



Full wwPDB X-ray Structure Validation Report ⓘ

Feb 18, 2018 – 12:15 pm GMT

PDB ID : 1IOK
Title : CRYSTAL STRUCTURE OF CHAPERONIN-60 FROM PARACOCCUS DENITRIFICANS
Authors : Fukami, T.A.; Yohda, M.; Taguchi, H.; Yoshida, M.; Miki, K.
Deposited on : 2001-03-16
Resolution : 3.20 Å(reported)

This is a Full wwPDB X-ray Structure 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/XrayValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

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

MolProbity : 4.02b-467
Xtrriage (Phenix) : **NOT EXECUTED**
EDS : **NOT EXECUTED**
Percentile statistics : 20171227.v01 (using entries in the PDB archive December 27th 2017)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : trunk30686

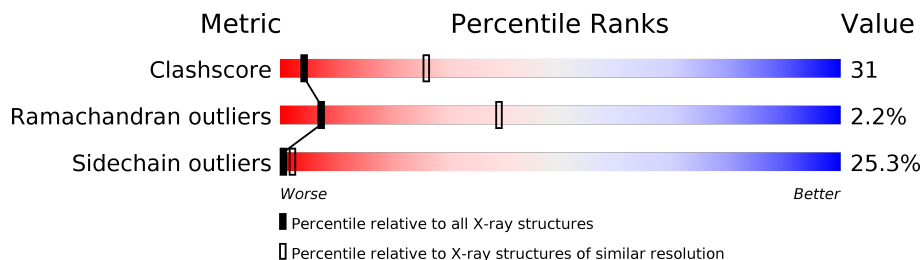
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 3.20 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)	Similar resolution (#Entries, resolution range(Å))
Clashscore	122078	1092 (3.20-3.20)
Ramachandran outliers	120005	1075 (3.20-3.20)
Sidechain outliers	119972	1074 (3.20-3.20)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments on the lower bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$. The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

Note EDS was not executed.

Mol	Chain	Length	Quality of chain
1	A	545	
1	B	545	
1	C	545	
1	D	545	
1	E	545	
1	F	545	
1	G	545	

2 Entry composition

There is only 1 type of molecule in this entry. The entry contains 25095 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the ZeroOcc column contains the number of atoms modelled with zero occupancy, 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 CHAPERONIN 60.

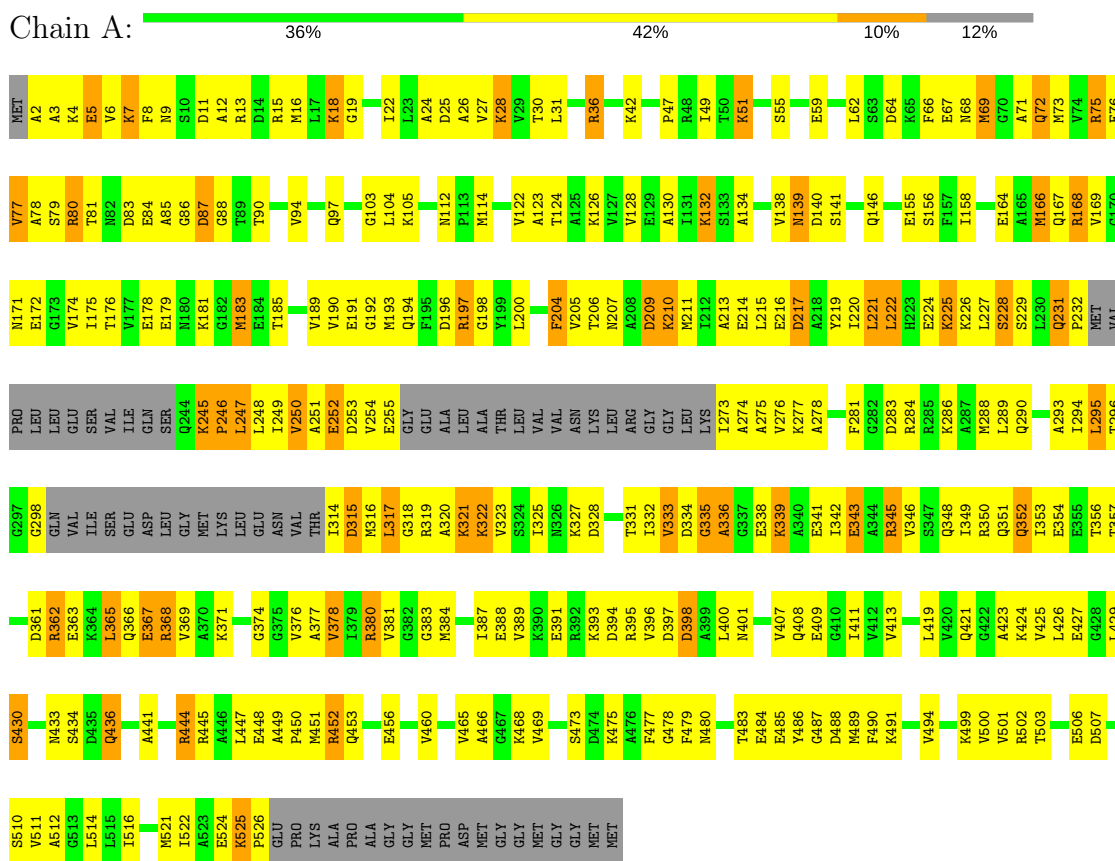
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
1	A	482	3585	2218	635	717	15	0	0	0
1	B	482	3585	2218	635	717	15	0	0	0
1	C	482	3585	2218	635	717	15	0	0	0
1	D	482	3585	2218	635	717	15	0	0	0
1	E	482	3585	2218	635	717	15	0	0	0
1	F	482	3585	2218	635	717	15	0	0	0
1	G	482	3585	2218	635	717	15	0	0	0

3 Residue-property plots

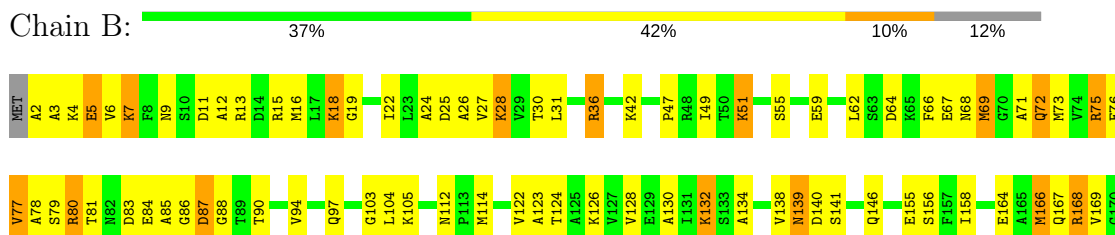
These plots are drawn for all protein, RNA and DNA chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. Residues are 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 dot above a residue indicates a poor fit to the electron density ($RSRZ > 2$). 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.

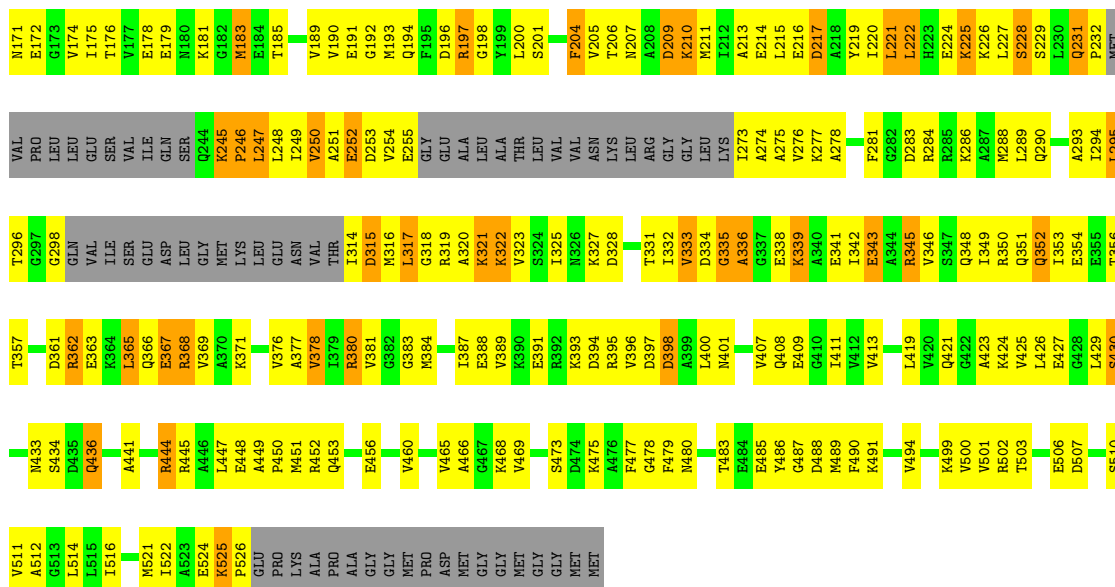
Note EDS was not executed.

- Molecule 1: CHAPERONIN 60



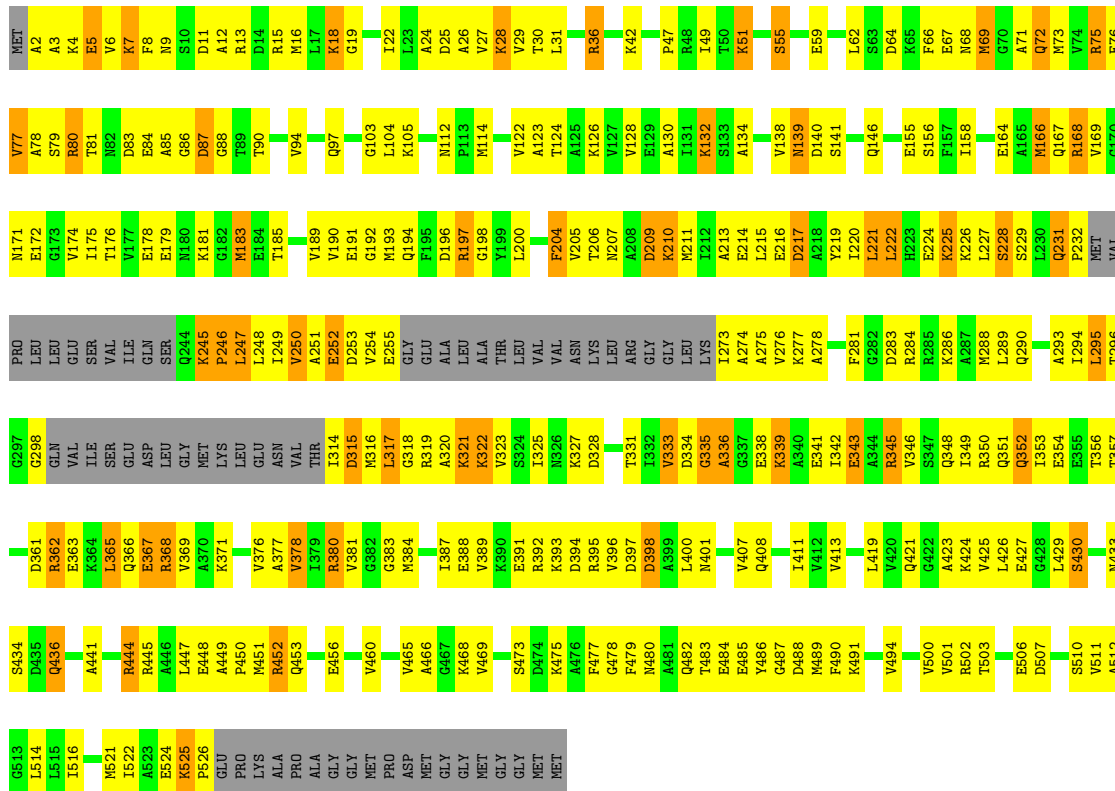
- Molecule 1: CHAPERONIN 60





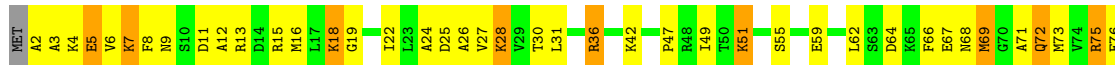
● Molecule 1: CHAPERONIN 60

Chain C: 37% 41% 10% 12%



● Molecule 1: CHAPERONIN 60

Chain D: 37% 42% 10% 12%



MET	A2	A3	K4	V6	K7	F8	N9	S10	D11	A12	R13	D14	R15	M16	L17	K18	G19	T22	L23	A24	D25	A26	V27	K28	V29	T30	L31	R36	K42	P47	R48	L49	T50	K51	S55	E59	L62	S63	D64	K65	F66	E67	M69	G70	A71	O72	M73	R74	V75	E76													
V77	A78	S79	R80	T81	N82	D83	E84	A85	G86	D87	G88	T89	T90	V94	Q97	G103	L104	K105	L112	M113	D114	V122	K126	V127	V128	E129	A130	P131	K132	S133	T134	A134	V138	M139	D140	S141	Q146	L155	D156	F157	I158	M169	E164	S165	G166	A167	M168	Q167	R168	V169	G170												
M171	E172	G173	T175	I176	V177	E178	E179	N180	K181	D182	G183	T184	E184	T185	V189	L190	D191	E191	G192	M193	Q194	F195	A196	R197	G198	L199	L200	F204	V205	T206	M207	A208	D209	G210	F479	M211	T212	A213	E214	L215	E216	D217	A218	Y219	I220	L221	L222	H223	E224	K225	K226	M228	S228	E164	S229	M166	S230	Q231	MET	P232	R168	V169	T296
PRO	LEU	LEU	GLU	SER	VAL	ILE	GLN	SER	Q244	K245	P246	L247	L248	I249	V250	A251	E252	D253	V254	E255	GLY	R319	A320	ALA	ALA	THR	LEU	VAL	ASN	LYS	ARG	GLY	GLY	GLY	LEU	A275	V276	K277	A278	F281	G282	D283	R284	R285	K286	M288	R350	L289	Q290	A293	I294	L295	T296										
G297	G298	GLN	VAL	ILE	SER	GLU	ASP	LEU	ASP	GLY	MET	LEU	LEU	ASN	THR	T331	G318	R319	G320	M316	L317	G318	R319	A320	ALA	ALA	THR	LEU	VAL	ASN	LYS	ARG	GLY	GLY	GLY	LEU	A275	V276	K277	A278	F281	G282	D283	R284	R285	K286	M288	R350	L289	Q290	A293	I294	L295	T296									
D361	R362	E363	K364	L365	Q366	E367	R368	V369	A370	K371	G374	G375	V376	A377	V378	L379	R380	V381	G382	G383	M384	I387	E388	V389	V469	S473	E391	R392	K393	D394	R395	V396	F477	G478	F479	Q408	I411	V412	V413	R434	V436	V437	Q438	I349	A423	T503	V425	L426	E427	G428	S430	M453	L514	S434	D435								
M433	S434	E435	Q436	L365	Q366	E367	R368	V369	A370	K371	G374	G375	V376	A377	V378	L379	R380	V381	G382	G383	M384	I387	E388	V389	V469	S473	E391	R392	K393	D394	R395	V396	F477	G478	F479	Q408	I411	V412	V413	R434	V436	V437	Q438	I349	A423	T503	V425	L426	E427	G428	S430	M453	L514	S434	D435								
A512	S513	L514	I515	I516	M521	A522	A523	E524	K525	F526	GLU	PRO	LYS	ALA	ALA	ALA	ALA	GLY	MET	PRO	ASP	MET	GLY	GLY	MET	GLY	GLY	S473	E391	R392	K393	D394	R395	V396	F477	G478	F479	Q408	I411	V412	V413	R434	V436	V437	Q438	I349	A423	T503	V425	L426	E427	G428	S430	M453	L514	S434	D435						

• Molecule 1: CHAPERONIN 60



MET	A2	A3	K4	V6	K7	F8	N9	S10	D11	A12	R13	D14	R15	M16	L17	K18	G19	T22	L23	A24	D25	A26	V27	K28	V29	T30	L31	R36	K42	P47	R48	L49	T50	K51	S55	E59	L62	S63	D64	K65	F66	E67	M69	G70	A71	O72	M73	R74	V75	E76												
V77	A78	S79	R80	T81	N82	D83	E84	A85	G86	D87	G88	T89	T90	V94	Q97	G103	L104	K105	L112	M113	D114	V122	K126	V127	V128	E129	A130	P131	K132	S133	T134	A134	V138	M139	D140	S141	Q146	L155	D156	F157	I158	M169	E164	S165	G166	A167	M168	Q167	R168	V169	G170	E172										
G173	V174	T175	I176	V177	E178	E179	N180	K181	D182	G183	T184	E184	T185	V189	L190	D191	E191	G192	M193	Q194	F195	A196	R197	G198	L199	L200	F204	V205	T206	M207	A208	D209	G210	F479	M211	T212	A213	E214	L215	E216	D217	A218	Y219	I220	L221	L222	H223	E224	K225	K226	M228	S228	E164	S229	M166	S230	Q231	MET	P232	R168	V169	T296
LEU	LEU	GLU	SER	VAL	ILE	GLN	SER	Q244	K245	P246	L247	L248	I249	V250	A251	E252	D253	V254	E255	GLY	R319	A320	ALA	ALA	THR	LEU	VAL	ASN	LYS	ARG	GLY	GLY	GLY	LEU	A275	V276	K277	A278	F281	G282	D283	R284	R285	K286	M288	R350	L289	Q290	A293	I294	L295	T296	G297									
G298	GLN	VAL	ILE	SER	GLU	ASP	LEU	ASP	GLY	MET	LEU	LEU	ASN	THR	T331	G318	R319	A320	M316	L317	G318	R319	A320	ALA	ALA	THR	LEU	VAL	ASN	LYS	ARG	GLY	GLY	GLY	LEU	A275	V276	K277	A278	F281	G282	D283	R284	R285	K286	M288	R350	L289	Q290	A293	I294	L295	T296	G297								
D361	R362	E363	K364	L365	Q366	E367	R368	V369	A370	K371	G374	G375	V376	A377	V378	L379	R380	V381	G382	G383	M384	I387	E388	V389	V469	S473	E391	R392	K393	D394	R395	V396	F477	G478	F479	Q408	I411	V412	V413	R434	V436	V437	Q438	I349	A423	T503	V425	L426	E427	G428	S430	M453	L514	S434	D435							
Q436	A441	R444	R445	A446	L447	E448	A449	A450	M451	R452	Q453	E456	V460	V469	V465	A466	G467	M384	I387	E388	V389	K396	E391	R392	K393	D394	R395	V396	F477	G478	F479	Q408	I411	V412	V413	R434	V436	V437	Q438	I349	A423	T503	V425	L426	E427	G428	S430	M453	L514	S434	D435											
I516	M521	I522	A523	K525	F526	GLU	PRO	LYS	ALA	ALA	ALA	ALA	GLY	MET	PRO	ASP	MET	GLY	GLY	MET	PRO	ASP	MET	GLY	GLY	MET	GLY	GLY	S473	E391	R392	K393	D394	R395	V396	F477	G478	F479	Q408	I411	V412	V413	R434	V436	V437	Q438	I349	A423	T503	V425	L426	E427	G428	S430	M453	L514	S434	D435				

4 Data and refinement statistics

Xtrriage (Phenix) and EDS were not executed - this section is therefore incomplete.

Property	Value	Source
Space group	P 42 21 2	Depositor
Cell constants a, b, c, α , β , γ	286.36Å 286.36Å 153.46Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	6.00 – 3.20	Depositor
% Data completeness (in resolution range)	(Not available) (6.00-3.20)	Depositor
R_{merge}	0.07	Depositor
R_{sym}	(Not available)	Depositor
Refinement program	X-PLOR 3.851	Depositor
R, R_{free}	0.204 , 0.235	Depositor
Estimated twinning fraction	No twinning to report.	Xtrriage
Total number of atoms	25095	wwPDB-VP
Average B, all atoms (Å ²)	88.0	wwPDB-VP

5 Model quality [i](#)

5.1 Standard geometry [i](#)

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
1	A	0.32	0/3609	0.48	0/4855
1	B	0.33	0/3609	0.48	0/4855
1	C	0.32	0/3609	0.49	0/4855
1	D	0.34	0/3609	0.48	0/4855
1	E	0.33	0/3609	0.48	0/4855
1	F	0.32	0/3609	0.49	0/4855
1	G	0.33	0/3609	0.48	0/4855
All	All	0.33	0/25263	0.48	0/33985

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts [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	3585	0	3657	233	0
1	B	3585	0	3657	231	0
1	C	3585	0	3657	229	0
1	D	3585	0	3657	228	0
1	E	3585	0	3657	231	0
1	F	3585	0	3657	235	0
1	G	3585	0	3657	231	0
All	All	25095	0	25599	1574	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 31.

