:NE	1:A:336:GLN:OE1	2.47	0.42
1:A:944:ILE:HG13	1:A:945:LEU:N	2.35	0.42
1:A:1298:ASP:O	1:A:1300:GLU:N	2.53	0.42
1:R:1079:LEU:HD12	1:R:1444:ASN:CA	2.50	0.42
2:Y:1824:ILE:HG22	2:Y:1828:CYS:SG	2.59	0.42
1:D:176:VAL:HG11	1:D:196:ILE:HG12	2.00	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1381:LEU:HB3	1:D:1474:PHE:CE2	2.54	0.42
1:D:1426:ILE:HG12	1:D:1476:ASN:HD21	1.84	0.42
1:D:1457:LEU:HA	1:D:1457:LEU:HD13	1.61	0.42
1:D:1657:ILE:HD11	1:D:1698:LEU:CD1	2.50	0.42
1:D:1703:SER:HB3	1:D:1713:ARG:NH2	2.34	0.42
1:D:1865:SER:O	1:D:1868:GLN:HB2	2.20	0.42
1:D:1943:HIS:O	1:D:1947:LYS:HG3	2.20	0.42
1:D:1954:PHE:O	1:D:2212:ARG:HD2	2.20	0.42
1:D:1978:LEU:HB2	1:D:2212:ARG:NH1	2.34	0.42
1:E:714:LEU:HD21	1:E:727:MET:CE	2.50	0.42
1:E:1015:GLU:HA	1:E:1018:LYS:CG	2.49	0.42
1:E:1041:VAL:HG11	1:E:1077:VAL:CG1	2.49	0.42
1:E:1178:VAL:HG12	1:E:1236:MET:HB3	2.01	0.42
1:C:765:TYR:OH	1:C:799:ILE:HG21	2.19	0.42
1:C:774:PHE:N	1:C:777:GLN:OE1	2.52	0.42
1:C:1367:ASP:OD1	1:C:1368:ARG:N	2.53	0.42
1:C:1389:PHE:CE1	1:C:1420:ARG:HD2	2.55	0.42
1:C:1678:ILE:HD13	1:C:1706:ALA:HB1	2.02	0.42
1:C:1719:ASN:N	1:C:1823:ARG:O	2.48	0.42
1:C:2054:LYS:O	1:C:2057:TYR:HB3	2.20	0.42
1:C:2120:PRO:O	1:C:2124:VAL:HG22	2.20	0.42
1:F:641:ASP:O	1:F:645:ARG:N	2.43	0.42
1:F:976:ARG:HG3	1:F:977:SER:N	2.34	0.42
1:F:1245:PHE:O	1:F:1248:ILE:N	2.52	0.42
1:F:1603:GLU:O	1:F:1607:GLN:NE2	2.52	0.42
1:F:1811:TYR:O	1:F:2035:ARG:HD2	2.19	0.42
1:B:684:LYS:HB2	1:B:696:ILE:HB	2.02	0.42
1:B:1080:ARG:HH21	1:B:1083:GLN:HB3	1.85	0.42
1:B:1180:PHE:HB2	1:B:1234:GLY:HA3	2.02	0.42
1:B:1671:TYR:OH	1:B:1903:PRO:HA	2.20	0.42
1:B:2227:LEU:O	1:B:2230:LYS:HG2	2.20	0.42
1:A:1428:ARG:HB3	1:A:1478:VAL:CG2	2.50	0.42
1:A:2117:VAL:N	1:Q:1797:LEU:HD11	2.35	0.42
1:G:2030:ILE:HG21	1:G:2067:ILE:HD11	2.01	0.42
1:Q:2217:TRP:HB3	1:Q:2267:ASN:HB3	2.01	0.42
1:R:355:SER:OG	1:R:426:LEU:HD11	2.20	0.42
1:R:727:MET:N	1:R:727:MET:SD	2.92	0.42
2:H:1715:SER:N	2:H:1734:PHE:O	2.47	0.42
2:M:1746:HIS:O	2:M:1751:ARG:NH1	2.53	0.42
1:D:294:VAL:HG23	1:D:330:PHE:CE2	2.55	0.42
1:D:312:ALA:N	1:D:320:GLY:O	2.44	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:984:LYS:HZ1	1:D:1056:THR:HG22	1.85	0.42
1:D:1309:ARG:O	1:D:1312:THR:N	2.53	0.42
1:D:1829:ALA:HA	1:D:1832:VAL:HG12	2.02	0.42
1:D:1986:VAL:HB	1:D:2042:VAL:HG13	2.02	0.42
1:D:2300:VAL:O	1:D:2304:ILE:HG12	2.20	0.42
1:D:2311:ASN:ND2	1:D:2313:GLU:OE1	2.52	0.42
1:D:2335:ILE:HG23	1:C:2335:ILE:CG2	2.50	0.42
1:E:1055:LEU:HD12	1:E:1059:LEU:HD13	2.02	0.42
1:E:1684:ILE:HD11	1:E:1823:ARG:CZ	2.50	0.42
1:E:1938:LEU:HD21	1:E:1960:PHE:CD1	2.55	0.42
1:E:1943:HIS:CE1	1:E:1951:LEU:HD21	2.55	0.42
1:C:1700:LEU:CB	1:C:1803:ILE:HD11	2.50	0.42
1:C:2178:ILE:HG23	1:C:2179:TYR:CD1	2.55	0.42
1:C:2319:ILE:O	1:C:2322:MET:HB2	2.20	0.42
1:C:2331:ARG:O	1:C:2335:ILE:HG13	2.19	0.42
1:F:357:HIS:N	1:F:379:SER:OG	2.39	0.42
1:F:1648:MET:HG2	1:F:1650:ARG:HB3	2.00	0.42
1:F:2016:GLN:HE21	1:F:2045:ASN:ND2	2.17	0.42
1:B:1429:HIS:O	1:B:1441:TYR:OH	2.30	0.42
1:B:1447:GLU:OE1	1:B:1447:GLU:N	2.47	0.42
1:A:1239:PHE:CZ	1:A:1248:ILE:HG21	2.54	0.42
1:A:2015:GLY:O	1:A:2017:VAL:HG23	2.20	0.42
1:G:2240:THR:HG22	1:G:2242:GLY:H	1.84	0.42
1:Q:1860:ARG:NH2	1:Q:2001:PRO:O	2.51	0.42
1:Q:2030:ILE:HG21	1:Q:2067:ILE:HD11	2.02	0.42
1:Q:2240:THR:HG22	1:Q:2241:ASP:OD1	2.20	0.42
1:J:767:VAL:HG12	1:J:768:GLU:N	2.32	0.42
1:J:780:ALA:HB3	1:J:791:LEU:HD12	2.01	0.42
1:R:1116:CYS:O	1:R:1120:LEU:N	2.42	0.42
2:K:1784:VAL:HB	2:K:1789:ALA:HB3	2.01	0.42
1:E:1729:GLU:OE1	1:E:1729:GLU:N	2.48	0.42
1:E:1748:TYR:CD1	1:F:2182:VAL:HG22	2.55	0.42
1:E:1937:MET:O	1:E:1954:PHE:N	2.51	0.42
1:C:1126:SER:OG	1:C:1428:ARG:NH2	2.40	0.42
1:C:1840:GLN:HB3	1:C:1872:ILE:HG22	2.01	0.42
1:C:1936:TRP:CD1	1:C:1941:ARG:HB3	2.55	0.42
1:C:2259:VAL:HG22	1:B:291:VAL:HA	2.01	0.42
1:F:450:GLU:HG3	1:F:457:LEU:HD12	2.02	0.42
1:F:809:LEU:HD12	1:F:813:CYS:SG	2.59	0.42
1:F:910:ILE:CG1	1:F:915:GLU:HB2	2.49	0.42
1:F:1719:ASN:N	1:F:1823:ARG:O	2.44	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1791:GLY:C	1:F:1796:ASN:HD21	2.22	0.42
1:B:1391:LEU:HD12	1:B:1391:LEU:O	2.19	0.42
1:B:1606:ARG:NH2	1:B:1632:LEU:HG	2.35	0.42
1:Q:1700:LEU:HD11	1:Q:1802:MET:HG2	2.01	0.42
1:Q:1923:ILE:HD12	1:Q:2208:TRP:O	2.20	0.42
1:J:352:ALA:HB3	1:J:426:LEU:CD2	2.50	0.42
1:J:1120:LEU:HD12	1:J:1152:VAL:HG23	2.01	0.42
1:J:1314:GLN:NE2	1:J:1315:ASN:OD1	2.52	0.42
1:R:631:GLY:O	1:R:635:GLY:N	2.45	0.42
1:R:1403:LEU:HA	1:R:1423:VAL:HA	2.01	0.42
1:D:301:ALA:O	1:D:305:GLY:N	2.50	0.41
1:D:1330:LEU:HD23	1:D:1330:LEU:C	2.41	0.41
1:D:1401:MET:CE	1:D:1453:ALA:HB2	2.50	0.41
1:D:1516:ASN:HA	1:D:1526:ILE:O	2.20	0.41
1:D:1719:ASN:OD1	1:D:1825:ILE:N	2.49	0.41
1:E:1298:ASP:O	1:E:1300:GLU:N	2.53	0.41
1:E:1470:CYS:O	1:E:1510:GLN:NE2	2.53	0.41
1:E:1941:ARG:O	1:E:1950:TRP:HA	2.20	0.41
1:E:2278:LEU:N	1:E:2278:LEU:HD22	2.34	0.41
1:C:954:ARG:HG3	1:B:2200:GLY:HA3	2.02	0.41
1:C:976:ARG:HG3	1:C:977:SER:N	2.34	0.41
1:C:1603:GLU:OE1	1:C:1607:GLN:NE2	2.53	0.41
1:C:1693:PRO:O	1:C:1697:LEU:HB2	2.19	0.41
1:C:1727:ALA:HB3	1:C:1730:ILE:HG22	2.02	0.41
1:F:1451:LEU:HD11	1:F:1499:TYR:OH	2.19	0.41
1:B:176:VAL:HG11	1:B:196:ILE:CG1	2.50	0.41
1:B:253:ALA:HB2	1:B:414:MET:SD	2.60	0.41
1:B:638:HIS:HB2	1:B:727:MET:HG3	2.01	0.41
1:B:1031:HIS:O	1:B:1034:VAL:HG23	2.20	0.41
1:B:1735:HIS:CE1	1:B:1754:THR:HG23	2.55	0.41
1:B:1851:ALA:HA	1:B:1869:LEU:HD11	2.02	0.41
1:B:1929:LYS:HG2	1:B:2085:GLN:HE21	1.84	0.41
1:A:444:VAL:HG22	1:A:540:TYR:OH	2.20	0.41
1:A:903:MET:HE2	1:A:918:ILE:HD13	2.02	0.41
1:A:941:ILE:HD11	1:A:972:VAL:CB	2.48	0.41
1:A:960:VAL:O	1:A:963:MET:HB3	2.19	0.41
1:A:1919:ILE:HG13	1:A:1979:GLY:HA3	2.01	0.41
1:A:1971:VAL:HG13	1:A:2025:LYS:NZ	2.34	0.41
1:A:2096:ILE:HD12	1:A:2096:ILE:O	2.19	0.41
1:G:2197:GLN:HB3	1:G:2202:ILE:HD11	2.02	0.41
1:J:1245:PHE:O	1:J:1248:ILE:N	2.52	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:R:371:ILE:HD11	1:R:476:ILE:HD12	2.02	0.41
1:R:914:VAL:HG11	1:R:945:LEU:HD12	2.00	0.41
2:S:1730:ASN:HD22	2:S:1731:GLU:N	2.18	0.41
2:U:1701:LEU:HD13	2:U:1775:MET:HG3	2.02	0.41
1:D:197:ALA:CA	1:D:202:VAL:HG22	2.46	0.41
1:D:450:GLU:CG	1:D:457:LEU:HD12	2.49	0.41
1:D:1774:ASP:O	1:D:1779:ARG:NH1	2.53	0.41
1:D:1941:ARG:HG3	1:D:1942:PRO:O	2.21	0.41
1:D:2260:LYS:O	1:D:2263:VAL:HB	2.20	0.41
1:E:265:LEU:HD22	1:E:285:LEU:HD12	2.01	0.41
1:E:1103:ILE:O	1:E:1106:SER:OG	2.36	0.41
1:E:1309:ARG:O	1:E:1312:THR:N	2.53	0.41
1:E:1528:ILE:HD12	1:E:1530:LEU:CD1	2.50	0.41
1:E:1753:LEU:HD13	1:E:1758:TYR:HA	2.02	0.41
1:E:1879:GLY:HA2	1:E:1964:MET:SD	2.59	0.41
1:E:2068:VAL:HA	1:E:2071:LEU:CD2	2.50	0.41
1:E:2076:GLN:HA	1:E:2104:HIS:CD2	2.55	0.41
1:C:674:LEU:HD11	1:C:745:PHE:CG	2.56	0.41
1:C:835:SER:C	1:C:836:LEU:HD12	2.39	0.41
1:C:1110:MET:HG2	1:C:1144:VAL:HG11	2.01	0.41
1:C:1314:GLN:NE2	1:C:1315:ASN:OD1	2.53	0.41
1:C:1384:ASN:O	1:C:1576:PRO:HA	2.20	0.41
1:C:1419:TYR:HB3	1:C:1466:VAL:HG21	2.01	0.41
1:C:1472:HIS:HA	1:C:1510:GLN:O	2.20	0.41
1:C:1503:LEU:HG	1:C:1508:VAL:HG21	2.02	0.41
1:F:923:ALA:O	1:F:926:ALA:HB3	2.20	0.41
1:F:1326:ARG:C	1:F:1327:LEU:HD22	2.40	0.41
1:F:1766:SER:O	1:F:1786:ILE:N	2.50	0.41
1:F:1811:TYR:CZ	1:F:1836:GLN:HG3	2.56	0.41
1:F:2067:ILE:CD1	1:F:2095:VAL:HG12	2.50	0.41
1:B:1233:MET:N	1:B:1233:MET:SD	2.93	0.41
1:B:1408:ALA:O	1:B:1410:VAL:HG23	2.20	0.41
1:A:332:ASN:HB2	1:A:906:VAL:HG22	2.02	0.41
1:A:696:ILE:CD1	1:A:870:PRO:HB2	2.50	0.41
1:A:1125:LEU:HD23	1:A:1125:LEU:O	2.20	0.41
1:A:1919:ILE:CG1	1:A:1979:GLY:HA3	2.50	0.41
1:Q:1612:LEU:HD13	1:Q:1896:LEU:CD1	2.50	0.41
1:R:1076:LYS:HB2	1:R:1448:ARG:HE	1.84	0.41
1:R:1245:PHE:O	1:R:1248:ILE:N	2.53	0.41
1:D:696:ILE:HG23	1:D:700:SER:O	2.20	0.41
1:D:938:SER:O	1:D:941:ILE:HG13	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1137:PHE:O	1:D:1140:HIS:HB3	2.20	0.41
1:D:1147:MET:HE1	1:D:1168:HIS:HB3	2.02	0.41
1:D:1424:ARG:HG2	1:D:1474:PHE:HB3	2.03	0.41
1:D:1473:ILE:HB	1:D:1511:ALA:HA	2.02	0.41
1:D:1912:LEU:HD22	1:D:1981:ILE:HG22	2.01	0.41
1:D:2024:PHE:O	1:D:2028:GLN:HG2	2.20	0.41
1:E:183:ASN:HA	1:E:186:ASN:OD1	2.20	0.41
1:E:368:GLY:O	1:E:413:LYS:HG2	2.20	0.41
1:E:1327:LEU:HB2	1:E:1358:PHE:O	2.20	0.41
1:E:1475:LEU:HD21	1:E:1477:PHE:CG	2.55	0.41
1:E:1699:PHE:CD2	1:E:1803:ILE:HD11	2.55	0.41
1:E:1825:ILE:O	1:E:1828:GLY:N	2.52	0.41
1:E:1935:ARG:HG2	1:E:1972:VAL:HG11	2.01	0.41
1:C:1483:MET:O	1:C:1517:ILE:HD12	2.20	0.41
1:C:2069:ASP:OD1	1:C:2072:ARG:NH2	2.53	0.41
1:F:1329:PHE:O	1:F:1356:PHE:N	2.46	0.41
1:F:1373:LEU:HD23	1:F:1378:ALA:HB2	2.02	0.41
1:F:1613:TRP:CZ3	1:F:1622:LEU:HD21	2.55	0.41
1:F:1760:ARG:HG3	1:F:1761:VAL:H	1.84	0.41
1:F:2251:TRP:CD1	1:F:2288:ILE:HD11	2.55	0.41
1:B:637:LEU:HA	1:B:640:ALA:HB3	2.02	0.41
1:B:971:LEU:HD23	1:B:974:ARG:NH2	2.35	0.41
1:B:2068:VAL:O	1:B:2071:LEU:HD23	2.20	0.41
1:A:243:LYS:HD2	1:A:313:SER:HA	2.01	0.41
1:A:651:PHE:CE1	1:A:1025:LEU:HD13	2.55	0.41
1:A:878:VAL:O	1:A:882:VAL:HG23	2.19	0.41
1:A:1069:LEU:CD1	1:A:1078:ALA:HB2	2.46	0.41
1:A:1515:ILE:CG2	1:A:1528:ILE:HD11	2.51	0.41
1:A:1923:ILE:HD11	1:A:2212:ARG:HB2	2.02	0.41
1:A:2288:ILE:H	1:A:2288:ILE:HD12	1.86	0.41
1:Q:1680:ILE:HG21	1:Q:1699:PHE:HD1	1.85	0.41
1:Q:1828:GLY:O	1:Q:1832:VAL:HG23	2.20	0.41
1:Q:2206:LEU:HD11	1:Q:2214:PHE:CD2	2.55	0.41
1:D:693:TYR:CZ	1:D:706:VAL:HG21	2.55	0.41
1:D:1096:ARG:O	1:D:1100:VAL:HG22	2.19	0.41
1:D:1125:LEU:O	1:D:1125:LEU:HD13	2.19	0.41
1:D:1166:VAL:HG13	1:D:1179:GLU:O	2.20	0.41
1:D:2258:THR:HG22	1:E:295:ASP:HB2	2.03	0.41
1:E:654:SER:HB2	1:E:661:LEU:HD13	2.01	0.41
1:E:969:VAL:HA	1:E:972:VAL:HG12	2.02	0.41
1:E:986:VAL:HG23	1:E:987:VAL:N	2.34	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1675:ARG:NH1	1:E:1899:LEU:O	2.54	0.41
1:E:2232:ILE:N	1:E:2232:ILE:HD12	2.34	0.41
1:C:322:ARG:NE	1:C:336:GLN:OE1	2.52	0.41
1:C:917:SER:HB2	1:C:944:ILE:HG21	2.02	0.41
1:C:1124:ILE:HG23	1:C:1159:ILE:CG2	2.50	0.41
1:C:1534:ASN:HD22	1:C:1535:GLU:H	1.67	0.41
1:F:1098:ASN:HA	1:F:1101:GLU:HB3	2.01	0.41
1:F:1711:ILE:C	1:F:1711:ILE:HD12	2.40	0.41
1:F:2133:LEU:O	1:F:2136:THR:OG1	2.30	0.41
1:F:2319:ILE:HG22	1:F:2323:THR:HG23	2.02	0.41
1:B:230:MET:HE3	1:B:462:LEU:HA	2.01	0.41
1:B:625:ARG:NH1	1:B:742:THR:O	2.52	0.41
1:B:1556:ILE:O	1:B:1572:LEU:HA	2.21	0.41
1:B:1726:LEU:HD12	1:G:2127:LYS:HD3	2.03	0.41
1:B:1751:LEU:HD21	1:G:2182:VAL:HG13	2.02	0.41
1:B:1973:VAL:HG21	1:B:2029:ALA:HB2	2.00	0.41
1:A:359:GLU:HB3	1:A:422:THR:HG23	2.02	0.41
1:A:423:VAL:HG13	1:A:435:PHE:CE1	2.55	0.41
1:A:1613:TRP:CE3	1:A:1622:LEU:HD12	2.55	0.41
1:A:2062:LYS:HG2	1:Q:1833:ARG:HE	1.85	0.41
1:A:2131:LYS:O	1:A:2135:LYS:N	2.45	0.41
1:A:2232:ILE:O	1:A:2235:ALA:HB3	2.21	0.41
1:G:1973:VAL:HG21	1:G:2029:ALA:HB2	2.02	0.41
1:Q:1605:PHE:CE2	1:Q:1609:LEU:HD22	2.55	0.41
1:J:122:LEU:HD21	1:J:156:MET:CE	2.51	0.41
1:R:1408:ALA:O	1:R:1416:VAL:HG12	2.20	0.41
2:K:1704:PHE:HE2	2:K:1839:LEU:HD22	1.86	0.41
2:O:1730:ASN:HD21	2:O:1732:HIS:HD2	1.69	0.41
1:D:400:VAL:HG11	1:D:427:TYR:HE1	1.86	0.41
1:D:595:ILE:HA	1:D:598:LEU:HD12	2.03	0.41
1:D:1094:GLU:HA	1:D:1097:HIS:HB3	2.03	0.41
1:D:1580:LYS:O	1:D:1583:LEU:N	2.54	0.41
1:D:1659:MET:HG3	1:D:1698:LEU:HD11	2.01	0.41
1:D:1713:ARG:HE	1:D:1816:THR:CB	2.34	0.41
1:D:1729:GLU:OE1	1:D:1729:GLU:N	2.47	0.41
1:D:2195:ARG:NH1	1:C:1793:GLY:HA3	2.35	0.41
1:D:2195:ARG:O	1:D:2199:LYS:HG2	2.21	0.41
1:E:886:MET:O	1:E:889:LEU:HG	2.20	0.41
1:E:995:LEU:HD21	1:E:1069:LEU:HD11	2.02	0.41
1:E:2240:THR:O	1:E:2243:GLN:HG2	2.21	0.41
1:E:2326:ILE:HG22	1:E:2327:SER:N	2.35	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:151:ILE:HD12	1:C:462:LEU:HD21	2.03	0.41
1:C:633:VAL:O	1:C:636:ALA:HB3	2.20	0.41
1:C:1309:ARG:O	1:C:1312:THR:OG1	2.28	0.41
1:C:1863:TYR:OH	1:C:2000:ASP:OD1	2.36	0.41
1:C:1925:PHE:HD2	1:C:1937:MET:HA	1.85	0.41
1:C:2327:SER:HA	1:C:2330:GLN:HB3	2.01	0.41
1:F:1470:CYS:HA	1:F:1509:LEU:HB3	2.02	0.41
1:F:1489:GLU:C	1:F:1493:ARG:HE	2.18	0.41
1:F:1712:PRO:HD3	1:F:1904:LYS:O	2.21	0.41
1:B:995:LEU:HG	1:B:1066:LEU:HD21	2.03	0.41
1:B:2101:ASN:H	1:B:2105:MET:CE	2.33	0.41
1:B:2116:SER:C	1:G:1797:LEU:HD11	2.40	0.41
1:A:420:ALA:HB3	1:A:461:GLN:HG2	2.03	0.41
1:A:1096:ARG:HA	1:A:1099:GLN:HB3	2.03	0.41
1:A:2127:LYS:HE2	1:Q:1726:LEU:HG	2.01	0.41
1:G:2297:ARG:O	1:G:2300:VAL:HG22	2.20	0.41
1:Q:2240:THR:HG22	1:Q:2242:GLY:H	1.86	0.41
1:J:1130:ILE:HG22	1:J:1130:ILE:O	2.20	0.41
1:J:1384:ASN:HA	1:J:1387:ARG:HB2	2.01	0.41
1:R:1369:ILE:HD12	1:R:1391:LEU:CD2	2.50	0.41
1:R:1480:THR:O	1:R:1480:THR:OG1	2.32	0.41
2:H:1664:LEU:CD2	2:H:1723:ILE:HD12	2.50	0.41
2:K:1755:SER:O	2:K:1845:TYR:OH	2.34	0.41
1:D:1757:ASP:HA	1:D:1760:ARG:HE	1.86	0.41
1:D:2113:SER:O	1:D:2114:ARG:HG2	2.21	0.41
1:D:2327:SER:HB2	1:D:2330:GLN:HG2	2.03	0.41
1:E:283:GLN:HA	1:E:286:TYR:HB3	2.03	0.41
1:E:894:LEU:HD12	1:E:895:PRO:HD3	2.03	0.41
1:E:1588:PHE:O	1:E:1592:SER:HB3	2.19	0.41
1:E:1772:VAL:HG21	1:E:1781:LYS:HB2	2.02	0.41
1:E:2056:MET:CE	1:E:2061:LEU:HD21	2.51	0.41
1:C:122:LEU:HD21	1:C:156:MET:CE	2.50	0.41
1:C:1970:THR:HA	1:C:1993:VAL:HG21	2.02	0.41
1:F:668:ASN:ND2	1:F:868:CYS:SG	2.93	0.41
1:F:1481:VAL:O	1:F:1517:ILE:HA	2.20	0.41
1:F:1895:VAL:HG12	1:F:1899:LEU:CD1	2.51	0.41
1:B:194:LEU:HA	1:B:197:ALA:HB3	2.02	0.41
1:B:442:LEU:HB2	1:B:461:GLN:HE22	1.85	0.41
1:B:1175:THR:CG2	1:B:1237:VAL:HG13	2.50	0.41
1:B:2307:LEU:HD22	1:G:2304:ILE:HD11	2.03	0.41
1:A:998:GLU:OE1	1:A:1074:ASN:ND2	2.51	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1516:ASN:HA	1:A:1526:ILE:O	2.20	0.41
1:R:281:VAL:HG12	1:R:286:TYR:HB2	2.03	0.41
1:R:1130:ILE:O	1:R:1130:ILE:HG22	2.20	0.41
2:O:1765:GLU:O	2:O:1807:ILE:N	2.53	0.41
1:D:236:ALA:O	1:D:240:LEU:HB2	2.21	0.41
1:D:1944:PRO:HD2	1:D:1951:LEU:HG	2.03	0.41
1:E:874:PHE:O	1:E:877:LYS:N	2.54	0.41
1:E:1125:LEU:HG	1:E:1125:LEU:O	2.20	0.41
1:C:615:ARG:NH2	1:C:715:LEU:HD22	2.36	0.41
1:C:2016:GLN:HE21	1:C:2045:ASN:ND2	2.19	0.41
