

Stride

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REM -----
REM
REM STRIDE: Knowledge-based secondary structure assignment
REM Please cite: D.Frushman & P.Argos, Proteins XX, XXX-XXX,
REM
REM Residue accessible surface area calculation
REM Please cite: F.Eisenhaber & P.Argos, J.Comp.Chem. 14, 12
REM           F.Eisenhaber et al., J.Comp.Chem., 1994, su
REM
REM ----- General information -----
REM
HDR OXIDOREDUCTASE                                03-MAR-16    5IKQ
CMP MOL_ID: 1;
CMP MOLECULE: PROSTAGLANDIN G/H SYNTHASE 2;
CMP CHAIN: A, B;
CMP SYNONYM: CYCLOOXYGENASE-2, COX-2, PHS II, PROSTAGLANDIN H2
CMP PGHS-2, PROSTAGLANDIN-ENDOPEROXIDE SYNTHASE 2;
CMP EC: 1.14.99.1;
CMP ENGINEERED: YES
SRC MOL_ID: 1;
SRC ORGANISM_SCIENTIFIC: HOMO SAPIENS;
SRC ORGANISM_COMMON: HUMAN;
SRC ORGANISM_TAXID: 9606;
SRC GENE: PTGS2, COX2;
SRC EXPRESSION_SYSTEM: SPODOPTERA FRUGIPERDA;
SRC EXPRESSION_SYSTEM_TAXID: 7108
AUT B.J.ORLANDO, M.G.MALKOWSKI
REM
REM ----- Secondary structure summary -----
REM
CHN /home/proj/stride/tmp/tmpgZ0g8Lpdb A
REM
REM           .           .           .           .           .
SEQ 1  NPCCSHPCQNRGVCMSVGFQYKCDCTRTGFYGENCSTPEFLTRIKLFLK
STR      TTTTTT  TTTTEEEEEETTTEEEEEETTTT  EETTTT  EE  HHHHHHHHHH
REM
REM           .           .           .           .           .
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SEQ 51 PTPNTVHYILTHFKGFVNIVNIPFLRNAIMSYVLTSRSHLIDSPPTYNA
STR HHHHHHHH HHHHHHHHTHHHHHHHHHHHHHHHHHH GGG TTTT BBT
REM
REM
SEQ 101 DYGYKSWEAFSNLSYYTRALPPVPDDCPTPLGVKGGKQLPDSNEIVEKLL
STR TBTTT HHHHHTTTB BBTTT TTTTTBTTBTT TTTT HHHHHHHH
REM
REM
SEQ 151 LRRKFIPDPQGSNMMFAFFAQHFTHQFFKTDHKRGPFTNGLGHGVDLNH
STR BTTTT BTTTTBBHHHHHHHHHHHHHTTTTBT TTTT HH
REM
REM
SEQ 201 IYGETLARQRKLR LFKDGKMKYQIIDGEMYPPTVKDTQAEMIYPPQVPEH
STR HH HHHHHHHEEEETTEE EEETTEE BHHHH TTTT GG
REM
REM
SEQ 251 LRFVAVGQEVFGLVPGLMMYATIWLREHNRVCDVLKQEHPEWGDEQLFQTS
STR G B TTTTTTTTTHHHHHHHHHHHHHHHHHHHHHHHTTTT HHHHHHHH
REM
REM
SEQ 301 RLILIGETIKIVIEDYVQHL SGYHFKLKFDPPELLFNKQFQYQNRIAAEFN
STR HHHHHHHHHHHHHHHHHHHHHHHHHHHHH GGGGTTT BHHHH
REM
REM
SEQ 351 TLYHWHPLLPDTFQIHDQKYNQYQQFIYNNSILLEHGITQFVESFTRQIAG
STR HHHTTGGG TTTEEETTEE HHHHTTTHHHHHHHHHHHHHHHHHHHH B B
REM
REM
SEQ 401 RVAGGRNVPPAVQKVSQASIDQSRQMKYQSFNEYRKRFMLKPYESFEELT
STR B GGGHHHHHHHHHHHHHHHHHH HHHHHHHH HHHHH
REM
REM
SEQ 451 GEKEMSAELEALYGDIDAVELYPALLVEKPRPDAIFGETMVEVGAPFSLK
STR HHHHHHHHHHHH GGG HHHHHHH TTTT HHHHHHHHHHHHHH
REM
REM
SEQ 501 GLMGNVICSPAYWKPSTFGGEVGFQIINTASIQSLICNNVKGCPFTSFSV
STR HHHH GGGTTTTT GGG HHHHHHHHH HHHHHHHHTTTT B
REM
REM

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SEQ 551 P
STR
REM
CHN /home/proj/stride/tmp/tmpgZ0g8Lpdb B
REM
REM      .           .           .           .           .
SEQ 1   NPCCSHPCQNRGVCMSVGFQYKCDCTRTGFYGENCSTPEFLTRIKLFLK
STR     TTTTTT  TTTTEEEETTTEEEETT  EETTTT  EE  HHHHHHHHH
REM
REM      .           .           .           .           .
SEQ 51  PTPNTVHYILTHFKGFVNVNNIPFLRNAIMSYVLTSRSHLIDSPPTYNA
STR     HHHHHHHHH  HHHHHHHHTTHHHHHHHHHHHHHHHHHHH  TTTT  BBT
REM
REM      .           .           .           .           .
SEQ 101 DYGYKSWEAFSNLSYYTRALPPVDDCPTPLGVKGGKQLPDSNEIVEKLL
STR     TBTTT  HHHHHTTTB  BBTTT  TTTTBTBTBT  TTTT  HHHHHHHHH
REM
REM      .           .           .           .           .
SEQ 151 LRRKFIPDPQGSNMMFAFFAQHFTHQFFKTDHKRGAFTNGLGHGVDLNH
STR     BTTTT  BTTTTBBHHHHHHHHHHHHHTTTTBTTTTTTTTBB  TTTT  HH
REM
REM      .           .           .           .           .
SEQ 201 IYGETLARQRKLRLFKDGKMKYQIIDGEMYPPTVKDTQAEMIYPPQVPEH
STR     HH  HHHHHHHB  TTTTBT  EEETTEE  BHHHH  TTTT  GG
REM
REM      .           .           .           .           .
SEQ 251 LRFVAVGQEVFGLVPGLMMYATIWLREHNRVCDVLKQEHPEWGDEQLFQTS
STR     G B TTTTTTTTTTHHHHHHHHHHHHHHHHHHHHHHHHTTTT  HHHHHHHH
REM
REM      .           .           .           .           .
SEQ 301 RLILIGETIKIVIEDYVQHLSGYHFKLKFDPPELLFNKQFQYQNRIAAEFN
STR     HHHHHHHHHHHHHHHHHHHHHHHHHHHHHHH  GGGGTTT  BHHHH
REM
REM      .           .           .           .           .
SEQ 351 TLYHWHPLLPDTFQIHDQKYNQYQFIYNNNSILLEHGITQFVESFTRQIAG
STR     HHH  GGG  TTTEEETTEE  HHHHTTTHHHHHHHHHHHHHHHHHHHHH  B B
REM
REM      .           .           .           .           .
SEQ 401 RVAGGRNVPPAVQKVSQASIDQSRQMKYQSFNEYRKRKRFMLKPYESFEELT
STR     B  GGGHHHHHHHHHHHHHHHHHHHH  HHHHHHHH  HHHHH

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REM
REM      .           .           .           .           .
SEQ 451  GEKEMSAELEALYGDIDAVELYPALLVEKPRPDAIFGETMVEVGAPFSLK
STR      HHHHHHHHHHHH  GGG  HHHHHHH  BTTTT  BHHHHHHHHHHHHHHH
REM
REM      .           .           .           .           .
SEQ 501  GLMGNVICSPAYWKPSTFGGEVGFQIINTASIQSLICNNVKGCPFTSFSV
STR      HHHH  GGGTTTTT  GGGG  HHHHHHHHHH  HHHHHHH  TTTT      B
REM
REM
SEQ 551  P
STR
REM
REM
REM
LOC  AlphaHelix  PHE      74  A      LEU      82  A
LOC  AlphaHelix  PRO      86  A      THR      94  A
LOC  AlphaHelix  LYS      97  A      ASN     104  A
LOC  AlphaHelix  PRO     106  A      SER     119  A
LOC  AlphaHelix  TRP     139  A      SER     143  A
LOC  AlphaHelix  SER     174  A      LEU     182  A
LOC  AlphaHelix  MET     196  A      HIS     207  A
LOC  AlphaHelix  ASN     231  A      TYR     234  A
LOC  AlphaHelix  LEU     238  A      LEU     244  A
LOC  AlphaHelix  VAL     266  A      THR     269  A
LOC  AlphaHelix  PRO     296  A      GLU     319  A
LOC  AlphaHelix  ASP     325  A      SER     353  A
LOC  AlphaHelix  ALA     379  A      TYR     385  A
LOC  AlphaHelix  TYR     404  A      PHE     407  A
LOC  AlphaHelix  ASN     411  A      ARG     428  A
LOC  AlphaHelix  GLN     445  A      MET     458  A
LOC  AlphaHelix  PHE     463  A      PHE     470  A
LOC  AlphaHelix  PHE     478  A      THR     482  A
LOC  AlphaHelix  LYS     485  A      TYR     495  A
LOC  AlphaHelix  LEU     503  A      VAL     509  A
LOC  AlphaHelix  GLU     520  A      GLY     536  A
LOC  AlphaHelix  GLU     553  A      THR     561  A
LOC  AlphaHelix  ILE     564  A      ASN     571  A
LOC  AlphaHelix  PHE      74  B      LEU      82  B
LOC  AlphaHelix  PRO      86  B      THR      94  B

