



Full wwPDB EM Validation Report ⓘ

Nov 11, 2024 – 12:08 AM EST

PDB ID : 8UQ3
EMDB ID : EMD-42459
Title : Structure of human RyR2-S2808D in the closed state in the presence of ARM210
Authors : Miotto, M.C.; Marks, A.R.
Deposited on : 2023-10-23
Resolution : 3.18 Å (reported)
Based on initial model : 7UA5

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

We welcome your comments at validation@mail.wwpdb.org

A user guide is available at

<https://www.wwpdb.org/validation/2017/EMValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

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

EMDB validation analysis : 0.0.1.dev113
Mogul : 2022.3.0, CSD as543be (2022)
MolProbity : 4.02b-467
buster-report : 1.1.7 (2018)
Percentile statistics : 20231227.v01 (using entries in the PDB archive December 27th 2023)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.39

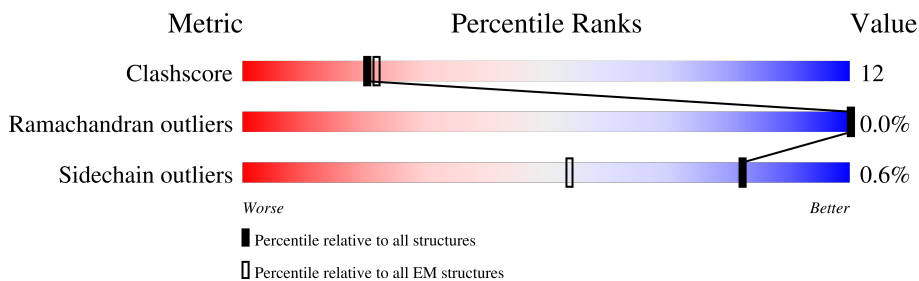
1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 3.18 Å.

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



Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	210492	15764
Ramachandran outliers	207382	16835
Sidechain outliers	206894	16415

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

Mol	Chain	Length	Quality of chain
1	A	4967	
1	B	4967	
1	C	4967	
1	D	4967	
2	E	108	
2	F	108	
2	G	108	
2	H	108	

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

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
4	ATP	A	5003	-	-	X	-
4	ATP	B	5003	-	-	X	-
4	ATP	C	5003	-	-	X	-
4	ATP	D	5003	-	-	X	-

2 Entry composition i

There are 5 unique types of molecules in this entry. The entry contains 138700 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a protein called Ryanodine receptor 2.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	A	4224	33771	21516	5745	6280	230	2	0
1	B	4224	33771	21516	5745	6280	230	2	0
1	C	4224	33771	21516	5745	6280	230	2	0
1	D	4224	33771	21516	5745	6280	230	2	0

There are 4 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	2808	ASP	SER	engineered mutation	UNP Q92736
B	2808	ASP	SER	engineered mutation	UNP Q92736
C	2808	ASP	SER	engineered mutation	UNP Q92736
D	2808	ASP	SER	engineered mutation	UNP Q92736

- Molecule 2 is a protein called Peptidyl-prolyl cis-trans isomerase FKBP1B.

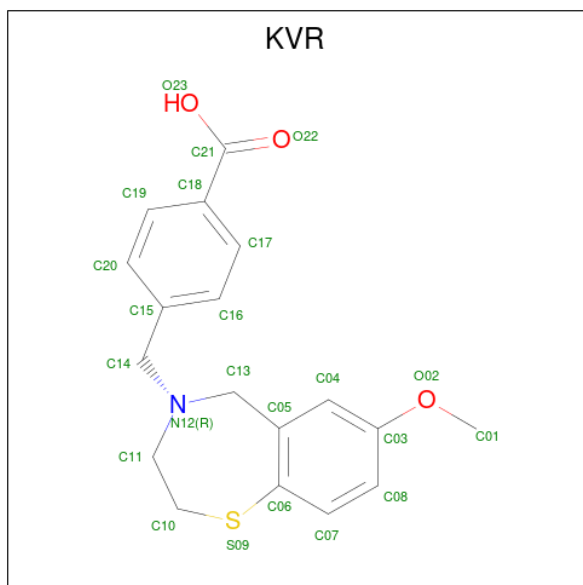
Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
2	E	107	818	516	144	154	4	0	0
2	F	107	818	516	144	154	4	0	0
2	G	107	818	516	144	154	4	0	0
2	H	107	818	516	144	154	4	0	0

- Molecule 3 is ZINC ION (three-letter code: ZN) (formula: Zn) (labeled as "Ligand of Interest" by depositor).

Continued from previous page...

Mol	Chain	Residues	Atoms					AltConf
			Total	C	N	O	P	
4	D	1	31	10	5	13	3	0

- Molecule 5 is 4-[(7-methoxy-2,3-dihydro-1,4-benzothiazepin-4(5H)-yl)methyl]benzoic acid (three-letter code: KVR) (formula: C₁₈H₁₉NO₃S).

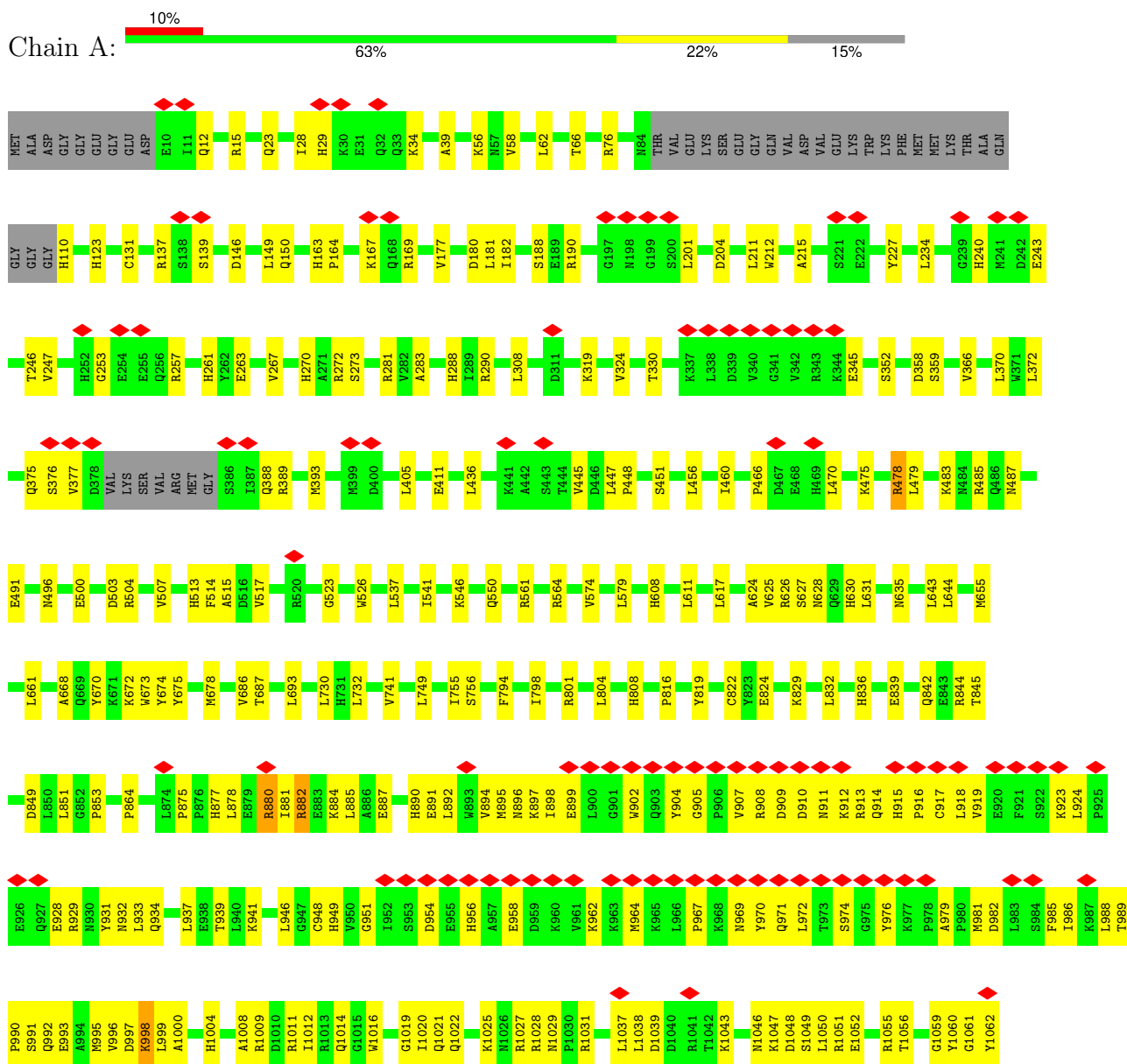


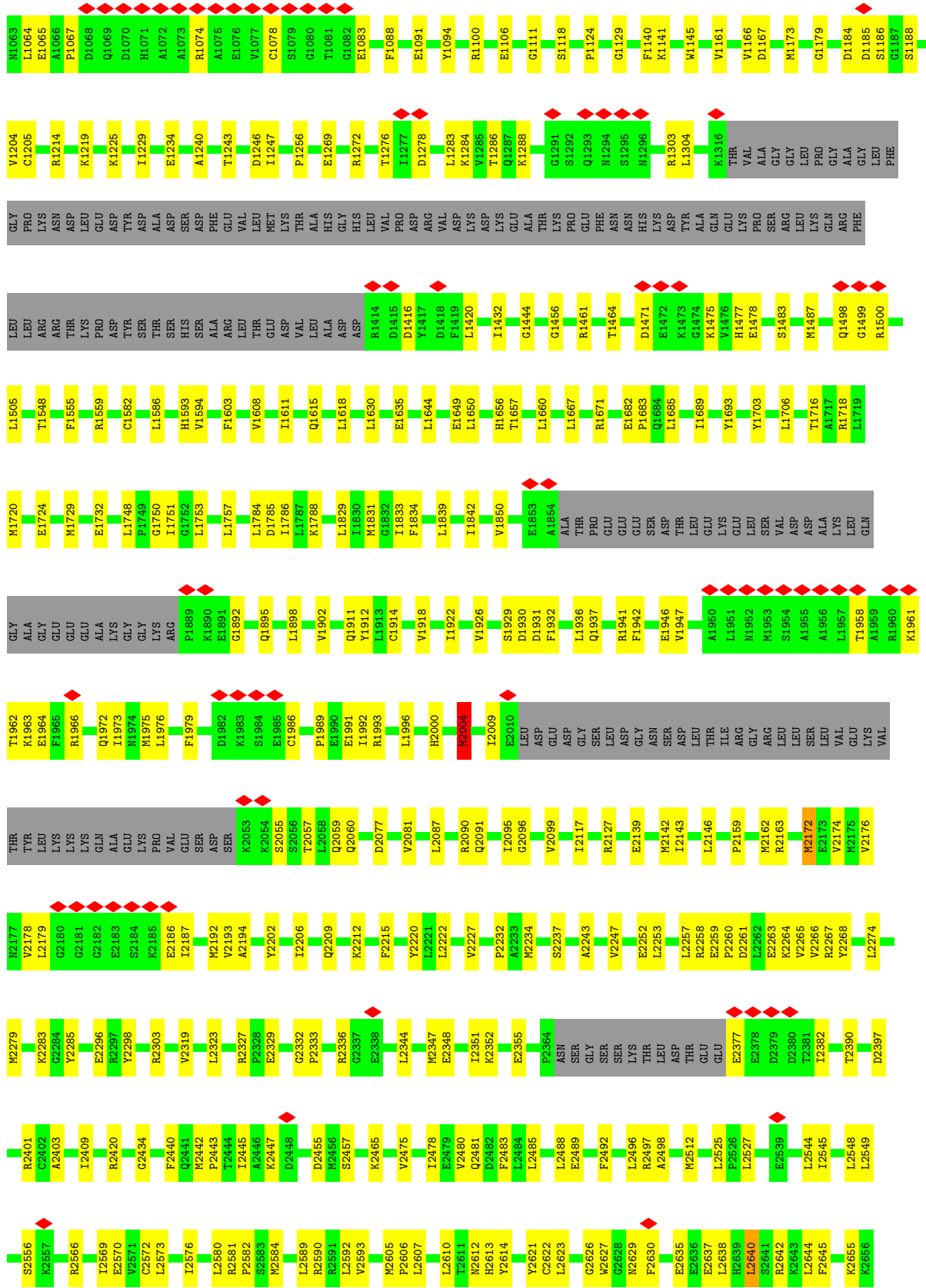
Mol	Chain	Residues	Atoms					AltConf
			Total	C	N	O	S	
5	A	1	23	18	1	3	1	0
5	B	1	23	18	1	3	1	0
5	C	1	23	18	1	3	1	0
5	D	1	23	18	1	3	1	0

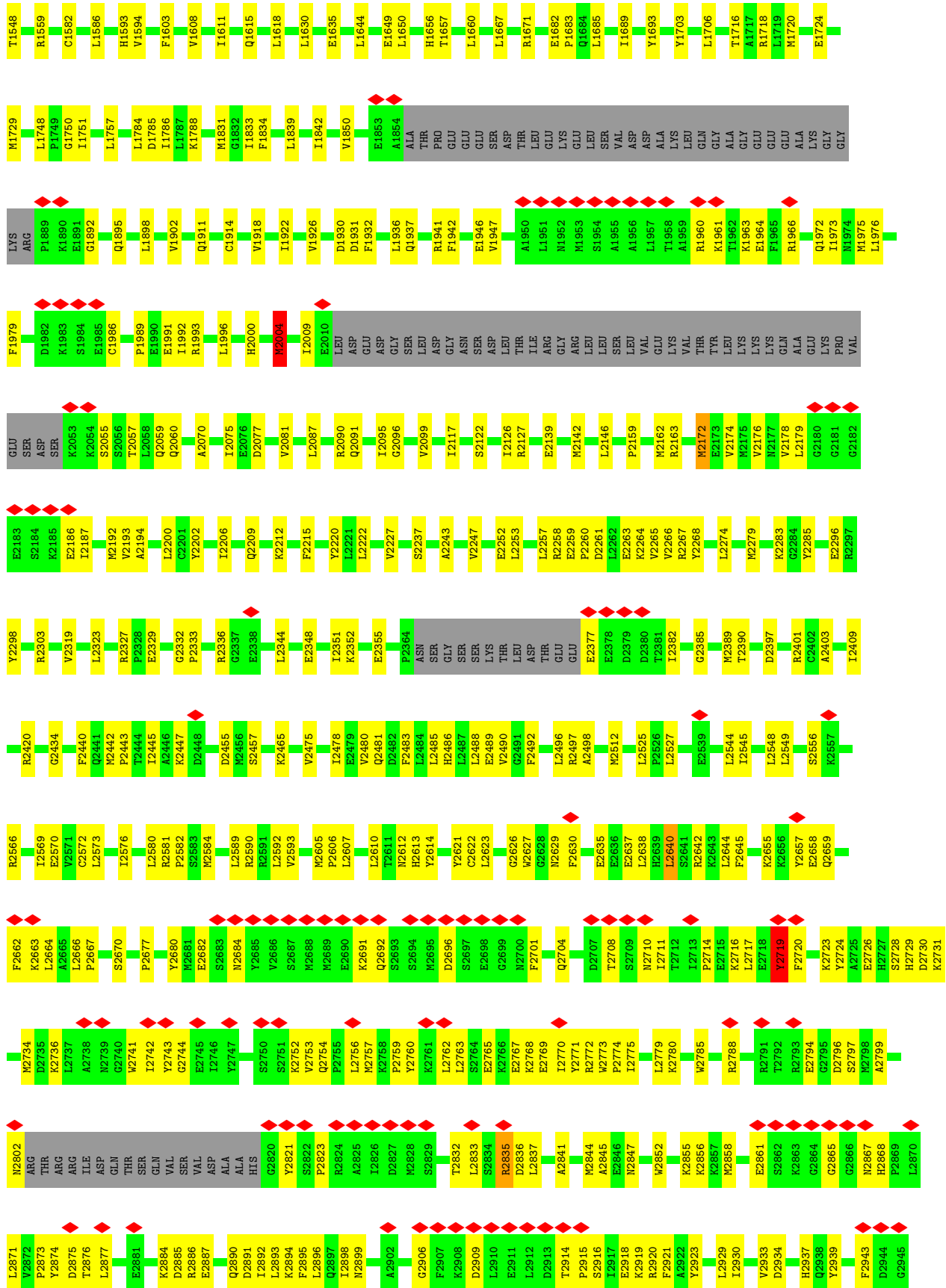
3 Residue-property plots

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

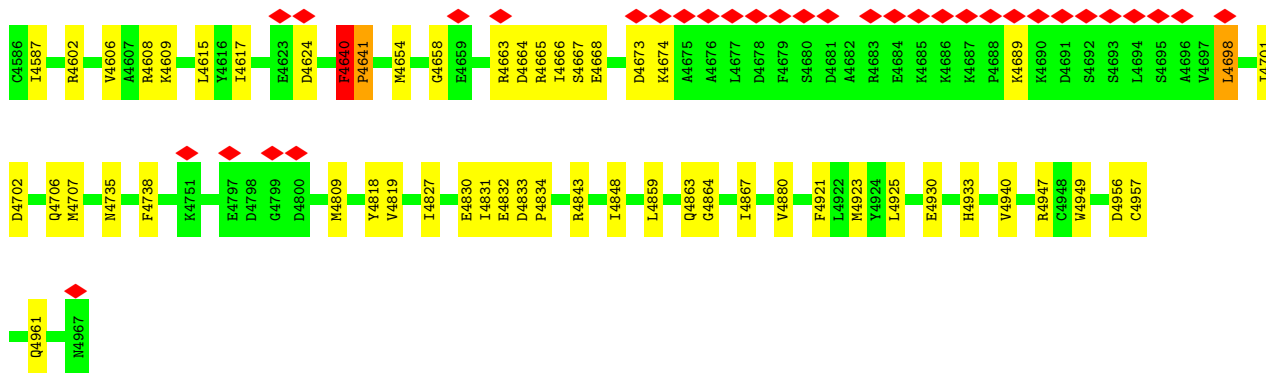
• Molecule 1: Ryanodine receptor 2



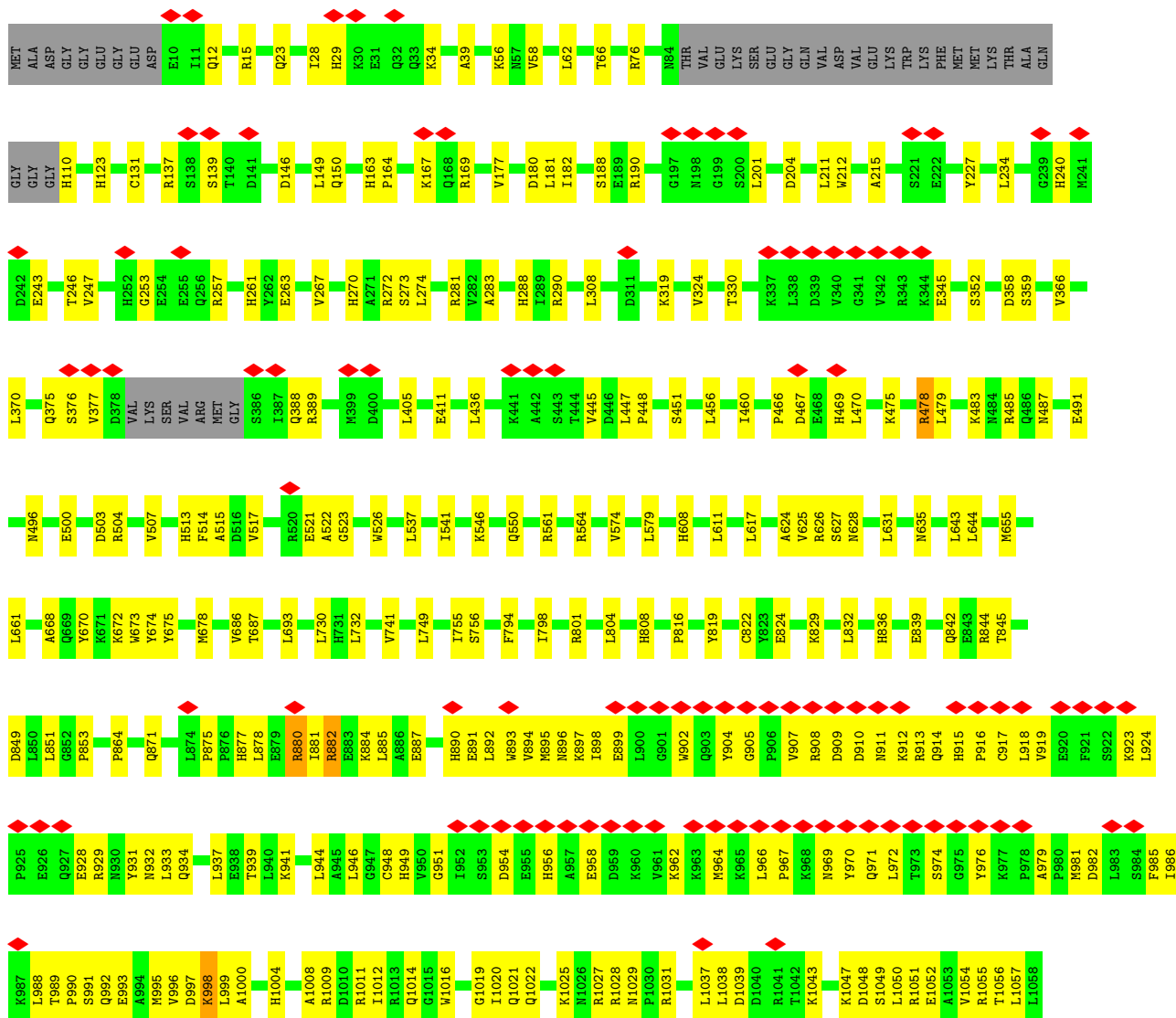


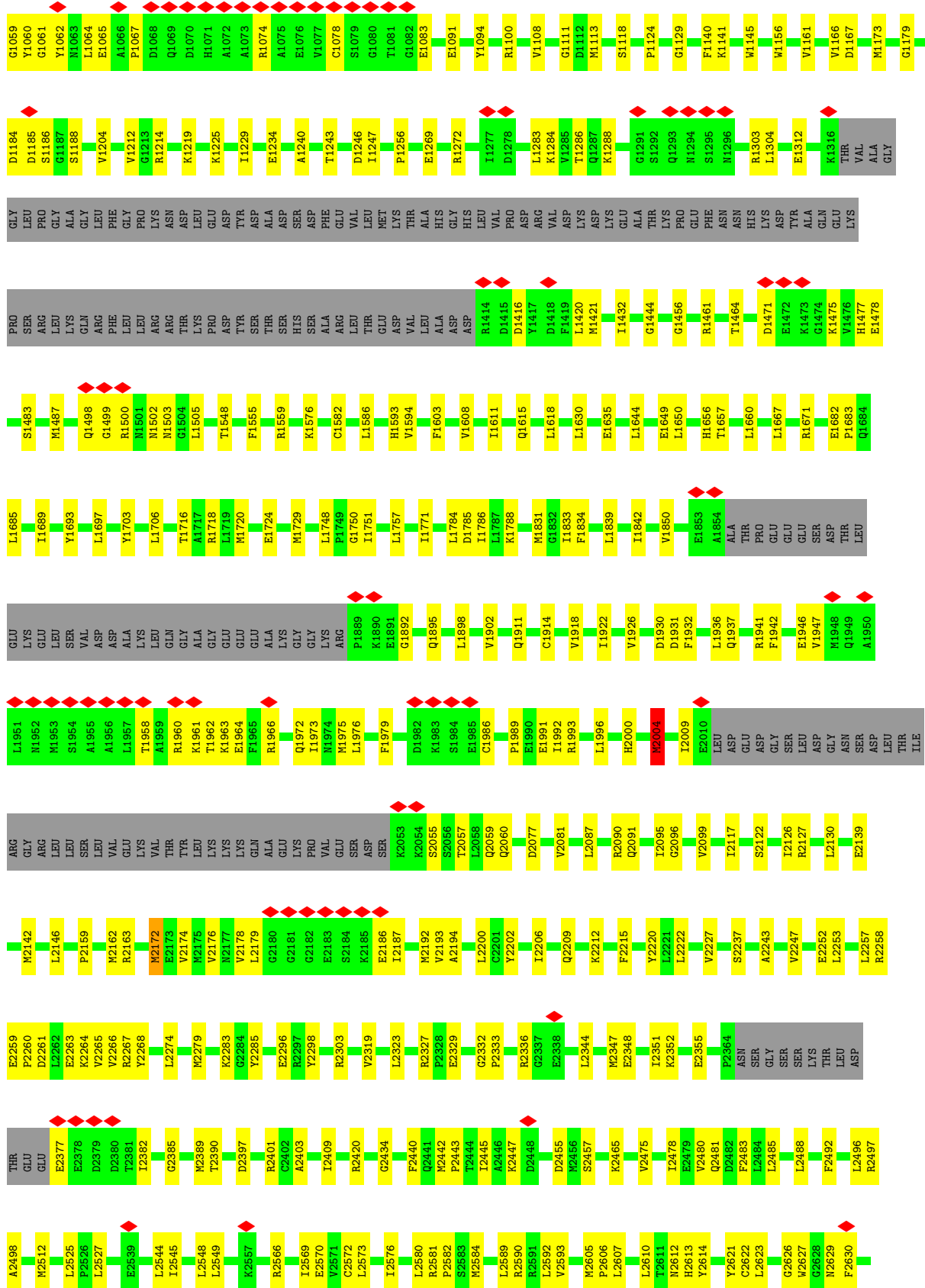


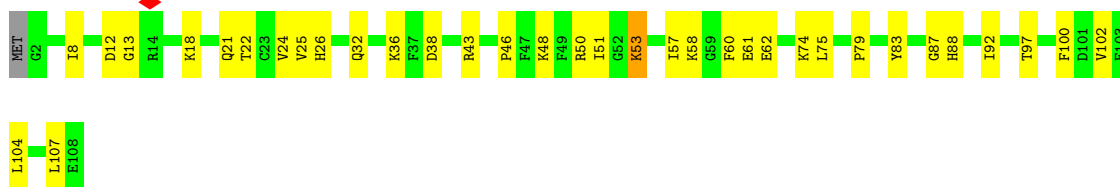
D4038	L3843	HIS	LYS	ARG	MET	T3975	P3209	S3145	Q3077	S3006	G2946
G4039	Q3844	PRO	LEU	TYR	VAL	L3276	S3210	I3146	G3078	L3007	S2947
R4040	L3845	ARG	GLU	SER	ALA	L3277	L3211	V3147	Q3079	K3010	R2948
G4041	L3846	SER	PRO	GLN	PHE	L3281	K3213	V3148	F3080	L3011	G2949
V4042	C3847	LYS	ALA	THR	VAL	L3282	K3214	L3214	R3081	L3014	R2950
R4043	E3848	LYS	ILE	SER	ILE	L3283	M3215	R3150	HIS	V3015	G2951
R4044	F3854	ALA	ARG	LEU	TYR	L3284	E3216	Q3151	THR	R3016	E2952
R4045	S3698	VAL	GLN	VAL	SER	Y3285	I3218	R3152	ARG	R3017	H2953
R4046	C3699	HIS	VAL	VAL	ASP	N3286	L3221	A3153	ASN	I3019	F2954
A4051	H3700	LYS	ALA	ALA	SER	N3287	G3224	A3154	GLN	S3020	F2955
A4052	L3879	LEU	LYS	LYS	ASN	L3288	S3224	L3155	PRO	D3025	V2956
H4055	Q3882	LEU	LYS	ARG	PHE	G3289	G3225	C3157	G3088	A3026	O2957
Y4058	F3888	SER	LYS	GLU	PHE	D3291	L3226	C3158	V3090	D3026	O2958
E4062	Y3889	LYS	LEU	LEU	LEU	E3292	I3226	L3159	T3091	I3029	I2960
T4063	W3890	ARG	ASN	ILE	GLU	G3293	Y3228	A3160	T3092	V3030	I2961
L4067	D3896	LYS	ARG	GLY	GLN	W3295	Q3230	F3162	Q3092	L3033	F2962
A4070	E3710	ALA	THR	LEU	ASN	K3297	H3233	A3163	I3093	H3043	F2963
E4071	V3711	ASP	ASP	ASN	PHE	R3298	R3234	G3164	M3094	H3034	A2964
T4072	V3711	THR	THR	THR	THR	L3299	V3234	A3165	Y3096	H3034	K2965
D4073	Q3728	SER	SER	VAL	VAL	M3300	M3235	F3166	T3097	I3035	V2966
F4074	A3729	ASP	PRO	ALA	ALA	V3301	E3236	V3167	L3101	L3036	V2967
N4075	R3730	PRO	GLY	PRO	GLN	F3302	V3237	P3168	L3102	G3037	L2968
L4078	L3731	GLU	GLY	ASP	ILE	Q3303	I3238	A3169	P3103	Q3038	F2969
D4079	H3732	THR	THR	GLN	THR	R3304	L3239	F3170	M3104	T3039	L2970
E4082	H3785	VAL	VAL	ASN	ASN	F3305	P3240	E3172	L3108	L3040	I2971
K4085	L3778	GLU	ARG	ILE	THR	L3306	M3241	E3173	F3109	D3041	I2972
R4086	L3778	ARG	ALA	ALA	PHE	N3308	Y3245	T3173	L3109	A3042	O2973
F4087	L3778	VAL	VAL	LEU	THR	K3309	M3246	H3174	E3110	R3043	V2974
L4101	E3783	ALA	LEU	LEU	LEU	F3312	S3247	L3175	G3117	L3050	F2975
L4102	K3784	ASN	ARG	ARG	THR	L3314	R3248	R3176	H3111	E3051	R2976
L4103	L3806	ASN	PHE	LYS	LYS	L3316	S3249	D3177	I3112	V3045	K2977
L4104	N3806	VAL	SER	LEU	SER	K3317	R3250	K3047	G3113	M3046	H2978
L4105	Q3811	VAL	LEU	LEU	THR	F3318	E3251	T3048	Q3114	K3047	R2979
S4106	E3815	HIS	HIS	THR	THR	L3320	H3252	G3049	F3117	G3049	L2980
E4107	G3816	GLU	GLU	GLU	VAL	P3321	E3255	L3057	G3118	L3050	V2981
D4112	L3817	GLN	GLN	ASP	ALA	L3322	N3256	R3068	F3119	E3052	F2982
T4113	G3818	LYS	SER	ASP	VAL	L3326	N3257	L3068	E3119	S3052	L2983
R4114	M3819	ARG	THR	LYS	THR	K3327	P3258	R3186	D3120	K3054	S2984
L4115	V3820	VAL	GLU	ALA	ALA	E3328	E3259	K3187	I3121	L3057	A2986
Q4116	T3821	VAL	ILE	ILE	GLU	K3329	R3260	R3192	I3122	R3068	S2987
T4117	E3822	ARG	GLY	ARG	GLU	L3330	A3261	A3193	L3123	R3068	R2988
F4118	F3823	ARG	ARG	SER	LYS	A3331	E3262	A3194	E3124	L3061	P2989
L4119	G3824	HIS	ARG	ARG	LYS	A3332	M3263	L3195	D3125	D3062	L2990
E4120	S3825	TYR	ARG	ARG	VAL	T3332	C3264	L3196	V3126	N3063	C2991
L4121	G3826	GLY	VAL	GLY	GLY	F3333	C3265	L3197	Q3127	E3066	S2992
A4122	E3827	LEU	LEU	LEU	ASP	V3334	T3266	P3198	Y3131	D3067	G2993
E4123	K3828	VAL	VAL	GLY	ASP	E3335	A3267	L3199	I3132	L3068	G2994
	D3833	ASP	GLY	ASP	GLY	E3336	L3268	N3269	I3133	E3069	H2995
	F3840	GLY	GLY	GLY	ASP	E3337	S3270	N3200	L3134	K3070	A2996
							H3272	M3072	L3135	T3071	A2997
							M3273	N3201	S3136	M3072	S2997
							N3274	V3201	L3137	E3073	K2999
								D3202	L3140	E3073	E3000
								D3203	G3141	E3074	K3001
								V3204	T3142		E3002
								T3208	S3143		M3003
									K3144		V3004
											T3005



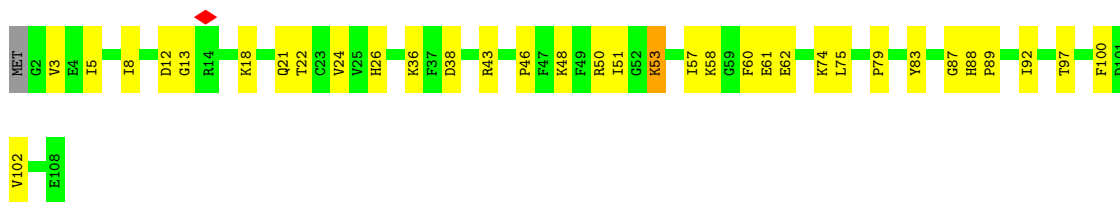
● Molecule 1: Ryanodine receptor 2



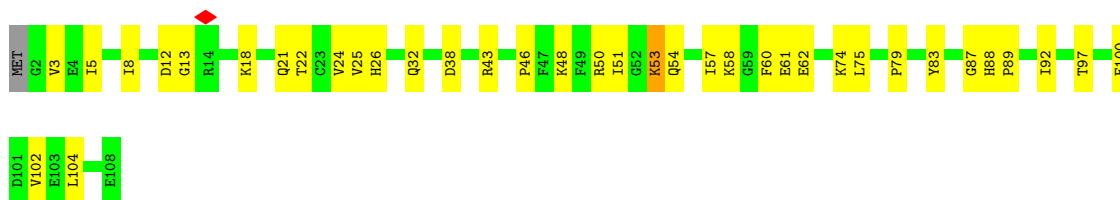




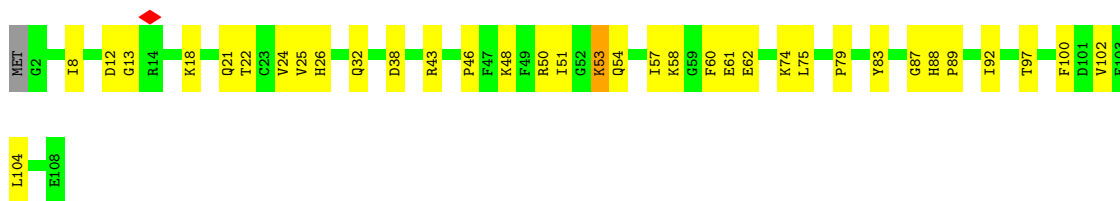
• Molecule 2: Peptidyl-prolyl cis-trans isomerase FKBP1B



• Molecule 2: Peptidyl-prolyl cis-trans isomerase FKBP1B



• Molecule 2: Peptidyl-prolyl cis-trans isomerase FKBP1B



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C4	Depositor
Number of particles used	83460	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	58	Depositor
Minimum defocus (nm)	500	Depositor
Maximum defocus (nm)	1200	Depositor
Magnification	Not provided	
Image detector	GATAN K3 BIOQUANTUM (6k x 4k)	Depositor
Maximum map value	0.550	Depositor
Minimum map value	-0.019	Depositor
Average map value	0.009	Depositor
Map value standard deviation	0.026	Depositor
Recommended contour level	0.12	Depositor
Map size (Å)	424.96, 424.96, 424.96	wwPDB
Map dimensions	512, 512, 512	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	0.83, 0.83, 0.83	Depositor

5 Model quality [i](#)

5.1 Standard geometry [i](#)

Bond lengths and bond angles in the following residue types are not validated in this section: ATP, KVR, ZN

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	0.27	0/34511	0.51	9/46614 (0.0%)
1	B	0.27	0/34511	0.51	9/46614 (0.0%)
1	C	0.27	0/34511	0.51	9/46614 (0.0%)
1	D	0.27	0/34511	0.51	9/46614 (0.0%)
2	E	0.29	0/834	0.53	0/1123
2	F	0.29	0/834	0.53	0/1123
2	G	0.29	0/834	0.53	0/1123
2	H	0.29	0/834	0.53	0/1123
All	All	0.27	0/141380	0.51	36/190948 (0.0%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	0	3
1	B	0	3
1	C	0	3
1	D	0	3
All	All	0	12

There are no bond length outliers.

All (36) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	D	3277	LEU	CA-CB-CG	8.45	134.73	115.30
1	A	3277	LEU	CA-CB-CG	8.43	134.69	115.30
1	C	3277	LEU	CA-CB-CG	8.42	134.67	115.30
1	B	3277	LEU	CA-CB-CG	8.42	134.66	115.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	2640	LEU	CB-CG-CD2	-7.00	99.11	111.00
1	A	2640	LEU	CB-CG-CD2	-6.99	99.12	111.00
1	C	2640	LEU	CB-CG-CD2	-6.99	99.12	111.00
1	D	2640	LEU	CB-CG-CD2	-6.98	99.13	111.00
1	D	3007	LEU	CA-CB-CG	6.84	131.03	115.30
1	A	3007	LEU	CA-CB-CG	6.83	131.01	115.30
1	C	3007	LEU	CA-CB-CG	6.83	131.01	115.30
1	B	3007	LEU	CA-CB-CG	6.82	130.99	115.30
1	C	3137	LEU	CA-CB-CG	6.37	129.95	115.30
1	A	3137	LEU	CA-CB-CG	6.37	129.94	115.30
1	B	3137	LEU	CA-CB-CG	6.37	129.94	115.30
1	D	3137	LEU	CA-CB-CG	6.36	129.92	115.30
1	B	3068	LEU	CA-CB-CG	5.78	128.60	115.30
1	A	3068	LEU	CA-CB-CG	5.78	128.60	115.30
1	C	3068	LEU	CA-CB-CG	5.78	128.60	115.30
1	D	3068	LEU	CA-CB-CG	5.78	128.59	115.30
1	B	2004	MET	CB-CG-SD	5.62	129.27	112.40
1	A	2004	MET	CB-CG-SD	5.61	129.24	112.40
1	C	2004	MET	CB-CG-SD	5.61	129.22	112.40
1	D	2004	MET	CB-CG-SD	5.61	129.22	112.40
1	B	3108	LEU	CA-CB-CG	5.55	128.08	115.30
1	A	3108	LEU	CA-CB-CG	5.55	128.07	115.30
1	C	3108	LEU	CA-CB-CG	5.55	128.07	115.30
1	D	3108	LEU	CA-CB-CG	5.54	128.03	115.30
1	A	2719	TYR	CB-CG-CD1	5.45	124.27	121.00
1	B	2719	TYR	CB-CG-CD1	5.45	124.27	121.00
1	D	2719	TYR	CB-CG-CD1	5.45	124.27	121.00
1	C	2719	TYR	CB-CG-CD1	5.43	124.26	121.00
1	B	4640	PHE	C-N-CD	-5.43	108.66	120.60
1	D	4640	PHE	C-N-CD	-5.41	108.71	120.60
1	A	4640	PHE	C-N-CD	-5.40	108.71	120.60
1	C	4640	PHE	C-N-CD	-5.39	108.73	120.60

There are no chirality outliers.

All (12) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	3192	ARG	Sidechain
1	A	3926	GLY	Peptide
1	A	4640	PHE	Peptide
1	B	3192	ARG	Sidechain
1	B	3926	GLY	Peptide

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	B	4640	PHE	Peptide
1	C	3192	ARG	Sidechain
1	C	3926	GLY	Peptide
1	C	4640	PHE	Peptide
1	D	3192	ARG	Sidechain
1	D	3926	GLY	Peptide
1	D	4640	PHE	Peptide

5.2 Too-close contacts [\(i\)](#)

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry-related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	33771	0	33455	796	0
1	B	33771	0	33455	790	0
1	C	33771	0	33455	799	0
1	D	33771	0	33455	809	0
2	E	818	0	821	24	0
2	F	818	0	821	23	0
2	G	818	0	821	25	0
2	H	818	0	821	26	0
3	A	1	0	0	0	0
3	B	1	0	0	0	0
3	C	1	0	0	0	0
3	D	1	0	0	0	0
4	A	62	0	24	9	0
4	B	62	0	24	9	0
4	C	62	0	24	9	0
4	D	62	0	24	10	0
5	A	23	0	0	7	0
5	B	23	0	0	7	0
5	C	23	0	0	7	0
5	D	23	0	0	7	0
All	All	138700	0	137200	3276	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 12.