1:C:2041:MET:HG2	1:C:2079:LEU:HB2	2.03	0.41
1:C:2093:TRP:CH2	1:C:2201:VAL:HG21	2.55	0.41
1:C:2122:GLY:HA2	1:C:2125:GLU:HG2	2.02	0.41
1:C:2260:LYS:O	1:C:2263:VAL:HB	2.21	0.41
1:C:2317:ASP:O	1:C:2320:ILE:HG12	2.20	0.41
1:F:448:CYS:HA	1:F:505:VAL:HG11	2.03	0.41
1:F:1913:LEU:HB2	1:F:1977:ARG:NH2	2.35	0.41
1:F:2258:THR:CG2	1:A:296:ASP:H	2.30	0.41
1:B:243:LYS:HD2	1:B:313:SER:HA	2.02	0.41
1:B:780:ALA:HB3	1:B:791:LEU:CD1	2.50	0.41
1:B:1289:LEU:HD11	1:B:1291:VAL:CG1	2.50	0.41
1:B:1499:TYR:O	1:B:1503:LEU:HD13	2.21	0.41
1:B:1545:TYR:CG	1:B:1558:PHE:HB3	2.55	0.41
1:B:1748:TYR:CD1	1:G:2182:VAL:HG22	2.56	0.41
1:B:2062:LYS:HG2	1:G:1833:ARG:HE	1.86	0.41
1:B:2297:ARG:O	1:B:2301:LEU:N	2.46	0.41
1:A:156:MET:SD	1:A:178:VAL:HG11	2.61	0.41
1:A:1437:ALA:HB1	1:A:1441:TYR:CE1	2.56	0.41
1:A:1527:PRO:HG2	1:A:1547:GLU:HB2	2.02	0.41
1:G:2082:ILE:HG12	1:G:2088:LEU:HD23	2.03	0.41
1:J:205:VAL:HG11	1:J:218:LEU:HD21	2.03	0.41
1:J:1408:ALA:O	1:J:1416:VAL:HG12	2.20	0.41
1:R:706:VAL:HG22	1:R:707:HIS:H	1.86	0.41
2:K:1704:PHE:CE1	2:K:1843:ALA:HB2	2.56	0.41
2:W:1792:VAL:HG11	2:W:1798:PHE:CD1	2.56	0.41
1:D:294:VAL:HG22	1:D:298:LEU:CD1	2.43	0.41
1:D:1847:ILE:HG21	1:D:1869:LEU:HD13	2.03	0.41
1:D:1984:GLY:C	1:D:2040:LEU:HD13	2.41	0.41
1:E:164:ALA:O	1:E:524:GLY:N	2.54	0.41
1:E:1612:LEU:HD23	1:E:1612:LEU:C	2.40	0.41
1:E:1636:GLU:HA	1:E:1662:TRP:HA	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1749:ARG:NE	1:E:1775:GLU:OE2	2.35	0.41
1:E:2120:PRO:HB3	1:E:2184:VAL:O	2.20	0.41
1:E:2220:ARG:O	1:E:2224:LEU:HD12	2.21	0.41
1:E:2300:VAL:HG12	1:E:2304:ILE:HD11	2.03	0.41
1:C:668:ASN:ND2	1:C:868:CYS:SG	2.94	0.41
1:F:354:GLN:O	1:F:714:LEU:N	2.53	0.41
1:F:1095:LEU:O	1:F:1098:ASN:HB3	2.20	0.41
1:F:1331:VAL:HG22	1:F:1354:LYS:O	2.21	0.41
1:F:2263:VAL:CG1	1:F:2269:ASP:HB2	2.50	0.41
1:F:2288:ILE:HA	1:F:2291:ASN:HD22	1.85	0.41
1:B:178:VAL:HA	1:B:192:LEU:HD21	2.03	0.41
1:B:442:LEU:HD11	1:B:446:HIS:ND1	2.36	0.41
1:A:310:ILE:HD11	1:A:330:PHE:CE1	2.55	0.41
1:A:380:VAL:HG11	1:A:388:ILE:HB	2.02	0.41
1:A:1309:ARG:NH1	1:A:1366:GLU:OE2	2.54	0.41
1:A:1408:ALA:HB2	1:A:1418:ASP:HB2	2.03	0.41
1:A:1424:ARG:HA	1:A:1474:PHE:HB3	2.02	0.41
1:G:1636:GLU:OE2	1:G:1650:ARG:NH2	2.46	0.41
1:Q:2044:ALA:HB1	1:Q:2088:LEU:HD11	2.02	0.41
1:J:377:ASP:OD1	1:J:379:SER:OG	2.28	0.41
1:R:454:ASP:OD1	1:R:502:ARG:NH2	2.54	0.41
1:R:1145:VAL:O	1:R:1149:ALA:HB3	2.20	0.41
1:R:1391:LEU:H	1:R:1391:LEU:HD13	1.85	0.41
1:D:894:LEU:HD23	1:D:897:LEU:HD13	2.01	0.41
1:D:1015:GLU:HA	1:D:1018:LYS:CG	2.51	0.41
1:D:1475:LEU:HD13	1:D:1475:LEU:O	2.21	0.41
1:D:1855:ASN:ND2	1:D:1863:TYR:O	2.38	0.41
1:D:1954:PHE:HE1	1:D:2212:ARG:HA	1.84	0.41
1:D:2229:LYS:HE2	1:D:2244:ILE:HG21	2.03	0.41
1:D:2305:ARG:O	1:D:2309:GLN:HG2	2.20	0.41
1:E:679:VAL:HG22	1:E:832:HIS:HA	2.02	0.41
1:E:1248:ILE:O	1:E:1248:ILE:HG22	2.20	0.41
1:E:1420:ARG:HG2	1:E:1470:CYS:HB3	2.01	0.41
1:E:1637:LEU:HD21	1:E:1663:LYS:HB2	2.03	0.41
1:E:1656:GLU:HG3	1:E:1657:ILE:HG23	2.03	0.41
1:E:1728:GLU:OE1	1:E:1731:ARG:NH2	2.54	0.41
1:E:1800:SER:O	1:E:1803:ILE:HG22	2.21	0.41
1:E:1833:ARG:HB2	1:F:2061:LEU:HD12	2.03	0.41
1:E:1919:ILE:H	1:E:1919:ILE:HD12	1.85	0.41
1:E:1931:PRO:HB2	1:E:1991:ARG:HG3	2.02	0.41
1:E:2195:ARG:O	1:E:2199:LYS:HG2	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2320:ILE:HD12	1:A:933:LEU:HD23	2.03	0.41
1:C:945:LEU:O	1:C:949:ALA:N	2.50	0.41
1:C:1086:ILE:O	1:C:1089:HIS:N	2.46	0.41
1:C:1122:LYS:O	1:C:1126:SER:HB3	2.20	0.41
1:C:1636:GLU:HB2	1:C:1648:MET:O	2.20	0.41
1:C:1819:LEU:HD11	1:C:1895:VAL:HG21	2.03	0.41
1:C:2218:ARG:HD3	1:C:2221:ARG:HE	1.86	0.41
1:F:122:LEU:HD21	1:F:156:MET:CE	2.51	0.41
1:F:166:ALA:HB2	1:F:525:THR:HG21	2.03	0.41
1:F:640:ALA:HB2	1:F:685:VAL:HG11	2.03	0.41
1:F:1302:ASP:OD1	1:F:1302:ASP:N	2.54	0.41
1:F:1699:PHE:O	1:F:1703:SER:OG	2.35	0.41
1:F:2068:VAL:O	1:F:2072:ARG:HB2	2.20	0.41
1:F:2227:LEU:O	1:F:2230:LYS:HB3	2.20	0.41
1:F:2258:THR:OG1	1:A:293:ASP:HB2	2.21	0.41
1:F:2258:THR:HG23	1:F:2259:VAL:N	2.35	0.41
1:B:724:THR:O	1:B:738:ILE:HG23	2.21	0.41
1:B:780:ALA:CB	1:B:791:LEU:HD12	2.51	0.41
1:B:861:VAL:HG23	1:B:990:LEU:HD22	2.02	0.41
1:B:1369:ILE:HG23	1:B:1404:TYR:OH	2.21	0.41
1:B:1410:VAL:HG12	1:B:1411:GLU:N	2.35	0.41
1:B:1533:THR:OG1	1:B:1541:ASP:O	2.33	0.41
1:B:2019:PHE:HB2	1:B:2021:ASP:OD1	2.20	0.41
1:B:2055:ASP:OD1	1:B:2056:MET:N	2.54	0.41
1:B:2107:MET:HB3	1:B:2202:ILE:HD12	2.03	0.41
1:B:2107:MET:HG2	1:B:2202:ILE:HD12	2.02	0.41
1:B:2151:LEU:HA	1:B:2164:LEU:HD13	2.03	0.41
1:A:193:ILE:HG21	1:A:218:LEU:HD11	2.02	0.41
1:A:1703:SER:HG	1:A:1713:ARG:NH1	2.17	0.41
1:A:1919:ILE:H	1:A:1919:ILE:HD12	1.86	0.41
1:A:2116:SER:C	1:Q:1797:LEU:HD11	2.41	0.41
1:A:2117:VAL:HG11	1:Q:1722:ALA:HB3	2.03	0.41
1:A:2259:VAL:HG13	1:A:2260:LYS:HG2	2.02	0.41
1:G:1923:ILE:HD12	1:G:2208:TRP:O	2.20	0.41
1:G:2039:PRO:CG	1:G:2223:LEU:HD21	2.50	0.41
1:G:2045:ASN:HA	1:G:2086:ALA:HB1	2.03	0.41
1:G:2108:TYR:OH	1:G:2218:ARG:NE	2.53	0.41
1:J:357:HIS:N	1:J:379:SER:OG	2.48	0.41
1:J:371:ILE:CD1	1:J:476:ILE:HD12	2.50	0.41
1:J:510:ILE:CG2	1:J:581:LEU:HD21	2.51	0.41
1:J:1104:PHE:CE2	1:J:1145:VAL:HG13	2.53	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:R:655:LEU:HD21	1:R:1024:VAL:HG11	2.03	0.41
2:H:1695:PHE:O	2:H:1737:ARG:N	2.42	0.41
2:K:1808:VAL:HG11	2:K:1824:ILE:HD13	2.01	0.41
2:M:1665:VAL:HA	2:M:1719:VAL:HG11	2.02	0.41
2:Y:1651:SER:O	2:Y:1686:HIS:N	2.54	0.41
2:Y:1832:VAL:HG12	2:Y:1855:ILE:HD12	2.02	0.41
1:D:356:ARG:HG3	1:D:395:ILE:HG21	2.02	0.41
1:D:869:LEU:HD22	1:D:874:PHE:CD1	2.56	0.41
1:D:1789:GLU:OE1	1:D:1792:ILE:HG23	2.20	0.41
1:E:249:VAL:HG11	1:E:415:VAL:HG21	2.03	0.41
1:E:637:LEU:HD11	1:E:693:TYR:CG	2.56	0.41
1:E:1809:LEU:HD23	1:E:1809:LEU:C	2.41	0.41
1:E:2045:ASN:OD1	1:E:2083:PRO:HD2	2.21	0.41
1:E:2206:LEU:HD11	1:E:2214:PHE:CD2	2.56	0.41
1:C:899:LEU:O	1:C:903:MET:HB2	2.20	0.41
1:C:1119:ASN:O	1:C:1123:LEU:N	2.49	0.41
1:C:1331:VAL:HG22	1:C:1354:LYS:O	2.21	0.41
1:C:1693:PRO:O	1:C:1697:LEU:CB	2.69	0.41
1:C:1848:LEU:HD22	1:C:1848:LEU:N	2.36	0.41
1:F:633:VAL:O	1:F:636:ALA:HB3	2.21	0.41
1:F:721:SER:OG	1:F:722:SER:N	2.53	0.41
1:F:889:LEU:HD13	1:F:983:MET:HG2	2.03	0.41
1:F:1830:TYR:CE2	1:F:1848:LEU:HD22	2.56	0.41
1:B:338:GLN:HE22	1:B:963:MET:HB2	1.85	0.41
1:B:357:HIS:CE1	1:B:378:CYS:HG	2.39	0.41
1:B:1139:TYR:CE2	1:B:1294:LYS:HG2	2.56	0.41
1:A:294:VAL:HG12	1:A:962:PHE:CE2	2.56	0.41
1:Q:1885:VAL:HG11	1:Q:1891:GLY:HA2	2.03	0.41
1:J:1403:LEU:HA	1:J:1423:VAL:HA	2.01	0.41
1:R:122:LEU:HD21	1:R:156:MET:CE	2.51	0.41
2:H:1738:GLY:HA2	2:H:1746:HIS:CE1	2.57	0.41
2:H:1766:ILE:HD12	2:H:1789:ALA:CB	2.51	0.41
2:K:1651:SER:O	2:K:1686:HIS:N	2.47	0.41
2:O:1653:VAL:HG13	2:O:1684:THR:CG2	2.51	0.41
2:U:1765:GLU:O	2:U:1807:ILE:N	2.50	0.41
1:D:315:GLY:HA3	1:D:319:LYS:O	2.22	0.40
1:D:1090:LEU:HD11	1:D:1096:ARG:NH1	2.35	0.40
1:D:1978:LEU:N	1:D:1978:LEU:HD23	2.36	0.40
1:D:2201:VAL:HG12	1:C:1798:ARG:HD3	2.03	0.40
1:E:637:LEU:HD13	1:E:685:VAL:HG11	2.02	0.40
1:E:706:VAL:HG22	1:E:707:HIS:N	2.36	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1966:PRO:HA	1:E:1969:GLN:HE21	1.86	0.40
1:E:1978:LEU:O	1:E:1981:ILE:HD12	2.21	0.40
1:E:2251:TRP:HA	1:E:2254:GLU:HB3	2.03	0.40
1:C:641:ASP:O	1:C:645:ARG:N	2.43	0.40
1:C:1711:ILE:HG12	1:C:1904:LYS:NZ	2.36	0.40
1:C:2040:LEU:HD22	1:C:2078:VAL:HG22	2.01	0.40
1:F:250:ALA:HA	1:F:411:LEU:HD13	2.03	0.40
1:F:1598:ILE:HG23	1:F:1599:TYR:N	2.36	0.40
1:F:1874:ILE:HG22	1:F:1875:MET:CE	2.51	0.40
1:F:1896:LEU:HA	1:F:1899:LEU:HB2	2.03	0.40
1:F:2221:ARG:HB2	1:F:2274:LEU:HD12	2.04	0.40
1:B:291:VAL:HG21	1:B:297:GLY:HA2	2.03	0.40
1:B:1613:TRP:CZ2	1:B:1626:PRO:HD3	2.56	0.40
1:A:889:LEU:HD11	1:A:982:HIS:CB	2.51	0.40
1:A:1025:LEU:O	1:A:1029:PHE:HB3	2.20	0.40
1:A:1180:PHE:HB2	1:A:1234:GLY:HA3	2.01	0.40
1:A:1671:TYR:OH	1:A:1903:PRO:HA	2.21	0.40
1:G:2024:PHE:O	1:G:2028:GLN:N	2.46	0.40
1:G:2163:GLU:O	1:G:2167:LYS:N	2.40	0.40
1:Q:2176:ILE:HG22	1:Q:2177:PRO:HD3	2.03	0.40
2:K:1739:ASP:OD1	2:K:1746:HIS:NE2	2.51	0.40
1:D:295:ASP:OD2	1:E:2258:THR:HG22	2.21	0.40
1:D:336:GLN:O	1:D:340:GLU:N	2.44	0.40
1:D:1240:ARG:HA	1:D:1294:LYS:HB3	2.02	0.40
1:D:1588:PHE:O	1:D:1592:SER:HB3	2.21	0.40
1:D:1700:LEU:HD23	1:D:1700:LEU:C	2.41	0.40
1:D:1710:GLY:HA2	1:D:1814:ILE:HD13	2.03	0.40
1:E:803:LYS:HE3	1:E:807:ALA:HB3	2.03	0.40
1:E:972:VAL:HG22	1:E:976:ARG:HB3	2.03	0.40
1:E:976:ARG:HG3	1:E:977:SER:N	2.37	0.40
1:E:1289:LEU:HD21	1:E:1291:VAL:CG1	2.51	0.40
1:E:1327:LEU:HD12	1:E:1327:LEU:N	2.36	0.40
1:C:639:VAL:HG21	1:C:672:VAL:HG13	2.03	0.40
1:C:966:GLN:HA	1:C:969:VAL:HG22	2.03	0.40
1:C:1115:PHE:CD1	1:C:1117:ILE:HD13	2.56	0.40
1:C:1603:GLU:O	1:C:1607:GLN:NE2	2.55	0.40
1:C:1836:GLN:HE22	1:C:2031:LYS:HE3	1.86	0.40
1:C:2082:ILE:HD12	1:C:2082:ILE:N	2.36	0.40
1:C:2144:TYR:CD1	1:C:2168:LEU:HD22	2.57	0.40
1:C:2197:GLN:HB3	1:C:2202:ILE:HD11	2.03	0.40
1:F:1828:GLY:HA2	1:F:1831:LEU:HD21	2.03	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2317:ASP:O	1:F:2320:ILE:HG12	2.21	0.40
1:B:578:LEU:HB3	1:B:595:ILE:HG12	2.02	0.40
1:B:1368:ARG:CZ	1:B:1395:PRO:HD3	2.51	0.40
1:B:1668:SER:HB3	1:B:1671:TYR:HB2	2.02	0.40
1:B:2088:LEU:HD23	1:B:2093:TRP:HB2	2.03	0.40
1:A:857:LEU:HD11	1:A:986:VAL:HG21	2.03	0.40
1:A:1103:ILE:C	1:A:1106:SER:HG	2.25	0.40
1:A:1368:ARG:HA	1:A:1371:ARG:HG2	2.03	0.40
1:A:2284:VAL:O	1:A:2284:VAL:HG22	2.21	0.40
1:D:334:PHE:CE1	1:D:346:ILE:HG21	2.57	0.40
1:D:673:GLU:HB3	1:D:747:LYS:HE3	2.03	0.40
1:D:1131:PHE:HD2	1:D:1353:PRO:HD2	1.86	0.40
1:D:1711:ILE:H	1:D:1711:ILE:HG13	1.73	0.40
1:D:1795:GLU:OE1	1:C:2199:LYS:NZ	2.43	0.40
1:D:1797:LEU:HD22	1:C:2093:TRP:CE3	2.57	0.40
1:D:2095:VAL:HG23	1:D:2096:ILE:CG2	2.37	0.40
1:D:2275:GLU:O	1:D:2279:THR:N	2.53	0.40
1:E:1164:ASN:OD1	1:E:1164:ASN:N	2.55	0.40
1:E:2320:ILE:HG13	1:E:2321:HIS:N	2.37	0.40
1:C:1130:ILE:O	1:C:1130:ILE:HG22	2.22	0.40
1:F:450:GLU:HG2	1:F:455:VAL:O	2.21	0.40
1:F:1104:PHE:CZ	1:F:1148:ALA:HB3	2.57	0.40
1:F:1122:LYS:O	1:F:1126:SER:HB3	2.20	0.40
1:F:1386:MET:SD	1:F:1424:ARG:NE	2.94	0.40
1:F:1548:VAL:HG21	1:F:1559:GLN:O	2.22	0.40
1:B:329:ASP:HB3	1:B:333:LEU:HD11	2.04	0.40
1:B:912:PRO:HA	1:B:915:GLU:HB3	2.04	0.40
1:B:980:ARG:HG3	1:B:981:GLY:N	2.36	0.40
1:B:1039:LEU:O	1:B:1042:THR:N	2.54	0.40
1:A:952:LEU:HD23	1:A:961:PHE:CD2	2.56	0.40
1:A:2055:ASP:OD1	1:A:2056:MET:N	2.55	0.40
1:G:1700:LEU:HD11	1:G:1802:MET:HG2	2.03	0.40
1:Q:2325:HIS:CG	1:Q:2326:ILE:H	2.39	0.40
1:J:1391:LEU:HD13	1:J:1391:LEU:H	1.85	0.40
1:R:1060:LEU:O	1:R:1064:THR:N	2.45	0.40
1:R:1436:GLU:N	1:R:1483:MET:SD	2.94	0.40
1:R:1534:ASN:ND2	1:R:1537:GLY:O	2.55	0.40
2:S:1680:ILE:HD12	2:S:1687:VAL:HG22	2.03	0.40
1:D:190:VAL:HG21	1:D:218:LEU:HA	2.03	0.40
1:D:250:ALA:HA	1:D:411:LEU:HD13	2.04	0.40
1:D:657:ARG:HB2	1:D:659:GLN:OE1	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:958:ARG:O	1:D:962:PHE:N	2.39	0.40
1:D:966:GLN:OE1	1:E:2253:VAL:HG11	2.21	0.40
1:D:1892:VAL:O	1:D:1895:VAL:HB	2.21	0.40
1:D:2243:GLN:HE22	1:E:946:ASP:C	2.25	0.40
1:E:454:ASP:OD1	1:E:502:ARG:NH2	2.54	0.40
1:E:899:LEU:HA	1:E:902:ILE:HG22	2.03	0.40
1:E:1096:ARG:O	1:E:1100:VAL:HG22	2.21	0.40
1:E:1241:THR:HG22	1:E:1295:THR:CG2	2.52	0.40
1:E:1381:LEU:H	1:E:1381:LEU:CD1	2.34	0.40
1:E:1682:ASN:ND2	1:E:1719:ASN:HB2	2.36	0.40
1:E:1865:SER:O	1:E:1868:GLN:N	2.54	0.40
1:C:448:CYS:HA	1:C:505:VAL:HG11	2.02	0.40
1:C:896:LEU:CD1	1:C:926:ALA:HB2	2.51	0.40
1:C:1754:THR:HG22	1:C:1777:GLU:OE2	2.22	0.40
1:C:2241:ASP:HA	1:C:2244:ILE:HB	2.03	0.40
1:F:244:ILE:HD11	1:F:347:PHE:HB3	2.03	0.40
1:F:1079:LEU:HD13	1:F:1079:LEU:HA	1.94	0.40
1:F:1246:VAL:HG23	1:F:1311:PHE:CE1	2.56	0.40
1:F:1492:VAL:HG22	1:F:1532:LEU:HD11	2.03	0.40
1:B:1736:VAL:HG21	1:G:2182:VAL:HG11	2.04	0.40
1:B:1920:ASP:HA	1:B:2213:THR:OG1	2.21	0.40
1:B:2284:VAL:HG22	1:B:2284:VAL:O	2.21	0.40
1:B:2292:ILE:HD12	1:B:2293:LYS:N	2.36	0.40
1:A:411:LEU:HD23	1:A:438:LEU:HD12	2.03	0.40
1:A:1025:LEU:O	1:A:1029:PHE:CB	2.69	0.40
1:G:2018:TRP:NE1	1:G:2092:SER:OG	2.45	0.40
1:Q:2258:THR:CG2	1:R:299:GLN:HE21	2.34	0.40
1:J:727:MET:SD	1:J:727:MET:N	2.95	0.40
1:R:634:CYS:O	1:R:638:HIS:N	2.53	0.40
1:R:655:LEU:HD23	1:R:1021:MET:HB3	2.04	0.40
2:O:1655:SER:HB2	2:O:1702:LYS:HB2	2.03	0.40
1:D:896:LEU:HD12	1:D:899:LEU:HD11	2.01	0.40
1:D:979:ILE:CD1	1:D:980:ARG:HG3	2.39	0.40
1:D:986:VAL:HG23	1:D:987:VAL:N	2.36	0.40
1:D:2093:TRP:CE3	1:D:2096:ILE:HD11	2.57	0.40
1:E:301:ALA:O	1:E:305:GLY:N	2.53	0.40
1:E:637:LEU:HA	1:E:640:ALA:HB3	2.03	0.40
1:E:1063:LEU:HG	1:E:1084:VAL:HG11	2.04	0.40
1:E:1104:PHE:HE2	1:E:1145:VAL:HG13	1.87	0.40
1:E:1356:PHE:HA	1:E:1371:ARG:HE	1.87	0.40
1:E:1368:ARG:HA	1:E:1371:ARG:HG2	2.04	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2057:TYR:O	1:E:2059:GLN:HG3	2.22	0.40
1:E:2319:ILE:HA	1:E:2322:MET:HB2	2.03	0.40
1:C:1104:PHE:HZ	1:C:1148:ALA:HB3	1.87	0.40
1:C:1104:PHE:O	1:C:1108:ILE:HG12	2.21	0.40
1:C:1470:CYS:SG	1:C:1509:LEU:HD23	2.61	0.40
1:C:1481:VAL:O	1:C:1517:ILE:HA	2.21	0.40
1:C:1799:GLY:O	1:C:1802:MET:HB3	2.21	0.40
1:C:1809:LEU:HD23	1:C:1810:ALA:N	2.37	0.40
1:F:639:VAL:HG21	1:F:672:VAL:HG13	2.02	0.40
1:F:1315:ASN:HB3	1:F:1317:ALA:HB3	2.03	0.40
1:F:1333:GLN:HE21	1:F:1352:PHE:N	2.19	0.40
1:F:1983:VAL:HG21	1:F:2041:MET:CG	2.51	0.40
1:F:2060:VAL:HA	1:F:2063:PHE:HD2	1.87	0.40
1:F:2221:ARG:HH11	1:F:2270:LEU:HB3	1.86	0.40
1:B:143:GLU:O	1:B:146:ARG:NH1	2.54	0.40
1:B:477:ARG:NE	1:B:484:PRO:O	2.55	0.40
1:B:696:ILE:CD1	1:B:870:PRO:HB2	2.52	0.40
1:B:995:LEU:O	1:B:999:THR:HG22	2.22	0.40
1:B:1138:PHE:CD2	1:B:1292:ALA:HB1	2.57	0.40
1:B:1385:ARG:O	1:B:1577:TYR:N	2.49	0.40
1:R:1457:LEU:HD23	1:R:1457:LEU:O	2.22	0.40
2:M:1691:THR:OG1	2:M:1715:SER:OG	2.11	0.40
2:W:1691:THR:CG2	2:W:1736:VAL:HG12	2.49	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	2047/2346 (87%)	1889 (92%)	147 (7%)	11 (0%)	29 69
1	B	2047/2346 (87%)	1888 (92%)	146 (7%)	13 (1%)	25 65