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LOC	AlphaHelix	LYS	97	B	ASN	104	B
LOC	AlphaHelix	PRO	107	B	HIS	123	B
LOC	AlphaHelix	TRP	140	B	SER	144	B
LOC	AlphaHelix	SER	175	B	LEU	183	B
LOC	AlphaHelix	MET	197	B	HIS	208	B
LOC	AlphaHelix	ASN	232	B	TYR	235	B
LOC	AlphaHelix	LEU	239	B	LEU	245	B
LOC	AlphaHelix	VAL	267	B	THR	270	B
LOC	AlphaHelix	PRO	297	B	GLU	320	B
LOC	AlphaHelix	ASP	326	B	SER	354	B
LOC	AlphaHelix	ALA	380	B	TYR	386	B
LOC	AlphaHelix	TYR	405	B	PHE	408	B
LOC	AlphaHelix	ASN	412	B	ARG	429	B
LOC	AlphaHelix	GLN	446	B	MET	459	B
LOC	AlphaHelix	PHE	464	B	PHE	471	B
LOC	AlphaHelix	PHE	479	B	THR	483	B
LOC	AlphaHelix	LYS	486	B	TYR	496	B
LOC	AlphaHelix	LEU	504	B	VAL	510	B
LOC	AlphaHelix	GLU	521	B	GLY	537	B
LOC	AlphaHelix	GLU	554	B	THR	562	B
LOC	AlphaHelix	ILE	565	B	ASN	571	B
LOC	310Helix	SER	121	A	LEU	123	A
LOC	310Helix	GLU	281	A	LEU	283	A
LOC	310Helix	PRO	363	A	LEU	366	A
LOC	310Helix	HIS	388	A	LEU	390	A
LOC	310Helix	PRO	442	A	VAL	444	A
LOC	310Helix	ILE	498	A	ALA	500	A
LOC	310Helix	VAL	538	A	CYS	540	A
LOC	310Helix	PRO	547	A	PHE	550	A
LOC	310Helix	GLU	282	B	LEU	284	B
LOC	310Helix	PRO	364	B	LEU	367	B
LOC	310Helix	HIS	389	B	LEU	391	B
LOC	310Helix	PRO	443	B	VAL	445	B
LOC	310Helix	ILE	499	B	ALA	501	B
LOC	310Helix	VAL	539	B	CYS	541	B
LOC	310Helix	PRO	548	B	PHE	551	B
LOC	Strand	VAL	46	A	VAL	50	A
LOC	Strand	GLN	54	A	ASP	58	A
LOC	Strand	PHE	64	A	TYR	65	A
LOC	Strand	THR	71	A	PRO	72	A

LOC	Strand	ARG	245	A	LYS	248	A
LOC	Strand	LYS	251	A	MET	252	A
LOC	Strand	GLN	255	A	ILE	257	A
LOC	Strand	GLU	260	A	TYR	262	A
LOC	Strand	PHE	395	A	ILE	397	A
LOC	Strand	GLN	400	A	TYR	402	A
LOC	Strand	VAL	46	B	VAL	50	B
LOC	Strand	GLN	54	B	ASP	58	B
LOC	Strand	PHE	64	B	TYR	65	B
LOC	Strand	THR	71	B	PRO	72	B
LOC	Strand	GLN	256	B	ILE	258	B
LOC	Strand	GLU	261	B	TYR	263	B
LOC	Strand	PHE	396	B	ILE	398	B
LOC	Strand	GLN	401	B	TYR	403	B
LOC	TurnI	ASN	34	A	CYS	37	A
LOC	TurnI	PRO	35	A	SER	38	A
LOC	TurnI	CYS	36	A	HIS	39	A
LOC	TurnI'	GLN	42	A	GLY	45	A
LOC	TurnI	GLY	51	A	GLN	54	A
LOC	TurnII	CYS	59	A	THR	62	A
LOC	TurnI	GLY	66	A	CYS	69	A
LOC	TurnIV	ASN	104	A	PRO	106	A
LOC	TurnIV	ASP	125	A	PRO	128	A
LOC	TurnI	ASN	131	A	TYR	134	A
LOC	TurnIV	TYR	134	A	LYS	137	A
LOC	TurnI	ASN	144	A	TYR	147	A
LOC	TurnVIII	ARG	150	A	PRO	153	A
LOC	TurnIV	PRO	156	A	CYS	159	A
LOC	TurnVIII	CYS	159	A	PRO	162	A
LOC	TurnI	THR	161	A	GLY	164	A
LOC	TurnIV	LEU	163	A	LYS	166	A
LOC	TurnVIII	LYS	168	A	LEU	171	A
LOC	TurnVIII	ARG	184	A	PHE	187	A
LOC	TurnI	ASP	190	A	GLY	193	A
LOC	TurnIV	HIS	207	A	PHE	210	A
LOC	TurnIV	GLN	208	A	LYS	211	A
LOC	TurnIV	ASP	213	A	ARG	216	A
LOC	TurnIV	HIS	214	A	GLY	217	A
LOC	TurnI	GLY	217	A	PHE	220	A
LOC	TurnI	GLY	223	A	HIS	226	A

LOC	TurnIV	PHE	247	A	GLY	250	A
LOC	TurnI'	LYS	248	A	LYS	251	A
LOC	TurnIV	ILE	256	A	GLY	259	A
LOC	TurnI'	ILE	257	A	GLU	260	A
LOC	TurnI	PRO	276	A	VAL	279	A
LOC	TurnVIII	VAL	287	A	GLU	290	A
LOC	TurnI	GLN	289	A	PHE	292	A
LOC	TurnI	VAL	291	A	LEU	294	A
LOC	TurnIV	PHE	292	A	VAL	295	A
LOC	TurnVIII	GLY	293	A	PRO	296	A
LOC	TurnI	HIS	320	A	TRP	323	A
LOC	TurnI	LEU	366	A	LYS	369	A
LOC	TurnVIII	PRO	392	A	PHE	395	A
LOC	TurnII'	ILE	397	A	GLN	400	A
LOC	TurnII	PHE	407	A	ASN	410	A
LOC	TurnII	ARG	513	A	ALA	516	A
LOC	TurnI	SER	541	A	TYR	544	A
LOC	TurnI	PRO	542	A	TRP	545	A
LOC	TurnII	VAL	572	A	CYS	575	A
LOC	GammaInv	TYR	385	A	TRP	387	A
LOC	TurnI	ASN	34	B	CYS	37	B
LOC	TurnI	PRO	35	B	SER	38	B
LOC	TurnI	CYS	36	B	HIS	39	B
LOC	TurnI'	GLN	42	B	GLY	45	B
LOC	TurnI	GLY	51	B	GLN	54	B
LOC	TurnII	CYS	59	B	THR	62	B
LOC	TurnI	GLY	66	B	CYS	69	B
LOC	TurnIV	ASN	104	B	PRO	107	B
LOC	TurnIV	ASP	126	B	PRO	129	B
LOC	TurnI	ASN	132	B	TYR	135	B
LOC	TurnIV	TYR	135	B	LYS	138	B
LOC	TurnI	ASN	145	B	TYR	148	B
LOC	TurnVIII	ARG	151	B	PRO	154	B
LOC	TurnVIII	PRO	157	B	CYS	160	B
LOC	TurnVIII	CYS	160	B	PRO	163	B
LOC	TurnI	THR	162	B	GLY	165	B
LOC	TurnIV	LEU	164	B	LYS	167	B
LOC	TurnVIII	LYS	169	B	LEU	172	B
LOC	TurnVIII	ARG	185	B	PHE	188	B
LOC	TurnI	ASP	191	B	GLY	194	B

LOC	TurnI	HIS	208	B	PHE	211	B	
LOC	TurnIV	GLN	209	B	LYS	212	B	
LOC	TurnIV	ASP	214	B	ARG	217	B	
LOC	TurnI	HIS	215	B	GLY	218	B	
LOC	TurnI	GLY	218	B	PHE	221	B	
LOC	TurnI	GLY	224	B	HIS	227	B	
LOC	TurnIV	PHE	248	B	GLY	251	B	
LOC	TurnI'	LYS	249	B	LYS	252	B	
LOC	TurnIV	ILE	257	B	GLY	260	B	
LOC	TurnI'	ILE	258	B	GLU	261	B	
LOC	TurnI	PRO	277	B	VAL	280	B	
LOC	TurnVIII	VAL	288	B	GLU	291	B	
LOC	TurnI	GLN	290	B	PHE	293	B	
LOC	TurnI	VAL	292	B	LEU	295	B	
LOC	TurnI	PHE	293	B	VAL	296	B	
LOC	TurnVIII	GLY	294	B	PRO	297	B	
LOC	TurnI	HIS	321	B	TRP	324	B	
LOC	TurnI	LEU	367	B	LYS	370	B	
LOC	TurnVIII	PRO	393	B	PHE	396	B	
LOC	TurnII'	ILE	398	B	GLN	401	B	
LOC	TurnII	PHE	408	B	ASN	411	B	
LOC	TurnII	ARG	514	B	ALA	517	B	
LOC	TurnI	SER	542	B	TYR	545	B	
LOC	TurnI	PRO	543	B	TRP	546	B	
LOC	TurnII	VAL	573	B	CYS	576	B	
LOC	Disulfide	CYS	36	A	CYS	47	A	PD
LOC	Disulfide	CYS	37	A	CYS	159	A	PD
LOC	Disulfide	CYS	41	A	CYS	57	A	PD
LOC	Disulfide	CYS	59	A	CYS	69	A	PD
LOC	Disulfide	CYS	569	A	CYS	575	A	PD
LOC	Disulfide	CYS	36	B	CYS	47	B	PD
LOC	Disulfide	CYS	37	B	CYS	160	B	PD
LOC	Disulfide	CYS	41	B	CYS	57	B	PD
LOC	Disulfide	CYS	59	B	CYS	69	B	PD
LOC	Disulfide	CYS	570	B	CYS	576	B	PD