All (1574) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:139:ASN:HD22	1:D:140:ASP:H	1.17	0.93
1:C:139:ASN:HD22	1:C:140:ASP:H	1.17	0.92
1:C:36:ARG:HG2	1:C:36:ARG:HH11	1.35	0.92
1:G:139:ASN:HD22	1:G:140:ASP:H	1.16	0.92
1:A:36:ARG:HH11	1:A:36:ARG:HG2	1.35	0.91
1:F:139:ASN:HD22	1:F:140:ASP:H	1.17	0.91
1:E:139:ASN:HD22	1:E:140:ASP:H	1.17	0.91
1:F:36:ARG:HH11	1:F:36:ARG:HG2	1.34	0.91
1:A:139:ASN:HD22	1:A:140:ASP:H	1.18	0.90
1:B:36:ARG:HH11	1:B:36:ARG:HG2	1.35	0.90
1:E:36:ARG:HG2	1:E:36:ARG:HH11	1.36	0.90
1:C:227:LEU:HB2	1:C:254:VAL:HA	1.54	0.89
1:F:227:LEU:HB2	1:F:254:VAL:HA	1.54	0.89
1:A:227:LEU:HB2	1:A:254:VAL:HA	1.55	0.89
1:G:227:LEU:HB2	1:G:254:VAL:HA	1.55	0.89
1:B:227:LEU:HB2	1:B:254:VAL:HA	1.55	0.89
1:B:139:ASN:HD22	1:B:140:ASP:H	1.18	0.88
1:D:227:LEU:HB2	1:D:254:VAL:HA	1.55	0.88
1:D:36:ARG:HH11	1:D:36:ARG:HG2	1.36	0.88
1:E:227:LEU:HB2	1:E:254:VAL:HA	1.55	0.88
1:G:36:ARG:HH11	1:G:36:ARG:HG2	1.40	0.86
1:A:228:SER:HA	1:A:255:GLU:HB2	1.58	0.85
1:G:228:SER:HA	1:G:255:GLU:HB2	1.59	0.85
1:B:228:SER:HA	1:B:255:GLU:HB2	1.59	0.84
1:C:228:SER:HA	1:C:255:GLU:HB2	1.59	0.83
1:A:449:ALA:HB3	1:A:450:PRO:HD3	1.60	0.83
1:E:228:SER:HA	1:E:255:GLU:HB2	1.59	0.83
1:F:514:LEU:HD13	1:G:49:ILE:HD12	1.61	0.82
1:D:228:SER:HA	1:D:255:GLU:HB2	1.59	0.82
1:F:228:SER:HA	1:F:255:GLU:HB2	1.59	0.82
1:G:449:ALA:HB3	1:G:450:PRO:HD3	1.62	0.82
1:B:514:LEU:HD13	1:C:49:ILE:HD12	1.63	0.81
1:F:449:ALA:HB3	1:F:450:PRO:HD3	1.62	0.81
1:A:322:LYS:HB3	1:A:333:VAL:HG23	1.63	0.81
1:B:449:ALA:HB3	1:B:450:PRO:HD3	1.62	0.81
1:D:322:LYS:HB3	1:D:333:VAL:HG23	1.63	0.81
1:F:322:LYS:HB3	1:F:333:VAL:HG23	1.63	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:449:ALA:HB3	1:D:450:PRO:HD3	1.61	0.80
1:E:322:LYS:HB3	1:E:333:VAL:HG23	1.63	0.80
1:A:49:ILE:HD12	1:G:514:LEU:HD13	1.63	0.80
1:G:322:LYS:HB3	1:G:333:VAL:HG23	1.64	0.80
1:C:514:LEU:HD13	1:D:49:ILE:HD12	1.63	0.80
1:B:322:LYS:HB3	1:B:333:VAL:HG23	1.64	0.80
1:C:322:LYS:HB3	1:C:333:VAL:HG23	1.64	0.80
1:C:449:ALA:HB3	1:C:450:PRO:HD3	1.61	0.79
1:F:250:VAL:HG13	1:F:276:VAL:HG23	1.65	0.78
1:A:197:ARG:HH11	1:A:277:LYS:HG2	1.49	0.78
1:E:449:ALA:HB3	1:E:450:PRO:HD3	1.64	0.78
1:G:250:VAL:HG13	1:G:276:VAL:HG23	1.66	0.78
1:D:197:ARG:HH11	1:D:277:LYS:HG2	1.49	0.77
1:A:250:VAL:HG13	1:A:276:VAL:HG23	1.66	0.77
1:E:197:ARG:HH11	1:E:277:LYS:HG2	1.50	0.77
1:B:380:ARG:HB2	1:B:380:ARG:HH11	1.50	0.77
1:B:197:ARG:HH11	1:B:277:LYS:HG2	1.50	0.77
1:D:250:VAL:HG13	1:D:276:VAL:HG23	1.66	0.77
1:F:197:ARG:HH11	1:F:277:LYS:HG2	1.50	0.77
1:G:197:ARG:HH11	1:G:277:LYS:HG2	1.50	0.77
1:E:250:VAL:HG13	1:E:276:VAL:HG23	1.67	0.77
1:E:380:ARG:HB2	1:E:380:ARG:HH11	1.50	0.77
1:C:250:VAL:HG13	1:C:276:VAL:HG23	1.66	0.77
1:A:380:ARG:HH11	1:A:380:ARG:HB2	1.50	0.76
1:G:380:ARG:HH11	1:G:380:ARG:HB2	1.50	0.76
1:C:197:ARG:HH11	1:C:277:LYS:HG2	1.50	0.76
1:C:380:ARG:HH11	1:C:380:ARG:HB2	1.50	0.76
1:F:380:ARG:HH11	1:F:380:ARG:HB2	1.50	0.76
1:C:413:VAL:HG12	1:C:489:MET:HB3	1.68	0.76
1:B:250:VAL:HG13	1:B:276:VAL:HG23	1.66	0.76
1:D:380:ARG:HH11	1:D:380:ARG:HB2	1.50	0.75
1:B:413:VAL:HG12	1:B:489:MET:HB3	1.69	0.75
1:G:413:VAL:HG12	1:G:489:MET:HB3	1.68	0.74
1:E:413:VAL:HG12	1:E:489:MET:HB3	1.68	0.74
1:A:413:VAL:HG12	1:A:489:MET:HB3	1.69	0.74
1:E:514:LEU:HD13	1:F:49:ILE:HD12	1.70	0.73
1:D:413:VAL:HG12	1:D:489:MET:HB3	1.70	0.73
1:F:413:VAL:HG12	1:F:489:MET:HB3	1.69	0.73
1:A:514:LEU:HD13	1:B:49:ILE:HD12	1.70	0.73
1:E:411:ILE:HD12	1:E:490:PHE:HE1	1.54	0.72
1:D:514:LEU:HD13	1:E:49:ILE:HD12	1.70	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:411:ILE:HD12	1:C:490:PHE:HE1	1.54	0.72
1:B:128:VAL:HG13	1:B:502:ARG:HG3	1.70	0.72
1:F:411:ILE:HD12	1:F:490:PHE:HE1	1.53	0.72
1:E:226:LYS:HG2	1:E:252:GLU:HB2	1.72	0.71
1:D:128:VAL:HG13	1:D:502:ARG:HG3	1.72	0.71
1:B:411:ILE:HD12	1:B:490:PHE:HE1	1.56	0.71
1:A:411:ILE:HD12	1:A:490:PHE:HE1	1.55	0.71
1:D:411:ILE:HD12	1:D:490:PHE:HE1	1.55	0.71
1:C:7:LYS:HD2	1:C:66:PHE:CZ	2.25	0.71
1:D:226:LYS:HG2	1:D:252:GLU:HB2	1.72	0.71
1:E:128:VAL:HG13	1:E:502:ARG:HG3	1.73	0.71
1:F:346:VAL:HG12	1:F:350:ARG:HE	1.56	0.71
1:C:128:VAL:HG13	1:C:502:ARG:HG3	1.72	0.71
1:A:346:VAL:HG12	1:A:350:ARG:HE	1.56	0.70
1:C:226:LYS:HG2	1:C:252:GLU:HB2	1.73	0.70
1:G:128:VAL:HG13	1:G:502:ARG:HG3	1.72	0.70
1:D:139:ASN:HD22	1:D:140:ASP:N	1.90	0.70
1:G:346:VAL:HG12	1:G:350:ARG:HE	1.56	0.70
1:F:7:LYS:HD2	1:F:66:PHE:CZ	2.26	0.70
1:G:7:LYS:HD2	1:G:66:PHE:CZ	2.26	0.70
1:B:346:VAL:HG12	1:B:350:ARG:HE	1.56	0.70
1:B:36:ARG:NH1	1:B:36:ARG:HG2	2.07	0.70
1:F:128:VAL:HG13	1:F:502:ARG:HG3	1.73	0.70
1:G:226:LYS:HG2	1:G:252:GLU:HB2	1.72	0.70
1:D:36:ARG:NH1	1:D:36:ARG:HG2	2.07	0.70
1:A:448:GLU:O	1:A:452:ARG:HD2	1.91	0.70
1:C:346:VAL:HG12	1:C:350:ARG:HE	1.56	0.70
1:F:226:LYS:HG2	1:F:252:GLU:HB2	1.72	0.70
1:A:226:LYS:HG2	1:A:252:GLU:HB2	1.73	0.69
1:D:7:LYS:HD2	1:D:66:PHE:CZ	2.26	0.69
1:F:130:ALA:CB	1:F:425:VAL:HG21	2.22	0.69
1:G:411:ILE:HD12	1:G:490:PHE:HE1	1.57	0.69
1:B:226:LYS:HG2	1:B:252:GLU:HB2	1.72	0.69
1:E:7:LYS:HD2	1:E:66:PHE:CZ	2.26	0.69
1:E:130:ALA:CB	1:E:425:VAL:HG21	2.22	0.69
1:D:346:VAL:HG12	1:D:350:ARG:HE	1.56	0.69
1:A:130:ALA:CB	1:A:425:VAL:HG21	2.23	0.69
1:G:139:ASN:HD22	1:G:140:ASP:N	1.90	0.69
1:G:130:ALA:CB	1:G:425:VAL:HG21	2.23	0.69
1:C:130:ALA:CB	1:C:425:VAL:HG21	2.23	0.69
1:G:227:LEU:HD22	1:G:254:VAL:HG22	1.75	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:166:MET:HG2	1:G:171:ASN:HA	1.74	0.68
1:E:346:VAL:HG12	1:E:350:ARG:HE	1.57	0.68
1:A:73:MET:CE	1:B:49:ILE:HD11	2.23	0.68
1:C:448:GLU:O	1:C:452:ARG:HD2	1.92	0.68
1:A:128:VAL:HG13	1:A:502:ARG:HG3	1.74	0.68
1:A:366:GLN:O	1:A:369:VAL:HG12	1.94	0.68
1:B:139:ASN:HD22	1:B:140:ASP:N	1.91	0.68
1:B:7:LYS:HD2	1:B:66:PHE:CZ	2.29	0.68
1:F:166:MET:HG2	1:F:171:ASN:HA	1.76	0.68
1:B:130:ALA:CB	1:B:425:VAL:HG21	2.23	0.68
1:C:366:GLN:O	1:C:369:VAL:HG12	1.94	0.68
1:D:166:MET:HG2	1:D:171:ASN:HA	1.75	0.68
1:F:448:GLU:O	1:F:452:ARG:HD2	1.94	0.68
1:B:227:LEU:HD22	1:B:254:VAL:HG22	1.76	0.68
1:E:139:ASN:HD22	1:E:140:ASP:N	1.90	0.68
1:E:166:MET:HG2	1:E:171:ASN:HA	1.76	0.68
1:A:227:LEU:HD22	1:A:254:VAL:HG22	1.76	0.67
1:C:321:LYS:HB3	1:C:334:ASP:HB3	1.76	0.67
1:D:130:ALA:CB	1:D:425:VAL:HG21	2.23	0.67
1:C:227:LEU:HD22	1:C:254:VAL:HG22	1.77	0.67
1:C:139:ASN:HD22	1:C:140:ASP:N	1.91	0.67
1:F:227:LEU:HD22	1:F:254:VAL:HG22	1.76	0.67
1:G:448:GLU:O	1:G:452:ARG:HD2	1.93	0.67
1:E:227:LEU:HD22	1:E:254:VAL:HG22	1.76	0.67
1:D:321:LYS:HB3	1:D:334:ASP:HB3	1.77	0.67
1:D:366:GLN:O	1:D:369:VAL:HG12	1.94	0.67
1:F:366:GLN:O	1:F:369:VAL:HG12	1.93	0.67
1:A:132:LYS:HD3	1:A:502:ARG:HD3	1.76	0.67
1:D:227:LEU:HD22	1:D:254:VAL:HG22	1.77	0.67
1:E:130:ALA:HB2	1:E:425:VAL:HG21	1.77	0.67
1:G:366:GLN:O	1:G:369:VAL:HG12	1.93	0.66
1:A:7:LYS:HD2	1:A:66:PHE:CZ	2.29	0.66
1:B:166:MET:HG2	1:B:171:ASN:HA	1.76	0.66
1:G:132:LYS:HD3	1:G:502:ARG:HD3	1.77	0.66
1:A:166:MET:HG2	1:A:171:ASN:HA	1.76	0.66
1:C:166:MET:HG2	1:C:171:ASN:HA	1.75	0.66
1:C:183:MET:HG2	1:C:384:MET:SD	2.35	0.66
1:E:366:GLN:O	1:E:369:VAL:HG12	1.94	0.66
1:A:183:MET:HG2	1:A:384:MET:SD	2.36	0.66
1:B:366:GLN:O	1:B:369:VAL:HG12	1.95	0.66
1:F:231:GLN:NE2	1:F:231:GLN:H	1.94	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:321:LYS:HB3	1:G:334:ASP:HB3	1.76	0.66
1:B:321:LYS:HB3	1:B:334:ASP:HB3	1.78	0.66
1:F:130:ALA:HB2	1:F:425:VAL:HG21	1.77	0.66
1:B:448:GLU:O	1:B:452:ARG:HD2	1.96	0.66
1:D:183:MET:HG2	1:D:384:MET:SD	2.36	0.66
1:A:321:LYS:HB3	1:A:334:ASP:HB3	1.76	0.65
1:E:226:LYS:NZ	1:E:252:GLU:HB3	2.11	0.65
1:E:321:LYS:HB3	1:E:334:ASP:HB3	1.77	0.65
1:F:321:LYS:HB3	1:F:334:ASP:HB3	1.77	0.65
1:B:183:MET:HG2	1:B:384:MET:SD	2.37	0.65
1:D:226:LYS:NZ	1:D:252:GLU:HB3	2.12	0.65
1:F:219:TYR:HB2	1:F:247:LEU:HA	1.79	0.65
1:A:219:TYR:HB2	1:A:247:LEU:HA	1.78	0.65
1:D:130:ALA:HB2	1:D:425:VAL:HG21	1.79	0.65
1:D:231:GLN:H	1:D:231:GLN:NE2	1.94	0.65
1:B:130:ALA:HB2	1:B:425:VAL:HG21	1.78	0.65
1:B:231:GLN:NE2	1:B:231:GLN:H	1.95	0.65
1:G:231:GLN:H	1:G:231:GLN:NE2	1.94	0.65
1:C:226:LYS:NZ	1:C:252:GLU:HB3	2.12	0.65
1:E:448:GLU:O	1:E:452:ARG:HD2	1.97	0.65
1:C:130:ALA:HB2	1:C:425:VAL:HG21	1.78	0.65
1:E:231:GLN:H	1:E:231:GLN:NE2	1.95	0.65
1:F:132:LYS:HD3	1:F:502:ARG:HD3	1.78	0.65
1:C:231:GLN:H	1:C:231:GLN:NE2	1.95	0.65
1:G:36:ARG:HG2	1:G:36:ARG:NH1	2.10	0.65
1:A:231:GLN:H	1:A:231:GLN:NE2	1.95	0.64
1:B:128:VAL:HG13	1:B:502:ARG:CG	2.27	0.64
1:E:209:ASP:HB3	1:E:210:LYS:NZ	2.12	0.64
1:B:72:GLN:HE22	1:B:75:ARG:NH1	1.95	0.64
1:A:226:LYS:NZ	1:A:252:GLU:HB3	2.12	0.64
1:C:209:ASP:HB3	1:C:210:LYS:NZ	2.12	0.64
1:C:36:ARG:HG2	1:C:36:ARG:NH1	2.07	0.64
1:D:448:GLU:O	1:D:452:ARG:HD2	1.97	0.64
1:D:73:MET:CE	1:E:49:ILE:HD11	2.27	0.64
1:F:429:LEU:HD12	1:F:430:SER:H	1.62	0.64
1:G:77:VAL:HA	1:G:80:ARG:HD3	1.79	0.64
1:D:429:LEU:HD12	1:D:430:SER:H	1.63	0.64
1:E:183:MET:HG2	1:E:384:MET:SD	2.37	0.64
1:F:226:LYS:NZ	1:F:252:GLU:HB3	2.12	0.64
1:G:183:MET:HG2	1:G:384:MET:SD	2.36	0.64
1:A:77:VAL:HA	1:A:80:ARG:HD3	1.79	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:209:ASP:HB3	1:B:210:LYS:NZ	2.13	0.64
1:A:130:ALA:HB2	1:A:425:VAL:HG21	1.78	0.64
1:E:219:TYR:HB2	1:E:247:LEU:HA	1.78	0.64
1:B:226:LYS:NZ	1:B:252:GLU:HB3	2.12	0.64
1:D:132:LYS:HD3	1:D:502:ARG:HD3	1.78	0.64
1:G:130:ALA:HB2	1:G:425:VAL:HG21	1.79	0.64
1:G:209:ASP:HB3	1:G:210:LYS:NZ	2.13	0.64
1:A:36:ARG:HG2	1:A:36:ARG:NH1	2.05	0.64
1:B:219:TYR:HB2	1:B:247:LEU:HA	1.78	0.64
1:D:209:ASP:HB3	1:D:210:LYS:NZ	2.13	0.64
1:F:183:MET:HG2	1:F:384:MET:SD	2.38	0.64
1:G:250:VAL:HA	1:G:276:VAL:O	1.98	0.64
1:C:132:LYS:HD3	1:C:502:ARG:HD3	1.79	0.64
1:D:190:VAL:HG12	1:D:191:GLU:H	1.62	0.64
1:D:77:VAL:HA	1:D:80:ARG:HD3	1.78	0.64
1:G:219:TYR:HB2	1:G:247:LEU:HA	1.78	0.64
1:G:226:LYS:NZ	1:G:252:GLU:HB3	2.13	0.64
1:A:429:LEU:HD12	1:A:430:SER:H	1.64	0.63
1:D:219:TYR:HB2	1:D:247:LEU:HA	1.79	0.63
1:F:250:VAL:HA	1:F:276:VAL:O	1.98	0.63
1:F:77:VAL:HA	1:F:80:ARG:HD3	1.80	0.63
1:A:209:ASP:HB3	1:A:210:LYS:NZ	2.13	0.63
1:F:209:ASP:HB3	1:F:210:LYS:NZ	2.13	0.63
1:F:72:GLN:HE22	1:F:75:ARG:NH1	1.96	0.63
1:C:219:TYR:HB2	1:C:247:LEU:HA	1.79	0.63
1:E:77:VAL:HA	1:E:80:ARG:HD3	1.80	0.63
1:F:139:ASN:HD22	1:F:140:ASP:N	1.91	0.63
1:E:84:GLU:HG3	1:E:500:VAL:HG22	1.81	0.63
1:E:72:GLN:HE22	1:E:75:ARG:NH1	1.96	0.63
1:G:72:GLN:HE22	1:G:75:ARG:NH1	1.97	0.63
1:C:250:VAL:HA	1:C:276:VAL:O	1.98	0.63
1:G:128:VAL:HG13	1:G:502:ARG:CG	2.28	0.63
1:E:248:LEU:HA	1:E:274:ALA:HB3	1.81	0.63
1:A:250:VAL:HA	1:A:276:VAL:O	1.99	0.62
1:B:250:VAL:HA	1:B:276:VAL:O	1.98	0.62
1:D:250:VAL:HA	1:D:276:VAL:O	1.99	0.62
1:B:77:VAL:HA	1:B:80:ARG:HD3	1.79	0.62
1:C:429:LEU:HD12	1:C:430:SER:H	1.63	0.62
1:E:250:VAL:HA	1:E:276:VAL:O	1.98	0.62
1:F:138:VAL:HG12	1:F:407:VAL:HG12	1.81	0.62
1:C:72:GLN:HE22	1:C:75:ARG:NH1	1.97	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:128:VAL:HG13	1:E:502:ARG:CG	2.29	0.62
1:E:73:MET:CE	1:F:49:ILE:HD11	2.30	0.62
1:A:176:THR:O	1:A:378:VAL:HG23	2.00	0.62
1:A:138:VAL:HG12	1:A:407:VAL:HG12	1.82	0.62
1:B:174:VAL:HG22	1:B:376:VAL:HG13	1.81	0.62
1:B:429:LEU:HD12	1:B:430:SER:H	1.64	0.62
1:B:176:THR:O	1:B:378:VAL:HG23	1.99	0.62
1:C:190:VAL:HG12	1:C:191:GLU:H	1.63	0.62
1:E:429:LEU:HD12	1:E:430:SER:H	1.65	0.62
1:F:248:LEU:HA	1:F:274:ALA:HB3	1.82	0.62
1:B:84:GLU:HG3	1:B:500:VAL:HG22	1.81	0.62
1:C:128:VAL:HG13	1:C:502:ARG:CG	2.28	0.62
1:C:176:THR:O	1:C:378:VAL:HG23	1.99	0.62
1:C:193:MET:HB2	1:C:295:LEU:HD22	1.82	0.62
1:E:174:VAL:HG22	1:E:376:VAL:HG13	1.82	0.62
1:F:36:ARG:NH1	1:F:36:ARG:HG2	2.07	0.62
1:D:174:VAL:HG22	1:D:376:VAL:HG13	1.82	0.62
1:E:132:LYS:HD3	1:E:502:ARG:HD3	1.79	0.62
1:C:73:MET:CE	1:D:49:ILE:HD11	2.30	0.62
1:F:84:GLU:HG3	1:F:500:VAL:HG22	1.82	0.62
1:F:176:THR:O	1:F:378:VAL:HG23	2.00	0.62
1:G:429:LEU:HD12	1:G:430:SER:H	1.63	0.62
1:A:525:LYS:HD2	1:A:526:PRO:HD2	1.82	0.61
1:D:248:LEU:HA	1:D:274:ALA:HB3	1.82	0.61
1:G:190:VAL:HG12	1:G:191:GLU:H	1.65	0.61
1:A:128:VAL:HG13	1:A:502:ARG:CG	2.29	0.61
1:B:477:PHE:HA	1:B:487:GLY:O	1.99	0.61
1:D:128:VAL:HG13	1:D:502:ARG:CG	2.29	0.61
1:A:174:VAL:HG22	1:A:376:VAL:HG13	1.82	0.61
1:B:138:VAL:HG12	1:B:407:VAL:HG12	1.83	0.61
1:B:248:LEU:HA	1:B:274:ALA:HB3	1.82	0.61
1:B:132:LYS:HD3	1:B:502:ARG:HD3	1.80	0.61
1:C:174:VAL:HG22	1:C:376:VAL:HG13	1.83	0.61
1:A:139:ASN:HD22	1:A:140:ASP:N	1.92	0.61
1:A:49:ILE:HD11	1:G:73:MET:CE	2.31	0.61
1:C:221:LEU:HD11	1:C:249:ILE:HG23	1.82	0.61
1:C:248:LEU:HA	1:C:274:ALA:HB3	1.82	0.61
1:C:77:VAL:HA	1:C:80:ARG:HD3	1.81	0.61
1:E:409:GLU:OE2	1:E:499:LYS:HG3	1.99	0.61
1:A:193:MET:HB2	1:A:295:LEU:HD22	1.82	0.61
1:B:221:LEU:HD11	1:B:249:ILE:HG23	1.82	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:525:LYS:HD2	1:F:526:PRO:HD2	1.82	0.61
1:F:73:MET:CE	1:G:49:ILE:HD11	2.30	0.61
1:G:248:LEU:HA	1:G:274:ALA:HB3	1.82	0.61
1:A:248:LEU:HA	1:A:274:ALA:HB3	1.82	0.61
1:E:367:GLU:HG3	1:E:368:ARG:N	2.16	0.61
1:G:221:LEU:HD11	1:G:249:ILE:HG23	1.82	0.61
1:B:193:MET:HB2	1:B:295:LEU:HD22	1.82	0.61
1:E:525:LYS:HD2	1:E:526:PRO:HD2	1.82	0.61
1:F:73:MET:HE3	1:G:49:ILE:HD11	1.82	0.61
1:F:75:ARG:HG2	1:F:75:ARG:NH1	2.16	0.61
1:A:72:GLN:HE22	1:A:75:ARG:NH1	1.99	0.61
1:B:73:MET:HE3	1:C:49:ILE:HD11	1.82	0.61
1:D:525:LYS:HD2	1:D:526:PRO:HD2	1.82	0.61
1:A:49:ILE:HD11	1:G:73:MET:HE3	1.82	0.61
1:G:193:MET:HB2	1:G:295:LEU:HD22	1.82	0.61
1:F:174:VAL:HG22	1:F:376:VAL:HG13	1.84	0.60
1:G:525:LYS:HD2	1:G:526:PRO:HD2	1.83	0.60
1:D:176:THR:O	1:D:378:VAL:HG23	2.01	0.60
1:D:193:MET:HB2	1:D:295:LEU:HD22	1.83	0.60
1:F:221:LEU:HD11	1:F:249:ILE:HG23	1.82	0.60
1:D:84:GLU:HG3	1:D:500:VAL:HG22	1.83	0.60
1:G:174:VAL:HG22	1:G:376:VAL:HG13	1.84	0.60
1:G:477:PHE:HA	1:G:487:GLY:O	2.01	0.60
1:E:221:LEU:HD11	1:E:249:ILE:HG23	1.82	0.60
1:E:75:ARG:HG2	1:E:75:ARG:NH1	2.17	0.60
1:B:367:GLU:HG3	1:B:368:ARG:N	2.16	0.60
1:B:525:LYS:HD2	1:B:526:PRO:HD2	1.83	0.60
1:C:73:MET:HE3	1:D:49:ILE:HD11	1.81	0.60