All (3276) 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:C:3227:ARG:HE	1:C:3228:TYR:H	1.13	0.92
1:B:4834:PRO:HB3	1:B:4843:ARG:HD3	1.51	0.92
1:D:4834:PRO:HB3	1:D:4843:ARG:HD3	1.51	0.92
1:A:3227:ARG:HE	1:A:3228:TYR:H	1.13	0.91
1:A:4834:PRO:HB3	1:A:4843:ARG:HD3	1.51	0.91
1:C:4834:PRO:HB3	1:C:4843:ARG:HD3	1.51	0.90
1:B:3260:ARG:NH1	1:B:3264:CYS:SG	2.47	0.88
1:D:3227:ARG:HE	1:D:3228:TYR:H	1.13	0.88
1:A:3260:ARG:NH1	1:A:3264:CYS:SG	2.47	0.88
1:C:3260:ARG:NH1	1:C:3264:CYS:SG	2.47	0.88
1:D:3260:ARG:NH1	1:D:3264:CYS:SG	2.47	0.88
1:B:3227:ARG:HE	1:B:3228:TYR:H	1.13	0.88
1:B:3227:ARG:HH11	1:B:3290:ILE:HG13	1.41	0.84
1:D:3218:ILE:HD11	1:D:3276:LEU:HD22	1.60	0.84
1:D:3227:ARG:HH11	1:D:3290:ILE:HG13	1.41	0.84
2:E:51:ILE:O	2:E:53:LYS:NZ	2.11	0.84
1:A:3227:ARG:HH11	1:A:3290:ILE:HG13	1.41	0.84
2:H:51:ILE:O	2:H:53:LYS:NZ	2.11	0.84
1:C:3218:ILE:HD11	1:C:3276:LEU:HD22	1.60	0.84
1:A:3218:ILE:HD11	1:A:3276:LEU:HD22	1.60	0.83
1:B:3218:ILE:HD11	1:B:3276:LEU:HD22	1.60	0.83
2:F:51:ILE:O	2:F:53:LYS:NZ	2.11	0.82
1:C:3227:ARG:HH11	1:C:3290:ILE:HG13	1.41	0.82
2:G:51:ILE:O	2:G:53:LYS:NZ	2.11	0.82
1:B:1611:ILE:HD11	1:B:1618:LEU:HB2	1.62	0.81
1:C:1611:ILE:HD11	1:C:1618:LEU:HB2	1.62	0.81
1:B:891:GLU:HA	1:B:894:VAL:HG22	1.63	0.81
1:C:3127:GLN:HG3	1:C:3183:ILE:HB	1.63	0.80
1:A:891:GLU:HA	1:A:894:VAL:HG22	1.63	0.80
1:A:1611:ILE:HD11	1:A:1618:LEU:HB2	1.62	0.80
1:D:2719:TYR:HE2	1:D:2799:ALA:HB2	1.47	0.80
1:C:891:GLU:HA	1:C:894:VAL:HG22	1.63	0.80
1:C:2719:TYR:HE2	1:C:2799:ALA:HB2	1.47	0.80
1:D:891:GLU:HA	1:D:894:VAL:HG22	1.63	0.80
1:B:3292:GLU:HG2	1:B:3334:VAL:HG21	1.65	0.79
1:B:3127:GLN:HG3	1:B:3183:ILE:HB	1.63	0.79
1:A:2719:TYR:HE2	1:A:2799:ALA:HB2	1.47	0.79
1:D:1611:ILE:HD11	1:D:1618:LEU:HB2	1.62	0.79
1:A:3292:GLU:HG2	1:A:3334:VAL:HG21	1.65	0.79
1:D:3292:GLU:HG2	1:D:3334:VAL:HG21	1.64	0.79
1:D:3127:GLN:HG3	1:D:3183:ILE:HB	1.63	0.79
1:A:3127:GLN:HG3	1:A:3183:ILE:HB	1.63	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:3292:GLU:HG2	1:C:3334:VAL:HG21	1.65	0.78
1:B:2719:TYR:HE2	1:B:2799:ALA:HB2	1.47	0.78
4:B:5003:ATP:O2A	5:B:5004:KVR:C14	2.32	0.77
1:B:1031:ARG:NH1	5:B:5004:KVR:O22	2.18	0.77
1:A:2998:ASN:ND2	1:A:3048:THR:OG1	2.18	0.77
1:D:2998:ASN:ND2	1:D:3048:THR:OG1	2.18	0.77
1:B:2998:ASN:ND2	1:B:3048:THR:OG1	2.18	0.77
1:C:1031:ARG:NH1	5:C:5004:KVR:O22	2.18	0.77
4:D:5003:ATP:O2A	5:D:5004:KVR:C14	2.32	0.77
1:A:3227:ARG:NH1	1:A:3290:ILE:O	2.18	0.77
4:A:5003:ATP:O2A	5:A:5004:KVR:C14	2.33	0.77
4:C:5003:ATP:O2A	5:C:5004:KVR:C14	2.33	0.76
1:A:1031:ARG:NH1	5:A:5004:KVR:O22	2.18	0.76
1:C:2998:ASN:ND2	1:C:3048:THR:OG1	2.18	0.76
1:C:3227:ARG:NH1	1:C:3290:ILE:O	2.18	0.76
1:C:1947:VAL:HG22	1:C:1961:LYS:HE2	1.68	0.75
1:D:1031:ARG:NH1	5:D:5004:KVR:O22	2.18	0.75
1:B:3227:ARG:NH1	1:B:3290:ILE:O	2.18	0.75
1:D:3227:ARG:NH1	1:D:3290:ILE:O	2.18	0.75
1:D:2159:PRO:HA	1:D:2162:MET:HE2	1.69	0.75
1:B:1947:VAL:HG22	1:B:1961:LYS:HE2	1.68	0.75
1:A:76:ARG:HD2	1:D:3890:TRP:HB3	1.67	0.74
1:B:3945:VAL:HG23	1:B:4006:SER:HB3	1.70	0.74
1:D:1947:VAL:HG22	1:D:1961:LYS:HE2	1.68	0.74
1:B:3674:THR:O	1:B:3679:LYS:NZ	2.21	0.74
1:C:3945:VAL:HG23	1:C:4006:SER:HB3	1.70	0.74
1:A:3674:THR:O	1:A:3679:LYS:NZ	2.21	0.74
1:B:2895:PHE:O	1:B:2899:ASN:ND2	2.21	0.74
1:D:2895:PHE:O	1:D:2899:ASN:ND2	2.21	0.74
1:A:1548:THR:O	1:D:2832:THR:OG1	2.05	0.73
1:A:1947:VAL:HG22	1:A:1961:LYS:HE2	1.68	0.73
1:C:3149:GLU:O	1:C:3152:ARG:NH1	2.21	0.73
1:A:3149:GLU:O	1:A:3152:ARG:NH1	2.21	0.73
1:C:483:LYS:O	1:C:487:ASN:ND2	2.21	0.73
4:C:5003:ATP:H5'2	5:C:5004:KVR:C20	2.19	0.73
1:A:2159:PRO:HA	1:A:2162:MET:HE2	1.70	0.73
1:A:3192:ARG:HH22	1:A:3197:LEU:HD23	1.54	0.73
1:C:2895:PHE:O	1:C:2899:ASN:ND2	2.21	0.73
1:C:3674:THR:O	1:C:3679:LYS:NZ	2.21	0.73
1:B:3149:GLU:O	1:B:3152:ARG:NH1	2.21	0.73
1:C:2929:LEU:HD11	1:C:2971:ILE:HG12	1.70	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:3192:ARG:HH22	1:D:3197:LEU:HD23	1.54	0.73
1:D:3674:THR:O	1:D:3679:LYS:NZ	2.21	0.73
1:A:483:LYS:O	1:A:487:ASN:ND2	2.21	0.73
1:A:2657:TYR:HA	1:A:2662:PHE:CE1	2.24	0.73
1:C:2159:PRO:HA	1:C:2162:MET:HE2	1.70	0.73
1:D:3042:ALA:HB3	1:D:3117:PHE:HE1	1.54	0.73
1:D:3149:GLU:O	1:D:3152:ARG:NH1	2.21	0.73
4:D:5003:ATP:H5'2	5:D:5004:KVR:C20	2.19	0.73
1:D:2657:TYR:HA	1:D:2662:PHE:CE1	2.24	0.73
1:A:2711:ILE:O	1:A:2780:LYS:NZ	2.21	0.72
1:A:2799:ALA:O	1:A:2802:ASN:ND2	2.22	0.72
1:B:2711:ILE:O	1:B:2780:LYS:NZ	2.22	0.72
1:C:2799:ALA:O	1:C:2802:ASN:ND2	2.22	0.72
1:A:2895:PHE:O	1:A:2899:ASN:ND2	2.21	0.72
1:A:3945:VAL:HG23	1:A:4006:SER:HB3	1.70	0.72
1:A:4640:PHE:CD2	1:A:4641:PRO:HD3	2.24	0.72
1:B:2657:TYR:HA	1:B:2662:PHE:CE1	2.24	0.72
4:B:5003:ATP:H5'2	5:B:5004:KVR:C20	2.19	0.72
1:C:4640:PHE:CD2	1:C:4641:PRO:HD3	2.24	0.72
1:B:4640:PHE:CD2	1:B:4641:PRO:HD3	2.24	0.72
1:C:3042:ALA:HB3	1:C:3117:PHE:HE1	1.54	0.72
1:B:3890:TRP:HB3	1:C:76:ARG:HD2	1.71	0.72
1:D:483:LYS:O	1:D:487:ASN:ND2	2.21	0.72
1:D:3945:VAL:HG23	1:D:4006:SER:HB3	1.70	0.72
1:B:958:GLU:HG2	1:B:1061:GLY:HA3	1.72	0.72
1:C:2657:TYR:HA	1:C:2662:PHE:CE1	2.24	0.72
1:D:958:GLU:HG2	1:D:1061:GLY:HA3	1.72	0.72
1:A:3042:ALA:HB3	1:A:3117:PHE:HE1	1.54	0.72
1:B:678:MET:SD	1:B:801:ARG:NH2	2.63	0.72
1:B:2929:LEU:HD11	1:B:2971:ILE:HG12	1.70	0.72
1:C:3192:ARG:HH22	1:C:3197:LEU:HD23	1.54	0.72
1:D:678:MET:SD	1:D:801:ARG:NH2	2.63	0.72
4:A:5003:ATP:H5'2	5:A:5004:KVR:C20	2.19	0.72
1:B:2799:ALA:O	1:B:2802:ASN:ND2	2.22	0.72
1:B:3042:ALA:HB3	1:B:3117:PHE:HE1	1.54	0.72
1:C:2711:ILE:O	1:C:2780:LYS:NZ	2.22	0.71
1:B:3192:ARG:HH22	1:B:3197:LEU:HD23	1.54	0.71
1:C:3890:TRP:HB3	1:D:76:ARG:HD2	1.71	0.71
1:D:2799:ALA:O	1:D:2802:ASN:ND2	2.22	0.71
1:D:2929:LEU:HD11	1:D:2971:ILE:HG12	1.70	0.71
1:A:2929:LEU:HD11	1:A:2971:ILE:HG12	1.70	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:678:MET:SD	1:A:801:ARG:NH2	2.63	0.71
1:B:483:LYS:O	1:B:487:ASN:ND2	2.21	0.71
1:C:678:MET:SD	1:C:801:ARG:NH2	2.63	0.71
1:D:4640:PHE:CD2	1:D:4641:PRO:HD3	2.24	0.71
1:B:2743:TYR:HD1	1:B:2757:MET:HB2	1.56	0.71
1:B:2159:PRO:HA	1:B:2162:MET:HE2	1.70	0.71
1:C:1129:GLY:HA3	1:C:1145:TRP:HB3	1.72	0.71
1:C:882:ARG:NH2	1:C:933:LEU:O	2.24	0.71
1:C:2832:THR:OG1	1:D:1548:THR:O	2.09	0.71
1:A:1129:GLY:HA3	1:A:1145:TRP:HB3	1.72	0.70
1:C:958:GLU:HG2	1:C:1061:GLY:HA3	1.72	0.70
1:C:2743:TYR:HD1	1:C:2757:MET:HB2	1.56	0.70
1:D:1129:GLY:HA3	1:D:1145:TRP:HB3	1.72	0.70
1:A:882:ARG:NH2	1:A:933:LEU:O	2.24	0.70
1:B:1129:GLY:HA3	1:B:1145:TRP:HB3	1.72	0.70
1:B:882:ARG:NH2	1:B:933:LEU:O	2.24	0.70
1:A:2832:THR:OG1	1:B:1548:THR:O	2.09	0.70
1:A:2996:ALA:O	1:A:3001:LYS:NZ	2.25	0.70
1:C:2996:ALA:O	1:C:3001:LYS:NZ	2.25	0.70
1:D:882:ARG:NH2	1:D:933:LEU:O	2.24	0.70
1:A:958:GLU:HG2	1:A:1061:GLY:HA3	1.72	0.70
1:A:2743:TYR:HD1	1:A:2757:MET:HB2	1.56	0.70
1:D:2890:GLN:HB3	1:D:2894:LYS:HE2	1.72	0.70
1:D:2996:ALA:O	1:D:3001:LYS:NZ	2.25	0.70
1:B:2890:GLN:HB3	1:B:2894:LYS:HE2	1.72	0.70
1:A:2890:GLN:HB3	1:A:2894:LYS:HE2	1.72	0.69
1:D:2729:HIS:N	1:D:2771:TYR:OH	2.25	0.69
1:D:2743:TYR:HD1	1:D:2757:MET:HB2	1.56	0.69
1:A:2744:GLY:HA3	1:A:2753:VAL:HB	1.75	0.69
1:C:2729:HIS:N	1:C:2771:TYR:OH	2.26	0.69
1:C:2890:GLN:HB3	1:C:2894:LYS:HE2	1.72	0.69
2:H:24:VAL:HG22	2:H:48:LYS:HG2	1.75	0.69
1:A:2607:LEU:HD11	1:A:2664:LEU:HG	1.75	0.69
1:A:2729:HIS:N	1:A:2771:TYR:OH	2.26	0.69
1:B:2979:ARG:HH22	1:B:3035:ILE:HB	1.58	0.69
1:B:2996:ALA:O	1:B:3001:LYS:NZ	2.25	0.69
1:B:3097:THR:HA	1:B:3101:LEU:HD12	1.75	0.69
1:C:2744:GLY:HA3	1:C:2753:VAL:HB	1.75	0.69
1:D:2979:ARG:HH22	1:D:3035:ILE:HB	1.58	0.69
1:A:2979:ARG:HH22	1:A:3035:ILE:HB	1.58	0.69
1:D:2711:ILE:O	1:D:2780:LYS:NZ	2.22	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2729:HIS:N	1:B:2771:TYR:OH	2.26	0.69
1:C:2979:ARG:HH22	1:C:3035:ILE:HB	1.58	0.69
1:B:2832:THR:OG1	1:C:1548:THR:O	2.11	0.68
1:B:919:VAL:HG21	1:B:923:LYS:HZ1	1.58	0.68
1:B:3016:ARG:NH2	1:B:3066:GLU:OE2	2.26	0.68
1:A:3097:THR:HA	1:A:3101:LEU:HD12	1.75	0.68
1:C:3016:ARG:NH2	1:C:3066:GLU:OE2	2.26	0.68
1:D:3097:THR:HA	1:D:3101:LEU:HD12	1.75	0.68
1:B:2744:GLY:HA3	1:B:2753:VAL:HB	1.74	0.68
1:C:2607:LEU:HD11	1:C:2664:LEU:HG	1.75	0.68
1:B:2607:LEU:HD11	1:B:2664:LEU:HG	1.75	0.68
1:C:3097:THR:HA	1:C:3101:LEU:HD12	1.75	0.68
1:D:2920:ARG:NH1	1:D:2981:TYR:OH	2.27	0.68
1:D:2744:GLY:HA3	1:D:2753:VAL:HB	1.75	0.68
2:E:24:VAL:HG22	2:E:48:LYS:HG2	1.75	0.68
2:G:24:VAL:HG22	2:G:48:LYS:HG2	1.75	0.68
1:D:2607:LEU:HD11	1:D:2664:LEU:HG	1.75	0.67
1:A:3016:ARG:NH2	1:A:3066:GLU:OE2	2.26	0.67
2:F:24:VAL:HG22	2:F:48:LYS:HG2	1.75	0.67
1:D:3016:ARG:NH2	1:D:3066:GLU:OE2	2.26	0.67
1:C:1788:LYS:HD3	1:C:1833:ILE:HG22	1.77	0.67
1:A:2920:ARG:NH1	1:A:2981:TYR:OH	2.27	0.67
1:B:3166:PHE:O	1:B:3248:ARG:NH2	2.28	0.67
1:C:2891:ASP:OD1	1:C:2892:ILE:N	2.28	0.67
1:A:2891:ASP:OD1	1:A:2892:ILE:N	2.28	0.67
1:B:2920:ARG:NH1	1:B:2981:TYR:OH	2.27	0.67
1:D:3166:PHE:O	1:D:3248:ARG:NH2	2.28	0.67
1:A:1074:ARG:HH22	1:A:1078:CYS:HB3	1.58	0.67
1:B:1788:LYS:HD3	1:B:1833:ILE:HG22	1.77	0.67
1:C:2920:ARG:NH1	1:C:2981:TYR:OH	2.27	0.67
1:A:3890:TRP:HB3	1:B:76:ARG:HD2	1.76	0.66
1:D:2891:ASP:OD1	1:D:2892:ILE:N	2.28	0.66
1:B:4031:THR:OG1	1:B:4055:HIS:NE2	2.29	0.66
1:C:1074:ARG:HH22	1:C:1078:CYS:HB3	1.58	0.66
1:D:1074:ARG:HH22	1:D:1078:CYS:HB3	1.58	0.66
1:D:3314:LEU:O	1:D:3318:HIS:HB2	1.96	0.66
1:B:1498:GLN:HG2	1:B:1499:GLY:H	1.61	0.66
1:A:1788:LYS:HD3	1:A:1833:ILE:HG22	1.77	0.66
1:D:1788:LYS:HD3	1:D:1833:ILE:HG22	1.77	0.66
1:D:1986:CYS:SG	1:D:1993:ARG:NH2	2.69	0.66
1:A:3314:LEU:O	1:A:3318:HIS:HB2	1.96	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1498:GLN:HG2	1:D:1499:GLY:H	1.61	0.66
1:A:1498:GLN:HG2	1:A:1499:GLY:H	1.61	0.66
1:A:2943:PHE:HZ	1:A:2956:TYR:HB2	1.61	0.66
1:C:3314:LEU:O	1:C:3318:HIS:HB2	1.96	0.66
1:C:4031:THR:OG1	1:C:4055:HIS:NE2	2.29	0.66
1:A:895:MET:HB3	1:A:972:LEU:HB3	1.78	0.66
1:B:895:MET:HB3	1:B:972:LEU:HB3	1.78	0.66
1:B:2891:ASP:OD1	1:B:2892:ILE:N	2.28	0.66
1:C:875:PRO:HD2	1:C:878:LEU:HD12	1.78	0.66
1:C:1986:CYS:SG	1:C:1993:ARG:NH2	2.69	0.65
1:B:3314:LEU:O	1:B:3318:HIS:HB2	1.96	0.65
1:C:895:MET:HB3	1:C:972:LEU:HB3	1.78	0.65
1:D:2943:PHE:HZ	1:D:2956:TYR:HB2	1.61	0.65
1:A:875:PRO:HD2	1:A:878:LEU:HD12	1.78	0.65
1:B:875:PRO:HD2	1:B:878:LEU:HD12	1.78	0.65
1:B:2769:GLU:O	1:B:2771:TYR:N	2.27	0.65
1:B:2972:ASP:HA	1:B:3035:ILE:HD11	1.78	0.65
1:A:2769:GLU:O	1:A:2771:TYR:N	2.27	0.65
1:A:3166:PHE:O	1:A:3248:ARG:NH2	2.28	0.65
1:B:844:ARG:NH1	1:B:845:THR:OG1	2.30	0.65
1:D:1911:GLN:OE1	1:D:2090:ARG:NH1	2.30	0.65
1:D:2916:SER:HB3	1:D:2919:LYS:HB2	1.79	0.65
1:A:1986:CYS:SG	1:A:1993:ARG:NH2	2.69	0.65
1:A:2916:SER:HB3	1:A:2919:LYS:HB2	1.79	0.65
1:B:2057:THR:HB	1:B:2060:GLN:HG3	1.79	0.65
1:C:1498:GLN:HG2	1:C:1499:GLY:H	1.61	0.65
1:C:2972:ASP:HA	1:C:3035:ILE:HD11	1.78	0.65
1:B:2916:SER:HB3	1:B:2919:LYS:HB2	1.79	0.65
1:C:919:VAL:HG21	1:C:923:LYS:HZ2	1.61	0.65
1:C:3166:PHE:O	1:C:3248:ARG:NH2	2.28	0.65
1:B:1074:ARG:HH22	1:B:1078:CYS:HB3	1.58	0.65
1:C:2570:GLU:HG2	1:C:2605:MET:HB2	1.79	0.65
1:D:2937:HIS:HA	1:D:3014:LEU:HD11	1.79	0.65
1:A:2057:THR:HB	1:A:2060:GLN:HG3	1.79	0.65
1:B:1986:CYS:SG	1:B:1993:ARG:NH2	2.69	0.65
1:C:844:ARG:NH1	1:C:845:THR:OG1	2.30	0.65
1:C:1456:GLY:O	1:C:1461:ARG:NH2	2.30	0.65
1:D:895:MET:HB3	1:D:972:LEU:HB3	1.78	0.65
1:D:4667:SER:HB2	1:D:4674:LYS:HE2	1.79	0.65
1:A:844:ARG:NH1	1:A:845:THR:OG1	2.30	0.65
1:D:844:ARG:NH1	1:D:845:THR:OG1	2.30	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2057:THR:HB	1:C:2060:GLN:HG3	1.79	0.64
1:D:875:PRO:HD2	1:D:878:LEU:HD12	1.78	0.64
1:B:1911:GLN:OE1	1:B:2090:ARG:NH1	2.30	0.64
1:C:2916:SER:HB3	1:C:2919:LYS:HB2	1.79	0.64
1:D:4031:THR:OG1	1:D:4055:HIS:NE2	2.29	0.64
1:A:4031:THR:OG1	1:A:4055:HIS:NE2	2.29	0.64
1:B:2570:GLU:HG2	1:B:2605:MET:HB2	1.79	0.64
1:A:1911:GLN:OE1	1:A:2090:ARG:NH1	2.30	0.64
1:C:1911:GLN:OE1	1:C:2090:ARG:NH1	2.30	0.64
1:C:2937:HIS:HA	1:C:3014:LEU:HD11	1.79	0.64
1:C:2943:PHE:HZ	1:C:2956:TYR:HB2	1.61	0.64
1:C:4667:SER:HB2	1:C:4674:LYS:HE2	1.79	0.64
1:D:1456:GLY:O	1:D:1461:ARG:NH2	2.30	0.64
1:B:864:PRO:HB2	1:B:1009:ARG:HG2	1.80	0.64
1:C:864:PRO:HB2	1:C:1009:ARG:HG2	1.80	0.64
1:D:2057:THR:HB	1:D:2060:GLN:HG3	1.79	0.64
1:D:2570:GLU:HG2	1:D:2605:MET:HB2	1.79	0.64
1:A:864:PRO:HB2	1:A:1009:ARG:HG2	1.80	0.64
1:B:2943:PHE:HZ	1:B:2956:TYR:HB2	1.61	0.64
1:A:4667:SER:HB2	1:A:4674:LYS:HE2	1.79	0.64
1:C:3261:ALA:O	1:C:3262:GLU:HG3	1.98	0.64
1:D:2972:ASP:HA	1:D:3035:ILE:HD11	1.79	0.64
1:A:247:VAL:O	1:A:272:ARG:NH2	2.31	0.64
1:B:247:VAL:O	1:B:272:ARG:NH2	2.31	0.64
1:D:2670:SER:HB2	1:D:2973:GLN:HG2	1.79	0.64
1:D:864:PRO:HB2	1:D:1009:ARG:HG2	1.80	0.63
1:D:986:ILE:O	1:D:1055:ARG:NH2	2.32	0.63
1:D:3004:VAL:HA	1:D:3007:LEU:HD13	1.80	0.63
1:B:2670:SER:HB2	1:B:2973:GLN:HG2	1.79	0.63
1:A:2670:SER:HB2	1:A:2973:GLN:HG2	1.79	0.63
1:A:2972:ASP:HA	1:A:3035:ILE:HD11	1.79	0.63
1:A:3004:VAL:HA	1:A:3007:LEU:HD13	1.80	0.63
1:B:3261:ALA:O	1:B:3262:GLU:HG3	1.98	0.63
1:A:2478:ILE:HG21	1:A:2527:LEU:HD11	1.81	0.63
1:C:2478:ILE:HG21	1:C:2527:LEU:HD11	1.81	0.63
1:C:3227:ARG:NH1	1:C:3287:ASN:HB2	2.14	0.63
1:A:986:ILE:O	1:A:1055:ARG:NH2	2.32	0.63
1:A:2570:GLU:HG2	1:A:2605:MET:HB2	1.79	0.63
1:B:904:TYR:HB2	1:B:918:LEU:HD23	1.81	0.63
1:C:839:GLU:HB3	1:C:851:LEU:HD12	1.80	0.63
1:B:2937:HIS:HA	1:B:3014:LEU:HD11	1.79	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:247:VAL:O	1:C:272:ARG:NH2	2.31	0.63
1:C:986:ILE:O	1:C:1055:ARG:NH2	2.32	0.63
1:D:3033:LEU:HD13	1:D:3104:MET:HB3	1.81	0.63
1:A:904:TYR:HB2	1:A:918:LEU:HD23	1.81	0.63
1:A:1456:GLY:O	1:A:1461:ARG:NH2	2.30	0.63
1:A:2937:HIS:HA	1:A:3014:LEU:HD11	1.79	0.63
1:C:2892:ILE:HG23	1:C:2893:LEU:HD12	1.81	0.63
1:D:247:VAL:O	1:D:272:ARG:NH2	2.31	0.63
1:B:4667:SER:HB2	1:B:4674:LYS:HE2	1.79	0.63
1:B:986:ILE:O	1:B:1055:ARG:NH2	2.32	0.62
1:B:2478:ILE:HG21	1:B:2527:LEU:HD11	1.81	0.62
1:B:2892:ILE:HG23	1:B:2893:LEU:HD12	1.81	0.62
1:B:3227:ARG:NH1	1:B:3287:ASN:HB2	2.13	0.62
1:C:964:MET:HB3	1:C:979:ALA:HB3	1.81	0.62
1:C:2670:SER:HB2	1:C:2973:GLN:HG2	1.79	0.62
1:D:839:GLU:HB3	1:D:851:LEU:HD12	1.80	0.62
1:D:2478:ILE:HG21	1:D:2527:LEU:HD11	1.81	0.62
1:D:3227:ARG:NH1	1:D:3287:ASN:HB2	2.13	0.62
1:A:3261:ALA:O	1:A:3262:GLU:HG3	1.98	0.62
1:C:1464:THR:HG22	1:C:1483:SER:HB2	1.81	0.62
1:C:4609:LYS:HD2	1:C:4615:LEU:HD13	1.82	0.62
1:D:2892:ILE:HG23	1:D:2893:LEU:HD12	1.81	0.62
1:D:3261:ALA:O	1:D:3262:GLU:HG3	1.98	0.62
1:A:4930:GLU:HA	1:A:4933:HIS:CD2	2.35	0.62
1:B:964:MET:HB3	1:B:979:ALA:HB3	1.81	0.62
1:C:3033:LEU:HD13	1:C:3104:MET:HB3	1.81	0.62
1:B:1464:THR:HG22	1:B:1483:SER:HB2	1.81	0.62
1:B:4930:GLU:HA	1:B:4933:HIS:CD2	2.35	0.62
1:C:4930:GLU:HA	1:C:4933:HIS:CD2	2.35	0.62
1:A:3033:LEU:HD13	1:A:3104:MET:HB3	1.81	0.62
1:A:4609:LYS:HD2	1:A:4615:LEU:HD13	1.82	0.62
1:B:3033:LEU:HD13	1:B:3104:MET:HB3	1.81	0.62
1:A:954:ASP:OD2	1:A:956:HIS:NE2	2.33	0.62
1:A:3037:GLY:HA2	1:A:3040:LEU:HD23	1.81	0.62
1:A:3227:ARG:NH1	1:A:3287:ASN:HB2	2.14	0.62
1:A:3259:GLU:O	1:A:3260:ARG:HD3	2.00	0.62
1:A:4082:GLU:HA	1:A:4085:LYS:HE2	1.82	0.62
1:B:3259:GLU:O	1:B:3260:ARG:HD3	2.00	0.62
1:B:4609:LYS:HD2	1:B:4615:LEU:HD13	1.82	0.62
1:D:4930:GLU:HA	1:D:4933:HIS:CD2	2.35	0.62
1:D:4082:GLU:HA	1:D:4085:LYS:HE2	1.82	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:964:MET:HB3	1:A:979:ALA:HB3	1.82	0.62
2:F:22:THR:HA	2:F:50:ARG:HA	1.81	0.62
1:B:839:GLU:HB3	1:B:851:LEU:HD12	1.80	0.62
1:C:1303:ARG:NH2	1:C:1635:GLU:OE1	2.33	0.62
1:C:2769:GLU:O	1:C:2771:TYR:N	2.27	0.62
1:D:2769:GLU:O	1:D:2771:TYR:N	2.27	0.62
1:D:4609:LYS:HD2	1:D:4615:LEU:HD13	1.82	0.62
1:A:919:VAL:HG21	1:A:923:LYS:HZ1	1.64	0.62
1:A:2717:LEU:HD23	1:A:2779:LEU:HD23	1.82	0.62
1:B:1303:ARG:NH2	1:B:1635:GLU:OE1	2.33	0.62
1:C:3004:VAL:HA	1:C:3007:LEU:HD13	1.80	0.62
1:C:3259:GLU:O	1:C:3260:ARG:HD3	2.00	0.62
1:A:2892:ILE:HG23	1:A:2893:LEU:HD12	1.81	0.62
2:E:22:THR:HA	2:E:50:ARG:HA	1.81	0.62
1:D:964:MET:HB3	1:D:979:ALA:HB3	1.81	0.62
1:A:3042:ALA:HB3	1:A:3117:PHE:CE1	2.35	0.61
4:A:5003:ATP:H5'1	5:A:5004:KVR:C14	2.30	0.61
1:C:954:ASP:OD2	1:C:956:HIS:NE2	2.33	0.61
1:A:839:GLU:HB3	1:A:851:LEU:HD12	1.80	0.61
1:B:1456:GLY:O	1:B:1461:ARG:NH2	2.30	0.61
1:B:3004:VAL:HA	1:B:3007:LEU:HD13	1.80	0.61
4:B:5003:ATP:H5'1	5:B:5004:KVR:C14	2.30	0.61
4:C:5003:ATP:H5'1	5:C:5004:KVR:C14	2.30	0.61
1:B:466:PRO:HG2	1:B:479:LEU:HG	1.82	0.61
1:C:904:TYR:HB2	1:C:918:LEU:HD23	1.81	0.61
1:C:1972:GLN:HA	1:C:1975:MET:HE2	1.82	0.61
2:H:22:THR:HA	2:H:50:ARG:HA	1.81	0.61
1:B:3037:GLY:HA2	1:B:3040:LEU:HD23	1.81	0.61
1:B:4082:GLU:HA	1:B:4085:LYS:HE2	1.82	0.61
1:D:3037:GLY:HA2	1:D:3040:LEU:HD23	1.81	0.61
1:A:928:GLU:OE2	1:A:932:ASN:ND2	2.34	0.61
2:G:22:THR:HA	2:G:50:ARG:HA	1.81	0.61
1:C:466:PRO:HG2	1:C:479:LEU:HG	1.82	0.61
1:C:3037:GLY:HA2	1:C:3040:LEU:HD23	1.81	0.61
1:D:2004:MET:HE2	1:D:2004:MET:HA	1.82	0.61
1:A:1464:THR:HG22	1:A:1483:SER:HB2	1.81	0.61
1:C:4082:GLU:HA	1:C:4085:LYS:HE2	1.82	0.61
1:D:1464:THR:HG22	1:D:1483:SER:HB2	1.81	0.61
1:D:3259:GLU:O	1:D:3260:ARG:HD3	2.00	0.61
4:D:5003:ATP:H5'1	5:D:5004:KVR:C14	2.30	0.61
1:C:288:HIS:O	1:C:290:ARG:NH1	2.34	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:954:ASP:OD2	1:D:956:HIS:NE2	2.33	0.61
1:B:954:ASP:OD2	1:B:956:HIS:NE2	2.33	0.61
1:B:2717:LEU:HD23	1:B:2779:LEU:HD23	1.82	0.61
1:D:928:GLU:OE2	1:D:932:ASN:ND2	2.34	0.61
1:A:1303:ARG:NH2	1:A:1635:GLU:OE1	2.33	0.61
1:C:951:GLY:H	1:C:1064:LEU:HD23	1.66	0.61
1:D:904:TYR:HB2	1:D:918:LEU:HD23	1.81	0.61
1:A:1972:GLN:HA	1:A:1975:MET:HE2	1.84	0.60
1:C:2717:LEU:HD23	1:C:2779:LEU:HD23	1.82	0.60
1:D:1303:ARG:NH2	1:D:1635:GLU:OE1	2.33	0.60
1:D:2717:LEU:HD23	1:D:2779:LEU:HD23	1.82	0.60
1:A:288:HIS:O	1:A:290:ARG:NH1	2.34	0.60
1:B:928:GLU:OE2	1:B:932:ASN:ND2	2.34	0.60
1:D:919:VAL:HG21	1:D:923:LYS:HZ2	1.66	0.60
1:B:949:HIS:HB2	1:B:1065:GLU:HB2	1.84	0.60
1:B:3606:ALA:HB1	1:B:3610:ASN:HB2	1.84	0.60
1:B:3042:ALA:HB3	1:B:3117:PHE:CE1	2.35	0.60
1:B:4107:GLU:OE1	1:B:4147:ARG:NH1	2.33	0.60
1:C:3606:ALA:HB1	1:C:3610:ASN:HB2	1.84	0.60
1:D:466:PRO:HG2	1:D:479:LEU:HG	1.82	0.60
1:D:3269:ASN:HB2	1:D:3272:HIS:ND1	2.16	0.60
1:A:466:PRO:HG2	1:A:479:LEU:HG	1.82	0.60
1:B:2930:ILE:O	1:B:3010:LYS:NZ	2.35	0.60
1:C:2004:MET:HE2	1:C:2004:MET:HA	1.84	0.60
1:D:2096:GLY:HA2	1:D:2099:VAL:HG22	1.84	0.60
1:A:2096:GLY:HA2	1:A:2099:VAL:HG22	1.84	0.60
1:A:3606:ALA:HB1	1:A:3610:ASN:HB2	1.84	0.60
1:B:1630:LEU:HD22	1:B:1644:LEU:HD11	1.84	0.60
1:B:1972:GLN:HA	1:B:1975:MET:HE2	1.83	0.60
1:C:1630:LEU:HD22	1:C:1644:LEU:HD11	1.84	0.60
1:C:3269:ASN:HB2	1:C:3272:HIS:ND1	2.16	0.60
1:C:949:HIS:HB2	1:C:1065:GLU:HB2	1.84	0.60
1:D:995:MET:O	1:D:998:LYS:HG3	2.02	0.60
1:A:3269:ASN:HB2	1:A:3272:HIS:ND1	2.16	0.60
1:C:928:GLU:OE2	1:C:932:ASN:ND2	2.34	0.60
1:C:995:MET:O	1:C:998:LYS:HG3	2.02	0.60
1:A:2723:LYS:HA	1:A:2726:GLU:HB2	1.83	0.59
1:D:288:HIS:O	1:D:290:ARG:NH1	2.34	0.59
1:D:951:GLY:H	1:D:1064:LEU:HD23	1.66	0.59
1:D:4107:GLU:OE1	1:D:4147:ARG:NH1	2.33	0.59
1:A:2930:ILE:O	1:A:3010:LYS:NZ	2.35	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:3160:ALA:HB2	1:B:3240:PRO:HB3	1.84	0.59
1:C:3257:ASN:ND2	1:C:3259:GLU:OE2	2.36	0.59
1:D:15:ARG:HD3	1:D:110:HIS:HB3	1.84	0.59
1:A:995:MET:O	1:A:998:LYS:HG3	2.02	0.59
1:A:1630:LEU:HD22	1:A:1644:LEU:HD11	1.84	0.59
1:A:2973:GLN:NE2	1:A:2977:ASN:OD1	2.36	0.59
1:B:288:HIS:O	1:B:290:ARG:NH1	2.34	0.59
1:B:3269:ASN:HB2	1:B:3272:HIS:ND1	2.16	0.59
1:D:1630:LEU:HD22	1:D:1644:LEU:HD11	1.84	0.59
1:D:3001:LYS:HE3	1:D:3044:THR:HG21	1.84	0.59
1:D:3160:ALA:HB2	1:D:3240:PRO:HB3	1.84	0.59
1:C:2590:ARG:NH2	1:C:2875:ASP:OD2	2.35	0.59
1:D:3606:ALA:HB1	1:D:3610:ASN:HB2	1.84	0.59
1:B:1757:LEU:HD22	1:B:2117:ILE:HD11	1.84	0.59
1:B:2096:GLY:HA2	1:B:2099:VAL:HG22	1.84	0.59
1:C:15:ARG:HD3	1:C:110:HIS:HB3	1.84	0.59
1:C:3003:MET:O	1:C:3006:SER:OG	2.18	0.59
1:D:905:GLY:HA3	1:D:914:GLN:HB3	1.83	0.59
1:D:3003:MET:O	1:D:3006:SER:OG	2.18	0.59
1:A:905:GLY:HA3	1:A:914:GLN:HB3	1.83	0.59
1:A:3920:LEU:HD22	1:A:3935:LEU:HD11	1.85	0.59
1:B:644:LEU:HD13	1:B:1630:LEU:HD21	1.84	0.59
1:B:3257:ASN:ND2	1:B:3259:GLU:OE2	2.36	0.59
1:C:2930:ILE:O	1:C:3010:LYS:NZ	2.35	0.59
1:D:644:LEU:HD13	1:D:1630:LEU:HD21	1.84	0.59
1:A:2590:ARG:NH2	1:A:2875:ASP:OD2	2.34	0.59
1:A:3209:PRO:HB3	1:A:3213:LYS:HD2	1.84	0.59
1:B:905:GLY:HA3	1:B:914:GLN:HB3	1.83	0.59
1:B:951:GLY:H	1:B:1064:LEU:HD23	1.66	0.59
1:C:3042:ALA:HB3	1:C:3117:PHE:CE1	2.35	0.59
1:C:3209:PRO:HB3	1:C:3213:LYS:HD2	1.84	0.59
1:A:625:VAL:HG23	1:A:628:ASN:HB2	1.85	0.59
1:A:951:GLY:H	1:A:1064:LEU:HD23	1.66	0.59
1:C:2096:GLY:HA2	1:C:2099:VAL:HG22	1.84	0.59
1:C:3109:PHE:CE2	1:C:3162:PHE:HD1	2.20	0.59
1:D:625:VAL:HG23	1:D:628:ASN:HB2	1.85	0.59
1:D:2973:GLN:NE2	1:D:2977:ASN:OD1	2.36	0.59
1:D:3209:PRO:HB3	1:D:3213:LYS:HD2	1.84	0.59
1:A:3160:ALA:HB2	1:A:3240:PRO:HB3	1.84	0.59
1:A:3257:ASN:ND2	1:A:3259:GLU:OE2	2.36	0.59
1:A:4238:ILE:HG13	1:B:4624:ASP:HB3	1.85	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:3001:LYS:HE3	1:B:3044:THR:HG21	1.84	0.59
1:B:3109:PHE:CE2	1:B:3162:PHE:HD1	2.21	0.59
1:B:3920:LEU:HD22	1:B:3935:LEU:HD11	1.85	0.59
1:B:4030:ASP:HA	1:B:4033:LYS:HE2	1.85	0.59
4:B:5003:ATP:C5'	5:B:5004:KVR:C20	2.81	0.59
1:D:3257:ASN:ND2	1:D:3259:GLU:OE2	2.36	0.59
1:C:3160:ALA:HB2	1:C:3240:PRO:HB3	1.84	0.59
1:D:949:HIS:HB2	1:D:1065:GLU:HB2	1.84	0.59
1:D:2723:LYS:HA	1:D:2726:GLU:HB2	1.83	0.59
4:D:5003:ATP:C5'	5:D:5004:KVR:C20	2.81	0.59
1:B:3209:PRO:HB3	1:B:3213:LYS:HD2	1.84	0.58
1:D:2930:ILE:O	1:D:3010:LYS:NZ	2.35	0.58
1:A:626:ARG:NH2	1:A:1667:LEU:O	2.36	0.58
1:B:995:MET:O	1:B:998:LYS:HG3	2.02	0.58
1:B:2723:LYS:HA	1:B:2726:GLU:HB2	1.83	0.58
1:C:905:GLY:HA3	1:C:914:GLN:HB3	1.83	0.58
1:C:1757:LEU:HD22	1:C:2117:ILE:HD11	1.84	0.58
1:C:3016:ARG:NH1	1:C:3067:ASP:OD2	2.36	0.58
1:C:3649:ALA:HB1	1:C:3652:PRO:HB2	1.85	0.58
1:D:1757:LEU:HD22	1:D:2117:ILE:HD11	1.84	0.58
1:D:4481:TRP:HA	1:D:4484:ILE:HG12	1.86	0.58
1:A:2760:TYR:HA	1:A:2763:LEU:HD12	1.85	0.58
1:A:3109:PHE:CE2	1:A:3162:PHE:HD1	2.20	0.58
4:A:5003:ATP:C5'	5:A:5004:KVR:C20	2.81	0.58
1:B:2612:ASN:OD1	1:B:2613:HIS:N	2.37	0.58
1:B:3649:ALA:HB1	1:B:3652:PRO:HB2	1.85	0.58
1:D:3016:ARG:NH1	1:D:3067:ASP:OD2	2.37	0.58
1:A:4481:TRP:HA	1:A:4484:ILE:HG12	1.86	0.58
1:B:3227:ARG:HD3	1:B:3291:ASP:HB2	1.84	0.58
1:C:2723:LYS:HA	1:C:2726:GLU:HB2	1.83	0.58
1:C:4030:ASP:HA	1:C:4033:LYS:HE2	1.85	0.58
1:D:28:ILE:HG22	1:D:29:HIS:CD2	2.38	0.58
1:D:3109:PHE:CE2	1:D:3162:PHE:HD1	2.21	0.58
1:A:4520:TYR:CE2	1:A:4559:TYR:HB3	2.39	0.58
1:B:15:ARG:HD3	1:B:110:HIS:HB3	1.84	0.58
1:C:625:VAL:HG23	1:C:628:ASN:HB2	1.85	0.58
1:C:2612:ASN:OD1	1:C:2613:HIS:N	2.37	0.58
4:C:5003:ATP:C5'	5:C:5004:KVR:C20	2.81	0.58
1:D:3042:ALA:HB3	1:D:3117:PHE:CE1	2.35	0.58
1:A:2742:ILE:O	1:A:2754:GLN:N	2.20	0.58
1:B:28:ILE:HG22	1:B:29:HIS:CD2	2.38	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:625:VAL:HG23	1:B:628:ASN:HB2	1.85	0.58
1:B:2760:TYR:HA	1:B:2763:LEU:HD12	1.85	0.58
1:B:2973:GLN:NE2	1:B:2977:ASN:OD1	2.36	0.58
1:C:28:ILE:HG22	1:C:29:HIS:CD2	2.38	0.58
1:D:1269:GLU:HB2	1:D:1288:LYS:HG2	1.85	0.58
1:D:3920:LEU:HD22	1:D:3935:LEU:HD11	1.85	0.58
1:A:949:HIS:HB2	1:A:1065:GLU:HB2	1.84	0.58
1:C:3920:LEU:HD22	1:C:3935:LEU:HD11	1.85	0.58
1:D:2760:TYR:HA	1:D:2763:LEU:HD12	1.85	0.58
1:D:4520:TYR:CE2	1:D:4559:TYR:HB3	2.39	0.58
1:A:2333:PRO:HA	1:A:2336:ARG:HE	1.69	0.58
1:A:3227:ARG:HD3	1:A:3291:ASP:HB2	1.85	0.58
1:A:4832:GLU:O	1:A:4843:ARG:NH2	2.37	0.58
1:B:3235:MET:HA	1:B:3239:LEU:HD13	1.86	0.58
1:D:3227:ARG:HD3	1:D:3291:ASP:HB2	1.84	0.58
1:A:3001:LYS:HE3	1:A:3044:THR:HG21	1.84	0.58
1:A:3235:MET:HA	1:A:3239:LEU:HD13	1.86	0.58
1:B:4832:GLU:O	1:B:4843:ARG:NH2	2.37	0.58
1:C:2973:GLN:NE2	1:C:2977:ASN:OD1	2.36	0.58
1:D:2742:ILE:O	1:D:2754:GLN:N	2.20	0.58
1:A:15:ARG:HD3	1:A:110:HIS:HB3	1.84	0.58
1:A:644:LEU:HD13	1:A:1630:LEU:HD21	1.84	0.58
1:A:2612:ASN:OD1	1:A:2613:HIS:N	2.37	0.58
1:A:4030:ASP:HA	1:A:4033:LYS:HE2	1.85	0.58
1:C:1269:GLU:HB2	1:C:1288:LYS:HG2	1.85	0.58
1:C:2760:TYR:HA	1:C:2763:LEU:HD12	1.85	0.58
1:C:3001:LYS:HE3	1:C:3044:THR:HG21	1.84	0.58
1:D:436:LEU:HD11	1:D:447:LEU:HD11	1.86	0.58
1:D:2612:ASN:OD1	1:D:2613:HIS:N	2.37	0.58
1:D:4832:GLU:O	1:D:4843:ARG:NH2	2.37	0.58
1:A:2622:CYS:SG	1:A:2623:LEU:N	2.77	0.57
1:C:3227:ARG:HD3	1:C:3291:ASP:HB2	1.85	0.57
1:C:3235:MET:HA	1:C:3239:LEU:HD13	1.86	0.57
1:C:4481:TRP:HA	1:C:4484:ILE:HG12	1.86	0.57
1:D:3043:ARG:N	1:D:3117:PHE:HZ	2.02	0.57
1:C:644:LEU:HD13	1:C:1630:LEU:HD21	1.84	0.57
1:C:2742:ILE:O	1:C:2754:GLN:N	2.20	0.57
1:A:1269:GLU:HB2	1:A:1288:LYS:HG2	1.85	0.57
1:A:1757:LEU:HD22	1:A:2117:ILE:HD11	1.84	0.57
4:A:5003:ATP:H5'2	5:A:5004:KVR:C15	2.35	0.57
1:B:1269:GLU:HB2	1:B:1288:LYS:HG2	1.85	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2622:CYS:SG	1:B:2623:LEU:N	2.77	0.57
1:B:4520:TYR:CE2	1:B:4559:TYR:HB3	2.39	0.57
1:D:3649:ALA:HB1	1:D:3652:PRO:HB2	1.86	0.57
4:B:5003:ATP:H5'2	5:B:5004:KVR:C15	2.35	0.57
1:C:4832:GLU:O	1:C:4843:ARG:NH2	2.37	0.57
1:D:4030:ASP:HA	1:D:4033:LYS:HE2	1.85	0.57
1:A:3649:ALA:HB1	1:A:3652:PRO:HB2	1.85	0.57
1:B:1785:ASP:OD2	1:B:1786:ILE:N	2.38	0.57
1:B:3016:ARG:NH1	1:B:3067:ASP:OD2	2.37	0.57
1:C:1611:ILE:HB	1:C:1615:GLN:HB2	1.86	0.57
1:C:2333:PRO:HA	1:C:2336:ARG:HE	1.69	0.57
1:C:2622:CYS:SG	1:C:2623:LEU:N	2.77	0.57
1:C:3043:ARG:N	1:C:3117:PHE:HZ	2.02	0.57
1:C:4520:TYR:CE2	1:C:4559:TYR:HB3	2.39	0.57
1:D:3235:MET:HA	1:D:3239:LEU:HD13	1.86	0.57
1:B:2742:ILE:O	1:B:2754:GLN:N	2.20	0.57
1:A:3016:ARG:NH1	1:A:3067:ASP:OD2	2.36	0.57
1:B:3043:ARG:N	1:B:3117:PHE:HZ	2.02	0.57
1:C:1914:CYS:SG	1:C:2091:GLN:NE2	2.77	0.57
1:D:1975:MET:HG3	1:D:1976:LEU:HD12	1.87	0.57
1:D:2333:PRO:HA	1:D:2336:ARG:HE	1.69	0.57
1:D:2622:CYS:SG	1:D:2623:LEU:N	2.77	0.57
1:A:436:LEU:HD11	1:A:447:LEU:HD11	1.86	0.57
1:A:1785:ASP:OD2	1:A:1786:ILE:N	2.38	0.57
1:B:263:GLU:OE2	1:B:388:GLN:NE2	2.38	0.57
1:B:2333:PRO:HA	1:B:2336:ARG:HE	1.69	0.57
1:B:4481:TRP:HA	1:B:4484:ILE:HG12	1.86	0.57
1:C:436:LEU:HD11	1:C:447:LEU:HD11	1.86	0.57
1:C:3192:ARG:NH1	1:C:3199:THR:HA	2.20	0.57
4:C:5003:ATP:H5'2	5:C:5004:KVR:C15	2.35	0.57
1:D:3015:VAL:HG11	1:D:3029:ILE:HG21	1.87	0.57
1:A:546:LYS:O	1:A:550:GLN:HG2	2.05	0.57
1:A:3043:ARG:N	1:A:3117:PHE:HZ	2.02	0.57
1:D:3002:GLU:O	1:D:3005:THR:OG1	2.22	0.57
1:B:1611:ILE:HB	1:B:1615:GLN:HB2	1.86	0.57
1:B:1989:PRO:HD2	1:B:1992:ILE:HD12	1.87	0.57
1:C:948:CYS:HA	1:C:1067:PRO:HD3	1.87	0.57
1:C:1989:PRO:HD2	1:C:1992:ILE:HD12	1.87	0.57
1:D:263:GLU:OE2	1:D:388:GLN:NE2	2.38	0.57
1:D:1611:ILE:HB	1:D:1615:GLN:HB2	1.86	0.57
1:D:3171:LEU:HG	1:D:3211:LEU:HB3	1.87	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:794:PHE:HB2	1:A:798:ILE:HG13	1.86	0.56
1:A:3002:GLU:O	1:A:3005:THR:OG1	2.22	0.56
1:B:948:CYS:HA	1:B:1067:PRO:HD3	1.87	0.56
1:C:794:PHE:HB2	1:C:798:ILE:HG13	1.87	0.56
1:C:3015:VAL:HG11	1:C:3029:ILE:HG21	1.87	0.56
1:A:28:ILE:HG22	1:A:29:HIS:CD2	2.38	0.56
1:A:3171:LEU:HG	1:A:3211:LEU:HB3	1.87	0.56
1:D:546:LYS:O	1:D:550:GLN:HG2	2.05	0.56
1:D:3192:ARG:NH1	1:D:3199:THR:HA	2.20	0.56
1:A:263:GLU:OE2	1:A:388:GLN:NE2	2.38	0.56
1:A:1611:ILE:HB	1:A:1615:GLN:HB2	1.86	0.56
1:A:1989:PRO:HD2	1:A:1992:ILE:HD12	1.87	0.56
1:A:2142:MET:CE	1:A:2174:VAL:HG11	2.36	0.56
1:A:2403:ALA:HB2	1:A:2475:VAL:HG22	1.88	0.56
1:A:3192:ARG:NH1	1:A:3199:THR:HA	2.20	0.56
1:A:4107:GLU:OE1	1:A:4147:ARG:NH1	2.33	0.56
2:H:8:ILE:HA	1:D:730:LEU:HD11	1.86	0.56
1:B:436:LEU:HD11	1:B:447:LEU:HD11	1.86	0.56
1:B:3192:ARG:NH1	1:B:3199:THR:HA	2.20	0.56
1:C:1975:MET:HG3	1:C:1976:LEU:HD12	1.87	0.56
1:A:3227:ARG:NH1	1:A:3290:ILE:HG13	2.18	0.56
1:B:2004:MET:HE2	1:B:2004:MET:HA	1.86	0.56
1:C:880:ARG:O	1:C:884:LYS:NZ	2.36	0.56
1:D:3209:PRO:HG2	1:D:3214:LEU:HD21	1.87	0.56
1:A:948:CYS:HA	1:A:1067:PRO:HD3	1.87	0.56
1:C:1785:ASP:OD2	1:C:1786:ILE:N	2.38	0.56
1:C:3171:LEU:HG	1:C:3211:LEU:HB3	1.87	0.56
1:A:1975:MET:HG3	1:A:1976:LEU:HD12	1.87	0.56
1:B:3015:VAL:HG11	1:B:3029:ILE:HG21	1.87	0.56
1:B:3209:PRO:HG2	1:B:3214:LEU:HD21	1.87	0.56
1:C:263:GLU:OE2	1:C:388:GLN:NE2	2.38	0.56
1:C:2259:GLU:OE2	1:C:3806:ASN:ND2	2.39	0.56
1:D:1914:CYS:SG	1:D:2091:GLN:NE2	2.77	0.56
1:D:2403:ALA:HB2	1:D:2475:VAL:HG22	1.88	0.56
1:B:2142:MET:CE	1:B:2174:VAL:HG11	2.36	0.56
1:B:2403:ALA:HB2	1:B:2475:VAL:HG22	1.88	0.56
1:C:626:ARG:NH2	1:C:1667:LEU:O	2.36	0.56
1:C:2403:ALA:HB2	1:C:2475:VAL:HG22	1.88	0.56
1:A:515:ALA:HB2	1:A:523:GLY:HA3	1.88	0.56
1:A:2259:GLU:OE2	1:A:3806:ASN:ND2	2.39	0.56
1:A:2263:GLU:HG3	1:A:2267:ARG:NH1	2.21	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:515:ALA:HB2	1:B:523:GLY:HA3	1.88	0.56
1:D:794:PHE:HB2	1:D:798:ILE:HG13	1.87	0.56
1:D:948:CYS:HA	1:D:1067:PRO:HD3	1.86	0.56
1:D:962:LYS:NZ	1:D:982:ASP:OD1	2.36	0.56
1:D:1785:ASP:OD2	1:D:1786:ILE:N	2.38	0.56
1:D:1973:ILE:HG13	1:D:3619:LEU:HB3	1.87	0.56
1:D:1989:PRO:HD2	1:D:1992:ILE:HD12	1.87	0.56
4:D:5003:ATP:H5'2	5:D:5004:KVR:C15	2.35	0.56
1:B:794:PHE:HB2	1:B:798:ILE:HG13	1.86	0.56
1:C:3209:PRO:HG2	1:C:3214:LEU:HD21	1.87	0.56
1:C:4107:GLU:OE1	1:C:4147:ARG:NH1	2.33	0.56
1:D:2142:MET:CE	1:D:2174:VAL:HG11	2.36	0.56
1:D:2194:ALA:HA	1:D:2237:SER:HB3	1.88	0.56
1:D:2263:GLU:HG3	1:D:2267:ARG:NH1	2.21	0.56
2:H:88:HIS:H	2:H:92:ILE:HB	1.71	0.56
1:B:962:LYS:NZ	1:B:982:ASP:OD1	2.36	0.56
1:B:1914:CYS:SG	1:B:2091:GLN:NE2	2.77	0.56
1:B:2351:ILE:O	1:B:2355:GLU:HG2	2.06	0.56
1:B:2627:TRP:HB2	1:B:2630:PHE:HB2	1.88	0.56
1:C:3269:ASN:HB3	1:C:3271:GLU:HG3	1.88	0.56
1:D:3171:LEU:HD11	1:D:3214:LEU:HD12	1.88	0.56
1:A:2754:GLN:HG3	1:A:2756:LEU:H	1.71	0.55
1:A:3171:LEU:HD11	1:A:3214:LEU:HD12	1.88	0.55
1:A:4624:ASP:HB3	1:D:4238:ILE:HG13	1.88	0.55
1:B:3171:LEU:HG	1:B:3211:LEU:HB3	1.87	0.55
1:C:2754:GLN:HG3	1:C:2756:LEU:H	1.71	0.55
1:A:3209:PRO:HG2	1:A:3214:LEU:HD21	1.87	0.55
1:A:3965:ILE:HD12	1:A:4086:ARG:HD2	1.88	0.55
2:E:88:HIS:H	2:E:92:ILE:HB	1.72	0.55
1:B:2259:GLU:OE2	1:B:3806:ASN:ND2	2.39	0.55
1:B:3965:ILE:HD12	1:B:4086:ARG:HD2	1.88	0.55
1:C:515:ALA:HB2	1:C:523:GLY:HA3	1.88	0.55
1:C:546:LYS:O	1:C:550:GLN:HG2	2.05	0.55
1:D:2259:GLU:OE2	1:D:3806:ASN:ND2	2.39	0.55
1:A:2004:MET:HE2	1:A:2004:MET:HA	1.87	0.55
1:A:2194:ALA:HA	1:A:2237:SER:HB3	1.88	0.55
1:A:3015:VAL:HG11	1:A:3029:ILE:HG21	1.87	0.55
1:B:546:LYS:O	1:B:550:GLN:HG2	2.05	0.55
1:B:3171:LEU:HD11	1:B:3214:LEU:HD12	1.88	0.55
1:B:3269:ASN:HB3	1:B:3271:GLU:HG3	1.88	0.55
1:C:962:LYS:NZ	1:C:982:ASP:OD1	2.36	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2627:TRP:HB2	1:D:2630:PHE:HB2	1.88	0.55
1:A:997:ASP:HA	1:A:1047:LYS:HE2	1.89	0.55
1:A:2285:TYR:OH	1:A:2382:ILE:N	2.37	0.55
1:A:3315:LEU:HA	1:A:3319:PHE:CD2	2.42	0.55
2:F:8:ILE:HA	1:B:730:LEU:HD11	1.88	0.55
1:B:981:MET:HG3	1:B:1059:GLY:HA3	1.88	0.55
1:B:1975:MET:HG3	1:B:1976:LEU:HD12	1.87	0.55
1:B:2263:GLU:HG3	1:B:2267:ARG:NH1	2.21	0.55
1:C:986:ILE:HB	1:C:1055:ARG:HE	1.72	0.55
1:C:1850:VAL:HG22	1:C:2055:SER:HB3	1.89	0.55
1:C:2252:GLU:HG2	1:C:3819:MET:SD	2.46	0.55
1:C:2743:TYR:CD1	1:C:2757:MET:HB2	2.41	0.55
1:D:515:ALA:HB2	1:D:523:GLY:HA3	1.88	0.55
1:D:1000:ALA:HB2	1:D:1050:LEU:HD11	1.89	0.55
1:D:1850:VAL:HG22	1:D:2055:SER:HB3	1.89	0.55
1:A:1000:ALA:HB2	1:A:1050:LEU:HD11	1.89	0.55
1:B:909:ASP:HB3	1:B:912:LYS:HB2	1.89	0.55
1:B:992:GLN:O	1:B:996:VAL:HG23	2.06	0.55
1:B:2943:PHE:CZ	1:B:2956:TYR:HB2	2.41	0.55
1:C:3171:LEU:HD11	1:C:3214:LEU:HD12	1.88	0.55
1:D:2720:PHE:CE1	1:D:2896:LEU:HA	2.42	0.55
1:A:1914:CYS:SG	1:A:2091:GLN:NE2	2.77	0.55
1:A:2252:GLU:HG2	1:A:3819:MET:SD	2.46	0.55
1:A:2351:ILE:O	1:A:2355:GLU:HG2	2.07	0.55
1:B:880:ARG:O	1:B:884:LYS:NZ	2.36	0.55
1:B:2720:PHE:CE1	1:B:2896:LEU:HA	2.41	0.55
1:B:2754:GLN:HG3	1:B:2756:LEU:H	1.71	0.55
1:B:3159:LEU:HD13	1:B:3241:MET:HE3	1.89	0.55
1:C:908:ARG:HG3	1:C:915:HIS:HD2	1.72	0.55
1:C:997:ASP:HA	1:C:1047:LYS:HE2	1.89	0.55
1:C:2142:MET:CE	1:C:2174:VAL:HG11	2.36	0.55
1:C:2351:ILE:O	1:C:2355:GLU:HG2	2.07	0.55
1:C:2621:TYR:OH	1:C:2637:GLU:OE2	2.17	0.55
1:C:2658:GLU:H	1:C:2662:PHE:HE1	1.54	0.55
1:D:981:MET:HG3	1:D:1059:GLY:HA3	1.88	0.55
1:D:1219:LYS:NZ	1:D:1243:THR:O	2.40	0.55
1:D:2351:ILE:O	1:D:2355:GLU:HG2	2.07	0.55
1:D:2743:TYR:CD1	1:D:2757:MET:HB2	2.41	0.55
1:D:2754:GLN:HG3	1:D:2756:LEU:H	1.71	0.55
1:A:246:THR:HG21	1:A:267:VAL:HG21	1.89	0.55
1:B:626:ARG:NH2	1:B:1667:LEU:O	2.36	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1973:ILE:HG13	1:B:3619:LEU:HB3	1.87	0.55
1:B:4654:MET:O	1:B:4663:ARG:NH1	2.40	0.55
1:C:246:THR:HG21	1:C:267:VAL:HG21	1.89	0.55
1:C:992:GLN:O	1:C:996:VAL:HG23	2.06	0.55
1:C:4046:ARG:HG3	1:C:4050:LYS:NZ	2.22	0.55
1:D:4654:MET:O	1:D:4663:ARG:NH1	2.40	0.55
1:A:908:ARG:HG3	1:A:915:HIS:HD2	1.72	0.55
1:A:1850:VAL:HG22	1:A:2055:SER:HB3	1.89	0.55
1:A:2720:PHE:CE1	1:A:2896:LEU:HA	2.41	0.55
2:F:88:HIS:H	2:F:92:ILE:HB	1.72	0.55
2:G:88:HIS:H	2:G:92:ILE:HB	1.72	0.55
1:B:908:ARG:HG3	1:B:915:HIS:HD2	1.72	0.55
1:B:997:ASP:HA	1:B:1047:LYS:HE2	1.89	0.55
1:B:2252:GLU:HG2	1:B:3819:MET:SD	2.46	0.55
1:B:2590:ARG:NH2	1:B:2875:ASP:OD2	2.34	0.55
1:B:4238:ILE:HG13	1:C:4624:ASP:HB3	1.89	0.55
1:C:2263:GLU:HG3	1:C:2267:ARG:NH1	2.21	0.55
1:D:2589:LEU:HD23	1:D:2592:LEU:HD12	1.89	0.55
1:D:3965:ILE:HD12	1:D:4086:ARG:HD2	1.89	0.55
1:A:1219:LYS:NZ	1:A:1243:THR:O	2.40	0.55
1:A:2589:LEU:HD23	1:A:2592:LEU:HD12	1.89	0.55
1:B:2194:ALA:HA	1:B:2237:SER:HB3	1.88	0.55
1:B:2658:GLU:H	1:B:2662:PHE:HE1	1.54	0.55
1:C:909:ASP:HB3	1:C:912:LYS:HB2	1.89	0.55
1:C:2627:TRP:HB2	1:C:2630:PHE:HB2	1.88	0.55
1:D:3315:LEU:HA	1:D:3319:PHE:CD2	2.42	0.55
1:A:909:ASP:HB3	1:A:912:LYS:HB2	1.89	0.55
1:B:986:ILE:HB	1:B:1055:ARG:HE	1.72	0.55
1:B:3315:LEU:HA	1:B:3319:PHE:CD2	2.42	0.55
1:C:3026:ALA:O	1:C:3030:VAL:HG23	2.07	0.55
1:D:908:ARG:HG3	1:D:915:HIS:HD2	1.72	0.55
1:D:992:GLN:O	1:D:996:VAL:HG23	2.06	0.55
1:D:2455:ASP:OD2	1:D:2457:SER:OG	2.22	0.55
1:D:2590:ARG:NH2	1:D:2875:ASP:OD2	2.34	0.55
1:A:981:MET:HG3	1:A:1059:GLY:HA3	1.88	0.54
1:A:992:GLN:O	1:A:996:VAL:HG23	2.06	0.54
1:A:1973:ILE:HG13	1:A:3619:LEU:HB3	1.87	0.54
1:A:2627:TRP:HB2	1:A:2630:PHE:HB2	1.88	0.54
1:B:2979:ARG:NH2	1:B:3035:ILE:HB	2.22	0.54
1:C:2589:LEU:HD23	1:C:2592:LEU:HD12	1.89	0.54
1:C:3965:ILE:HD12	1:C:4086:ARG:HD2	1.89	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:4046:ARG:HG3	1:D:4050:LYS:NZ	2.22	0.54
1:A:2943:PHE:CZ	1:A:2956:TYR:HB2	2.41	0.54
1:A:3016:ARG:NH1	1:A:3063:ASN:HB3	2.23	0.54
1:A:4046:ARG:HG3	1:A:4050:LYS:NZ	2.22	0.54
1:B:4046:ARG:HG3	1:B:4050:LYS:NZ	2.22	0.54
1:D:997:ASP:HA	1:D:1047:LYS:HE2	1.89	0.54
1:D:2252:GLU:HG2	1:D:3819:MET:SD	2.46	0.54
1:A:3026:ALA:O	1:A:3030:VAL:HG23	2.07	0.54
1:A:4116:GLN:HA	1:A:4119:LEU:HD12	1.90	0.54
1:C:2720:PHE:CE1	1:C:2896:LEU:HA	2.41	0.54
1:C:3002:GLU:O	1:C:3005:THR:OG1	2.22	0.54
1:C:3233:HIS:O	1:C:3237:VAL:HG22	2.08	0.54
1:D:627:SER:O	1:D:631:LEU:HG	2.08	0.54
1:D:986:ILE:HB	1:D:1055:ARG:HE	1.72	0.54
1:D:3026:ALA:O	1:D:3030:VAL:HG23	2.07	0.54
1:D:3269:ASN:HB3	1:D:3271:GLU:HG3	1.88	0.54
1:A:4654:MET:O	1:A:4663:ARG:NH1	2.40	0.54
1:B:1850:VAL:HG22	1:B:2055:SER:HB3	1.89	0.54
1:C:3315:LEU:HA	1:C:3319:PHE:CD2	2.42	0.54
1:C:4238:ILE:HG13	1:D:4624:ASP:HB3	1.89	0.54
1:D:3016:ARG:NH1	1:D:3063:ASN:HB3	2.23	0.54
1:A:908:ARG:HG3	1:A:915:HIS:CD2	2.43	0.54
1:A:986:ILE:HB	1:A:1055:ARG:HE	1.72	0.54
1:B:908:ARG:HG3	1:B:915:HIS:CD2	2.43	0.54
1:B:1219:LYS:NZ	1:B:1243:THR:O	2.40	0.54
1:B:2589:LEU:HD23	1:B:2592:LEU:HD12	1.89	0.54
1:B:3002:GLU:O	1:B:3005:THR:OG1	2.22	0.54
1:C:644:LEU:HD11	1:C:1650:LEU:HD22	1.90	0.54
1:C:2194:ALA:HA	1:C:2237:SER:HB3	1.88	0.54
1:C:4654:MET:O	1:C:4663:ARG:NH1	2.40	0.54
1:D:4116:GLN:HA	1:D:4119:LEU:HD12	1.90	0.54
1:A:2933:VAL:HG22	1:A:2963:PHE:HE1	1.73	0.54
1:A:3246:MET:SD	1:A:3276:LEU:HD12	2.48	0.54
2:G:8:ILE:HA	1:C:730:LEU:HD11	1.89	0.54
1:B:1284:LYS:NZ	1:B:1286:THR:OG1	2.41	0.54
1:B:1979:PHE:HZ	1:B:1996:LEU:HB3	1.73	0.54
1:B:3233:HIS:O	1:B:3237:VAL:HG22	2.08	0.54
1:D:3246:MET:SD	1:D:3276:LEU:HD12	2.48	0.54
1:A:3269:ASN:HB3	1:A:3271:GLU:HG3	1.88	0.54
1:B:246:THR:HG21	1:B:267:VAL:HG21	1.89	0.54
1:B:1100:ARG:NH1	1:B:1167:ASP:OD1	2.40	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:908:ARG:HG3	1:C:915:HIS:CD2	2.43	0.54
1:C:1100:ARG:NH1	1:C:1167:ASP:OD1	2.40	0.54
1:C:1973:ILE:HG13	1:C:3619:LEU:HB3	1.87	0.54
1:C:2979:ARG:NH2	1:C:3035:ILE:HB	2.22	0.54
1:D:909:ASP:HB3	1:D:912:LYS:HB2	1.89	0.54
1:D:3164:GLY:O	1:D:3248:ARG:NE	2.41	0.54
1:D:3233:HIS:O	1:D:3237:VAL:HG22	2.08	0.54
1:A:308:LEU:HD21	1:A:370:LEU:HD12	1.90	0.54
1:B:2285:TYR:OH	1:B:2382:ILE:N	2.37	0.54
1:B:3016:ARG:NH1	1:B:3063:ASN:HB3	2.23	0.54
1:B:4252:ILE:HG21	1:C:4707:MET:HG3	1.89	0.54
1:D:1972:GLN:HA	1:D:1975:MET:HE2	1.89	0.54
1:D:2485:LEU:HD12	1:D:2544:LEU:HD23	1.89	0.54
1:A:4120:GLU:HA	1:A:4123:GLU:HG2	1.90	0.54
1:C:1000:ALA:HB2	1:C:1050:LEU:HD11	1.89	0.54
1:C:1219:LYS:NZ	1:C:1243:THR:O	2.40	0.54
1:C:2943:PHE:CZ	1:C:2956:TYR:HB2	2.41	0.54
1:C:3016:ARG:NH1	1:C:3063:ASN:HB3	2.23	0.54
1:C:3227:ARG:NH1	1:C:3290:ILE:HG13	2.18	0.54
1:D:541:ILE:HD11	1:D:574:VAL:HG13	1.90	0.54
1:D:3089:GLY:O	1:D:3093:ILE:HG12	2.08	0.54
1:D:3227:ARG:NH1	1:D:3290:ILE:HG13	2.18	0.54
1:A:1100:ARG:NH1	1:A:1167:ASP:OD1	2.40	0.54
1:B:644:LEU:HD11	1:B:1650:LEU:HD22	1.90	0.54
1:B:1941:ARG:NH2	1:B:3609:TYR:O	2.41	0.54
1:C:981:MET:HG3	1:C:1059:GLY:HA3	1.88	0.54
1:D:1100:ARG:NH1	1:D:1167:ASP:OD1	2.40	0.54
1:D:1941:ARG:NH2	1:D:3609:TYR:O	2.41	0.54
1:A:541:ILE:HD11	1:A:574:VAL:HG13	1.90	0.53
1:A:3089:GLY:O	1:A:3093:ILE:HG12	2.08	0.53
1:A:3285:TYR:CE1	1:A:3325:LYS:HD2	2.44	0.53
1:B:1000:ALA:HB2	1:B:1050:LEU:HD11	1.89	0.53
1:B:2348:GLU:OE2	1:B:2352:LYS:NZ	2.42	0.53
1:C:308:LEU:HD21	1:C:370:LEU:HD12	1.90	0.53
1:C:1941:ARG:NH2	1:C:3609:TYR:O	2.41	0.53
1:D:644:LEU:HD11	1:D:1650:LEU:HD22	1.90	0.53
1:A:2348:GLU:OE2	1:A:2352:LYS:NZ	2.42	0.53
1:B:180:ASP:HB3	1:B:211:LEU:HD12	1.91	0.53
1:B:627:SER:O	1:B:631:LEU:HG	2.08	0.53
1:B:2296:GLU:HG3	1:B:2390:THR:HG22	1.91	0.53
1:B:3246:MET:SD	1:B:3276:LEU:HD12	2.48	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:3285:TYR:CE1	1:B:3325:LYS:HD2	2.44	0.53
1:B:3805:LEU:HD21	1:B:3888:PHE:HA	1.90	0.53
1:C:3154:ALA:O	1:C:3157:GLU:HG3	2.09	0.53
1:C:4252:ILE:HG21	1:D:4707:MET:HG3	1.90	0.53
1:D:2933:VAL:HG22	1:D:2963:PHE:HE1	1.73	0.53
1:D:3180:ILE:HA	1:D:3185:ASN:HD22	1.73	0.53
1:A:2545:ILE:HD12	1:A:2580:LEU:HD11	1.90	0.53
1:A:4819:VAL:HG12	1:A:4830:GLU:HG3	1.91	0.53
1:B:2545:ILE:HD12	1:B:2580:LEU:HD11	1.90	0.53
1:C:436:LEU:HG	1:C:445:VAL:HG11	1.90	0.53
1:C:1048:ASP:HA	1:C:1051:ARG:HE	1.74	0.53
1:C:2348:GLU:OE2	1:C:2352:LYS:NZ	2.42	0.53
1:C:3071:THR:HG23	1:C:3094:ILE:HG12	1.90	0.53
1:C:4116:GLN:HA	1:C:4119:LEU:HD12	1.90	0.53
1:D:308:LEU:HD21	1:D:370:LEU:HD12	1.90	0.53
1:D:2348:GLU:OE2	1:D:2352:LYS:NZ	2.42	0.53
1:D:2658:GLU:H	1:D:2662:PHE:HE1	1.54	0.53
1:D:3154:ALA:O	1:D:3157:GLU:HG3	2.09	0.53
1:A:1941:ARG:NH2	1:A:3609:TYR:O	2.41	0.53
1:A:2979:ARG:NH2	1:A:3035:ILE:HB	2.22	0.53
1:A:4250:TYR:O	1:A:4254:THR:HG23	2.09	0.53
1:C:180:ASP:HB3	1:C:211:LEU:HD12	1.91	0.53
1:C:3805:LEU:HD21	1:C:3888:PHE:HA	1.91	0.53
1:D:3285:TYR:CE1	1:D:3325:LYS:HD2	2.44	0.53
1:A:962:LYS:NZ	1:A:982:ASP:OD1	2.36	0.53
1:A:1048:ASP:HA	1:A:1051:ARG:HE	1.74	0.53
1:A:3233:HIS:O	1:A:3237:VAL:HG22	2.08	0.53
1:A:3805:LEU:HD21	1:A:3888:PHE:HA	1.91	0.53
1:B:308:LEU:HD21	1:B:370:LEU:HD12	1.90	0.53
1:B:990:PRO:HA	1:B:993:GLU:HB2	1.91	0.53
1:B:3026:ALA:O	1:B:3030:VAL:HG23	2.07	0.53
1:B:3154:ALA:O	1:B:3157:GLU:HG3	2.09	0.53
1:B:4029:SER:HG	1:B:4055:HIS:CD2	2.26	0.53
1:B:4116:GLN:HA	1:B:4119:LEU:HD12	1.90	0.53
1:B:4120:GLU:HA	1:B:4123:GLU:HG2	1.90	0.53
1:C:1979:PHE:HZ	1:C:1996:LEU:HB3	1.73	0.53
1:C:3246:MET:SD	1:C:3276:LEU:HD12	2.48	0.53
1:C:4819:VAL:HG12	1:C:4830:GLU:HG3	1.91	0.53
1:D:436:LEU:HG	1:D:445:VAL:HG11	1.90	0.53
1:D:880:ARG:O	1:D:884:LYS:NZ	2.36	0.53
1:D:3071:THR:HG23	1:D:3094:ILE:HG12	1.90	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:3805:LEU:HD21	1:D:3888:PHE:HA	1.91	0.53
1:A:2296:GLU:HG3	1:A:2390:THR:HG22	1.91	0.53
1:A:2943:PHE:CE1	1:A:2954:PHE:HB3	2.44	0.53
1:A:3071:THR:HG23	1:A:3094:ILE:HG12	1.90	0.53
1:A:3154:ALA:O	1:A:3157:GLU:HG3	2.09	0.53
1:A:3198:PRO:HD2	1:A:3204:VAL:HG22	1.91	0.53
1:B:2629:ASN:OD1	1:B:2630:PHE:N	2.42	0.53
1:B:3030:VAL:HG12	1:B:3034:HIS:NE2	2.24	0.53
1:B:3071:THR:HG23	1:B:3094:ILE:HG12	1.90	0.53
1:B:3285:TYR:HE1	1:B:3328:LYS:HE3	1.74	0.53
1:C:2296:GLU:HG3	1:C:2390:THR:HG22	1.91	0.53
1:D:246:THR:HG21	1:D:267:VAL:HG21	1.89	0.53
1:D:626:ARG:NH2	1:D:1667:LEU:O	2.36	0.53
1:D:2285:TYR:OH	1:D:2382:ILE:N	2.37	0.53
1:D:2296:GLU:HG3	1:D:2390:THR:HG22	1.91	0.53
1:A:627:SER:O	1:A:631:LEU:HG	2.08	0.53
1:A:2485:LEU:HD12	1:A:2544:LEU:HD23	1.89	0.53
1:A:3164:GLY:O	1:A:3248:ARG:NE	2.41	0.53
1:A:4113:THR:O	1:A:4117:THR:HG23	2.09	0.53
1:B:892:LEU:HA	1:B:895:MET:SD	2.49	0.53
1:B:2691:LYS:HZ1	1:B:2874:TYR:HB3	1.73	0.53
1:B:3198:PRO:HD2	1:B:3204:VAL:HG22	1.91	0.53
1:C:627:SER:O	1:C:631:LEU:HG	2.08	0.53
1:C:896:ASN:OD1	1:C:897:LYS:N	2.42	0.53
1:C:3030:VAL:HG12	1:C:3034:HIS:NE2	2.24	0.53
1:C:4250:TYR:O	1:C:4254:THR:HG23	2.09	0.53
1:D:892:LEU:HA	1:D:895:MET:SD	2.49	0.53
1:D:908:ARG:HG3	1:D:915:HIS:CD2	2.43	0.53
1:D:2943:PHE:CE1	1:D:2954:PHE:HB3	2.44	0.53
1:D:2943:PHE:CZ	1:D:2956:TYR:HB2	2.42	0.53
1:D:2968:LEU:HB3	1:D:2969:PRO:HD3	1.91	0.53
1:A:644:LEU:HD11	1:A:1650:LEU:HD22	1.90	0.53
1:A:881:ILE:HG13	1:A:885:LEU:HD23	1.91	0.53
1:A:892:LEU:HA	1:A:895:MET:SD	2.49	0.53
1:A:2968:LEU:HB3	1:A:2969:PRO:HD3	1.91	0.53
1:A:3285:TYR:HE1	1:A:3328:LYS:HE3	1.74	0.53
1:B:3180:ILE:HA	1:B:3185:ASN:HD22	1.74	0.53
1:C:2485:LEU:HD12	1:C:2544:LEU:HD23	1.89	0.53
1:C:2629:ASN:OD1	1:C:2630:PHE:N	2.42	0.53
1:C:2716:LYS:HG3	1:C:2717:LEU:HD12	1.90	0.53
1:D:849:ASP:OD1	1:D:1214:ARG:NE	2.42	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1184:ASP:OD2	1:D:1188:SER:OG	2.26	0.53
1:A:2684:ASN:ND2	1:A:2909:ASP:OD1	2.39	0.53
1:B:849:ASP:OD1	1:B:1214:ARG:NE	2.42	0.53
1:B:881:ILE:HG13	1:B:885:LEU:HD23	1.91	0.53
1:B:896:ASN:OD1	1:B:897:LYS:N	2.42	0.53
1:B:2968:LEU:HB3	1:B:2969:PRO:HD3	1.91	0.53
1:B:4819:VAL:HG12	1:B:4830:GLU:HG3	1.91	0.53
1:D:3285:TYR:HE1	1:D:3328:LYS:HE3	1.73	0.53
1:A:896:ASN:OD1	1:A:897:LYS:N	2.42	0.53
1:A:990:PRO:HA	1:A:993:GLU:HB2	1.91	0.53
1:A:1284:LYS:NZ	1:A:1286:THR:OG1	2.41	0.53
1:A:2497:ARG:HH12	1:A:2877:LEU:HA	1.74	0.53
1:A:2658:GLU:H	1:A:2662:PHE:HE1	1.54	0.53
1:A:3030:VAL:HG12	1:A:3034:HIS:NE2	2.24	0.53
1:A:3134:LEU:HD12	1:A:3162:PHE:HE2	1.74	0.53
1:B:1184:ASP:OD2	1:B:1188:SER:OG	2.26	0.53
1:B:2485:LEU:HD12	1:B:2544:LEU:HD23	1.89	0.53
1:B:4113:THR:O	1:B:4117:THR:HG23	2.09	0.53
1:C:1284:LYS:NZ	1:C:1286:THR:OG1	2.41	0.53
1:C:2765:GLU:HA	1:C:2768:LYS:HD2	1.91	0.53
1:C:3285:TYR:CE1	1:C:3325:LYS:HD2	2.43	0.53
1:C:4045:LYS:HE2	1:C:4078:LEU:HD22	1.91	0.53
1:D:2763:LEU:HB3	1:D:2767:GLU:OE2	2.10	0.53
1:D:4045:LYS:HE2	1:D:4078:LEU:HD22	1.91	0.53
1:A:180:ASP:HB3	1:A:211:LEU:HD12	1.91	0.52
1:A:972:LEU:HD11	1:A:976:TYR:HB2	1.91	0.52
1:A:4707:MET:HG3	1:D:4252:ILE:HG21	1.91	0.52
1:B:2716:LYS:HG3	1:B:2717:LEU:HD12	1.90	0.52
1:C:881:ILE:HG13	1:C:885:LEU:HD23	1.91	0.52
1:C:3089:GLY:O	1:C:3093:ILE:HG12	2.08	0.52
1:D:180:ASP:HB3	1:D:211:LEU:HD12	1.91	0.52
1:D:1048:ASP:HA	1:D:1051:ARG:HE	1.74	0.52
1:D:3030:VAL:HG12	1:D:3034:HIS:NE2	2.24	0.52
1:D:4113:THR:O	1:D:4117:THR:HG23	2.09	0.52
1:D:4250:TYR:O	1:D:4254:THR:HG23	2.09	0.52
1:A:2629:ASN:OD1	1:A:2630:PHE:N	2.42	0.52
1:B:2765:GLU:HA	1:B:2768:LYS:HD2	1.91	0.52
1:B:2933:VAL:HG22	1:B:2963:PHE:HE1	1.73	0.52
1:C:541:ILE:HD11	1:C:574:VAL:HG13	1.90	0.52
1:D:881:ILE:HG13	1:D:885:LEU:HD23	1.91	0.52
1:D:990:PRO:HA	1:D:993:GLU:HB2	1.91	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1979:PHE:HZ	1:D:1996:LEU:HB3	1.73	0.52
1:D:2716:LYS:HG3	1:D:2717:LEU:HD12	1.90	0.52
1:A:880:ARG:O	1:A:884:LYS:NZ	2.36	0.52
1:A:2095:ILE:HD11	1:A:3629:ILE:HG23	1.91	0.52
1:A:2763:LEU:HB3	1:A:2767:GLU:OE2	2.10	0.52
1:B:1685:LEU:O	1:B:1689:ILE:HG12	2.09	0.52
1:B:2623:LEU:HD23	1:B:2626:GLY:H	1.74	0.52
1:B:3089:GLY:O	1:B:3093:ILE:HG12	2.08	0.52
1:B:3134:LEU:HD12	1:B:3162:PHE:HE2	1.74	0.52
1:B:3778:LEU:HB2	1:B:3854:PHE:CE1	2.44	0.52
1:C:2623:LEU:HD23	1:C:2626:GLY:H	1.74	0.52
1:C:4120:GLU:HA	1:C:4123:GLU:HG2	1.90	0.52
1:D:4120:GLU:HA	1:D:4123:GLU:HG2	1.90	0.52
1:A:2736:LYS:HB3	1:A:2741:TRP:HB2	1.92	0.52
1:A:2937:HIS:HB2	1:A:3014:LEU:HD21	1.92	0.52
1:A:3180:ILE:HA	1:A:3185:ASN:HD22	1.74	0.52
1:B:1048:ASP:HA	1:B:1051:ARG:HE	1.74	0.52
1:B:4250:TYR:O	1:B:4254:THR:HG23	2.09	0.52
1:C:1685:LEU:O	1:C:1689:ILE:HG12	2.10	0.52
1:C:2874:TYR:HA	1:C:2877:LEU:HD13	1.91	0.52
1:C:2923:TYR:HE2	1:C:2999:LYS:HB3	1.74	0.52
1:D:2497:ARG:HH12	1:D:2877:LEU:HA	1.74	0.52
1:A:436:LEU:HG	1:A:445:VAL:HG11	1.90	0.52
1:A:881:ILE:O	1:A:885:LEU:HD23	2.10	0.52
1:A:1685:LEU:O	1:A:1689:ILE:HG12	2.10	0.52
1:B:4045:LYS:HE2	1:B:4078:LEU:HD22	1.91	0.52
1:C:375:GLN:HG2	1:C:377:VAL:HG13	1.92	0.52
1:C:2000:HIS:O	1:C:2004:MET:HG2	2.10	0.52
1:C:2968:LEU:HB3	1:C:2969:PRO:HD3	1.91	0.52
1:C:3180:ILE:HA	1:C:3185:ASN:HD22	1.74	0.52
1:C:3218:ILE:HA	1:C:3221:LEU:HG	1.92	0.52
1:C:3778:LEU:HB2	1:C:3854:PHE:CE1	2.44	0.52
1:C:4113:THR:O	1:C:4117:THR:HG23	2.09	0.52
1:D:896:ASN:OD1	1:D:897:LYS:N	2.42	0.52
1:D:4819:VAL:HG12	1:D:4830:GLU:HG3	1.91	0.52
1:A:2004:MET:HE2	1:A:2009:ILE:HG13	1.90	0.52
1:A:2765:GLU:HA	1:A:2768:LYS:HD2	1.91	0.52
1:A:3778:LEU:HB2	1:A:3854:PHE:CE1	2.44	0.52
1:A:4921:PHE:HE2	1:A:4940:VAL:HG11	1.74	0.52
1:B:972:LEU:HD11	1:B:976:TYR:HB2	1.90	0.52
1:C:849:ASP:OD1	1:C:1214:ARG:NE	2.42	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:892:LEU:HA	1:C:895:MET:SD	2.49	0.52
1:C:1184:ASP:OD2	1:C:1188:SER:OG	2.26	0.52
1:C:2497:ARG:HH12	1:C:2877:LEU:HA	1.74	0.52
1:C:3198:PRO:HD2	1:C:3204:VAL:HG22	1.91	0.52
1:C:4921:PHE:HE2	1:C:4940:VAL:HG11	1.74	0.52
1:D:972:LEU:HD11	1:D:976:TYR:HB2	1.91	0.52
1:A:1184:ASP:OD2	1:A:1188:SER:OG	2.26	0.52
1:A:2623:LEU:HD23	1:A:2626:GLY:H	1.74	0.52
1:A:3245:TYR:O	1:A:3249:TRP:HE3	1.93	0.52
1:A:4045:LYS:HE2	1:A:4078:LEU:HD22	1.91	0.52
1:B:2497:ARG:HH12	1:B:2877:LEU:HA	1.74	0.52
1:B:2937:HIS:HB2	1:B:3014:LEU:HD21	1.92	0.52
1:C:2937:HIS:HB2	1:C:3014:LEU:HD21	1.92	0.52
1:C:2943:PHE:CE1	1:C:2954:PHE:HB3	2.44	0.52
1:C:3285:TYR:HE1	1:C:3328:LYS:HE3	1.74	0.52
1:D:2095:ILE:HD11	1:D:3629:ILE:HG23	1.91	0.52
1:D:2979:ARG:NH2	1:D:3035:ILE:HB	2.22	0.52
1:D:3198:PRO:HD2	1:D:3204:VAL:HG22	1.91	0.52
1:A:1979:PHE:HZ	1:A:1996:LEU:HB3	1.73	0.52
1:A:2455:ASP:OD2	1:A:2457:SER:OG	2.21	0.52
1:A:2657:TYR:HA	1:A:2662:PHE:HE1	1.75	0.52
1:B:436:LEU:HG	1:B:445:VAL:HG11	1.90	0.52
1:B:541:ILE:HD11	1:B:574:VAL:HG13	1.90	0.52
1:B:1074:ARG:HH12	1:B:1078:CYS:H	1.58	0.52
1:B:2736:LYS:HB3	1:B:2741:TRP:HB2	1.92	0.52
1:B:2763:LEU:HB3	1:B:2767:GLU:OE2	2.10	0.52
1:B:3164:GLY:O	1:B:3248:ARG:NE	2.41	0.52
1:B:3218:ILE:HA	1:B:3221:LEU:HG	1.92	0.52
1:B:3245:TYR:O	1:B:3249:TRP:HE3	1.93	0.52
1:B:4306:PHE:HA	1:B:4309:ILE:HG12	1.92	0.52
1:C:3011:LEU:HD21	1:C:3036:LEU:CD1	2.40	0.52
1:C:3164:GLY:O	1:C:3248:ARG:NE	2.41	0.52
1:D:881:ILE:O	1:D:885:LEU:HD23	2.10	0.52
1:D:2202:TYR:O	1:D:2206:ILE:HG12	2.10	0.52
1:D:2629:ASN:OD1	1:D:2630:PHE:N	2.42	0.52
1:D:3011:LEU:HD21	1:D:3036:LEU:CD1	2.40	0.52
1:D:3879:LEU:O	1:D:3882:GLN:HG3	2.10	0.52
1:A:988:LEU:HD12	1:A:992:GLN:HE21	1.75	0.52
1:A:2716:LYS:HG3	1:A:2717:LEU:HD12	1.90	0.52
1:A:2874:TYR:HA	1:A:2877:LEU:HD13	1.91	0.52
1:A:3011:LEU:HD21	1:A:3036:LEU:CD1	2.40	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2943:PHE:CE1	1:B:2954:PHE:HB3	2.44	0.52
1:B:3011:LEU:HD21	1:B:3036:LEU:CD1	2.40	0.52
1:C:988:LEU:HD12	1:C:992:GLN:HE21	1.75	0.52
1:C:2763:LEU:HB3	1:C:2767:GLU:OE2	2.10	0.52
1:D:988:LEU:HD12	1:D:992:GLN:HE21	1.75	0.52
1:D:2937:HIS:HB2	1:D:3014:LEU:HD21	1.92	0.52
1:A:2923:TYR:HE2	1:A:2999:LYS:HB3	1.74	0.52
1:A:3277:LEU:HD13	1:A:3306:ILE:HG22	1.92	0.52
1:B:1048:ASP:OD1	1:B:1049:SER:N	2.43	0.52
1:B:3277:LEU:HD13	1:B:3306:ILE:HG22	1.92	0.52
1:C:1724:GLU:OE2	1:C:2127:ARG:NH2	2.42	0.52
1:C:2545:ILE:HD12	1:C:2580:LEU:HD11	1.90	0.52
1:C:2933:VAL:HG22	1:C:2963:PHE:HE1	1.73	0.52
1:C:3134:LEU:HD12	1:C:3162:PHE:HE2	1.74	0.52
1:D:2545:ILE:HD12	1:D:2580:LEU:HD11	1.90	0.52
1:D:3134:LEU:HD12	1:D:3162:PHE:HE2	1.74	0.52
1:D:3277:LEU:HD13	1:D:3306:ILE:HG22	1.92	0.52
1:D:3315:LEU:HA	1:D:3319:PHE:HD2	1.75	0.52
1:A:3218:ILE:HA	1:A:3221:LEU:HG	1.92	0.51
1:B:2202:TYR:O	1:B:2206:ILE:HG12	2.10	0.51
1:B:4197:ILE:HG23	1:B:4923:MET:HE2	1.92	0.51
1:B:4921:PHE:HE2	1:B:4940:VAL:HG11	1.74	0.51
1:C:990:PRO:HA	1:C:993:GLU:HB2	1.91	0.51
1:C:2285:TYR:OH	1:C:2382:ILE:N	2.37	0.51
1:C:3159:LEU:HB2	1:C:3241:MET:HE3	1.92	0.51
1:C:3229:THR:HG23	1:C:3291:ASP:OD2	2.10	0.51
1:C:3277:LEU:HD13	1:C:3306:ILE:HG22	1.92	0.51
1:D:675:TYR:HB3	1:D:822:CYS:SG	2.51	0.51
1:D:1014:GLN:O	1:D:1027:ARG:NH2	2.43	0.51
1:D:2447:LYS:HA	1:D:2447:LYS:HE3	1.92	0.51
1:D:2874:TYR:HA	1:D:2877:LEU:HD13	1.91	0.51
1:D:3134:LEU:HB2	1:D:3162:PHE:CE2	2.46	0.51
1:D:3136:SER:O	1:D:3140:LEU:HD22	2.10	0.51
1:D:3778:LEU:HB2	1:D:3854:PHE:CE1	2.44	0.51
1:D:4921:PHE:HE2	1:D:4940:VAL:HG11	1.74	0.51
1:A:675:TYR:HB3	1:A:822:CYS:SG	2.50	0.51
1:B:2000:HIS:O	1:B:2004:MET:HG2	2.10	0.51
1:B:2447:LYS:HE3	1:B:2447:LYS:HA	1.93	0.51
1:B:3314:LEU:HD12	1:B:3318:HIS:ND1	2.25	0.51
1:C:881:ILE:O	1:C:885:LEU:HD23	2.10	0.51
1:C:1014:GLN:O	1:C:1027:ARG:NH2	2.43	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2943:PHE:HE1	1:C:2954:PHE:HB3	1.75	0.51
1:D:2736:LYS:HB3	1:D:2741:TRP:HB2	1.92	0.51
1:D:3229:THR:HG23	1:D:3291:ASP:OD2	2.10	0.51
1:D:3314:LEU:HD12	1:D:3318:HIS:ND1	2.25	0.51
1:D:4105:LEU:HB3	1:D:4115:LEU:HD21	1.92	0.51
1:A:2635:GLU:HA	1:A:2638:LEU:HB2	1.93	0.51
1:A:3136:SER:O	1:A:3140:LEU:HD22	2.10	0.51
1:A:3274:ASN:HA	1:A:3277:LEU:HD23	1.93	0.51
1:B:675:TYR:HB3	1:B:822:CYS:SG	2.51	0.51
1:B:2657:TYR:HA	1:B:2662:PHE:HE1	1.75	0.51
1:B:2923:TYR:HE2	1:B:2999:LYS:HB3	1.74	0.51
1:C:972:LEU:HD11	1:C:976:TYR:HB2	1.90	0.51
1:C:1074:ARG:HH12	1:C:1078:CYS:H	1.58	0.51
1:D:1284:LYS:NZ	1:D:1286:THR:OG1	2.41	0.51
1:D:2623:LEU:HD23	1:D:2626:GLY:H	1.74	0.51
1:D:3274:ASN:HA	1:D:3277:LEU:HD23	1.93	0.51
1:A:2202:TYR:O	1:A:2206:ILE:HG12	2.10	0.51
1:B:2004:MET:HE2	1:B:2009:ILE:HG13	1.92	0.51
1:B:2095:ILE:HD11	1:B:3629:ILE:HG23	1.91	0.51
1:B:3108:LEU:HD12	1:B:3109:PHE:CD1	2.46	0.51
1:C:675:TYR:HB3	1:C:822:CYS:SG	2.50	0.51