REM
 REM ----- Detailed secondary structure assignment-----
 REM
 REM |---Residue---| |---Structure---| |---Phi---| |---Psi---|
 ASG ASN A 34 1 T Turn 360.00 123.39

ASG	PRO	A	35	2	T	Turn	-67.58	-16.28
ASG	CYS	A	36	3	T	Turn	-85.55	1.69
ASG	CYS	A	37	4	T	Turn	-60.65	-26.17
ASG	SER	A	38	5	T	Turn	-86.91	0.97
ASG	HIS	A	39	6	T	Turn	53.56	52.30
ASG	PRO	A	40	7	C	Coil	-66.50	-32.01
ASG	CYS	A	41	8	C	Coil	-77.64	119.93
ASG	GLN	A	42	9	T	Turn	-95.66	168.69
ASG	ASN	A	43	10	T	Turn	54.98	45.53
ASG	ARG	A	44	11	T	Turn	70.62	17.01
ASG	GLY	A	45	12	T	Turn	-70.22	149.11
ASG	VAL	A	46	13	E	Strand	-97.54	123.69
ASG	CYS	A	47	14	E	Strand	-89.60	137.01
ASG	MET	A	48	15	E	Strand	-138.99	133.55
ASG	SER	A	49	16	E	Strand	-75.69	146.63
ASG	VAL	A	50	17	E	Strand	-137.28	98.45
ASG	GLY	A	51	18	T	Turn	80.13	-169.98
ASG	PHE	A	52	19	T	Turn	-86.53	-21.42
ASG	ASP	A	53	20	T	Turn	-120.77	-13.17
ASG	GLN	A	54	21	E	Strand	-108.93	159.66
ASG	TYR	A	55	22	E	Strand	-137.10	169.64
ASG	LYS	A	56	23	E	Strand	-140.71	142.74
ASG	CYS	A	57	24	E	Strand	-105.32	132.62
ASG	ASP	A	58	25	E	Strand	-99.60	106.13
ASG	CYS	A	59	26	T	Turn	-94.73	11.50
ASG	THR	A	60	27	T	Turn	-52.75	124.61
ASG	ARG	A	61	28	T	Turn	61.55	20.56
ASG	THR	A	62	29	T	Turn	-88.08	-21.81
ASG	GLY	A	63	30	C	Coil	84.19	5.15
ASG	PHE	A	64	31	E	Strand	-127.71	165.42
ASG	TYR	A	65	32	E	Strand	-144.75	-177.15
ASG	GLY	A	66	33	T	Turn	103.31	177.89
ASG	GLU	A	67	34	T	Turn	-60.45	-36.91
ASG	ASN	A	68	35	T	Turn	-115.00	17.11
ASG	CYS	A	69	36	T	Turn	55.96	44.35
ASG	SER	A	70	37	C	Coil	-110.51	-16.97
ASG	THR	A	71	38	E	Strand	-84.84	115.75
ASG	PRO	A	72	39	E	Strand	-70.70	142.35
ASG	GLU	A	73	40	C	Coil	-70.87	166.52
ASG	PHE	A	74	41	H	AlphaHelix	-58.05	-51.10

ASG	LEU	A	75	42	H	AlphaHelix	-63.11	-30.75
ASG	THR	A	76	43	H	AlphaHelix	-69.93	-38.81
ASG	ARG	A	77	44	H	AlphaHelix	-57.30	-42.25
ASG	ILE	A	78	45	H	AlphaHelix	-65.84	-50.48
ASG	LYS	A	79	46	H	AlphaHelix	-60.94	-40.69
ASG	LEU	A	80	47	H	AlphaHelix	-64.33	-30.87
ASG	PHE	A	81	48	H	AlphaHelix	-74.14	-23.97
ASG	LEU	A	82	49	H	AlphaHelix	-108.43	13.32
ASG	LYS	A	83	50	C	Coil	-93.84	120.40
ASG	PRO	A	84	51	C	Coil	-71.87	151.94
ASG	THR	A	85	52	C	Coil	-69.54	148.84
ASG	PRO	A	86	53	H	AlphaHelix	-52.90	-36.42
ASG	ASN	A	87	54	H	AlphaHelix	-69.77	-29.68
ASG	THR	A	88	55	H	AlphaHelix	-68.12	-51.77
ASG	VAL	A	89	56	H	AlphaHelix	-63.07	-36.87
ASG	HIS	A	90	57	H	AlphaHelix	-66.22	-34.95
ASG	TYR	A	91	58	H	AlphaHelix	-62.90	-46.51
ASG	ILE	A	92	59	H	AlphaHelix	-61.48	-38.87
ASG	LEU	A	93	60	H	AlphaHelix	-81.56	-13.76
ASG	THR	A	94	61	H	AlphaHelix	-110.45	8.30
ASG	HIS	A	95	62	C	Coil	-133.80	179.11
ASG	PHE	A	96	63	C	Coil	61.02	48.98
ASG	LYS	A	97	64	H	AlphaHelix	-56.57	-32.85
ASG	GLY	A	98	65	H	AlphaHelix	-64.29	-40.29
ASG	PHE	A	99	66	H	AlphaHelix	-67.14	-47.50
ASG	TRP	A	100	67	H	AlphaHelix	-68.33	-27.37
ASG	ASN	A	101	68	H	AlphaHelix	-64.51	-30.51
ASG	VAL	A	102	69	H	AlphaHelix	-75.18	-46.53
ASG	VAL	A	103	70	H	AlphaHelix	-60.70	-41.58
ASG	ASN	A	104	71	H	AlphaHelix	-64.51	-19.50
ASG	ASN	A	105	72	T	Turn	-103.44	3.29
ASG	ILE	A	105A	73	T	Turn	-110.44	93.21
ASG	PRO	A	106	74	H	AlphaHelix	-45.24	-42.11
ASG	PHE	A	107	75	H	AlphaHelix	-59.15	-44.94
ASG	LEU	A	108	76	H	AlphaHelix	-70.14	-46.35
ASG	ARG	A	109	77	H	AlphaHelix	-57.02	-44.86
ASG	ASN	A	110	78	H	AlphaHelix	-61.31	-40.37
ASG	ALA	A	111	79	H	AlphaHelix	-65.12	-47.32
ASG	ILE	A	112	80	H	AlphaHelix	-63.29	-47.75
ASG	MET	A	113	81	H	AlphaHelix	-61.38	-34.00

ASG	SER	A	114	82	H	AlphaHelix	-63.15	-42.68
ASG	TYR	A	115	83	H	AlphaHelix	-59.61	-50.64
ASG	VAL	A	116	84	H	AlphaHelix	-51.31	-42.37
ASG	LEU	A	117	85	H	AlphaHelix	-71.90	-44.87
ASG	THR	A	118	86	H	AlphaHelix	-85.80	-26.48
ASG	SER	A	119	87	H	AlphaHelix	-71.22	-4.87
ASG	ARG	A	120	88	C	Coil	-119.37	-22.49
ASG	SER	A	121	89	G	310Helix	-60.64	-27.16
ASG	HIS	A	122	90	G	310Helix	-75.97	-3.22
ASG	LEU	A	123	91	G	310Helix	-92.93	-15.12
ASG	ILE	A	124	92	C	Coil	-102.64	129.07
ASG	ASP	A	125	93	T	Turn	-77.70	124.22
ASG	SER	A	126	94	T	Turn	-149.97	115.02
ASG	PRO	A	127	95	T	Turn	-56.43	157.30
ASG	PRO	A	128	96	T	Turn	-73.82	166.25
ASG	THR	A	129	97	C	Coil	-120.71	-87.84
ASG	TYR	A	130	98	B	Bridge	-83.65	161.23
ASG	ASN	A	131	99	B	Bridge	-141.45	-168.55
ASG	ALA	A	132	100	T	Turn	-60.50	-29.85
ASG	ASP	A	133	101	T	Turn	-100.41	-2.63
ASG	TYR	A	134	102	B	Bridge	-139.87	112.18
ASG	GLY	A	135	103	T	Turn	-96.90	8.31
ASG	TYR	A	136	104	T	Turn	-130.28	158.52
ASG	LYS	A	137	105	T	Turn	-65.20	133.45
ASG	SER	A	138	106	C	Coil	-151.83	158.27
ASG	TRP	A	139	107	H	AlphaHelix	-68.83	-29.78
ASG	GLU	A	140	108	H	AlphaHelix	-61.85	-45.46
ASG	ALA	A	141	109	H	AlphaHelix	-67.90	-39.58
ASG	PHE	A	142	110	H	AlphaHelix	-68.40	-48.49
ASG	SER	A	143	111	H	AlphaHelix	-88.82	-22.23
ASG	ASN	A	144	112	T	Turn	-84.69	104.70
ASG	LEU	A	145	113	T	Turn	-76.16	-9.08
ASG	SER	A	146	114	T	Turn	-73.54	-18.70
ASG	TYR	A	147	115	B	Bridge	-84.35	146.21
ASG	TYR	A	148	116	C	Coil	-69.26	146.53
ASG	THR	A	149	117	B	Bridge	-84.86	176.35
ASG	ARG	A	150	118	B	Bridge	-136.05	125.45
ASG	ALA	A	151	119	T	Turn	-68.97	-33.41
ASG	LEU	A	152	120	T	Turn	-124.62	142.09
ASG	PRO	A	153	121	T	Turn	-61.03	156.50