1:F:128:VAL:HG13	1:F:502:ARG:CG	2.30	0.60
1:F:367:GLU:HG3	1:F:368:ARG:N	2.16	0.60
1:C:22:ILE:HG21	1:C:62:LEU:HD21	1.84	0.60
1:C:296:THR:O	1:C:336:ALA:HB3	2.02	0.60
1:G:367:GLU:HG3	1:G:368:ARG:N	2.16	0.60
1:C:367:GLU:HG3	1:C:368:ARG:N	2.16	0.60
1:C:138:VAL:HG12	1:C:407:VAL:HG12	1.83	0.60
1:E:176:THR:O	1:E:378:VAL:HG23	2.01	0.60
1:A:221:LEU:HD11	1:A:249:ILE:HG23	1.84	0.60
1:C:477:PHE:HA	1:C:487:GLY:O	2.02	0.60
1:C:525:LYS:HD2	1:C:526:PRO:HD2	1.83	0.60
1:C:84:GLU:HG3	1:C:500:VAL:HG22	1.83	0.60
1:D:73:MET:HE3	1:E:49:ILE:HD11	1.84	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:72:GLN:HE22	1:D:75:ARG:NH1	2.00	0.60
1:E:193:MET:HB2	1:E:295:LEU:HD22	1.82	0.60
1:F:477:PHE:HA	1:F:487:GLY:O	2.02	0.60
1:G:84:GLU:HG3	1:G:500:VAL:HG22	1.83	0.59
1:C:27:VAL:CG1	1:C:90:THR:HG23	2.32	0.59
1:B:73:MET:CE	1:C:49:ILE:HD11	2.32	0.59
1:F:296:THR:O	1:F:336:ALA:HB3	2.02	0.59
1:G:219:TYR:H	1:G:247:LEU:HA	1.66	0.59
1:A:477:PHE:HA	1:A:487:GLY:O	2.02	0.59
1:C:352:GLN:O	1:C:356:THR:HG23	2.02	0.59
1:D:352:GLN:O	1:D:356:THR:HG23	2.02	0.59
1:F:193:MET:HB2	1:F:295:LEU:HD22	1.82	0.59
1:A:84:GLU:HG3	1:A:500:VAL:HG22	1.82	0.59
1:D:296:THR:O	1:D:336:ALA:HB3	2.02	0.59
1:D:367:GLU:HG3	1:D:368:ARG:N	2.16	0.59
1:A:73:MET:HE3	1:B:49:ILE:HD11	1.83	0.59
1:C:219:TYR:H	1:C:247:LEU:HA	1.66	0.59
1:D:219:TYR:H	1:D:247:LEU:HA	1.67	0.59
1:E:73:MET:HE3	1:F:49:ILE:HD11	1.84	0.59
1:G:138:VAL:HG12	1:G:407:VAL:HG12	1.85	0.59
1:A:296:THR:O	1:A:336:ALA:HB3	2.02	0.59
1:A:367:GLU:HG3	1:A:368:ARG:N	2.16	0.59
1:D:27:VAL:CG1	1:D:90:THR:HG23	2.33	0.59
1:F:219:TYR:H	1:F:247:LEU:HA	1.67	0.59
1:A:219:TYR:H	1:A:247:LEU:HA	1.67	0.59
1:B:71:ALA:O	1:B:75:ARG:HB3	2.02	0.59
1:C:158:ILE:HG23	1:C:396:VAL:HG22	1.84	0.59
1:F:352:GLN:O	1:F:356:THR:HG23	2.03	0.59
1:G:296:THR:O	1:G:336:ALA:HB3	2.03	0.59
1:B:77:VAL:HG12	1:B:78:ALA:N	2.18	0.59
1:E:352:GLN:O	1:E:356:THR:HG23	2.03	0.59
1:A:394:ASP:O	1:A:398:ASP:HB2	2.03	0.59
1:B:296:THR:O	1:B:336:ALA:HB3	2.03	0.59
1:D:221:LEU:HD11	1:D:249:ILE:HG23	1.83	0.59
1:E:27:VAL:CG1	1:E:90:THR:HG23	2.33	0.59
1:F:483:THR:OG1	1:F:485:GLU:HG2	2.03	0.59
1:E:219:TYR:H	1:E:247:LEU:HA	1.66	0.59
1:E:477:PHE:HA	1:E:487:GLY:O	2.03	0.59
1:D:158:ILE:HG23	1:D:396:VAL:HG22	1.85	0.58
1:F:411:ILE:CD1	1:F:490:PHE:HE1	2.16	0.58
1:B:219:TYR:H	1:B:247:LEU:HA	1.66	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:190:VAL:HG12	1:E:191:GLU:H	1.67	0.58
1:G:353:ILE:HG12	1:G:365:LEU:HB3	1.85	0.58
1:A:168:ARG:HG2	1:A:189:VAL:HG21	1.86	0.58
1:D:77:VAL:HG12	1:D:78:ALA:N	2.17	0.58
1:G:394:ASP:O	1:G:398:ASP:HB2	2.03	0.58
1:D:394:ASP:O	1:D:398:ASP:HB2	2.03	0.58
1:G:352:GLN:O	1:G:356:THR:HG23	2.03	0.58
1:C:483:THR:OG1	1:C:485:GLU:HG2	2.03	0.58
1:C:394:ASP:O	1:C:398:ASP:HB2	2.03	0.58
1:E:296:THR:O	1:E:336:ALA:HB3	2.03	0.58
1:G:483:THR:OG1	1:G:485:GLU:HG2	2.04	0.58
1:A:353:ILE:HG12	1:A:365:LEU:HB3	1.86	0.58
1:F:168:ARG:HG2	1:F:189:VAL:HG21	1.86	0.58
1:F:353:ILE:HG12	1:F:365:LEU:HB3	1.85	0.58
1:G:27:VAL:CG1	1:G:90:THR:HG23	2.32	0.58
1:B:25:ASP:HA	1:B:28:LYS:HD2	1.86	0.58
1:D:22:ILE:HG21	1:D:62:LEU:HD21	1.86	0.58
1:G:71:ALA:O	1:G:75:ARG:HB3	2.04	0.58
1:D:477:PHE:HA	1:D:487:GLY:O	2.04	0.58
1:A:483:THR:OG1	1:A:485:GLU:HG2	2.04	0.58
1:A:19:GLY:HA3	1:A:67:GLU:O	2.04	0.58
1:C:77:VAL:HG12	1:C:78:ALA:N	2.18	0.58
1:E:138:VAL:HG12	1:E:407:VAL:HG12	1.85	0.58
1:G:365:LEU:O	1:G:368:ARG:HG3	2.04	0.58
1:G:176:THR:O	1:G:378:VAL:HG23	2.04	0.58
1:A:488:ASP:OD1	1:A:490:PHE:HB2	2.04	0.57
1:B:158:ILE:HG23	1:B:396:VAL:HG22	1.84	0.57
1:B:27:VAL:CG1	1:B:90:THR:HG23	2.33	0.57
1:A:352:GLN:O	1:A:356:THR:HG23	2.03	0.57
1:B:394:ASP:O	1:B:398:ASP:HB2	2.04	0.57
1:B:468:LYS:HD3	1:B:486:TYR:CZ	2.39	0.57
1:B:168:ARG:HG2	1:B:189:VAL:HG21	1.87	0.57
1:B:352:GLN:O	1:B:356:THR:HG23	2.03	0.57
1:B:353:ILE:HG12	1:B:365:LEU:HB3	1.85	0.57
1:B:75:ARG:HG2	1:B:75:ARG:NH1	2.19	0.57
1:D:138:VAL:HG12	1:D:407:VAL:HG12	1.86	0.57
1:F:77:VAL:HG12	1:F:78:ALA:N	2.19	0.57
1:G:158:ILE:HG23	1:G:396:VAL:HG22	1.85	0.57
1:G:25:ASP:HA	1:G:28:LYS:HD2	1.86	0.57
1:E:36:ARG:HG2	1:E:36:ARG:NH1	2.08	0.57
1:F:158:ILE:HG23	1:F:396:VAL:HG22	1.85	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:488:ASP:OD1	1:F:490:PHE:HB2	2.04	0.57
1:G:75:ARG:NH1	1:G:75:ARG:HG2	2.18	0.57
1:C:168:ARG:HG2	1:C:189:VAL:HG21	1.86	0.57
1:C:411:ILE:CD1	1:C:490:PHE:HE1	2.16	0.57
1:D:502:ARG:O	1:D:506:GLU:HG3	2.04	0.57
1:F:75:ARG:HH11	1:F:75:ARG:HG2	1.68	0.57
1:A:365:LEU:O	1:A:368:ARG:HG3	2.05	0.57
1:E:353:ILE:HG12	1:E:365:LEU:HB3	1.86	0.57
1:F:468:LYS:HD3	1:F:486:TYR:CZ	2.40	0.57
1:B:409:GLU:OE2	1:B:499:LYS:HG3	2.05	0.57
1:C:226:LYS:HZ1	1:C:252:GLU:HB3	1.69	0.57
1:A:75:ARG:HG2	1:A:75:ARG:NH1	2.20	0.57
1:B:483:THR:OG1	1:B:485:GLU:HG2	2.05	0.57
1:F:71:ALA:O	1:F:75:ARG:HB3	2.05	0.57
1:A:59:GLU:O	1:G:4:LYS:HD2	2.05	0.57
1:C:245:LYS:NZ	1:C:319:ARG:HH21	2.03	0.57
1:E:168:ARG:HG2	1:E:189:VAL:HG21	1.87	0.57
1:E:365:LEU:O	1:E:368:ARG:HG3	2.05	0.57
1:E:75:ARG:HG2	1:E:75:ARG:HH11	1.67	0.57
1:G:168:ARG:HG2	1:G:189:VAL:HG21	1.87	0.57
1:B:190:VAL:HG12	1:B:191:GLU:H	1.68	0.57
1:B:451:MET:HE1	1:B:466:ALA:HA	1.87	0.57
1:G:77:VAL:HG12	1:G:78:ALA:N	2.18	0.57
1:A:31:LEU:HD13	1:A:90:THR:CG2	2.35	0.56
1:F:365:LEU:O	1:F:368:ARG:HG3	2.05	0.56
1:F:394:ASP:O	1:F:398:ASP:HB2	2.05	0.56
1:A:27:VAL:CG1	1:A:90:THR:HG23	2.35	0.56
1:A:71:ALA:O	1:A:75:ARG:HB3	2.05	0.56
1:C:353:ILE:HG12	1:C:365:LEU:HB3	1.85	0.56
1:D:168:ARG:HG2	1:D:189:VAL:HG21	1.87	0.56
1:D:483:THR:OG1	1:D:485:GLU:HG2	2.04	0.56
1:E:22:ILE:HG21	1:E:62:LEU:HD21	1.87	0.56
1:E:394:ASP:O	1:E:398:ASP:HB2	2.05	0.56
1:E:71:ALA:O	1:E:75:ARG:HB3	2.05	0.56
1:G:468:LYS:HD3	1:G:486:TYR:CZ	2.41	0.56
1:G:502:ARG:O	1:G:506:GLU:HG3	2.05	0.56
1:A:158:ILE:HG23	1:A:396:VAL:HG22	1.85	0.56
1:B:365:LEU:O	1:B:368:ARG:HG3	2.05	0.56
1:B:479:PHE:N	1:B:489:MET:HE1	2.20	0.56
1:B:81:THR:HG23	1:B:503:THR:HG22	1.87	0.56
1:C:468:LYS:HD3	1:C:486:TYR:CZ	2.40	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:353:ILE:HG12	1:D:365:LEU:HB3	1.85	0.56
1:E:245:LYS:NZ	1:E:319:ARG:HH21	2.04	0.56
1:A:22:ILE:HG21	1:A:62:LEU:HD21	1.87	0.56
1:C:31:LEU:HD13	1:C:90:THR:CG2	2.36	0.56
1:D:468:LYS:HD3	1:D:486:TYR:CZ	2.40	0.56
1:F:245:LYS:NZ	1:F:319:ARG:HH21	2.03	0.56
1:G:19:GLY:HA3	1:G:67:GLU:O	2.06	0.56
1:A:77:VAL:HG12	1:A:78:ALA:N	2.19	0.56
1:C:75:ARG:HG2	1:C:75:ARG:NH1	2.20	0.56
1:D:81:THR:HG23	1:D:503:THR:HG22	1.88	0.56
1:E:411:ILE:CD1	1:E:490:PHE:HE1	2.19	0.56
1:G:13:ARG:HD3	1:G:104:LEU:HD22	1.88	0.56
1:A:209:ASP:HB3	1:A:210:LYS:HZ1	1.71	0.56
1:B:226:LYS:HZ1	1:B:252:GLU:HB3	1.69	0.56
1:B:393:LYS:O	1:B:397:ASP:HB2	2.05	0.56
1:D:411:ILE:CD1	1:D:490:PHE:HE1	2.19	0.56
1:D:4:LYS:HD2	1:E:59:GLU:O	2.06	0.56
1:F:25:ASP:HA	1:F:28:LYS:HD2	1.88	0.56
1:A:245:LYS:NZ	1:A:319:ARG:HH21	2.04	0.56
1:A:411:ILE:CD1	1:A:490:PHE:HE1	2.19	0.56
1:D:488:ASP:OD1	1:D:490:PHE:HB2	2.06	0.56
1:F:28:LYS:HG3	1:F:453:GLN:OE1	2.06	0.56
1:G:400:LEU:HG	1:G:400:LEU:O	2.06	0.56
1:A:393:LYS:O	1:A:397:ASP:HB2	2.06	0.56
1:A:81:THR:HG23	1:A:503:THR:HG22	1.88	0.56
1:D:25:ASP:HA	1:D:28:LYS:HD2	1.88	0.56
1:E:483:THR:OG1	1:E:485:GLU:HG2	2.05	0.56
1:G:245:LYS:NZ	1:G:319:ARG:HH21	2.04	0.56
1:A:468:LYS:HD3	1:A:486:TYR:CZ	2.40	0.56
1:B:245:LYS:NZ	1:B:319:ARG:HH21	2.04	0.56
1:C:200:LEU:HD23	1:C:275:ALA:O	2.06	0.56
1:C:71:ALA:O	1:C:75:ARG:HB3	2.06	0.56
1:E:209:ASP:HB3	1:E:210:LYS:HZ1	1.70	0.56
1:G:75:ARG:HH11	1:G:75:ARG:HG2	1.69	0.56
1:B:488:ASP:OD1	1:B:490:PHE:HB2	2.05	0.56
1:C:393:LYS:O	1:C:397:ASP:HB2	2.06	0.56
1:D:71:ALA:O	1:D:75:ARG:HB3	2.06	0.56
1:E:158:ILE:HG23	1:E:396:VAL:HG22	1.87	0.56
1:F:27:VAL:CG1	1:F:90:THR:HG23	2.35	0.56
1:D:13:ARG:HD3	1:D:104:LEU:HD22	1.88	0.55
1:E:13:ARG:HD3	1:E:104:LEU:HD22	1.88	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:19:GLY:HA3	1:F:67:GLU:O	2.06	0.55
1:B:75:ARG:HG2	1:B:75:ARG:HH11	1.71	0.55
1:C:25:ASP:HA	1:C:28:LYS:HD2	1.88	0.55
1:C:19:GLY:HA3	1:C:67:GLU:O	2.06	0.55
1:E:25:ASP:HA	1:E:28:LYS:HD2	1.89	0.55
1:A:25:ASP:HA	1:A:28:LYS:HD2	1.88	0.55
1:A:69:MET:HG2	1:B:47:PRO:HB3	1.88	0.55
1:D:365:LEU:O	1:D:368:ARG:HG3	2.05	0.55
1:E:488:ASP:OD1	1:E:490:PHE:HB2	2.05	0.55
1:E:77:VAL:HG12	1:E:78:ALA:N	2.19	0.55
1:F:393:LYS:O	1:F:397:ASP:HB2	2.06	0.55
1:F:31:LEU:HD13	1:F:90:THR:CG2	2.36	0.55
1:G:393:LYS:O	1:G:397:ASP:HB2	2.06	0.55
1:B:19:GLY:HA3	1:B:67:GLU:O	2.06	0.55
1:C:488:ASP:OD1	1:C:490:PHE:HB2	2.05	0.55
1:D:245:LYS:NZ	1:D:319:ARG:HH21	2.04	0.55
1:D:393:LYS:O	1:D:397:ASP:HB2	2.07	0.55
1:F:502:ARG:O	1:F:506:GLU:HG3	2.06	0.55
1:G:488:ASP:OD1	1:G:490:PHE:HB2	2.07	0.55
1:A:200:LEU:HD23	1:A:275:ALA:O	2.07	0.55
1:B:342:ILE:O	1:B:346:VAL:HG23	2.06	0.55
1:B:22:ILE:HG21	1:B:62:LEU:HD21	1.89	0.55
1:C:349:ILE:HG21	1:C:369:VAL:HB	1.89	0.55
1:E:226:LYS:HG2	1:E:252:GLU:CB	2.37	0.55
1:E:342:ILE:O	1:E:346:VAL:HG23	2.07	0.55
1:F:227:LEU:HB3	1:F:254:VAL:HG13	1.89	0.55
1:F:400:LEU:HG	1:F:400:LEU:O	2.07	0.55
1:G:200:LEU:HD23	1:G:275:ALA:O	2.07	0.55
1:G:411:ILE:CD1	1:G:490:PHE:HE1	2.20	0.55
1:B:200:LEU:HD23	1:B:275:ALA:O	2.07	0.55
1:B:502:ARG:O	1:B:506:GLU:HG3	2.06	0.55
1:E:393:LYS:O	1:E:397:ASP:HB2	2.06	0.55
1:A:227:LEU:HB3	1:A:254:VAL:HG13	1.88	0.55
1:B:411:ILE:CD1	1:B:490:PHE:HE1	2.20	0.55
1:F:342:ILE:O	1:F:346:VAL:HG23	2.07	0.55
1:A:13:ARG:HD3	1:A:104:LEU:HD22	1.89	0.55
1:C:5:GLU:HG3	1:C:525:LYS:HD3	1.88	0.55
1:C:75:ARG:HG2	1:C:75:ARG:HH11	1.72	0.55
1:E:468:LYS:HD3	1:E:486:TYR:CZ	2.42	0.55
1:F:30:THR:HB	1:F:51:LYS:O	2.06	0.55
1:G:2:ALA:O	1:G:4:LYS:HG2	2.07	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:28:LYS:HG3	1:A:453:GLN:OE1	2.06	0.55
1:A:342:ILE:O	1:A:346:VAL:HG23	2.06	0.55
1:D:342:ILE:O	1:D:346:VAL:HG23	2.07	0.55
1:F:413:VAL:CG1	1:F:489:MET:HB3	2.37	0.55
1:G:227:LEU:HB3	1:G:254:VAL:HG13	1.89	0.55
1:A:502:ARG:O	1:A:506:GLU:HG3	2.06	0.54
1:A:31:LEU:HD13	1:A:90:THR:HG21	1.88	0.54
1:B:31:LEU:HD13	1:B:90:THR:CG2	2.37	0.54
1:B:441:ALA:O	1:B:445:ARG:HD3	2.07	0.54
1:D:349:ILE:HG21	1:D:369:VAL:HB	1.89	0.54
1:E:413:VAL:CG1	1:E:489:MET:HB3	2.37	0.54
1:E:81:THR:HG23	1:E:503:THR:HG22	1.90	0.54
1:E:4:LYS:HD2	1:F:59:GLU:O	2.07	0.54
1:G:31:LEU:HD13	1:G:90:THR:HG21	1.89	0.54
1:G:460:VAL:HG21	1:G:479:PHE:HZ	1.73	0.54
1:A:5:GLU:HG3	1:A:525:LYS:HD3	1.88	0.54
1:A:24:ALA:HB3	1:A:97:GLN:NE2	2.23	0.54
1:C:365:LEU:O	1:C:368:ARG:HG3	2.06	0.54
1:C:179:GLU:HA	1:C:381:VAL:HG23	1.90	0.54
1:G:342:ILE:O	1:G:346:VAL:HG23	2.07	0.54
1:E:200:LEU:HD23	1:E:275:ALA:O	2.07	0.54
1:F:22:ILE:HG21	1:F:62:LEU:HD21	1.89	0.54
1:G:31:LEU:HD13	1:G:90:THR:CG2	2.37	0.54
1:D:179:GLU:HA	1:D:381:VAL:HG23	1.90	0.54
1:F:31:LEU:HD13	1:F:90:THR:HG21	1.89	0.54
1:G:192:GLY:HA2	1:G:295:LEU:HD21	1.90	0.54
1:A:226:LYS:HG2	1:A:252:GLU:CB	2.38	0.54
1:B:349:ILE:HG21	1:B:369:VAL:HB	1.90	0.54
1:C:502:ARG:O	1:C:506:GLU:HG3	2.06	0.54
1:D:200:LEU:HD23	1:D:275:ALA:O	2.08	0.54
1:B:5:GLU:HG3	1:B:525:LYS:HD3	1.88	0.54
1:C:226:LYS:HG2	1:C:252:GLU:CB	2.38	0.54
1:C:451:MET:HE1	1:C:466:ALA:HA	1.90	0.54
1:C:460:VAL:HG21	1:C:479:PHE:HZ	1.72	0.54
1:C:31:LEU:HD13	1:C:90:THR:HG21	1.89	0.54
1:D:5:GLU:HG3	1:D:525:LYS:HD3	1.89	0.54
1:E:5:GLU:HG3	1:E:525:LYS:HD3	1.88	0.54
1:F:179:GLU:HA	1:F:381:VAL:HG23	1.90	0.54
1:F:452:ARG:O	1:F:456:GLU:HG2	2.08	0.54
1:G:413:VAL:CG1	1:G:489:MET:HB3	2.38	0.54
1:B:383:GLY:N	1:B:389:VAL:HG22	2.23	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:28:LYS:HG3	1:C:453:GLN:OE1	2.07	0.54
1:E:227:LEU:HB3	1:E:254:VAL:HG13	1.89	0.54
1:F:226:LYS:HG2	1:F:252:GLU:CB	2.38	0.54
1:F:2:ALA:O	1:F:4:LYS:HG2	2.08	0.54
1:A:383:GLY:N	1:A:389:VAL:HG22	2.23	0.54
1:C:342:ILE:O	1:C:346:VAL:HG23	2.07	0.54
1:E:349:ILE:HG21	1:E:369:VAL:HB	1.90	0.54
1:F:200:LEU:HD23	1:F:275:ALA:O	2.08	0.54
1:G:349:ILE:HG21	1:G:369:VAL:HB	1.90	0.54
1:E:2:ALA:O	1:E:4:LYS:HG2	2.07	0.54
1:E:400:LEU:O	1:E:400:LEU:HG	2.07	0.54
1:F:383:GLY:N	1:F:389:VAL:HG22	2.23	0.54
1:F:81:THR:HG23	1:F:503:THR:HG22	1.90	0.54
1:G:5:GLU:HG3	1:G:525:LYS:HD3	1.89	0.54
1:D:31:LEU:HD13	1:D:90:THR:CG2	2.38	0.54
1:B:13:ARG:HD3	1:B:104:LEU:HD22	1.90	0.53
1:B:179:GLU:HA	1:B:381:VAL:HG23	1.90	0.53
1:C:250:VAL:HG12	1:C:278:ALA:HA	1.90	0.53
1:D:75:ARG:HG2	1:D:75:ARG:NH1	2.23	0.53
1:E:460:VAL:HG21	1:E:479:PHE:HZ	1.73	0.53
1:G:179:GLU:HA	1:G:381:VAL:HG23	1.90	0.53
1:G:441:ALA:O	1:G:445:ARG:HD3	2.07	0.53
1:G:479:PHE:N	1:G:489:MET:HE1	2.23	0.53
1:D:250:VAL:HG12	1:D:278:ALA:HA	1.90	0.53
1:F:349:ILE:HG21	1:F:369:VAL:HB	1.90	0.53
1:F:5:GLU:HG3	1:F:525:LYS:HD3	1.89	0.53
1:C:178:GLU:O	1:C:381:VAL:HG22	2.08	0.53
1:C:383:GLY:N	1:C:389:VAL:HG22	2.23	0.53
1:C:400:LEU:HG	1:C:400:LEU:O	2.07	0.53
1:C:81:THR:HG23	1:C:503:THR:HG22	1.90	0.53
1:E:179:GLU:HA	1:E:381:VAL:HG23	1.90	0.53
1:F:190:VAL:HG12	1:F:191:GLU:H	1.72	0.53
1:A:349:ILE:HG21	1:A:369:VAL:HB	1.89	0.53
1:A:413:VAL:CG1	1:A:489:MET:HB3	2.38	0.53
1:B:250:VAL:HG12	1:B:278:ALA:HA	1.90	0.53
1:A:75:ARG:HH11	1:A:75:ARG:HG2	1.73	0.53
1:B:226:LYS:HG2	1:B:252:GLU:CB	2.38	0.53
1:G:183:MET:HB3	1:G:384:MET:HE1	1.90	0.53
1:A:192:GLY:HA2	1:A:295:LEU:HD21	1.91	0.53
1:B:227:LEU:HB3	1:B:254:VAL:HG13	1.89	0.53
1:C:192:GLY:HA2	1:C:295:LEU:HD21	1.90	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:222:LEU:HB2	1:C:289:LEU:HD22	1.91	0.53
1:C:66:PHE:HA	1:C:69:MET:HE2	1.91	0.53
1:D:226:LYS:HG2	1:D:252:GLU:CB	2.38	0.53
1:E:24:ALA:HB3	1:E:97:GLN:NE2	2.23	0.53
1:E:451:MET:HE1	1:E:466:ALA:HA	1.90	0.53
1:G:81:THR:HG23	1:G:503:THR:HG22	1.91	0.53
1:A:197:ARG:NH1	1:A:277:LYS:HG2	2.23	0.53
1:B:222:LEU:HB2	1:B:289:LEU:HD22	1.91	0.53
1:C:413:VAL:CG1	1:C:489:MET:HB3	2.37	0.53
1:F:192:GLY:HA2	1:F:295:LEU:HD21	1.90	0.53
1:A:2:ALA:O	1:A:4:LYS:HG2	2.09	0.53
1:B:139:ASN:ND2	1:B:139:ASN:H	2.07	0.53
1:B:400:LEU:O	1:B:400:LEU:HG	2.07	0.53
1:C:227:LEU:HB3	1:C:254:VAL:HG13	1.89	0.53
1:D:400:LEU:O	1:D:400:LEU:HG	2.07	0.53
1:F:209:ASP:HB3	1:F:210:LYS:HZ1	1.73	0.53
1:A:66:PHE:HA	1:A:69:MET:HE2	1.91	0.53