1:C:3227:ARG:HB3	1:C:3230:GLN:OE1	2.11	0.51
1:D:375:GLN:HG2	1:D:377:VAL:HG13	1.92	0.51
1:D:3159:LEU:HB2	1:D:3241:MET:HE3	1.92	0.51
1:A:849:ASP:OD1	1:A:1214:ARG:NE	2.42	0.51
1:A:2000:HIS:O	1:A:2004:MET:HG2	2.10	0.51
1:A:3314:LEU:HD12	1:A:3318:HIS:ND1	2.25	0.51
2:G:83:TYR:HB3	2:G:87:GLY:HA2	1.93	0.51
1:B:988:LEU:HD12	1:B:992:GLN:HE21	1.75	0.51
1:B:2635:GLU:HA	1:B:2638:LEU:HB2	1.93	0.51
1:B:3134:LEU:HB2	1:B:3162:PHE:CE2	2.45	0.51
1:B:4105:LEU:HB3	1:B:4115:LEU:HD21	1.92	0.51
1:C:2447:LYS:HA	1:C:2447:LYS:HE3	1.92	0.51
1:C:3245:TYR:O	1:C:3249:TRP:HE3	1.93	0.51
1:C:3314:LEU:HD12	1:C:3318:HIS:CE1	2.46	0.51
1:C:3879:LEU:O	1:C:3882:GLN:HG3	2.10	0.51
1:D:1048:ASP:OD1	1:D:1049:SER:N	2.43	0.51
1:D:2488:LEU:HD11	1:D:2548:LEU:HD13	1.93	0.51
1:D:2765:GLU:HA	1:D:2768:LYS:HD2	1.91	0.51
1:D:3314:LEU:HD12	1:D:3318:HIS:CE1	2.46	0.51
1:D:3729:ALA:HA	1:D:3732:HIS:CD2	2.46	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:4306:PHE:HA	1:D:4309:ILE:HG12	1.92	0.51
1:A:1048:ASP:OD1	1:A:1049:SER:N	2.43	0.51
1:A:1246:ASP:OD1	1:A:1693:TYR:OH	2.29	0.51
1:A:1963:LYS:HA	1:A:1966:ARG:HE	1.76	0.51
1:A:2835:ARG:NH1	1:A:2836:ASP:HB2	2.26	0.51
1:A:3227:ARG:HE	1:A:3228:TYR:N	1.96	0.51
1:B:123:HIS:HD1	1:B:149:LEU:HD11	1.76	0.51
1:B:1014:GLN:O	1:B:1027:ARG:NH2	2.43	0.51
1:B:2714:PRO:HD2	1:B:2717:LEU:HD13	1.93	0.51
1:B:2874:TYR:HA	1:B:2877:LEU:HD13	1.92	0.51
1:B:3003:MET:O	1:B:3006:SER:OG	2.18	0.51
1:C:2635:GLU:HA	1:C:2638:LEU:HB2	1.93	0.51
1:C:3134:LEU:HB2	1:C:3162:PHE:CE2	2.46	0.51
1:C:3227:ARG:NE	1:C:3228:TYR:H	1.96	0.51
1:D:1685:LEU:O	1:D:1689:ILE:HG12	2.10	0.51
1:D:3227:ARG:HB3	1:D:3230:GLN:OE1	2.11	0.51
1:A:2447:LYS:HA	1:A:2447:LYS:HE3	1.92	0.51
1:A:2939:TYR:HB3	1:A:2943:PHE:HE2	1.76	0.51
1:A:2973:GLN:HA	1:A:2976:LYS:HG2	1.93	0.51
1:A:3003:MET:O	1:A:3006:SER:OG	2.18	0.51
1:A:3314:LEU:HD12	1:A:3318:HIS:CE1	2.46	0.51
1:A:4255:LEU:HB2	1:A:4293:THR:HG21	1.93	0.51
2:H:32:GLN:NE2	1:D:1312:GLU:HB3	2.25	0.51
2:H:83:TYR:HB3	2:H:87:GLY:HA2	1.93	0.51
1:B:4194:GLU:CD	1:B:4608:ARG:HH22	2.14	0.51
1:C:928:GLU:OE1	4:C:5003:ATP:H8	1.94	0.51
1:C:2095:ILE:HD11	1:C:3629:ILE:HG23	1.91	0.51
1:C:4197:ILE:HG23	1:C:4923:MET:HE2	1.92	0.51
1:D:123:HIS:HD1	1:D:149:LEU:HD11	1.76	0.51
1:D:2000:HIS:O	1:D:2004:MET:HG2	2.10	0.51
1:D:2635:GLU:HA	1:D:2638:LEU:HB2	1.93	0.51
1:D:2835:ARG:NH1	1:D:2836:ASP:HB2	2.26	0.51
1:D:2923:TYR:HE2	1:D:2999:LYS:HB3	1.74	0.51
1:A:131:CYS:SG	1:A:150:GLN:HB2	2.51	0.51
1:A:1014:GLN:O	1:A:1027:ARG:NH2	2.43	0.51
1:A:2264:LYS:HG2	1:A:2267:ARG:NH2	2.26	0.51
1:A:2794:GLU:HB2	1:B:1498:GLN:OE1	2.11	0.51
1:A:3072:MET:HB3	1:A:3140:LEU:HD21	1.93	0.51
1:A:3134:LEU:HB2	1:A:3162:PHE:CE2	2.46	0.51
1:A:3315:LEU:HA	1:A:3319:PHE:HD2	1.75	0.51
1:A:3879:LEU:O	1:A:3882:GLN:HG3	2.10	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:3879:LEU:O	1:B:3882:GLN:HG3	2.10	0.51
1:B:4255:LEU:HB2	1:B:4293:THR:HG21	1.93	0.51
1:C:2488:LEU:HD11	1:C:2548:LEU:HD13	1.93	0.51
1:C:2973:GLN:HA	1:C:2976:LYS:HG2	1.93	0.51
1:C:3314:LEU:HD12	1:C:3318:HIS:ND1	2.25	0.51
1:C:4194:GLU:CD	1:C:4608:ARG:HH22	2.14	0.51
1:D:928:GLU:OE1	4:D:5003:ATP:H8	1.94	0.51
1:D:3187:LYS:NZ	1:D:3195:LEU:HD13	2.26	0.51
1:A:2714:PRO:HD2	1:A:2717:LEU:HD13	1.93	0.51
1:B:131:CYS:SG	1:B:150:GLN:HB2	2.51	0.51
1:B:1963:LYS:HA	1:B:1966:ARG:HE	1.76	0.51
1:B:2488:LEU:HD11	1:B:2548:LEU:HD13	1.93	0.51
1:B:2696:ASP:OD2	1:B:2701:PHE:N	2.43	0.51
1:B:4103:THR:O	1:B:4107:GLU:HG3	2.11	0.51
1:B:4275:THR:HG22	1:B:4278:ASP:H	1.76	0.51
1:C:1008:ALA:O	1:C:1012:ILE:HG12	2.11	0.51
1:C:1048:ASP:OD1	1:C:1049:SER:N	2.43	0.51
1:C:2264:LYS:HG2	1:C:2267:ARG:NH2	2.26	0.51
1:C:3108:LEU:HD12	1:C:3109:PHE:CD1	2.46	0.51
1:C:3187:LYS:NZ	1:C:3195:LEU:HD13	2.26	0.51
1:C:3315:LEU:HA	1:C:3319:PHE:HD2	1.75	0.51
1:C:4306:PHE:HA	1:C:4309:ILE:HG12	1.92	0.51
1:D:2972:ASP:HA	1:D:3035:ILE:CD1	2.41	0.51
1:A:123:HIS:HD1	1:A:149:LEU:HD11	1.76	0.51
1:A:3729:ALA:HA	1:A:3732:HIS:CD2	2.46	0.51
1:A:4103:THR:O	1:A:4107:GLU:HG3	2.11	0.51
1:B:2835:ARG:NH1	1:B:2836:ASP:HB2	2.26	0.51
1:B:2943:PHE:HE1	1:B:2954:PHE:HB3	1.75	0.51
1:C:2696:ASP:OD2	1:C:2701:PHE:N	2.43	0.51
1:C:2714:PRO:HD2	1:C:2717:LEU:HD13	1.93	0.51
1:C:2736:LYS:HB3	1:C:2741:TRP:HB2	1.92	0.51
1:C:3274:ASN:HA	1:C:3277:LEU:HD23	1.93	0.51
1:C:4255:LEU:HB2	1:C:4293:THR:HG21	1.93	0.51
1:A:375:GLN:HG2	1:A:377:VAL:HG13	1.92	0.50
1:A:2972:ASP:HA	1:A:3035:ILE:CD1	2.41	0.50
1:A:3187:LYS:NZ	1:A:3195:LEU:HD13	2.26	0.50
1:A:4135:ARG:HD3	1:A:4147:ARG:HD3	1.94	0.50
1:A:4848:ILE:HD11	1:D:4818:TYR:HA	1.92	0.50
1:B:1008:ALA:O	1:B:1012:ILE:HG12	2.11	0.50
1:B:2590:ARG:HA	1:B:2640:LEU:HD11	1.93	0.50
1:B:2973:GLN:HA	1:B:2976:LYS:HG2	1.93	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:3227:ARG:CZ	1:B:3287:ASN:HB2	2.41	0.50
1:B:3729:ALA:HA	1:B:3732:HIS:CD2	2.46	0.50
1:C:1049:SER:O	1:C:1052:GLU:HG3	2.11	0.50
1:C:3072:MET:HB3	1:C:3140:LEU:HD21	1.93	0.50
1:D:1049:SER:O	1:D:1052:GLU:HG3	2.11	0.50
1:D:3218:ILE:HA	1:D:3221:LEU:HG	1.92	0.50
1:D:3227:ARG:CZ	1:D:3287:ASN:HB2	2.41	0.50
1:A:928:GLU:OE1	4:A:5003:ATP:H8	1.94	0.50
1:A:4194:GLU:CD	1:A:4608:ARG:HH22	2.14	0.50
1:A:4306:PHE:HA	1:A:4309:ILE:HG12	1.92	0.50
2:E:83:TYR:HB3	2:E:87:GLY:HA2	1.93	0.50
1:B:375:GLN:HG2	1:B:377:VAL:HG13	1.92	0.50
1:B:881:ILE:O	1:B:885:LEU:HD23	2.10	0.50
1:B:1724:GLU:OE2	1:B:2127:ARG:NH2	2.42	0.50
1:B:3314:LEU:HD12	1:B:3318:HIS:CE1	2.46	0.50
1:C:2202:TYR:O	1:C:2206:ILE:HG12	2.10	0.50
1:C:2455:ASP:OD2	1:C:2457:SER:OG	2.21	0.50
1:C:3102:LEU:HD22	1:C:3154:ALA:HB1	1.93	0.50
1:C:4103:THR:O	1:C:4107:GLU:HG3	2.11	0.50
1:D:2264:LYS:HG2	1:D:2267:ARG:NH2	2.26	0.50
1:D:2939:TYR:HB3	1:D:2943:PHE:HE2	1.76	0.50
1:D:3245:TYR:O	1:D:3249:TRP:HE3	1.93	0.50
1:D:3315:LEU:HD23	1:D:3319:PHE:CE2	2.46	0.50
1:A:878:LEU:O	1:A:881:ILE:HG22	2.11	0.50
1:A:967:PRO:O	1:A:971:GLN:HB2	2.12	0.50
1:A:969:ASN:OD1	1:A:970:TYR:N	2.45	0.50
1:A:1074:ARG:HH12	1:A:1078:CYS:H	1.58	0.50
1:A:2488:LEU:HD11	1:A:2548:LEU:HD13	1.93	0.50
1:A:2590:ARG:HA	1:A:2640:LEU:HD11	1.93	0.50
1:B:967:PRO:O	1:B:971:GLN:HB2	2.12	0.50
1:B:1049:SER:O	1:B:1052:GLU:HG3	2.11	0.50
1:B:2972:ASP:HA	1:B:3035:ILE:CD1	2.41	0.50
1:B:3072:MET:HB3	1:B:3140:LEU:HD21	1.93	0.50
1:C:1963:LYS:HA	1:C:1966:ARG:HE	1.76	0.50
1:C:2590:ARG:HA	1:C:2640:LEU:HD11	1.93	0.50
1:C:3044:THR:HA	1:C:3047:LYS:HG2	1.94	0.50
1:C:3058:ARG:HE	1:C:3061:LEU:HD21	1.77	0.50
1:C:3227:ARG:CZ	1:C:3287:ASN:HB2	2.42	0.50
1:D:131:CYS:SG	1:D:150:GLN:HB2	2.51	0.50
1:D:1964:GLU:HB2	1:D:1975:MET:HE3	1.93	0.50
1:D:4194:GLU:CD	1:D:4608:ARG:HH22	2.14	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:3058:ARG:HE	1:A:3061:LEU:HD21	1.77	0.50
1:A:3227:ARG:CZ	1:A:3287:ASN:HB2	2.42	0.50
1:A:3229:THR:HG23	1:A:3291:ASP:OD2	2.10	0.50
1:A:4105:LEU:HB3	1:A:4115:LEU:HD21	1.92	0.50
1:B:969:ASN:OD1	1:B:970:TYR:N	2.45	0.50
1:B:2593:VAL:HG12	1:B:2644:LEU:HB2	1.94	0.50
1:B:3102:LEU:HD22	1:B:3154:ALA:HB1	1.93	0.50
1:B:3227:ARG:HB3	1:B:3230:GLN:OE1	2.11	0.50
1:B:3274:ASN:HA	1:B:3277:LEU:HD23	1.93	0.50
1:C:131:CYS:SG	1:C:150:GLN:HB2	2.51	0.50
1:C:878:LEU:O	1:C:881:ILE:HG22	2.11	0.50
1:C:3136:SER:O	1:C:3140:LEU:HD22	2.10	0.50
1:C:3315:LEU:HD23	1:C:3319:PHE:CE2	2.47	0.50
1:D:270:HIS:ND1	1:D:491:GLU:HG3	2.27	0.50
1:D:2590:ARG:HA	1:D:2640:LEU:HD11	1.93	0.50
1:D:2708:THR:O	1:D:2708:THR:HG22	2.12	0.50
1:D:2973:GLN:HA	1:D:2976:LYS:HG2	1.93	0.50
1:D:3227:ARG:NE	1:D:3228:TYR:H	1.96	0.50
1:D:4103:THR:O	1:D:4107:GLU:HG3	2.11	0.50
1:A:270:HIS:ND1	1:A:491:GLU:HG3	2.27	0.50
1:A:2943:PHE:HE1	1:A:2954:PHE:HB3	1.75	0.50
1:B:878:LEU:O	1:B:881:ILE:HG22	2.11	0.50
1:B:3044:THR:HA	1:B:3047:LYS:HG2	1.94	0.50
1:B:3229:THR:HG23	1:B:3291:ASP:OD2	2.10	0.50
1:C:2657:TYR:HA	1:C:2662:PHE:HE1	1.75	0.50
1:D:3072:MET:HB3	1:D:3140:LEU:HD21	1.93	0.50
1:A:2719:TYR:O	1:A:2719:TYR:HD1	1.94	0.50
2:F:83:TYR:HB3	2:F:87:GLY:HA2	1.93	0.50
1:B:270:HIS:ND1	1:B:491:GLU:HG3	2.27	0.50
1:B:2377:GLU:OE2	1:B:2457:SER:OG	2.30	0.50
1:B:2455:ASP:OD2	1:B:2457:SER:OG	2.21	0.50
1:C:270:HIS:ND1	1:C:491:GLU:HG3	2.27	0.50
1:C:2377:GLU:OE2	1:C:2457:SER:OG	2.30	0.50
1:D:3044:THR:HA	1:D:3047:LYS:HG2	1.94	0.50
1:A:2377:GLU:OE2	1:A:2457:SER:OG	2.30	0.50
1:A:3108:LEU:HD12	1:A:3109:PHE:CD1	2.46	0.50
1:B:2719:TYR:O	1:B:2719:TYR:HD1	1.94	0.50
1:B:2720:PHE:HE1	1:B:2896:LEU:HA	1.77	0.50
1:B:2743:TYR:CD1	1:B:2757:MET:HB2	2.41	0.50
1:B:3315:LEU:HA	1:B:3319:PHE:HD2	1.75	0.50
1:C:2835:ARG:NH1	1:C:2836:ASP:HB2	2.26	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:4105:LEU:HB3	1:C:4115:LEU:HD21	1.92	0.50
1:D:878:LEU:O	1:D:881:ILE:HG22	2.11	0.50
1:D:1074:ARG:HH12	1:D:1078:CYS:H	1.58	0.50
1:D:3102:LEU:HD22	1:D:3154:ALA:HB1	1.93	0.50
1:A:537:LEU:O	1:A:541:ILE:HG12	2.12	0.50
1:A:730:LEU:HD11	2:E:8:ILE:HA	1.93	0.50
1:A:1049:SER:O	1:A:1052:GLU:HG3	2.11	0.50
1:A:2696:ASP:OD2	1:A:2701:PHE:N	2.43	0.50
1:A:3159:LEU:HB2	1:A:3241:MET:HE3	1.94	0.50
1:B:2264:LYS:HG2	1:B:2267:ARG:NH2	2.26	0.50
1:B:2939:TYR:HB3	1:B:2943:PHE:HE2	1.76	0.50
1:B:3058:ARG:HE	1:B:3061:LEU:HD21	1.77	0.50
1:C:1839:LEU:HD12	1:C:1842:ILE:HD11	1.94	0.50
1:C:2719:TYR:HD1	1:C:2719:TYR:O	1.94	0.50
1:C:3729:ALA:HA	1:C:3732:HIS:CD2	2.46	0.50
1:C:4275:THR:HG22	1:C:4278:ASP:H	1.76	0.50
1:D:686:VAL:HG13	1:D:687:THR:HG23	1.94	0.50
1:D:2174:VAL:O	1:D:2178:VAL:HG23	2.12	0.50
1:D:2593:VAL:HG12	1:D:2644:LEU:HB2	1.94	0.50
1:D:3108:LEU:HD12	1:D:3109:PHE:CD1	2.46	0.50
1:D:4275:THR:HG22	1:D:4278:ASP:H	1.76	0.50
1:B:537:LEU:O	1:B:541:ILE:HG12	2.12	0.50
1:B:3227:ARG:HE	1:B:3228:TYR:N	1.96	0.50
1:B:3677:THR:HB	1:B:3679:LYS:HZ3	1.77	0.50
1:C:4029:SER:HG	1:C:4055:HIS:CD2	2.29	0.50
1:D:967:PRO:O	1:D:971:GLN:HB2	2.12	0.50
1:D:2714:PRO:HD2	1:D:2717:LEU:HD13	1.93	0.50
1:D:4135:ARG:HD3	1:D:4147:ARG:HD3	1.94	0.50
1:A:2833:LEU:HD13	1:A:2837:LEU:HB3	1.94	0.49
1:A:3246:MET:HE3	1:A:3268:LEU:HD11	1.94	0.49
2:F:50:ARG:HG2	2:F:53:LYS:HE3	1.94	0.49
2:H:50:ARG:HG2	2:H:53:LYS:HE3	1.93	0.49
1:B:928:GLU:OE1	4:B:5003:ATP:H8	1.94	0.49
1:B:3184:TYR:HE2	1:B:3201:VAL:HB	1.77	0.49
1:C:163:HIS:HB2	1:C:182:ILE:HG13	1.94	0.49
1:C:2593:VAL:HG12	1:C:2644:LEU:HB2	1.94	0.49
1:D:1008:ALA:O	1:D:1012:ILE:HG12	2.11	0.49
1:D:1611:ILE:HD12	1:D:1611:ILE:H	1.77	0.49
1:D:2720:PHE:HE1	1:D:2896:LEU:HA	1.77	0.49
1:D:2943:PHE:HE1	1:D:2954:PHE:HB3	1.75	0.49
1:A:137:ARG:HH22	1:A:204:ASP:HB3	1.77	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2708:THR:HG22	1:A:2708:THR:O	2.12	0.49
2:G:50:ARG:HG2	2:G:53:LYS:HE3	1.94	0.49
1:B:137:ARG:HH22	1:B:204:ASP:HB3	1.77	0.49
1:B:163:HIS:HB2	1:B:182:ILE:HG13	1.94	0.49
1:B:1839:LEU:HD12	1:B:1842:ILE:HD11	1.94	0.49
1:B:3136:SER:O	1:B:3140:LEU:HD22	2.10	0.49
1:B:3187:LYS:NZ	1:B:3195:LEU:HD13	2.26	0.49
1:C:123:HIS:HD1	1:C:149:LEU:HD11	1.76	0.49
1:C:2720:PHE:HE1	1:C:2896:LEU:HA	1.77	0.49
1:D:504:ARG:O	1:D:507:VAL:HG22	2.13	0.49
1:D:2719:TYR:O	1:D:2719:TYR:HD1	1.94	0.49
1:A:686:VAL:HG13	1:A:687:THR:HG23	1.94	0.49
1:A:2589:LEU:O	1:A:2593:VAL:HG13	2.13	0.49
2:H:54:GLN:O	1:D:1771:ILE:HD11	2.11	0.49
1:B:253:GLY:O	1:B:257:ARG:HG2	2.13	0.49
1:B:2708:THR:O	1:B:2708:THR:HG22	2.12	0.49
1:C:2708:THR:HG22	1:C:2708:THR:O	2.12	0.49
1:D:4255:LEU:HB2	1:D:4293:THR:HG21	1.93	0.49
1:A:1420:LEU:HD11	1:A:1559:ARG:HH21	1.77	0.49
1:A:2174:VAL:O	1:A:2178:VAL:HG23	2.12	0.49
1:A:3044:THR:HA	1:A:3047:LYS:HG2	1.94	0.49
1:A:3192:ARG:NH2	1:A:3197:LEU:HD23	2.26	0.49
1:A:4029:SER:HG	1:A:4055:HIS:CD2	2.31	0.49
1:C:1685:LEU:HD13	1:C:1706:LEU:HD13	1.94	0.49
1:C:4135:ARG:HD3	1:C:4147:ARG:HD3	1.94	0.49
1:C:4818:TYR:HA	1:D:4848:ILE:HD11	1.94	0.49
1:D:227:TYR:CG	1:D:352:SER:HB2	2.48	0.49
1:D:969:ASN:OD1	1:D:970:TYR:N	2.45	0.49
1:D:1304:LEU:HB3	1:D:1586:LEU:HD11	1.95	0.49
1:D:4079:ASP:O	1:D:4082:GLU:HG3	2.13	0.49
2:F:79:PRO:HD3	2:F:97:THR:OG1	2.13	0.49
1:B:3315:LEU:HD23	1:B:3319:PHE:CE2	2.46	0.49
1:B:4177:VAL:HG11	1:B:4880:VAL:HA	1.94	0.49
1:C:969:ASN:OD1	1:C:970:TYR:N	2.45	0.49
1:C:2004:MET:HE2	1:C:2009:ILE:HG13	1.94	0.49
1:C:4177:VAL:HG11	1:C:4880:VAL:HA	1.94	0.49
1:D:1963:LYS:HA	1:D:1966:ARG:HE	1.76	0.49
1:D:2589:LEU:O	1:D:2593:VAL:HG13	2.13	0.49
1:D:2696:ASP:OD2	1:D:2701:PHE:N	2.43	0.49
1:A:163:HIS:HB2	1:A:182:ILE:HG13	1.94	0.49
1:A:253:GLY:O	1:A:257:ARG:HG2	2.13	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:829:LYS:NZ	1:A:1037:LEU:O	2.39	0.49
1:A:2621:TYR:OH	1:A:2637:GLU:OE2	2.17	0.49
1:A:3227:ARG:HB3	1:A:3230:GLN:OE1	2.11	0.49
1:A:3315:LEU:HD23	1:A:3319:PHE:CE2	2.47	0.49
1:A:3823:GLU:OE1	1:A:3826:GLY:N	2.41	0.49
1:A:4275:THR:HG22	1:A:4278:ASP:H	1.76	0.49
1:B:234:LEU:HD13	1:B:405:LEU:HD22	1.95	0.49
1:B:2589:LEU:O	1:B:2593:VAL:HG13	2.13	0.49
1:B:3187:LYS:HD2	1:B:3192:ARG:HH21	1.78	0.49
1:C:686:VAL:HG13	1:C:687:THR:HG23	1.94	0.49
1:C:1246:ASP:OD1	1:C:1693:TYR:OH	2.29	0.49
1:C:2939:TYR:HB3	1:C:2943:PHE:HE2	1.76	0.49
1:D:2377:GLU:OE2	1:D:2457:SER:OG	2.30	0.49
1:A:2743:TYR:CD1	1:A:2757:MET:HB2	2.41	0.49
2:F:8:ILE:HD11	2:F:74:LYS:HB2	1.95	0.49
2:H:79:PRO:HD3	2:H:97:THR:OG1	2.13	0.49
1:B:4818:TYR:HA	1:C:4848:ILE:HD11	1.94	0.49
1:C:2972:ASP:HA	1:C:3035:ILE:CD1	2.41	0.49
1:C:3215:MET:HA	1:C:3218:ILE:HG12	1.94	0.49
1:C:4079:ASP:O	1:C:4082:GLU:HG3	2.13	0.49
1:C:4086:ARG:HH21	1:C:4087:PHE:HE2	1.61	0.49
1:D:3058:ARG:HE	1:D:3061:LEU:HD21	1.77	0.49
1:A:1611:ILE:H	1:A:1611:ILE:HD12	1.77	0.49
1:A:3102:LEU:HD22	1:A:3154:ALA:HB1	1.93	0.49
1:A:4079:ASP:O	1:A:4082:GLU:HG3	2.13	0.49
1:A:4956:ASP:OD1	1:A:4957:CYS:N	2.46	0.49
1:B:2344:LEU:HD22	1:B:2434:GLY:HA3	1.95	0.49
1:B:3304:GLN:HA	1:B:3307:ILE:HG12	1.95	0.49
1:C:227:TYR:CG	1:C:352:SER:HB2	2.48	0.49
1:C:503:ASP:O	1:C:507:VAL:HG13	2.13	0.49
1:C:3184:TYR:HE2	1:C:3201:VAL:HB	1.78	0.49
1:C:3227:ARG:HE	1:C:3228:TYR:N	1.96	0.49
1:D:537:LEU:O	1:D:541:ILE:HG12	2.12	0.49
1:D:4197:ILE:HG23	1:D:4923:MET:HE2	1.93	0.49
1:A:181:LEU:N	1:A:212:TRP:O	2.36	0.49
1:A:4058:TYR:HB3	1:A:4062:GLU:HB2	1.95	0.49
1:A:4197:ILE:HG23	1:A:4923:MET:HE2	1.93	0.49
2:H:58:LYS:O	2:H:62:GLU:OE1	2.31	0.49
1:B:504:ARG:O	1:B:507:VAL:HG22	2.13	0.49
1:B:1074:ARG:NH1	1:B:1078:CYS:H	2.11	0.49
1:B:2621:TYR:OH	1:B:2637:GLU:OE2	2.17	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:137:ARG:HH22	1:C:204:ASP:HB3	1.77	0.49
1:C:504:ARG:O	1:C:507:VAL:HG22	2.13	0.49
1:C:967:PRO:O	1:C:971:GLN:HB2	2.12	0.49
1:D:1420:LEU:HD11	1:D:1559:ARG:HH21	1.77	0.49
1:D:1716:THR:O	1:D:1720:MET:HG3	2.13	0.49
1:D:3184:TYR:HE2	1:D:3201:VAL:HB	1.78	0.49
1:D:3695:MET:HB3	1:D:3731:LEU:HD11	1.95	0.49
1:D:4058:TYR:HB3	1:D:4062:GLU:HB2	1.95	0.49
1:D:4086:ARG:HH21	1:D:4087:PHE:HE2	1.61	0.49
1:A:1304:LEU:HB3	1:A:1586:LEU:HD11	1.95	0.49
1:A:2344:LEU:HD22	1:A:2434:GLY:HA3	1.95	0.49
1:A:2592:LEU:HD13	1:A:2610:LEU:CD2	2.43	0.49
1:C:234:LEU:HD13	1:C:405:LEU:HD22	1.95	0.49
1:C:2971:ILE:HG23	1:C:2975:PHE:CE2	2.48	0.49
1:D:2957:GLU:HB2	1:D:2961:LYS:NZ	2.28	0.49
1:D:3246:MET:HE3	1:D:3268:LEU:HD11	1.94	0.49
1:A:3112:ILE:HG23	1:A:3117:PHE:HB3	1.95	0.48
2:E:50:ARG:HG2	2:E:53:LYS:HE3	1.93	0.48
2:E:79:PRO:HD3	2:E:97:THR:OG1	2.13	0.48
2:H:12:ASP:OD2	2:H:13:GLY:N	2.46	0.48
1:B:3695:MET:HB3	1:B:3731:LEU:HD11	1.95	0.48
1:C:537:LEU:O	1:C:541:ILE:HG12	2.12	0.48
1:C:1611:ILE:H	1:C:1611:ILE:HD12	1.77	0.48
1:C:3112:ILE:HG23	1:C:3117:PHE:HB3	1.95	0.48
1:D:4145:ILE:HB	1:D:4961:GLN:HG3	1.95	0.48
1:A:1008:ALA:O	1:A:1012:ILE:HG12	2.11	0.48
2:E:58:LYS:O	2:E:62:GLU:OE1	2.31	0.48
2:G:58:LYS:O	2:G:62:GLU:OE1	2.31	0.48
1:B:227:TYR:CG	1:B:352:SER:HB2	2.48	0.48
1:B:1118:SER:HB3	1:B:1204:VAL:HG11	1.95	0.48
1:B:1420:LEU:HD11	1:B:1559:ARG:HH21	1.77	0.48
1:B:2684:ASN:ND2	1:B:2909:ASP:OD1	2.39	0.48
1:B:3112:ILE:HG23	1:B:3117:PHE:HB3	1.95	0.48
1:B:3215:MET:HA	1:B:3218:ILE:HG12	1.94	0.48
1:C:56:LYS:HA	1:C:324:VAL:HG23	1.95	0.48
1:C:253:GLY:O	1:C:257:ARG:HG2	2.13	0.48
1:C:2258:ARG:HB3	1:C:2260:PRO:HD2	1.95	0.48
1:C:2592:LEU:HD13	1:C:2610:LEU:CD2	2.43	0.48
1:C:4145:ILE:HB	1:C:4961:GLN:HG3	1.95	0.48
1:D:1685:LEU:HD13	1:D:1706:LEU:HD13	1.94	0.48
1:D:1839:LEU:HD12	1:D:1842:ILE:HD11	1.94	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:3215:MET:HA	1:D:3218:ILE:HG12	1.94	0.48
1:D:4177:VAL:HG11	1:D:4880:VAL:HA	1.94	0.48
1:A:504:ARG:O	1:A:507:VAL:HG22	2.13	0.48
1:A:982:ASP:H	1:A:985:PHE:HE1	1.62	0.48
1:A:2720:PHE:HE1	1:A:2896:LEU:HA	1.77	0.48
1:A:3227:ARG:NE	1:A:3228:TYR:H	1.96	0.48
2:E:12:ASP:OD2	2:E:13:GLY:N	2.46	0.48
1:B:686:VAL:HG13	1:B:687:THR:HG23	1.94	0.48
1:B:1979:PHE:CG	1:B:1993:ARG:HG2	2.49	0.48
1:B:2833:LEU:HD13	1:B:2837:LEU:HB3	1.94	0.48
1:B:3227:ARG:NH1	1:B:3290:ILE:HG13	2.18	0.48
1:B:4145:ILE:HB	1:B:4961:GLN:HG3	1.95	0.48
1:C:466:PRO:HG3	1:C:478:ARG:HD2	1.96	0.48
1:C:1074:ARG:NH1	1:C:1078:CYS:H	2.11	0.48
1:D:137:ARG:HH22	1:D:204:ASP:HB3	1.78	0.48
1:D:902:TRP:CZ2	1:D:913:ARG:HA	2.48	0.48
1:A:234:LEU:HD13	1:A:405:LEU:HD22	1.95	0.48
1:A:503:ASP:O	1:A:507:VAL:HG13	2.13	0.48
1:A:1979:PHE:CG	1:A:1993:ARG:HG2	2.49	0.48
1:A:3184:TYR:HE2	1:A:3201:VAL:HB	1.78	0.48
1:A:3653:GLU:OE2	1:A:3660:ARG:NH2	2.46	0.48
1:A:4145:ILE:HB	1:A:4961:GLN:HG3	1.95	0.48
2:E:8:ILE:HD11	2:E:74:LYS:HB2	1.95	0.48
2:F:12:ASP:OD2	2:F:13:GLY:N	2.46	0.48
2:G:12:ASP:OD2	2:G:13:GLY:N	2.46	0.48
2:H:8:ILE:HD11	2:H:74:LYS:HB2	1.95	0.48
1:B:56:LYS:HA	1:B:324:VAL:HG23	1.95	0.48
1:B:887:GLU:O	1:B:890:HIS:ND1	2.46	0.48
1:B:2163:ARG:NH1	1:B:2209:GLN:HB3	2.29	0.48
1:C:1898:LEU:HD13	1:C:1902:VAL:HG12	1.96	0.48
1:C:1937:GLN:NE2	1:C:3608:LEU:O	2.32	0.48
1:C:2174:VAL:O	1:C:2178:VAL:HG23	2.12	0.48
1:C:3697:LYS:HA	1:C:3700:HIS:CD2	2.49	0.48
1:D:3187:LYS:HD2	1:D:3192:ARG:HH21	1.78	0.48
1:A:1682:GLU:HB3	1:A:1683:PRO:HD3	1.95	0.48
1:A:2258:ARG:HB3	1:A:2260:PRO:HD2	1.95	0.48
1:A:2593:VAL:HG12	1:A:2644:LEU:HB2	1.94	0.48
1:B:1246:ASP:OD1	1:B:1693:TYR:OH	2.29	0.48
1:B:1898:LEU:HD13	1:B:1902:VAL:HG12	1.96	0.48
1:B:2971:ILE:HG23	1:B:2975:PHE:CE2	2.48	0.48
1:B:3227:ARG:HH12	1:B:3287:ASN:HB2	1.78	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:4079:ASP:O	1:B:4082:GLU:HG3	2.13	0.48
1:B:4135:ARG:HD3	1:B:4147:ARG:HD3	1.94	0.48
1:C:3653:GLU:OE2	1:C:3660:ARG:NH2	2.46	0.48
1:D:466:PRO:HG3	1:D:478:ARG:HD2	1.96	0.48
1:D:1979:PHE:CG	1:D:1993:ARG:HG2	2.49	0.48
1:D:2971:ILE:HG23	1:D:2975:PHE:CE2	2.48	0.48
1:A:227:TYR:CG	1:A:352:SER:HB2	2.47	0.48
1:A:887:GLU:O	1:A:890:HIS:ND1	2.46	0.48
1:A:1724:GLU:OE2	1:A:2127:ARG:NH2	2.42	0.48
1:A:2163:ARG:NH1	1:A:2209:GLN:HB3	2.29	0.48
1:A:2274:LEU:HG	1:A:2329:GLU:HG3	1.96	0.48
2:G:8:ILE:HD11	2:G:74:LYS:HB2	1.95	0.48
2:G:79:PRO:HD3	2:G:97:THR:OG1	2.13	0.48
1:B:674:TYR:CE1	1:B:756:SER:HB2	2.49	0.48
1:B:902:TRP:CZ2	1:B:913:ARG:HA	2.48	0.48
1:B:4086:ARG:HH21	1:B:4087:PHE:HE2	1.61	0.48
1:C:1420:LEU:HD11	1:C:1559:ARG:HH21	1.77	0.48
1:C:2163:ARG:NH1	1:C:2209:GLN:HB3	2.29	0.48
1:C:2589:LEU:O	1:C:2593:VAL:HG13	2.13	0.48
1:C:2957:GLU:HB2	1:C:2961:LYS:NZ	2.28	0.48
1:D:253:GLY:O	1:D:257:ARG:HG2	2.13	0.48
1:D:2163:ARG:NH1	1:D:2209:GLN:HB3	2.29	0.48
1:D:2258:ARG:HB3	1:D:2260:PRO:HD2	1.95	0.48
1:D:2274:LEU:HG	1:D:2329:GLU:HG3	1.96	0.48
1:D:3653:GLU:OE2	1:D:3660:ARG:NH2	2.46	0.48
1:D:4268:MET:O	1:D:4272:LYS:HG2	2.14	0.48
1:A:2971:ILE:HG23	1:A:2975:PHE:CE2	2.48	0.48
1:A:3304:GLN:HA	1:A:3307:ILE:HG12	1.95	0.48
1:A:3336:GLU:OE2	1:A:3337:GLU:HG3	2.13	0.48
1:A:4086:ARG:HH21	1:A:4087:PHE:HE2	1.61	0.48
1:A:4177:VAL:HG11	1:A:4880:VAL:HA	1.94	0.48
1:B:972:LEU:HD12	1:B:974:SER:HB2	1.96	0.48
1:B:982:ASP:H	1:B:985:PHE:HE1	1.62	0.48
1:B:2174:VAL:O	1:B:2178:VAL:HG23	2.12	0.48
1:B:4058:TYR:HB3	1:B:4062:GLU:HB2	1.95	0.48
1:C:674:TYR:CE1	1:C:756:SER:HB2	2.48	0.48
1:C:824:GLU:HA	1:C:1020:ILE:HD12	1.96	0.48
1:C:902:TRP:CZ2	1:C:913:ARG:HA	2.48	0.48
1:C:946:LEU:HG	1:C:998:LYS:HD3	1.96	0.48
1:C:2833:LEU:HD13	1:C:2837:LEU:HB3	1.94	0.48
1:C:3227:ARG:HH12	1:C:3287:ASN:HB2	1.78	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:3336:GLU:OE2	1:C:3337:GLU:HG3	2.13	0.48
1:C:4956:ASP:OD1	1:C:4957:CYS:N	2.46	0.48
1:D:163:HIS:HB2	1:D:182:ILE:HG13	1.94	0.48
1:D:2833:LEU:HD13	1:D:2837:LEU:HB3	1.94	0.48
1:A:1685:LEU:HD13	1:A:1706:LEU:HD13	1.94	0.48
1:A:3187:LYS:HD2	1:A:3192:ARG:HH21	1.78	0.48
1:B:137:ARG:HH12	1:B:204:ASP:HB3	1.79	0.48
1:B:503:ASP:O	1:B:507:VAL:HG13	2.13	0.48
1:B:910:ASP:OD2	1:B:911:ASN:N	2.47	0.48
1:B:1047:LYS:HG3	1:B:1051:ARG:CZ	2.44	0.48
1:B:1304:LEU:HB3	1:B:1586:LEU:HD11	1.95	0.48
1:B:3303:SER:HA	1:B:3306:ILE:HD13	1.96	0.48
1:B:3697:LYS:HA	1:B:3700:HIS:CD2	2.49	0.48
1:B:4051:ALA:O	1:B:4055:HIS:ND1	2.19	0.48
1:C:887:GLU:O	1:C:890:HIS:ND1	2.46	0.48
1:C:3304:GLN:HA	1:C:3307:ILE:HG12	1.95	0.48
1:D:887:GLU:O	1:D:890:HIS:ND1	2.46	0.48
1:D:2344:LEU:HD22	1:D:2434:GLY:HA3	1.95	0.48
1:A:674:TYR:CE1	1:A:756:SER:HB2	2.48	0.48
1:A:902:TRP:CZ2	1:A:913:ARG:HA	2.48	0.48
1:A:2059:GLN:NE2	1:A:2091:GLN:O	2.47	0.48
1:A:2768:LYS:HB3	1:A:2772:ARG:NH1	2.29	0.48
1:A:2957:GLU:HA	1:A:2960:ILE:HG12	1.96	0.48
1:A:3215:MET:HA	1:A:3218:ILE:HG12	1.94	0.48
1:B:824:GLU:HA	1:B:1020:ILE:HD12	1.96	0.48
1:B:1685:LEU:HD13	1:B:1706:LEU:HD13	1.94	0.48
1:B:1716:THR:O	1:B:1720:MET:HG3	2.13	0.48
1:C:1118:SER:HB3	1:C:1204:VAL:HG11	1.95	0.48
1:C:1304:LEU:HB3	1:C:1586:LEU:HD11	1.95	0.48
1:C:1716:THR:O	1:C:1720:MET:HG3	2.13	0.48
1:C:1979:PHE:CG	1:C:1993:ARG:HG2	2.49	0.48
1:C:2920:ARG:HH22	1:C:3000:GLU:HG2	1.79	0.48
1:C:2957:GLU:HA	1:C:2960:ILE:HG12	1.96	0.48
1:C:4058:TYR:HB3	1:C:4062:GLU:HB2	1.95	0.48
1:D:503:ASP:O	1:D:507:VAL:HG13	2.13	0.48
1:D:982:ASP:H	1:D:985:PHE:HE1	1.61	0.48
1:D:2997:SER:O	1:D:3000:GLU:HB2	2.14	0.48
1:A:972:LEU:HD12	1:A:974:SER:HB2	1.96	0.48
1:A:1118:SER:HB3	1:A:1204:VAL:HG11	1.95	0.48
1:A:3277:LEU:O	1:A:3281:LEU:HG	2.14	0.48
1:A:3296:MET:HA	1:A:3299:LEU:HG	1.96	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1611:ILE:H	1:B:1611:ILE:HD12	1.77	0.48
1:B:2274:LEU:HG	1:B:2329:GLU:HG3	1.96	0.48
1:B:2572:CYS:O	1:B:2576:ILE:HG13	2.14	0.48
1:C:2059:GLN:NE2	1:C:2091:GLN:O	2.47	0.48
1:C:2344:LEU:HD22	1:C:2434:GLY:HA3	1.95	0.48
1:C:2724:TYR:CD1	1:C:2895:PHE:CD2	3.02	0.48
1:C:3296:MET:HA	1:C:3299:LEU:HG	1.96	0.48
1:C:3303:SER:HA	1:C:3306:ILE:HD13	1.96	0.48
1:C:3695:MET:HB3	1:C:3731:LEU:HD11	1.95	0.48
1:D:181:LEU:N	1:D:212:TRP:O	2.36	0.48
1:D:1724:GLU:OE2	1:D:2127:ARG:NH2	2.42	0.48
1:D:2004:MET:HE2	1:D:2009:ILE:HG13	1.96	0.48
1:D:3025:ASP:O	1:D:3029:ILE:HD12	2.14	0.48
1:D:3324:GLU:OE2	1:D:3325:LYS:HE3	2.14	0.48
1:A:56:LYS:HA	1:A:324:VAL:HG23	1.95	0.47
1:A:137:ARG:HH12	1:A:204:ASP:HB3	1.79	0.47
1:A:470:LEU:HB2	1:A:475:LYS:HG3	1.96	0.47
1:A:1716:THR:O	1:A:1720:MET:HG3	2.13	0.47
1:A:1839:LEU:HD12	1:A:1842:ILE:HD11	1.94	0.47
2:G:38:ASP:OD1	2:G:43:ARG:NH1	2.47	0.47
1:B:643:LEU:HD13	1:B:1657:THR:HG23	1.96	0.47
1:B:1416:ASP:O	1:B:1420:LEU:HB2	2.14	0.47
1:B:2957:GLU:HB2	1:B:2961:LYS:NZ	2.28	0.47
1:B:3336:GLU:OE2	1:B:3337:GLU:HG3	2.13	0.47
1:C:611:LEU:HD22	1:C:1660:LEU:HD22	1.96	0.47
1:C:2274:LEU:HG	1:C:2329:GLU:HG3	1.96	0.47
1:D:234:LEU:HD13	1:D:405:LEU:HD22	1.95	0.47
1:D:674:TYR:CE1	1:D:756:SER:HB2	2.48	0.47
1:D:1682:GLU:HB3	1:D:1683:PRO:HD3	1.95	0.47
1:D:2592:LEU:HD13	1:D:2610:LEU:CD2	2.43	0.47
1:D:2957:GLU:HA	1:D:2960:ILE:HG12	1.96	0.47
1:D:3697:LYS:HA	1:D:3700:HIS:CD2	2.49	0.47
1:A:4252:ILE:HG21	1:B:4707:MET:HG3	1.95	0.47
4:A:5003:ATP:C5'	5:A:5004:KVR:C15	2.92	0.47
2:E:38:ASP:OD1	2:E:43:ARG:NH1	2.47	0.47
2:F:58:LYS:O	2:F:62:GLU:OE1	2.31	0.47
1:B:466:PRO:HG3	1:B:478:ARG:HD2	1.96	0.47
1:B:2592:LEU:HD13	1:B:2610:LEU:CD2	2.43	0.47
1:B:2724:TYR:CD1	1:B:2895:PHE:CD2	3.02	0.47
1:B:2957:GLU:HA	1:B:2960:ILE:HG12	1.96	0.47
1:C:982:ASP:H	1:C:985:PHE:HE1	1.61	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:3324:GLU:OE2	1:C:3325:LYS:HE3	2.14	0.47
1:D:3112:ILE:HG23	1:D:3117:PHE:HB3	1.95	0.47
1:D:3336:GLU:OE2	1:D:3337:GLU:HG3	2.13	0.47
1:D:4956:ASP:OD1	1:D:4957:CYS:N	2.46	0.47
1:A:2997:SER:O	1:A:3000:GLU:HB2	2.14	0.47
1:B:2768:LYS:HB3	1:B:2772:ARG:NH1	2.29	0.47
1:B:2920:ARG:HH22	1:B:3000:GLU:HG2	1.79	0.47
1:B:3246:MET:HE3	1:B:3268:LEU:HD11	1.96	0.47
1:B:3296:MET:HA	1:B:3299:LEU:HG	1.96	0.47
1:B:3844:GLN:O	1:B:3848:GLU:HG3	2.15	0.47
1:C:137:ARG:HH12	1:C:204:ASP:HB3	1.79	0.47
1:C:910:ASP:OD2	1:C:911:ASN:N	2.47	0.47
1:C:1416:ASP:O	1:C:1420:LEU:HB2	2.14	0.47
1:C:4026:LEU:HD11	1:C:4052:MET:HA	1.96	0.47
1:D:1047:LYS:HG3	1:D:1051:ARG:CZ	2.44	0.47
1:D:2719:TYR:CE2	1:D:2799:ALA:HB2	2.38	0.47
1:D:2724:TYR:CD1	1:D:2895:PHE:CD2	3.02	0.47
1:D:3187:LYS:O	1:D:3191:GLU:HB3	2.15	0.47
1:D:3304:GLN:HA	1:D:3307:ILE:HG12	1.95	0.47
1:A:2920:ARG:HH22	1:A:3000:GLU:HG2	1.79	0.47
2:G:54:GLN:O	1:C:1771:ILE:HD11	2.14	0.47
1:B:137:ARG:NH1	1:B:146:ASP:OD1	2.48	0.47
1:B:470:LEU:HB2	1:B:475:LYS:HG3	1.96	0.47
1:B:1788:LYS:HG3	1:B:1834:PHE:CE1	2.50	0.47
1:B:3653:GLU:OE2	1:B:3660:ARG:NH2	2.46	0.47
1:B:4026:LEU:HD11	1:B:4052:MET:HA	1.96	0.47
4:B:5003:ATP:C5'	5:B:5004:KVR:C15	2.93	0.47
1:C:643:LEU:HD13	1:C:1657:THR:HG23	1.96	0.47
1:C:972:LEU:HD12	1:C:974:SER:HB2	1.96	0.47
1:C:2918:GLU:HA	1:C:2923:TYR:HB3	1.96	0.47
1:C:2997:SER:O	1:C:3000:GLU:HB2	2.14	0.47
1:C:4203:ALA:HA	1:C:4206:ILE:HG12	1.97	0.47
1:D:470:LEU:HB2	1:D:475:LYS:HG3	1.96	0.47
1:D:1471:ASP:OD1	1:D:1475:LYS:N	2.47	0.47
1:D:3296:MET:HA	1:D:3299:LEU:HG	1.96	0.47
1:D:4203:ALA:HA	1:D:4206:ILE:HG12	1.97	0.47
1:A:1047:LYS:HG3	1:A:1051:ARG:CZ	2.44	0.47
1:A:2724:TYR:CD1	1:A:2895:PHE:CD2	3.02	0.47
1:A:2769:GLU:C	1:A:2771:TYR:H	2.16	0.47
1:A:3187:LYS:HD2	1:A:3192:ARG:NH2	2.30	0.47
1:A:4268:MET:O	1:A:4272:LYS:HG2	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2655:LYS:O	1:B:2958:GLN:NE2	2.48	0.47
1:C:514:PHE:CD2	1:C:526:TRP:HB2	2.50	0.47
1:C:882:ARG:HH22	1:C:933:LEU:C	2.18	0.47
1:C:3025:ASP:O	1:C:3029:ILE:HD12	2.14	0.47
1:D:56:LYS:HA	1:D:324:VAL:HG23	1.95	0.47
1:D:137:ARG:HH12	1:D:204:ASP:HB3	1.79	0.47
1:D:946:LEU:HG	1:D:998:LYS:HD3	1.96	0.47
1:D:1118:SER:HB3	1:D:1204:VAL:HG11	1.95	0.47
1:D:2768:LYS:HB3	1:D:2772:ARG:NH1	2.29	0.47
1:D:3303:SER:HA	1:D:3306:ILE:HD13	1.96	0.47
1:A:466:PRO:HG3	1:A:478:ARG:HD2	1.96	0.47
1:A:910:ASP:OD2	1:A:911:ASN:N	2.47	0.47
1:A:1074:ARG:NH1	1:A:1078:CYS:H	2.11	0.47
1:A:1124:PRO:HD2	1:A:1594:VAL:HG23	1.97	0.47
1:A:2572:CYS:O	1:A:2576:ILE:HG13	2.14	0.47
1:A:3025:ASP:O	1:A:3029:ILE:HD12	2.14	0.47
1:A:3187:LYS:O	1:A:3191:GLU:HB3	2.15	0.47
1:A:3697:LYS:HA	1:A:3700:HIS:CD2	2.49	0.47
1:A:3844:GLN:O	1:A:3848:GLU:HG3	2.15	0.47
2:H:38:ASP:OD1	2:H:43:ARG:NH1	2.47	0.47
1:B:939:THR:HG23	1:B:999:LEU:HD21	1.96	0.47
1:B:1682:GLU:HB3	1:B:1683:PRO:HD3	1.95	0.47
1:C:1047:LYS:HG3	1:C:1051:ARG:CZ	2.44	0.47
1:C:2572:CYS:O	1:C:2576:ILE:HG13	2.14	0.47
1:C:2768:LYS:HB3	1:C:2772:ARG:NH1	2.29	0.47
1:C:4268:MET:O	1:C:4272:LYS:HG2	2.14	0.47
1:D:939:THR:HG23	1:D:999:LEU:HD21	1.97	0.47
1:D:1074:ARG:NH1	1:D:1078:CYS:H	2.11	0.47
1:D:1416:ASP:O	1:D:1420:LEU:HB2	2.14	0.47
1:D:2059:GLN:NE2	1:D:2091:GLN:O	2.47	0.47
1:D:2445:ILE:HG23	1:D:2865:GLY:HA2	1.97	0.47
1:D:2719:TYR:HD1	1:D:2723:LYS:HZ2	1.61	0.47
1:D:3187:LYS:HD2	1:D:3192:ARG:NH2	2.30	0.47
1:D:3277:LEU:O	1:D:3281:LEU:HG	2.14	0.47
1:D:4029:SER:HG	1:D:4055:HIS:CD2	2.32	0.47
1:A:939:THR:HG23	1:A:999:LEU:HD21	1.96	0.47
1:A:946:LEU:HG	1:A:998:LYS:HD3	1.96	0.47
1:A:1416:ASP:O	1:A:1420:LEU:HB2	2.14	0.47
1:A:1898:LEU:HD13	1:A:1902:VAL:HG12	1.96	0.47
1:A:1937:GLN:NE2	1:A:3608:LEU:O	2.31	0.47
1:A:2215:PHE:CD2	1:A:2253:LEU:HD22	2.50	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2445:ILE:HG23	1:A:2865:GLY:HA2	1.97	0.47
1:A:2730:ASP:O	1:A:2734:MET:HG2	2.15	0.47
1:A:3005:THR:HG21	1:A:3045:VAL:HG21	1.97	0.47
1:A:3324:GLU:OE2	1:A:3325:LYS:HE3	2.14	0.47
1:A:3677:THR:HB	1:A:3679:LYS:NZ	2.30	0.47
1:B:164:PRO:HB3	1:B:169:ARG:HB2	1.97	0.47
1:B:882:ARG:HH22	1:B:933:LEU:C	2.18	0.47
1:B:1185:ASP:OD1	1:B:1186:SER:N	2.48	0.47
1:B:2059:GLN:NE2	1:B:2091:GLN:O	2.47	0.47
1:B:2215:PHE:CD2	1:B:2253:LEU:HD22	2.50	0.47
1:B:2445:ILE:HG23	1:B:2865:GLY:HA2	1.97	0.47
1:B:3005:THR:HG21	1:B:3045:VAL:HG21	1.97	0.47
1:B:3025:ASP:O	1:B:3029:ILE:HD12	2.14	0.47
1:B:3192:ARG:NH2	1:B:3197:LEU:HD23	2.26	0.47
1:B:3277:LEU:O	1:B:3281:LEU:HG	2.14	0.47
1:B:3324:GLU:OE2	1:B:3325:LYS:HE3	2.14	0.47
1:C:1682:GLU:HB3	1:C:1683:PRO:HD3	1.95	0.47
1:C:2655:LYS:O	1:C:2958:GLN:NE2	2.48	0.47
1:C:3005:THR:HG21	1:C:3045:VAL:HG21	1.97	0.47
1:C:3187:LYS:HD2	1:C:3192:ARG:NH2	2.30	0.47
1:C:3187:LYS:HD2	1:C:3192:ARG:HH21	1.78	0.47
1:C:4011:GLU:HB2	1:C:4121:LEU:HD23	1.97	0.47
1:C:4043:ILE:O	1:C:4078:LEU:HD23	2.15	0.47
1:D:829:LYS:NZ	1:D:1037:LEU:O	2.39	0.47
1:D:2566:ARG:HA	1:D:2569:ILE:HG12	1.97	0.47
1:D:2655:LYS:O	1:D:2958:GLN:NE2	2.48	0.47
1:D:2920:ARG:HH22	1:D:3000:GLU:HG2	1.79	0.47
1:D:4283:PHE:CE1	1:D:4287:TYR:HE2	2.33	0.47
1:A:514:PHE:CD2	1:A:526:TRP:HB2	2.50	0.47
1:A:1471:ASP:OD1	1:A:1475:LYS:N	2.47	0.47
1:A:2957:GLU:HB2	1:A:2961:LYS:NZ	2.28	0.47
1:A:3227:ARG:HH12	1:A:3287:ASN:HB2	1.78	0.47
1:A:3695:MET:HB3	1:A:3731:LEU:HD11	1.95	0.47
1:B:1272:ARG:NH2	1:B:1582:CYS:SG	2.88	0.47
1:B:2176:VAL:HG22	1:B:2220:TYR:HE2	1.80	0.47
1:C:470:LEU:HB2	1:C:475:LYS:HG3	1.96	0.47
1:C:732:LEU:HG	1:C:741:VAL:HG11	1.97	0.47
1:C:3017:HIS:CD2	1:C:3093:ILE:HD12	2.50	0.47
1:C:3250:TRP:CE3	1:C:3309:LYS:HE3	2.50	0.47
1:D:882:ARG:HH22	1:D:933:LEU:C	2.18	0.47
1:D:1898:LEU:HD13	1:D:1902:VAL:HG12	1.96	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2139:GLU:O	1:D:2192:MET:HE3	2.15	0.47
1:D:2572:CYS:O	1:D:2576:ILE:HG13	2.14	0.47
4:D:5003:ATP:C5'	5:D:5004:KVR:C15	2.92	0.47
1:A:164:PRO:HB3	1:A:169:ARG:HB2	1.97	0.47
1:A:611:LEU:HD22	1:A:1660:LEU:HD22	1.96	0.47
1:A:643:LEU:HD13	1:A:1657:THR:HG23	1.96	0.47
1:A:1048:ASP:HA	1:A:1051:ARG:NE	2.30	0.47
1:A:1788:LYS:HG3	1:A:1834:PHE:CE1	2.50	0.47
1:A:4283:PHE:CE1	1:A:4287:TYR:HE2	2.33	0.47
1:B:181:LEU:N	1:B:212:TRP:O	2.36	0.47
1:B:2258:ARG:HB3	1:B:2260:PRO:HD2	1.95	0.47
1:B:4203:ALA:HA	1:B:4206:ILE:HG12	1.97	0.47
1:B:4956:ASP:OD1	1:B:4957:CYS:N	2.46	0.47
1:C:1471:ASP:OD1	1:C:1475:LYS:N	2.47	0.47
1:C:2566:ARG:HA	1:C:2569:ILE:HG12	1.97	0.47
1:A:1100:ARG:NH2	1:A:1234:GLU:O	2.48	0.47
1:A:1185:ASP:OD1	1:A:1186:SER:N	2.48	0.47
1:A:2785:TRP:HH2	1:A:2847:ASN:ND2	2.13	0.47
1:A:2918:GLU:HA	1:A:2923:TYR:HB3	1.96	0.47
1:A:3811:GLN:NE2	1:A:3815:GLU:OE2	2.47	0.47
1:A:4203:ALA:HA	1:A:4206:ILE:HG12	1.97	0.47
2:F:38:ASP:OD1	2:F:43:ARG:NH1	2.47	0.47
1:B:514:PHE:CD2	1:B:526:TRP:HB2	2.50	0.47
1:B:1048:ASP:HA	1:B:1051:ARG:NE	2.30	0.47
1:B:1471:ASP:OD1	1:B:1475:LYS:N	2.47	0.47
1:C:448:PRO:HB2	1:C:451:SER:OG	2.15	0.47
1:C:3187:LYS:O	1:C:3191:GLU:HB3	2.15	0.47
1:C:3622:GLN:HB3	1:C:3626:LYS:NZ	2.30	0.47
1:D:2215:PHE:CD2	1:D:2253:LEU:HD22	2.50	0.47
1:D:2730:ASP:O	1:D:2734:MET:HG2	2.15	0.47
1:D:2769:GLU:C	1:D:2771:TYR:N	2.69	0.47
1:D:2785:TRP:HH2	1:D:2847:ASN:ND2	2.13	0.47
1:D:4026:LEU:HD11	1:D:4052:MET:HA	1.96	0.47
1:A:824:GLU:HA	1:A:1020:ILE:HD12	1.96	0.46
1:A:904:TYR:CE1	1:A:916:PRO:HA	2.51	0.46
1:A:928:GLU:OE2	4:A:5003:ATP:C8	2.69	0.46
1:A:1272:ARG:NH2	1:A:1582:CYS:SG	2.88	0.46
1:A:2566:ARG:HA	1:A:2569:ILE:HG12	1.97	0.46
1:A:2691:LYS:HZ1	1:A:2875:ASP:H	1.63	0.46
1:A:3017:HIS:CD2	1:A:3093:ILE:HD12	2.50	0.46
1:A:3622:GLN:HB3	1:A:3626:LYS:NZ	2.30	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2769:GLU:OE2	1:B:2772:ARG:NH2	2.48	0.46
1:B:2785:TRP:HH2	1:B:2847:ASN:ND2	2.13	0.46
1:B:2997:SER:O	1:B:3000:GLU:HB2	2.14	0.46
1:B:4011:GLU:HB2	1:B:4121:LEU:HD23	1.96	0.46
1:C:164:PRO:HB3	1:C:169:ARG:HB2	1.97	0.46
4:C:5003:ATP:C5'	5:C:5004:KVR:C15	2.92	0.46
1:D:514:PHE:CD2	1:D:526:TRP:HB2	2.50	0.46
1:D:643:LEU:HD13	1:D:1657:THR:HG23	1.96	0.46
1:D:972:LEU:HD12	1:D:974:SER:HB2	1.96	0.46
1:D:1246:ASP:OD1	1:D:1693:TYR:OH	2.29	0.46
1:D:3288:LEU:HD21	1:D:3336:GLU:HG3	1.97	0.46
1:D:3823:GLU:OE1	1:D:3826:GLY:N	2.41	0.46
1:A:281:ARG:NE	1:A:283:ALA:O	2.41	0.46
1:A:732:LEU:HG	1:A:741:VAL:HG11	1.97	0.46
1:A:2692:GLN:HG2	1:A:2704:GLN:HG3	1.97	0.46
1:A:2701:PHE:HD1	1:A:2873:PRO:HG3	1.80	0.46
1:A:3288:LEU:HD21	1:A:3336:GLU:HG3	1.97	0.46
1:A:3303:SER:HA	1:A:3306:ILE:HD13	1.96	0.46
1:B:829:LYS:NZ	1:B:1037:LEU:O	2.39	0.46
1:B:2719:TYR:HE2	1:B:2799:ALA:CB	2.24	0.46
1:B:2730:ASP:O	1:B:2734:MET:HG2	2.15	0.46
1:B:3187:LYS:O	1:B:3191:GLU:HB3	2.15	0.46
1:C:2215:PHE:CD2	1:C:2253:LEU:HD22	2.50	0.46
1:C:3677:THR:HB	1:C:3679:LYS:NZ	2.30	0.46
1:C:4283:PHE:CE1	1:C:4287:TYR:HE2	2.33	0.46
1:D:910:ASP:OD2	1:D:911:ASN:N	2.47	0.46
1:D:1979:PHE:HB3	1:D:1986:CYS:SG	2.55	0.46
1:D:2266:VAL:HG12	1:D:2327:ARG:HD2	1.96	0.46
1:D:2788:ARG:NH2	1:D:2906:GLY:O	2.45	0.46
1:D:3005:THR:HG21	1:D:3045:VAL:HG21	1.97	0.46
1:D:3227:ARG:HH12	1:D:3287:ASN:HB2	1.78	0.46
1:D:4664:ASP:OD1	1:D:4665:ARG:N	2.49	0.46
1:A:902:TRP:CZ2	1:A:915:HIS:CE1	3.04	0.46
1:A:2142:MET:HE3	1:A:2174:VAL:HG11	1.97	0.46
1:A:4827:ILE:O	1:A:4831:ILE:HG12	2.15	0.46
1:B:23:GLN:HB2	1:B:34:LYS:HD2	1.97	0.46
1:B:1100:ARG:NH2	1:B:1234:GLU:O	2.48	0.46
1:B:3017:HIS:CD2	1:B:3093:ILE:HD12	2.50	0.46
1:B:3288:LEU:HD21	1:B:3336:GLU:HG3	1.97	0.46
1:B:4268:MET:O	1:B:4272:LYS:HG2	2.14	0.46
1:C:270:HIS:CE1	1:C:491:GLU:HG3	2.50	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1124:PRO:HD2	1:C:1594:VAL:HG23	1.97	0.46
1:C:1979:PHE:HB3	1:C:1986:CYS:SG	2.55	0.46
1:C:2139:GLU:O	1:C:2192:MET:HE3	2.15	0.46
1:C:2266:VAL:HG12	1:C:2327:ARG:HD2	1.97	0.46
1:C:2730:ASP:O	1:C:2734:MET:HG2	2.15	0.46
1:C:2769:GLU:C	1:C:2771:TYR:N	2.69	0.46
1:D:448:PRO:HB2	1:D:451:SER:OG	2.15	0.46
1:D:1048:ASP:HA	1:D:1051:ARG:NE	2.30	0.46
1:D:2581:ARG:HD3	1:D:2582:PRO:HD2	1.98	0.46
1:D:4011:GLU:HB2	1:D:4121:LEU:HD23	1.97	0.46
1:A:668:ALA:HB2	1:A:1012:ILE:HD11	1.98	0.46
1:A:882:ARG:HH22	1:A:933:LEU:C	2.18	0.46
1:A:1936:LEU:HD11	1:A:1976:LEU:HD23	1.97	0.46
1:A:1979:PHE:HB3	1:A:1986:CYS:SG	2.55	0.46
1:B:1979:PHE:HB3	1:B:1986:CYS:SG	2.55	0.46
1:B:2566:ARG:HA	1:B:2569:ILE:HG12	1.97	0.46
1:B:3316:LYS:O	1:B:3317:THR:OG1	2.30	0.46
1:C:2443:PRO:HD3	1:C:2512:MET:HG2	1.97	0.46
1:C:2573:LEU:HD23	1:C:2605:MET:SD	2.56	0.46
1:C:2581:ARG:HD3	1:C:2582:PRO:HD2	1.97	0.46
1:C:3246:MET:HE3	1:C:3268:LEU:HD11	1.96	0.46
1:C:3846:LEU:HD22	1:C:3854:PHE:CE2	2.51	0.46
1:C:4602:ARG:O	1:C:4606:VAL:HG23	2.16	0.46
1:D:611:LEU:HD22	1:D:1660:LEU:HD22	1.96	0.46
1:D:732:LEU:HG	1:D:741:VAL:HG11	1.97	0.46
1:D:824:GLU:HA	1:D:1020:ILE:HD12	1.96	0.46
1:D:2443:PRO:HD3	1:D:2512:MET:HG2	1.97	0.46
1:D:2769:GLU:OE2	1:D:2772:ARG:NH2	2.48	0.46
1:D:3622:GLN:HB3	1:D:3626:LYS:NZ	2.30	0.46
1:D:3677:THR:HB	1:D:3679:LYS:HZ3	1.80	0.46
1:D:3844:GLN:O	1:D:3848:GLU:HG3	2.15	0.46
1:D:3846:LEU:HD22	1:D:3854:PHE:CE2	2.51	0.46
1:A:2266:VAL:HG12	1:A:2327:ARG:HD2	1.96	0.46
1:B:611:LEU:HD22	1:B:1660:LEU:HD22	1.96	0.46
1:B:928:GLU:OE2	4:B:5003:ATP:C8	2.68	0.46
1:B:3187:LYS:HD2	1:B:3192:ARG:NH2	2.30	0.46
1:B:3622:GLN:HB3	1:B:3626:LYS:NZ	2.30	0.46
1:C:939:THR:HG23	1:C:999:LEU:HD21	1.96	0.46
1:C:1185:ASP:OD1	1:C:1186:SER:N	2.48	0.46
1:C:2592:LEU:HD13	1:C:2610:LEU:HD21	1.98	0.46
1:C:2719:TYR:HE2	1:C:2799:ALA:CB	2.24	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2785:TRP:HH2	1:C:2847:ASN:ND2	2.13	0.46
1:C:3277:LEU:O	1:C:3281:LEU:HG	2.14	0.46
1:C:3844:GLN:O	1:C:3848:GLU:HG3	2.15	0.46
1:C:4827:ILE:O	1:C:4831:ILE:HG12	2.15	0.46
1:D:1936:LEU:HD11	1:D:1976:LEU:HD23	1.97	0.46
1:D:2610:LEU:HD12	1:D:2614:TYR:HE2	1.80	0.46
1:D:3033:LEU:HD13	1:D:3104:MET:CB	2.44	0.46
1:D:3677:THR:HB	1:D:3679:LYS:NZ	2.30	0.46
1:A:2222:LEU:HD23	1:A:2222:LEU:HA	1.79	0.46
1:A:4011:GLU:HB2	1:A:4121:LEU:HD23	1.97	0.46
1:B:904:TYR:CE1	1:B:916:PRO:HA	2.51	0.46
1:B:2610:LEU:HD12	1:B:2614:TYR:HE2	1.80	0.46
1:B:2701:PHE:HD1	1:B:2873:PRO:HG3	1.81	0.46
1:B:3245:TYR:HA	1:B:3249:TRP:CZ3	2.51	0.46
1:B:4827:ILE:O	1:B:4831:ILE:HG12	2.15	0.46
1:C:928:GLU:OE2	4:C:5003:ATP:C8	2.68	0.46
1:C:948:CYS:SG	1:C:1064:LEU:HB3	2.56	0.46
1:C:1100:ARG:NH2	1:C:1234:GLU:O	2.48	0.46
1:C:1272:ARG:NH2	1:C:1582:CYS:SG	2.88	0.46
1:C:2445:ILE:HG23	1:C:2865:GLY:HA2	1.97	0.46
1:C:2852:TRP:HA	1:C:2855:LYS:HE3	1.98	0.46
1:C:3131:TYR:HE1	1:C:3166:PHE:CZ	2.33	0.46
1:D:164:PRO:HB3	1:D:169:ARG:HB2	1.97	0.46
1:D:2573:LEU:HD23	1:D:2605:MET:SD	2.56	0.46
1:D:2918:GLU:HA	1:D:2923:TYR:HB3	1.96	0.46
1:D:3245:TYR:HA	1:D:3249:TRP:CZ3	2.51	0.46
1:A:2610:LEU:HD12	1:A:2614:TYR:HE2	1.80	0.46
1:A:2655:LYS:O	1:A:2958:GLN:NE2	2.48	0.46
1:A:2719:TYR:CE2	1:A:2799:ALA:HB2	2.38	0.46
1:A:3245:TYR:HA	1:A:3249:TRP:CZ3	2.51	0.46
1:A:4584:PHE:O	1:A:4587:ILE:HG22	2.16	0.46
2:H:75:LEU:HB2	2:H:100:PHE:HB2	1.98	0.46
1:B:4043:ILE:O	1:B:4078:LEU:HD23	2.15	0.46
1:B:4283:PHE:CE1	1:B:4287:TYR:HE2	2.33	0.46
1:C:1788:LYS:HG3	1:C:1834:PHE:CE1	2.50	0.46
1:C:2610:LEU:HD12	1:C:2614:TYR:HE2	1.80	0.46
1:D:668:ALA:HB2	1:D:1012:ILE:HD11	1.98	0.46
1:D:693:LEU:HD22	1:D:798:ILE:HD12	1.98	0.46
1:D:902:TRP:CZ2	1:D:915:HIS:CE1	3.04	0.46
1:D:1788:LYS:HG3	1:D:1834:PHE:CE1	2.50	0.46
1:D:2592:LEU:HD13	1:D:2610:LEU:HD21	1.98	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:3312:PRO:HA	1:D:3315:LEU:HD12	1.98	0.46
1:D:3969:LYS:HB2	1:D:3969:LYS:HE2	1.75	0.46
1:D:4051:ALA:O	1:D:4055:HIS:ND1	2.19	0.46
1:D:4827:ILE:O	1:D:4831:ILE:HG12	2.15	0.46
1:A:2573:LEU:HD23	1:A:2605:MET:SD	2.56	0.46
1:A:3033:LEU:HD13	1:A:3104:MET:CB	2.44	0.46
1:A:3250:TRP:CE3	1:A:3309:LYS:HE3	2.50	0.46
1:A:4051:ALA:O	1:A:4055:HIS:ND1	2.19	0.46
1:B:281:ARG:NE	1:B:283:ALA:O	2.41	0.46
1:B:561:ARG:O	1:B:564:ARG:HG2	2.16	0.46
1:B:1124:PRO:HD2	1:B:1594:VAL:HG23	1.97	0.46
1:B:2142:MET:HE3	1:B:2174:VAL:HG11	1.97	0.46
1:B:2573:LEU:HD23	1:B:2605:MET:SD	2.56	0.46
1:B:3144:LYS:HB2	1:B:3233:HIS:CE1	2.51	0.46
1:B:3677:THR:HB	1:B:3679:LYS:NZ	2.30	0.46
1:B:4602:ARG:O	1:B:4606:VAL:HG23	2.16	0.46
1:C:561:ARG:O	1:C:564:ARG:HG2	2.16	0.46
1:C:842:GLN:HB2	1:C:1603:PHE:HB2	1.98	0.46
1:C:895:MET:HE2	1:C:972:LEU:HD22	1.97	0.46
1:C:904:TYR:CE1	1:C:916:PRO:HA	2.51	0.46
1:C:2176:VAL:HG22	1:C:2220:TYR:HE2	1.80	0.46
1:C:2332:GLY:O	1:C:2336:ARG:HG3	2.16	0.46
1:C:2692:GLN:HG2	1:C:2704:GLN:HG3	1.97	0.46
1:C:4947:ARG:HD3	1:C:4949:TRP:CZ2	2.51	0.46
1:D:270:HIS:CE1	1:D:491:GLU:HG3	2.50	0.46
1:D:904:TYR:CE1	1:D:916:PRO:HA	2.51	0.46
1:D:928:GLU:OE2	4:D:5003:ATP:C8	2.68	0.46
1:D:1124:PRO:HD2	1:D:1594:VAL:HG23	1.97	0.46
1:D:2176:VAL:HG22	1:D:2220:TYR:HE2	1.80	0.46
1:D:2852:TRP:HA	1:D:2855:LYS:HE3	1.98	0.46
1:D:4602:ARG:O	1:D:4606:VAL:HG23	2.16	0.46
1:D:4795:LYS:HA	1:D:4795:LYS:HD2	1.80	0.46
1:A:3316:LYS:O	1:A:3317:THR:OG1	2.30	0.46
1:B:270:HIS:CE1	1:B:491:GLU:HG3	2.51	0.46
1:B:948:CYS:SG	1:B:1064:LEU:HB3	2.56	0.46
1:B:1922:ILE:O	1:B:1926:VAL:HG23	2.16	0.46
1:B:2319:VAL:O	1:B:2323:LEU:HG	2.16	0.46
1:B:2332:GLY:O	1:B:2336:ARG:HG3	2.16	0.46
1:B:2821:TYR:O	1:B:2823:PRO:HD3	2.16	0.46
1:B:2918:GLU:HA	1:B:2923:TYR:HB3	1.96	0.46
1:C:1048:ASP:HA	1:C:1051:ARG:NE	2.30	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2004:MET:SD	1:C:3632:GLU:HG2	2.56	0.46
1:C:4480:PHE:HA	1:C:4483:LYS:NZ	2.31	0.46
1:D:842:GLN:HB2	1:D:1603:PHE:HB2	1.98	0.46
1:D:1185:ASP:OD1	1:D:1186:SER:N	2.48	0.46
1:D:2004:MET:SD	1:D:3632:GLU:HG2	2.56	0.46
1:D:3017:HIS:CD2	1:D:3093:ILE:HD12	2.50	0.46
1:D:3167:PRO:HA	1:D:3248:ARG:NH2	2.31	0.46
1:D:3250:TRP:CE3	1:D:3309:LYS:HE3	2.50	0.46
1:D:4043:ILE:O	1:D:4078:LEU:HD23	2.15	0.46
1:A:137:ARG:NH1	1:A:146:ASP:OD1	2.48	0.46
1:A:1498:GLN:OE1	1:D:2794:GLU:HB2	2.16	0.46
1:A:2212:LYS:HG3	1:A:2253:LEU:HD21	1.98	0.46
1:A:2443:PRO:HD3	1:A:2512:MET:HG2	1.97	0.46
1:A:3015:VAL:HG11	1:A:3029:ILE:CG2	2.46	0.46
1:A:3187:LYS:HZ2	1:A:3195:LEU:HD13	1.80	0.46
1:A:3846:LEU:HD22	1:A:3854:PHE:CE2	2.51	0.46
1:A:4026:LEU:HD11	1:A:4052:MET:HA	1.96	0.46
1:A:4602:ARG:O	1:A:4606:VAL:HG23	2.16	0.46
2:G:75:LEU:HB2	2:G:100:PHE:HB2	1.98	0.46
1:B:732:LEU:HG	1:B:741:VAL:HG11	1.97	0.46
1:B:946:LEU:HG	1:B:998:LYS:HD3	1.96	0.46
1:B:2443:PRO:HD3	1:B:2512:MET:HG2	1.97	0.46
1:B:2773:TRP:HB3	1:B:2774:PRO:HD3	1.98	0.46
1:B:3250:TRP:CE3	1:B:3309:LYS:HE3	2.50	0.46
1:B:3846:LEU:HD22	1:B:3854:PHE:CE2	2.51	0.46
1:C:808:HIS:CD2	1:C:832:LEU:HD23	2.51	0.46
1:C:902:TRP:CZ2	1:C:915:HIS:CE1	3.04	0.46
1:C:2090:ARG:HE	1:C:2090:ARG:HB3	1.58	0.46
1:C:2212:LYS:HG3	1:C:2253:LEU:HD21	1.98	0.46
1:C:3320:LEU:O	1:C:3323:MET:HG2	2.16	0.46
1:C:4664:ASP:OD1	1:C:4665:ARG:N	2.49	0.46
1:D:1100:ARG:NH2	1:D:1234:GLU:O	2.48	0.46
1:D:1784:LEU:HD13	1:D:1833:ILE:HD11	1.98	0.46
1:D:2828:MET:HE1	1:D:2895:PHE:HB2	1.98	0.46
1:D:3131:TYR:HE1	1:D:3166:PHE:CZ	2.33	0.46
1:D:4035:TYR:HE2	1:D:4051:ALA:HA	1.81	0.46
1:A:23:GLN:HB2	1:A:34:LYS:HD2	1.97	0.45
1:A:948:CYS:SG	1:A:1064:LEU:HB3	2.56	0.45
1:A:2176:VAL:HG22	1:A:2220:TYR:HE2	1.80	0.45
1:A:3187:LYS:HG2	1:A:3191:GLU:CD	2.37	0.45
1:A:3312:PRO:HA	1:A:3315:LEU:HD12	1.98	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:4664:ASP:OD1	1:A:4665:ARG:N	2.49	0.45
1:A:4864:GLY:HA2	1:D:4867:ILE:HG12	1.97	0.45
2:F:36:LYS:HE3	2:F:36:LYS:HB3	1.80	0.45
1:B:3187:LYS:HG2	1:B:3191:GLU:CD	2.37	0.45
1:B:3312:PRO:HA	1:B:3315:LEU:HD12	1.98	0.45
1:C:514:PHE:HD2	1:C:526:TRP:HB2	1.82	0.45
1:C:2319:VAL:O	1:C:2323:LEU:HG	2.16	0.45
1:C:2708:THR:HG21	1:C:2780:LYS:C	2.37	0.45
1:C:2769:GLU:OE2	1:C:2772:ARG:NH2	2.48	0.45
1:D:1272:ARG:NH2	1:D:1582:CYS:SG	2.88	0.45
1:D:2332:GLY:O	1:D:2336:ARG:HG3	2.16	0.45
1:D:3282:LYS:O	1:D:3285:TYR:HB3	2.17	0.45
1:D:4947:ARG:HD3	1:D:4949:TRP:CZ2	2.51	0.45
1:A:808:HIS:CD2	1:A:832:LEU:HD23	2.51	0.45
1:A:1839:LEU:HA	1:A:1842:ILE:HG12	1.99	0.45
1:A:1922:ILE:O	1:A:1926:VAL:HG23	2.16	0.45
1:A:2004:MET:SD	1:A:3632:GLU:HG2	2.56	0.45
1:A:2581:ARG:HD3	1:A:2582:PRO:HD2	1.97	0.45
1:A:2769:GLU:OE2	1:A:2772:ARG:NH2	2.48	0.45
1:A:2788:ARG:NH2	1:A:2906:GLY:O	2.45	0.45
1:A:3131:TYR:HE1	1:A:3166:PHE:CZ	2.33	0.45
1:A:4043:ILE:O	1:A:4078:LEU:HD23	2.15	0.45
1:A:4159:GLN:HB3	1:A:4200:MET:HG2	1.98	0.45
1:B:2004:MET:SD	1:B:3632:GLU:HG2	2.56	0.45
1:B:2710:ASN:OD1	1:B:2711:ILE:N	2.50	0.45
1:B:3328:LYS:HG3	1:B:3329:LYS:HD3	1.98	0.45
1:C:137:ARG:NH1	1:C:146:ASP:OD1	2.48	0.45
1:C:693:LEU:HD22	1:C:798:ILE:HD12	1.98	0.45
1:C:3245:TYR:HA	1:C:3249:TRP:CZ3	2.51	0.45
1:C:3677:THR:HB	1:C:3679:LYS:HZ3	1.81	0.45
1:C:4112:ASP:O	1:C:4116:GLN:HG2	2.17	0.45
1:D:23:GLN:HB2	1:D:34:LYS:HD2	1.97	0.45
1:D:561:ARG:O	1:D:564:ARG:HG2	2.16	0.45
1:D:1019:GLY:HA3	1:D:1028:ARG:HE	1.81	0.45
1:D:2701:PHE:HD1	1:D:2873:PRO:HG3	1.80	0.45
1:D:3320:LEU:O	1:D:3323:MET:HG2	2.16	0.45
1:D:3986:LEU:HD12	1:D:4101:LEU:HD12	1.98	0.45
1:A:2710:ASN:OD1	1:A:2711:ILE:N	2.50	0.45
1:A:4480:PHE:HA	1:A:4483:LYS:NZ	2.31	0.45
1:B:902:TRP:CZ2	1:B:915:HIS:CE1	3.04	0.45
1:B:2266:VAL:HG12	1:B:2327:ARG:HD2	1.97	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2397:ASP:O	1:B:2401:ARG:HG3	2.17	0.45
1:B:3033:LEU:HD13	1:B:3104:MET:CB	2.44	0.45
1:B:3131:TYR:HE1	1:B:3166:PHE:CZ	2.33	0.45
1:B:4664:ASP:OD1	1:B:4665:ARG:N	2.49	0.45
1:C:3144:LYS:HB2	1:C:3233:HIS:CE1	2.51	0.45
1:C:3167:PRO:HA	1:C:3248:ARG:NH2	2.31	0.45
1:C:3192:ARG:NH2	1:C:3197:LEU:HD23	2.26	0.45
1:C:4698:LEU:O	1:C:4701:ILE:HG22	2.17	0.45
1:D:137:ARG:NH1	1:D:146:ASP:OD1	2.48	0.45
1:D:982:ASP:HB2	1:D:985:PHE:CD1	2.52	0.45
1:D:2057:THR:HG22	1:D:2059:GLN:H	1.82	0.45
1:D:2710:ASN:OD1	1:D:2711:ILE:N	2.50	0.45
1:D:2723:LYS:N	1:D:2726:GLU:OE1	2.45	0.45
1:D:2821:TYR:O	1:D:2823:PRO:HD3	2.16	0.45
1:D:3284:ILE:HA	1:D:3287:ASN:OD1	2.16	0.45
1:A:448:PRO:HB2	1:A:451:SER:OG	2.15	0.45
1:A:1019:GLY:HA3	1:A:1028:ARG:HE	1.81	0.45
1:A:1106:GLU:OE1	1:A:1214:ARG:NH1	2.44	0.45
1:A:2057:THR:HG22	1:A:2059:GLN:H	1.82	0.45
1:A:3159:LEU:HD13	1:A:3241:MET:HE3	1.97	0.45
1:B:448:PRO:HB2	1:B:451:SER:OG	2.15	0.45
1:B:1269:GLU:HB3	1:B:1286:THR:HB	1.98	0.45
1:B:3159:LEU:HB2	1:B:3241:MET:HE3	1.99	0.45
1:B:3282:LYS:O	1:B:3285:TYR:HB3	2.17	0.45
1:B:3325:LYS:HD2	1:B:3328:LYS:HZ2	1.82	0.45
1:C:2397:ASP:O	1:C:2401:ARG:HG3	2.16	0.45
1:C:2710:ASN:OD1	1:C:2711:ILE:N	2.50	0.45
1:C:3033:LEU:HD13	1:C:3104:MET:CB	2.44	0.45
1:C:3312:PRO:HA	1:C:3315:LEU:HD12	1.98	0.45
1:C:3823:GLU:OE1	1:C:3826:GLY:N	2.41	0.45
1:D:808:HIS:CD2	1:D:832:LEU:HD23	2.51	0.45
1:D:948:CYS:SG	1:D:1064:LEU:HB3	2.56	0.45
1:D:2692:GLN:HG2	1:D:2704:GLN:HG3	1.97	0.45
1:D:3811:GLN:NE2	1:D:3815:GLU:OE2	2.47	0.45
1:D:4480:PHE:HA	1:D:4483:LYS:NZ	2.31	0.45
1:D:4502:MET:SD	1:D:4585:PHE:HB3	2.57	0.45
1:A:887:GLU:HA	1:A:890:HIS:ND1	2.31	0.45
1:A:2332:GLY:O	1:A:2336:ARG:HG3	2.16	0.45
1:A:3282:LYS:O	1:A:3285:TYR:HB3	2.17	0.45
1:A:4947:ARG:HD3	1:A:4949:TRP:CZ2	2.51	0.45
2:F:57:ILE:HG13	2:F:60:PHE:HB2	1.98	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:57:ILE:HG13	2:H:60:PHE:HB2	1.98	0.45
1:B:693:LEU:HD22	1:B:798:ILE:HD12	1.98	0.45
1:B:2581:ARG:HD3	1:B:2582:PRO:HD2	1.97	0.45
1:B:2852:TRP:HA	1:B:2855:LYS:HE3	1.98	0.45
1:B:3986:LEU:HD12	1:B:4101:LEU:HD12	1.98	0.45
1:B:4947:ARG:HD3	1:B:4949:TRP:CZ2	2.51	0.45
1:C:1922:ILE:O	1:C:1926:VAL:HG23	2.16	0.45
1:C:3224:SER:OG	1:C:3226:ILE:HG12	2.17	0.45
1:C:3288:LEU:HD21	1:C:3336:GLU:HG3	1.97	0.45
1:D:1269:GLU:HB3	1:D:1286:THR:HB	1.98	0.45
1:D:2186:GLU:HG3	1:D:2187:ILE:H	1.82	0.45
1:D:3224:SER:OG	1:D:3226:ILE:HG12	2.17	0.45
1:D:4029:SER:OG	1:D:4055:HIS:NE2	2.49	0.45
1:A:1269:GLU:HB3	1:A:1286:THR:HB	1.98	0.45
1:A:2319:VAL:O	1:A:2323:LEU:HG	2.16	0.45
1:A:3144:LYS:HB2	1:A:3233:HIS:CE1	2.51	0.45
1:A:3224:SER:OG	1:A:3226:ILE:HG12	2.17	0.45
1:A:4112:ASP:O	1:A:4116:GLN:HG2	2.17	0.45
1:B:514:PHE:HD2	1:B:526:TRP:HB2	1.82	0.45
1:B:808:HIS:CD2	1:B:832:LEU:HD23	2.51	0.45
1:B:2139:GLU:O	1:B:2192:MET:HE3	2.16	0.45
1:B:2670:SER:HB2	1:B:2973:GLN:CG	2.47	0.45
1:B:4480:PHE:HA	1:B:4483:LYS:NZ	2.31	0.45
1:B:4698:LEU:O	1:B:4701:ILE:HG22	2.17	0.45
1:C:1936:LEU:HD11	1:C:1976:LEU:HD23	1.97	0.45
1:C:3015:VAL:HG11	1:C:3029:ILE:CG2	2.46	0.45
1:C:4480:PHE:HA	1:C:4483:LYS:HZ3	1.82	0.45
1:C:4584:PHE:O	1:C:4587:ILE:HG22	2.16	0.45
1:C:4735:ASN:HB3	1:C:4738:PHE:CD2	2.52	0.45
1:D:514:PHE:HD2	1:D:526:TRP:HB2	1.82	0.45
1:D:887:GLU:HA	1:D:890:HIS:ND1	2.31	0.45
1:D:2492:PHE:O	1:D:2496:LEU:HD12	2.17	0.45
1:D:2708:THR:HG21	1:D:2780:LYS:C	2.37	0.45
1:D:3015:VAL:HG11	1:D:3029:ILE:CG2	2.47	0.45
1:D:3144:LYS:HB2	1:D:3233:HIS:CE1	2.51	0.45
1:D:4112:ASP:O	1:D:4116:GLN:HG2	2.17	0.45
1:A:270:HIS:CE1	1:A:491:GLU:HG3	2.50	0.45
1:A:1784:LEU:HD13	1:A:1833:ILE:HD11	1.98	0.45
1:A:3320:LEU:O	1:A:3323:MET:HG2	2.16	0.45
1:A:3986:LEU:HD12	1:A:4101:LEU:HD12	1.98	0.45
1:A:4035:TYR:HE2	1:A:4051:ALA:HA	1.81	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:4502:MET:SD	1:A:4585:PHE:HB3	2.57	0.45
1:B:668:ALA:HB2	1:B:1012:ILE:HD11	1.98	0.45
1:B:4112:ASP:O	1:B:4116:GLN:HG2	2.17	0.45
1:B:4155:SER:O	1:B:4159:GLN:HG2	2.17	0.45
1:C:23:GLN:HB2	1:C:34:LYS:HD2	1.97	0.45
1:C:281:ARG:NE	1:C:283:ALA:O	2.41	0.45
1:C:2701:PHE:HD1	1:C:2873:PRO:HG3	1.80	0.45
1:C:2821:TYR:O	1:C:2823:PRO:HD3	2.16	0.45
1:C:3986:LEU:HD12	1:C:4101:LEU:HD12	1.99	0.45
1:D:1432:ILE:HB	1:D:1505:LEU:HB3	1.99	0.45
1:D:2728:SER:HA	1:D:2731:LYS:HG2	1.99	0.45
1:D:3050:LEU:HG	1:D:3052:SER:H	1.82	0.45
1:A:514:PHE:HD2	1:A:526:TRP:HB2	1.82	0.45
1:A:561:ARG:O	1:A:564:ARG:HG2	2.16	0.45
1:A:842:GLN:HB2	1:A:1603:PHE:HB2	1.98	0.45
1:A:989:THR:HB	1:A:992:GLN:OE1	2.17	0.45
1:A:2592:LEU:HD13	1:A:2610:LEU:HD21	1.98	0.45
1:A:2852:TRP:HA	1:A:2855:LYS:HE3	1.98	0.45
1:A:3833:ASP:OD2	1:A:3908:LYS:HD2	2.17	0.45
1:A:4698:LEU:O	1:A:4701:ILE:HG22	2.17	0.45
1:B:261:HIS:CD2	1:B:263:GLU:HG3	2.52	0.45
1:B:887:GLU:HA	1:B:890:HIS:ND1	2.31	0.45
1:B:931:TYR:O	1:B:934:GLN:HG3	2.17	0.45
1:B:2692:GLN:HG2	1:B:2704:GLN:HG3	1.97	0.45
1:B:3167:PRO:HA	1:B:3248:ARG:NH2	2.31	0.45
1:B:3284:ILE:HA	1:B:3287:ASN:OD1	2.16	0.45
1:B:3651:PRO:HB2	1:B:3652:PRO:HD3	1.99	0.45
1:C:982:ASP:HB2	1:C:985:PHE:CD1	2.52	0.45
1:C:1269:GLU:HB3	1:C:1286:THR:HB	1.98	0.45
1:C:2261:ASP:O	1:C:2265:VAL:HG23	2.17	0.45
1:C:2794:GLU:HB2	1:D:1498:GLN:OE1	2.16	0.45
1:C:3192:ARG:HH12	1:C:3197:LEU:HD23	1.82	0.45
1:C:3284:ILE:HA	1:C:3287:ASN:OD1	2.16	0.45
1:D:624:ALA:HB2	1:D:1667:LEU:HD12	1.99	0.45
1:D:2397:ASP:O	1:D:2401:ARG:HG3	2.17	0.45
1:D:2773:TRP:HB3	1:D:2774:PRO:HD3	1.98	0.45
1:D:4584:PHE:O	1:D:4587:ILE:HG22	2.16	0.45
1:D:4698:LEU:O	1:D:4701:ILE:HG22	2.17	0.45
1:A:2492:PHE:O	1:A:2496:LEU:HD12	2.17	0.45
1:A:2723:LYS:N	1:A:2726:GLU:OE1	2.45	0.45
1:A:3192:ARG:HH12	1:A:3197:LEU:HD23	1.82	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:3321:PRO:O	1:A:3325:LYS:HG2	2.17	0.45
1:A:3783:GLU:OE2	1:A:3784:LYS:NZ	2.39	0.45
1:A:4155:SER:O	1:A:4159:GLN:HG2	2.17	0.45
2:F:75:LEU:HB2	2:F:100:PHE:HB2	1.98	0.45
2:G:18:LYS:HE2	2:G:21:GLN:OE1	2.17	0.45
1:B:1936:LEU:HD11	1:B:1976:LEU:HD23	1.97	0.45
1:B:2592:LEU:HD13	1:B:2610:LEU:HD21	1.98	0.45
1:B:3015:VAL:HG11	1:B:3029:ILE:CG2	2.46	0.45
1:C:2279:MET:SD	1:C:2283:LYS:HD3	2.57	0.45
1:C:2728:SER:HA	1:C:2731:LYS:HG2	1.98	0.45
1:C:2867:ASN:OD1	1:C:2868:HIS:N	2.50	0.45
1:D:3187:LYS:HG2	1:D:3191:GLU:CD	2.37	0.45
1:D:3651:PRO:HB2	1:D:3652:PRO:HD3	1.99	0.45
1:D:4239:LEU:HD12	1:D:4240:THR:N	2.32	0.45
1:D:4735:ASN:HB3	1:D:4738:PHE:CD2	2.52	0.45
1:A:261:HIS:CD2	1:A:263:GLU:HG3	2.52	0.45
1:A:376:SER:HA	1:A:389:ARG:HD2	1.99	0.45
1:A:693:LEU:HD22	1:A:798:ILE:HD12	1.98	0.45
1:A:2397:ASP:O	1:A:2401:ARG:HG3	2.17	0.45
1:A:3167:PRO:HA	1:A:3248:ARG:NH2	2.31	0.45
2:G:57:ILE:HG13	2:G:60:PHE:HB2	1.98	0.45
1:B:2794:GLU:HB2	1:C:1498:GLN:OE1	2.16	0.45
1:B:3151:GLN:O	1:B:3155:LEU:HD12	2.17	0.45
1:B:3224:SER:OG	1:B:3226:ILE:HG12	2.17	0.45
1:B:3321:PRO:O	1:B:3325:LYS:HG2	2.17	0.45
1:B:4584:PHE:O	1:B:4587:ILE:HG22	2.16	0.45
1:C:895:MET:HA	1:C:898:ILE:HG22	1.99	0.45
1:C:2179:LEU:HD13	1:C:2227:VAL:HG21	1.99	0.45
1:C:2186:GLU:HG3	1:C:2187:ILE:H	1.82	0.45
1:C:2666:LEU:HB3	1:C:2667:PRO:HD3	1.99	0.45
1:C:3187:LYS:HG2	1:C:3191:GLU:CD	2.37	0.45
1:C:3282:LYS:O	1:C:3285:TYR:HB3	2.17	0.45
1:C:3328:LYS:HG3	1:C:3329:LYS:HD3	1.98	0.45
1:C:4029:SER:OG	1:C:4055:HIS:NE2	2.49	0.45
1:C:4035:TYR:HE2	1:C:4051:ALA:HA	1.81	0.45
1:C:4239:LEU:HD12	1:C:4240:THR:N	2.32	0.45
1:C:4658:GLY:HA3	1:C:4663:ARG:HD3	1.99	0.45
1:D:895:MET:HA	1:D:898:ILE:HG22	1.99	0.45
1:D:1839:LEU:HA	1:D:1842:ILE:HG12	1.98	0.45
1:D:1922:ILE:O	1:D:1926:VAL:HG23	2.16	0.45
1:D:2867:ASN:OD1	1:D:2868:HIS:N	2.50	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:4159:GLN:HB3	1:D:4200:MET:HG2	1.98	0.45
1:A:2497:ARG:NH1	1:A:2876:THR:O	2.51	0.44
1:A:2708:THR:HG21	1:A:2780:LYS:C	2.37	0.44
1:A:4239:LEU:HD12	1:A:4240:THR:N	2.32	0.44
1:B:358:ASP:OD1	1:B:359:SER:N	2.50	0.44
1:B:1839:LEU:HA	1:B:1842:ILE:HG12	1.98	0.44