ASG	PRO	A	154	122	C	Coil	-68.41	147.91
ASG	VAL	A	155	123	C	Coil	-61.17	127.74
ASG	PRO	A	156	124	T	Turn	-50.13	156.77
ASG	ASP	A	157	125	T	Turn	-63.82	-63.48
ASG	ASP	A	158	126	T	Turn	-91.76	82.17
ASG	CYS	A	159	127	T	Turn	-114.23	157.02
ASG	PRO	A	160	128	T	Turn	-60.66	-34.55
ASG	THR	A	161	129	B	Bridge	-128.51	158.07
ASG	PRO	A	162	130	T	Turn	-56.27	-31.09
ASG	LEU	A	163	131	T	Turn	-97.35	-3.09
ASG	GLY	A	164	132	B	Bridge	137.40	-90.13
ASG	VAL	A	165	133	T	Turn	-132.07	-21.15
ASG	LYS	A	166	134	T	Turn	-84.06	157.13
ASG	GLY	A	167	135	C	Coil	86.02	178.13
ASG	LYS	A	168	136	T	Turn	-75.25	171.73
ASG	LYS	A	169	137	T	Turn	-67.62	-30.49
ASG	GLN	A	170	138	T	Turn	-120.98	140.47
ASG	LEU	A	171	139	T	Turn	-71.19	156.00
ASG	PRO	A	172	140	C	Coil	-60.77	159.42
ASG	ASP	A	173	141	C	Coil	-59.82	128.46
ASG	SER	A	174	142	H	AlphaHelix	-68.86	-37.10
ASG	ASN	A	175	143	H	AlphaHelix	-65.04	-38.37
ASG	GLU	A	176	144	H	AlphaHelix	-63.32	-34.96
ASG	ILE	A	177	145	H	AlphaHelix	-69.12	-41.65
ASG	VAL	A	178	146	H	AlphaHelix	-64.33	-44.57
ASG	GLU	A	179	147	H	AlphaHelix	-69.69	-48.83
ASG	LYS	A	180	148	H	AlphaHelix	-71.99	-29.75
ASG	LEU	A	181	149	H	AlphaHelix	-121.08	-25.97
ASG	LEU	A	182	150	H	AlphaHelix	-115.50	-30.60
ASG	LEU	A	183	151	B	Bridge	-67.66	138.41
ASG	ARG	A	184	152	T	Turn	-72.04	122.59
ASG	ARG	A	185	153	T	Turn	-90.63	-40.32
ASG	LYS	A	186	154	T	Turn	-149.55	132.72
ASG	PHE	A	187	155	T	Turn	-53.81	125.56
ASG	ILE	A	188	156	C	Coil	-107.88	104.67
ASG	PRO	A	189	157	B	Bridge	-68.62	156.81
ASG	ASP	A	190	158	T	Turn	-73.25	120.82
ASG	PRO	A	191	159	T	Turn	-61.52	-27.90
ASG	GLN	A	192	160	T	Turn	-75.18	-11.67
ASG	GLY	A	193	161	T	Turn	86.16	15.31

ASG	SER	A	194	162	B	Bridge	-52.69	133.00
ASG	ASN	A	195	163	B	Bridge	-105.83	-171.21
ASG	MET	A	196	164	H	AlphaHelix	-75.12	-26.70
ASG	MET	A	197	165	H	AlphaHelix	-58.92	-40.94
ASG	PHE	A	198	166	H	AlphaHelix	-68.07	-50.61
ASG	ALA	A	199	167	H	AlphaHelix	-58.76	-43.93
ASG	PHE	A	200	168	H	AlphaHelix	-77.44	-26.08
ASG	PHE	A	201	169	H	AlphaHelix	-68.03	-42.95
ASG	ALA	A	202	170	H	AlphaHelix	-56.44	-45.33
ASG	GLN	A	203	171	H	AlphaHelix	-70.66	-45.26
ASG	HIS	A	204	172	H	AlphaHelix	-62.96	-47.89
ASG	PHE	A	205	173	H	AlphaHelix	-64.14	-52.24
ASG	THR	A	206	174	H	AlphaHelix	-72.86	-19.75
ASG	HIS	A	207	175	H	AlphaHelix	-78.99	7.41
ASG	GLN	A	208	176	T	Turn	-90.22	-17.72
ASG	PHE	A	209	177	T	Turn	-126.19	-4.25
ASG	PHE	A	210	178	T	Turn	-104.75	81.33
ASG	LYS	A	211	179	T	Turn	-124.53	69.22
ASG	THR	A	212	180	B	Bridge	-59.83	125.65
ASG	ASP	A	213	181	T	Turn	-87.56	89.71
ASG	HIS	A	214	182	T	Turn	-74.01	-2.68
ASG	LYS	A	215	183	T	Turn	-69.40	-58.18
ASG	ARG	A	216	184	T	Turn	-66.21	-46.77
ASG	GLY	A	217	185	T	Turn	141.48	169.96
ASG	PRO	A	218	186	T	Turn	-60.77	-17.38
ASG	ALA	A	219	187	T	Turn	-81.29	-8.87
ASG	PHE	A	220	188	B	Bridge	-113.88	151.45
ASG	THR	A	221	189	B	Bridge	-127.99	154.50
ASG	ASN	A	222	190	C	Coil	-99.27	-5.82
ASG	GLY	A	223	191	T	Turn	-92.28	81.09
ASG	LEU	A	224	192	T	Turn	-72.36	-13.10
ASG	GLY	A	225	193	T	Turn	-70.87	-22.13
ASG	HIS	A	226	194	T	Turn	49.54	48.90
ASG	GLY	A	227	195	C	Coil	168.22	-156.87
ASG	VAL	A	228	196	C	Coil	-87.89	84.84
ASG	ASP	A	229	197	C	Coil	-108.68	-3.80
ASG	LEU	A	230	198	C	Coil	61.88	35.59
ASG	ASN	A	231	199	H	AlphaHelix	-65.84	-23.93
ASG	HIS	A	232	200	H	AlphaHelix	-73.13	-7.90
ASG	ILE	A	233	201	H	AlphaHelix	-103.78	-43.97

ASG	TYR	A	234	202	H	AlphaHelix	-103.73	-11.92
ASG	GLY	A	235	203	C	Coil	95.98	148.04
ASG	GLU	A	236	204	C	Coil	-73.32	-31.14
ASG	THR	A	237	205	C	Coil	-118.56	159.85
ASG	LEU	A	238	206	H	AlphaHelix	-61.83	-35.78
ASG	ALA	A	239	207	H	AlphaHelix	-60.18	-42.57
ASG	ARG	A	240	208	H	AlphaHelix	-72.23	-35.47
ASG	GLN	A	241	209	H	AlphaHelix	-61.00	-42.61
ASG	ARG	A	242	210	H	AlphaHelix	-68.16	-27.07
ASG	LYS	A	243	211	H	AlphaHelix	-72.71	-25.05
ASG	LEU	A	244	212	H	AlphaHelix	-98.27	-20.05
ASG	ARG	A	245	213	E	Strand	-81.19	148.08
ASG	LEU	A	246	214	E	Strand	-82.29	-24.89
ASG	PHE	A	247	215	E	Strand	57.05	29.29
ASG	LYS	A	248	216	E	Strand	-134.51	130.28
ASG	ASP	A	249	217	T	Turn	59.14	19.76
ASG	GLY	A	250	218	T	Turn	76.96	4.27
ASG	LYS	A	251	219	E	Strand	-82.80	167.00
ASG	MET	A	252	220	E	Strand	-98.00	144.81
ASG	LYS	A	253	221	C	Coil	-55.11	153.63
ASG	TYR	A	254	222	C	Coil	-166.69	166.73
ASG	GLN	A	255	223	E	Strand	-126.60	148.61
ASG	ILE	A	256	224	E	Strand	-98.07	123.82
ASG	ILE	A	257	225	E	Strand	-129.77	122.21
ASG	ASP	A	258	226	T	Turn	55.76	41.36
ASG	GLY	A	259	227	T	Turn	75.10	-0.64
ASG	GLU	A	260	228	E	Strand	-109.55	142.77
ASG	MET	A	261	229	E	Strand	-80.80	129.86
ASG	TYR	A	262	230	E	Strand	-132.14	164.76
ASG	PRO	A	263	231	C	Coil	-63.02	155.35
ASG	PRO	A	264	232	C	Coil	-73.05	174.67
ASG	THR	A	265	233	B	Bridge	-91.79	164.39
ASG	VAL	A	266	234	H	AlphaHelix	-66.05	-37.33
ASG	LYS	A	267	235	H	AlphaHelix	-58.83	-42.51
ASG	ASP	A	268	236	H	AlphaHelix	-75.95	-41.12
ASG	THR	A	269	237	H	AlphaHelix	-89.10	-28.77
ASG	GLN	A	270	238	C	Coil	62.87	21.70
ASG	ALA	A	271	239	C	Coil	-89.61	116.80
ASG	GLU	A	272	240	C	Coil	-58.59	140.41
ASG	MET	A	273	241	C	Coil	-138.71	153.84