1:D:178:GLU:O	1:D:381:VAL:HG22	2.09	0.53
1:D:227:LEU:HB3	1:D:254:VAL:HG13	1.89	0.53
1:E:502:ARG:O	1:E:506:GLU:HG3	2.09	0.53
1:F:24:ALA:HB3	1:F:97:GLN:NE2	2.24	0.53
1:F:103:GLY:HA3	1:F:516:ILE:HD11	1.91	0.53
1:G:178:GLU:O	1:G:381:VAL:HG22	2.09	0.53
1:G:24:ALA:HB3	1:G:97:GLN:NE2	2.24	0.53
1:A:179:GLU:HA	1:A:381:VAL:HG23	1.91	0.53
1:B:178:GLU:O	1:B:381:VAL:HG22	2.09	0.53
1:B:460:VAL:HG21	1:B:479:PHE:HZ	1.74	0.53
1:D:441:ALA:O	1:D:445:ARG:HD3	2.09	0.53
1:D:452:ARG:O	1:D:456:GLU:HG2	2.09	0.53
1:F:178:GLU:O	1:F:381:VAL:HG22	2.09	0.53
1:G:30:THR:HB	1:G:51:LYS:O	2.09	0.53
1:A:190:VAL:HG12	1:A:191:GLU:H	1.73	0.52
1:A:479:PHE:N	1:A:489:MET:HE1	2.24	0.52
1:C:139:ASN:H	1:C:139:ASN:ND2	2.08	0.52
1:C:452:ARG:O	1:C:456:GLU:HG2	2.09	0.52
1:E:479:PHE:N	1:E:489:MET:HE1	2.24	0.52
1:A:250:VAL:HG12	1:A:278:ALA:HA	1.90	0.52
1:B:192:GLY:HA2	1:B:295:LEU:HD21	1.91	0.52
1:C:460:VAL:HG21	1:C:479:PHE:CZ	2.45	0.52
1:D:2:ALA:O	1:D:4:LYS:HG2	2.08	0.52
1:E:383:GLY:N	1:E:389:VAL:HG22	2.23	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:317:LEU:HG	1:F:318:GLY:N	2.24	0.52
1:G:139:ASN:ND2	1:G:139:ASN:H	2.06	0.52
1:G:383:GLY:N	1:G:389:VAL:HG22	2.25	0.52
1:E:250:VAL:HG12	1:E:278:ALA:HA	1.89	0.52
1:A:421:GLN:O	1:A:424:LYS:HB2	2.09	0.52
1:A:460:VAL:HG21	1:A:479:PHE:HZ	1.73	0.52
1:B:66:PHE:HA	1:B:69:MET:HE2	1.92	0.52
1:E:19:GLY:HA3	1:E:67:GLU:O	2.09	0.52
1:F:13:ARG:HD3	1:F:104:LEU:HD22	1.91	0.52
1:F:426:LEU:HB2	1:F:444:ARG:HD2	1.91	0.52
1:A:18:LYS:HB3	1:A:67:GLU:HG2	1.92	0.52
1:C:426:LEU:HB2	1:C:444:ARG:HD2	1.91	0.52
1:D:31:LEU:HD13	1:D:90:THR:HG21	1.91	0.52
1:D:413:VAL:CG1	1:D:489:MET:HB3	2.38	0.52
1:D:30:THR:HB	1:D:51:LYS:O	2.09	0.52
1:D:86:GLY:C	1:D:88:GLY:H	2.13	0.52
1:E:139:ASN:H	1:E:139:ASN:ND2	2.07	0.52
1:E:317:LEU:HG	1:E:318:GLY:N	2.25	0.52
1:F:460:VAL:HG21	1:F:479:PHE:HZ	1.73	0.52
1:A:47:PRO:HB3	1:G:69:MET:HG2	1.91	0.52
1:A:222:LEU:HB2	1:A:289:LEU:HD22	1.91	0.52
1:A:441:ALA:O	1:A:445:ARG:HD3	2.09	0.52
1:A:30:THR:HB	1:A:51:LYS:O	2.10	0.52
1:B:317:LEU:HG	1:B:318:GLY:N	2.25	0.52
1:B:413:VAL:CG1	1:B:489:MET:HB3	2.38	0.52
1:D:139:ASN:H	1:D:139:ASN:ND2	2.08	0.52
1:C:4:LYS:HD2	1:D:59:GLU:O	2.08	0.52
1:D:7:LYS:HD2	1:D:66:PHE:CE1	2.45	0.52
1:E:197:ARG:NH1	1:E:277:LYS:HG2	2.24	0.52
1:E:365:LEU:HD11	1:E:368:ARG:HH21	1.75	0.52
1:F:222:LEU:HB2	1:F:289:LEU:HD22	1.91	0.52
1:G:365:LEU:HD11	1:G:368:ARG:HH21	1.75	0.52
1:G:66:PHE:HA	1:G:69:MET:CE	2.40	0.52
1:B:2:ALA:O	1:B:4:LYS:HG2	2.09	0.52
1:D:185:THR:HA	1:D:380:ARG:O	2.10	0.52
1:D:192:GLY:HA2	1:D:295:LEU:HD21	1.91	0.52
1:D:383:GLY:N	1:D:389:VAL:HG22	2.24	0.52
1:E:433:ASN:N	1:E:433:ASN:OD1	2.42	0.52
1:E:31:LEU:HD13	1:E:90:THR:CG2	2.40	0.52
1:G:250:VAL:HG12	1:G:278:ALA:HA	1.90	0.52
1:B:30:THR:HB	1:B:51:LYS:O	2.09	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:441:ALA:O	1:C:445:ARG:HD3	2.10	0.52
1:D:460:VAL:HG21	1:D:479:PHE:HZ	1.74	0.52
1:D:69:MET:HG2	1:E:47:PRO:HB3	1.91	0.52
1:E:192:GLY:HA2	1:E:295:LEU:HD21	1.91	0.52
1:E:421:GLN:O	1:E:424:LYS:HB2	2.10	0.52
1:F:477:PHE:CE1	1:F:486:TYR:HB3	2.45	0.52
1:G:86:GLY:C	1:G:88:GLY:H	2.14	0.52
1:A:66:PHE:HA	1:A:69:MET:CE	2.40	0.52
1:B:86:GLY:C	1:B:88:GLY:H	2.13	0.52
1:D:66:PHE:HA	1:D:69:MET:HE2	1.92	0.52
1:E:452:ARG:O	1:E:456:GLU:HG2	2.10	0.52
1:G:7:LYS:HD2	1:G:66:PHE:CE1	2.44	0.52
1:B:365:LEU:HD11	1:B:368:ARG:HH21	1.75	0.52
1:D:222:LEU:HB2	1:D:289:LEU:HD22	1.91	0.52
1:E:185:THR:HA	1:E:380:ARG:O	2.10	0.52
1:E:365:LEU:HG	1:E:368:ARG:HE	1.75	0.52
1:E:31:LEU:HD13	1:E:90:THR:HG21	1.91	0.52
1:B:103:GLY:HA3	1:B:516:ILE:HD11	1.91	0.51
1:B:31:LEU:HD13	1:B:90:THR:HG21	1.90	0.51
1:C:30:THR:HB	1:C:51:LYS:O	2.09	0.51
1:E:138:VAL:O	1:E:138:VAL:HG12	2.09	0.51
1:E:169:VAL:CG2	1:E:377:ALA:HB2	2.41	0.51
1:F:185:THR:HA	1:F:380:ARG:O	2.10	0.51
1:F:365:LEU:HG	1:F:368:ARG:HE	1.76	0.51
1:G:452:ARG:O	1:G:456:GLU:HG2	2.10	0.51
1:F:4:LYS:HD2	1:G:59:GLU:O	2.10	0.51
1:G:22:ILE:HG21	1:G:62:LEU:HD21	1.91	0.51
1:A:365:LEU:HG	1:A:368:ARG:HE	1.76	0.51
1:C:13:ARG:HD3	1:C:104:LEU:HD22	1.93	0.51
1:C:421:GLN:O	1:C:424:LYS:HB2	2.10	0.51
1:E:460:VAL:HG21	1:E:479:PHE:CZ	2.45	0.51
1:G:220:ILE:HG23	1:G:248:LEU:HD22	1.92	0.51
1:G:197:ARG:NH1	1:G:277:LYS:HG2	2.24	0.51
1:G:322:LYS:HB3	1:G:333:VAL:CG2	2.39	0.51
1:A:185:THR:HA	1:A:380:ARG:O	2.10	0.51
1:A:460:VAL:HG21	1:A:479:PHE:CZ	2.45	0.51
1:C:317:LEU:HG	1:C:318:GLY:N	2.25	0.51
1:C:7:LYS:HD2	1:C:66:PHE:CE1	2.45	0.51
1:D:220:ILE:HG23	1:D:248:LEU:HD22	1.93	0.51
1:E:220:ILE:HG23	1:E:248:LEU:HD22	1.93	0.51
1:E:222:LEU:HB2	1:E:289:LEU:HD22	1.91	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:28:LYS:HG3	1:E:453:GLN:OE1	2.11	0.51
1:E:66:PHE:HA	1:E:69:MET:CE	2.41	0.51
1:F:197:ARG:NH1	1:F:277:LYS:HG2	2.24	0.51
1:G:226:LYS:HG2	1:G:252:GLU:CB	2.38	0.51
1:G:222:LEU:HB2	1:G:289:LEU:HD22	1.91	0.51
1:G:317:LEU:HG	1:G:318:GLY:N	2.25	0.51
1:B:24:ALA:HB3	1:B:97:GLN:NE2	2.26	0.51
1:C:86:GLY:C	1:C:88:GLY:H	2.14	0.51
1:D:28:LYS:HG3	1:D:453:GLN:OE1	2.11	0.51
1:F:322:LYS:HB3	1:F:333:VAL:CG2	2.38	0.51
1:F:479:PHE:N	1:F:489:MET:HE1	2.25	0.51
1:B:452:ARG:O	1:B:456:GLU:HG2	2.11	0.51
1:B:468:LYS:HD3	1:B:486:TYR:CE1	2.46	0.51
1:C:6:VAL:HG22	1:C:522:ILE:HG12	1.92	0.51
1:D:451:MET:HE1	1:D:466:ALA:HA	1.92	0.51
1:D:468:LYS:HD3	1:D:486:TYR:CE1	2.45	0.51
1:D:479:PHE:N	1:D:489:MET:HE1	2.26	0.51
1:F:460:VAL:HG21	1:F:479:PHE:CZ	2.45	0.51
1:F:7:LYS:HD2	1:F:66:PHE:CE1	2.44	0.51
1:A:26:ALA:HA	1:G:8:PHE:HE1	1.76	0.51
1:C:185:THR:HA	1:C:380:ARG:O	2.10	0.51
1:A:317:LEU:HG	1:A:318:GLY:N	2.25	0.51
1:A:400:LEU:HG	1:A:400:LEU:O	2.10	0.51
1:D:365:LEU:HD11	1:D:368:ARG:HH21	1.76	0.51
1:E:178:GLU:O	1:E:381:VAL:HG22	2.10	0.51
1:F:284:ARG:HA	1:F:284:ARG:HH11	1.76	0.51
1:G:365:LEU:HG	1:G:368:ARG:HE	1.76	0.51
1:G:421:GLN:O	1:G:424:LYS:HB2	2.11	0.51
1:G:426:LEU:HB2	1:G:444:ARG:HD2	1.92	0.51
1:A:139:ASN:H	1:A:139:ASN:ND2	2.07	0.51
1:A:452:ARG:O	1:A:456:GLU:HG2	2.11	0.51
1:C:66:PHE:HA	1:C:69:MET:CE	2.41	0.51
1:D:433:ASN:OD1	1:D:433:ASN:N	2.44	0.51
1:F:220:ILE:HG23	1:F:248:LEU:HD22	1.93	0.51
1:F:250:VAL:HG12	1:F:278:ALA:HA	1.91	0.51
1:G:185:THR:HA	1:G:380:ARG:O	2.10	0.51
1:G:460:VAL:HG21	1:G:479:PHE:CZ	2.45	0.51
1:A:284:ARG:HA	1:A:284:ARG:HH11	1.76	0.51
1:A:489:MET:HG3	1:A:494:VAL:HB	1.93	0.51
1:B:185:THR:HA	1:B:380:ARG:O	2.10	0.51
1:B:64:ASP:OD1	1:B:64:ASP:C	2.50	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:24:ALA:HB3	1:C:97:GLN:NE2	2.26	0.51
1:E:7:LYS:HD2	1:E:66:PHE:CE1	2.45	0.51
1:F:421:GLN:O	1:F:424:LYS:HB2	2.10	0.51
1:A:178:GLU:O	1:A:381:VAL:HG22	2.11	0.51
1:C:103:GLY:HA3	1:C:516:ILE:HD11	1.92	0.51
1:D:421:GLN:O	1:D:424:LYS:HB2	2.11	0.51
1:D:19:GLY:HA3	1:D:67:GLU:O	2.10	0.51
1:E:24:ALA:O	1:E:28:LYS:HD2	2.11	0.51
1:E:441:ALA:O	1:E:445:ARG:HD3	2.11	0.51
1:G:103:GLY:HA3	1:G:516:ILE:HD11	1.93	0.51
1:G:18:LYS:HB3	1:G:67:GLU:HG2	1.93	0.51
1:B:314:ILE:HD12	1:B:315:ASP:N	2.26	0.50
1:C:314:ILE:HD12	1:C:315:ASP:N	2.26	0.50
1:D:460:VAL:HG21	1:D:479:PHE:CZ	2.46	0.50
1:E:226:LYS:HZ1	1:E:252:GLU:HB3	1.76	0.50
1:F:139:ASN:H	1:F:139:ASN:ND2	2.07	0.50
1:A:314:ILE:HD12	1:A:315:ASP:N	2.26	0.50
1:A:86:GLY:C	1:A:88:GLY:H	2.14	0.50
1:B:433:ASN:OD1	1:B:433:ASN:N	2.42	0.50
1:C:365:LEU:HG	1:C:368:ARG:HE	1.76	0.50
1:C:479:PHE:N	1:C:489:MET:HE1	2.26	0.50
1:D:66:PHE:HA	1:D:69:MET:CE	2.41	0.50
1:E:426:LEU:HB2	1:E:444:ARG:HD2	1.93	0.50
1:E:6:VAL:HG22	1:E:522:ILE:HG12	1.94	0.50
1:F:433:ASN:OD1	1:F:433:ASN:N	2.43	0.50
1:F:86:GLY:C	1:F:88:GLY:H	2.14	0.50
1:G:433:ASN:OD1	1:G:436:GLN:HB2	2.12	0.50
1:G:477:PHE:CE1	1:G:486:TYR:HB3	2.46	0.50
1:B:362:ARG:HE	1:B:363:GLU:N	2.09	0.50
1:B:460:VAL:HG21	1:B:479:PHE:CZ	2.47	0.50
1:A:4:LYS:HD2	1:B:59:GLU:O	2.10	0.50
1:C:18:LYS:HB3	1:C:67:GLU:HG2	1.93	0.50
1:C:220:ILE:HG23	1:C:248:LEU:HD22	1.93	0.50
1:D:231:GLN:N	1:D:232:PRO:HD2	2.27	0.50
1:D:365:LEU:HG	1:D:368:ARG:HE	1.76	0.50
1:E:231:GLN:N	1:E:232:PRO:HD2	2.26	0.50
1:G:433:ASN:OD1	1:G:433:ASN:N	2.44	0.50
1:G:28:LYS:HG3	1:G:453:GLN:OE1	2.12	0.50
1:A:220:ILE:HG23	1:A:248:LEU:HD22	1.93	0.50
1:B:66:PHE:HA	1:B:69:MET:CE	2.42	0.50
1:C:231:GLN:N	1:C:232:PRO:HD2	2.27	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:317:LEU:HG	1:D:318:GLY:N	2.25	0.50
1:D:169:VAL:CG2	1:D:377:ALA:HB2	2.42	0.50
1:D:426:LEU:HB2	1:D:444:ARG:HD2	1.92	0.50
1:F:362:ARG:HE	1:F:363:GLU:N	2.09	0.50
1:G:362:ARG:HE	1:G:363:GLU:N	2.09	0.50
1:A:169:VAL:CG2	1:A:377:ALA:HB2	2.41	0.50
1:B:231:GLN:N	1:B:232:PRO:HD2	2.27	0.50
1:C:365:LEU:HD11	1:C:368:ARG:HH21	1.76	0.50
1:D:477:PHE:CE1	1:D:486:TYR:HB3	2.46	0.50
1:E:103:GLY:HA3	1:E:516:ILE:HD11	1.93	0.50
1:E:18:LYS:HB3	1:E:67:GLU:HG2	1.93	0.50
1:E:284:ARG:HA	1:E:284:ARG:HH11	1.76	0.50
1:G:451:MET:HE1	1:G:466:ALA:HA	1.94	0.50
1:A:426:LEU:HB2	1:A:444:ARG:HD2	1.92	0.50
1:A:409:GLU:OE2	1:A:499:LYS:HG3	2.11	0.50
1:C:362:ARG:HE	1:C:363:GLU:N	2.10	0.50
1:C:433:ASN:OD1	1:C:433:ASN:N	2.45	0.50
1:C:433:ASN:OD1	1:C:436:GLN:HB2	2.12	0.50
1:D:284:ARG:HA	1:D:284:ARG:HH11	1.76	0.50
1:D:64:ASP:OD1	1:D:64:ASP:C	2.50	0.50
1:E:30:THR:HB	1:E:51:LYS:O	2.11	0.50
1:F:169:VAL:CG2	1:F:377:ALA:HB2	2.42	0.50
1:F:441:ALA:O	1:F:445:ARG:HD3	2.11	0.50
1:F:66:PHE:HA	1:F:69:MET:CE	2.41	0.50
1:B:284:ARG:HA	1:B:284:ARG:HH11	1.76	0.50
1:B:224:GLU:HG3	1:B:286:LYS:NZ	2.27	0.50
1:B:4:LYS:HD2	1:C:59:GLU:O	2.11	0.50
1:C:24:ALA:O	1:C:28:LYS:HD2	2.12	0.50
1:D:221:LEU:HD21	1:D:249:ILE:HG12	1.94	0.50
1:D:222:LEU:HD13	1:D:289:LEU:HB3	1.94	0.50
1:F:138:VAL:HG12	1:F:138:VAL:O	2.11	0.50
1:G:314:ILE:HD12	1:G:315:ASP:N	2.26	0.50
1:G:339:LYS:HB3	1:G:343:GLU:OE2	2.12	0.50
1:A:433:ASN:OD1	1:A:433:ASN:N	2.43	0.50
1:B:365:LEU:HG	1:B:368:ARG:HE	1.76	0.50
1:B:28:LYS:HG3	1:B:453:GLN:OE1	2.12	0.50
1:C:138:VAL:O	1:C:138:VAL:HG12	2.10	0.50
1:C:468:LYS:HD3	1:C:486:TYR:CE1	2.47	0.50
1:D:226:LYS:HZ3	1:D:252:GLU:HB3	1.77	0.50
1:D:314:ILE:HD12	1:D:315:ASP:N	2.26	0.50
1:A:477:PHE:CE1	1:A:486:TYR:HB3	2.46	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:86:GLY:C	1:E:88:GLY:H	2.14	0.50
1:F:314:ILE:HD12	1:F:315:ASP:N	2.26	0.50
1:G:169:VAL:CG2	1:G:377:ALA:HB2	2.42	0.50
1:A:138:VAL:O	1:A:138:VAL:HG12	2.11	0.49
1:B:169:VAL:CG2	1:B:377:ALA:HB2	2.41	0.49
1:D:224:GLU:HG3	1:D:286:LYS:NZ	2.27	0.49
1:D:322:LYS:HB3	1:D:333:VAL:CG2	2.39	0.49
1:D:75:ARG:HH11	1:D:75:ARG:HG2	1.76	0.49
1:E:224:GLU:HG3	1:E:286:LYS:NZ	2.27	0.49
1:F:365:LEU:HD11	1:F:368:ARG:HH21	1.76	0.49
1:A:362:ARG:HE	1:A:363:GLU:N	2.10	0.49
1:B:220:ILE:HG23	1:B:248:LEU:HD22	1.93	0.49
1:B:222:LEU:HD13	1:B:289:LEU:HB3	1.94	0.49
1:B:322:LYS:HB3	1:B:333:VAL:CG2	2.39	0.49
1:C:222:LEU:HD13	1:C:289:LEU:HB3	1.94	0.49
1:F:224:GLU:HG3	1:F:286:LYS:NZ	2.27	0.49
1:A:248:LEU:HD13	1:A:323:VAL:HG11	1.95	0.49
1:A:365:LEU:HD11	1:A:368:ARG:HH21	1.76	0.49
1:C:2:ALA:O	1:C:4:LYS:HG2	2.11	0.49
1:C:169:VAL:CG2	1:C:377:ALA:HB2	2.42	0.49
1:A:231:GLN:N	1:A:232:PRO:HD2	2.27	0.49
1:A:322:LYS:HB3	1:A:333:VAL:CG2	2.38	0.49
1:A:361:ASP:OD1	1:A:365:LEU:HD13	2.13	0.49
1:B:248:LEU:HD13	1:B:323:VAL:HG11	1.95	0.49
1:B:339:LYS:HB3	1:B:343:GLU:OE2	2.13	0.49
1:C:224:GLU:HG3	1:C:286:LYS:NZ	2.28	0.49
1:C:361:ASP:OD1	1:C:365:LEU:HD13	2.13	0.49
1:E:314:ILE:HD12	1:E:315:ASP:N	2.26	0.49
1:F:11:ASP:CG	1:F:15:ARG:HH12	2.16	0.49
1:F:451:MET:CE	1:F:465:VAL:HG12	2.42	0.49
1:F:451:MET:HE1	1:F:466:ALA:HA	1.94	0.49
1:A:339:LYS:HB3	1:A:343:GLU:OE2	2.13	0.49
1:B:433:ASN:OD1	1:B:436:GLN:HB2	2.13	0.49
1:C:227:LEU:HD13	1:C:254:VAL:HG22	1.95	0.49
1:A:224:GLU:HG3	1:A:286:LYS:NZ	2.27	0.49
1:A:221:LEU:HD21	1:A:249:ILE:HG12	1.94	0.49
1:B:138:VAL:HG12	1:B:138:VAL:O	2.11	0.49
1:B:361:ASP:OD1	1:B:365:LEU:HD13	2.13	0.49
1:D:362:ARG:HE	1:D:363:GLU:N	2.09	0.49
1:E:248:LEU:HD13	1:E:323:VAL:HG11	1.95	0.49
1:E:169:VAL:HG21	1:E:377:ALA:HB2	1.94	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:231:GLN:N	1:F:232:PRO:HD2	2.27	0.49
1:F:64:ASP:C	1:F:64:ASP:OD1	2.51	0.49
1:G:284:ARG:HA	1:G:284:ARG:HH11	1.76	0.49
1:G:66:PHE:HA	1:G:69:MET:HE2	1.94	0.49
1:D:248:LEU:HD13	1:D:323:VAL:HG11	1.95	0.49
1:G:248:LEU:HD13	1:G:323:VAL:HG11	1.95	0.49
1:B:122:VAL:HG12	1:B:123:ALA:N	2.28	0.49
1:C:284:ARG:HA	1:C:284:ARG:HH11	1.76	0.49
1:D:18:LYS:HB3	1:D:67:GLU:HG2	1.93	0.49
1:D:227:LEU:HD13	1:D:254:VAL:HG22	1.95	0.49
1:E:339:LYS:HB3	1:E:343:GLU:OE2	2.12	0.49
1:E:477:PHE:CE1	1:E:486:TYR:HB3	2.47	0.49
1:G:231:GLN:N	1:G:232:PRO:HD2	2.27	0.49
1:G:227:LEU:HD13	1:G:254:VAL:HG22	1.94	0.49
1:G:469:VAL:HG22	1:G:478:GLY:HA2	1.94	0.49
1:G:501:VAL:HG12	1:G:501:VAL:O	2.13	0.49
1:A:222:LEU:HD13	1:A:289:LEU:HB3	1.94	0.49
1:A:69:MET:HG2	1:B:47:PRO:HG3	1.95	0.49
1:C:339:LYS:HB3	1:C:343:GLU:OE2	2.13	0.49
1:E:213:ALA:HB3	1:E:325:ILE:HB	1.95	0.49
1:F:489:MET:HG3	1:F:494:VAL:HB	1.95	0.49
1:F:6:VAL:HG22	1:F:522:ILE:HG12	1.95	0.49
1:G:138:VAL:HG12	1:G:138:VAL:O	2.13	0.49
1:B:227:LEU:HD13	1:B:254:VAL:HG22	1.95	0.49
1:B:469:VAL:HG22	1:B:478:GLY:HA2	1.95	0.49
1:C:477:PHE:CE1	1:C:486:TYR:HB3	2.47	0.49
1:E:362:ARG:HE	1:E:363:GLU:N	2.09	0.49
1:G:222:LEU:HD13	1:G:289:LEU:HB3	1.94	0.49
1:G:468:LYS:HD3	1:G:486:TYR:CE1	2.47	0.49
1:G:64:ASP:OD1	1:G:64:ASP:C	2.51	0.49
1:A:64:ASP:OD1	1:A:64:ASP:C	2.51	0.48
1:B:421:GLN:O	1:B:424:LYS:HB2	2.12	0.48
1:B:477:PHE:CE1	1:B:486:TYR:HB3	2.47	0.48
1:D:339:LYS:HB3	1:D:343:GLU:OE2	2.13	0.48
1:D:469:VAL:HG22	1:D:478:GLY:HA2	1.95	0.48
1:E:221:LEU:HD21	1:E:249:ILE:HG12	1.95	0.48
1:E:361:ASP:OD1	1:E:365:LEU:HD13	2.13	0.48
1:E:433:ASN:OD1	1:E:436:GLN:HB2	2.13	0.48
1:F:122:VAL:HG12	1:F:123:ALA:N	2.27	0.48
1:A:341:GLU:O	1:A:345:ARG:HG2	2.13	0.48
1:D:24:ALA:HB3	1:D:97:GLN:NE2	2.27	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:222:LEU:HD13	1:E:289:LEU:HB3	1.94	0.48
1:E:468:LYS:HD3	1:E:486:TYR:CE1	2.48	0.48
1:F:248:LEU:HD13	1:F:323:VAL:HG11	1.95	0.48
1:G:221:LEU:HD21	1:G:249:ILE:HG12	1.94	0.48
1:G:341:GLU:O	1:G:345:ARG:HG2	2.14	0.48
1:A:451:MET:HE1	1:A:466:ALA:HA	1.95	0.48