1:B:2279:MET:SD	1:B:2283:LYS:HD3	2.57	0.44
1:B:2593:VAL:HG12	1:B:2644:LEU:HD13	1.99	0.44
1:B:2867:ASN:OD1	1:B:2868:HIS:N	2.50	0.44
1:B:3811:GLN:NE2	1:B:3815:GLU:OE2	2.47	0.44
1:B:4480:PHE:HA	1:B:4483:LYS:HZ3	1.83	0.44
1:C:358:ASP:OD1	1:C:359:SER:N	2.50	0.44
1:C:376:SER:HA	1:C:389:ARG:HD2	1.99	0.44
1:C:624:ALA:HB2	1:C:1667:LEU:HD12	1.99	0.44
1:C:655:MET:HE2	1:C:1608:VAL:HG21	1.99	0.44
1:C:989:THR:HB	1:C:992:GLN:OE1	2.17	0.44
1:C:2670:SER:HB2	1:C:2973:GLN:CG	2.46	0.44
1:C:2684:ASN:ND2	1:C:2909:ASP:OD1	2.39	0.44
1:C:2788:ARG:NH2	1:C:2906:GLY:O	2.45	0.44
1:D:1649:GLU:HG2	1:D:1650:LEU:N	2.32	0.44
1:D:3328:LYS:HG3	1:D:3329:LYS:HD3	1.98	0.44
1:D:3833:ASP:OD2	1:D:3908:LYS:HD2	2.17	0.44
1:A:2821:TYR:O	1:A:2823:PRO:HD3	2.16	0.44
1:A:3284:ILE:HA	1:A:3287:ASN:OD1	2.16	0.44
1:A:3651:PRO:HB2	1:A:3652:PRO:HD3	1.99	0.44
1:B:749:LEU:HD22	1:B:755:ILE:HD11	1.99	0.44
1:B:2212:LYS:HG3	1:B:2253:LEU:HD21	1.98	0.44
1:B:2492:PHE:O	1:B:2496:LEU:HD12	2.17	0.44
1:B:3320:LEU:O	1:B:3323:MET:HG2	2.16	0.44
1:B:3833:ASP:OD2	1:B:3908:LYS:HD2	2.17	0.44
1:B:4502:MET:SD	1:B:4585:PHE:HB3	2.57	0.44
1:C:853:PRO:HB3	1:C:1083:GLU:OE2	2.18	0.44
1:C:887:GLU:HA	1:C:890:HIS:ND1	2.31	0.44
1:C:1039:ASP:O	1:C:1043:LYS:HB2	2.17	0.44
1:C:1784:LEU:HD13	1:C:1833:ILE:HD11	1.98	0.44
1:C:3651:PRO:HB2	1:C:3652:PRO:HD3	1.99	0.44
1:D:376:SER:HA	1:D:389:ARG:HD2	1.99	0.44
1:D:931:TYR:O	1:D:934:GLN:HG3	2.17	0.44
1:D:1140:PHE:CD2	1:D:1141:LYS:HE3	2.53	0.44
1:D:1697:LEU:HD23	1:D:1697:LEU:HA	1.88	0.44
1:D:1937:GLN:NE2	1:D:3608:LEU:O	2.31	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:4155:SER:O	1:D:4159:GLN:HG2	2.17	0.44
1:D:4658:GLY:HA3	1:D:4663:ARG:HD3	2.00	0.44
1:A:931:TYR:O	1:A:934:GLN:HG3	2.17	0.44
1:A:1432:ILE:HB	1:A:1505:LEU:HB3	1.99	0.44
1:A:2261:ASP:O	1:A:2265:VAL:HG23	2.17	0.44
1:A:2773:TRP:HB3	1:A:2774:PRO:HD3	1.98	0.44
1:A:3016:ARG:HA	1:A:3096:TYR:OH	2.18	0.44
1:A:3050:LEU:HG	1:A:3052:SER:H	1.82	0.44
1:A:3151:GLN:O	1:A:3155:LEU:HD12	2.17	0.44
2:E:75:LEU:HB2	2:E:100:PHE:HB2	1.98	0.44
1:B:842:GLN:HB2	1:B:1603:PHE:HB2	1.98	0.44
1:B:895:MET:HE2	1:B:972:LEU:HD22	1.99	0.44
1:B:1140:PHE:CD2	1:B:1141:LYS:HE3	2.53	0.44
1:B:1937:GLN:NE2	1:B:3608:LEU:O	2.31	0.44
1:B:2057:THR:HG22	1:B:2059:GLN:H	1.82	0.44
1:B:2179:LEU:HD13	1:B:2227:VAL:HG21	1.99	0.44
1:B:2719:TYR:HD1	1:B:2723:LYS:HZ2	1.61	0.44
1:B:4159:GLN:HB3	1:B:4200:MET:HG2	1.98	0.44
1:C:668:ALA:HB2	1:C:1012:ILE:HD11	1.98	0.44
1:C:1019:GLY:HA3	1:C:1028:ARG:HE	1.81	0.44
1:C:2773:TRP:HB3	1:C:2774:PRO:HD3	1.98	0.44
1:C:4155:SER:O	1:C:4159:GLN:HG2	2.17	0.44
1:D:1750:GLY:HA3	1:D:1839:LEU:HD21	2.00	0.44
1:D:2279:MET:SD	1:D:2283:LYS:HD3	2.57	0.44
1:D:2923:TYR:CE2	1:D:2999:LYS:HB3	2.52	0.44
1:D:3151:GLN:O	1:D:3155:LEU:HD12	2.17	0.44
1:A:358:ASP:OD1	1:A:359:SER:N	2.50	0.44
1:A:853:PRO:HB3	1:A:1083:GLU:OE2	2.18	0.44
1:A:2920:ARG:NH1	1:A:2981:TYR:HH	2.14	0.44
1:A:2923:TYR:CE2	1:A:2999:LYS:HB3	2.52	0.44
1:A:3677:THR:HB	1:A:3679:LYS:HZ3	1.81	0.44
2:E:57:ILE:HG13	2:E:60:PHE:HB2	1.98	0.44
1:B:982:ASP:HB2	1:B:985:PHE:HD1	1.83	0.44
1:B:1649:GLU:HG2	1:B:1650:LEU:N	2.33	0.44
1:B:2247:VAL:HG11	1:B:2257:LEU:HD12	2.00	0.44
1:B:2497:ARG:NH1	1:B:2876:THR:O	2.51	0.44
1:B:3975:GLN:O	1:B:3979:VAL:HG23	2.18	0.44
1:B:4239:LEU:HD12	1:B:4240:THR:N	2.32	0.44
1:C:181:LEU:N	1:C:212:TRP:O	2.36	0.44
1:C:931:TYR:O	1:C:934:GLN:HG3	2.17	0.44
1:C:1043:LYS:O	1:C:1047:LYS:CB	2.66	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2492:PHE:O	1:C:2496:LEU:HD12	2.17	0.44
1:C:2593:VAL:HG12	1:C:2644:LEU:HD13	1.99	0.44
1:C:3016:ARG:HA	1:C:3096:TYR:OH	2.17	0.44
1:C:3321:PRO:O	1:C:3325:LYS:HG2	2.17	0.44
1:D:261:HIS:CD2	1:D:263:GLU:HG3	2.52	0.44
1:D:2212:LYS:HG3	1:D:2253:LEU:HD21	1.98	0.44
1:D:3038:GLN:HA	1:D:3111:HIS:CD2	2.53	0.44
1:A:624:ALA:HB2	1:A:1667:LEU:HD12	1.99	0.44
1:A:2728:SER:HA	1:A:2731:LYS:HG2	1.99	0.44
1:A:3328:LYS:HG3	1:A:3329:LYS:HD3	1.98	0.44
2:F:18:LYS:HE2	2:F:21:GLN:OE1	2.17	0.44
2:H:18:LYS:HE2	2:H:21:GLN:OE1	2.17	0.44
1:B:376:SER:HA	1:B:389:ARG:HD2	1.99	0.44
1:B:1019:GLY:HA3	1:B:1028:ARG:HE	1.81	0.44
1:B:1043:LYS:O	1:B:1047:LYS:CB	2.65	0.44
1:B:2172:MET:O	1:B:2176:VAL:HG23	2.18	0.44
1:B:2186:GLU:HG3	1:B:2187:ILE:H	1.82	0.44
1:B:2708:THR:HG21	1:B:2780:LYS:C	2.37	0.44
1:B:3016:ARG:HA	1:B:3096:TYR:OH	2.17	0.44
1:B:3016:ARG:HG2	1:B:3017:HIS:ND1	2.33	0.44
1:B:3038:GLN:HA	1:B:3111:HIS:CD2	2.53	0.44
1:B:3192:ARG:HH12	1:B:3197:LEU:HD23	1.82	0.44
1:B:4035:TYR:HE2	1:B:4051:ALA:HA	1.81	0.44
1:B:4735:ASN:HB3	1:B:4738:PHE:CD2	2.52	0.44
1:C:261:HIS:CD2	1:C:263:GLU:HG3	2.52	0.44
1:C:1140:PHE:CD2	1:C:1141:LYS:HE3	2.53	0.44
1:C:1839:LEU:HA	1:C:1842:ILE:HG12	1.99	0.44
1:C:2057:THR:HG22	1:C:2059:GLN:H	1.82	0.44
1:C:2593:VAL:HG11	1:C:2640:LEU:HG	2.00	0.44
1:C:2691:LYS:HZ1	1:C:2874:TYR:HB3	1.83	0.44
1:C:3050:LEU:HG	1:C:3052:SER:H	1.82	0.44
1:C:3833:ASP:OD2	1:C:3908:LYS:HD2	2.17	0.44
1:C:4051:ALA:O	1:C:4055:HIS:ND1	2.19	0.44
1:C:4502:MET:SD	1:C:4585:PHE:HB3	2.57	0.44
1:D:1043:LYS:O	1:D:1047:LYS:CB	2.65	0.44
1:D:4664:ASP:O	1:D:4668:GLU:OE1	2.35	0.44
1:A:982:ASP:HB2	1:A:985:PHE:CD1	2.52	0.44
1:A:982:ASP:HB2	1:A:985:PHE:HD1	1.83	0.44
1:A:1964:GLU:HB2	1:A:1975:MET:HE3	1.99	0.44
1:A:2247:VAL:HG11	1:A:2257:LEU:HD12	2.00	0.44
1:A:2867:ASN:OD1	1:A:2868:HIS:N	2.50	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:3016:ARG:HG2	1:A:3017:HIS:ND1	2.33	0.44
1:A:3038:GLN:HA	1:A:3111:HIS:CD2	2.53	0.44
1:A:4735:ASN:HB3	1:A:4738:PHE:CD2	2.52	0.44
2:G:32:GLN:NE2	1:C:1312:GLU:HB3	2.33	0.44
1:B:219:SER:OG	1:B:222:GLU:OE1	2.24	0.44
1:B:895:MET:HA	1:B:898:ILE:HG22	1.99	0.44
1:B:982:ASP:HB2	1:B:985:PHE:CD1	2.52	0.44
1:B:1039:ASP:O	1:B:1043:LYS:HB2	2.17	0.44
1:B:2642:ARG:HD2	1:B:2680:TYR:HE2	1.83	0.44
1:B:2923:TYR:CE2	1:B:2999:LYS:HB3	2.52	0.44
1:B:4276:VAL:O	1:B:4280:VAL:HG23	2.18	0.44
1:C:749:LEU:HD22	1:C:755:ILE:HD11	1.99	0.44
1:C:3151:GLN:O	1:C:3155:LEU:HD12	2.17	0.44
1:C:3285:TYR:CD1	1:C:3325:LYS:HD2	2.53	0.44
1:C:3975:GLN:O	1:C:3979:VAL:HG23	2.18	0.44
1:C:4276:VAL:O	1:C:4280:VAL:HG23	2.18	0.44
1:D:58:VAL:HG13	1:D:319:LYS:HG2	2.00	0.44
1:D:358:ASP:OD1	1:D:359:SER:N	2.50	0.44
1:D:1047:LYS:HG3	1:D:1051:ARG:NE	2.33	0.44
1:D:1689:ILE:HG23	1:D:1703:TYR:CZ	2.53	0.44
1:D:2319:VAL:O	1:D:2323:LEU:HG	2.16	0.44
1:D:2666:LEU:HB3	1:D:2667:PRO:HD3	1.99	0.44
1:D:3016:ARG:HA	1:D:3096:TYR:OH	2.18	0.44
1:D:3123:LEU:HB3	1:D:3124:GLU:H	1.72	0.44
1:D:3192:ARG:HH12	1:D:3197:LEU:HD23	1.82	0.44
1:D:3227:ARG:HE	1:D:3228:TYR:N	1.96	0.44
1:A:1649:GLU:HG2	1:A:1650:LEU:N	2.33	0.44
1:A:2440:PHE:CZ	1:A:2465:LYS:HD3	2.53	0.44
1:A:2593:VAL:HG11	1:A:2640:LEU:HG	2.00	0.44
1:A:2666:LEU:HB3	1:A:2667:PRO:HD3	1.99	0.44
1:A:2971:ILE:HG23	1:A:2975:PHE:HE2	1.83	0.44
2:E:18:LYS:HE2	2:E:21:GLN:OE1	2.17	0.44
1:B:624:ALA:HB2	1:B:1667:LEU:HD12	1.99	0.44
1:B:2440:PHE:CZ	1:B:2465:LYS:HD3	2.53	0.44
1:B:2728:SER:HA	1:B:2731:LYS:HG2	1.99	0.44
1:B:3069:GLU:N	1:B:3069:GLU:OE2	2.51	0.44
1:C:58:VAL:HG13	1:C:319:LYS:HG2	2.00	0.44
1:D:2261:ASP:O	1:D:2265:VAL:HG23	2.17	0.44
1:D:2593:VAL:HG12	1:D:2644:LEU:HD13	1.99	0.44
1:D:2691:LYS:HZ1	1:D:2874:TYR:HB3	1.82	0.44
1:D:3043:ARG:C	1:D:3047:LYS:HZ2	2.21	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:3325:LYS:HD2	1:D:3328:LYS:HZ2	1.82	0.44
1:A:895:MET:HA	1:A:898:ILE:HG22	1.99	0.44
1:A:1750:GLY:HA3	1:A:1839:LEU:HD21	2.00	0.44
1:A:2179:LEU:HD13	1:A:2227:VAL:HG21	1.99	0.44
1:A:3250:TRP:HE1	1:A:3256:ASN:HD21	1.66	0.44
1:A:4658:GLY:HA3	1:A:4663:ARG:HD3	1.99	0.44
1:B:2593:VAL:HG11	1:B:2640:LEU:HG	2.00	0.44
1:B:3050:LEU:HG	1:B:3052:SER:H	1.82	0.44
1:B:3131:TYR:HE1	1:B:3166:PHE:HZ	1.66	0.44
1:C:1432:ILE:HB	1:C:1505:LEU:HB3	1.99	0.44
1:C:1689:ILE:HG23	1:C:1703:TYR:CZ	2.53	0.44
1:C:3016:ARG:HG2	1:C:3017:HIS:ND1	2.33	0.44
1:C:4159:GLN:HB3	1:C:4200:MET:HG2	1.98	0.44
1:D:240:HIS:HB2	1:D:243:GLU:OE1	2.18	0.44
1:D:853:PRO:HB3	1:D:1083:GLU:OE2	2.18	0.44
1:D:2179:LEU:HD13	1:D:2227:VAL:HG21	1.99	0.44
1:D:3250:TRP:HE1	1:D:3256:ASN:HD21	1.66	0.44
1:D:3321:PRO:O	1:D:3325:LYS:HG2	2.17	0.44
1:A:3975:GLN:O	1:A:3979:VAL:HG23	2.18	0.44
1:A:4664:ASP:O	1:A:4668:GLU:OE1	2.36	0.44
2:H:32:GLN:HG2	1:D:1312:GLU:OE1	2.18	0.44
1:B:989:THR:HB	1:B:992:GLN:OE1	2.17	0.44
1:B:1166:VAL:HG23	1:B:1173:MET:HG2	2.00	0.44
1:B:2759:PRO:HD2	1:B:2762:LEU:HD12	2.00	0.44
1:C:1166:VAL:HG23	1:C:1173:MET:HG2	2.00	0.44
1:C:2497:ARG:NH1	1:C:2876:THR:O	2.51	0.44
1:C:4664:ASP:O	1:C:4668:GLU:OE1	2.35	0.44
1:D:749:LEU:HD22	1:D:755:ILE:HD11	1.99	0.44
1:D:3016:ARG:HG2	1:D:3017:HIS:ND1	2.33	0.44
1:A:1140:PHE:CD2	1:A:1141:LYS:HE3	2.53	0.43
1:A:1689:ILE:HG23	1:A:1703:TYR:CZ	2.53	0.43
1:A:2172:MET:O	1:A:2176:VAL:HG23	2.18	0.43
1:A:2186:GLU:HG3	1:A:2187:ILE:H	1.82	0.43
1:A:2605:MET:HB3	1:A:2606:PRO:HD3	2.00	0.43
1:A:2622:CYS:HA	1:A:2677:PRO:HG3	2.00	0.43
1:A:2642:ARG:HD2	1:A:2680:TYR:HE2	1.83	0.43
1:A:2833:LEU:HB3	1:A:2837:LEU:HB2	2.00	0.43
1:A:3320:LEU:HB2	1:A:3321:PRO:HD3	2.00	0.43
1:B:2077:ASP:O	1:B:2081:VAL:HG23	2.19	0.43
1:B:2442:MET:SD	1:B:2498:ALA:HB1	2.58	0.43
1:B:2666:LEU:HB3	1:B:2667:PRO:HD3	1.99	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2833:LEU:HB3	1:B:2837:LEU:HB2	2.00	0.43
1:B:3305:PRO:O	1:B:3309:LYS:HG3	2.18	0.43
1:B:4658:GLY:HA3	1:B:4663:ARG:HD3	1.99	0.43
1:C:2172:MET:O	1:C:2176:VAL:HG23	2.18	0.43
1:D:1016:TRP:CE3	1:D:1029:ASN:HB2	2.53	0.43
1:D:1039:ASP:O	1:D:1043:LYS:HB2	2.17	0.43
1:D:2657:TYR:HA	1:D:2662:PHE:HE1	1.75	0.43
1:D:3305:PRO:O	1:D:3309:LYS:HG3	2.18	0.43
1:A:28:ILE:HD11	1:A:201:LEU:HD21	2.00	0.43
1:A:655:MET:HE2	1:A:1608:VAL:HG21	2.00	0.43
1:A:3285:TYR:CD1	1:A:3325:LYS:HD2	2.53	0.43
1:B:1021:GLN:NE2	1:B:1022:GLN:O	2.51	0.43
1:B:1718:ARG:HD3	1:B:1831:MET:HA	2.00	0.43
1:B:2261:ASP:O	1:B:2265:VAL:HG23	2.17	0.43
1:C:1016:TRP:CE3	1:C:1029:ASN:HB2	2.53	0.43
1:C:2884:LYS:O	1:C:2887:GLU:HG3	2.18	0.43
1:C:3043:ARG:C	1:C:3047:LYS:HZ2	2.22	0.43
1:D:989:THR:HB	1:D:992:GLN:OE1	2.17	0.43
1:D:2146:LEU:HD23	1:D:2146:LEU:HA	1.83	0.43
1:D:2440:PHE:CZ	1:D:2465:LYS:HD3	2.53	0.43
1:D:2971:ILE:HG23	1:D:2975:PHE:HE2	1.83	0.43
1:D:3285:TYR:CD1	1:D:3325:LYS:HD2	2.53	0.43
1:A:240:HIS:HB2	1:A:243:GLU:OE1	2.18	0.43
1:A:749:LEU:HD22	1:A:755:ILE:HD11	1.99	0.43
1:A:1444:GLY:HA3	1:A:1487:MET:HA	2.01	0.43
1:A:1892:GLY:H	1:A:1895:GLN:NE2	2.16	0.43
1:A:2143:ILE:HG13	1:A:2192:MET:HE1	2.00	0.43
1:A:3131:TYR:HE1	1:A:3166:PHE:HZ	1.66	0.43
1:B:877:HIS:O	1:B:880:ARG:HD3	2.19	0.43
1:B:1047:LYS:HG3	1:B:1051:ARG:NE	2.33	0.43
1:B:2146:LEU:HD23	1:B:2146:LEU:HA	1.83	0.43
1:B:2723:LYS:N	1:B:2726:GLU:OE1	2.45	0.43
1:B:3320:LEU:HB2	1:B:3321:PRO:HD3	2.00	0.43
1:C:1444:GLY:HA3	1:C:1487:MET:HA	2.01	0.43
1:C:1718:ARG:HD3	1:C:1831:MET:HA	2.01	0.43
1:C:2923:TYR:CE2	1:C:2999:LYS:HB3	2.52	0.43
1:C:3038:GLN:HA	1:C:3111:HIS:CD2	2.53	0.43
1:C:3305:PRO:O	1:C:3309:LYS:HG3	2.18	0.43
1:D:28:ILE:HD11	1:D:201:LEU:HD21	2.00	0.43
1:D:877:HIS:O	1:D:880:ARG:HD3	2.18	0.43
1:D:931:TYR:CD2	4:D:5003:ATP:C2'	3.02	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2497:ARG:NH1	1:D:2876:THR:O	2.50	0.43
1:D:2593:VAL:HG11	1:D:2640:LEU:HG	2.00	0.43
1:D:2670:SER:HB2	1:D:2973:GLN:CG	2.47	0.43
1:D:3975:GLN:O	1:D:3979:VAL:HG23	2.18	0.43
1:A:12:GLN:HG3	1:A:177:VAL:HG11	2.01	0.43
1:A:895:MET:HE2	1:A:972:LEU:HD22	1.99	0.43
1:A:1016:TRP:CE3	1:A:1029:ASN:HB2	2.53	0.43
1:A:2593:VAL:HG12	1:A:2644:LEU:HD13	1.99	0.43
1:A:2670:SER:HB2	1:A:2973:GLN:CG	2.47	0.43
1:A:3325:LYS:HD2	1:A:3328:LYS:HZ2	1.82	0.43
1:A:3793:LEU:HD23	1:A:3793:LEU:HA	1.89	0.43
1:A:4014:LEU:HD13	1:A:4122:ALA:HB2	2.00	0.43
1:B:2622:CYS:HA	1:B:2677:PRO:HG3	2.01	0.43
1:B:3948:LEU:HD23	1:B:3948:LEU:HA	1.88	0.43
1:B:4664:ASP:O	1:B:4668:GLU:OE1	2.35	0.43
1:C:433:LEU:HD23	1:C:433:LEU:HA	1.89	0.43
1:C:1021:GLN:NE2	1:C:1022:GLN:O	2.51	0.43
1:C:1047:LYS:HG3	1:C:1051:ARG:NE	2.33	0.43
1:C:1750:GLY:HA3	1:C:1839:LEU:HD21	2.00	0.43
1:C:2247:VAL:HG11	1:C:2257:LEU:HD12	2.00	0.43
1:C:2642:ARG:HD2	1:C:2680:TYR:HE2	1.83	0.43
1:C:2967:VAL:O	1:C:2971:ILE:HG13	2.19	0.43
1:C:3069:GLU:N	1:C:3069:GLU:OE2	2.51	0.43
1:C:4014:LEU:HD13	1:C:4122:ALA:HB2	2.00	0.43
1:D:4480:PHE:HD1	1:D:4483:LYS:HZ3	1.67	0.43
1:A:58:VAL:HG13	1:A:319:LYS:HG2	2.00	0.43
1:A:661:LEU:HD13	1:A:673:TRP:CD1	2.53	0.43
1:A:1021:GLN:NE2	1:A:1022:GLN:O	2.51	0.43
1:A:1043:LYS:O	1:A:1047:LYS:CB	2.65	0.43
1:A:2279:MET:SD	1:A:2283:LYS:HD3	2.57	0.43
2:G:89:PRO:HB2	1:C:1671:ARG:HH22	1.83	0.43
1:B:58:VAL:HG13	1:B:319:LYS:HG2	2.00	0.43
1:B:240:HIS:HB2	1:B:243:GLU:OE1	2.18	0.43
1:B:661:LEU:HD13	1:B:673:TRP:CD1	2.53	0.43
1:B:1432:ILE:HB	1:B:1505:LEU:HB3	1.99	0.43
1:B:1689:ILE:HG23	1:B:1703:TYR:CZ	2.53	0.43
1:B:1784:LEU:HD13	1:B:1833:ILE:HD11	1.98	0.43
1:B:2607:LEU:CD1	1:B:2664:LEU:HG	2.47	0.43
1:B:2638:LEU:HB3	1:B:2680:TYR:CE1	2.54	0.43
1:B:2884:LYS:O	1:B:2887:GLU:HG3	2.18	0.43
1:B:2971:ILE:HG23	1:B:2975:PHE:HE2	1.83	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:3285:TYR:CD1	1:B:3325:LYS:HD2	2.53	0.43
1:B:4030:ASP:OD2	1:B:4031:THR:N	2.52	0.43
1:C:661:LEU:HD13	1:C:673:TRP:CD1	2.53	0.43
1:C:829:LYS:NZ	1:C:1037:LEU:O	2.39	0.43
1:C:982:ASP:HB2	1:C:985:PHE:HD1	1.83	0.43
1:C:1649:GLU:HG2	1:C:1650:LEU:N	2.32	0.43
1:C:2222:LEU:HA	1:C:2222:LEU:HD23	1.79	0.43
1:C:2440:PHE:CZ	1:C:2465:LYS:HD3	2.53	0.43
1:C:2759:PRO:HD2	1:C:2762:LEU:HD12	2.00	0.43
1:C:2833:LEU:HB3	1:C:2837:LEU:HB2	2.00	0.43
1:C:4673:ASP:OD1	1:C:4673:ASP:N	2.51	0.43
1:D:1892:GLY:H	1:D:1895:GLN:NE2	2.16	0.43
1:D:2087:LEU:O	1:D:2091:GLN:HG2	2.19	0.43
1:A:655:MET:SD	1:A:836:HIS:HA	2.59	0.43
1:A:2146:LEU:HD23	1:A:2146:LEU:HA	1.83	0.43
1:B:12:GLN:HG3	1:B:177:VAL:HG11	2.01	0.43
1:B:579:LEU:HD13	1:B:617:LEU:HG	2.00	0.43
1:B:931:TYR:CD2	4:B:5003:ATP:C2'	3.01	0.43
1:B:1016:TRP:CE3	1:B:1029:ASN:HB2	2.53	0.43
1:B:4014:LEU:HD13	1:B:4122:ALA:HB2	2.00	0.43
1:C:240:HIS:HB2	1:C:243:GLU:OE1	2.18	0.43
1:C:2087:LEU:O	1:C:2091:GLN:HG2	2.19	0.43
1:C:2442:MET:SD	1:C:2498:ALA:HB1	2.58	0.43
1:C:2828:MET:HE1	1:C:2895:PHE:HB2	2.00	0.43
1:D:661:LEU:HD13	1:D:673:TRP:CD1	2.53	0.43
1:D:1931:ASP:OD1	1:D:1932:PHE:N	2.52	0.43
1:D:2172:MET:O	1:D:2176:VAL:HG23	2.18	0.43
1:D:2409:ILE:HD13	1:D:2420:ARG:NH1	2.34	0.43
1:D:2442:MET:SD	1:D:2498:ALA:HB1	2.58	0.43
1:D:2549:LEU:HD13	1:D:2573:LEU:HD11	2.00	0.43
1:D:4276:VAL:O	1:D:4280:VAL:HG23	2.18	0.43
1:A:877:HIS:O	1:A:880:ARG:HD3	2.19	0.43
1:A:1039:ASP:O	1:A:1043:LYS:HB2	2.17	0.43
1:A:1047:LYS:HG3	1:A:1051:ARG:NE	2.33	0.43
1:A:2187:ILE:HD11	1:A:2193:VAL:HG21	2.01	0.43
1:A:2759:PRO:HD2	1:A:2762:LEU:HD12	2.00	0.43
1:A:2884:LYS:O	1:A:2887:GLU:HG3	2.18	0.43
1:A:3305:PRO:O	1:A:3309:LYS:HG3	2.18	0.43
2:F:50:ARG:HH21	2:F:53:LYS:HG2	1.83	0.43
1:B:188:SER:HB2	1:B:190:ARG:HH11	1.84	0.43
1:B:853:PRO:HB3	1:B:1083:GLU:OE2	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2549:LEU:HD13	1:B:2573:LEU:HD11	1.99	0.43
1:B:2788:ARG:NH2	1:B:2906:GLY:O	2.45	0.43
1:B:3043:ARG:C	1:B:3047:LYS:HZ2	2.22	0.43
1:C:2077:ASP:O	1:C:2081:VAL:HG23	2.19	0.43
1:C:2638:LEU:HB3	1:C:2680:TYR:CE1	2.54	0.43
1:C:2682:GLU:HG3	1:C:2919:LYS:HD3	2.00	0.43
1:C:2719:TYR:CE2	1:C:2799:ALA:HB2	2.38	0.43
1:D:188:SER:HB2	1:D:190:ARG:HH11	1.84	0.43
1:D:2988:ARG:N	1:D:2989:PRO:HD3	2.34	0.43
1:D:3783:GLU:OE2	1:D:3784:LYS:NZ	2.39	0.43
1:A:931:TYR:CD2	4:A:5003:ATP:C2'	3.02	0.43
1:A:1166:VAL:HG23	1:A:1173:MET:HG2	2.00	0.43
1:A:2967:VAL:O	1:A:2971:ILE:HG13	2.19	0.43
1:A:4070:ALA:HB1	1:A:4078:LEU:HD13	2.01	0.43
1:A:4276:VAL:O	1:A:4280:VAL:HG23	2.18	0.43
1:A:4673:ASP:OD1	1:A:4673:ASP:N	2.51	0.43
1:B:1608:VAL:HA	1:B:1618:LEU:O	2.19	0.43
1:B:2726:GLU:OE1	1:B:2726:GLU:N	2.51	0.43
1:B:3227:ARG:NE	1:B:3228:TYR:H	1.96	0.43
1:C:1892:GLY:H	1:C:1895:GLN:NE2	2.16	0.43
1:C:1931:ASP:OD1	1:C:1932:PHE:N	2.52	0.43
1:C:3123:LEU:HB3	1:C:3124:GLU:H	1.72	0.43
1:C:4617:ILE:HD13	1:C:4666:ILE:HD12	2.01	0.43
1:C:4867:ILE:HG12	1:D:4864:GLY:HA2	2.01	0.43
1:D:1021:GLN:NE2	1:D:1022:GLN:O	2.51	0.43
1:D:2142:MET:HE3	1:D:2174:VAL:HG11	2.00	0.43
1:D:2187:ILE:HD11	1:D:2193:VAL:HG21	2.01	0.43
1:D:2621:TYR:OH	1:D:2637:GLU:OE2	2.17	0.43
1:D:2638:LEU:HB3	1:D:2680:TYR:CE1	2.54	0.43
1:D:2684:ASN:ND2	1:D:2909:ASP:OD1	2.39	0.43
1:D:2833:LEU:HB3	1:D:2837:LEU:HB2	2.00	0.43
1:D:3069:GLU:N	1:D:3069:GLU:OE2	2.51	0.43
1:D:4617:ILE:HD13	1:D:4666:ILE:HD12	2.01	0.43
1:A:188:SER:HB2	1:A:190:ARG:HH11	1.84	0.43
1:A:579:LEU:HD13	1:A:617:LEU:HG	2.00	0.43
1:A:1914:CYS:O	1:A:1918:VAL:HG23	2.19	0.43
1:A:2087:LEU:O	1:A:2091:GLN:HG2	2.19	0.43
1:A:2442:MET:SD	1:A:2498:ALA:HB1	2.58	0.43
1:A:3054:LYS:O	1:A:3057:LEU:HD23	2.19	0.43
1:B:28:ILE:HD11	1:B:201:LEU:HD21	2.00	0.43
1:B:655:MET:SD	1:B:836:HIS:HA	2.59	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:896:ASN:O	1:B:899:GLU:HG3	2.19	0.43
1:B:1931:ASP:OD1	1:B:1932:PHE:N	2.52	0.43
1:B:2581:ARG:HB3	1:B:2584:MET:SD	2.59	0.43
1:B:3250:TRP:HE1	1:B:3256:ASN:HD21	1.66	0.43
1:C:877:HIS:HA	1:C:880:ARG:NE	2.34	0.43
1:C:877:HIS:O	1:C:880:ARG:HD3	2.19	0.43
1:D:655:MET:SD	1:D:836:HIS:HA	2.59	0.43
1:D:896:ASN:O	1:D:899:GLU:HG3	2.19	0.43
1:D:982:ASP:HB2	1:D:985:PHE:HD1	1.83	0.43
1:D:2581:ARG:HB3	1:D:2584:MET:SD	2.59	0.43
1:D:2967:VAL:O	1:D:2971:ILE:HG13	2.19	0.43
1:D:3187:LYS:HZ2	1:D:3195:LEU:HD13	1.83	0.43
1:D:3320:LEU:HB2	1:D:3321:PRO:HD3	2.00	0.43
1:A:2077:ASP:O	1:A:2081:VAL:HG23	2.19	0.43
1:A:2409:ILE:HD13	1:A:2420:ARG:NH1	2.34	0.43
1:A:2719:TYR:HE2	1:A:2799:ALA:CB	2.24	0.43
1:A:2768:LYS:O	1:A:2771:TYR:HB3	2.19	0.43
1:A:2999:LYS:O	1:A:3002:GLU:HG3	2.19	0.43
1:A:4040:LYS:HE3	1:A:4040:LYS:HB2	1.83	0.43
1:A:4617:ILE:HD13	1:A:4666:ILE:HD12	2.01	0.43
1:B:281:ARG:NH1	1:B:345:GLU:HB3	2.34	0.43
1:B:937:LEU:HG	1:B:941:LYS:HE2	2.01	0.43
1:B:1444:GLY:HA3	1:B:1487:MET:HA	2.01	0.43
1:B:1750:GLY:HA3	1:B:1839:LEU:HD21	2.00	0.43
1:B:1972:GLN:OE1	1:B:3608:LEU:HG	2.19	0.43
1:B:2682:GLU:HG3	1:B:2919:LYS:HD3	2.00	0.43
1:C:188:SER:HB2	1:C:190:ARG:HH11	1.84	0.43
1:C:2605:MET:HB3	1:C:2606:PRO:HD3	2.00	0.43
1:C:2607:LEU:CD1	1:C:2664:LEU:HG	2.47	0.43
1:C:2768:LYS:O	1:C:2771:TYR:HB3	2.19	0.43
1:C:3054:LYS:O	1:C:3057:LEU:HD23	2.18	0.43
1:C:3250:TRP:HE1	1:C:3256:ASN:HD21	1.66	0.43
1:D:1166:VAL:HG23	1:D:1173:MET:HG2	2.00	0.43
1:D:2622:CYS:HA	1:D:2677:PRO:HG3	2.00	0.43
1:A:881:ILE:HG21	1:A:1062:TYR:CE2	2.54	0.42
1:A:2139:GLU:O	1:A:2192:MET:HE3	2.19	0.42
1:A:3227:ARG:NH2	1:A:3295:TRP:HZ2	2.17	0.42
1:A:3969:LYS:HE2	1:A:3969:LYS:HB2	1.76	0.42
1:A:4029:SER:OG	1:A:4055:HIS:NE2	2.49	0.42
2:F:50:ARG:HE	2:F:53:LYS:HE3	1.84	0.42
1:B:877:HIS:HA	1:B:880:ARG:NE	2.34	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2768:LYS:O	1:B:2771:TYR:HB3	2.19	0.42
1:B:3823:GLU:OE1	1:B:3826:GLY:N	2.41	0.42
1:C:28:ILE:HD11	1:C:201:LEU:HD21	2.00	0.42
1:C:937:LEU:HG	1:C:941:LYS:HE2	2.01	0.42
1:C:2409:ILE:HD13	1:C:2420:ARG:NH1	2.34	0.42
1:D:12:GLN:HG3	1:D:177:VAL:HG11	2.01	0.42
1:D:877:HIS:HA	1:D:880:ARG:NE	2.34	0.42
1:D:1444:GLY:HA3	1:D:1487:MET:HA	2.01	0.42
1:D:1608:VAL:HA	1:D:1618:LEU:O	2.19	0.42
1:D:1914:CYS:O	1:D:1918:VAL:HG23	2.19	0.42
1:D:2247:VAL:HG11	1:D:2257:LEU:HD12	2.00	0.42
1:D:2768:LYS:O	1:D:2771:TYR:HB3	2.19	0.42
1:D:2884:LYS:O	1:D:2887:GLU:HG3	2.18	0.42
1:D:2999:LYS:O	1:D:3002:GLU:HG3	2.19	0.42
1:D:3183:ILE:CG1	1:D:3187:LYS:HE2	2.49	0.42
1:D:4070:ALA:HB1	1:D:4078:LEU:HD13	2.01	0.42
1:A:896:ASN:O	1:A:899:GLU:HG3	2.19	0.42
1:A:1256:PRO:HG3	1:A:1593:HIS:NE2	2.34	0.42
1:A:1276:THR:OG1	1:A:1278:ASP:OD1	2.32	0.42
1:A:1608:VAL:HA	1:A:1618:LEU:O	2.19	0.42
1:A:2549:LEU:HD13	1:A:2573:LEU:HD11	1.99	0.42
1:A:2914:THR:N	1:A:2915:PRO:HD2	2.34	0.42
1:A:2988:ARG:N	1:A:2989:PRO:HD3	2.34	0.42
1:A:3183:ILE:CG1	1:A:3187:LYS:HE2	2.49	0.42
1:A:4480:PHE:HD1	1:A:4483:LYS:HZ3	1.68	0.42
1:A:4694:LEU:HD21	1:D:4264:LEU:HB3	2.02	0.42
2:E:50:ARG:HH21	2:E:53:LYS:HG2	1.83	0.42
1:B:2409:ILE:HD13	1:B:2420:ARG:NH1	2.34	0.42
1:B:2719:TYR:CE2	1:B:2799:ALA:HB2	2.38	0.42
1:B:2999:LYS:O	1:B:3002:GLU:HG3	2.19	0.42
1:B:3134:LEU:HD12	1:B:3162:PHE:CE2	2.54	0.42
1:B:3697:LYS:HD3	1:B:3700:HIS:NE2	2.34	0.42
1:B:4617:ILE:HD13	1:B:4666:ILE:HD12	2.01	0.42
1:C:579:LEU:HD13	1:C:617:LEU:HG	2.00	0.42
1:C:722:LEU:HD23	1:C:722:LEU:HA	1.91	0.42
1:C:1942:PHE:O	1:C:1946:GLU:HG2	2.20	0.42
1:C:2622:CYS:HA	1:C:2677:PRO:HG3	2.00	0.42
1:C:2726:GLU:OE1	1:C:2726:GLU:N	2.51	0.42
1:C:2918:GLU:HG3	1:C:2923:TYR:CD1	2.54	0.42
1:C:2988:ARG:N	1:C:2989:PRO:HD3	2.34	0.42
1:C:3320:LEU:HB2	1:C:3321:PRO:HD3	2.00	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:3793:LEU:HD23	1:C:3793:LEU:HA	1.89	0.42
1:D:608:HIS:HB2	1:D:1656:HIS:ND1	2.34	0.42
1:D:1283:LEU:HD11	1:D:1582:CYS:SG	2.60	0.42
1:D:1718:ARG:HD3	1:D:1831:MET:HA	2.01	0.42
1:D:2222:LEU:HA	1:D:2222:LEU:HD23	1.79	0.42
1:D:2759:PRO:HD2	1:D:2762:LEU:HD12	2.00	0.42
1:D:2944:ASP:O	1:D:2947:SER:OG	2.35	0.42
1:D:3298:ARG:O	1:D:3301:VAL:HG12	2.19	0.42
1:D:4014:LEU:HD13	1:D:4122:ALA:HB2	2.00	0.42
1:A:732:LEU:HD23	1:A:732:LEU:HA	1.87	0.42
1:A:877:HIS:HA	1:A:880:ARG:NE	2.34	0.42
1:A:981:MET:HE3	1:A:1056:THR:HA	2.00	0.42
1:A:1161:VAL:HG21	1:A:1225:LYS:HE2	2.01	0.42
1:A:1718:ARG:HD3	1:A:1831:MET:HA	2.01	0.42
1:A:2268:TYR:HB3	1:A:2298:TYR:CZ	2.55	0.42
1:A:2682:GLU:HG3	1:A:2919:LYS:HD3	2.01	0.42
1:A:3069:GLU:OE2	1:A:3069:GLU:N	2.51	0.42
1:A:3697:LYS:HA	1:A:3700:HIS:NE2	2.34	0.42
1:B:981:MET:HE3	1:B:1056:THR:HA	2.01	0.42
1:B:2918:GLU:HG3	1:B:2923:TYR:CD1	2.54	0.42
1:B:2988:ARG:N	1:B:2989:PRO:HD3	2.34	0.42
1:C:1283:LEU:HD11	1:C:1582:CYS:SG	2.60	0.42
1:C:2971:ILE:HG23	1:C:2975:PHE:HE2	1.83	0.42
1:C:3131:TYR:HE1	1:C:3166:PHE:HZ	1.66	0.42
1:C:3699:CYS:SG	1:C:3731:LEU:HD12	2.60	0.42
1:C:4030:ASP:OD2	1:C:4031:THR:N	2.52	0.42
1:D:1256:PRO:HG3	1:D:1593:HIS:NE2	2.34	0.42
1:D:2726:GLU:OE1	1:D:2726:GLU:N	2.51	0.42
1:D:2775:ILE:H	1:D:2775:ILE:HD12	1.84	0.42
1:D:3697:LYS:HD3	1:D:3700:HIS:NE2	2.34	0.42
1:D:4266:LYS:HB2	1:D:4266:LYS:HE2	1.83	0.42
1:A:267:VAL:HG22	1:A:273:SER:HB3	2.02	0.42
1:A:281:ARG:NH1	1:A:345:GLU:HB3	2.34	0.42
1:A:608:HIS:HB2	1:A:1656:HIS:ND1	2.34	0.42
1:A:3697:LYS:HD3	1:A:3700:HIS:NE2	2.34	0.42
1:A:4030:ASP:OD2	1:A:4031:THR:N	2.52	0.42
2:G:50:ARG:HH21	2:G:53:LYS:HG2	1.83	0.42
1:B:1283:LEU:HD11	1:B:1582:CYS:SG	2.60	0.42
1:B:1892:GLY:H	1:B:1895:GLN:NE2	2.16	0.42
1:B:1964:GLU:HB2	1:B:1975:MET:HE3	2.00	0.42
1:B:2769:GLU:C	1:B:2771:TYR:N	2.69	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2775:ILE:H	1:B:2775:ILE:HD12	1.84	0.42
1:B:3054:LYS:O	1:B:3057:LEU:HD23	2.19	0.42
1:B:3183:ILE:CG1	1:B:3187:LYS:HE2	2.49	0.42
1:B:4015:LYS:HE2	1:B:4015:LYS:HB3	1.88	0.42
1:C:12:GLN:HG3	1:C:177:VAL:HG11	2.01	0.42
1:C:281:ARG:NH1	1:C:345:GLU:HB3	2.34	0.42
1:C:871:GLN:OE1	1:C:871:GLN:N	2.50	0.42
1:C:881:ILE:HG21	1:C:1062:TYR:CE2	2.54	0.42
1:C:981:MET:HE3	1:C:1056:THR:HA	2.01	0.42
1:C:1608:VAL:HA	1:C:1618:LEU:O	2.19	0.42
1:C:2549:LEU:HD13	1:C:2573:LEU:HD11	2.00	0.42
1:C:2581:ARG:HB3	1:C:2584:MET:SD	2.59	0.42
1:C:2841:ALA:HA	1:C:2844:MET:HG3	2.02	0.42
1:C:3325:LYS:HD2	1:C:3328:LYS:HZ2	1.83	0.42
1:C:3697:LYS:HD3	1:C:3700:HIS:NE2	2.34	0.42
1:D:281:ARG:NH1	1:D:345:GLU:HB3	2.34	0.42
1:D:579:LEU:HD13	1:D:617:LEU:HG	2.00	0.42
1:D:631:LEU:O	1:D:635:ASN:ND2	2.53	0.42
1:D:3697:LYS:HA	1:D:3700:HIS:NE2	2.34	0.42
1:D:3699:CYS:SG	1:D:3731:LEU:HD12	2.59	0.42
1:D:4040:LYS:HE3	1:D:4040:LYS:HB2	1.83	0.42
1:A:496:ASN:O	1:A:500:GLU:OE1	2.38	0.42
1:A:937:LEU:HG	1:A:941:LYS:HE2	2.01	0.42
1:A:2929:LEU:O	1:A:2933:VAL:HG23	2.20	0.42
1:A:3231:MET:HE3	1:A:3233:HIS:HB2	2.01	0.42
1:B:732:LEU:HD23	1:B:732:LEU:HA	1.87	0.42
1:B:881:ILE:HG21	1:B:1062:TYR:CE2	2.54	0.42
1:B:1256:PRO:HG3	1:B:1593:HIS:NE2	2.34	0.42
1:B:1937:GLN:HG2	1:B:3609:TYR:HA	2.02	0.42
1:B:2187:ILE:HD11	1:B:2193:VAL:HG21	2.01	0.42
1:B:3187:LYS:HZ1	1:B:3195:LEU:HD13	1.84	0.42
1:B:3227:ARG:NH2	1:B:3295:TRP:HZ2	2.18	0.42
1:B:3298:ARG:O	1:B:3301:VAL:HG12	2.19	0.42
1:B:3699:CYS:SG	1:B:3731:LEU:HD12	2.59	0.42
1:B:4031:THR:HA	1:B:4034:GLU:HG3	2.01	0.42
1:C:896:ASN:O	1:C:899:GLU:HG3	2.19	0.42
1:C:2775:ILE:H	1:C:2775:ILE:HD12	1.84	0.42
1:C:3159:LEU:HD13	1:C:3241:MET:HE3	2.01	0.42
1:C:3697:LYS:HA	1:C:3700:HIS:NE2	2.34	0.42
1:C:4031:THR:HA	1:C:4034:GLU:HG3	2.01	0.42
1:D:1729:MET:SD	1:D:1930:ASP:HB2	2.60	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1937:GLN:HG2	1:D:3609:TYR:HA	2.02	0.42
1:D:2858:MET:O	1:D:2861:GLU:HG3	2.20	0.42
1:D:2920:ARG:NH1	1:D:2981:TYR:HH	2.16	0.42
1:D:3054:LYS:O	1:D:3057:LEU:HD23	2.19	0.42
1:D:3641:ILE:HD11	1:D:3694:ILE:HG22	2.02	0.42
1:D:3783:GLU:OE2	1:D:3784:LYS:HG2	2.20	0.42
1:A:1283:LEU:HD11	1:A:1582:CYS:SG	2.60	0.42
1:A:1931:ASP:OD1	1:A:1932:PHE:N	2.52	0.42
1:A:1937:GLN:HG2	1:A:3609:TYR:HA	2.02	0.42
1:A:2581:ARG:HB3	1:A:2584:MET:SD	2.59	0.42
1:A:2638:LEU:HB3	1:A:2680:TYR:CE1	2.54	0.42
1:A:3783:GLU:OE2	1:A:3784:LYS:HG2	2.20	0.42
1:B:39:ALA:O	1:B:123:HIS:HE1	2.03	0.42
1:B:1179:GLY:HA3	1:B:1229:ILE:HD11	2.02	0.42
1:B:3293:GLY:O	1:B:3296:MET:HG2	2.20	0.42
1:B:3641:ILE:HD11	1:B:3694:ILE:HG22	2.02	0.42
1:B:3697:LYS:HA	1:B:3700:HIS:NE2	2.34	0.42
1:B:4710:LEU:HD23	1:B:4710:LEU:HA	1.90	0.42
1:B:4867:ILE:HG12	1:C:4864:GLY:HA2	2.01	0.42
1:C:608:HIS:HB2	1:C:1656:HIS:ND1	2.34	0.42
1:C:2146:LEU:HD23	1:C:2146:LEU:HA	1.83	0.42
1:C:2268:TYR:HB3	1:C:2298:TYR:CZ	2.55	0.42
1:C:2999:LYS:O	1:C:3002:GLU:HG3	2.19	0.42
1:C:3134:LEU:HB2	1:C:3162:PHE:HE2	1.85	0.42
1:C:3293:GLY:O	1:C:3296:MET:HG2	2.20	0.42
1:D:411:GLU:OE2	1:D:485:ARG:NE	2.35	0.42
1:D:1942:PHE:O	1:D:1946:GLU:HG2	2.19	0.42
1:D:2077:ASP:O	1:D:2081:VAL:HG23	2.19	0.42
1:D:2481:GLN:O	1:D:2485:LEU:HD23	2.19	0.42
1:D:4925:LEU:HD12	1:D:4933:HIS:CE1	2.55	0.42
1:A:2841:ALA:HA	1:A:2844:MET:HG3	2.02	0.42
1:A:3102:LEU:HD21	1:A:3154:ALA:O	2.20	0.42
1:A:3298:ARG:O	1:A:3301:VAL:HG12	2.19	0.42
1:A:4031:THR:HA	1:A:4034:GLU:HG3	2.01	0.42
1:A:4484:ILE:O	1:A:4488:GLN:HG2	2.20	0.42
1:A:4818:TYR:HA	1:B:4848:ILE:HD11	2.00	0.42
2:H:75:LEU:HD22	2:H:102:VAL:HG21	2.02	0.42
1:B:267:VAL:HG22	1:B:273:SER:HB3	2.02	0.42
1:B:496:ASN:O	1:B:500:GLU:OE1	2.38	0.42
1:B:631:LEU:O	1:B:635:ASN:ND2	2.53	0.42
1:B:1161:VAL:HG21	1:B:1225:LYS:HE2	2.01	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:4484:ILE:O	1:B:4488:GLN:HG2	2.20	0.42
1:C:931:TYR:CD2	4:C:5003:ATP:C2'	3.01	0.42
1:C:2187:ILE:HD11	1:C:2193:VAL:HG21	2.01	0.42
1:D:2268:TYR:HB3	1:D:2298:TYR:CZ	2.54	0.42
1:D:2605:MET:HB3	1:D:2606:PRO:HD3	2.00	0.42
1:D:2642:ARG:HD2	1:D:2680:TYR:HE2	1.83	0.42
1:D:2841:ALA:HA	1:D:2844:MET:HG3	2.02	0.42
1:A:631:LEU:O	1:A:635:ASN:ND2	2.53	0.42
1:A:1729:MET:SD	1:A:1930:ASP:HB2	2.60	0.42
1:A:2895:PHE:HA	1:A:2898:ILE:HG12	2.02	0.42
1:A:2918:GLU:HG3	1:A:2923:TYR:CD1	2.54	0.42
1:A:4512:ALA:O	1:A:4516:ILE:HG13	2.20	0.42
2:H:50:ARG:HE	2:H:53:LYS:HE3	1.84	0.42
1:B:2222:LEU:HD23	1:B:2222:LEU:HA	1.79	0.42
1:B:2605:MET:HB3	1:B:2606:PRO:HD3	2.00	0.42
1:B:2841:ALA:HA	1:B:2844:MET:HG3	2.02	0.42
1:C:732:LEU:HD23	1:C:732:LEU:HA	1.87	0.42
1:C:1729:MET:SD	1:C:1930:ASP:HB2	2.60	0.42
1:C:1937:GLN:HG2	1:C:3609:TYR:HA	2.02	0.42
1:C:1972:GLN:OE1	1:C:3608:LEU:HG	2.19	0.42
1:C:2481:GLN:O	1:C:2485:LEU:HD23	2.19	0.42
1:C:2858:MET:O	1:C:2861:GLU:HG3	2.20	0.42
1:C:2920:ARG:NH1	1:C:2981:TYR:HH	2.18	0.42
1:C:3102:LEU:HD21	1:C:3154:ALA:O	2.20	0.42
1:C:3212:GLU:HG2	1:C:3213:LYS:N	2.35	0.42
1:C:3783:GLU:OE2	1:C:3784:LYS:HG2	2.20	0.42
1:D:4030:ASP:OD2	1:D:4031:THR:N	2.52	0.42
1:D:4484:ILE:O	1:D:4488:GLN:HG2	2.20	0.42
1:A:881:ILE:HD11	1:A:1060:TYR:CE2	2.55	0.42
1:A:1991:GLU:HG2	1:A:1992:ILE:N	2.35	0.42
1:A:2525:LEU:HD21	1:A:2569:ILE:HA	2.02	0.42
1:A:3187:LYS:HD2	1:A:3192:ARG:HD2	2.02	0.42
1:A:3641:ILE:HD11	1:A:3694:ILE:HG22	2.02	0.42
1:A:4795:LYS:HD2	1:A:4795:LYS:HA	1.80	0.42
2:E:36:LYS:HB3	2:E:36:LYS:HE3	1.81	0.42
2:E:58:LYS:O	2:E:61:GLU:HB3	2.20	0.42
2:H:50:ARG:HH21	2:H:53:LYS:HG2	1.83	0.42
2:H:58:LYS:O	2:H:61:GLU:HB3	2.20	0.42
1:B:1914:CYS:O	1:B:1918:VAL:HG23	2.19	0.42
1:B:2858:MET:O	1:B:2861:GLU:HG3	2.20	0.42
1:B:2967:VAL:O	1:B:2971:ILE:HG13	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:3212:GLU:HG2	1:B:3213:LYS:N	2.35	0.42
1:B:3783:GLU:OE2	1:B:3784:LYS:HG2	2.20	0.42
1:C:23:GLN:NE2	1:C:215:ALA:HB2	2.35	0.42
1:C:881:ILE:HD11	1:C:1060:TYR:CE2	2.55	0.42
1:C:1256:PRO:HG3	1:C:1593:HIS:NE2	2.34	0.42
1:C:1914:CYS:HB3	1:C:2090:ARG:NH2	2.35	0.42
1:C:2914:THR:N	1:C:2915:PRO:HD2	2.34	0.42
1:C:3183:ILE:CG1	1:C:3187:LYS:HE2	2.49	0.42
1:C:3298:ARG:O	1:C:3301:VAL:HG12	2.19	0.42
1:C:4925:LEU:HD12	1:C:4933:HIS:CE1	2.55	0.42
1:D:1161:VAL:HG21	1:D:1225:LYS:HE2	2.01	0.42
1:D:1179:GLY:HA3	1:D:1229:ILE:HD11	2.02	0.42
1:D:2682:GLU:HG3	1:D:2919:LYS:HD3	2.00	0.42
1:D:2691:LYS:HZ1	1:D:2875:ASP:H	1.67	0.42
1:D:2914:THR:N	1:D:2915:PRO:HD2	2.34	0.42
1:D:3183:ILE:HG13	1:D:3187:LYS:HE2	2.02	0.42
1:D:3293:GLY:O	1:D:3296:MET:HG2	2.20	0.42
1:A:911:ASN:OD1	1:A:912:LYS:N	2.53	0.42
1:A:3134:LEU:HD12	1:A:3162:PHE:CE2	2.54	0.42
1:A:3699:CYS:SG	1:A:3731:LEU:HD12	2.59	0.42
1:A:3942:ASP:O	1:A:3945:VAL:HG12	2.20	0.42
2:E:26:HIS:CD2	2:E:46:PRO:HA	2.55	0.42
2:E:50:ARG:HE	2:E:53:LYS:HE3	1.85	0.42
2:F:58:LYS:O	2:F:61:GLU:HB3	2.20	0.42
1:B:608:HIS:HB2	1:B:1656:HIS:ND1	2.34	0.42
1:B:895:MET:O	1:B:898:ILE:HG22	2.20	0.42
1:B:1500:ARG:HD2	1:B:1505:LEU:HB2	2.02	0.42
1:B:2087:LEU:O	1:B:2091:GLN:HG2	2.19	0.42
1:B:2268:TYR:HB3	1:B:2298:TYR:CZ	2.54	0.42
1:C:39:ALA:O	1:C:123:HIS:HE1	2.03	0.42
1:C:655:MET:SD	1:C:836:HIS:HA	2.59	0.42
1:C:2142:MET:HE1	1:C:2174:VAL:HG11	2.00	0.42
1:C:2929:LEU:O	1:C:2933:VAL:HG23	2.20	0.42
1:C:3227:ARG:NH2	1:C:3295:TRP:HZ2	2.18	0.42
1:C:3641:ILE:HD11	1:C:3694:ILE:HG22	2.02	0.42
1:C:4832:GLU:HG2	1:C:4833:ASP:H	1.85	0.42
1:D:267:VAL:HG22	1:D:273:SER:HB3	2.02	0.42
1:D:881:ILE:HD11	1:D:1060:TYR:CE2	2.55	0.42
1:D:1004:HIS:CD2	1:D:1038:LEU:HD11	2.55	0.42
1:D:3131:TYR:HE1	1:D:3166:PHE:HZ	1.66	0.42
1:D:3213:LYS:O	1:D:3216:GLU:HG3	2.20	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:877:HIS:HA	1:A:880:ARG:CD	2.50	0.41
1:A:1111:GLY:O	1:A:1140:PHE:HB2	2.20	0.41
1:A:1914:CYS:HB3	1:A:2090:ARG:NH2	2.35	0.41
1:A:3043:ARG:C	1:A:3047:LYS:HZ2	2.23	0.41
2:E:75:LEU:HD22	2:E:102:VAL:HG21	2.02	0.41
2:H:89:PRO:HB2	1:D:1671:ARG:HH22	1.85	0.41
1:B:804:LEU:HD13	1:B:832:LEU:HD21	2.02	0.41
1:B:1240:ALA:HB2	1:B:1247:ILE:HD11	2.02	0.41
1:B:1942:PHE:O	1:B:1946:GLU:HG2	2.20	0.41
1:B:2525:LEU:HD21	1:B:2569:ILE:HA	2.02	0.41
1:C:1991:GLU:HG2	1:C:1992:ILE:N	2.35	0.41
1:C:2525:LEU:HD21	1:C:2569:ILE:HA	2.02	0.41
1:C:2691:LYS:HZ1	1:C:2875:ASP:H	1.67	0.41
1:C:3187:LYS:HD2	1:C:3192:ARG:HD2	2.02	0.41
1:C:3942:ASP:O	1:C:3945:VAL:HG12	2.20	0.41
1:D:263:GLU:OE1	1:D:272:ARG:NH1	2.40	0.41
1:D:881:ILE:HG21	1:D:1062:TYR:CE2	2.54	0.41
1:D:1991:GLU:HG2	1:D:1992:ILE:N	2.35	0.41
1:D:2186:GLU:HG3	1:D:2187:ILE:HG22	2.03	0.41
1:D:2200:LEU:HD23	1:D:2200:LEU:HA	1.84	0.41
1:D:2895:PHE:HA	1:D:2898:ILE:HG12	2.02	0.41
1:D:2918:GLU:HG3	1:D:2923:TYR:CD1	2.54	0.41
1:D:2959:GLU:OE1	1:D:2959:GLU:N	2.53	0.41
1:D:3227:ARG:NH2	1:D:3295:TRP:HZ2	2.17	0.41
1:A:513:HIS:O	1:A:517:VAL:HG23	2.20	0.41
1:A:890:HIS:HB3	1:A:929:ARG:HH12	1.86	0.41
1:A:904:TYR:OH	1:A:923:LYS:NZ	2.53	0.41
1:A:1004:HIS:CD2	1:A:1038:LEU:HD11	2.55	0.41
1:A:2333:PRO:HA	1:A:2336:ARG:NE	2.33	0.41
1:A:2775:ILE:HD12	1:A:2775:ILE:H	1.84	0.41
1:B:655:MET:HE2	1:B:1608:VAL:HG21	2.02	0.41
1:B:878:LEU:HD13	1:B:944:LEU:HD11	2.02	0.41
1:B:1991:GLU:HG2	1:B:1992:ILE:N	2.35	0.41
1:B:2481:GLN:O	1:B:2485:LEU:HD23	2.19	0.41
1:B:3123:LEU:HB3	1:B:3124:GLU:H	1.72	0.41
1:B:3942:ASP:O	1:B:3945:VAL:HG12	2.20	0.41
1:B:4832:GLU:HG2	1:B:4833:ASP:H	1.86	0.41
1:C:411:GLU:OE2	1:C:485:ARG:NE	2.35	0.41
1:C:877:HIS:HA	1:C:880:ARG:CD	2.50	0.41
1:C:1240:ALA:HB2	1:C:1247:ILE:HD11	2.03	0.41
1:C:2333:PRO:HA	1:C:2336:ARG:NE	2.33	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2385:GLY:O	1:C:2389:MET:HG3	2.21	0.41
1:C:2480:VAL:HG12	1:C:2483:PHE:H	1.85	0.41
1:C:2645:PHE:CD2	1:C:2921:PHE:HZ	2.38	0.41
1:C:2852:TRP:CH2	1:C:2856:LYS:HG3	2.55	0.41
1:C:3001:LYS:HD2	1:C:3041:ASP:HB3	2.02	0.41
1:C:3134:LEU:HD12	1:C:3162:PHE:CE2	2.54	0.41
1:C:3172:GLU:OE2	1:C:3175:LEU:HG	2.20	0.41
1:C:3213:LYS:O	1:C:3216:GLU:HG3	2.20	0.41
1:D:804:LEU:HD13	1:D:832:LEU:HD21	2.02	0.41
1:D:937:LEU:HG	1:D:941:LYS:HE2	2.01	0.41
1:D:1972:GLN:OE1	1:D:3608:LEU:HG	2.19	0.41
1:D:2645:PHE:CD2	1:D:2921:PHE:HZ	2.38	0.41
1:D:3134:LEU:HB2	1:D:3162:PHE:HE2	1.85	0.41
1:A:411:GLU:OE2	1:A:485:ARG:NE	2.35	0.41
1:A:1477:HIS:CE1	1:A:1478:GLU:HG2	2.56	0.41
1:A:2481:GLN:O	1:A:2485:LEU:HD23	2.19	0.41
1:A:2607:LEU:CD1	1:A:2664:LEU:HG	2.47	0.41
1:A:2726:GLU:OE1	1:A:2726:GLU:N	2.51	0.41
1:A:2769:GLU:C	1:A:2771:TYR:N	2.69	0.41
1:A:2858:MET:O	1:A:2861:GLU:HG3	2.20	0.41
1:A:3035:ILE:O	1:A:3039:THR:HG23	2.21	0.41
1:B:881:ILE:HD11	1:B:1060:TYR:CE2	2.55	0.41
1:B:2895:PHE:HA	1:B:2898:ILE:HG12	2.02	0.41
1:B:3102:LEU:HD21	1:B:3154:ALA:O	2.20	0.41
1:C:878:LEU:HD13	1:C:944:LEU:HD11	2.02	0.41
1:C:1091:GLU:HB3	1:C:1094:TYR:HD2	1.86	0.41
1:C:3183:ILE:HG13	1:C:3187:LYS:HE2	2.02	0.41
1:C:3227:ARG:CZ	1:C:3291:ASP:HB3	2.51	0.41
1:C:4070:ALA:HB1	1:C:4078:LEU:HD13	2.01	0.41
1:D:911:ASN:OD1	1:D:912:LYS:N	2.54	0.41
1:D:1477:HIS:CE1	1:D:1478:GLU:HG2	2.55	0.41
1:D:1500:ARG:HD2	1:D:1505:LEU:HB2	2.02	0.41
1:D:2333:PRO:HA	1:D:2336:ARG:NE	2.33	0.41
1:D:4031:THR:HA	1:D:4034:GLU:HG3	2.01	0.41
1:A:23:GLN:NE2	1:A:215:ALA:HB2	2.35	0.41
1:A:39:ALA:O	1:A:123:HIS:HE1	2.03	0.41
1:A:2172:MET:HE2	1:A:2172:MET:HB2	1.97	0.41
1:A:3861:GLN:HB3	1:A:3864:ASN:HD22	1.86	0.41
2:H:26:HIS:CD2	2:H:46:PRO:HA	2.56	0.41
1:B:877:HIS:HA	1:B:880:ARG:CD	2.50	0.41
1:B:2929:LEU:O	1:B:2933:VAL:HG23	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:3227:ARG:CZ	1:B:3291:ASP:HB3	2.51	0.41
1:C:911:ASN:OD1	1:C:912:LYS:N	2.53	0.41
1:C:1964:GLU:HB2	1:C:1975:MET:HE3	2.02	0.41
1:C:2186:GLU:HG3	1:C:2187:ILE:HG22	2.03	0.41
1:C:2868:HIS:HB3	1:C:2871:LEU:HB2	2.03	0.41
1:D:496:ASN:O	1:D:500:GLU:OE1	2.38	0.41
1:D:2525:LEU:HD21	1:D:2569:ILE:HA	2.02	0.41
1:D:2659:GLN:O	1:D:2663:LYS:HG2	2.21	0.41
1:D:2852:TRP:CH2	1:D:2856:LYS:HG3	2.55	0.41
1:D:4512:ALA:O	1:D:4516:ILE:HG13	2.20	0.41
1:A:989:THR:HG22	1:A:991:SER:H	1.85	0.41
1:A:1942:PHE:O	1:A:1946:GLU:HG2	2.20	0.41
1:A:2243:ALA:O	1:A:2247:VAL:HG22	2.20	0.41
1:A:3293:GLY:O	1:A:3296:MET:HG2	2.20	0.41
1:A:4925:LEU:HD12	1:A:4933:HIS:CE1	2.55	0.41
2:F:26:HIS:CD2	2:F:46:PRO:HA	2.55	0.41
2:F:89:PRO:HB2	1:B:1671:ARG:HH22	1.85	0.41
1:B:456:LEU:O	1:B:460:ILE:HG12	2.21	0.41
1:B:1477:HIS:CE1	1:B:1478:GLU:HG2	2.56	0.41
1:B:2186:GLU:HG3	1:B:2187:ILE:HG22	2.03	0.41
1:B:2243:ALA:O	1:B:2247:VAL:HG22	2.20	0.41
1:B:2645:PHE:CD2	1:B:2921:PHE:HZ	2.38	0.41
1:B:2752:LYS:HD3	1:B:2752:LYS:HA	1.92	0.41
1:B:3142:THR:HA	1:B:3233:HIS:HB3	2.02	0.41
1:B:3172:GLU:OE2	1:B:3175:LEU:HG	2.20	0.41
1:B:4070:ALA:HB1	1:B:4078:LEU:HD13	2.01	0.41
1:B:4832:GLU:N	1:B:4843:ARG:HH22	2.19	0.41
1:B:4925:LEU:HD12	1:B:4933:HIS:CE1	2.55	0.41
1:C:267:VAL:HG22	1:C:273:SER:HB3	2.02	0.41
1:C:631:LEU:O	1:C:635:ASN:ND2	2.53	0.41
1:C:670:TYR:CE2	1:C:672:LYS:HB2	2.56	0.41
1:C:804:LEU:HD13	1:C:832:LEU:HD21	2.02	0.41
1:C:1016:TRP:HZ3	1:C:1022:GLN:HE22	1.69	0.41
1:C:1748:LEU:HB2	1:C:1751:ILE:HD13	2.03	0.41
1:C:1914:CYS:O	1:C:1918:VAL:HG23	2.19	0.41
1:C:2243:ALA:O	1:C:2247:VAL:HG22	2.20	0.41
1:C:2659:GLN:O	1:C:2663:LYS:HG2	2.21	0.41
1:C:3843:LEU:HD23	1:C:3846:LEU:HD12	2.03	0.41
1:D:513:HIS:O	1:D:517:VAL:HG23	2.20	0.41
1:D:670:TYR:CE2	1:D:672:LYS:HB2	2.56	0.41
1:D:895:MET:O	1:D:898:ILE:HG22	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1016:TRP:HZ3	1:D:1022:GLN:HE22	1.69	0.41
1:D:1111:GLY:O	1:D:1140:PHE:HB2	2.20	0.41
1:D:1748:LEU:HB2	1:D:1751:ILE:HD13	2.03	0.41
1:D:2243:ALA:O	1:D:2247:VAL:HG22	2.20	0.41
1:A:670:TYR:CE2	1:A:672:LYS:HB2	2.56	0.41
1:A:2828:MET:HE1	1:A:2895:PHE:HB2	2.03	0.41
1:A:4649:VAL:O	1:A:4653:VAL:HG23	2.21	0.41
2:G:75:LEU:HD22	2:G:102:VAL:HG21	2.02	0.41
1:B:1111:GLY:O	1:B:1140:PHE:HB2	2.20	0.41
1:B:2385:GLY:O	1:B:2389:MET:HG3	2.21	0.41
1:B:2659:GLN:O	1:B:2663:LYS:HG2	2.20	0.41
1:B:2845:ALA:HB1	1:B:2885:ASP:OD1	2.21	0.41
1:B:2852:TRP:CH2	1:B:2856:LYS:HG3	2.55	0.41
1:B:3213:LYS:O	1:B:3216:GLU:HG3	2.20	0.41
1:B:3292:GLU:HB3	1:B:3293:GLY:H	1.70	0.41
1:B:3843:LEU:HD23	1:B:3846:LEU:HD12	2.03	0.41
1:B:4512:ALA:O	1:B:4516:ILE:HG13	2.20	0.41
1:B:4859:LEU:O	1:B:4863:GLN:HG2	2.21	0.41
1:C:895:MET:O	1:C:898:ILE:HG22	2.20	0.41
1:C:1304:LEU:HD23	1:C:1304:LEU:HA	1.91	0.41
1:C:2895:PHE:HA	1:C:2898:ILE:HG12	2.02	0.41
1:D:39:ALA:O	1:D:123:HIS:HE1	2.03	0.41
1:D:1054:VAL:O	1:D:1057:LEU:HG	2.21	0.41
1:D:2868:HIS:HB3	1:D:2871:LEU:HB2	2.03	0.41
1:D:3840:PHE:CE1	1:D:3874:THR:HG23	2.56	0.41
1:D:4832:GLU:N	1:D:4843:ARG:HH22	2.19	0.41
1:A:804:LEU:HD13	1:A:832:LEU:HD21	2.02	0.41
1:A:1016:TRP:HZ3	1:A:1022:GLN:HE22	1.69	0.41
1:A:1179:GLY:HA3	1:A:1229:ILE:HD11	2.02	0.41
1:A:1288:LYS:H	1:A:1288:LYS:HG3	1.72	0.41
1:A:2186:GLU:HG3	1:A:2187:ILE:HG22	2.03	0.41
1:A:3142:THR:HA	1:A:3233:HIS:HB3	2.02	0.41
1:A:3840:PHE:CE1	1:A:3874:THR:HG23	2.56	0.41
1:A:4832:GLU:HG2	1:A:4833:ASP:H	1.86	0.41
1:B:513:HIS:O	1:B:517:VAL:HG23	2.20	0.41
1:B:1729:MET:SD	1:B:1930:ASP:HB2	2.60	0.41
1:B:3045:VAL:HG12	1:B:3046:MET:HE2	2.03	0.41
1:B:3148:VAL:O	1:B:3152:ARG:HB3	2.21	0.41
1:B:3166:PHE:CD1	1:B:3167:PRO:HD2	2.56	0.41
1:C:890:HIS:HB3	1:C:929:ARG:HH12	1.86	0.41
1:C:904:TYR:OH	1:C:923:LYS:NZ	2.53	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1958:THR:O	1:C:1962:THR:HG22	2.21	0.41
1:C:3035:ILE:O	1:C:3039:THR:HG23	2.21	0.41
1:C:3166:PHE:CD1	1:C:3167:PRO:HD2	2.56	0.41
1:D:330:THR:HG23	1:D:366:VAL:HG22	2.03	0.41
1:D:871:GLN:OE1	1:D:871:GLN:N	2.50	0.41
1:D:917:CYS:HA	1:D:924:LEU:HG	2.02	0.41
1:D:981:MET:HE3	1:D:1056:THR:HA	2.01	0.41
1:D:1421:MET:O	1:D:1576:LYS:NZ	2.51	0.41
1:D:1958:THR:O	1:D:1962:THR:HG22	2.21	0.41
1:D:2736:LYS:HB3	1:D:2741:TRP:CB	2.51	0.41
1:D:3102:LEU:HD21	1:D:3154:ALA:O	2.20	0.41
1:D:3231:MET:HE3	1:D:3233:HIS:HB2	2.03	0.41
1:D:4575:LEU:HD23	1:D:4575:LEU:HA	1.96	0.41
1:A:456:LEU:O	1:A:460:ILE:HG12	2.21	0.41
1:A:2852:TRP:CH2	1:A:2856:LYS:HG3	2.56	0.41
1:A:3172:GLU:OE2	1:A:3175:LEU:HG	2.20	0.41
1:A:3183:ILE:HG13	1:A:3187:LYS:HE2	2.02	0.41
1:A:3213:LYS:O	1:A:3216:GLU:HG3	2.20	0.41
1:A:3906:PHE:HB3	1:A:3967:LEU:HD11	2.03	0.41
1:A:4806:CYS:HA	1:A:4812:CYS:HB2	2.03	0.41
1:A:4832:GLU:N	1:A:4843:ARG:HH22	2.19	0.41
2:F:3:VAL:HG13	2:F:5:ILE:HD11	2.03	0.41
2:G:50:ARG:HE	2:G:53:LYS:HE3	1.84	0.41
1:B:670:TYR:CE2	1:B:672:LYS:HB2	2.56	0.41
1:B:1748:LEU:HB2	1:B:1751:ILE:HD13	2.03	0.41
1:B:2333:PRO:HA	1:B:2336:ARG:NE	2.33	0.41
1:B:4673:ASP:OD1	1:B:4673:ASP:N	2.51	0.41
1:C:137:ARG:HG3	1:C:139:SER:HB3	2.03	0.41
1:C:456:LEU:O	1:C:460:ILE:HG12	2.21	0.41
1:C:496:ASN:O	1:C:500:GLU:OE1	2.38	0.41
1:C:2172:MET:HE2	1:C:2172:MET:HB2	1.92	0.41
1:C:3045:VAL:HG12	1:C:3046:MET:HE2	2.03	0.41
1:C:3148:VAL:O	1:C:3152:ARG:HB3	2.21	0.41
1:C:3969:LYS:HB2	1:C:3969:LYS:HE2	1.76	0.41
1:D:23:GLN:NE2	1:D:215:ALA:HB2	2.35	0.41
1:D:2179:LEU:HD22	1:D:2227:VAL:HG11	2.03	0.41
1:D:2929:LEU:O	1:D:2933:VAL:HG23	2.20	0.41
1:D:3035:ILE:O	1:D:3039:THR:HG23	2.21	0.41
1:D:3935:LEU:HD23	1:D:3935:LEU:HA	1.88	0.41
1:A:1047:LYS:HD2	1:A:1050:LEU:HD11	2.02	0.41
1:A:1748:LEU:HB2	1:A:1751:ILE:HD13	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1972:GLN:OE1	1:A:3608:LEU:HG	2.19	0.41
1:A:2645:PHE:CD2	1:A:2921:PHE:HZ	2.38	0.41
1:A:2659:GLN:O	1:A:2663:LYS:HG2	2.21	0.41
1:A:3227:ARG:CZ	1:A:3291:ASP:HB3	2.51	0.41
1:A:4569:GLU:HB3	1:A:4570:PRO:HD3	2.02	0.41
2:E:32:GLN:OE1	2:E:97:THR:HB	2.21	0.41
2:G:26:HIS:CD2	2:G:46:PRO:HA	2.56	0.41
1:B:23:GLN:NE2	1:B:215:ALA:HB2	2.35	0.41
1:B:827:LEU:HD23	1:B:827:LEU:HA	1.89	0.41
1:B:911:ASN:OD1	1:B:912:LYS:N	2.53	0.41
1:B:1046:ASN:OD1	1:B:1047:LYS:N	2.54	0.41
1:B:1502:ASN:OD1	1:B:1503:ASN:N	2.54	0.41
1:B:2004:MET:CE	1:B:2009:ILE:HG13	2.51	0.41
1:B:2480:VAL:HG12	1:B:2483:PHE:H	1.86	0.41
1:B:2934:ASP:HB2	1:B:3010:LYS:HZ1	1.86	0.41
1:B:3068:LEU:HD21	1:B:3133:ILE:HG12	2.03	0.41
1:B:3208:ILE:HA	1:B:3209:PRO:HD3	1.91	0.41
1:B:4063:THR:O	1:B:4067:LEU:HD23	2.21	0.41
1:C:513:HIS:O	1:C:517:VAL:HG23	2.20	0.41
1:C:1046:ASN:OD1	1:C:1047:LYS:N	2.54	0.41
1:C:1161:VAL:HG21	1:C:1225:LYS:HE2	2.01	0.41
1:C:2122:SER:O	1:C:2126:ILE:HG12	2.21	0.41
1:C:2232:PRO:C	1:C:2234:MET:H	2.24	0.41
1:C:2845:ALA:HB1	1:C:2885:ASP:OD1	2.21	0.41
1:C:2886:ARG:O	1:C:2890:GLN:OE1	2.39	0.41
1:C:2998:ASN:ND2	1:C:3048:THR:HG1	2.17	0.41
1:C:3187:LYS:HZ1	1:C:3195:LEU:HD13	1.85	0.41
1:C:3227:ARG:NH2	1:C:3287:ASN:HB2	2.36	0.41
1:C:3858:LEU:HD23	1:C:3858:LEU:HA	1.96	0.41
1:C:3920:LEU:O	1:C:3924:ILE:HG12	2.21	0.41
1:C:4063:THR:O	1:C:4067:LEU:HD23	2.21	0.41
1:C:4484:ILE:O	1:C:4488:GLN:HG2	2.20	0.41
1:C:4512:ALA:O	1:C:4516:ILE:HG13	2.20	0.41
1:C:4832:GLU:N	1:C:4843:ARG:HH22	2.19	0.41
1:C:4859:LEU:O	1:C:4863:GLN:HG2	2.21	0.41
1:D:281:ARG:NE	1:D:283:ALA:O	2.41	0.41
1:D:467:ASP:OD1	1:D:469:HIS:ND1	2.51	0.41
1:D:877:HIS:HA	1:D:880:ARG:CD	2.50	0.41
1:D:890:HIS:HB3	1:D:929:ARG:HH12	1.86	0.41
1:D:893:TRP:CD2	4:D:5003:ATP:N6	2.89	0.41
1:D:989:THR:HG22	1:D:991:SER:H	1.85	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1091:GLU:HB3	1:D:1094:TYR:HD2	1.86	0.41
1:D:2480:VAL:HG12	1:D:2483:PHE:H	1.86	0.41
1:D:2934:ASP:HB2	1:D:3010:LYS:HZ1	1.86	0.41
1:D:3001:LYS:HD2	1:D:3041:ASP:HB3	2.02	0.41
1:D:3045:VAL:HG12	1:D:3046:MET:HE2	2.03	0.41
1:D:3134:LEU:HD12	1:D:3162:PHE:CE2	2.54	0.41
1:D:3159:LEU:HD13	1:D:3241:MET:HE3	2.01	0.41
1:D:3187:LYS:HD2	1:D:3192:ARG:HD2	2.02	0.41
1:D:3192:ARG:NH2	1:D:3197:LEU:HD23	2.26	0.41
1:D:3227:ARG:CZ	1:D:3291:ASP:HB3	2.51	0.41
1:D:3227:ARG:NH2	1:D:3287:ASN:HB2	2.36	0.41
1:D:3906:PHE:HB3	1:D:3967:LEU:HD11	2.03	0.41
1:A:372:LEU:HA	1:A:393:MET:HG2	2.03	0.41
1:A:895:MET:O	1:A:898:ILE:HG22	2.20	0.41
1:A:1240:ALA:HB2	1:A:1247:ILE:HD11	2.02	0.41
1:A:1732:GLU:HB2	1:A:1753:LEU:HD21	2.03	0.41
1:A:2179:LEU:HD22	1:A:2227:VAL:HG11	2.03	0.41
1:A:2347:MET:O	1:A:2351:ILE:HG12	2.21	0.41
1:A:2480:VAL:HG12	1:A:2483:PHE:H	1.85	0.41
1:A:2886:ARG:O	1:A:2890:GLN:OE1	2.39	0.41
1:A:3200:ASN:O	1:A:3204:VAL:HG23	2.21	0.41
1:A:3920:LEU:O	1:A:3924:ILE:HG12	2.21	0.41
2:H:25:VAL:HG12	2:H:104:LEU:HA	2.04	0.41
1:B:1088:PHE:HB2	1:B:1205:CYS:SG	2.61	0.41
1:B:1914:CYS:HB3	1:B:2090:ARG:NH2	2.35	0.41
1:B:2796:ASP:OD1	1:B:2797:SER:N	2.54	0.41
1:B:3187:LYS:HD2	1:B:3192:ARG:HD2	2.02	0.41
1:C:2200:LEU:HD23	1:C:2200:LEU:HA	1.84	0.41
1:C:2489:GLU:OE1	1:C:2544:LEU:HD13	2.21	0.41
1:C:2736:LYS:HB3	1:C:2741:TRP:CB	2.51	0.41
1:C:2796:ASP:OD1	1:C:2797:SER:N	2.54	0.41
1:C:3068:LEU:HD21	1:C:3133:ILE:HG12	2.03	0.41
1:D:137:ARG:HG3	1:D:139:SER:HB3	2.03	0.41
1:D:1240:ALA:HB2	1:D:1247:ILE:HD11	2.03	0.41
1:D:1502:ASN:OD1	1:D:1503:ASN:N	2.54	0.41
1:D:2122:SER:O	1:D:2126:ILE:HG12	2.21	0.41
1:D:2347:MET:O	1:D:2351:ILE:HG12	2.21	0.41
1:D:2886:ARG:O	1:D:2890:GLN:OE1	2.39	0.41
1:A:62:LEU:O	1:A:66:THR:HG23	2.21	0.40
1:A:137:ARG:HG3	1:A:139:SER:HB3	2.03	0.40
1:A:907:VAL:HG13	1:A:909:ASP:HB2	2.04	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:917:CYS:HA	1:A:924:LEU:HG	2.02	0.40
1:A:1088:PHE:HB2	1:A:1205:CYS:SG	2.61	0.40
1:A:1829:LEU:HD12	1:A:1829:LEU:HA	1.95	0.40
1:A:3622:GLN:HB3	1:A:3626:LYS:HZ1	1.85	0.40
1:A:3843:LEU:HD23	1:A:3846:LEU:HD12	2.03	0.40
1:A:4484:ILE:HG13	1:A:4485:ILE:N	2.37	0.40
1:B:871:GLN:OE1	1:B:871:GLN:N	2.50	0.40
1:B:989:THR:HG22	1:B:991:SER:H	1.85	0.40
1:B:2179:LEU:HD22	1:B:2227:VAL:HG11	2.03	0.40
1:B:2556:SER:HA	1:B:2569:ILE:HD12	2.04	0.40
1:B:2868:HIS:HB3	1:B:2871:LEU:HB2	2.03	0.40
1:B:3035:ILE:O	1:B:3039:THR:HG23	2.21	0.40
1:B:3840:PHE:CE1	1:B:3874:THR:HG23	2.56	0.40
1:B:3846:LEU:O	1:B:3854:PHE:HD2	2.04	0.40
1:C:989:THR:HG22	1:C:991:SER:H	1.85	0.40
1:C:2347:MET:O	1:C:2351:ILE:HG12	2.21	0.40
1:C:2719:TYR:HD1	1:C:2723:LYS:HZ2	1.65	0.40
1:C:3861:GLN:HB3	1:C:3864:ASN:HD22	1.86	0.40
1:C:4079:ASP:HB3	1:C:4082:GLU:CG	2.52	0.40
1:C:4831:ILE:CG1	1:C:4843:ARG:HH21	2.34	0.40
1:D:456:LEU:O	1:D:460:ILE:HG12	2.21	0.40
1:D:816:PRO:HB2	1:D:819:TYR:CD2	2.56	0.40
1:D:3172:GLU:OE2	1:D:3175:LEU:HG	2.20	0.40
1:D:3728:GLN:HG2	1:D:3765:ILE:HA	2.03	0.40
1:D:3920:LEU:O	1:D:3924:ILE:HG12	2.21	0.40
1:D:4735:ASN:HB3	1:D:4738:PHE:HD2	1.86	0.40
1:A:630:HIS:CE1	1:A:1671:ARG:HD3	2.57	0.40
1:A:816:PRO:HB2	1:A:819:TYR:CD2	2.56	0.40
1:A:1091:GLU:HB3	1:A:1094:TYR:HD2	1.86	0.40
1:A:1929:SER:OG	1:A:3617:VAL:HG13	2.22	0.40
1:A:2489:GLU:OE1	1:A:2544:LEU:HD13	2.21	0.40
1:A:2556:SER:HA	1:A:2569:ILE:HD12	2.04	0.40
1:A:3134:LEU:HB2	1:A:3162:PHE:HE2	1.85	0.40
2:F:75:LEU:HD22	2:F:102:VAL:HG21	2.02	0.40
2:H:32:GLN:OE1	2:H:97:THR:HB	2.21	0.40
1:B:630:HIS:CE1	1:B:1671:ARG:HD3	2.57	0.40
1:B:890:HIS:HB3	1:B:929:ARG:HH12	1.86	0.40
1:B:917:CYS:HA	1:B:924:LEU:HG	2.02	0.40
1:B:1960:ARG:O	1:B:1963:LYS:HG2	2.21	0.40
1:B:2200:LEU:HD23	1:B:2200:LEU:HA	1.84	0.40
1:B:2486:HIS:O	1:B:2490:VAL:HG22	2.22	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2914:THR:N	1:B:2915:PRO:HD2	2.34	0.40
1:B:3649:ALA:C	1:B:3652:PRO:HD2	2.42	0.40
1:B:4828:GLY:HA2	1:B:4831:ILE:HG12	2.04	0.40
1:C:274:LEU:HD23	1:C:274:LEU:HA	1.83	0.40
1:C:282:VAL:O	1:C:285:SER:OG	2.39	0.40
1:C:1088:PHE:HB2	1:C:1205:CYS:SG	2.61	0.40
1:C:1477:HIS:CE1	1:C:1478:GLU:HG2	2.56	0.40
1:C:2004:MET:CE	1:C:2009:ILE:HG13	2.51	0.40
1:C:2142:MET:HE3	1:C:2174:VAL:HG11	2.03	0.40
1:C:2431:ASP:O	1:C:2435:VAL:HG23	2.21	0.40
1:C:2486:HIS:O	1:C:2490:VAL:HG22	2.22	0.40
1:C:3026:ALA:HA	1:C:3029:ILE:HD13	2.04	0.40
1:C:3649:ALA:C	1:C:3652:PRO:HD2	2.42	0.40
1:C:4484:ILE:HG13	1:C:4485:ILE:N	2.37	0.40
1:D:62:LEU:O	1:D:66:THR:HG23	2.22	0.40
1:D:521:GLU:HG2	1:D:522:ALA:N	2.36	0.40
1:D:878:LEU:HD13	1:D:944:LEU:HD11	2.02	0.40
1:D:907:VAL:HG13	1:D:909:ASP:HB2	2.04	0.40
1:D:1108:VAL:HB	1:D:1212:VAL:HB	2.03	0.40
1:D:1283:LEU:HB2	1:D:1555:PHE:HB2	2.04	0.40
1:D:3212:GLU:HG2	1:D:3213:LYS:N	2.35	0.40
1:D:3649:ALA:C	1:D:3652:PRO:HD2	2.42	0.40
1:D:3843:LEU:HD23	1:D:3846:LEU:HD12	2.03	0.40
1:D:3861:GLN:HB3	1:D:3864:ASN:HD22	1.86	0.40
1:D:3942:ASP:O	1:D:3945:VAL:HG12	2.20	0.40
1:D:4702:ASP:O	1:D:4706:GLN:HG2	2.21	0.40
1:D:4831:ILE:CG1	1:D:4843:ARG:HH21	2.34	0.40
1:A:330:THR:HG23	1:A:366:VAL:HG22	2.03	0.40
1:A:1046:ASN:OD1	1:A:1047:LYS:N	2.54	0.40
1:A:1500:ARG:HD2	1:A:1505:LEU:HB2	2.02	0.40
1:A:2004:MET:CE	1:A:2009:ILE:HG13	2.50	0.40
1:A:2796:ASP:OD1	1:A:2797:SER:N	2.54	0.40
1:A:2959:GLU:OE1	1:A:2959:GLU:N	2.53	0.40
1:A:3001:LYS:HD2	1:A:3041:ASP:HB3	2.02	0.40
1:A:4055:HIS:HB3	1:A:4057:HIS:CE1	2.57	0.40
2:E:104:LEU:HD21	2:E:107:LEU:HD21	2.03	0.40
1:B:137:ARG:HG3	1:B:139:SER:HB3	2.03	0.40
1:B:816:PRO:HB2	1:B:819:TYR:CD2	2.56	0.40
1:B:1004:HIS:CD2	1:B:1038:LEU:HD11	2.55	0.40
1:B:1011:ARG:HB3	1:B:1016:TRP:HB2	2.04	0.40
1:B:1016:TRP:HZ3	1:B:1022:GLN:HE22	1.69	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1091:GLU:HB3	1:B:1094:TYR:HD2	1.86	0.40
1:B:1108:VAL:HB	1:B:1212:VAL:HB	2.03	0.40
1:B:3001:LYS:HD2	1:B:3041:ASP:HB3	2.02	0.40
1:B:3183:ILE:HG13	1:B:3187:LYS:HE2	2.02	0.40
1:B:3200:ASN:O	1:B:3204:VAL:HG23	2.21	0.40
1:C:1004:HIS:CD2	1:C:1038:LEU:HD11	2.55	0.40
1:C:1111:GLY:O	1:C:1140:PHE:HB2	2.20	0.40
1:C:4569:GLU:HB3	1:C:4570:PRO:HD3	2.02	0.40
1:C:4702:ASP:O	1:C:4706:GLN:HG2	2.22	0.40
1:D:904:TYR:OH	1:D:923:LYS:NZ	2.53	0.40
1:D:2127:ARG:O	1:D:2130:LEU:HB2	2.21	0.40
1:D:2658:GLU:O	1:D:2662:PHE:HD1	2.04	0.40
1:D:3026:ALA:HA	1:D:3029:ILE:HD13	2.04	0.40
1:D:3208:ILE:HA	1:D:3209:PRO:HD3	1.91	0.40
1:D:4063:THR:O	1:D:4067:LEU:HD23	2.21	0.40
1:D:4806:CYS:HA	1:D:4812:CYS:HB2	2.03	0.40
1:A:1011:ARG:HB3	1:A:1016:TRP:HB2	2.04	0.40
1:A:1829:LEU:HG	1:A:1912:TYR:CE2	2.57	0.40
1:A:2658:GLU:O	1:A:2662:PHE:HD1	2.04	0.40
1:A:2736:LYS:HB3	1:A:2741:TRP:CB	2.51	0.40
1:A:3123:LEU:HB3	1:A:3124:GLU:H	1.72	0.40
1:A:4693:SER:O	1:A:4697:VAL:HG23	2.22	0.40
2:E:25:VAL:HG12	2:E:104:LEU:HA	2.04	0.40
2:G:25:VAL:HG12	2:G:104:LEU:HA	2.03	0.40
2:G:58:LYS:O	2:G:61:GLU:HB3	2.20	0.40
1:B:2070:ALA:HA	1:B:2075:ILE:HD11	2.03	0.40
1:B:2658:GLU:O	1:B:2662:PHE:HD1	2.04	0.40
1:B:2736:LYS:HB3	1:B:2741:TRP:CB	2.51	0.40
1:B:2886:ARG:O	1:B:2890:GLN:OE1	2.39	0.40
1:B:3026:ALA:HA	1:B:3029:ILE:HD13	2.03	0.40
1:B:3728:GLN:HG2	1:B:3765:ILE:HA	2.03	0.40
1:B:4484:ILE:HG13	1:B:4485:ILE:N	2.36	0.40
1:B:4649:VAL:O	1:B:4653:VAL:HG23	2.21	0.40
1:C:1732:GLU:HB2	1:C:1753:LEU:HD21	2.03	0.40
1:C:2179:LEU:HD22	1:C:2227:VAL:HG11	2.03	0.40
1:C:3200:ASN:O	1:C:3204:VAL:HG23	2.21	0.40
1:C:3840:PHE:CE1	1:C:3874:THR:HG23	2.56	0.40
1:C:3846:LEU:O	1:C:3854:PHE:HD2	2.05	0.40
1:C:3935:LEU:HA	1:C:3935:LEU:HD23	1.88	0.40
1:D:966:LEU:HD23	1:D:966:LEU:HA	1.98	0.40
1:D:1011:ARG:HB3	1:D:1016:TRP:HB2	2.04	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1113:MET:HB2	1:D:1156:TRP:CZ2	2.57	0.40
1:D:1960:ARG:O	1:D:1963:LYS:HG2	2.22	0.40
1:D:2142:MET:HE1	1:D:2174:VAL:HG11	2.04	0.40
1:D:2385:GLY:O	1:D:2389:MET:HG3	2.20	0.40
1:D:2845:ALA:HB1	1:D:2885:ASP:OD1	2.21	0.40
1:D:3142:THR:HA	1:D:3233:HIS:HB3	2.02	0.40
1:D:3200:ASN:O	1:D:3204:VAL:HG23	2.21	0.40
1:D:4194:GLU:HG2	1:D:4645:TRP:HZ3	1.86	0.40
1:A:1283:LEU:HB2	1:A:1555:PHE:HB2	2.04	0.40
1:A:1958:THR:O	1:A:1962:THR:HG22	2.21	0.40
1:A:2232:PRO:C	1:A:2234:MET:H	2.24	0.40
1:A:2868:HIS:HB3	1:A:2871:LEU:HB2	2.03	0.40
1:A:3166:PHE:CD1	1:A:3167:PRO:HD2	2.56	0.40
1:A:3250:TRP:HE3	1:A:3309:LYS:HE3	1.87	0.40
1:A:4194:GLU:HG2	1:A:4645:TRP:HZ3	1.86	0.40
2:G:3:VAL:HG13	2:G:5:ILE:HD11	2.03	0.40
1:B:904:TYR:OH	1:B:923:LYS:NZ	2.53	0.40
1:B:2122:SER:O	1:B:2126:ILE:HG12	2.21	0.40
1:B:2489:GLU:OE1	1:B:2544:LEU:HD13	2.21	0.40
1:B:2959:GLU:OE1	1:B:2959:GLU:N	2.53	0.40
1:B:3134:LEU:HB2	1:B:3162:PHE:HE2	1.85	0.40
1:B:3250:TRP:HE3	1:B:3309:LYS:HE3	1.87	0.40
1:C:521:GLU:HG2	1:C:522:ALA:N	2.36	0.40
1:C:816:PRO:HB2	1:C:819:TYR:CD2	2.56	0.40
1:C:1500:ARG:HD2	1:C:1505:LEU:HB2	2.02	0.40
1:C:1502:ASN:OD1	1:C:1503:ASN:N	2.54	0.40
1:C:3142:THR:HA	1:C:3233:HIS:HB3	2.02	0.40
1:C:4930:GLU:HA	1:C:4933:HIS:HD2	1.84	0.40
1:D:274:LEU:HD23	1:D:274:LEU:HA	1.83	0.40
1:D:655:MET:HE2	1:D:1608:VAL:HG21	2.04	0.40
1:D:1047:LYS:HD2	1:D:1050:LEU:HD11	2.02	0.40
1:D:1914:CYS:HB3	1:D:2090:ARG:NH2	2.35	0.40
1:D:2004:MET:CE	1:D:2009:ILE:HG13	2.51	0.40
1:D:3700:HIS:HD1	1:D:3702:GLU:H	1.70	0.40
1:D:3793:LEU:HD23	1:D:3793:LEU:HA	1.89	0.40
1:D:4767:LEU:HD23	1:D:4767:LEU:HA	1.96	0.40