ASG	ILE	A	274	242	C	Coil	-85.58	109.56
ASG	TYR	A	275	243	C	Coil	-141.51	139.74
ASG	PRO	A	276	244	T	Turn	-66.08	160.13
ASG	PRO	A	277	245	T	Turn	-56.75	-31.23
ASG	GLN	A	278	246	T	Turn	-67.10	-25.03
ASG	VAL	A	279	247	T	Turn	-72.15	114.90
ASG	PRO	A	280	248	C	Coil	-64.75	165.44
ASG	GLU	A	281	249	G	310Helix	-59.99	-44.10
ASG	HIS	A	282	250	G	310Helix	-75.03	-4.90
ASG	LEU	A	283	251	G	310Helix	-109.65	6.87
ASG	ARG	A	284	252	C	Coil	-88.86	81.61
ASG	PHE	A	285	253	B	Bridge	-68.46	134.56
ASG	ALA	A	286	254	C	Coil	-105.35	124.54
ASG	VAL	A	287	255	T	Turn	-134.44	177.49
ASG	GLY	A	288	256	T	Turn	-51.89	-47.62
ASG	GLN	A	289	257	T	Turn	-90.50	124.88
ASG	GLU	A	290	258	T	Turn	-61.91	-21.49
ASG	VAL	A	291	259	T	Turn	-101.78	-1.79
ASG	PHE	A	292	260	T	Turn	-71.36	-5.94
ASG	GLY	A	293	261	T	Turn	-78.15	-12.41
ASG	LEU	A	294	262	T	Turn	-56.01	-42.43
ASG	VAL	A	295	263	T	Turn	-141.72	132.96
ASG	PRO	A	296	264	H	AlphaHelix	-56.80	-28.55
ASG	GLY	A	297	265	H	AlphaHelix	-60.53	-36.33
ASG	LEU	A	298	266	H	AlphaHelix	-72.17	-41.05
ASG	MET	A	299	267	H	AlphaHelix	-69.64	-24.69
ASG	MET	A	300	268	H	AlphaHelix	-64.73	-55.01
ASG	TYR	A	301	269	H	AlphaHelix	-64.08	-34.97
ASG	ALA	A	302	270	H	AlphaHelix	-62.09	-41.22
ASG	THR	A	303	271	H	AlphaHelix	-65.56	-45.03
ASG	ILE	A	304	272	H	AlphaHelix	-60.83	-47.60
ASG	TRP	A	305	273	H	AlphaHelix	-67.43	-37.65
ASG	LEU	A	306	274	H	AlphaHelix	-56.96	-48.14
ASG	ARG	A	307	275	H	AlphaHelix	-59.71	-41.91
ASG	GLU	A	308	276	H	AlphaHelix	-62.19	-40.64
ASG	HIS	A	309	277	H	AlphaHelix	-60.08	-48.09
ASG	ASN	A	310	278	H	AlphaHelix	-69.09	-25.59
ASG	ARG	A	311	279	H	AlphaHelix	-68.62	-45.01
ASG	VAL	A	312	280	H	AlphaHelix	-66.20	-33.56
ASG	CYS	A	313	281	H	AlphaHelix	-59.96	-39.66

ASG	ASP	A	314	282	H	AlphaHelix	-67.38	-42.22
ASG	VAL	A	315	283	H	AlphaHelix	-61.52	-48.15
ASG	LEU	A	316	284	H	AlphaHelix	-67.83	-33.32
ASG	LYS	A	317	285	H	AlphaHelix	-60.82	-41.66
ASG	GLN	A	318	286	H	AlphaHelix	-63.20	-40.91
ASG	GLU	A	319	287	H	AlphaHelix	-76.80	-32.33
ASG	HIS	A	320	288	T	Turn	-131.90	78.92
ASG	PRO	A	321	289	T	Turn	-68.61	-13.71
ASG	GLU	A	322	290	T	Turn	-85.72	-11.76
ASG	TRP	A	323	291	T	Turn	-75.41	146.75
ASG	GLY	A	324	292	C	Coil	-94.20	179.12
ASG	ASP	A	325	293	H	AlphaHelix	-61.50	-41.12
ASG	GLU	A	326	294	H	AlphaHelix	-62.66	-52.02
ASG	GLN	A	327	295	H	AlphaHelix	-66.90	-32.26
ASG	LEU	A	328	296	H	AlphaHelix	-63.34	-40.40
ASG	PHE	A	329	297	H	AlphaHelix	-68.60	-49.06
ASG	GLN	A	330	298	H	AlphaHelix	-66.41	-41.72
ASG	THR	A	331	299	H	AlphaHelix	-66.90	-39.55
ASG	SER	A	332	300	H	AlphaHelix	-60.89	-42.39
ASG	ARG	A	333	301	H	AlphaHelix	-58.75	-48.64
ASG	LEU	A	334	302	H	AlphaHelix	-59.88	-33.93
ASG	ILE	A	335	303	H	AlphaHelix	-70.09	-47.08
ASG	LEU	A	336	304	H	AlphaHelix	-62.40	-34.55
ASG	ILE	A	337	305	H	AlphaHelix	-59.10	-46.17
ASG	GLY	A	338	306	H	AlphaHelix	-60.01	-44.40
ASG	GLU	A	339	307	H	AlphaHelix	-59.30	-42.11
ASG	THR	A	340	308	H	AlphaHelix	-61.77	-51.56
ASG	ILE	A	341	309	H	AlphaHelix	-62.33	-41.88
ASG	LYS	A	342	310	H	AlphaHelix	-54.79	-53.87
ASG	ILE	A	343	311	H	AlphaHelix	-64.94	-41.09
ASG	VAL	A	344	312	H	AlphaHelix	-63.37	-43.09
ASG	ILE	A	345	313	H	AlphaHelix	-71.97	-52.37
ASG	GLU	A	346	314	H	AlphaHelix	-87.65	-17.33
ASG	ASP	A	347	315	H	AlphaHelix	-115.70	-52.89
ASG	TYR	A	348	316	H	AlphaHelix	-70.45	-61.41
ASG	VAL	A	349	317	H	AlphaHelix	-64.06	-34.20
ASG	GLN	A	350	318	H	AlphaHelix	-56.13	-47.50
ASG	HIS	A	351	319	H	AlphaHelix	-70.22	-40.19
ASG	LEU	A	352	320	H	AlphaHelix	-66.14	-39.36
ASG	SER	A	353	321	H	AlphaHelix	-70.76	-30.24

ASG	GLY	A	354	322	C	Coil	70.85	15.79
ASG	TYR	A	355	323	C	Coil	-70.70	144.17
ASG	HIS	A	356	324	C	Coil	-83.11	-19.29
ASG	PHE	A	357	325	C	Coil	-72.51	136.67
ASG	LYS	A	358	326	C	Coil	-90.22	98.72
ASG	LEU	A	359	327	C	Coil	-55.07	150.07
ASG	LYS	A	360	328	C	Coil	-135.15	129.85
ASG	PHE	A	361	329	C	Coil	-89.49	108.74
ASG	ASP	A	362	330	C	Coil	-154.48	98.33
ASG	PRO	A	363	331	G	310Helix	-57.82	-24.05
ASG	GLU	A	364	332	G	310Helix	-64.11	-22.46
ASG	LEU	A	365	333	G	310Helix	-62.52	-21.11
ASG	LEU	A	366	334	G	310Helix	-103.65	-1.59
ASG	PHE	A	367	335	T	Turn	-70.19	-19.23
ASG	ASN	A	368	336	T	Turn	-107.29	17.14
ASG	LYS	A	369	337	T	Turn	-116.12	163.48
ASG	GLN	A	370	338	C	Coil	-83.47	107.82
ASG	PHE	A	371	339	C	Coil	-147.80	135.21
ASG	GLN	A	372	340	C	Coil	-92.25	118.09
ASG	TYR	A	373	341	C	Coil	-84.27	67.24
ASG	GLN	A	374	342	C	Coil	-159.61	163.14
ASG	ASN	A	375	343	C	Coil	-159.61	146.53
ASG	ARG	A	376	344	C	Coil	-131.24	124.83
ASG	ILE	A	377	345	C	Coil	-67.92	126.23
ASG	ALA	A	378	346	B	Bridge	-86.10	135.28
ASG	ALA	A	379	347	H	AlphaHelix	-57.38	-35.12
ASG	GLU	A	380	348	H	AlphaHelix	-69.62	-32.25
ASG	PHE	A	381	349	H	AlphaHelix	-62.16	-41.06
ASG	ASN	A	382	350	H	AlphaHelix	-61.94	-53.65
ASG	THR	A	383	351	H	AlphaHelix	-52.99	-52.11
ASG	LEU	A	384	352	H	AlphaHelix	-63.35	-21.47
ASG	TYR	A	385	353	H	AlphaHelix	-90.26	11.46
ASG	HIS	A	386	354	T	Turn	-78.27	77.41
ASG	TRP	A	387	355	T	Turn	-91.76	53.51
ASG	HIS	A	388	356	G	310Helix	-56.49	-35.49
ASG	PRO	A	389	357	G	310Helix	-59.53	-15.82
ASG	LEU	A	390	358	G	310Helix	-62.57	-26.70
ASG	LEU	A	391	359	C	Coil	-73.38	134.00
ASG	PRO	A	392	360	T	Turn	-77.26	177.22
ASG	ASP	A	393	361	T	Turn	-76.86	-39.91