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	C	2047/2346 (87%)	1884 (92%)	150 (7%)	13 (1%)	25	65
1	D	2047/2346 (87%)	1879 (92%)	154 (8%)	14 (1%)	22	62
1	E	2047/2346 (87%)	1895 (93%)	138 (7%)	14 (1%)	22	62
1	F	2047/2346 (87%)	1884 (92%)	150 (7%)	13 (1%)	25	65
1	G	755/2346 (32%)	727 (96%)	25 (3%)	3 (0%)	34	72
1	J	1290/2346 (55%)	1157 (90%)	125 (10%)	8 (1%)	25	65
1	Q	755/2346 (32%)	727 (96%)	24 (3%)	4 (0%)	29	69
1	R	1290/2346 (55%)	1158 (90%)	124 (10%)	8 (1%)	25	65
2	H	212/240 (88%)	207 (98%)	5 (2%)	0	100	100
2	K	212/240 (88%)	206 (97%)	6 (3%)	0	100	100
2	M	212/240 (88%)	205 (97%)	7 (3%)	0	100	100
2	O	212/240 (88%)	205 (97%)	7 (3%)	0	100	100
2	S	212/240 (88%)	206 (97%)	6 (3%)	0	100	100
2	U	212/240 (88%)	205 (97%)	7 (3%)	0	100	100
2	W	212/240 (88%)	205 (97%)	7 (3%)	0	100	100
2	Y	212/240 (88%)	205 (97%)	7 (3%)	0	100	100
All	All	18068/25380 (71%)	16732 (93%)	1235 (7%)	101 (1%)	29	65