1:B:18:LYS:HB3	1:B:67:GLU:HG2	1.95	0.48
1:C:248:LEU:HD13	1:C:323:VAL:HG11	1.95	0.48
1:C:322:LYS:HB3	1:C:333:VAL:CG2	2.39	0.48
1:E:227:LEU:HD13	1:E:254:VAL:HG22	1.95	0.48
1:C:341:GLU:O	1:C:345:ARG:HG2	2.13	0.48
1:F:222:LEU:HD13	1:F:289:LEU:HB3	1.94	0.48
1:F:213:ALA:HB3	1:F:325:ILE:HB	1.96	0.48
1:F:361:ASP:OD1	1:F:365:LEU:HD13	2.13	0.48
1:F:468:LYS:HD3	1:F:486:TYR:CE1	2.47	0.48
1:F:69:MET:HG2	1:G:47:PRO:HB3	1.95	0.48
1:G:451:MET:CE	1:G:465:VAL:HG12	2.44	0.48
1:B:7:LYS:HD2	1:B:66:PHE:CE1	2.48	0.48
1:D:501:VAL:O	1:D:501:VAL:HG12	2.13	0.48
1:F:24:ALA:O	1:F:28:LYS:HD2	2.14	0.48
1:F:433:ASN:OD1	1:F:436:GLN:HB2	2.14	0.48
1:G:213:ALA:HB3	1:G:325:ILE:HB	1.95	0.48
1:G:224:GLU:HG3	1:G:286:LYS:NZ	2.28	0.48
1:B:426:LEU:HB2	1:B:444:ARG:HD2	1.94	0.48
1:B:501:VAL:O	1:B:501:VAL:HG12	2.14	0.48
1:C:221:LEU:HD21	1:C:249:ILE:HG12	1.95	0.48
1:A:433:ASN:OD1	1:A:436:GLN:HB2	2.14	0.48
1:A:469:VAL:HG22	1:A:478:GLY:HA2	1.95	0.48
1:C:122:VAL:HG12	1:C:123:ALA:N	2.29	0.48
1:C:469:VAL:HG22	1:C:478:GLY:HA2	1.94	0.48
1:D:433:ASN:OD1	1:D:436:GLN:HB2	2.14	0.48
1:F:501:VAL:HG12	1:F:501:VAL:O	2.13	0.48
1:A:468:LYS:HD3	1:A:486:TYR:CE1	2.48	0.48
1:C:64:ASP:C	1:C:64:ASP:OD1	2.52	0.48
1:D:11:ASP:CG	1:D:15:ARG:HH12	2.17	0.48
1:D:8:PHE:HE1	1:E:26:ALA:HA	1.78	0.48
1:E:12:ALA:HB1	1:E:521:MET:HG3	1.96	0.48
1:G:122:VAL:HG12	1:G:123:ALA:N	2.27	0.48
1:G:190:VAL:HG11	1:G:334:ASP:CG	2.34	0.48
1:C:489:MET:HG3	1:C:494:VAL:HB	1.95	0.48
1:D:361:ASP:OD1	1:D:365:LEU:HD13	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:190:VAL:HG11	1:F:334:ASP:CB	2.43	0.48
1:F:339:LYS:HB3	1:F:343:GLU:OE2	2.13	0.48
1:F:183:MET:HB3	1:F:384:MET:HE1	1.95	0.48
1:B:169:VAL:HG21	1:B:377:ALA:HB2	1.95	0.48
1:D:122:VAL:HG12	1:D:123:ALA:N	2.29	0.48
1:F:341:GLU:O	1:F:345:ARG:HG2	2.14	0.48
1:G:6:VAL:HG22	1:G:522:ILE:HG12	1.95	0.48
1:B:227:LEU:CB	1:B:254:VAL:HG13	2.44	0.47
1:B:341:GLU:O	1:B:345:ARG:HG2	2.14	0.47
1:D:220:ILE:HD12	1:D:248:LEU:HD22	1.96	0.47
1:E:322:LYS:HB3	1:E:333:VAL:CG2	2.39	0.47
1:E:469:VAL:HG22	1:E:478:GLY:HA2	1.96	0.47
1:G:124:THR:O	1:G:128:VAL:HG23	2.14	0.47
1:A:501:VAL:HG12	1:A:501:VAL:O	2.14	0.47
1:B:205:VAL:HG12	1:B:207:ASN:H	1.79	0.47
1:C:227:LEU:CB	1:C:254:VAL:HG13	2.44	0.47
1:C:501:VAL:O	1:C:501:VAL:HG12	2.13	0.47
1:D:138:VAL:HG12	1:D:138:VAL:O	2.12	0.47
1:E:341:GLU:O	1:E:345:ARG:HG2	2.14	0.47
1:F:221:LEU:HD21	1:F:249:ILE:HG12	1.94	0.47
1:A:213:ALA:HB3	1:A:325:ILE:HB	1.96	0.47
1:B:205:VAL:HG12	1:B:207:ASN:N	2.30	0.47
1:B:221:LEU:HD21	1:B:249:ILE:HG12	1.95	0.47
1:C:183:MET:HB3	1:C:384:MET:HE1	1.96	0.47
1:D:489:MET:HG3	1:D:494:VAL:HB	1.96	0.47
1:E:64:ASP:C	1:E:64:ASP:OD1	2.52	0.47
1:F:227:LEU:HD13	1:F:254:VAL:HG22	1.95	0.47
1:A:227:LEU:HD13	1:A:254:VAL:HG22	1.96	0.47
1:D:169:VAL:HG21	1:D:377:ALA:HB2	1.96	0.47
1:F:226:LYS:HZ3	1:F:252:GLU:HB3	1.79	0.47
1:F:469:VAL:HG22	1:F:478:GLY:HA2	1.95	0.47
1:A:362:ARG:HE	1:A:363:GLU:HB2	1.79	0.47
1:A:7:LYS:HD2	1:A:66:PHE:CE1	2.49	0.47
1:D:219:TYR:CD1	1:D:247:LEU:HD12	2.50	0.47
1:D:341:GLU:O	1:D:345:ARG:HG2	2.14	0.47
1:F:220:ILE:HD12	1:F:248:LEU:HD22	1.95	0.47
1:B:220:ILE:HD12	1:B:248:LEU:HD22	1.96	0.47
1:C:220:ILE:HD12	1:C:248:LEU:HD22	1.96	0.47
1:A:220:ILE:HD12	1:A:248:LEU:HD22	1.95	0.47
1:F:169:VAL:HG21	1:F:377:ALA:HB2	1.96	0.47
1:G:362:ARG:HE	1:G:363:GLU:HB2	1.79	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:361:ASP:OD1	1:G:365:LEU:HD13	2.13	0.47
1:A:221:LEU:HD21	1:A:249:ILE:CG1	2.45	0.47
1:B:174:VAL:O	1:B:174:VAL:HG22	2.14	0.47
1:D:227:LEU:CB	1:D:254:VAL:HG13	2.44	0.47
1:D:197:ARG:NH1	1:D:277:LYS:HG2	2.23	0.47
1:D:321:LYS:CB	1:D:334:ASP:HB3	2.45	0.47
1:F:77:VAL:HG21	1:F:511:VAL:HG13	1.97	0.47
1:G:227:LEU:CB	1:G:254:VAL:HG13	2.44	0.47
1:A:226:LYS:HZ1	1:A:252:GLU:HB3	1.78	0.47
1:A:289:LEU:O	1:A:293:ALA:HB2	2.15	0.47
1:B:219:TYR:CD1	1:B:247:LEU:HD12	2.50	0.47
1:B:183:MET:HB3	1:B:384:MET:HE1	1.97	0.47
1:E:227:LEU:CB	1:E:254:VAL:HG13	2.45	0.47
1:F:18:LYS:HB3	1:F:67:GLU:HG2	1.96	0.47
1:G:220:ILE:HD12	1:G:248:LEU:HD22	1.96	0.47
1:G:429:LEU:HD12	1:G:430:SER:N	2.30	0.47
1:B:362:ARG:HE	1:B:363:GLU:HB2	1.79	0.47
1:B:158:ILE:CG2	1:B:396:VAL:HG22	2.45	0.47
1:C:11:ASP:CG	1:C:15:ARG:HH12	2.18	0.47
1:C:213:ALA:HB3	1:C:325:ILE:HB	1.96	0.47
1:C:362:ARG:HE	1:C:363:GLU:HB2	1.80	0.47
1:C:511:VAL:HG23	1:C:512:ALA:N	2.29	0.47
1:D:124:THR:O	1:D:128:VAL:HG23	2.15	0.47
1:E:220:ILE:HD12	1:E:248:LEU:HD22	1.96	0.47
1:A:169:VAL:HG21	1:A:377:ALA:HB2	1.96	0.47
1:A:174:VAL:O	1:A:174:VAL:HG22	2.14	0.47
1:A:227:LEU:CB	1:A:254:VAL:HG13	2.44	0.47
1:B:213:ALA:HB3	1:B:325:ILE:HB	1.96	0.47
1:C:197:ARG:NH1	1:C:277:LYS:HG2	2.24	0.47
1:C:158:ILE:CG2	1:C:396:VAL:HG22	2.45	0.47
1:C:451:MET:CE	1:C:465:VAL:HG12	2.45	0.47
1:D:174:VAL:O	1:D:174:VAL:HG22	2.14	0.47
1:D:213:ALA:HB3	1:D:325:ILE:HB	1.96	0.47
1:F:227:LEU:CB	1:F:254:VAL:HG13	2.44	0.47
1:G:11:ASP:CG	1:G:15:ARG:HH12	2.18	0.47
1:G:219:TYR:CD1	1:G:247:LEU:HD12	2.50	0.47
1:A:69:MET:HG2	1:B:47:PRO:CB	2.45	0.46
1:C:112:ASN:OD1	1:C:114:MET:N	2.49	0.46
1:C:321:LYS:CB	1:C:334:ASP:HB3	2.45	0.46
1:F:221:LEU:HD21	1:F:249:ILE:CG1	2.45	0.46
1:G:24:ALA:O	1:G:28:LYS:HD2	2.14	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:19:GLY:HA2	1:A:62:LEU:CD1	2.45	0.46
1:A:205:VAL:HG12	1:A:207:ASN:N	2.30	0.46
1:A:24:ALA:O	1:A:28:LYS:HD2	2.15	0.46
1:C:429:LEU:HD12	1:C:430:SER:N	2.30	0.46
1:D:198:GLY:O	1:D:276:VAL:HG12	2.15	0.46
1:D:362:ARG:HE	1:D:363:GLU:HB2	1.79	0.46
1:E:205:VAL:HG12	1:E:207:ASN:H	1.79	0.46
1:E:489:MET:HG3	1:E:494:VAL:HB	1.97	0.46
1:G:221:LEU:HD21	1:G:249:ILE:CG1	2.46	0.46
1:G:226:LYS:HZ1	1:G:252:GLU:HB3	1.79	0.46
1:G:169:VAL:HG21	1:G:377:ALA:HB2	1.97	0.46
1:A:205:VAL:HG12	1:A:207:ASN:H	1.80	0.46
1:A:219:TYR:CD1	1:A:247:LEU:HD12	2.50	0.46
1:B:36:ARG:NH1	1:B:36:ARG:CG	2.76	0.46
1:B:489:MET:HG3	1:B:494:VAL:HB	1.97	0.46
1:D:158:ILE:CG2	1:D:396:VAL:HG22	2.46	0.46
1:E:511:VAL:HG23	1:E:512:ALA:N	2.30	0.46
1:F:219:TYR:CD1	1:F:247:LEU:HD12	2.50	0.46
1:G:209:ASP:HB3	1:G:210:LYS:HZ2	1.80	0.46
1:A:11:ASP:CG	1:A:15:ARG:HH12	2.19	0.46
1:B:24:ALA:O	1:B:28:LYS:HD2	2.16	0.46
1:C:205:VAL:HG12	1:C:207:ASN:N	2.31	0.46
1:C:77:VAL:HG21	1:C:511:VAL:HG13	1.98	0.46
1:E:221:LEU:O	1:E:250:VAL:HG23	2.16	0.46
1:F:383:GLY:H	1:F:389:VAL:HG22	1.81	0.46
1:F:158:ILE:CG2	1:F:396:VAL:HG22	2.46	0.46
1:C:205:VAL:HG12	1:C:207:ASN:H	1.80	0.46
1:D:289:LEU:O	1:D:293:ALA:HB2	2.16	0.46
1:E:66:PHE:HA	1:E:69:MET:HE2	1.96	0.46
1:G:489:MET:HG3	1:G:494:VAL:HB	1.98	0.46
1:A:122:VAL:HG12	1:A:123:ALA:N	2.31	0.46
1:A:158:ILE:CG2	1:A:396:VAL:HG22	2.46	0.46
1:B:429:LEU:HD12	1:B:430:SER:N	2.31	0.46
1:C:219:TYR:CD1	1:C:247:LEU:HD12	2.51	0.46
1:C:169:VAL:HG21	1:C:377:ALA:HB2	1.96	0.46
1:D:429:LEU:HD12	1:D:430:SER:N	2.29	0.46
1:E:11:ASP:CG	1:E:15:ARG:HH12	2.18	0.46
1:E:219:TYR:CD1	1:E:247:LEU:HD12	2.51	0.46
1:F:227:LEU:HB2	1:F:254:VAL:CA	2.37	0.46
1:D:103:GLY:HA3	1:D:516:ILE:HD11	1.96	0.46
1:D:205:VAL:HG12	1:D:207:ASN:H	1.80	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:122:VAL:HG12	1:E:123:ALA:N	2.29	0.46
1:E:205:VAL:HG12	1:E:207:ASN:N	2.30	0.46
1:G:205:VAL:HG12	1:G:207:ASN:H	1.80	0.46
1:G:351:GLN:HA	1:G:354:GLU:HB2	1.98	0.46
1:B:197:ARG:NH1	1:B:277:LYS:HG2	2.23	0.46
1:D:205:VAL:HG12	1:D:207:ASN:N	2.31	0.46
1:D:351:GLN:HA	1:D:354:GLU:HB2	1.98	0.46
1:C:69:MET:HG2	1:D:47:PRO:HB3	1.98	0.46
1:E:174:VAL:HG22	1:E:174:VAL:O	2.15	0.46
1:E:198:GLY:O	1:E:276:VAL:HG12	2.16	0.46
1:E:383:GLY:H	1:E:389:VAL:HG22	1.81	0.46
1:F:351:GLN:HA	1:F:354:GLU:HB2	1.98	0.46
1:F:362:ARG:HE	1:F:363:GLU:HB2	1.79	0.46
1:F:80:ARG:HB2	1:F:80:ARG:HH11	1.81	0.46
1:G:69:MET:HB2	1:G:69:MET:HE3	1.53	0.46
1:A:217:ASP:O	1:A:246:PRO:HD2	2.16	0.46
1:A:90:THR:O	1:A:94:VAL:HG23	2.16	0.46
1:B:221:LEU:HD21	1:B:249:ILE:CG1	2.46	0.46
1:C:289:LEU:O	1:C:293:ALA:HB2	2.16	0.46
1:D:221:LEU:HD21	1:D:249:ILE:CG1	2.45	0.46
1:D:62:LEU:H	1:D:68:ASN:HD22	1.64	0.46
1:E:289:LEU:O	1:E:293:ALA:HB2	2.15	0.46
1:E:77:VAL:HG21	1:E:511:VAL:HG13	1.98	0.46
1:A:128:VAL:HG11	1:A:506:GLU:OE2	2.16	0.46
1:A:6:VAL:HG22	1:A:522:ILE:HG12	1.98	0.46
1:B:451:MET:CE	1:B:465:VAL:HG12	2.46	0.46
1:C:294:ILE:HD11	1:C:345:ARG:NH1	2.31	0.46
1:D:217:ASP:O	1:D:246:PRO:HD2	2.16	0.46
1:E:194:GLN:HG3	1:E:331:THR:OG1	2.16	0.46
1:G:62:LEU:H	1:G:68:ASN:HD22	1.63	0.46
1:C:217:ASP:O	1:C:246:PRO:HD2	2.16	0.45
1:G:80:ARG:HB2	1:G:80:ARG:HH11	1.81	0.45
1:A:175:ILE:HG22	1:A:176:THR:N	2.31	0.45
1:A:451:MET:CE	1:A:465:VAL:HG12	2.47	0.45
1:B:19:GLY:HA2	1:B:62:LEU:CD1	2.46	0.45
1:D:36:ARG:NH1	1:D:36:ARG:CG	2.75	0.45
1:D:69:MET:HE3	1:D:69:MET:HB2	1.53	0.45
1:E:221:LEU:HD21	1:E:249:ILE:CG1	2.46	0.45
1:E:351:GLN:HA	1:E:354:GLU:HB2	1.99	0.45
1:F:217:ASP:O	1:F:246:PRO:HD2	2.17	0.45
1:F:194:GLN:HG3	1:F:331:THR:OG1	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:198:GLY:O	1:G:276:VAL:HG12	2.16	0.45
1:G:217:ASP:O	1:G:246:PRO:HD2	2.16	0.45
1:A:351:GLN:HA	1:A:354:GLU:HB2	1.99	0.45
1:A:103:GLY:HA3	1:A:516:ILE:HD11	1.97	0.45
1:B:12:ALA:HB1	1:B:521:MET:SD	2.57	0.45
1:B:11:ASP:CG	1:B:15:ARG:HH12	2.19	0.45
1:B:289:LEU:O	1:B:293:ALA:HB2	2.15	0.45
1:C:19:GLY:HA2	1:C:62:LEU:CD1	2.46	0.45
1:C:351:GLN:HA	1:C:354:GLU:HB2	1.98	0.45
1:C:478:GLY:HA3	1:C:489:MET:HE3	1.97	0.45
1:D:112:ASN:OD1	1:D:114:MET:N	2.49	0.45
1:E:225:LYS:HB2	1:E:226:LYS:H	1.62	0.45
1:E:362:ARG:HE	1:E:363:GLU:HB2	1.80	0.45
1:G:112:ASN:OD1	1:G:114:MET:N	2.49	0.45
1:G:378:VAL:HG22	1:G:378:VAL:O	2.16	0.45
1:G:19:GLY:HA2	1:G:62:LEU:CD1	2.47	0.45
1:B:321:LYS:CB	1:B:334:ASP:HB3	2.46	0.45
1:D:320:ALA:HA	1:D:335:GLY:O	2.17	0.45
1:D:348:GLN:O	1:D:352:GLN:HB2	2.17	0.45
1:D:378:VAL:O	1:D:378:VAL:HG22	2.17	0.45
1:F:112:ASN:OD1	1:F:114:MET:N	2.49	0.45
1:F:507:ASP:O	1:F:510:SER:HB3	2.17	0.45
1:B:348:GLN:O	1:B:352:GLN:HB2	2.17	0.45
1:B:80:ARG:HB2	1:B:80:ARG:HH11	1.82	0.45
1:C:383:GLY:H	1:C:389:VAL:HG22	1.82	0.45
1:E:112:ASN:OD1	1:E:114:MET:N	2.50	0.45
1:F:221:LEU:O	1:F:250:VAL:HG23	2.16	0.45
1:F:289:LEU:O	1:F:293:ALA:HB2	2.15	0.45
1:G:289:LEU:O	1:G:293:ALA:HB2	2.16	0.45
1:A:247:LEU:HB3	1:A:273:ILE:HD12	1.99	0.45
1:A:69:MET:HB2	1:A:69:MET:HE3	1.55	0.45
1:A:77:VAL:HG21	1:A:511:VAL:HG13	1.99	0.45
1:B:351:GLN:HA	1:B:354:GLU:HB2	1.98	0.45
1:C:221:LEU:O	1:C:250:VAL:HG23	2.16	0.45
1:F:128:VAL:HG11	1:F:506:GLU:OE2	2.17	0.45
1:F:66:PHE:HA	1:F:69:MET:HE2	1.97	0.45
1:G:194:GLN:HG3	1:G:331:THR:OG1	2.17	0.45
1:G:221:LEU:O	1:G:250:VAL:HG23	2.16	0.45
1:B:247:LEU:HB3	1:B:273:ILE:HD12	1.99	0.45
1:C:124:THR:O	1:C:128:VAL:HG23	2.16	0.45
1:C:198:GLY:O	1:C:276:VAL:HG12	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:320:ALA:HA	1:C:335:GLY:O	2.17	0.45
1:E:501:VAL:O	1:E:501:VAL:HG12	2.16	0.45
1:E:69:MET:HG2	1:F:47:PRO:HB3	1.99	0.45
1:F:19:GLY:HA2	1:F:62:LEU:CD1	2.46	0.45
1:F:478:GLY:HA3	1:F:489:MET:HE3	1.99	0.45
1:G:204:PHE:CE1	1:G:273:ILE:HG23	2.52	0.45
1:G:205:VAL:HG12	1:G:207:ASN:N	2.30	0.45
1:A:12:ALA:HB1	1:A:521:MET:HG3	1.99	0.45
1:A:221:LEU:O	1:A:250:VAL:HG23	2.16	0.45
1:C:348:GLN:O	1:C:352:GLN:HB2	2.17	0.45
1:E:348:GLN:O	1:E:352:GLN:HB2	2.17	0.45
1:E:69:MET:HE3	1:E:69:MET:HB2	1.50	0.45
1:E:80:ARG:HB2	1:E:80:ARG:HH11	1.82	0.45
1:B:217:ASP:O	1:B:246:PRO:HD2	2.17	0.45
1:D:221:LEU:O	1:D:250:VAL:HG23	2.16	0.45
1:E:217:ASP:O	1:E:246:PRO:HD2	2.17	0.45
1:F:204:PHE:CE1	1:F:273:ILE:HG23	2.52	0.45
1:F:511:VAL:HG23	1:F:512:ALA:N	2.32	0.45
1:A:124:THR:O	1:A:128:VAL:HG23	2.17	0.45
1:A:383:GLY:H	1:A:389:VAL:HG22	1.81	0.45
1:A:429:LEU:HD12	1:A:430:SER:N	2.29	0.45
1:B:112:ASN:OD1	1:B:114:MET:N	2.50	0.45
1:B:194:GLN:HG3	1:B:331:THR:OG1	2.17	0.45
1:C:480:ASN:O	1:C:484:GLU:N	2.45	0.45
1:C:62:LEU:H	1:C:68:ASN:HD22	1.64	0.45
1:C:72:GLN:HE22	1:C:75:ARG:CZ	2.30	0.45
1:D:175:ILE:HG22	1:D:176:THR:N	2.32	0.45
1:G:478:GLY:HA3	1:G:489:MET:HE3	1.99	0.45
1:B:225:LYS:HB2	1:B:226:LYS:H	1.62	0.44
1:B:383:GLY:H	1:B:389:VAL:HG22	1.81	0.44
1:C:174:VAL:O	1:C:174:VAL:HG22	2.16	0.44
1:C:221:LEU:HD21	1:C:249:ILE:CG1	2.47	0.44
1:C:80:ARG:HH11	1:C:80:ARG:HB2	1.82	0.44
1:D:19:GLY:HA2	1:D:62:LEU:CD1	2.47	0.44
1:D:383:GLY:H	1:D:389:VAL:HG22	1.82	0.44
1:D:511:VAL:HG23	1:D:512:ALA:N	2.33	0.44
1:D:6:VAL:HG22	1:D:522:ILE:HG12	1.98	0.44
1:G:158:ILE:CG2	1:G:396:VAL:HG22	2.46	0.44
1:A:194:GLN:HG3	1:A:331:THR:OG1	2.17	0.44
1:B:198:GLY:O	1:B:276:VAL:HG12	2.18	0.44
1:C:204:PHE:CE1	1:C:273:ILE:HG23	2.52	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:90:THR:O	1:D:94:VAL:HG23	2.17	0.44
1:E:320:ALA:HA	1:E:335:GLY:O	2.18	0.44
1:E:294:ILE:HD11	1:E:345:ARG:NH1	2.32	0.44
1:E:423:ALA:HB2	1:E:447:LEU:HD13	1.98	0.44
1:F:294:ILE:HD11	1:F:345:ARG:NH1	2.33	0.44
1:A:198:GLY:O	1:A:276:VAL:HG12	2.17	0.44
1:B:12:ALA:HB1	1:B:521:MET:HG3	1.98	0.44
1:B:221:LEU:O	1:B:250:VAL:HG23	2.16	0.44
1:B:6:VAL:HG22	1:B:522:ILE:HG12	1.99	0.44
1:C:247:LEU:HB3	1:C:273:ILE:HD12	1.99	0.44
1:D:507:ASP:O	1:D:510:SER:HB3	2.17	0.44
1:E:451:MET:CE	1:E:466:ALA:HA	2.48	0.44
1:F:247:LEU:HB3	1:F:273:ILE:HD12	1.99	0.44
1:G:174:VAL:HG22	1:G:174:VAL:O	2.16	0.44
1:G:294:ILE:HD11	1:G:345:ARG:NH1	2.32	0.44
1:G:348:GLN:O	1:G:352:GLN:HB2	2.17	0.44
1:B:69:MET:HB2	1:B:69:MET:HE3	1.55	0.44
1:C:128:VAL:HG11	1:C:506:GLU:OE2	2.18	0.44
1:E:158:ILE:CG2	1:E:396:VAL:HG22	2.48	0.44
1:F:320:ALA:HA	1:F:335:GLY:O	2.18	0.44
1:G:320:ALA:HA	1:G:335:GLY:O	2.17	0.44
1:A:80:ARG:HB2	1:A:80:ARG:HH11	1.82	0.44
1:C:90:THR:O	1:C:94:VAL:HG23	2.17	0.44
1:D:13:ARG:CD	1:D:104:LEU:HD22	2.47	0.44
1:D:423:ALA:HB2	1:D:447:LEU:HD13	1.99	0.44
1:E:204:PHE:CE1	1:E:273:ILE:HG23	2.53	0.44
1:F:245:LYS:HZ1	1:F:319:ARG:HH21	1.64	0.44
1:F:429:LEU:HD12	1:F:430:SER:N	2.29	0.44
1:G:219:TYR:N	1:G:246:PRO:O	2.51	0.44
1:A:183:MET:HB3	1:A:384:MET:HE1	1.99	0.44
1:A:480:ASN:HD21	1:A:483:THR:HG23	1.83	0.44
1:C:245:LYS:HZ1	1:C:319:ARG:HH21	1.65	0.44
1:D:183:MET:HB3	1:D:384:MET:HE1	2.00	0.44
1:D:231:GLN:N	1:D:231:GLN:NE2	2.65	0.44