ASG	THR	A	394	362	T	Turn	-136.50	155.52
ASG	PHE	A	395	363	E	Strand	-98.49	131.49
ASG	GLN	A	396	364	E	Strand	-114.64	100.78
ASG	ILE	A	397	365	E	Strand	-108.99	113.90
ASG	HIS	A	398	366	T	Turn	57.42	-117.34
ASG	ASP	A	399	367	T	Turn	-89.14	-26.48
ASG	GLN	A	400	368	E	Strand	-76.37	151.75
ASG	LYS	A	401	369	E	Strand	-130.54	120.75
ASG	TYR	A	402	370	E	Strand	-111.76	134.78
ASG	ASN	A	403	371	C	Coil	-79.58	176.65
ASG	TYR	A	404	372	H	AlphaHelix	-62.82	-36.31
ASG	GLN	A	405	373	H	AlphaHelix	-66.50	-36.87
ASG	GLN	A	406	374	H	AlphaHelix	-80.50	-25.34
ASG	PHE	A	407	375	H	AlphaHelix	-90.10	-30.54
ASG	ILE	A	408	376	T	Turn	-68.80	136.98
ASG	TYR	A	409	377	T	Turn	54.53	32.89
ASG	ASN	A	410	378	T	Turn	-113.75	85.40
ASG	ASN	A	411	379	H	AlphaHelix	-77.43	-14.35
ASG	SER	A	412	380	H	AlphaHelix	-58.67	-43.08
ASG	ILE	A	413	381	H	AlphaHelix	-61.46	-35.83
ASG	LEU	A	414	382	H	AlphaHelix	-66.23	-45.24
ASG	LEU	A	415	383	H	AlphaHelix	-72.92	-33.74
ASG	GLU	A	416	384	H	AlphaHelix	-63.16	-50.37
ASG	HIS	A	417	385	H	AlphaHelix	-90.84	-36.56
ASG	GLY	A	418	386	H	AlphaHelix	89.42	157.87
ASG	ILE	A	419	387	H	AlphaHelix	-59.78	-41.35
ASG	THR	A	420	388	H	AlphaHelix	-56.40	-52.55
ASG	GLN	A	421	389	H	AlphaHelix	-62.08	-33.56
ASG	PHE	A	422	390	H	AlphaHelix	-63.78	-47.52
ASG	VAL	A	423	391	H	AlphaHelix	-62.87	-48.52
ASG	GLU	A	424	392	H	AlphaHelix	-55.47	-45.94
ASG	SER	A	425	393	H	AlphaHelix	-69.18	-43.54
ASG	PHE	A	426	394	H	AlphaHelix	-69.31	-28.23
ASG	THR	A	427	395	H	AlphaHelix	-70.55	-29.02
ASG	ARG	A	428	396	H	AlphaHelix	-87.70	-30.98
ASG	GLN	A	429	397	C	Coil	-83.00	129.13
ASG	ILE	A	430	398	B	Bridge	-84.78	150.58
ASG	ALA	A	431	399	C	Coil	-93.78	170.97
ASG	GLY	A	432	400	B	Bridge	-87.76	156.16
ASG	ARG	A	433	401	C	Coil	-74.63	138.88

ASG	VAL	A	434	402	C	Coil	-87.49	-50.65
ASG	ALA	A	435	403	C	Coil	-84.70	175.70
ASG	GLY	A	436	404	C	Coil	94.56	-8.48
ASG	GLY	A	437	405	C	Coil	82.55	161.47
ASG	ARG	A	438	406	C	Coil	46.22	60.48
ASG	ASN	A	439	407	C	Coil	-145.73	18.35
ASG	VAL	A	440	408	B	Bridge	-86.92	126.32
ASG	PRO	A	441	409	C	Coil	-60.01	130.36
ASG	PRO	A	442	410	G	310Helix	-55.58	-18.64
ASG	ALA	A	443	411	G	310Helix	-65.19	-35.50
ASG	VAL	A	444	412	G	310Helix	-105.92	30.31
ASG	GLN	A	445	413	H	AlphaHelix	-58.84	-37.78
ASG	LYS	A	446	414	H	AlphaHelix	-65.98	-35.47
ASG	VAL	A	447	415	H	AlphaHelix	-70.54	-37.26
ASG	SER	A	448	416	H	AlphaHelix	-63.62	-43.97
ASG	GLN	A	449	417	H	AlphaHelix	-65.19	-41.98
ASG	ALA	A	450	418	H	AlphaHelix	-57.79	-40.32
ASG	SER	A	451	419	H	AlphaHelix	-59.93	-39.57
ASG	ILE	A	452	420	H	AlphaHelix	-69.46	-50.35
ASG	ASP	A	453	421	H	AlphaHelix	-59.84	-43.30
ASG	GLN	A	454	422	H	AlphaHelix	-69.34	-29.20
ASG	SER	A	455	423	H	AlphaHelix	-66.59	-27.96
ASG	ARG	A	456	424	H	AlphaHelix	-82.23	-37.29
ASG	GLN	A	457	425	H	AlphaHelix	-74.47	-20.05
ASG	MET	A	458	426	H	AlphaHelix	-88.20	0.09
ASG	LYS	A	459	427	C	Coil	57.72	51.83
ASG	TYR	A	460	428	C	Coil	-65.33	139.64
ASG	GLN	A	461	429	C	Coil	-72.40	170.12
ASG	SER	A	462	430	C	Coil	-69.14	165.18
ASG	PHE	A	463	431	H	AlphaHelix	-53.95	-48.70
ASG	ASN	A	464	432	H	AlphaHelix	-63.78	-30.06
ASG	GLU	A	465	433	H	AlphaHelix	-68.15	-35.93
ASG	TYR	A	466	434	H	AlphaHelix	-76.12	-28.30
ASG	ARG	A	467	435	H	AlphaHelix	-57.88	-54.51
ASG	LYS	A	468	436	H	AlphaHelix	-62.09	-37.96
ASG	ARG	A	469	437	H	AlphaHelix	-58.18	-27.82
ASG	PHE	A	470	438	H	AlphaHelix	-115.80	37.47
ASG	MET	A	471	439	C	Coil	64.52	32.50
ASG	LEU	A	472	440	C	Coil	-116.59	149.35
ASG	LYS	A	473	441	C	Coil	-68.29	133.10

ASG	PRO	A	474	442	C	Coil	-68.75	145.88
ASG	TYR	A	475	443	C	Coil	-69.67	138.45
ASG	GLU	A	476	444	C	Coil	-94.34	-7.67
ASG	SER	A	477	445	C	Coil	-159.85	162.88
ASG	PHE	A	478	446	H	AlphaHelix	-68.12	-38.69
ASG	GLU	A	479	447	H	AlphaHelix	-64.85	-30.91
ASG	GLU	A	480	448	H	AlphaHelix	-70.46	-29.16
ASG	LEU	A	481	449	H	AlphaHelix	-75.36	-47.13
ASG	THR	A	482	450	H	AlphaHelix	-93.11	-23.77
ASG	GLY	A	483	451	C	Coil	68.89	17.48
ASG	GLU	A	484	452	C	Coil	-143.45	-171.37
ASG	LYS	A	485	453	H	AlphaHelix	-104.85	-43.90
ASG	GLU	A	486	454	H	AlphaHelix	-85.21	-42.02
ASG	MET	A	487	455	H	AlphaHelix	-64.35	-39.71
ASG	SER	A	488	456	H	AlphaHelix	-61.48	-36.45
ASG	ALA	A	489	457	H	AlphaHelix	-65.10	-39.91
ASG	GLU	A	490	458	H	AlphaHelix	-64.54	-41.10
ASG	LEU	A	491	459	H	AlphaHelix	-61.64	-42.07
ASG	GLU	A	492	460	H	AlphaHelix	-67.47	-35.70
ASG	ALA	A	493	461	H	AlphaHelix	-68.69	-36.44
ASG	LEU	A	494	462	H	AlphaHelix	-78.45	-57.52
ASG	TYR	A	495	463	H	AlphaHelix	-90.36	-35.17
ASG	GLY	A	496	464	C	Coil	86.33	-57.90
ASG	ASP	A	497	465	C	Coil	-107.69	140.45
ASG	ILE	A	498	466	G	310Helix	-64.42	-28.11
ASG	ASP	A	499	467	G	310Helix	-77.65	-4.66
ASG	ALA	A	500	468	G	310Helix	-99.42	-6.97
ASG	VAL	A	501	469	C	Coil	-67.19	136.41
ASG	GLU	A	502	470	C	Coil	-83.82	160.56
ASG	LEU	A	503	471	H	AlphaHelix	-60.38	-59.62
ASG	TYR	A	504	472	H	AlphaHelix	-61.47	-50.67
ASG	PRO	A	505	473	H	AlphaHelix	-60.73	-38.70
ASG	ALA	A	506	474	H	AlphaHelix	-65.77	-37.12
ASG	LEU	A	507	475	H	AlphaHelix	-62.68	-31.18
ASG	LEU	A	508	476	H	AlphaHelix	-90.06	-21.35
ASG	VAL	A	509	477	H	AlphaHelix	-101.81	-5.93
ASG	GLU	A	510	478	C	Coil	-56.67	143.74
ASG	LYS	A	511	479	C	Coil	-55.06	121.09
ASG	PRO	A	512	480	C	Coil	-65.61	155.35
ASG	ARG	A	513	481	T	Turn	-69.64	156.94