All (101) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	D	211	HIS
1	D	419	SER
1	D	868	CYS
1	D	1688	ILE
1	E	211	HIS
1	E	419	SER
1	E	868	CYS
1	C	868	CYS
1	C	2326	ILE
1	F	868	CYS
1	F	2326	ILE
1	B	211	HIS
1	B	868	CYS
1	B	1304	LEU
1	B	1688	ILE

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Mol	Chain	Res	Type
1	A	868	CYS
1	A	1297	CYS
1	A	1304	LEU
1	G	2325	HIS
1	G	2326	ILE
1	Q	2325	HIS
1	Q	2326	ILE
1	J	211	HIS
1	J	868	CYS
1	J	1304	LEU
1	R	211	HIS
1	R	868	CYS
1	R	1304	LEU
1	D	873	PHE
1	D	1269	ALA
1	D	1304	LEU
1	D	1580	LYS
1	D	1620	ALA
1	E	1269	ALA
1	E	1304	LEU
1	E	1580	LYS
1	E	1688	ILE
1	E	2259	VAL
1	C	419	SER
1	C	1269	ALA
1	C	1304	LEU
1	C	2276	LYS
1	F	419	SER
1	F	1269	ALA
1	F	1304	LEU
1	B	1269	ALA
1	B	1669	PRO
1	A	211	HIS
1	A	1269	ALA
1	A	1688	ILE
1	G	1688	ILE
1	Q	1688	ILE
1	J	419	SER
1	J	1269	ALA
1	R	419	SER
1	R	1269	ALA
1	D	2258	THR