1:D:80:ARG:HH11	1:D:80:ARG:HB2	1.82	0.44
1:E:429:LEU:HD12	1:E:430:SER:N	2.31	0.44
1:E:62:LEU:H	1:E:68:ASN:HD22	1.66	0.44
1:F:205:VAL:HG12	1:F:207:ASN:N	2.31	0.44
1:F:205:VAL:HG12	1:F:207:ASN:H	1.81	0.44
1:F:231:GLN:NE2	1:F:231:GLN:N	2.65	0.44
1:F:219:TYR:N	1:F:246:PRO:O	2.51	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:13:ARG:CD	1:G:104:LEU:HD22	2.48	0.44
1:G:488:ASP:HB3	1:G:491:LYS:HG3	1.99	0.44
1:G:511:VAL:HG23	1:G:512:ALA:N	2.33	0.44
1:A:511:VAL:HG23	1:A:512:ALA:N	2.32	0.44
1:B:72:GLN:HE22	1:B:75:ARG:CZ	2.31	0.44
1:C:126:LYS:HG3	1:C:429:LEU:CD2	2.48	0.44
1:D:194:GLN:HG3	1:D:331:THR:OG1	2.18	0.44
1:E:75:ARG:HH11	1:E:75:ARG:CG	2.30	0.44
1:F:175:ILE:HG22	1:F:176:THR:N	2.32	0.44
1:F:348:GLN:O	1:F:352:GLN:HB2	2.17	0.44
1:G:72:GLN:HE22	1:G:75:ARG:CZ	2.31	0.44
1:B:77:VAL:HG21	1:B:511:VAL:HG13	2.00	0.44
1:C:190:VAL:HG12	1:C:191:GLU:N	2.32	0.44
1:C:225:LYS:HG3	1:C:225:LYS:H	1.61	0.44
1:C:69:MET:HE3	1:C:69:MET:HB2	1.59	0.44
1:D:423:ALA:HB2	1:D:447:LEU:CD1	2.47	0.44
1:E:175:ILE:HG22	1:E:176:THR:N	2.33	0.44
1:F:174:VAL:HG22	1:F:174:VAL:O	2.17	0.44
1:G:507:ASP:O	1:G:510:SER:HB3	2.18	0.44
1:G:77:VAL:HG21	1:G:511:VAL:HG13	2.00	0.44
1:A:13:ARG:CD	1:A:104:LEU:HD22	2.48	0.44
1:A:320:ALA:HA	1:A:335:GLY:O	2.17	0.44
1:A:348:GLN:O	1:A:352:GLN:HB2	2.18	0.44
1:B:320:ALA:HA	1:B:335:GLY:O	2.17	0.44
1:D:24:ALA:O	1:D:28:LYS:HD2	2.17	0.44
1:E:219:TYR:N	1:E:246:PRO:O	2.51	0.44
1:E:247:LEU:HB3	1:E:273:ILE:HD12	1.99	0.44
1:F:198:GLY:O	1:F:276:VAL:HG12	2.17	0.44
1:A:219:TYR:N	1:A:246:PRO:O	2.51	0.43
1:B:451:MET:CE	1:B:466:ALA:HA	2.48	0.43
1:C:175:ILE:HG22	1:C:176:THR:N	2.33	0.43
1:C:349:ILE:HG22	1:C:353:ILE:HD11	2.00	0.43
1:E:72:GLN:HE22	1:E:75:ARG:CZ	2.30	0.43
1:F:126:LYS:HG3	1:F:429:LEU:CD2	2.48	0.43
1:A:204:PHE:CE1	1:A:273:ILE:HG23	2.54	0.43
1:A:8:PHE:HE1	1:B:26:ALA:HA	1.83	0.43
1:B:294:ILE:HD11	1:B:345:ARG:NH1	2.33	0.43
1:C:227:LEU:CD1	1:C:251:ALA:HB3	2.48	0.43
1:C:12:ALA:HB1	1:C:521:MET:HG3	1.99	0.43
1:D:139:ASN:N	1:D:139:ASN:ND2	2.66	0.43
1:D:349:ILE:HG22	1:D:353:ILE:HD11	2.00	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:72:GLN:HE22	1:D:75:ARG:CZ	2.31	0.43
1:E:365:LEU:HA	1:E:368:ARG:HG2	2.00	0.43
1:F:480:ASN:HD21	1:F:483:THR:HG23	1.84	0.43
1:A:112:ASN:OD1	1:A:114:MET:N	2.51	0.43
1:A:488:ASP:HB3	1:A:491:LYS:HG3	2.00	0.43
1:E:19:GLY:HA2	1:E:62:LEU:CD1	2.48	0.43
1:G:128:VAL:HG11	1:G:506:GLU:OE2	2.19	0.43
1:G:225:LYS:HG3	1:G:225:LYS:H	1.62	0.43
1:G:174:VAL:HG13	1:G:376:VAL:HA	2.00	0.43
1:B:488:ASP:HB3	1:B:491:LYS:HG3	1.99	0.43
1:D:247:LEU:HB3	1:D:273:ILE:HD12	1.99	0.43
1:E:423:ALA:HB2	1:E:447:LEU:CD1	2.48	0.43
1:F:488:ASP:HB3	1:F:491:LYS:HG3	1.99	0.43
1:F:62:LEU:H	1:F:68:ASN:HD22	1.66	0.43
1:B:103:GLY:HA3	1:B:516:ILE:CD1	2.49	0.43
1:C:139:ASN:N	1:C:139:ASN:ND2	2.67	0.43
1:D:227:LEU:CD1	1:D:251:ALA:HB3	2.48	0.43
1:C:8:PHE:HE1	1:D:26:ALA:HA	1.84	0.43
1:D:294:ILE:HD11	1:D:345:ARG:NH1	2.32	0.43
1:E:13:ARG:CD	1:E:104:LEU:HD22	2.48	0.43
1:F:225:LYS:HB2	1:F:226:LYS:H	1.62	0.43
1:F:227:LEU:CD1	1:F:251:ALA:HB3	2.48	0.43
1:G:12:ALA:HB1	1:G:521:MET:SD	2.58	0.43
1:G:175:ILE:HG22	1:G:176:THR:N	2.33	0.43
1:G:247:LEU:HB3	1:G:273:ILE:HD12	2.00	0.43
1:B:204:PHE:CE1	1:B:273:ILE:HG23	2.53	0.43
1:B:511:VAL:HG23	1:B:512:ALA:N	2.34	0.43
1:B:69:MET:HG2	1:C:47:PRO:HB3	2.01	0.43
1:D:204:PHE:CE1	1:D:273:ILE:HG23	2.53	0.43
1:D:480:ASN:HD21	1:D:483:THR:HG23	1.84	0.43
1:E:12:ALA:HB1	1:E:521:MET:SD	2.59	0.43
1:E:451:MET:CE	1:E:465:VAL:HG12	2.49	0.43
1:F:365:LEU:HA	1:F:368:ARG:HG2	2.00	0.43
1:G:75:ARG:HH11	1:G:75:ARG:CG	2.31	0.43
1:A:478:GLY:HA3	1:A:489:MET:HE3	1.99	0.43
1:B:349:ILE:HG22	1:B:353:ILE:HD11	2.00	0.43
1:D:365:LEU:HA	1:D:368:ARG:HG2	2.00	0.43
1:D:451:MET:CE	1:D:465:VAL:HG12	2.49	0.43
1:E:224:GLU:HG3	1:E:286:LYS:CE	2.49	0.43
1:F:103:GLY:HA3	1:F:516:ILE:CD1	2.49	0.43
1:F:124:THR:O	1:F:128:VAL:HG23	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:294:ILE:HD11	1:A:345:ARG:NH1	2.33	0.43
1:A:480:ASN:O	1:A:484:GLU:N	2.47	0.43
1:B:227:LEU:CD1	1:B:251:ALA:HB3	2.49	0.43
1:B:365:LEU:HA	1:B:368:ARG:HG2	2.00	0.43
1:C:488:ASP:HB3	1:C:491:LYS:HG3	1.99	0.43
1:C:103:GLY:HA3	1:C:516:ILE:CD1	2.49	0.43
1:D:224:GLU:HG3	1:D:286:LYS:CE	2.49	0.43
1:D:478:GLY:HA3	1:D:489:MET:HE3	2.00	0.43
1:F:349:ILE:HG22	1:F:353:ILE:HD11	2.00	0.43
1:F:451:MET:CE	1:F:466:ALA:HA	2.49	0.43
1:A:321:LYS:CB	1:A:334:ASP:HB3	2.45	0.43
1:B:175:ILE:HG22	1:B:176:THR:N	2.33	0.43
1:B:224:GLU:HG3	1:B:286:LYS:CE	2.49	0.43
1:B:507:ASP:O	1:B:510:SER:HB3	2.18	0.43
1:C:224:GLU:HG3	1:C:286:LYS:CE	2.49	0.43
1:C:194:GLN:HG3	1:C:331:THR:OG1	2.17	0.43
1:C:365:LEU:HA	1:C:368:ARG:HG2	2.01	0.43
1:C:507:ASP:O	1:C:510:SER:HB3	2.19	0.43
1:D:12:ALA:HB1	1:D:521:MET:HG3	2.00	0.43
1:E:128:VAL:HG11	1:E:506:GLU:OE2	2.18	0.43
1:G:227:LEU:CD1	1:G:251:ALA:HB3	2.49	0.43
1:G:365:LEU:HA	1:G:368:ARG:HG2	2.00	0.43
1:A:225:LYS:HB2	1:A:226:LYS:H	1.62	0.43
1:A:227:LEU:CD1	1:A:251:ALA:HB3	2.48	0.43
1:B:126:LYS:HG3	1:B:429:LEU:CD2	2.49	0.43
1:B:62:LEU:H	1:B:68:ASN:HD22	1.65	0.43
1:D:488:ASP:HB3	1:D:491:LYS:HG3	2.00	0.43
1:E:124:THR:O	1:E:128:VAL:HG23	2.19	0.43
1:E:478:GLY:HA3	1:E:489:MET:HE3	2.01	0.43
1:G:383:GLY:H	1:G:389:VAL:HG22	1.83	0.43
1:A:24:ALA:O	1:A:28:LYS:HB3	2.18	0.42
1:A:451:MET:HE1	1:A:465:VAL:HG12	2.01	0.42
1:D:480:ASN:O	1:D:484:GLU:N	2.48	0.42
1:E:227:LEU:CD1	1:E:251:ALA:HB3	2.48	0.42
1:E:248:LEU:CA	1:E:274:ALA:HB3	2.49	0.42
1:D:69:MET:HG2	1:E:47:PRO:HG3	2.00	0.42
1:F:13:ARG:CD	1:F:104:LEU:HD22	2.49	0.42
1:F:75:ARG:HH11	1:F:75:ARG:CG	2.30	0.42
1:A:365:LEU:HA	1:A:368:ARG:HG2	2.00	0.42
1:B:231:GLN:N	1:B:231:GLN:NE2	2.65	0.42
1:B:449:ALA:CB	1:B:450:PRO:HD3	2.43	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:217:ASP:HA	1:C:320:ALA:O	2.19	0.42
1:D:128:VAL:O	1:D:128:VAL:HG12	2.18	0.42
1:F:226:LYS:HZ1	1:F:252:GLU:HB3	1.84	0.42
1:F:26:ALA:O	1:F:29:VAL:HG22	2.18	0.42
1:F:321:LYS:CB	1:F:334:ASP:HB3	2.45	0.42
1:A:507:ASP:O	1:A:510:SER:HB3	2.19	0.42
1:B:378:VAL:HG22	1:B:378:VAL:O	2.19	0.42
1:A:126:LYS:HG3	1:A:429:LEU:CD2	2.49	0.42
1:A:62:LEU:H	1:A:68:ASN:HD22	1.65	0.42
1:C:227:LEU:HD11	1:C:251:ALA:HB3	2.02	0.42
1:C:451:MET:CE	1:C:466:ALA:HA	2.48	0.42
1:D:219:TYR:N	1:D:246:PRO:O	2.52	0.42
1:E:378:VAL:O	1:E:378:VAL:HG22	2.19	0.42
1:D:69:MET:HG2	1:E:47:PRO:CB	2.49	0.42
1:E:488:ASP:HB3	1:E:491:LYS:HG3	2.00	0.42
1:F:220:ILE:CD1	1:F:248:LEU:HD22	2.49	0.42
1:G:248:LEU:CA	1:G:274:ALA:HB3	2.49	0.42
1:A:224:GLU:HG3	1:A:286:LYS:CE	2.49	0.42
1:A:349:ILE:HG22	1:A:353:ILE:HD11	2.01	0.42
1:A:423:ALA:HB2	1:A:447:LEU:HD13	2.01	0.42
1:B:124:THR:O	1:B:128:VAL:HG23	2.19	0.42
1:B:174:VAL:HG13	1:B:376:VAL:HA	2.02	0.42
1:B:90:THR:O	1:B:94:VAL:HG23	2.20	0.42
1:C:174:VAL:HG13	1:C:376:VAL:HA	2.01	0.42
1:C:19:GLY:O	1:C:71:ALA:HB2	2.20	0.42
1:F:126:LYS:HG3	1:F:429:LEU:HD22	2.00	0.42
1:G:321:LYS:CB	1:G:334:ASP:HB3	2.45	0.42
1:G:480:ASN:HD21	1:G:483:THR:HG23	1.84	0.42
1:A:174:VAL:HG13	1:A:376:VAL:HA	2.02	0.42
1:A:220:ILE:CD1	1:A:248:LEU:HD22	2.50	0.42
1:E:126:LYS:HG3	1:E:429:LEU:CD2	2.49	0.42
1:F:12:ALA:HB1	1:F:521:MET:HG3	2.01	0.42
1:F:36:ARG:CG	1:F:36:ARG:NH1	2.75	0.42
1:G:380:ARG:HH11	1:G:380:ARG:CB	2.28	0.42
1:C:112:ASN:OD1	1:C:112:ASN:C	2.58	0.42
1:D:112:ASN:C	1:D:112:ASN:OD1	2.58	0.42
1:E:221:LEU:HG	1:E:249:ILE:HA	2.02	0.42
1:F:72:GLN:HE22	1:F:75:ARG:CZ	2.31	0.42
1:A:112:ASN:OD1	1:A:112:ASN:C	2.58	0.42
1:A:2:ALA:O	1:A:3:ALA:C	2.57	0.42
1:C:220:ILE:CD1	1:C:248:LEU:HD22	2.50	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:126:LYS:HG3	1:D:429:LEU:CD2	2.49	0.42
1:D:227:LEU:HD11	1:D:251:ALA:HB3	2.02	0.42
1:D:298:GLY:HA2	1:D:317:LEU:C	2.40	0.42
1:D:174:VAL:HG13	1:D:376:VAL:HA	2.01	0.42
1:E:139:ASN:ND2	1:E:139:ASN:N	2.66	0.42
1:E:321:LYS:CB	1:E:334:ASP:HB3	2.45	0.42
1:E:507:ASP:O	1:E:510:SER:HB3	2.20	0.42
1:F:2:ALA:O	1:F:3:ALA:C	2.57	0.42
1:B:13:ARG:CD	1:B:104:LEU:HD22	2.49	0.42
1:B:112:ASN:C	1:B:112:ASN:OD1	2.59	0.42
1:B:128:VAL:HG11	1:B:506:GLU:OE2	2.20	0.42
1:B:227:LEU:HD11	1:B:251:ALA:HB3	2.02	0.42
1:B:423:ALA:HB2	1:B:447:LEU:HD13	2.01	0.42
1:D:128:VAL:HG11	1:D:506:GLU:OE2	2.19	0.42
1:D:451:MET:CE	1:D:466:ALA:HA	2.49	0.42
1:E:220:ILE:CD1	1:E:248:LEU:HD22	2.50	0.42
1:F:123:ALA:HB1	1:F:426:LEU:HD22	2.02	0.42
1:G:224:GLU:HG3	1:G:286:LYS:CE	2.50	0.42
1:A:139:ASN:ND2	1:A:139:ASN:N	2.66	0.42
1:A:217:ASP:HA	1:A:320:ALA:O	2.20	0.42
1:B:219:TYR:N	1:B:246:PRO:O	2.52	0.42
1:B:221:LEU:HG	1:B:249:ILE:HA	2.02	0.42
1:D:215:LEU:HD22	1:D:274:ALA:HB2	2.02	0.42
1:D:220:ILE:CD1	1:D:248:LEU:HD22	2.50	0.42
1:D:77:VAL:HG21	1:D:511:VAL:HG13	2.02	0.42
1:F:215:LEU:HD22	1:F:274:ALA:HB2	2.02	0.42
1:G:225:LYS:HB2	1:G:226:LYS:H	1.62	0.42
1:G:215:LEU:HD22	1:G:274:ALA:HB2	2.02	0.42
1:G:349:ILE:HG22	1:G:353:ILE:HD11	2.01	0.42
1:G:126:LYS:HG3	1:G:429:LEU:CD2	2.50	0.42
1:A:378:VAL:O	1:A:378:VAL:HG22	2.20	0.41
1:C:219:TYR:N	1:C:246:PRO:O	2.52	0.41
1:C:298:GLY:HA2	1:C:317:LEU:C	2.40	0.41
1:E:90:THR:O	1:E:94:VAL:HG23	2.20	0.41
1:F:224:GLU:HG3	1:F:286:LYS:CE	2.49	0.41
1:A:215:LEU:HD22	1:A:274:ALA:HB2	2.02	0.41
1:A:423:ALA:HB2	1:A:447:LEU:CD1	2.50	0.41
1:B:139:ASN:N	1:B:139:ASN:ND2	2.66	0.41
1:E:7:LYS:HB3	1:E:12:ALA:HB2	2.03	0.41
1:E:298:GLY:HA2	1:E:317:LEU:C	2.41	0.41
1:F:323:VAL:HG13	1:F:332:ILE:HG12	2.02	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:7:LYS:HB3	1:A:12:ALA:HB2	2.03	0.41
1:B:75:ARG:HH11	1:B:75:ARG:CG	2.32	0.41
1:C:221:LEU:HG	1:C:249:ILE:HA	2.03	0.41
1:C:480:ASN:HD21	1:C:483:THR:HG23	1.85	0.41
1:D:220:ILE:HG23	1:D:248:LEU:CD2	2.50	0.41
1:F:423:ALA:HB2	1:F:447:LEU:HD13	2.01	0.41
1:F:69:MET:HE3	1:F:69:MET:HB2	1.53	0.41
1:G:112:ASN:C	1:G:112:ASN:OD1	2.58	0.41
1:A:227:LEU:HD11	1:A:251:ALA:HB3	2.02	0.41
1:C:126:LYS:HG3	1:C:429:LEU:HD22	2.02	0.41
1:C:220:ILE:HG23	1:C:248:LEU:CD2	2.51	0.41
1:C:423:ALA:HB2	1:C:447:LEU:CD1	2.50	0.41
1:E:227:LEU:HB2	1:E:254:VAL:CA	2.38	0.41
1:E:217:ASP:HA	1:E:320:ALA:O	2.21	0.41
1:F:217:ASP:HA	1:F:320:ALA:O	2.21	0.41
1:F:221:LEU:HG	1:F:249:ILE:HA	2.03	0.41
1:G:220:ILE:CD1	1:G:248:LEU:HD22	2.50	0.41
1:G:12:ALA:HB1	1:G:521:MET:HG3	2.03	0.41
1:A:451:MET:CE	1:A:466:ALA:HA	2.50	0.41
1:A:12:ALA:HB1	1:A:521:MET:SD	2.60	0.41
1:B:215:LEU:HD22	1:B:274:ALA:HB2	2.02	0.41
1:B:220:ILE:CD1	1:B:248:LEU:HD22	2.50	0.41
1:B:80:ARG:HB2	1:B:80:ARG:NH1	2.36	0.41
1:E:349:ILE:HG22	1:E:353:ILE:HD11	2.01	0.41
1:E:36:ARG:CG	1:E:36:ARG:NH1	2.76	0.41
1:E:2:ALA:O	1:E:3:ALA:C	2.58	0.41
1:B:2:ALA:O	1:B:3:ALA:C	2.59	0.41
1:B:423:ALA:HB2	1:B:447:LEU:CD1	2.51	0.41
1:C:215:LEU:HD22	1:C:274:ALA:HB2	2.03	0.41
1:D:221:LEU:HG	1:D:249:ILE:HA	2.03	0.41
1:E:174:VAL:HG13	1:E:376:VAL:HA	2.01	0.41
1:F:220:ILE:HG23	1:F:248:LEU:CD2	2.50	0.41
1:F:298:GLY:HA2	1:F:317:LEU:C	2.41	0.41
1:F:174:VAL:HG13	1:F:376:VAL:HA	2.02	0.41
1:F:8:PHE:HE1	1:G:26:ALA:HA	1.86	0.41
1:G:24:ALA:O	1:G:28:LYS:HB3	2.20	0.41
1:G:298:GLY:HA2	1:G:317:LEU:C	2.41	0.41
1:C:24:ALA:O	1:C:28:LYS:HB3	2.21	0.41
1:E:245:LYS:HZ1	1:E:319:ARG:HH21	1.66	0.41
1:E:480:ASN:HD21	1:E:483:THR:HG23	1.85	0.41
1:E:103:GLY:HA3	1:E:516:ILE:CD1	2.50	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:227:LEU:HD11	1:F:251:ALA:HB3	2.02	0.41
1:G:231:GLN:N	1:G:231:GLN:NE2	2.65	0.41
1:A:248:LEU:CB	1:A:274:ALA:HB3	2.51	0.41
1:B:220:ILE:HG23	1:B:248:LEU:CD2	2.51	0.41
1:B:248:LEU:CB	1:B:274:ALA:HB3	2.51	0.41
1:C:26:ALA:O	1:C:29:VAL:HG22	2.21	0.41
1:C:378:VAL:HG22	1:C:378:VAL:O	2.21	0.41
1:D:227:LEU:HB2	1:D:254:VAL:CA	2.38	0.41
1:D:248:LEU:CA	1:D:274:ALA:HB3	2.49	0.41
1:D:2:ALA:O	1:D:3:ALA:C	2.59	0.41
1:D:126:LYS:HG3	1:D:429:LEU:HD22	2.02	0.41
1:D:482:GLN:HA	1:D:482:GLN:NE2	2.36	0.41
1:G:181:LYS:HB2	1:G:182:GLY:H	1.78	0.41
1:A:298:GLY:HA2	1:A:317:LEU:C	2.41	0.41
1:C:482:GLN:HA	1:C:482:GLN:NE2	2.36	0.41
1:F:423:ALA:HB2	1:F:447:LEU:CD1	2.51	0.41
1:G:2:ALA:O	1:G:3:ALA:C	2.58	0.41
1:G:36:ARG:CG	1:G:36:ARG:NH1	2.79	0.41
1:A:220:ILE:HG23	1:A:248:LEU:CD2	2.51	0.41
1:A:231:GLN:N	1:A:231:GLN:NE2	2.65	0.41
1:A:190:VAL:HG11	1:A:334:ASP:CB	2.51	0.41
1:C:13:ARG:CD	1:C:104:LEU:HD22	2.50	0.41
1:C:423:ALA:HB2	1:C:447:LEU:HD13	2.02	0.41
1:E:220:ILE:HG23	1:E:248:LEU:CD2	2.50	0.41
1:E:227:LEU:HD11	1:E:251:ALA:HB3	2.02	0.41
1:E:215:LEU:HD22	1:E:274:ALA:HB2	2.03	0.41
1:F:451:MET:HE1	1:F:465:VAL:HG12	2.02	0.41
1:F:90:THR:O	1:F:94:VAL:HG23	2.21	0.41
1:A:221:LEU:HG	1:A:249:ILE:HA	2.03	0.41
1:A:72:GLN:HE22	1:A:75:ARG:CZ	2.34	0.41
1:B:298:GLY:HA2	1:B:317:LEU:C	2.41	0.41
1:C:55:SER:O	1:C:59:GLU:HG2	2.20	0.41
1:F:380:ARG:HH11	1:F:380:ARG:CB	2.29	0.41
1:F:7:LYS:HB3	1:F:12:ALA:HB2	2.03	0.40
1:F:489:MET:HG3	1:F:494:VAL:O	2.21	0.40
1:G:220:ILE:HG23	1:G:248:LEU:CD2	2.50	0.40
1:G:248:LEU:CB	1:G:274:ALA:HB3	2.51	0.40
1:G:26:ALA:O	1:G:29:VAL:HG22	2.21	0.40
1:G:323:VAL:HG13	1:G:332:ILE:HG12	2.03	0.40
1:B:201:SER:O	1:B:204:PHE:HB2	2.21	0.40
1:B:480:ASN:HD21	1:B:483:THR:HG23	1.85	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:80:ARG:HB2	1:C:80:ARG:NH1	2.36	0.40
1:D:19:GLY:HA2	1:D:62:LEU:HD11	2.03	0.40
1:E:112:ASN:C	1:E:112:ASN:OD1	2.58	0.40
1:G:103:GLY:HA3	1:G:516:ILE:CD1	2.50	0.40
1:G:227:LEU:HD11	1:G:251:ALA:HB3	2.03	0.40
1:A:323:VAL:HG13	1:A:332:ILE:HG12	2.03	0.40
1:B:7:LYS:HB3	1:B:12:ALA:HB2	2.04	0.40
1:E:126:LYS:HG3	1:E:429:LEU:HD22	2.02	0.40
1:F:190:VAL:HG12	1:F:191:GLU:N	2.36	0.40
1:F:80:ARG:HB2	1:F:80:ARG:NH1	2.35	0.40
1:G:217:ASP:HA	1:G:320:ALA:O	2.22	0.40
1:G:480:ASN:O	1:G:484:GLU:N	2.48	0.40
1:B:217:ASP:HA	1:B:320:ALA:O	2.22	0.40
1:B:323:VAL:HG13	1:B:332:ILE:HG12	2.03	0.40
1:F:378:VAL:HG22	1:F:378:VAL:O	2.21	0.40
1:A:80:ARG:NH1	1:A:80:ARG:HB2	2.36	0.40
1:C:2:ALA:O	1:C:3:ALA:C	2.60	0.40
1:E:144:VAL:O	1:E:144:VAL:CG1	2.70	0.40
1:G:201:SER:O	1:G:204:PHE:HB2	2.21	0.40
1:G:482:GLN:NE2	1:G:482:GLN:HA	2.37	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 X-ray entries followed by that with respect to entries of similar resolution.