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	4198/4967 (84%)	4073 (97%)	123 (3%)	2 (0%)	100	100
1	B	4198/4967 (84%)	4075 (97%)	121 (3%)	2 (0%)	100	100
1	C	4198/4967 (84%)	4073 (97%)	123 (3%)	2 (0%)	100	100
1	D	4198/4967 (84%)	4075 (97%)	121 (3%)	2 (0%)	100	100
2	E	105/108 (97%)	101 (96%)	4 (4%)	0	100	100
2	F	105/108 (97%)	101 (96%)	4 (4%)	0	100	100
2	G	105/108 (97%)	101 (96%)	4 (4%)	0	100	100
2	H	105/108 (97%)	101 (96%)	4 (4%)	0	100	100
All	All	17212/20300 (85%)	16700 (97%)	504 (3%)	8 (0%)	100	100

All (8) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	4641	PRO
1	B	4641	PRO
1	C	4641	PRO
1	D	4641	PRO
1	A	2770	ILE
1	B	2770	ILE
1	C	2770	ILE
1	D	2770	ILE

5.3.2 Protein sidechains [i](#)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	3708/4358 (85%)	3687 (99%)	21 (1%)	84	92
1	B	3708/4358 (85%)	3687 (99%)	21 (1%)	84	92
1	C	3708/4358 (85%)	3687 (99%)	21 (1%)	84	92
1	D	3708/4358 (85%)	3687 (99%)	21 (1%)	84	92
2	E	88/89 (99%)	87 (99%)	1 (1%)	70	84
2	F	88/89 (99%)	87 (99%)	1 (1%)	70	84
2	G	88/89 (99%)	87 (99%)	1 (1%)	70	84
2	H	88/89 (99%)	87 (99%)	1 (1%)	70	84
All	All	15184/17788 (85%)	15096 (99%)	88 (1%)	82	92