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Mol	Chain	Res	Type
1	E	873	PHE
1	E	1400	LYS
1	E	1759	LYS
1	C	873	PHE
1	C	1400	LYS
1	C	2325	HIS
1	F	873	PHE
1	F	1688	ILE
1	F	2276	LYS
1	F	2325	HIS
1	B	419	SER
1	B	873	PHE
1	A	419	SER
1	A	873	PHE
1	A	1580	LYS
1	J	873	PHE
1	R	873	PHE
1	D	1400	LYS
1	C	1172	LYS
1	C	1688	ILE
1	C	1759	LYS
1	F	1172	LYS
1	F	1400	LYS
1	B	1580	LYS
1	D	1172	LYS
1	D	1569	HIS
1	E	1172	LYS
1	F	1580	LYS
1	F	2327	SER
1	B	1172	LYS
1	A	1093	TYR
1	A	1172	LYS
1	J	1172	LYS
1	R	1172	LYS
1	C	2327	SER
1	E	1548	VAL
1	B	1911	PRO
1	D	1185	PRO
1	E	1185	PRO
1	B	1185	PRO
1	B	1910	VAL
1	Q	2327	SER

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Mol	Chain	Res	Type
1	R	1548	VAL
1	J	1548	VAL

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	1784/2056 (87%)	1748 (98%)	36 (2%)	55	74
1	B	1784/2056 (87%)	1755 (98%)	29 (2%)	62	79
1	C	1784/2056 (87%)	1745 (98%)	39 (2%)	52	71
1	D	1784/2056 (87%)	1739 (98%)	45 (2%)	47	68
1	E	1784/2056 (87%)	1734 (97%)	50 (3%)	43	65
1	F	1784/2056 (87%)	1750 (98%)	34 (2%)	57	75
1	G	660/2056 (32%)	655 (99%)	5 (1%)	81	89
1	J	1124/2056 (55%)	1093 (97%)	31 (3%)	43	65
1	Q	660/2056 (32%)	654 (99%)	6 (1%)	78	87
1	R	1124/2056 (55%)	1089 (97%)	35 (3%)	40	62
2	H	186/214 (87%)	185 (100%)	1 (0%)	88	93
2	K	186/214 (87%)	185 (100%)	1 (0%)	88	93
2	M	186/214 (87%)	184 (99%)	2 (1%)	73	84
2	O	186/214 (87%)	185 (100%)	1 (0%)	88	93
2	S	186/214 (87%)	184 (99%)	2 (1%)	73	84
2	U	186/214 (87%)	185 (100%)	1 (0%)	88	93
2	W	186/214 (87%)	185 (100%)	1 (0%)	88	93
2	Y	186/214 (87%)	184 (99%)	2 (1%)	73	84
All	All	15760/22272 (71%)	15439 (98%)	321 (2%)	57	74

All (321) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	D	266	ARG
1	D	283	GLN
1	D	290	TYR
1	D	536	ASN
1	D	804	ARG
1	D	864	MET
1	D	875	SER
1	D	909	ARG
1	D	947	SER
1	D	963	MET
1	D	974	ARG
1	D	995	LEU
1	D	996	ARG
1	D	1022	ASN
1	D	1076	LYS
1	D	1080	ARG
1	D	1095	LEU
1	D	1236	MET
1	D	1381	LEU
1	D	1388	ASN
1	D	1403	LEU
1	D	1449	LEU
1	D	1475	LEU
1	D	1502	ARG
1	D	1509	LEU
1	D	1518	ARG
1	D	1534	ASN
1	D	1544	LEU
1	D	1609	LEU
1	D	1622	LEU
1	D	1637	LEU
1	D	1645	LEU
1	D	1649	ASN
1	D	1797	LEU
1	D	1819	LEU
1	D	1848	LEU
1	D	1904	LYS
1	D	1914	ASN
1	D	2003	ASN
1	D	2116	SER
1	D	2161	ARG
1	D	2245	GLN
1	D	2249	ARG

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Mol	Chain	Res	Type
1	D	2311	ASN
1	D	2327	SER
1	E	266	ARG
1	E	290	TYR
1	E	584	ARG
1	E	588	ARG
1	E	644	LEU
1	E	674	LEU
1	E	860	LEU
1	E	864	MET
1	E	875	SER
1	E	889	LEU
1	E	909	ARG
1	E	947	SER
1	E	974	ARG
1	E	983	MET
1	E	990	LEU
1	E	1022	ASN
1	E	1048	LEU
1	E	1066	LEU
1	E	1080	ARG
1	E	1085	LEU
1	E	1095	LEU
1	E	1125	LEU
1	E	1232	ARG
1	E	1381	LEU
1	E	1388	ASN
1	E	1391	LEU
1	E	1449	LEU
1	E	1451	LEU
1	E	1502	ARG
1	E	1518	ARG
1	E	1530	LEU
1	E	1534	ASN
1	E	1540	LEU
1	E	1571	MET
1	E	1632	LEU
1	E	1649	ASN
1	E	1758	TYR
1	E	1914	ASN
1	E	2003	ASN
1	E	2025	LYS

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Mol	Chain	Res	Type
1	E	2034	ASN
1	E	2041	MET
1	E	2101	ASN
1	E	2111	ARG
1	E	2116	SER
1	E	2135	LYS
1	E	2161	ARG
1	E	2245	GLN
1	E	2249	ARG
1	E	2327	SER
1	C	529	LEU
1	C	534	ASN
1	C	644	LEU
1	C	674	LEU
1	C	715	LEU
1	C	860	LEU
1	C	875	SER
1	C	889	LEU
1	C	909	ARG
1	C	947	SER
1	C	974	ARG
1	C	983	MET
1	C	990	LEU
1	C	1022	ASN
1	C	1061	ASN
1	C	1074	ASN
1	C	1080	ARG
1	C	1085	LEU
1	C	1095	LEU
1	C	1125	LEU
1	C	1232	ARG
1	C	1247	ARG
1	C	1303	ARG
1	C	1309	ARG
1	C	1381	LEU
1	C	1384	ASN
1	C	1438	SER
1	C	1467	ARG
1	C	1498	ARG
1	C	1518	ARG
1	C	1534	ASN
1	C	1540	LEU

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Mol	Chain	Res	Type
1	C	1564	LYS
1	C	1649	ASN
1	C	1843	ASN
1	C	2003	ASN
1	C	2116	SER
1	C	2138	ARG
1	C	2327	SER
1	F	529	LEU
1	F	534	ASN
1	F	644	LEU
1	F	674	LEU
1	F	860	LEU
1	F	875	SER
1	F	889	LEU
1	F	909	ARG
1	F	947	SER
1	F	974	ARG
1	F	983	MET
1	F	990	LEU
1	F	1022	ASN
1	F	1061	ASN
1	F	1066	LEU
1	F	1080	ARG
1	F	1085	LEU
1	F	1095	LEU
1	F	1098	ASN
1	F	1125	LEU
1	F	1232	ARG
1	F	1309	ARG
1	F	1381	LEU
1	F	1467	ARG
1	F	1493	ARG
1	F	1506	LEU
1	F	1518	ARG
1	F	1534	ASN
1	F	1540	LEU
1	F	1649	ASN
1	F	1843	ASN
1	F	2003	ASN
1	F	2116	SER
1	F	2327	SER
1	B	529	LEU

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Mol	Chain	Res	Type
1	B	534	ASN
1	B	588	ARG
1	B	875	SER
1	B	916	LYS
1	B	974	ARG
1	B	1060	LEU
1	B	1080	ARG
1	B	1253	MET
1	B	1330	LEU
1	B	1381	LEU
1	B	1438	SER
1	B	1518	ARG
1	B	1524	LYS
1	B	1534	ASN
1	B	1540	LEU
1	B	1564	LYS
1	B	1758	TYR
1	B	1914	ASN
1	B	2003	ASN
1	B	2025	LYS
1	B	2034	ASN
1	B	2111	ARG
1	B	2116	SER
1	B	2135	LYS
1	B	2161	ARG
1	B	2223	LEU
1	B	2245	GLN
1	B	2327	SER
1	A	283	GLN
1	A	290	TYR
1	A	500	CYS
1	A	529	LEU
1	A	534	ASN
1	A	584	ARG
1	A	588	ARG
1	A	734	TYR
1	A	916	LYS
1	A	920	LYS
1	A	947	SER
1	A	974	ARG
1	A	996	ARG
1	A	1060	LEU