ASG	PRO	A	514	482	T	Turn	-50.82	116.57
ASG	ASP	A	515	483	T	Turn	55.86	28.04
ASG	ALA	A	516	484	T	Turn	-110.12	162.70
ASG	ILE	A	517	485	C	Coil	-81.29	-24.78
ASG	PHE	A	518	486	C	Coil	-124.14	172.66
ASG	GLY	A	519	487	C	Coil	-103.93	178.82
ASG	GLU	A	520	488	H	AlphaHelix	-53.09	-48.12
ASG	THR	A	521	489	H	AlphaHelix	-65.72	-43.61
ASG	MET	A	522	490	H	AlphaHelix	-54.04	-43.44
ASG	VAL	A	523	491	H	AlphaHelix	-72.78	-44.26
ASG	GLU	A	524	492	H	AlphaHelix	-74.19	-21.95
ASG	VAL	A	525	493	H	AlphaHelix	-92.73	-40.99
ASG	GLY	A	526	494	H	AlphaHelix	-73.26	-41.77
ASG	ALA	A	527	495	H	AlphaHelix	-56.02	-46.97
ASG	PRO	A	528	496	H	AlphaHelix	-65.00	-39.54
ASG	PHE	A	529	497	H	AlphaHelix	-56.83	-47.30
ASG	SER	A	530	498	H	AlphaHelix	-65.33	-51.23
ASG	LEU	A	531	499	H	AlphaHelix	-63.88	-32.08
ASG	LYS	A	532	500	H	AlphaHelix	-65.24	-40.58
ASG	GLY	A	533	501	H	AlphaHelix	-72.26	-26.75
ASG	LEU	A	534	502	H	AlphaHelix	-84.86	-57.75
ASG	MET	A	535	503	H	AlphaHelix	-75.43	-22.23
ASG	GLY	A	536	504	H	AlphaHelix	-75.09	-11.44
ASG	ASN	A	537	505	C	Coil	-59.69	141.71
ASG	VAL	A	538	506	G	310Helix	-59.12	-31.74
ASG	ILE	A	539	507	G	310Helix	-66.29	-15.60
ASG	CYS	A	540	508	G	310Helix	-85.16	-6.35
ASG	SER	A	541	509	T	Turn	-78.42	149.79
ASG	PRO	A	542	510	T	Turn	-55.28	-29.55
ASG	ALA	A	543	511	T	Turn	-73.34	-24.69
ASG	TYR	A	544	512	T	Turn	-99.84	-35.79
ASG	TRP	A	545	513	T	Turn	-71.62	74.71
ASG	LYS	A	546	514	C	Coil	-145.09	154.51
ASG	PRO	A	547	515	G	310Helix	-63.02	-35.49
ASG	SER	A	548	516	G	310Helix	-62.82	-27.98
ASG	THR	A	549	517	G	310Helix	-60.44	-35.96
ASG	PHE	A	550	518	G	310Helix	-107.62	20.86
ASG	GLY	A	551	519	C	Coil	89.38	8.50
ASG	GLY	A	552	520	C	Coil	117.96	-177.20
ASG	GLU	A	553	521	H	AlphaHelix	-63.48	-33.52

ASG	VAL	A	554	522	H	AlphaHelix	-61.21	-44.11
ASG	GLY	A	555	523	H	AlphaHelix	-70.65	-39.98
ASG	PHE	A	556	524	H	AlphaHelix	-62.54	-34.98
ASG	GLN	A	557	525	H	AlphaHelix	-70.67	-32.41
ASG	ILE	A	558	526	H	AlphaHelix	-57.95	-44.63
ASG	ILE	A	559	527	H	AlphaHelix	-60.45	-55.47
ASG	ASN	A	560	528	H	AlphaHelix	-74.13	-6.55
ASG	THR	A	561	529	H	AlphaHelix	-119.76	12.67
ASG	ALA	A	562	530	C	Coil	-75.23	148.27
ASG	SER	A	563	531	C	Coil	-158.01	161.63
ASG	ILE	A	564	532	H	AlphaHelix	-63.38	-29.94
ASG	GLN	A	565	533	H	AlphaHelix	-69.53	-47.00
ASG	SER	A	566	534	H	AlphaHelix	-69.74	-33.81
ASG	LEU	A	567	535	H	AlphaHelix	-57.50	-45.74
ASG	ILE	A	568	536	H	AlphaHelix	-72.51	-41.44
ASG	CYS	A	569	537	H	AlphaHelix	-65.26	-34.43
ASG	ASN	A	570	538	H	AlphaHelix	-79.52	-21.29
ASG	ASN	A	571	539	H	AlphaHelix	-128.75	-3.92
ASG	VAL	A	572	540	T	Turn	-114.09	125.72
ASG	LYS	A	573	541	T	Turn	-55.86	130.45
ASG	GLY	A	574	542	T	Turn	92.92	-15.16
ASG	CYS	A	575	543	T	Turn	55.48	62.58
ASG	PRO	A	576	544	C	Coil	-72.32	151.36
ASG	PHE	A	577	545	C	Coil	-69.98	137.13
ASG	THR	A	578	546	C	Coil	-142.91	161.63
ASG	SER	A	579	547	C	Coil	-161.71	167.01
ASG	PHE	A	580	548	C	Coil	-88.78	-0.10
ASG	SER	A	581	549	B	Bridge	-130.38	150.43
ASG	VAL	A	582	550	C	Coil	-70.34	140.27
ASG	PRO	A	583	551	C	Coil	-80.28	360.00
ASG	ASN	B	34	1	T	Turn	360.00	110.15
ASG	PRO	B	35	2	T	Turn	-59.96	-22.01
ASG	CYS	B	36	3	T	Turn	-80.32	-0.25
ASG	CYS	B	37	4	T	Turn	-61.14	-26.17
ASG	SER	B	38	5	T	Turn	-77.26	-12.00
ASG	HIS	B	39	6	T	Turn	54.45	51.95
ASG	PRO	B	40	7	C	Coil	-69.76	-32.56
ASG	CYS	B	41	8	C	Coil	-71.40	120.42
ASG	GLN	B	42	9	T	Turn	-96.39	163.12
ASG	ASN	B	43	10	T	Turn	58.51	48.91

ASG	ARG	B	44	11	T	Turn	70.90	11.08
ASG	GLY	B	45	12	T	Turn	-65.15	152.27
ASG	VAL	B	46	13	E	Strand	-103.43	124.44
ASG	CYS	B	47	14	E	Strand	-88.72	139.89
ASG	MET	B	48	15	E	Strand	-143.14	135.62
ASG	SER	B	49	16	E	Strand	-78.05	140.06
ASG	VAL	B	50	17	E	Strand	-127.26	91.60
ASG	GLY	B	51	18	T	Turn	82.03	-163.47
ASG	PHE	B	52	19	T	Turn	-88.59	-25.57
ASG	ASP	B	53	20	T	Turn	-117.40	-13.67
ASG	GLN	B	54	21	E	Strand	-108.45	156.01
ASG	TYR	B	55	22	E	Strand	-130.36	176.94
ASG	LYS	B	56	23	E	Strand	-151.14	130.94
ASG	CYS	B	57	24	E	Strand	-101.08	132.40
ASG	ASP	B	58	25	E	Strand	-97.37	105.41
ASG	CYS	B	59	26	T	Turn	-92.94	6.84
ASG	THR	B	60	27	T	Turn	-46.88	125.75
ASG	ARG	B	61	28	T	Turn	55.30	24.30
ASG	THR	B	62	29	T	Turn	-87.68	-22.01
ASG	GLY	B	63	30	C	Coil	90.50	-2.54
ASG	PHE	B	64	31	E	Strand	-124.11	164.27
ASG	TYR	B	65	32	E	Strand	-144.01	-179.45
ASG	GLY	B	66	33	T	Turn	105.17	167.50
ASG	GLU	B	67	34	T	Turn	-51.11	-30.03
ASG	ASN	B	68	35	T	Turn	-120.16	8.87
ASG	CYS	B	69	36	T	Turn	56.68	41.81
ASG	SER	B	70	37	C	Coil	-106.16	-20.81
ASG	THR	B	71	38	E	Strand	-87.78	114.15
ASG	PRO	B	72	39	E	Strand	-73.86	146.29
ASG	GLU	B	73	40	C	Coil	-72.64	179.09
ASG	PHE	B	74	41	H	AlphaHelix	-67.22	-49.95
ASG	LEU	B	75	42	H	AlphaHelix	-59.07	-44.98
ASG	THR	B	76	43	H	AlphaHelix	-60.45	-41.99
ASG	ARG	B	77	44	H	AlphaHelix	-55.44	-39.61
ASG	ILE	B	78	45	H	AlphaHelix	-75.40	-52.28
ASG	LYS	B	79	46	H	AlphaHelix	-48.58	-44.65
ASG	LEU	B	80	47	H	AlphaHelix	-62.78	-28.19
ASG	PHE	B	81	48	H	AlphaHelix	-75.58	-38.03
ASG	LEU	B	82	49	H	AlphaHelix	-84.53	-24.57
ASG	LYS	B	83	50	C	Coil	-67.31	120.51