All (88) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	167	LYS
1	A	478	ARG
1	A	880	ARG
1	A	882	ARG
1	A	998	LYS
1	A	1025	LYS
1	A	2004	MET
1	A	2172	MET
1	A	2303	ARG
1	A	2719	TYR
1	A	2835	ARG
1	A	2950	LYS
1	A	3102	LEU
1	A	3140	LEU
1	A	3152	ARG
1	A	3177	LYS
1	A	3260	ARG
1	A	3327	LYS
1	A	4689	LYS
1	A	4698	LEU
1	A	4809	MET
2	E	53	LYS
2	F	53	LYS
2	G	53	LYS
2	H	53	LYS
1	B	167	LYS
1	B	478	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	B	880	ARG
1	B	882	ARG
1	B	998	LYS
1	B	1025	LYS
1	B	2004	MET
1	B	2172	MET
1	B	2303	ARG
1	B	2719	TYR
1	B	2835	ARG
1	B	2950	LYS
1	B	3102	LEU
1	B	3140	LEU
1	B	3152	ARG
1	B	3177	LYS
1	B	3260	ARG
1	B	3327	LYS
1	B	4689	LYS
1	B	4698	LEU
1	B	4809	MET
1	C	167	LYS
1	C	478	ARG
1	C	880	ARG
1	C	882	ARG
1	C	998	LYS
1	C	1025	LYS
1	C	2004	MET
1	C	2172	MET
1	C	2303	ARG
1	C	2719	TYR
1	C	2835	ARG
1	C	2950	LYS
1	C	3102	LEU
1	C	3140	LEU
1	C	3152	ARG
1	C	3177	LYS
1	C	3260	ARG
1	C	3327	LYS
1	C	4689	LYS
1	C	4698	LEU
1	C	4809	MET
1	D	167	LYS
1	D	478	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	D	880	ARG
1	D	882	ARG
1	D	998	LYS
1	D	1025	LYS
1	D	2004	MET
1	D	2172	MET
1	D	2303	ARG
1	D	2719	TYR
1	D	2835	ARG
1	D	2950	LYS
1	D	3102	LEU
1	D	3140	LEU
1	D	3152	ARG
1	D	3177	LYS
1	D	3260	ARG
1	D	3327	LYS
1	D	4689	LYS
1	D	4698	LEU
1	D	4809	MET