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Mol	Chain	Res	Type
1	A	1240	ARG
1	A	1303	ARG
1	A	1330	LEU
1	A	1381	LEU
1	A	1398	ASN
1	A	1438	SER
1	A	1502	ARG
1	A	1518	ARG
1	A	1524	LYS
1	A	1534	ASN
1	A	1540	LEU
1	A	1758	TYR
1	A	1914	ASN
1	A	2003	ASN
1	A	2025	LYS
1	A	2034	ASN
1	A	2111	ARG
1	A	2116	SER
1	A	2135	LYS
1	A	2161	ARG
1	A	2245	GLN
1	A	2327	SER
1	G	1843	ASN
1	G	2003	ASN
1	G	2116	SER
1	G	2206	LEU
1	G	2270	LEU
1	Q	1667	LYS
1	Q	1843	ASN
1	Q	2003	ASN
1	Q	2116	SER
1	Q	2206	LEU
1	Q	2280	GLU
1	J	290	TYR
1	J	529	LEU
1	J	588	ARG
1	J	615	ARG
1	J	644	LEU
1	J	674	LEU
1	J	734	TYR
1	J	860	LEU
1	J	875	SER

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Mol	Chain	Res	Type
1	J	889	LEU
1	J	909	ARG
1	J	974	ARG
1	J	983	MET
1	J	990	LEU
1	J	1022	ASN
1	J	1061	ASN
1	J	1080	ARG
1	J	1085	LEU
1	J	1095	LEU
1	J	1098	ASN
1	J	1125	LEU
1	J	1232	ARG
1	J	1381	LEU
1	J	1388	ASN
1	J	1391	LEU
1	J	1438	SER
1	J	1449	LEU
1	J	1451	LEU
1	J	1518	ARG
1	J	1534	ASN
1	J	1540	LEU
1	R	290	TYR
1	R	529	LEU
1	R	588	ARG
1	R	615	ARG
1	R	644	LEU
1	R	674	LEU
1	R	734	TYR
1	R	860	LEU
1	R	875	SER
1	R	889	LEU
1	R	909	ARG
1	R	916	LYS
1	R	974	ARG
1	R	983	MET
1	R	990	LEU
1	R	1022	ASN
1	R	1061	ASN
1	R	1068	GLN
1	R	1080	ARG
1	R	1085	LEU

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Mol	Chain	Res	Type
1	R	1095	LEU
1	R	1098	ASN
1	R	1125	LEU
1	R	1232	ARG
1	R	1381	LEU
1	R	1388	ASN
1	R	1391	LEU
1	R	1438	SER
1	R	1449	LEU
1	R	1451	LEU
1	R	1518	ARG
1	R	1524	LYS
1	R	1534	ASN
1	R	1540	LEU
1	R	1571	MET
2	H	1758	ARG
2	K	1730	ASN
2	M	1664	LEU
2	M	1730	ASN
2	O	1730	ASN
2	S	1664	LEU
2	S	1730	ASN
2	U	1730	ASN
2	Y	1664	LEU
2	Y	1730	ASN
2	W	1730	ASN

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (233) such sidechains are listed below:

Mol	Chain	Res	Type
1	D	185	ASN
1	D	225	ASN
1	D	332	ASN
1	D	461	GLN
1	D	606	ASN
1	D	668	ASN
1	D	707	HIS
1	D	859	ASN
1	D	862	ASN
1	D	900	GLN
1	D	940	GLN
1	D	964	ASN

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Mol	Chain	Res	Type
1	D	1000	GLN
1	D	1017	ASN
1	D	1099	GLN
1	D	1114	GLN
1	D	1119	ASN
1	D	1181	GLN
1	D	1314	GLN
1	D	1315	ASN
1	D	1388	ASN
1	D	1402	HIS
1	D	1569	HIS
1	D	1589	GLN
1	D	1649	ASN
1	D	1655	ASN
1	D	1768	HIS
1	D	1877	ASN
1	D	1914	ASN
1	D	2003	ASN
1	D	2034	ASN
1	D	2045	ASN
1	D	2059	GLN
1	D	2243	GLN
1	D	2245	GLN
1	D	2277	GLN
1	D	2330	GLN
1	E	185	ASN
1	E	203	GLN
1	E	225	ASN
1	E	332	ASN
1	E	338	GLN
1	E	443	GLN
1	E	461	GLN
1	E	606	ASN
1	E	707	HIS
1	E	859	ASN
1	E	900	GLN
1	E	940	GLN
1	E	966	GLN
1	E	970	GLN
1	E	993	GLN
1	E	1033	GLN
1	E	1099	GLN

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Mol	Chain	Res	Type
1	E	1114	GLN
1	E	1119	ASN
1	E	1181	GLN
1	E	1380	GLN
1	E	1388	ASN
1	E	1429	HIS
1	E	1443	GLN
1	E	1534	ASN
1	E	1565	GLN
1	E	1569	HIS
1	E	1589	GLN
1	E	1649	ASN
1	E	1655	ASN
1	E	1682	ASN
1	E	1768	HIS
1	E	1914	ASN
1	E	2003	ASN
1	E	2034	ASN
1	E	2101	ASN
1	E	2146	HIS
1	E	2234	ASN
1	E	2243	GLN
1	E	2321	HIS
1	C	225	ASN
1	C	251	GLN
1	C	859	ASN
1	C	900	GLN
1	C	964	ASN
1	C	1033	GLN
1	C	1074	ASN
1	C	1114	GLN
1	C	1333	GLN
1	C	1384	ASN
1	C	1444	ASN
1	C	1510	GLN
1	C	1534	ASN
1	C	1559	GLN
1	C	1619	GLN
1	C	1732	HIS
1	C	1877	ASN
1	C	2003	ASN
1	C	2016	GLN

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Mol	Chain	Res	Type
1	C	2059	GLN
1	C	2076	GLN
1	C	2085	GLN
1	C	2146	HIS
1	C	2277	GLN
1	C	2291	ASN
1	F	225	ASN
1	F	251	GLN
1	F	859	ASN
1	F	900	GLN
1	F	924	GLN
1	F	964	ASN
1	F	1033	GLN
1	F	1083	GLN
1	F	1114	GLN
1	F	1333	GLN
1	F	1429	HIS
1	F	1534	ASN
1	F	1559	GLN
1	F	1619	GLN
1	F	1649	ASN
1	F	1756	GLN
1	F	1812	ASN
1	F	1877	ASN
1	F	1965	GLN
1	F	2003	ASN
1	F	2013	GLN
1	F	2076	GLN
1	F	2085	GLN
1	F	2181	GLN
1	F	2234	ASN
1	F	2243	GLN
1	F	2245	GLN
1	F	2277	GLN
1	F	2291	ASN
1	B	185	ASN
1	B	429	GLN
1	B	859	ASN
1	B	939	GLN
1	B	940	GLN
1	B	948	HIS
1	B	966	GLN

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Mol	Chain	Res	Type
1	B	1074	ASN
1	B	1089	HIS
1	B	1113	HIS
1	B	1114	GLN
1	B	1143	GLN
1	B	1181	GLN
1	B	1314	GLN
1	B	1372	HIS
1	B	1398	ASN
1	B	1534	ASN
1	B	1589	GLN
1	B	1682	ASN
1	B	1914	ASN
1	B	2003	ASN
1	B	2028	GLN
1	B	2180	HIS
1	B	2309	GLN
1	A	125	ASN
1	A	859	ASN
1	A	928	ASN
1	A	940	GLN
1	A	948	HIS
1	A	964	ASN
1	A	973	GLN
1	A	1114	GLN
1	A	1314	GLN
1	A	1472	HIS
1	A	1534	ASN
1	A	1565	GLN
1	A	1589	GLN
1	A	1644	GLN
1	A	1682	ASN
1	A	1914	ASN
1	A	2003	ASN
1	A	2028	GLN
1	A	2180	HIS
1	A	2234	ASN
1	G	1619	GLN
1	G	1642	GLN
1	G	2003	ASN
1	G	2028	GLN
1	G	2181	GLN

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Mol	Chain	Res	Type
1	G	2291	ASN
1	G	2330	GLN
1	Q	1619	GLN
1	Q	1642	GLN
1	Q	1843	ASN
1	Q	2003	ASN
1	Q	2028	GLN
1	Q	2181	GLN
1	Q	2236	ASN
1	Q	2330	GLN
1	J	251	GLN
1	J	381	GLN
1	J	859	ASN
1	J	924	GLN
1	J	1033	GLN
1	J	1061	ASN
1	J	1083	GLN
1	J	1114	GLN
1	J	1388	ASN
1	J	1444	ASN
1	J	1472	HIS
1	R	251	GLN
1	R	299	GLN
1	R	381	GLN
1	R	859	ASN
1	R	900	GLN
1	R	924	GLN
1	R	1033	GLN
1	R	1083	GLN
1	R	1114	GLN
1	R	1388	ASN
1	R	1444	ASN
1	R	1472	HIS
2	H	1730	ASN
2	H	1779	GLN
2	K	1730	ASN
2	K	1732	HIS
2	K	1756	GLN
2	K	1779	GLN
2	M	1730	ASN
2	M	1779	GLN
2	O	1730	ASN

Continued on next page...

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Mol	Chain	Res	Type
2	O	1732	HIS
2	O	1756	GLN
2	O	1779	GLN
2	S	1730	ASN
2	S	1779	GLN
2	U	1730	ASN
2	U	1756	GLN
2	Y	1730	ASN
2	W	1730	ASN
2	W	1732	HIS
2	W	1742	ASN

5.3.3 RNA

There are no RNA molecules in this entry.

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

8 non-standard protein/DNA/RNA residues are modelled in this entry.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
1	SEP	A	1263	1	8,9,10	1.54	1 (12%)	8,12,14	1.74	2 (25%)
1	SEP	R	1263	1	8,9,10	1.57	1 (12%)	8,12,14	1.32	2 (25%)
1	SEP	B	1263	1	8,9,10	1.53	1 (12%)	8,12,14	0.89	0
1	SEP	C	1263	1	8,9,10	1.55	1 (12%)	8,12,14	1.83	2 (25%)
1	SEP	J	1263	1	8,9,10	1.56	1 (12%)	8,12,14	1.42	2 (25%)
1	SEP	E	1263	1	8,9,10	1.52	1 (12%)	8,12,14	1.32	2 (25%)
1	SEP	F	1263	1	8,9,10	1.54	1 (12%)	8,12,14	0.92	0
1	SEP	D	1263	1	8,9,10	1.51	1 (12%)	8,12,14	1.22	2 (25%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
1	SEP	A	1263	1	-	1/5/8/10	-
1	SEP	R	1263	1	-	1/5/8/10	-
1	SEP	B	1263	1	-	1/5/8/10	-
1	SEP	C	1263	1	-	1/5/8/10	-
1	SEP	J	1263	1	-	1/5/8/10	-
1	SEP	E	1263	1	-	1/5/8/10	-
1	SEP	F	1263	1	-	1/5/8/10	-
1	SEP	D	1263	1	-	1/5/8/10	-

All (8) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	1263	SEP	P-O1P	3.47	1.61	1.50
1	R	1263	SEP	P-O1P	3.41	1.61	1.50
1	J	1263	SEP	P-O1P	3.40	1.61	1.50
1	B	1263	SEP	P-O1P	3.39	1.61	1.50
1	F	1263	SEP	P-O1P	3.36	1.61	1.50
1	E	1263	SEP	P-O1P	3.35	1.61	1.50
1	A	1263	SEP	P-O1P	3.34	1.61	1.50
1	D	1263	SEP	P-O1P	3.27	1.61	1.50

All (12) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1263	SEP	OG-CB-CA	3.54	111.59	108.14
1	C	1263	SEP	P-OG-CB	-3.26	109.33	118.30
1	C	1263	SEP	OG-CB-CA	2.92	110.99	108.14
1	J	1263	SEP	OG-CB-CA	2.72	110.79	108.14
1	A	1263	SEP	P-OG-CB	-2.64	111.02	118.30
1	R	1263	SEP	OG-CB-CA	2.29	110.37	108.14
1	J	1263	SEP	P-OG-CB	-2.23	112.14	118.30
1	R	1263	SEP	P-OG-CB	-2.22	112.17	118.30
1	E	1263	SEP	OG-CB-CA	2.21	110.29	108.14
1	E	1263	SEP	P-OG-CB	-2.18	112.29	118.30
1	D	1263	SEP	P-OG-CB	-2.11	112.48	118.30
1	D	1263	SEP	O2P-P-OG	2.01	112.07	106.73

There are no chirality outliers.

All (8) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
1	D	1263	SEP	N-CA-CB-OG
1	E	1263	SEP	N-CA-CB-OG
1	C	1263	SEP	N-CA-CB-OG
1	F	1263	SEP	N-CA-CB-OG
1	B	1263	SEP	N-CA-CB-OG
1	A	1263	SEP	N-CA-CB-OG
1	J	1263	SEP	N-CA-CB-OG
1	R	1263	SEP	N-CA-CB-OG

There are no ring outliers.

4 monomers are involved in 5 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
1	C	1263	SEP	1	0
1	E	1263	SEP	1	0
1	F	1263	SEP	2	0
1	D	1263	SEP	1	0

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.

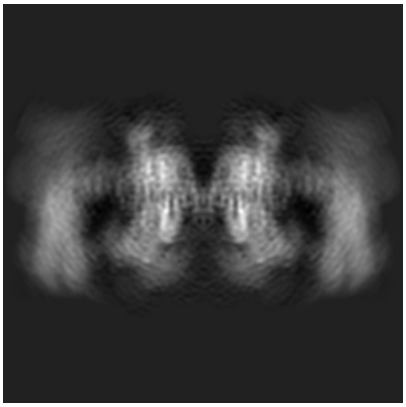
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-4344. These allow visual inspection of the internal detail of the map and identification of artifacts.