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	474/545 (87%)	404 (85%)	59 (12%)	11 (2%)	7	38
1	B	474/545 (87%)	405 (85%)	59 (12%)	10 (2%)	8	40
1	C	474/545 (87%)	404 (85%)	60 (13%)	10 (2%)	8	40
1	D	474/545 (87%)	404 (85%)	60 (13%)	10 (2%)	8	40

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	E	474/545 (87%)	404 (85%)	60 (13%)	10 (2%)	8	40
1	F	474/545 (87%)	404 (85%)	58 (12%)	12 (2%)	6	36
1	G	474/545 (87%)	405 (85%)	59 (12%)	10 (2%)	8	40
All	All	3318/3815 (87%)	2830 (85%)	415 (12%)	73 (2%)	7	39

All (73) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	9	ASN
1	A	85	ALA
1	A	228	SER
1	A	378	VAL
1	B	9	ASN
1	B	85	ALA
1	B	134	ALA
1	B	228	SER
1	B	378	VAL
1	C	9	ASN
1	C	85	ALA
1	C	134	ALA
1	C	228	SER
1	C	378	VAL
1	D	9	ASN
1	D	85	ALA
1	D	228	SER
1	D	378	VAL
1	E	9	ASN
1	E	85	ALA
1	E	134	ALA
1	E	228	SER
1	E	378	VAL
1	F	9	ASN
1	F	85	ALA
1	F	228	SER
1	F	378	VAL
1	G	9	ASN
1	G	85	ALA
1	G	228	SER
1	G	378	VAL
1	A	134	ALA
1	A	335	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	B	335	GLY
1	C	335	GLY
1	D	134	ALA
1	D	335	GLY
1	E	335	GLY
1	F	134	ALA
1	F	335	GLY
1	G	134	ALA
1	G	335	GLY
1	A	87	ASP
1	A	336	ALA
1	A	475	LYS
1	B	87	ASP
1	B	336	ALA
1	B	475	LYS
1	C	87	ASP
1	C	336	ALA
1	C	475	LYS
1	D	87	ASP
1	D	336	ALA
1	D	475	LYS
1	E	87	ASP
1	E	336	ALA
1	E	475	LYS
1	F	87	ASP
1	F	336	ALA
1	F	475	LYS
1	G	87	ASP
1	G	336	ALA
1	G	475	LYS
1	F	3	ALA
1	A	246	PRO
1	B	246	PRO
1	C	246	PRO
1	D	246	PRO
1	F	246	PRO
1	E	246	PRO
1	G	246	PRO
1	F	374	GLY
1	A	374	GLY