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (36) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	608	HIS
1	A	650	ASN
1	A	1593	HIS
1	A	2802	ASN
1	A	2998	ASN
1	A	3111	HIS
1	A	3114	GLN
1	A	3115	HIS
1	A	4933	HIS
1	B	635	ASN
1	B	650	ASN
1	B	1593	HIS
1	B	2802	ASN
1	B	2998	ASN
1	B	3111	HIS
1	B	3114	GLN
1	B	3115	HIS
1	B	4933	HIS
1	C	608	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	C	650	ASN
1	C	1593	HIS
1	C	2802	ASN
1	C	2998	ASN
1	C	3111	HIS
1	C	3114	GLN
1	C	3115	HIS
1	C	4933	HIS
1	D	608	HIS
1	D	650	ASN
1	D	1593	HIS
1	D	2802	ASN
1	D	2998	ASN
1	D	3111	HIS
1	D	3114	GLN
1	D	3115	HIS
1	D	4933	HIS

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 oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 16 ligands modelled in this entry, 4 are monoatomic - leaving 12 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
5	KVR	B	5004	-	24,25,25	1.43	3 (12%)	31,34,34	1.71	4 (12%)
4	ATP	D	5003	-	28,33,33	0.63	0	34,52,52	0.62	1 (2%)
4	ATP	B	5002	-	28,33,33	0.65	0	34,52,52	0.61	1 (2%)
5	KVR	A	5004	-	24,25,25	1.44	3 (12%)	31,34,34	1.71	4 (12%)
5	KVR	C	5004	-	24,25,25	1.44	3 (12%)	31,34,34	1.71	4 (12%)
4	ATP	C	5002	-	28,33,33	0.65	0	34,52,52	0.61	1 (2%)
4	ATP	A	5003	-	28,33,33	0.63	0	34,52,52	0.62	1 (2%)
4	ATP	D	5002	-	28,33,33	0.64	0	34,52,52	0.62	1 (2%)
5	KVR	D	5004	-	24,25,25	1.44	3 (12%)	31,34,34	1.71	3 (9%)
4	ATP	C	5003	-	28,33,33	0.63	0	34,52,52	0.62	1 (2%)
4	ATP	B	5003	-	28,33,33	0.62	0	34,52,52	0.62	1 (2%)
4	ATP	A	5002	-	28,33,33	0.65	0	34,52,52	0.61	1 (2%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
5	KVR	B	5004	-	-	8/10/20/20	0/2/3/3
4	ATP	D	5003	-	-	9/18/38/38	0/3/3/3
4	ATP	B	5002	-	-	3/18/38/38	0/3/3/3
5	KVR	A	5004	-	-	8/10/20/20	0/2/3/3
5	KVR	C	5004	-	-	8/10/20/20	0/2/3/3
4	ATP	C	5002	-	-	3/18/38/38	0/3/3/3
4	ATP	A	5003	-	-	9/18/38/38	0/3/3/3
4	ATP	D	5002	-	-	3/18/38/38	0/3/3/3
5	KVR	D	5004	-	-	8/10/20/20	0/2/3/3
4	ATP	C	5003	-	-	9/18/38/38	0/3/3/3
4	ATP	B	5003	-	-	9/18/38/38	0/3/3/3
4	ATP	A	5002	-	-	3/18/38/38	0/3/3/3

All (12) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	C	5004	KVR	C06-S09	4.90	1.82	1.77
5	D	5004	KVR	C06-S09	4.90	1.82	1.77

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	A	5004	KVR	C06-S09	4.88	1.82	1.77
5	B	5004	KVR	C06-S09	4.86	1.82	1.77
5	A	5004	KVR	C13-C05	2.61	1.55	1.51
5	B	5004	KVR	C13-C05	2.59	1.55	1.51
5	C	5004	KVR	C13-C05	2.59	1.55	1.51
5	D	5004	KVR	C13-C05	2.56	1.55	1.51
5	D	5004	KVR	C13-N12	-2.31	1.45	1.47
5	A	5004	KVR	C13-N12	-2.30	1.45	1.47
5	B	5004	KVR	C13-N12	-2.30	1.45	1.47
5	C	5004	KVR	C13-N12	-2.28	1.45	1.47

All (23) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	D	5004	KVR	C10-S09-C06	7.29	113.03	102.71
5	A	5004	KVR	C10-S09-C06	7.27	113.02	102.71
5	C	5004	KVR	C10-S09-C06	7.27	113.00	102.71
5	B	5004	KVR	C10-S09-C06	7.25	112.99	102.71
5	C	5004	KVR	C15-C14-N12	-2.91	107.20	113.15
5	D	5004	KVR	C15-C14-N12	-2.90	107.20	113.15
5	B	5004	KVR	C15-C14-N12	-2.90	107.21	113.15
5	A	5004	KVR	C15-C14-N12	-2.90	107.22	113.15
4	A	5003	ATP	C5-C6-N6	2.38	123.94	120.31
4	B	5003	ATP	C5-C6-N6	2.37	123.92	120.31
4	C	5002	ATP	C5-C6-N6	2.35	123.89	120.31
4	D	5002	ATP	C5-C6-N6	2.35	123.89	120.31
4	D	5003	ATP	C5-C6-N6	2.34	123.88	120.31
4	B	5002	ATP	C5-C6-N6	2.34	123.87	120.31
4	A	5002	ATP	C5-C6-N6	2.33	123.86	120.31
4	C	5003	ATP	C5-C6-N6	2.33	123.85	120.31
5	C	5004	KVR	C04-C05-C06	2.05	120.11	118.17
5	A	5004	KVR	C04-C05-C06	2.04	120.10	118.17
5	B	5004	KVR	O23-C21-C18	2.03	120.04	114.84
5	B	5004	KVR	C04-C05-C06	2.02	120.08	118.17
5	D	5004	KVR	O23-C21-C18	2.02	120.02	114.84
5	C	5004	KVR	O23-C21-C18	2.02	120.01	114.84
5	A	5004	KVR	O23-C21-C18	2.00	119.98	114.84

There are no chirality outliers.

All (80) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
4	A	5003	ATP	PB-O3B-PG-O2G
4	A	5003	ATP	C5'-O5'-PA-O1A
4	A	5003	ATP	C5'-O5'-PA-O2A
4	A	5003	ATP	C5'-O5'-PA-O3A
4	B	5003	ATP	PB-O3B-PG-O2G
4	B	5003	ATP	C5'-O5'-PA-O1A
4	B	5003	ATP	C5'-O5'-PA-O2A
4	B	5003	ATP	C5'-O5'-PA-O3A
4	C	5003	ATP	PB-O3B-PG-O2G
4	C	5003	ATP	C5'-O5'-PA-O1A
4	C	5003	ATP	C5'-O5'-PA-O2A
4	C	5003	ATP	C5'-O5'-PA-O3A
4	D	5003	ATP	PB-O3B-PG-O2G
4	D	5003	ATP	C5'-O5'-PA-O1A
4	D	5003	ATP	C5'-O5'-PA-O2A
4	D	5003	ATP	C5'-O5'-PA-O3A
5	A	5004	KVR	C15-C14-N12-C11
5	A	5004	KVR	C15-C14-N12-C13
5	B	5004	KVR	C15-C14-N12-C11
5	B	5004	KVR	C15-C14-N12-C13
5	C	5004	KVR	C15-C14-N12-C11
5	C	5004	KVR	C15-C14-N12-C13
5	D	5004	KVR	C15-C14-N12-C11
5	D	5004	KVR	C15-C14-N12-C13
5	A	5004	KVR	C17-C18-C21-O22
5	A	5004	KVR	C19-C18-C21-O22
5	B	5004	KVR	C17-C18-C21-O22
5	B	5004	KVR	C19-C18-C21-O22
5	C	5004	KVR	C17-C18-C21-O22
5	C	5004	KVR	C19-C18-C21-O22
5	D	5004	KVR	C17-C18-C21-O22
5	D	5004	KVR	C19-C18-C21-O22
5	A	5004	KVR	C17-C18-C21-O23
5	A	5004	KVR	C19-C18-C21-O23
5	B	5004	KVR	C17-C18-C21-O23
5	B	5004	KVR	C19-C18-C21-O23
5	C	5004	KVR	C17-C18-C21-O23
5	C	5004	KVR	C19-C18-C21-O23
5	D	5004	KVR	C17-C18-C21-O23
5	D	5004	KVR	C19-C18-C21-O23
5	A	5004	KVR	C04-C03-O02-C01
5	A	5004	KVR	C08-C03-O02-C01
5	B	5004	KVR	C04-C03-O02-C01

Continued on next page...

Continued from previous page...

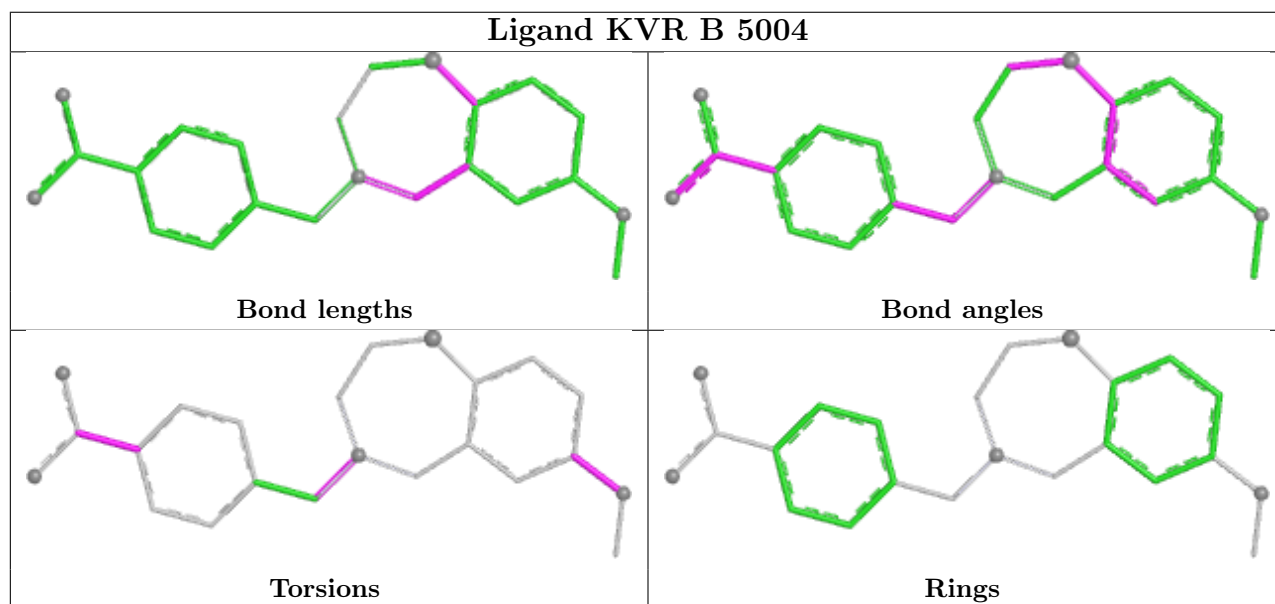
Mol	Chain	Res	Type	Atoms
5	B	5004	KVR	C08-C03-O02-C01
5	C	5004	KVR	C04-C03-O02-C01
5	C	5004	KVR	C08-C03-O02-C01
5	D	5004	KVR	C04-C03-O02-C01
5	D	5004	KVR	C08-C03-O02-C01
4	A	5002	ATP	PG-O3B-PB-O3A
4	B	5002	ATP	PG-O3B-PB-O3A
4	C	5002	ATP	PG-O3B-PB-O3A
4	D	5002	ATP	PG-O3B-PB-O3A
4	A	5002	ATP	PB-O3A-PA-O5'
4	B	5002	ATP	PB-O3A-PA-O5'
4	C	5002	ATP	PB-O3A-PA-O5'
4	D	5002	ATP	PB-O3A-PA-O5'
4	A	5003	ATP	PA-O3A-PB-O2B
4	B	5003	ATP	PA-O3A-PB-O2B
4	C	5003	ATP	PA-O3A-PB-O2B
4	D	5003	ATP	PA-O3A-PB-O2B
4	A	5002	ATP	PB-O3A-PA-O1A
4	B	5002	ATP	PB-O3A-PA-O1A
4	C	5002	ATP	PB-O3A-PA-O1A
4	D	5002	ATP	PB-O3A-PA-O1A
4	A	5003	ATP	PB-O3B-PG-O1G
4	B	5003	ATP	PB-O3B-PG-O1G
4	C	5003	ATP	PB-O3B-PG-O1G
4	D	5003	ATP	PB-O3B-PG-O1G
4	C	5003	ATP	O4'-C4'-C5'-O5'
4	A	5003	ATP	PA-O3A-PB-O1B
4	B	5003	ATP	PA-O3A-PB-O1B
4	C	5003	ATP	PA-O3A-PB-O1B
4	D	5003	ATP	PA-O3A-PB-O1B
4	A	5003	ATP	O4'-C4'-C5'-O5'
4	B	5003	ATP	O4'-C4'-C5'-O5'
4	D	5003	ATP	O4'-C4'-C5'-O5'
4	A	5003	ATP	PB-O3A-PA-O2A
4	B	5003	ATP	PB-O3A-PA-O2A
4	C	5003	ATP	PB-O3A-PA-O2A
4	D	5003	ATP	PB-O3A-PA-O2A

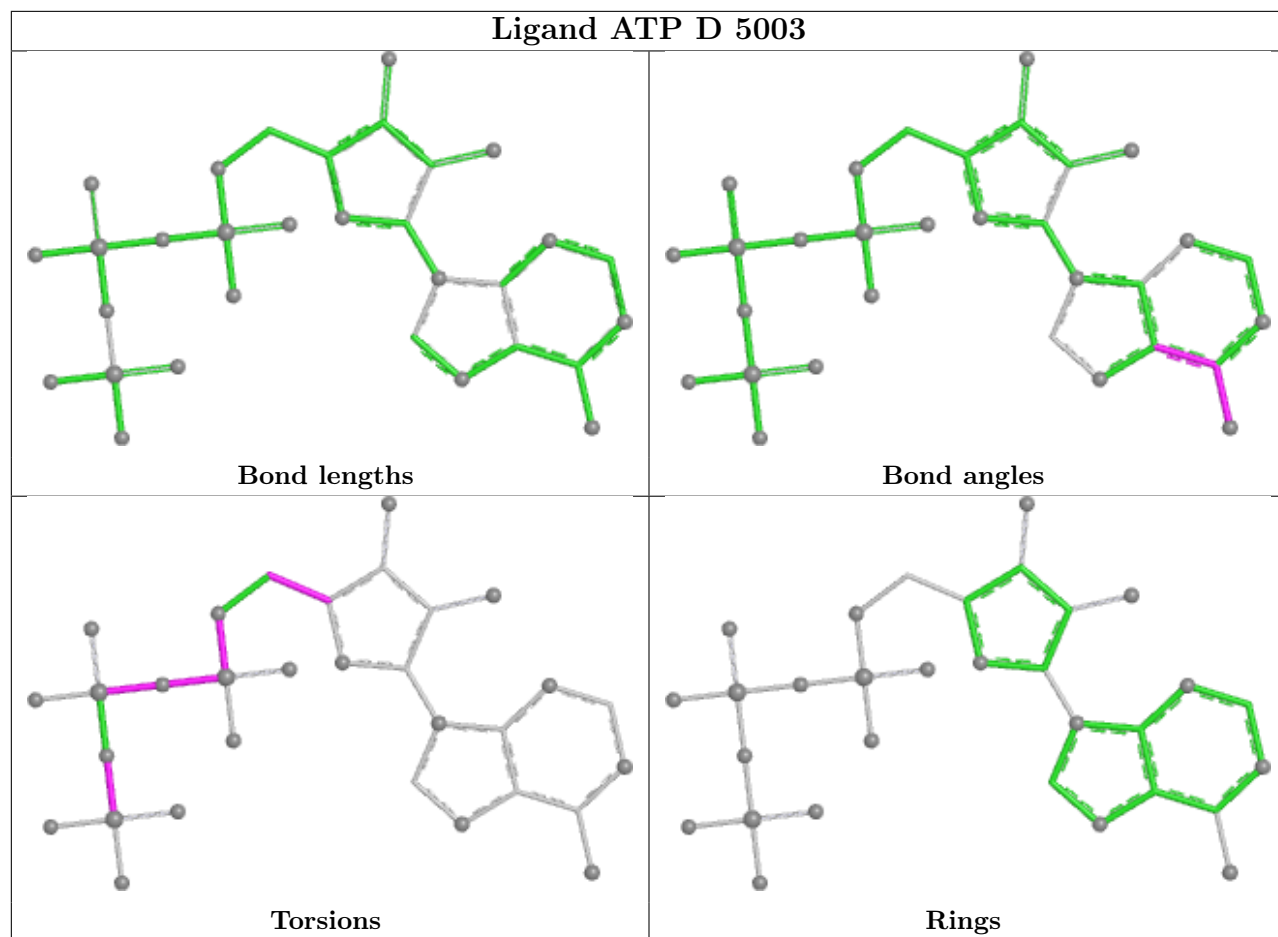
There are no ring outliers.

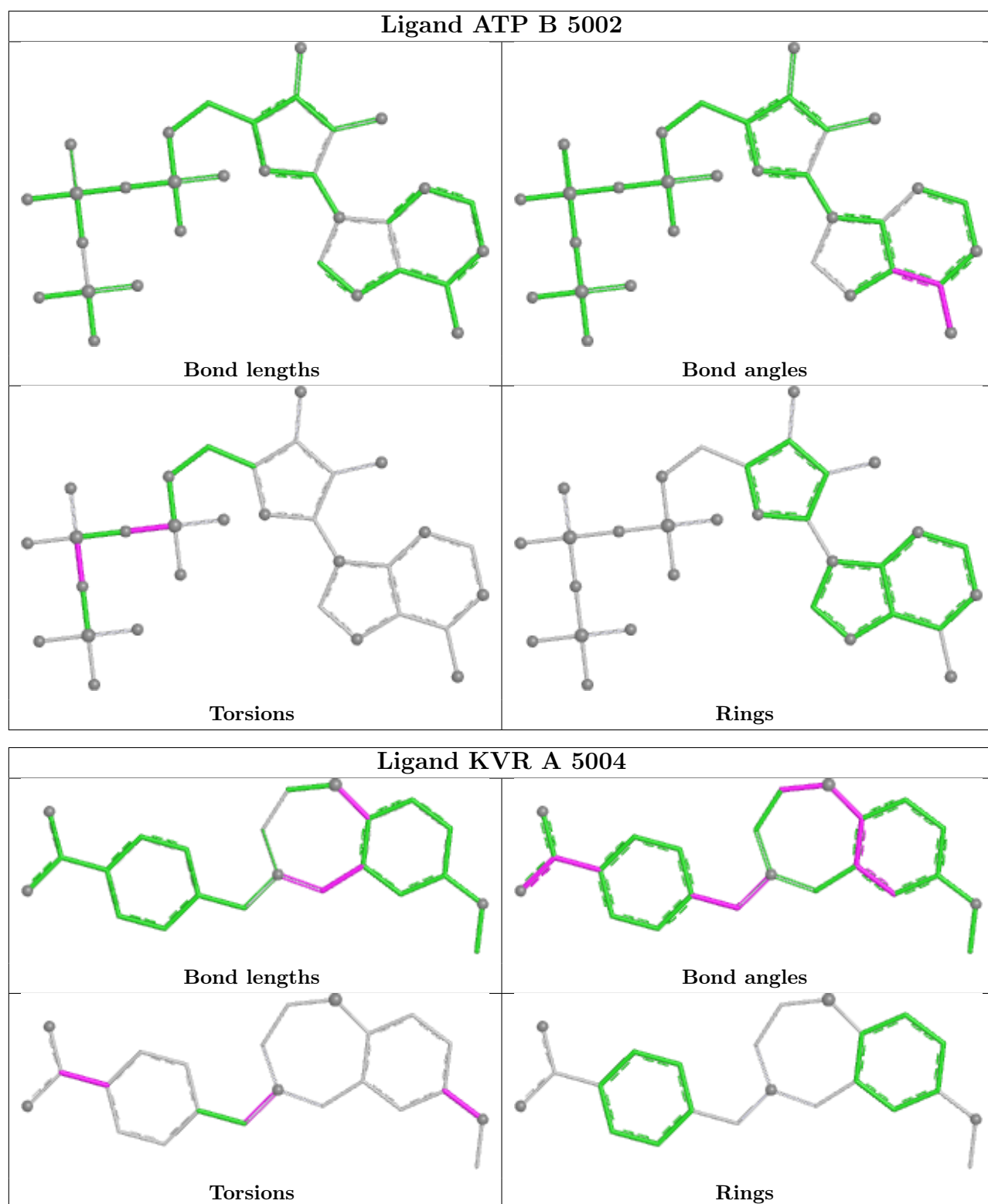
8 monomers are involved in 41 short contacts:

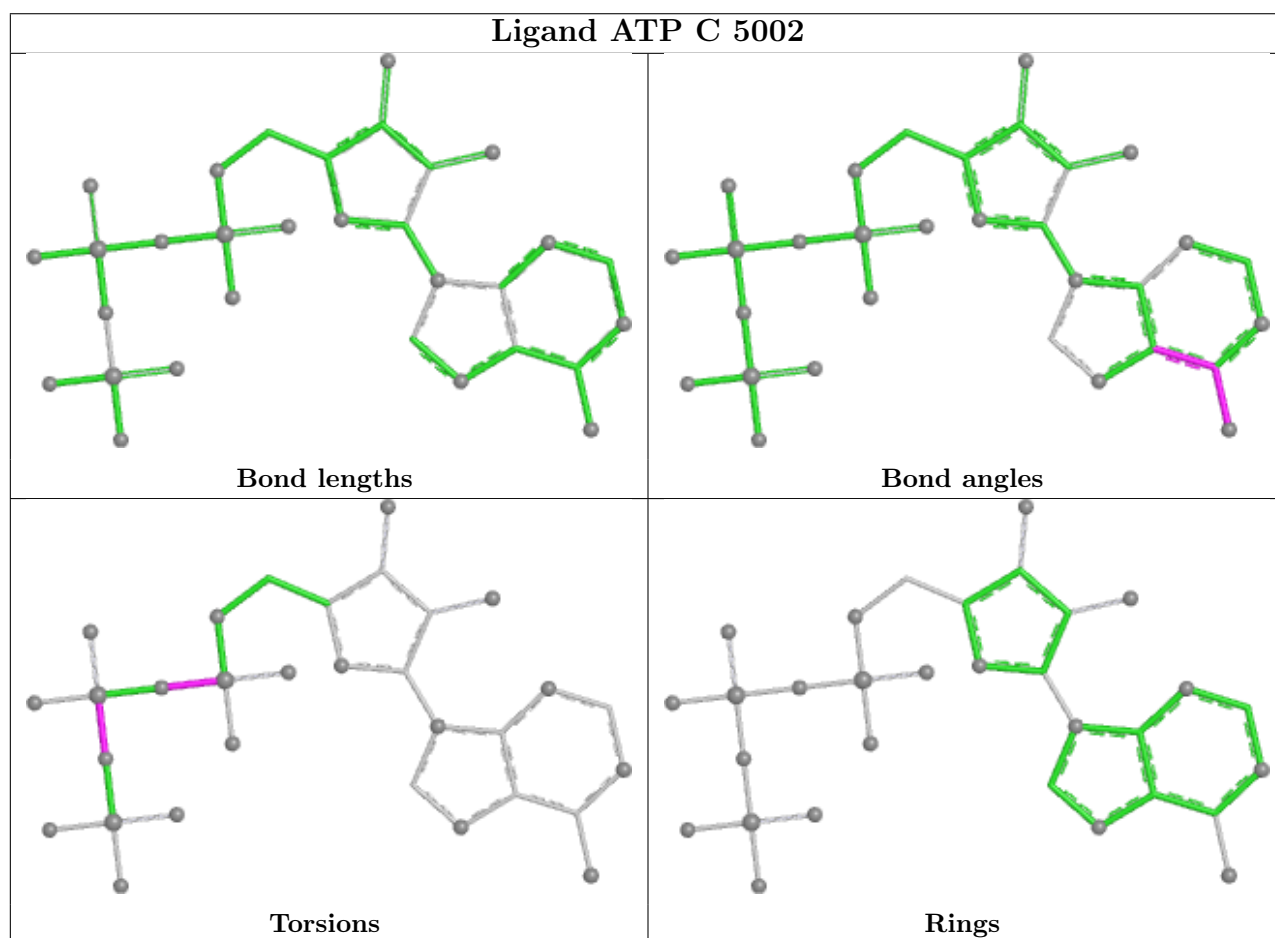
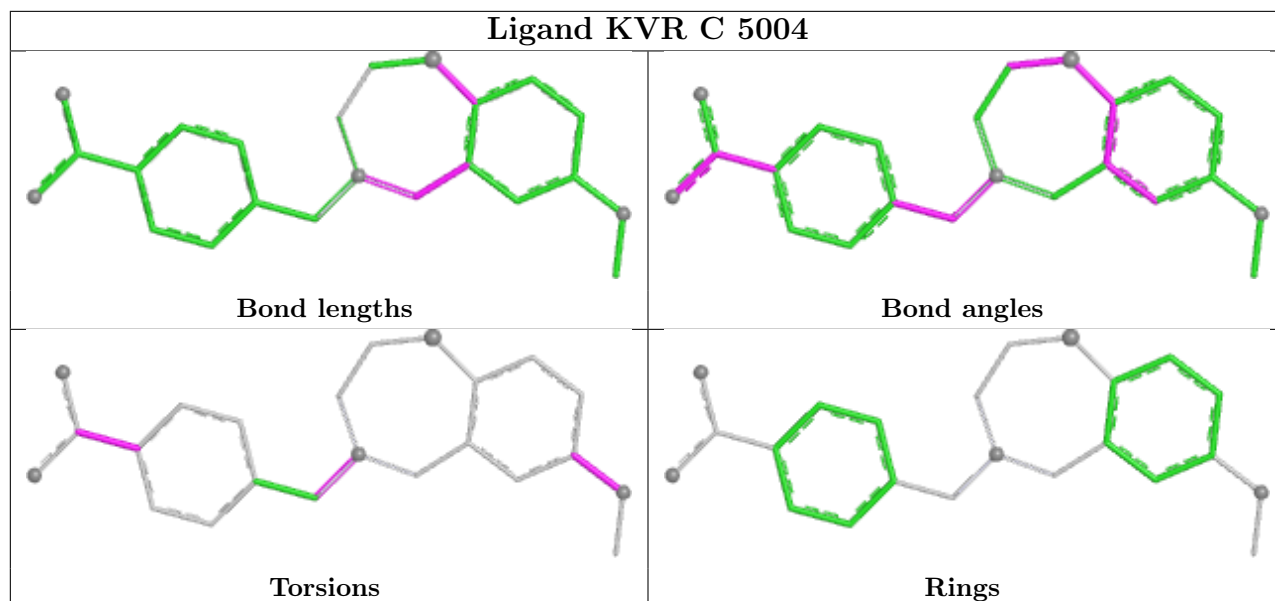
Mol	Chain	Res	Type	Clashes	Symm-Clashes
5	B	5004	KVR	7	0
4	D	5003	ATP	10	0
5	A	5004	KVR	7	0
5	C	5004	KVR	7	0
4	A	5003	ATP	9	0
5	D	5004	KVR	7	0
4	C	5003	ATP	9	0
4	B	5003	ATP	9	0