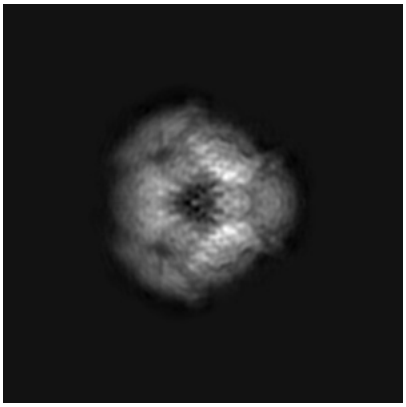
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections

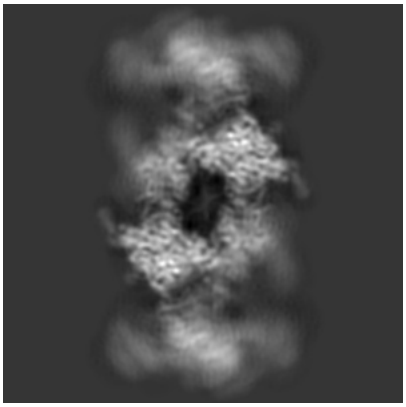
6.1.1 Primary map



X



Y

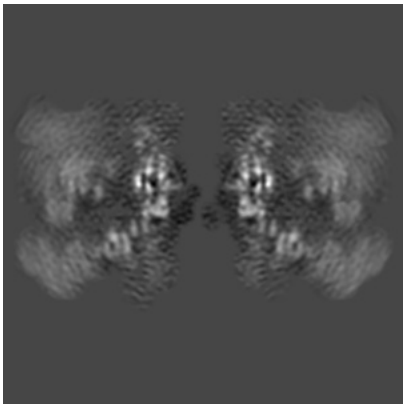


Z

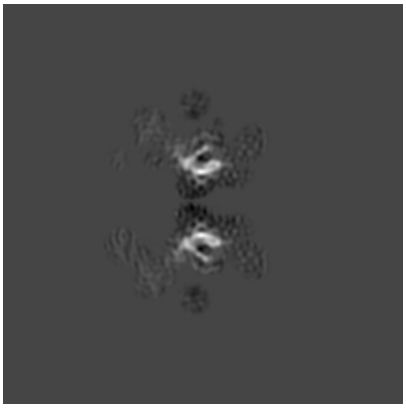
The images above show the map projected in three orthogonal directions.

6.2 Central slices

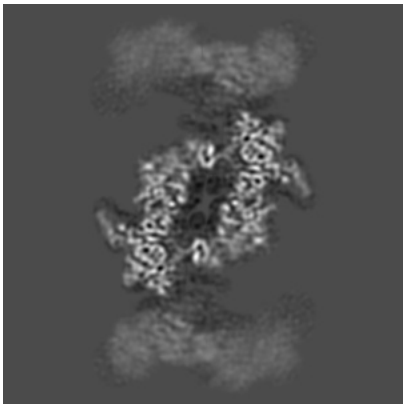
6.2.1 Primary map



X Index: 188



Y Index: 188

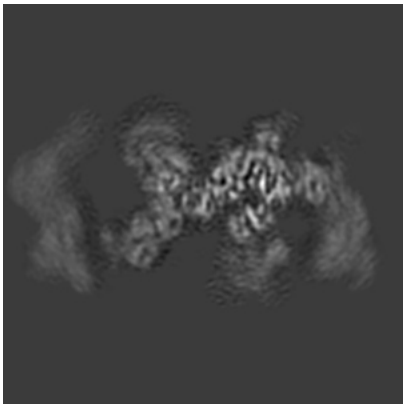


Z Index: 188

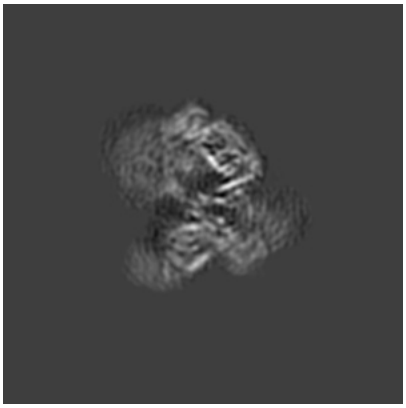
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

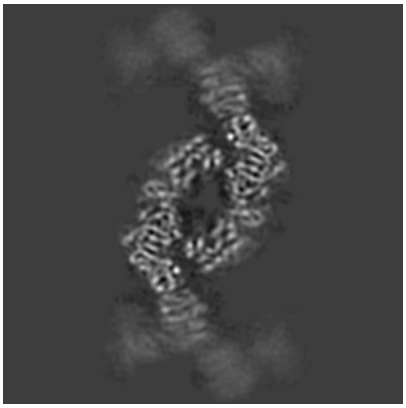
6.3.1 Primary map



X Index: 219



Y Index: 223



Z Index: 201

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 0.015. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

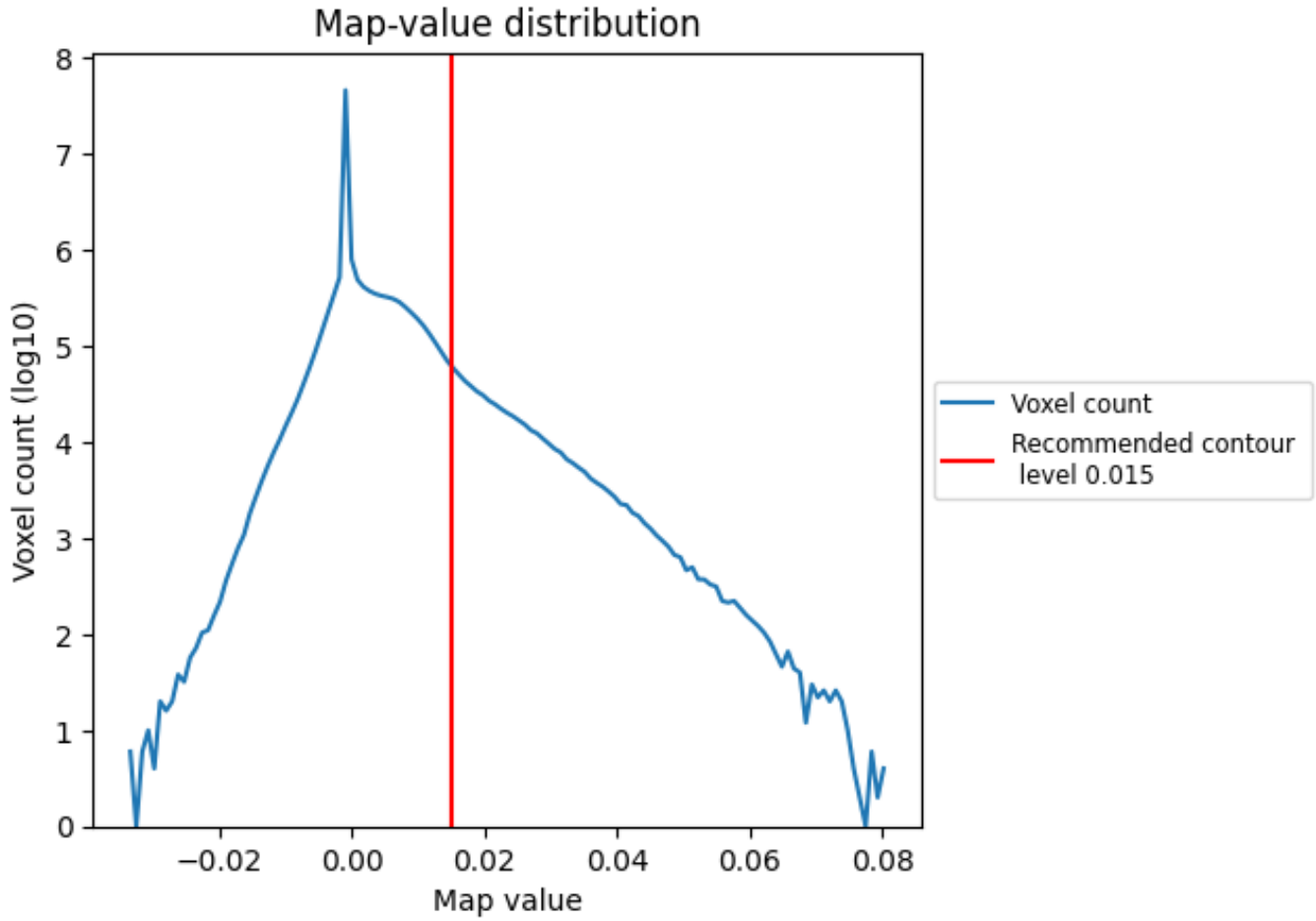
6.5 Mask visualisation (i)

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

7 Map analysis

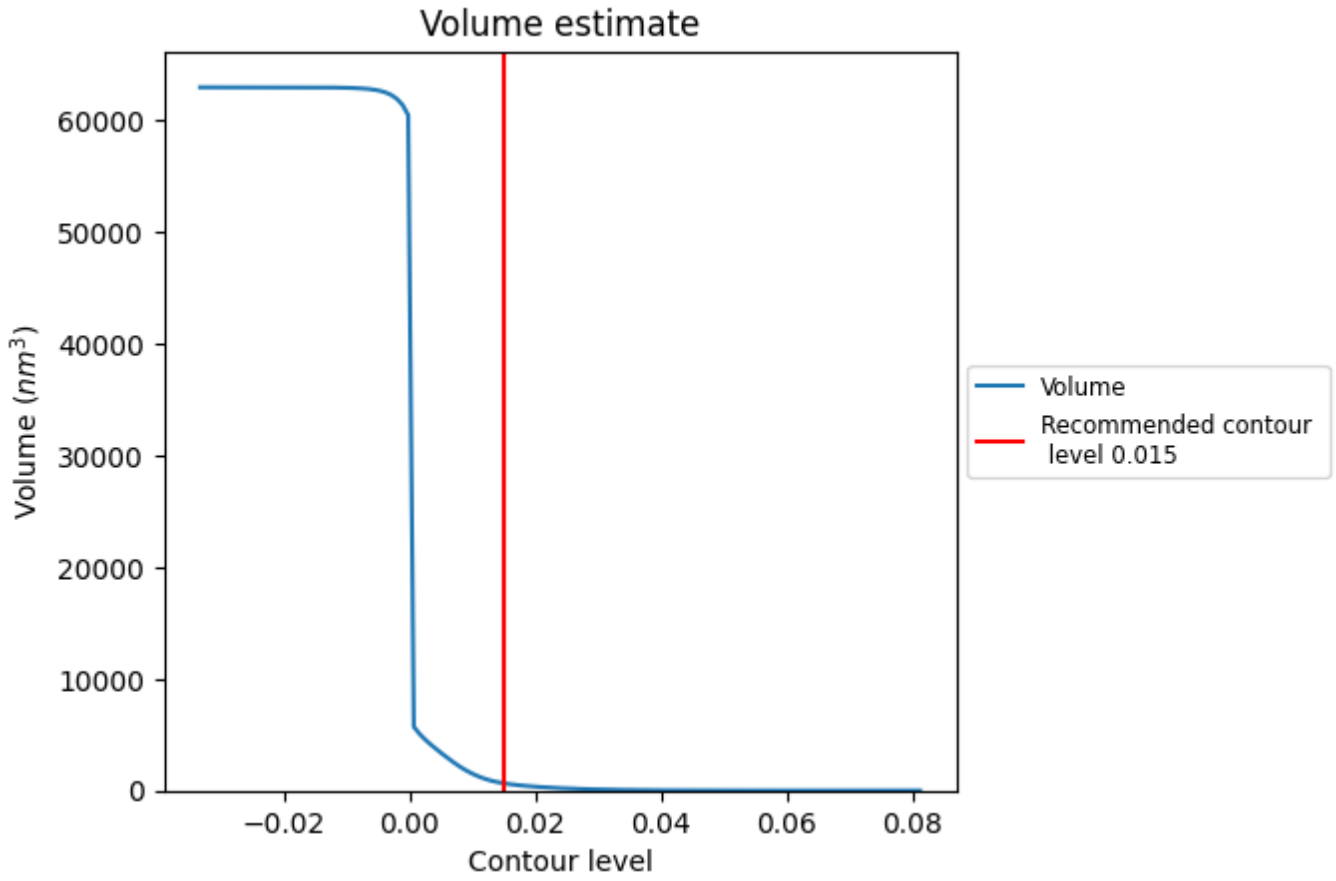
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution