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 X-ray entries followed by that with respect to entries of similar resolution.

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	372/421 (88%)	278 (75%)	94 (25%)	0	2
1	B	372/421 (88%)	279 (75%)	93 (25%)	0	2
1	C	372/421 (88%)	277 (74%)	95 (26%)	0	2
1	D	372/421 (88%)	279 (75%)	93 (25%)	0	2
1	E	372/421 (88%)	278 (75%)	94 (25%)	0	2
1	F	372/421 (88%)	278 (75%)	94 (25%)	0	2
1	G	372/421 (88%)	277 (74%)	95 (26%)	0	2
All	All	2604/2947 (88%)	1946 (75%)	658 (25%)	0	2

All (658) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	5	GLU
1	A	7	LYS
1	A	16	MET
1	A	18	LYS
1	A	28	LYS
1	A	36	ARG
1	A	42	LYS
1	A	51	LYS
1	A	55	SER
1	A	69	MET
1	A	72	GLN
1	A	75	ARG
1	A	76	GLU
1	A	77	VAL
1	A	79	SER
1	A	80	ARG
1	A	83	ASP
1	A	87	ASP
1	A	105	LYS
1	A	132	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	139	ASN
1	A	141	SER
1	A	146	GLN
1	A	155	GLU
1	A	156	SER
1	A	164	GLU
1	A	166	MET
1	A	167	GLN
1	A	168	ARG
1	A	172	GLU
1	A	181	LYS
1	A	183	MET
1	A	196	ASP
1	A	197	ARG
1	A	204	PHE
1	A	206	THR
1	A	209	ASP
1	A	210	LYS
1	A	211	MET
1	A	214	GLU
1	A	216	GLU
1	A	217	ASP
1	A	221	LEU
1	A	222	LEU
1	A	225	LYS
1	A	229	SER
1	A	231	GLN
1	A	245	LYS
1	A	247	LEU
1	A	250	VAL
1	A	252	GLU
1	A	253	ASP
1	A	281	PHE
1	A	283	ASP
1	A	288	MET
1	A	290	GLN
1	A	295	LEU
1	A	315	ASP
1	A	316	MET
1	A	317	LEU
1	A	321	LYS
1	A	322	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	327	LYS
1	A	328	ASP
1	A	333	VAL
1	A	338	GLU
1	A	339	LYS
1	A	343	GLU
1	A	345	ARG
1	A	352	GLN
1	A	357	THR
1	A	362	ARG
1	A	365	LEU
1	A	367	GLU
1	A	368	ARG
1	A	371	LYS
1	A	380	ARG
1	A	387	ILE
1	A	388	GLU
1	A	391	GLU
1	A	395	ARG
1	A	398	ASP
1	A	401	ASN
1	A	408	GLN
1	A	419	LEU
1	A	427	GLU
1	A	430	SER
1	A	434	SER
1	A	436	GLN
1	A	444	ARG
1	A	452	ARG
1	A	473	SER
1	A	524	GLU
1	A	525	LYS
1	B	5	GLU
1	B	7	LYS
1	B	16	MET
1	B	18	LYS
1	B	28	LYS
1	B	36	ARG
1	B	42	LYS
1	B	51	LYS
1	B	55	SER
1	B	69	MET

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	B	72	GLN
1	B	75	ARG
1	B	76	GLU
1	B	77	VAL
1	B	79	SER
1	B	80	ARG
1	B	83	ASP
1	B	87	ASP
1	B	105	LYS
1	B	132	LYS
1	B	139	ASN
1	B	141	SER
1	B	146	GLN
1	B	155	GLU
1	B	156	SER
1	B	164	GLU
1	B	166	MET
1	B	167	GLN
1	B	168	ARG
1	B	172	GLU
1	B	181	LYS
1	B	183	MET
1	B	196	ASP
1	B	197	ARG
1	B	204	PHE
1	B	206	THR
1	B	209	ASP
1	B	210	LYS
1	B	211	MET
1	B	214	GLU
1	B	216	GLU
1	B	217	ASP
1	B	221	LEU
1	B	222	LEU
1	B	225	LYS
1	B	229	SER
1	B	231	GLN
1	B	245	LYS
1	B	247	LEU
1	B	250	VAL
1	B	252	GLU
1	B	253	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	B	281	PHE
1	B	283	ASP
1	B	288	MET
1	B	290	GLN
1	B	295	LEU
1	B	315	ASP
1	B	316	MET
1	B	317	LEU
1	B	321	LYS
1	B	322	LYS
1	B	327	LYS
1	B	328	ASP
1	B	333	VAL
1	B	338	GLU
1	B	339	LYS
1	B	343	GLU
1	B	345	ARG
1	B	352	GLN
1	B	357	THR
1	B	362	ARG
1	B	365	LEU
1	B	367	GLU
1	B	368	ARG
1	B	371	LYS
1	B	380	ARG
1	B	387	ILE
1	B	388	GLU
1	B	391	GLU
1	B	395	ARG
1	B	398	ASP
1	B	401	ASN
1	B	408	GLN
1	B	419	LEU
1	B	427	GLU
1	B	430	SER
1	B	434	SER
1	B	436	GLN
1	B	444	ARG
1	B	473	SER
1	B	524	GLU
1	B	525	LYS
1	C	5	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	C	7	LYS
1	C	16	MET
1	C	18	LYS
1	C	28	LYS
1	C	36	ARG
1	C	42	LYS
1	C	51	LYS
1	C	55	SER
1	C	69	MET
1	C	72	GLN
1	C	75	ARG
1	C	76	GLU
1	C	77	VAL
1	C	79	SER
1	C	80	ARG
1	C	83	ASP
1	C	87	ASP
1	C	105	LYS
1	C	132	LYS
1	C	139	ASN
1	C	141	SER
1	C	146	GLN
1	C	155	GLU
1	C	156	SER
1	C	164	GLU
1	C	166	MET
1	C	167	GLN
1	C	168	ARG
1	C	172	GLU
1	C	181	LYS
1	C	183	MET
1	C	196	ASP
1	C	197	ARG
1	C	204	PHE
1	C	206	THR
1	C	209	ASP
1	C	210	LYS
1	C	211	MET
1	C	214	GLU
1	C	216	GLU
1	C	217	ASP
1	C	221	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	C	222	LEU
1	C	225	LYS
1	C	229	SER
1	C	231	GLN
1	C	245	LYS
1	C	247	LEU
1	C	250	VAL
1	C	252	GLU
1	C	253	ASP
1	C	281	PHE
1	C	283	ASP
1	C	288	MET
1	C	290	GLN
1	C	295	LEU
1	C	315	ASP
1	C	316	MET
1	C	317	LEU
1	C	321	LYS
1	C	322	LYS
1	C	327	LYS
1	C	328	ASP
1	C	333	VAL
1	C	338	GLU
1	C	339	LYS
1	C	343	GLU
1	C	345	ARG
1	C	352	GLN
1	C	357	THR
1	C	362	ARG
1	C	365	LEU
1	C	367	GLU
1	C	368	ARG
1	C	371	LYS
1	C	380	ARG
1	C	387	ILE
1	C	388	GLU
1	C	391	GLU
1	C	392	ARG
1	C	395	ARG
1	C	398	ASP
1	C	401	ASN
1	C	408	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	C	419	LEU
1	C	427	GLU
1	C	430	SER
1	C	434	SER
1	C	436	GLN
1	C	444	ARG
1	C	452	ARG
1	C	473	SER
1	C	524	GLU
1	C	525	LYS
1	D	5	GLU
1	D	7	LYS
1	D	16	MET
1	D	18	LYS
1	D	28	LYS
1	D	36	ARG
1	D	42	LYS
1	D	51	LYS
1	D	55	SER
1	D	69	MET
1	D	72	GLN
1	D	75	ARG
1	D	76	GLU
1	D	77	VAL
1	D	79	SER
1	D	80	ARG
1	D	83	ASP
1	D	87	ASP
1	D	105	LYS
1	D	132	LYS
1	D	139	ASN
1	D	141	SER
1	D	146	GLN
1	D	155	GLU
1	D	156	SER
1	D	164	GLU
1	D	166	MET
1	D	167	GLN
1	D	168	ARG
1	D	172	GLU
1	D	181	LYS
1	D	183	MET

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	D	196	ASP
1	D	197	ARG
1	D	204	PHE
1	D	206	THR
1	D	209	ASP
1	D	210	LYS
1	D	211	MET
1	D	214	GLU
1	D	216	GLU
1	D	217	ASP
1	D	221	LEU
1	D	222	LEU
1	D	225	LYS
1	D	229	SER
1	D	231	GLN
1	D	245	LYS
1	D	247	LEU
1	D	250	VAL
1	D	252	GLU
1	D	253	ASP
1	D	281	PHE
1	D	283	ASP
1	D	288	MET
1	D	290	GLN
1	D	295	LEU
1	D	315	ASP
1	D	316	MET
1	D	317	LEU
1	D	321	LYS
1	D	322	LYS
1	D	327	LYS
1	D	328	ASP
1	D	333	VAL
1	D	338	GLU
1	D	339	LYS
1	D	343	GLU
1	D	345	ARG
1	D	352	GLN
1	D	357	THR
1	D	362	ARG
1	D	365	LEU
1	D	367	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	D	368	ARG
1	D	371	LYS
1	D	380	ARG
1	D	387	ILE
1	D	388	GLU
1	D	391	GLU
1	D	395	ARG
1	D	398	ASP
1	D	401	ASN
1	D	408	GLN
1	D	419	LEU
1	D	427	GLU
1	D	430	SER
1	D	434	SER
1	D	436	GLN
1	D	444	ARG
1	D	473	SER
1	D	524	GLU
1	D	525	LYS
1	E	5	GLU
1	E	7	LYS
1	E	16	MET
1	E	18	LYS
1	E	28	LYS
1	E	36	ARG
1	E	42	LYS
1	E	51	LYS
1	E	55	SER
1	E	64	ASP
1	E	69	MET
1	E	72	GLN
1	E	75	ARG
1	E	76	GLU
1	E	77	VAL
1	E	79	SER
1	E	80	ARG
1	E	83	ASP
1	E	87	ASP
1	E	105	LYS
1	E	132	LYS
1	E	139	ASN
1	E	141	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	E	146	GLN
1	E	155	GLU
1	E	156	SER
1	E	164	GLU
1	E	166	MET
1	E	167	GLN
1	E	168	ARG
1	E	172	GLU
1	E	181	LYS
1	E	183	MET
1	E	196	ASP
1	E	197	ARG
1	E	204	PHE
1	E	206	THR
1	E	209	ASP
1	E	210	LYS
1	E	211	MET
1	E	214	GLU
1	E	216	GLU
1	E	217	ASP
1	E	221	LEU
1	E	222	LEU
1	E	225	LYS
1	E	229	SER
1	E	231	GLN
1	E	245	LYS
1	E	247	LEU
1	E	250	VAL
1	E	252	GLU
1	E	253	ASP
1	E	281	PHE
1	E	283	ASP
1	E	288	MET
1	E	290	GLN
1	E	295	LEU
1	E	315	ASP
1	E	316	MET
1	E	317	LEU
1	E	321	LYS
1	E	322	LYS
1	E	327	LYS
1	E	328	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	E	333	VAL
1	E	338	GLU
1	E	339	LYS
1	E	343	GLU
1	E	345	ARG
1	E	352	GLN
1	E	357	THR
1	E	362	ARG
1	E	365	LEU
1	E	367	GLU
1	E	368	ARG
1	E	371	LYS
1	E	380	ARG
1	E	387	ILE
1	E	388	GLU
1	E	391	GLU
1	E	395	ARG
1	E	398	ASP
1	E	401	ASN
1	E	408	GLN
1	E	419	LEU
1	E	427	GLU
1	E	430	SER
1	E	434	SER
1	E	436	GLN
1	E	444	ARG
1	E	473	SER
1	E	524	GLU
1	E	525	LYS
1	F	5	GLU
1	F	7	LYS
1	F	16	MET
1	F	18	LYS
1	F	28	LYS
1	F	36	ARG
1	F	42	LYS
1	F	51	LYS
1	F	55	SER
1	F	69	MET
1	F	72	GLN
1	F	75	ARG
1	F	76	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	F	77	VAL
1	F	79	SER
1	F	80	ARG
1	F	83	ASP
1	F	87	ASP
1	F	105	LYS
1	F	132	LYS
1	F	139	ASN
1	F	141	SER
1	F	146	GLN
1	F	155	GLU
1	F	156	SER
1	F	164	GLU
1	F	166	MET
1	F	167	GLN
1	F	168	ARG
1	F	172	GLU
1	F	181	LYS
1	F	183	MET
1	F	196	ASP
1	F	197	ARG
1	F	204	PHE
1	F	206	THR
1	F	209	ASP
1	F	210	LYS
1	F	211	MET
1	F	214	GLU
1	F	216	GLU
1	F	217	ASP
1	F	221	LEU
1	F	222	LEU
1	F	225	LYS
1	F	229	SER
1	F	231	GLN
1	F	245	LYS
1	F	247	LEU
1	F	250	VAL
1	F	252	GLU
1	F	253	ASP
1	F	281	PHE
1	F	283	ASP
1	F	288	MET

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	F	290	GLN
1	F	295	LEU
1	F	315	ASP
1	F	316	MET
1	F	317	LEU
1	F	321	LYS
1	F	322	LYS
1	F	327	LYS
1	F	328	ASP
1	F	333	VAL
1	F	338	GLU
1	F	339	LYS
1	F	343	GLU
1	F	345	ARG
1	F	352	GLN
1	F	357	THR
1	F	362	ARG
1	F	365	LEU
1	F	367	GLU
1	F	368	ARG
1	F	371	LYS
1	F	380	ARG
1	F	387	ILE
1	F	388	GLU
1	F	391	GLU
1	F	395	ARG
1	F	398	ASP
1	F	401	ASN
1	F	408	GLN
1	F	419	LEU
1	F	427	GLU
1	F	430	SER
1	F	434	SER
1	F	436	GLN
1	F	444	ARG
1	F	452	ARG
1	F	473	SER
1	F	524	GLU
1	F	525	LYS
1	G	5	GLU
1	G	7	LYS
1	G	10	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	G	16	MET
1	G	18	LYS
1	G	28	LYS
1	G	36	ARG
1	G	42	LYS
1	G	51	LYS
1	G	55	SER
1	G	69	MET
1	G	72	GLN
1	G	75	ARG
1	G	76	GLU
1	G	77	VAL
1	G	79	SER
1	G	80	ARG
1	G	83	ASP
1	G	87	ASP
1	G	105	LYS
1	G	132	LYS
1	G	139	ASN
1	G	141	SER
1	G	146	GLN
1	G	155	GLU
1	G	156	SER
1	G	164	GLU
1	G	166	MET
1	G	167	GLN
1	G	168	ARG
1	G	172	GLU
1	G	181	LYS
1	G	183	MET
1	G	196	ASP
1	G	197	ARG
1	G	204	PHE
1	G	206	THR
1	G	209	ASP
1	G	210	LYS
1	G	211	MET
1	G	214	GLU
1	G	216	GLU
1	G	217	ASP
1	G	221	LEU
1	G	222	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	G	225	LYS
1	G	229	SER
1	G	231	GLN
1	G	245	LYS
1	G	247	LEU
1	G	250	VAL
1	G	252	GLU
1	G	253	ASP
1	G	281	PHE
1	G	283	ASP
1	G	288	MET
1	G	290	GLN
1	G	295	LEU
1	G	315	ASP
1	G	316	MET
1	G	317	LEU
1	G	321	LYS
1	G	322	LYS
1	G	327	LYS
1	G	328	ASP
1	G	333	VAL
1	G	338	GLU
1	G	339	LYS
1	G	343	GLU
1	G	345	ARG
1	G	352	GLN
1	G	357	THR
1	G	362	ARG
1	G	365	LEU
1	G	367	GLU
1	G	368	ARG
1	G	371	LYS
1	G	380	ARG
1	G	387	ILE
1	G	388	GLU
1	G	391	GLU
1	G	395	ARG
1	G	398	ASP
1	G	401	ASN
1	G	408	GLN
1	G	419	LEU
1	G	427	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	G	430	SER
1	G	434	SER
1	G	436	GLN
1	G	444	ARG
1	G	452	ARG
1	G	473	SER
1	G	524	GLU
1	G	525	LYS

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (69) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	68	ASN
1	A	72	GLN
1	A	97	GLN
1	A	139	ASN
1	A	153	ASN
1	A	194	GLN
1	A	231	GLN
1	A	348	GLN
1	A	352	GLN
1	A	480	ASN
1	B	68	ASN
1	B	72	GLN
1	B	97	GLN
1	B	139	ASN
1	B	153	ASN
1	B	194	GLN
1	B	231	GLN
1	B	348	GLN
1	B	352	GLN
1	B	480	ASN
1	C	37	ASN
1	C	68	ASN
1	C	72	GLN
1	C	97	GLN
1	C	139	ASN
1	C	153	ASN
1	C	194	GLN
1	C	231	GLN
1	C	348	GLN
1	C	352	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	C	480	ASN
1	D	68	ASN
1	D	72	GLN
1	D	139	ASN
1	D	153	ASN
1	D	194	GLN
1	D	231	GLN
1	D	348	GLN
1	D	352	GLN
1	D	480	ASN
1	E	68	ASN
1	E	72	GLN
1	E	97	GLN
1	E	139	ASN
1	E	153	ASN
1	E	231	GLN
1	E	348	GLN
1	E	352	GLN
1	E	480	ASN
1	F	68	ASN
1	F	72	GLN
1	F	97	GLN
1	F	139	ASN
1	F	153	ASN
1	F	194	GLN
1	F	231	GLN
1	F	348	GLN
1	F	352	GLN
1	F	480	ASN
1	G	68	ASN
1	G	72	GLN
1	G	97	GLN
1	G	139	ASN
1	G	153	ASN
1	G	194	GLN
1	G	231	GLN
1	G	348	GLN
1	G	352	GLN
1	G	480	ASN

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates [i](#)

There are no carbohydrates 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 Fit of model and data

6.1 Protein, DNA and RNA chains

EDS was not executed - this section is therefore empty.

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

EDS was not executed - this section is therefore empty.

6.3 Carbohydrates

EDS was not executed - this section is therefore empty.

6.4 Ligands

EDS was not executed - this section is therefore empty.

6.5 Other polymers

EDS was not executed - this section is therefore empty.