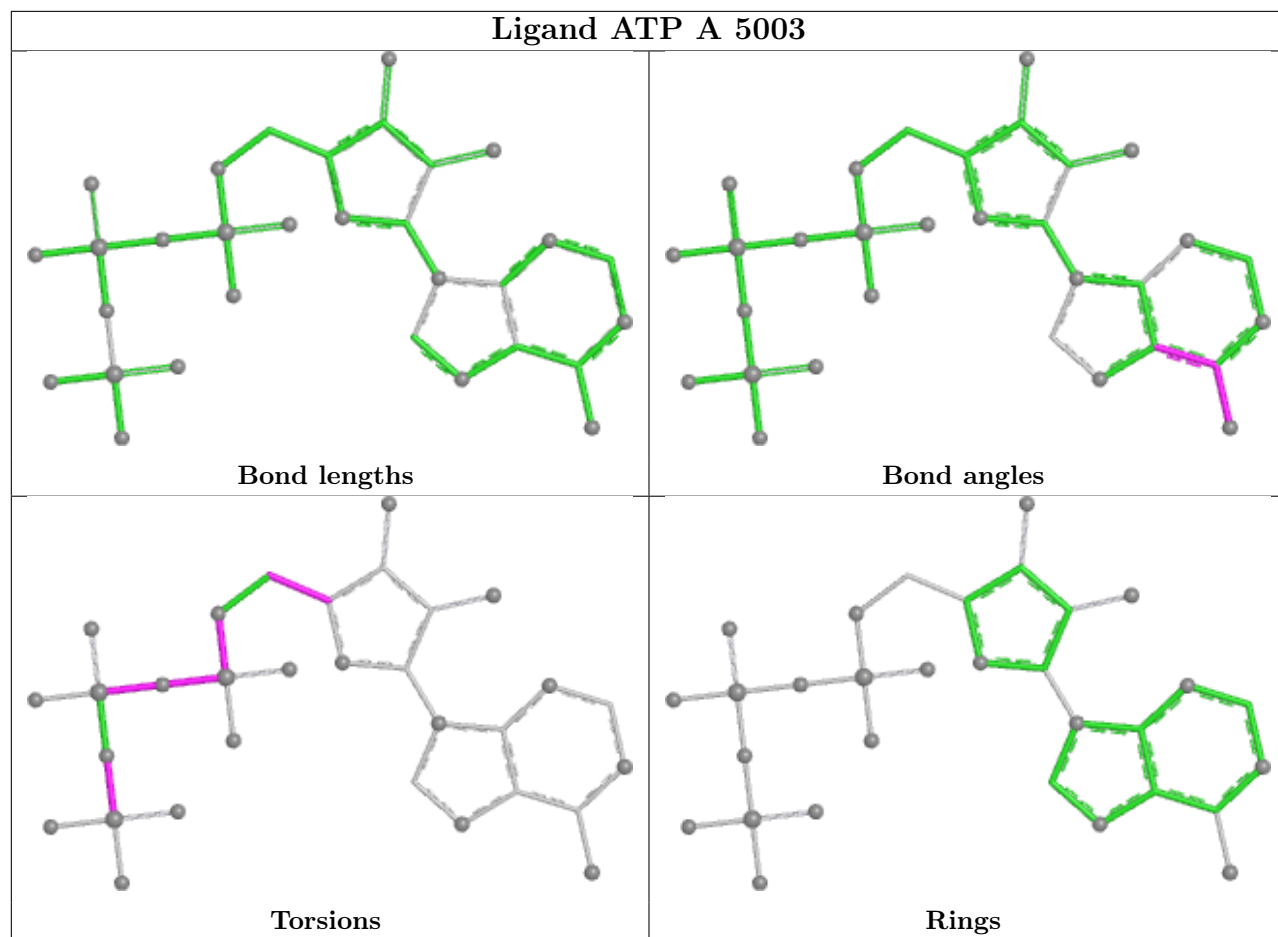
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

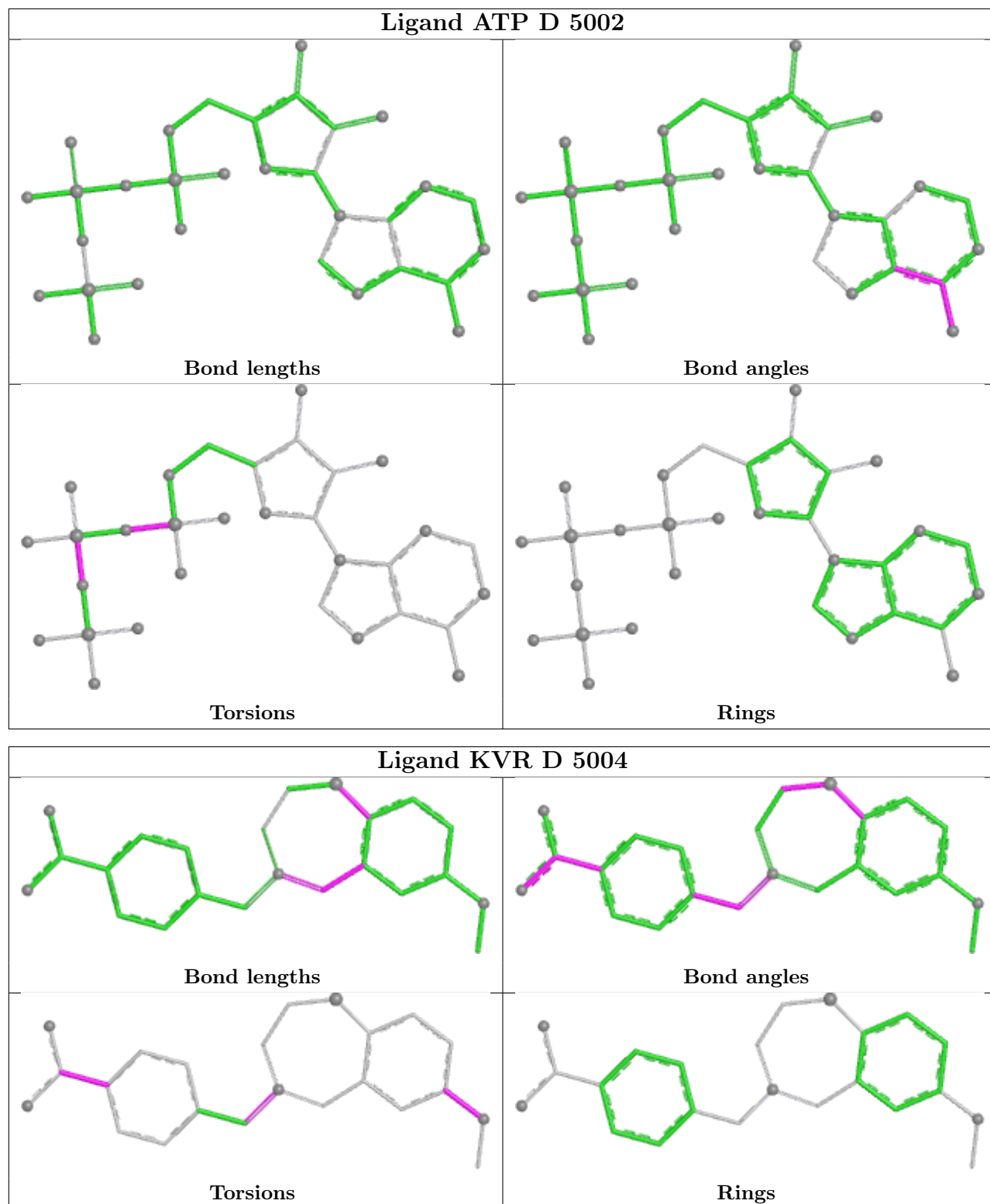


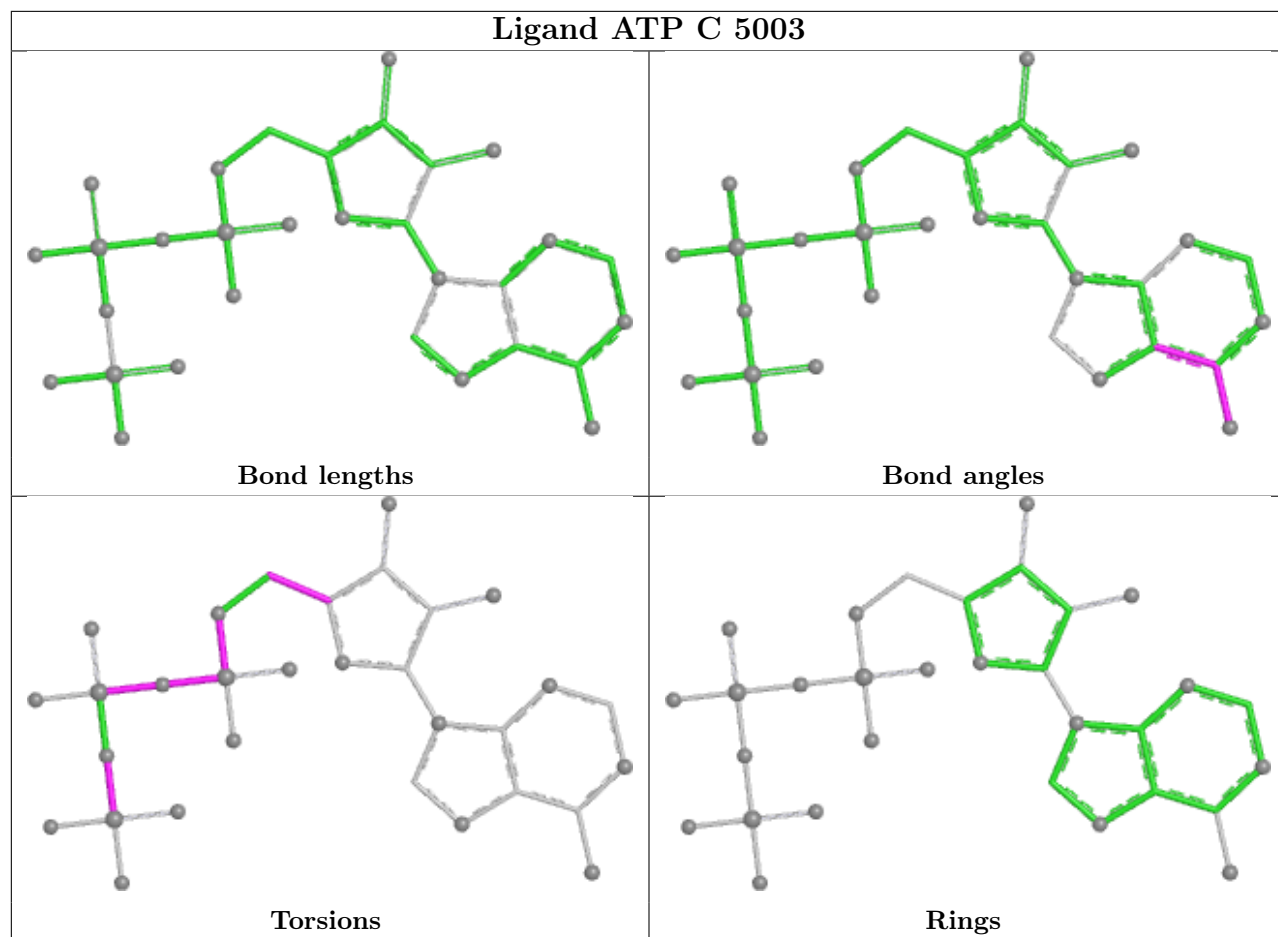


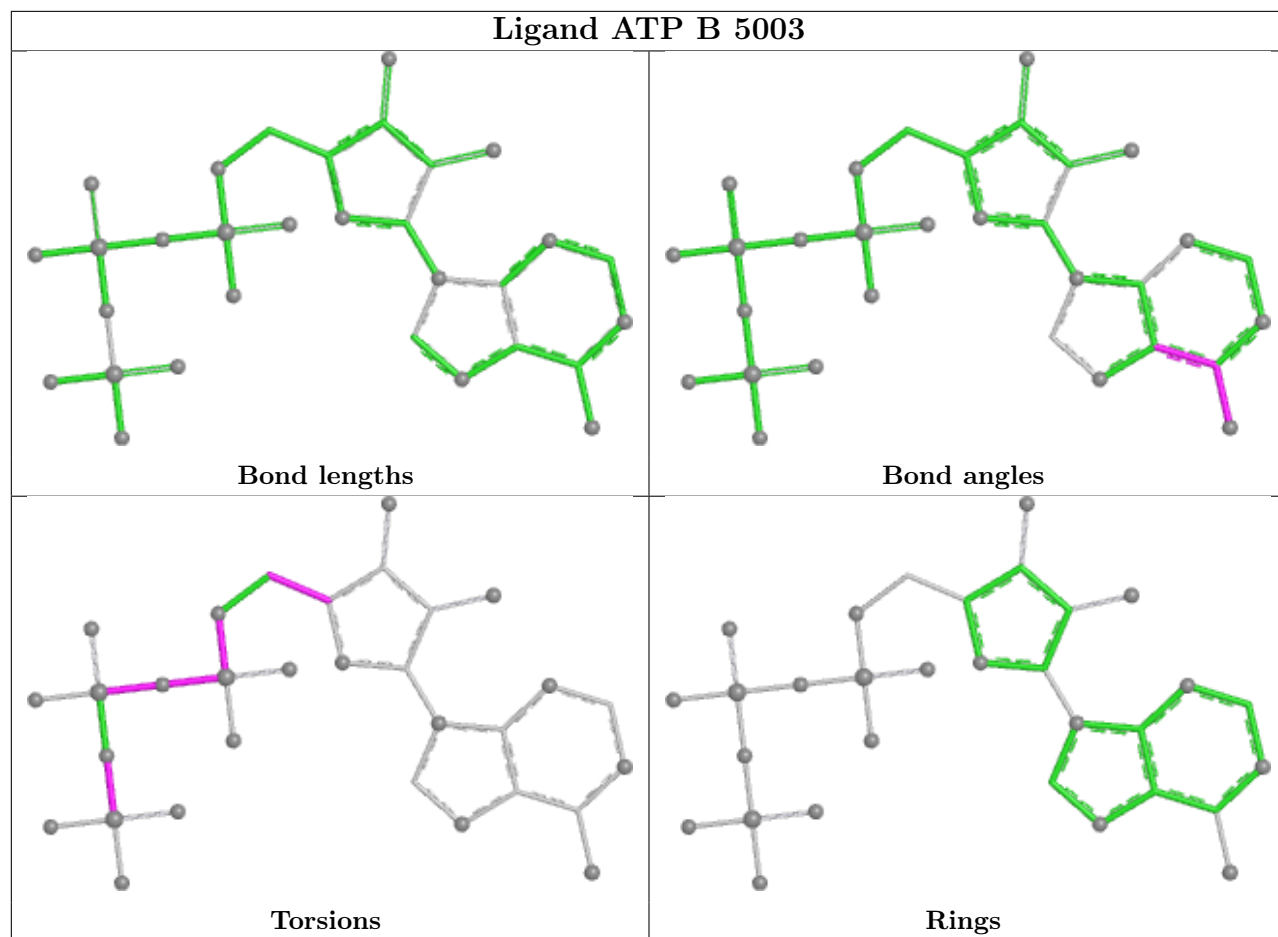


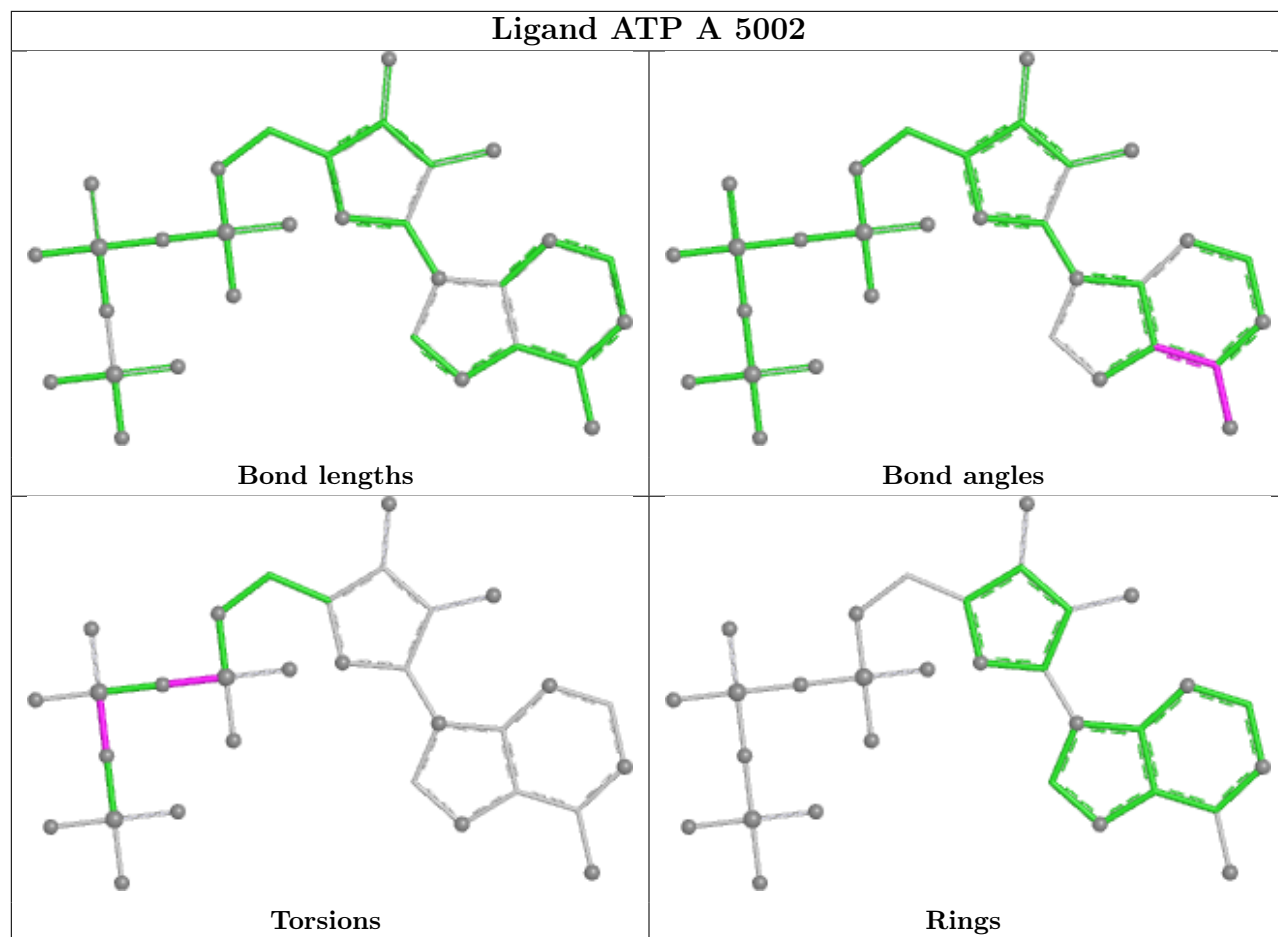












5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

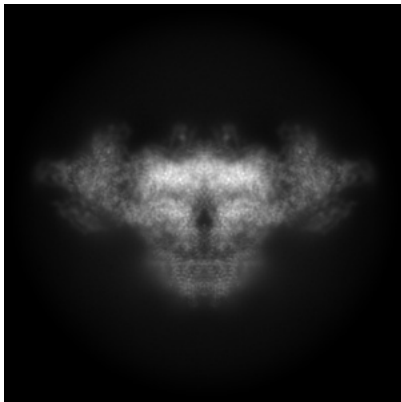
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-42459. These allow visual inspection of the internal detail of the map and identification of artifacts.

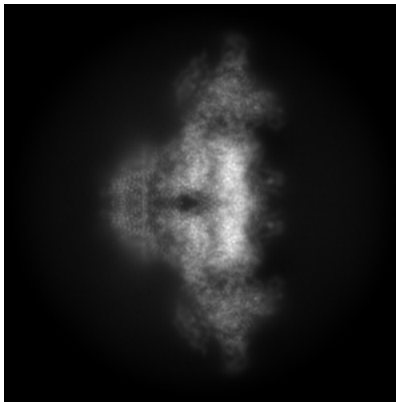
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

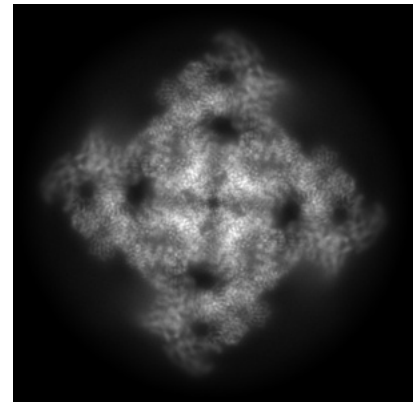
6.1.1 Primary map



X



Y

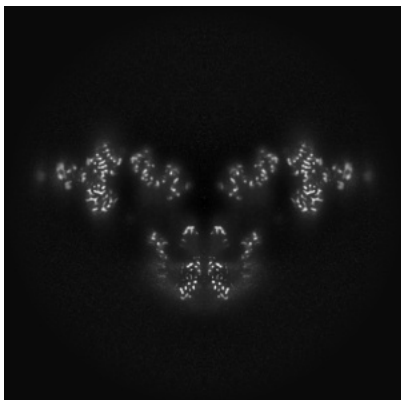


Z

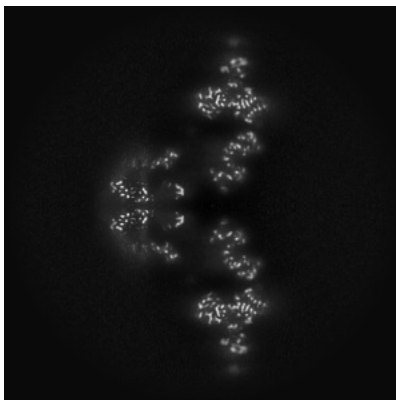
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

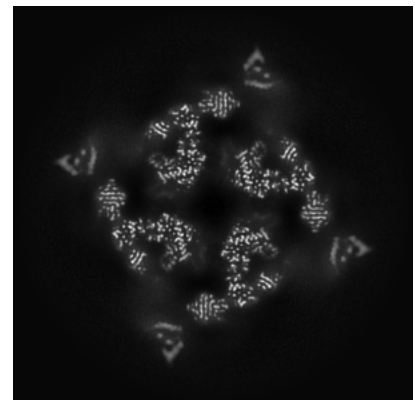
6.2.1 Primary map



X Index: 256



Y Index: 256

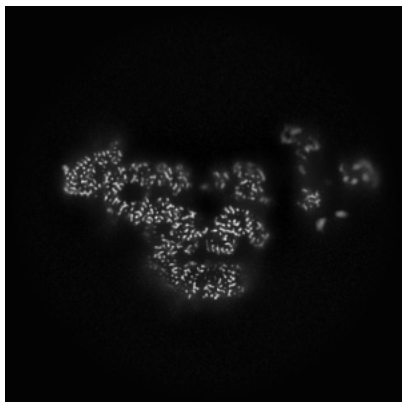


Z Index: 256

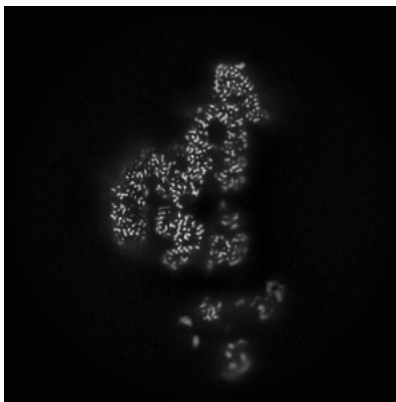
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

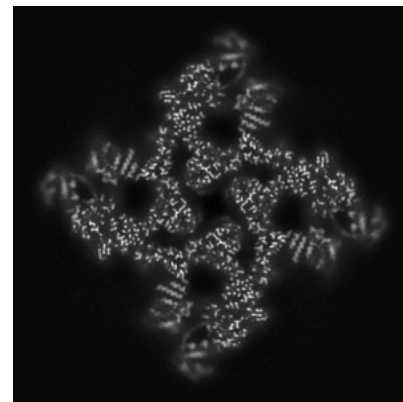
6.3.1 Primary map



X Index: 279



Y Index: 279



Z Index: 287

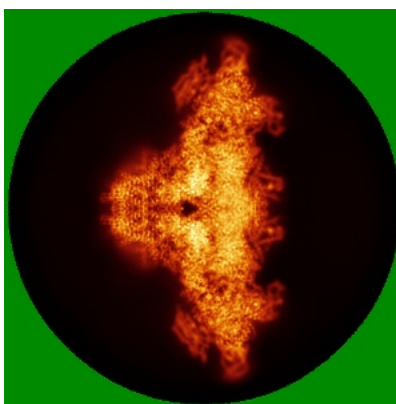
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) [i](#)

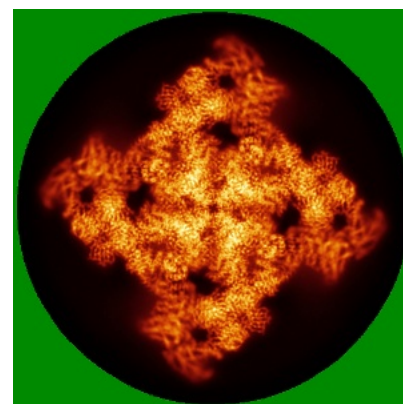
6.4.1 Primary map



X



Y

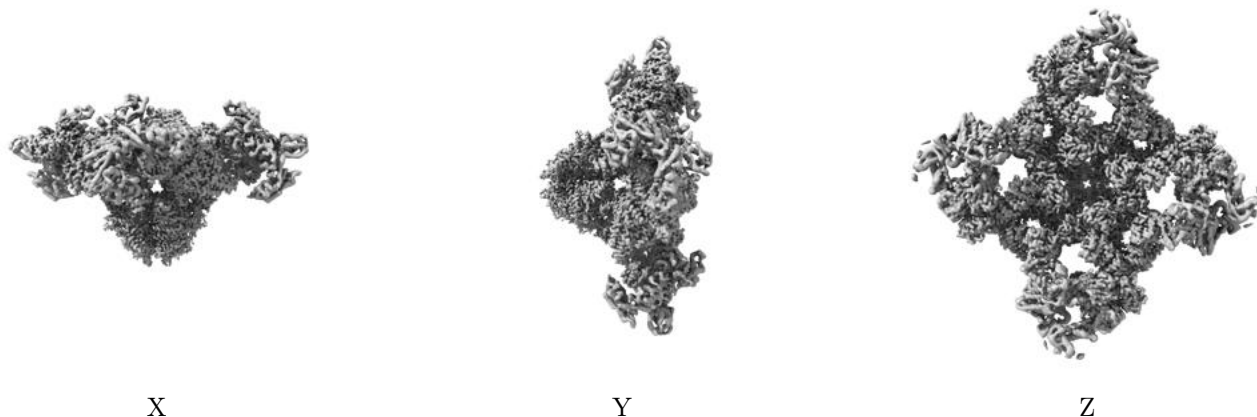


Z

The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.12. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

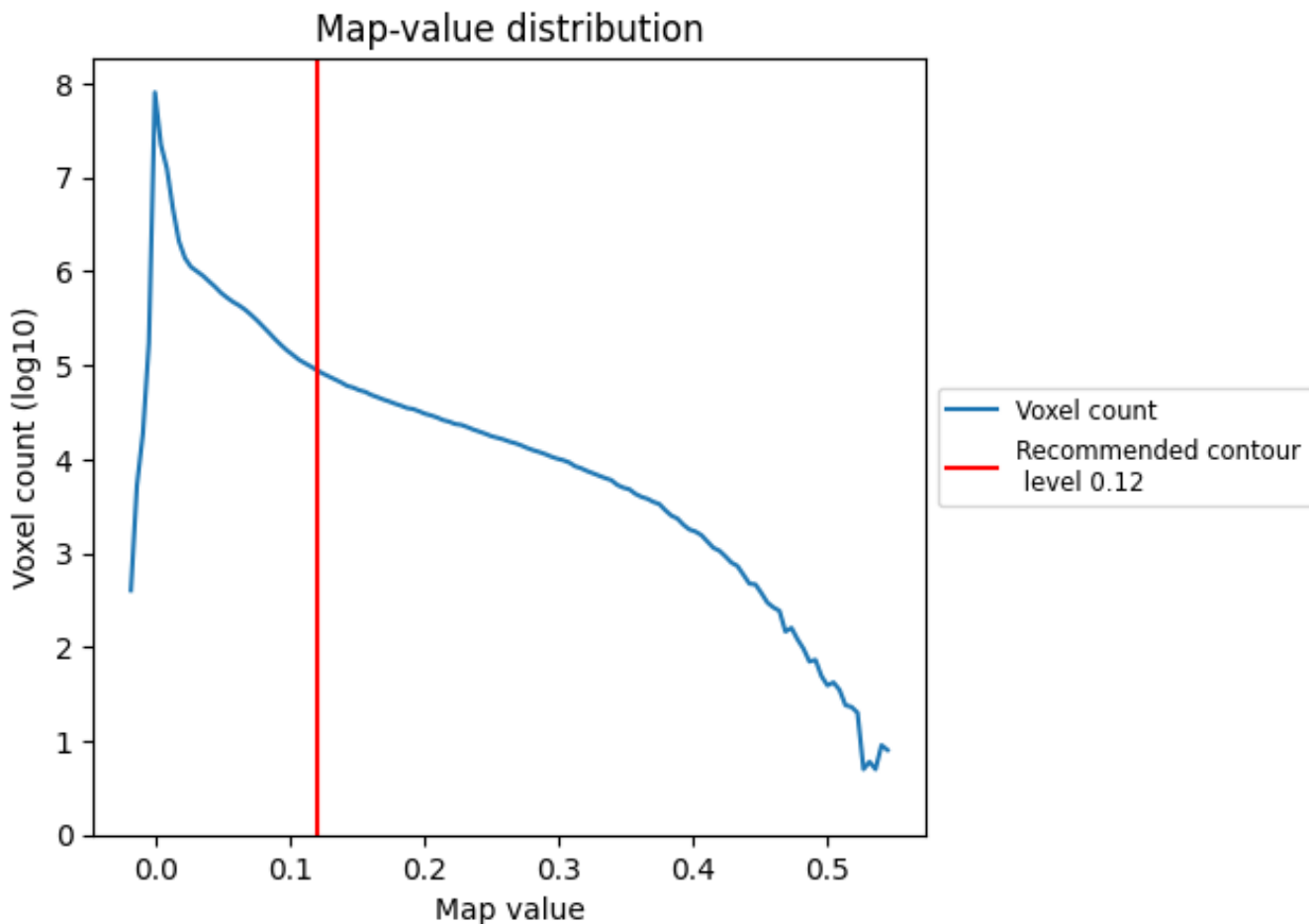
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

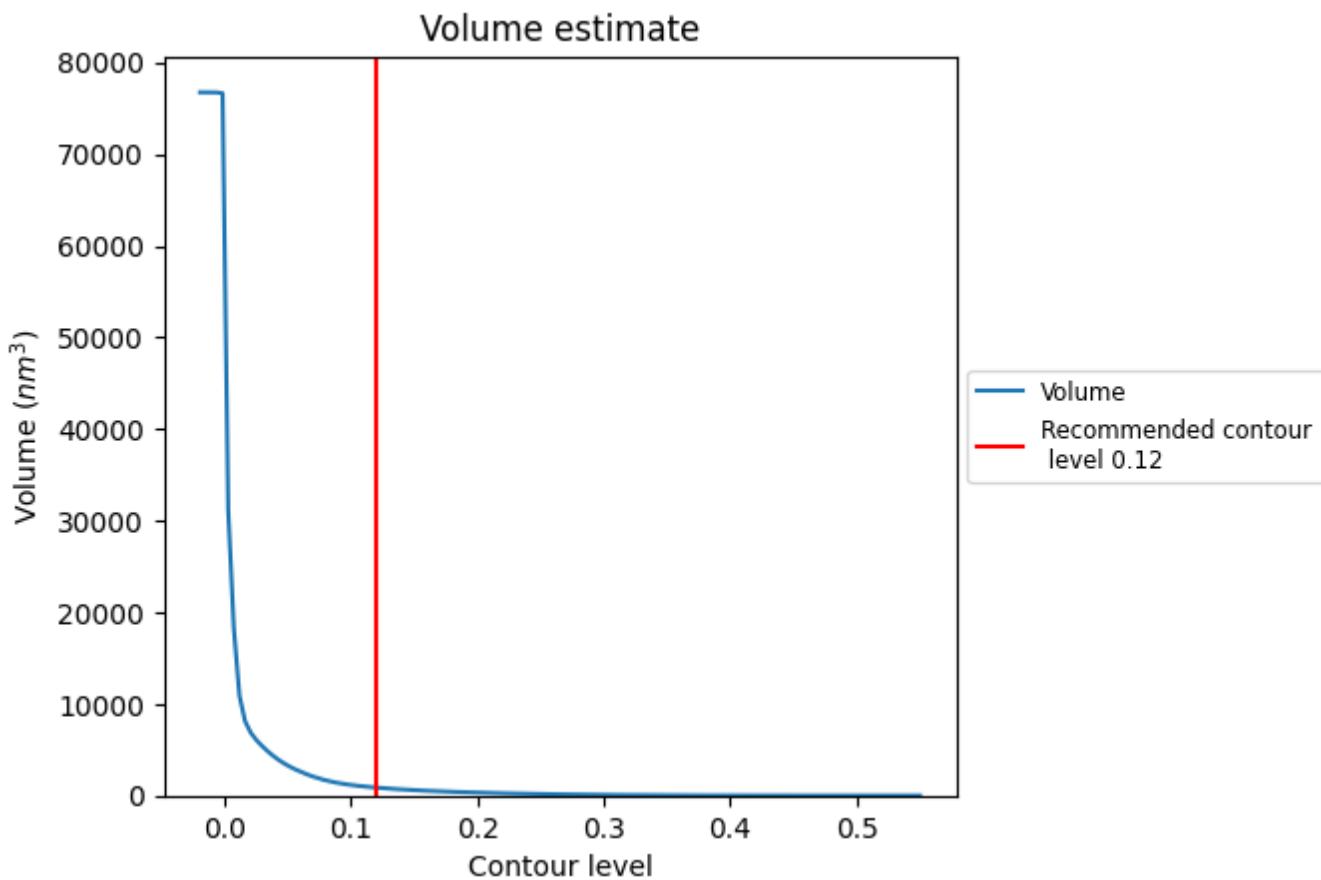
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



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

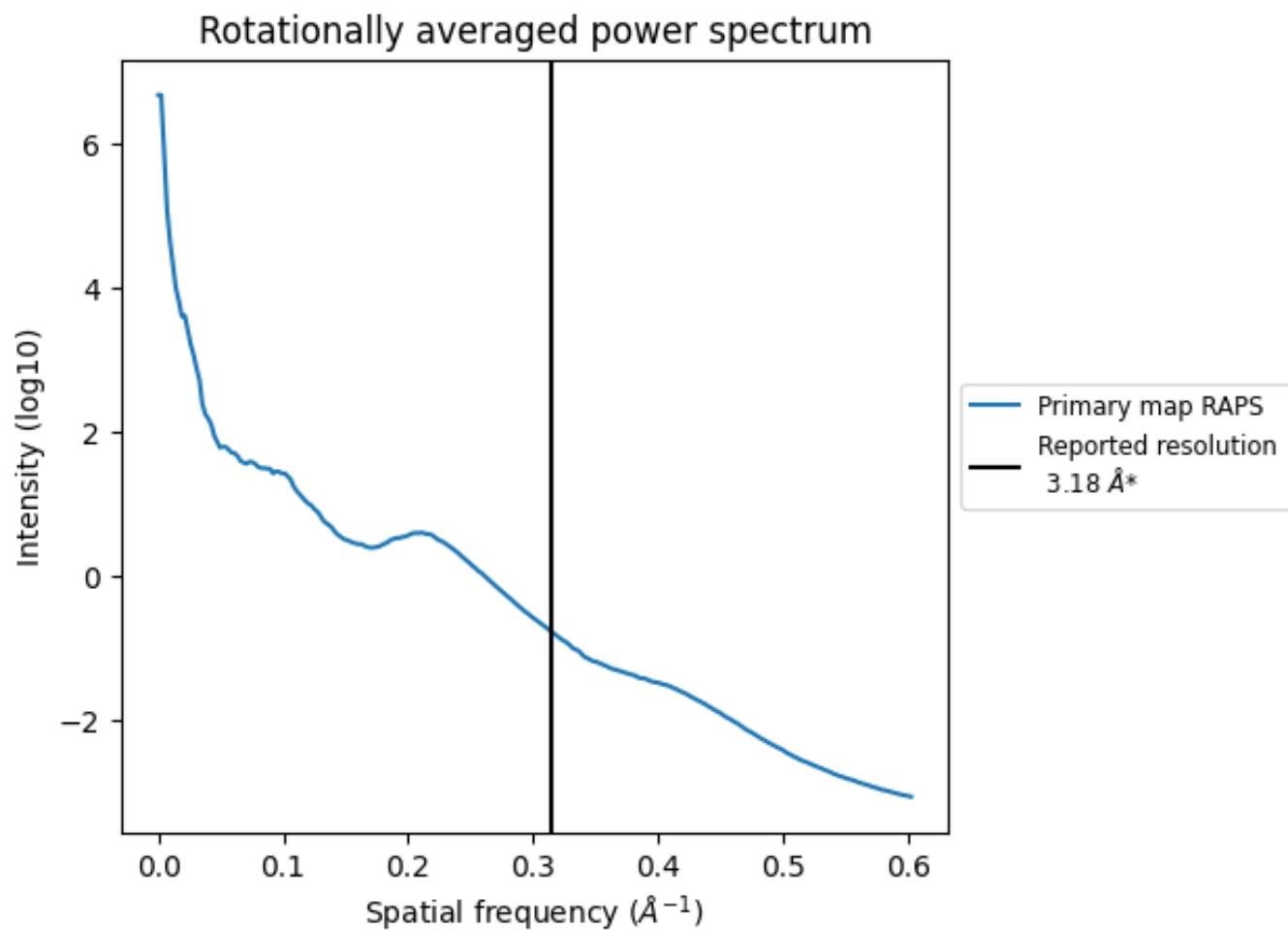
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 868 nm^3 ; this corresponds to an approximate mass of 784 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum [\(i\)](#)



*Reported resolution corresponds to spatial frequency of 0.314 Å⁻¹

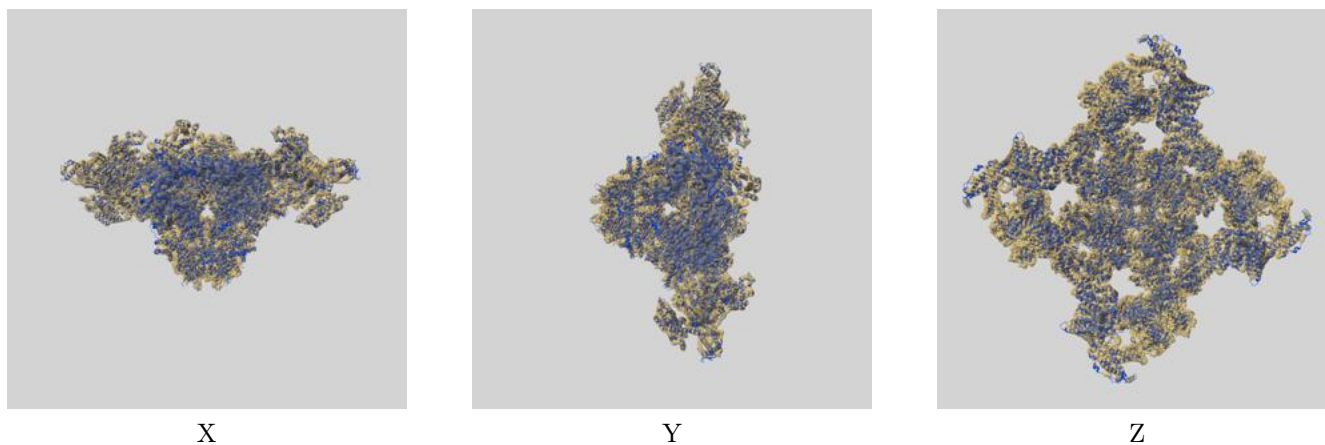
8 Fourier-Shell correlation

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

9 Map-model fit [i](#)

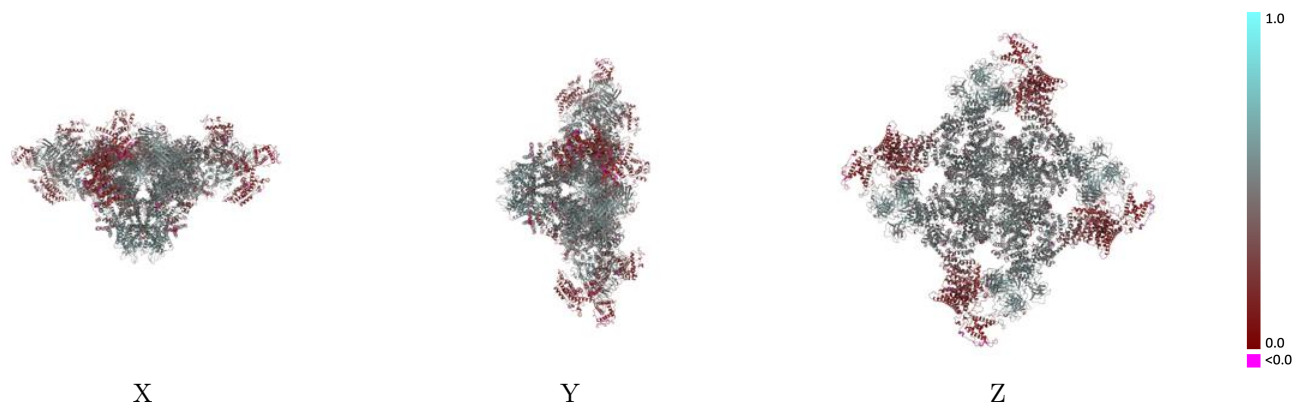
This section contains information regarding the fit between EMDB map EMD-42459 and PDB model 8UQ3. Per-residue inclusion information can be found in section 3 on page 7.

9.1 Map-model overlay [i](#)



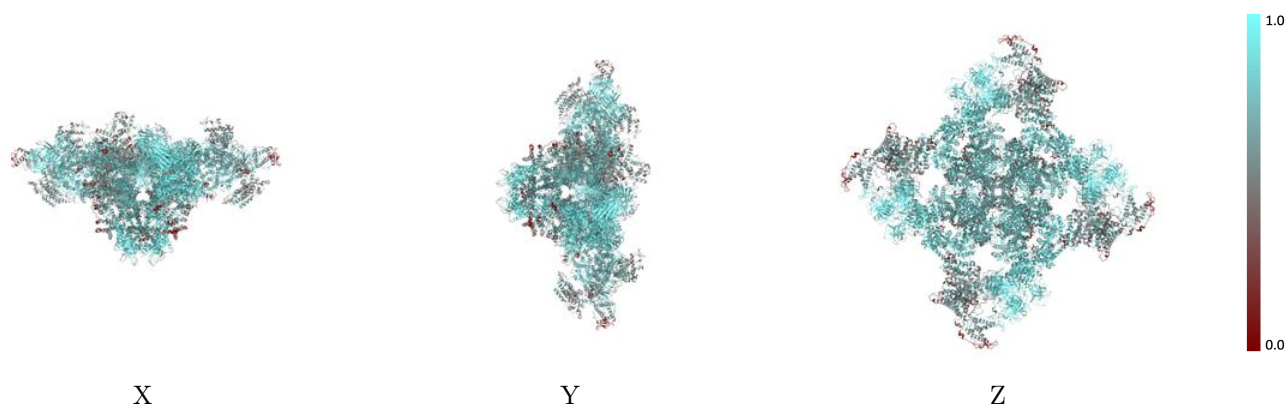
The images above show the 3D surface view of the map at the recommended contour level 0.12 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

9.2 Q-score mapped to coordinate model [\(i\)](#)



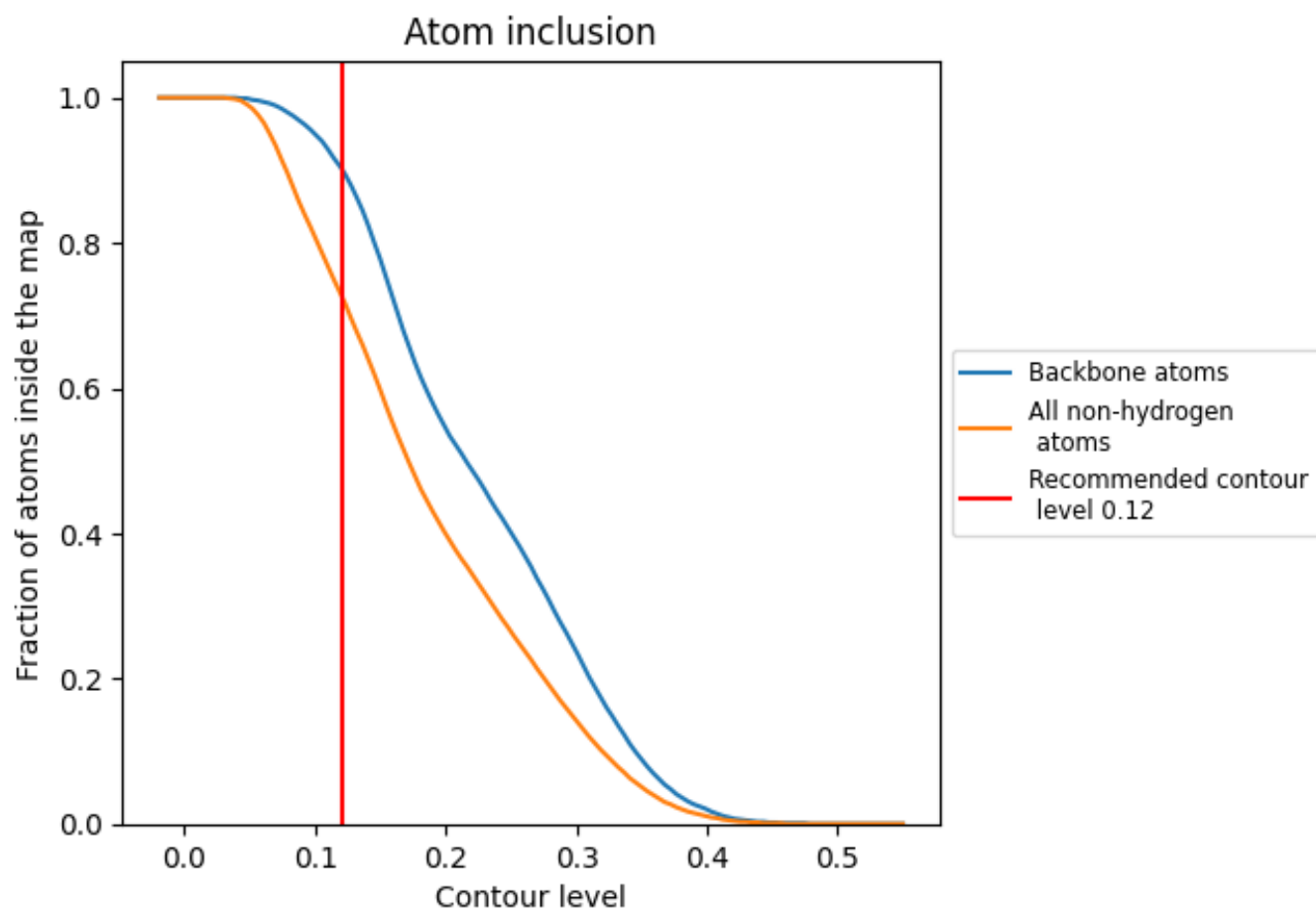
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions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

9.3 Atom inclusion mapped to coordinate model [\(i\)](#)



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.12).



















9.4 Atom inclusion [i](#)



At the recommended contour level, 90% of all backbone atoms, 73% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary [i](#)

The table lists the average atom inclusion at the recommended contour level (0.12) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.7280	 0.4180
A	 0.7260	 0.4160
B	 0.7260	 0.4160
C	 0.7250	 0.4150
D	 0.7250	 0.4160
E	 0.8490	 0.5070
F	 0.8500	 0.5100
G	 0.8540	 0.5100
H	 0.8490	 0.5110