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

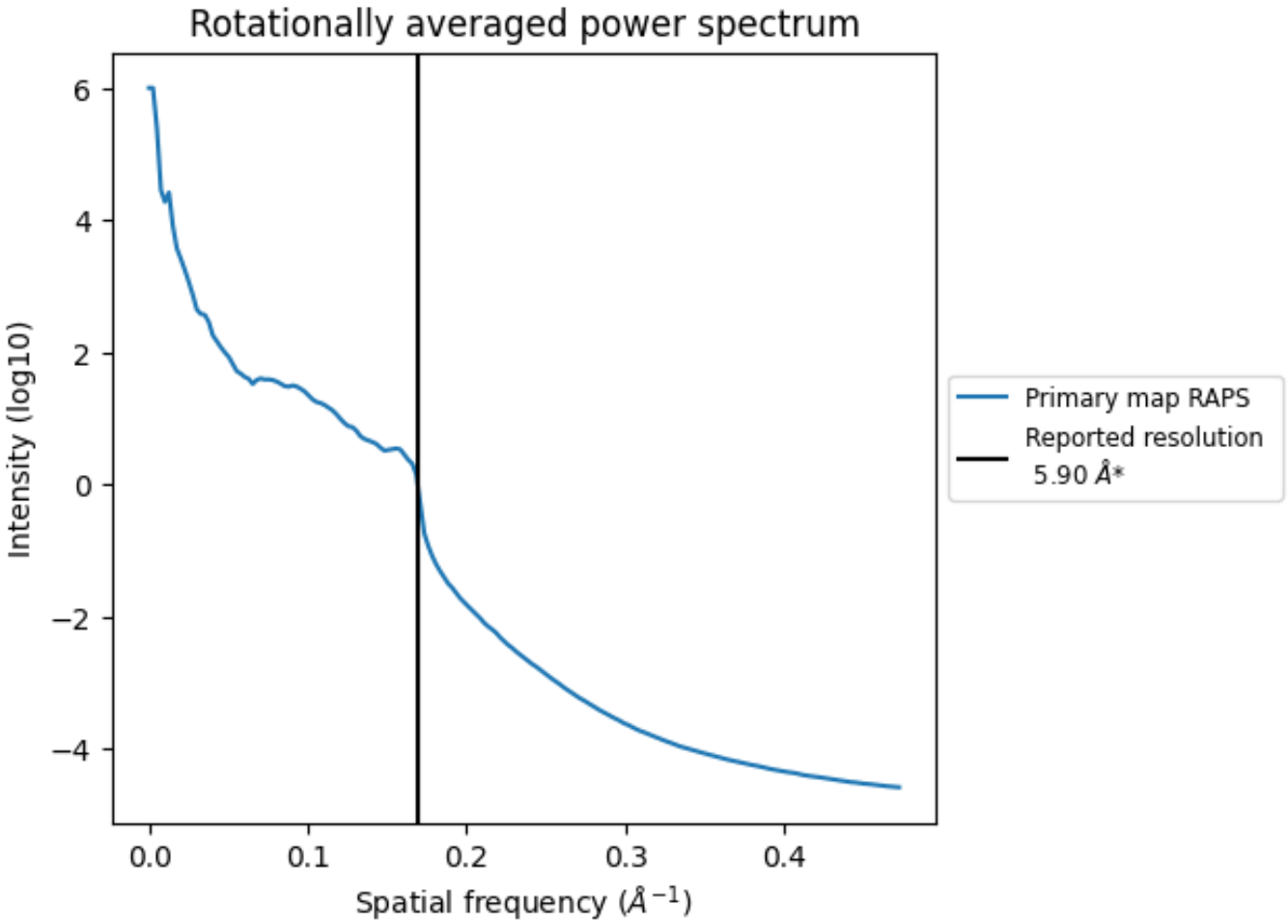
7.2 Volume estimate



The volume at the recommended contour level is 649 nm^3; this corresponds to an approximate mass of 587 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 0.169 Å^{-1}

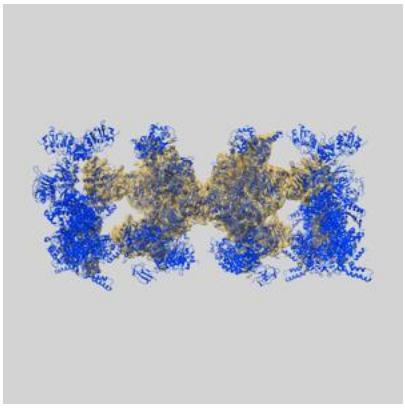
8 Fourier-Shell correlation

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

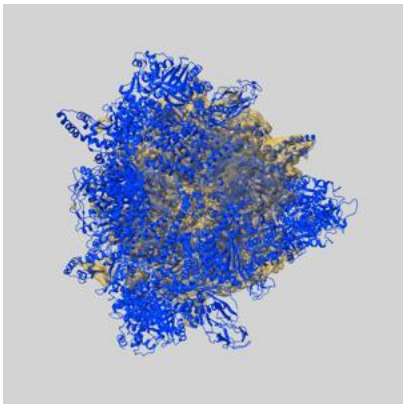
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-4344 and PDB model 6G2I. Per-residue inclusion information can be found in section 3 on page 11.

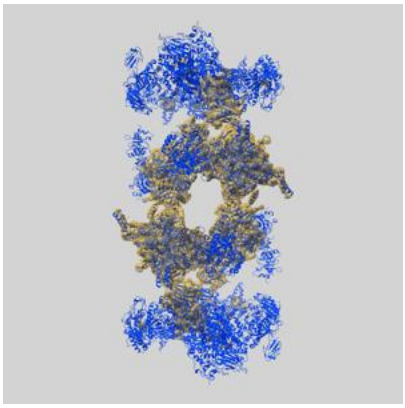
9.1 Map-model overlay



X



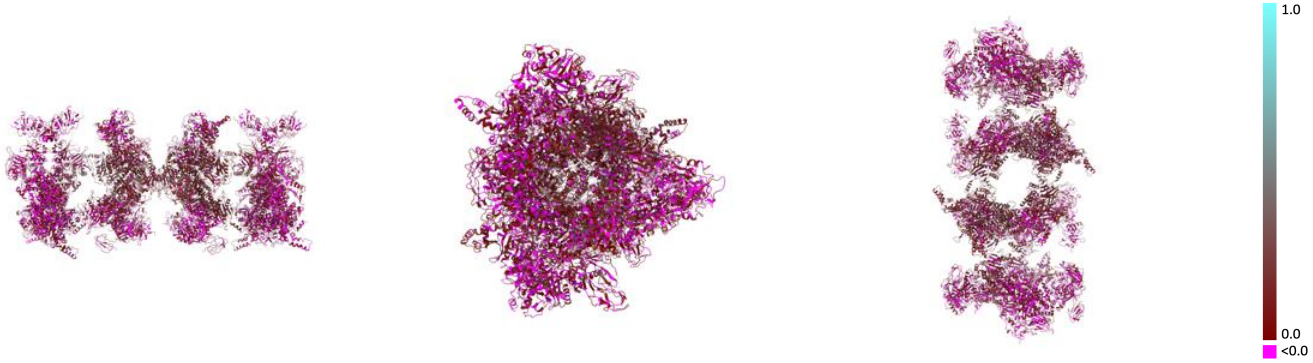
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.015 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.

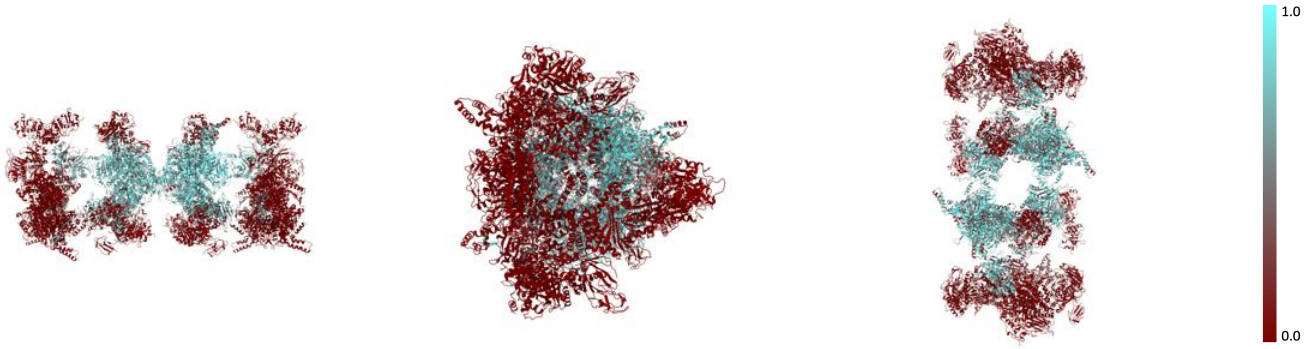
9.2 Q-score mapped to coordinate model (i)



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.

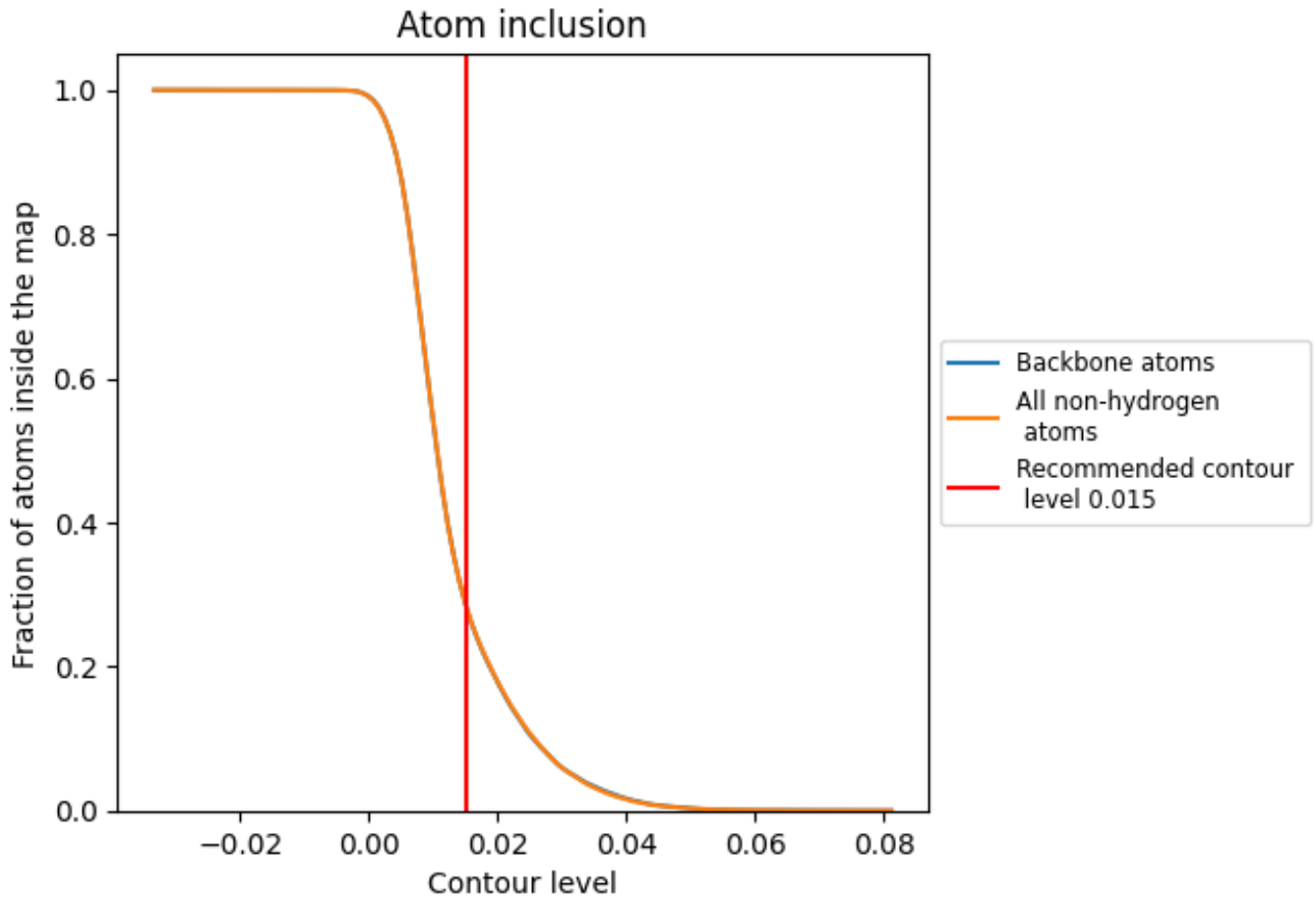
9.3 Atom inclusion mapped to coordinate model (i)



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 (0.015).

9.4 Atom inclusion (i)



At the recommended contour level, 29% of all backbone atoms, 29% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary

The table lists the average atom inclusion at the recommended contour level (0.015) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.2876	0.1080
A	0.2282	0.0990
B	0.2298	0.1000
C	0.4242	0.1330
D	0.5945	0.1610
E	0.5903	0.1610
F	0.4229	0.1330
G	0.0360	0.0800
H	0.0707	0.0540
J	0.0063	0.0540
K	0.0522	0.0450
M	0.0468	0.0510
O	0.0732	0.0580
Q	0.0353	0.0770
R	0.0063	0.0540
S	0.0018	0.0510
U	0.0024	0.0510
W	0.0000	0.0370
Y	0.0012	0.0380