ASG	PRO	B	84	51	C	Coil	-72.83	154.52
ASG	THR	B	85	52	C	Coil	-68.67	148.67
ASG	PRO	B	86	53	H	AlphaHelix	-57.62	-34.48
ASG	ASN	B	87	54	H	AlphaHelix	-64.03	-33.50
ASG	THR	B	88	55	H	AlphaHelix	-70.16	-51.24
ASG	VAL	B	89	56	H	AlphaHelix	-56.96	-39.48
ASG	HIS	B	90	57	H	AlphaHelix	-64.66	-37.35
ASG	TYR	B	91	58	H	AlphaHelix	-63.91	-43.53
ASG	ILE	B	92	59	H	AlphaHelix	-66.68	-33.50
ASG	LEU	B	93	60	H	AlphaHelix	-80.70	-18.68
ASG	THR	B	94	61	H	AlphaHelix	-107.38	7.42
ASG	HIS	B	95	62	C	Coil	-132.90	-174.62
ASG	PHE	B	96	63	C	Coil	55.90	49.78
ASG	LYS	B	97	64	H	AlphaHelix	-57.97	-31.24
ASG	GLY	B	98	65	H	AlphaHelix	-72.93	-40.00
ASG	PHE	B	99	66	H	AlphaHelix	-63.34	-46.95
ASG	TRP	B	100	67	H	AlphaHelix	-64.98	-27.91
ASG	ASN	B	101	68	H	AlphaHelix	-60.09	-28.99
ASG	VAL	B	102	69	H	AlphaHelix	-91.67	-36.49
ASG	VAL	B	103	70	H	AlphaHelix	-59.44	-39.70
ASG	ASN	B	104	71	H	AlphaHelix	-64.50	-24.76
ASG	ASN	B	105	72	T	Turn	-99.15	1.20
ASG	ILE	B	106	73	T	Turn	-109.84	97.06
ASG	PRO	B	107	74	H	AlphaHelix	-51.53	-37.39
ASG	PHE	B	108	75	H	AlphaHelix	-56.87	-44.09
ASG	LEU	B	109	76	H	AlphaHelix	-75.02	-44.77
ASG	ARG	B	110	77	H	AlphaHelix	-62.48	-42.40
ASG	ASN	B	111	78	H	AlphaHelix	-63.88	-41.14
ASG	ALA	B	112	79	H	AlphaHelix	-67.86	-43.44
ASG	ILE	B	113	80	H	AlphaHelix	-66.11	-49.25
ASG	MET	B	114	81	H	AlphaHelix	-57.17	-38.78
ASG	SER	B	115	82	H	AlphaHelix	-58.75	-45.71
ASG	TYR	B	116	83	H	AlphaHelix	-65.65	-40.76
ASG	VAL	B	117	84	H	AlphaHelix	-50.39	-47.78
ASG	LEU	B	118	85	H	AlphaHelix	-66.47	-50.42
ASG	THR	B	119	86	H	AlphaHelix	-70.25	-44.65
ASG	SER	B	120	87	H	AlphaHelix	-61.91	-30.10
ASG	ARG	B	121	88	H	AlphaHelix	-80.15	-42.21
ASG	SER	B	122	89	H	AlphaHelix	-65.22	-23.09
ASG	HIS	B	123	90	H	AlphaHelix	-73.11	-7.40

ASG	LEU	B	124	91	C	Coil	-87.22	-8.32
ASG	ILE	B	125	92	C	Coil	-105.34	131.26
ASG	ASP	B	126	93	T	Turn	-79.00	118.01
ASG	SER	B	127	94	T	Turn	-145.27	114.44
ASG	PRO	B	128	95	T	Turn	-60.48	157.26
ASG	PRO	B	129	96	T	Turn	-72.44	159.56
ASG	THR	B	130	97	C	Coil	-114.38	-93.62
ASG	TYR	B	131	98	B	Bridge	-77.03	161.84
ASG	ASN	B	132	99	B	Bridge	-139.59	-169.45
ASG	ALA	B	133	100	T	Turn	-63.86	-23.26
ASG	ASP	B	134	101	T	Turn	-100.24	-5.45
ASG	TYR	B	135	102	B	Bridge	-138.54	109.28
ASG	GLY	B	136	103	T	Turn	-89.27	4.61
ASG	TYR	B	137	104	T	Turn	-131.00	157.94
ASG	LYS	B	138	105	T	Turn	-61.45	132.49
ASG	SER	B	139	106	C	Coil	-151.18	155.34
ASG	TRP	B	140	107	H	AlphaHelix	-69.09	-28.10
ASG	GLU	B	141	108	H	AlphaHelix	-64.16	-46.25
ASG	ALA	B	142	109	H	AlphaHelix	-66.06	-37.46
ASG	PHE	B	143	110	H	AlphaHelix	-70.94	-43.90
ASG	SER	B	144	111	H	AlphaHelix	-91.72	-24.49
ASG	ASN	B	145	112	T	Turn	-83.11	100.45
ASG	LEU	B	146	113	T	Turn	-71.52	-9.05
ASG	SER	B	147	114	T	Turn	-72.74	-17.85
ASG	TYR	B	148	115	B	Bridge	-88.33	143.67
ASG	TYR	B	149	116	C	Coil	-65.22	144.27
ASG	THR	B	150	117	B	Bridge	-85.49	-179.75
ASG	ARG	B	151	118	B	Bridge	-137.58	129.24
ASG	ALA	B	152	119	T	Turn	-72.26	-31.13
ASG	LEU	B	153	120	T	Turn	-128.99	136.09
ASG	PRO	B	154	121	T	Turn	-60.13	154.10
ASG	PRO	B	155	122	C	Coil	-61.08	151.71
ASG	VAL	B	156	123	C	Coil	-65.36	128.57
ASG	PRO	B	157	124	T	Turn	-48.17	149.69
ASG	ASP	B	158	125	T	Turn	-58.26	-55.43
ASG	ASP	B	159	126	T	Turn	-100.41	84.27
ASG	CYS	B	160	127	T	Turn	-115.78	162.40
ASG	PRO	B	161	128	T	Turn	-56.37	-47.09
ASG	THR	B	162	129	B	Bridge	-125.08	158.64
ASG	PRO	B	163	130	T	Turn	-55.14	-28.80

ASG	LEU	B	164	131	T	Turn	-97.50	-3.45
ASG	GLY	B	165	132	B	Bridge	131.28	-88.08
ASG	VAL	B	166	133	T	Turn	-123.39	-37.97
ASG	LYS	B	167	134	T	Turn	-68.62	156.38
ASG	GLY	B	168	135	C	Coil	89.89	-179.23
ASG	LYS	B	169	136	T	Turn	-84.16	165.87
ASG	LYS	B	170	137	T	Turn	-64.53	-22.70
ASG	GLN	B	171	138	T	Turn	-130.79	129.44
ASG	LEU	B	172	139	T	Turn	-68.79	153.30
ASG	PRO	B	173	140	C	Coil	-59.44	156.07
ASG	ASP	B	174	141	C	Coil	-58.19	125.23
ASG	SER	B	175	142	H	AlphaHelix	-63.88	-34.31
ASG	ASN	B	176	143	H	AlphaHelix	-68.09	-35.87
ASG	GLU	B	177	144	H	AlphaHelix	-64.91	-37.02
ASG	ILE	B	178	145	H	AlphaHelix	-63.82	-48.59
ASG	VAL	B	179	146	H	AlphaHelix	-58.99	-50.60
ASG	GLU	B	180	147	H	AlphaHelix	-63.75	-44.67
ASG	LYS	B	181	148	H	AlphaHelix	-75.99	-34.94
ASG	LEU	B	182	149	H	AlphaHelix	-115.09	-29.81
ASG	LEU	B	183	150	H	AlphaHelix	-110.93	-34.56
ASG	LEU	B	184	151	B	Bridge	-64.16	142.25
ASG	ARG	B	185	152	T	Turn	-82.30	117.50
ASG	ARG	B	186	153	T	Turn	-79.62	-52.46
ASG	LYS	B	187	154	T	Turn	-137.07	144.87
ASG	PHE	B	188	155	T	Turn	-60.86	124.74
ASG	ILE	B	189	156	C	Coil	-108.00	108.93
ASG	PRO	B	190	157	B	Bridge	-73.77	149.08
ASG	ASP	B	191	158	T	Turn	-62.20	124.95
ASG	PRO	B	192	159	T	Turn	-66.69	-23.86
ASG	GLN	B	193	160	T	Turn	-79.22	-8.38
ASG	GLY	B	194	161	T	Turn	84.37	16.89
ASG	SER	B	195	162	B	Bridge	-54.33	136.89
ASG	ASN	B	196	163	B	Bridge	-111.74	-176.07
ASG	MET	B	197	164	H	AlphaHelix	-71.64	-23.54
ASG	MET	B	198	165	H	AlphaHelix	-59.45	-42.07
ASG	PHE	B	199	166	H	AlphaHelix	-72.17	-43.56
ASG	ALA	B	200	167	H	AlphaHelix	-60.15	-49.36
ASG	PHE	B	201	168	H	AlphaHelix	-73.68	-26.43
ASG	PHE	B	202	169	H	AlphaHelix	-67.66	-46.18
ASG	ALA	B	203	170	H	AlphaHelix	-56.57	-43.30

ASG	GLN	B	204	171	H	AlphaHelix	-67.04	-50.42
ASG	HIS	B	205	172	H	AlphaHelix	-63.28	-47.80
ASG	PHE	B	206	173	H	AlphaHelix	-63.10	-52.41
ASG	THR	B	207	174	H	AlphaHelix	-71.09	-20.25
ASG	HIS	B	208	175	H	AlphaHelix	-79.14	4.57
ASG	GLN	B	209	176	T	Turn	-86.14	-22.45
ASG	PHE	B	210	177	T	Turn	-123.66	-7.99
ASG	PHE	B	211	178	T	Turn	-101.07	89.33
ASG	LYS	B	212	179	T	Turn	-132.60	67.68
ASG	THR	B	213	180	B	Bridge	-58.69	126.60
ASG	ASP	B	214	181	T	Turn	-91.64	81.59
ASG	HIS	B	215	182	T	Turn	-65.24	-15.86
ASG	LYS	B	216	183	T	Turn	-56.53	-43.93
ASG	ARG	B	217	184	T	Turn	-91.90	-36.05
ASG	GLY	B	218	185	T	Turn	143.75	167.19
ASG	PRO	B	219	186	T	Turn	-63.23	-20.93
ASG	ALA	B	220	187	T	Turn	-74.39	-11.23
ASG	PHE	B	221	188	B	Bridge	-113.67	152.91
ASG	THR	B	222	189	B	Bridge	-129.61	153.89
ASG	ASN	B	223	190	C	Coil	-98.38	-4.45
ASG	GLY	B	224	191	T	Turn	-97.30	84.05
ASG	LEU	B	225	192	T	Turn	-76.71	-8.79
ASG	GLY	B	226	193	T	Turn	-74.75	-21.36
ASG	HIS	B	227	194	T	Turn	50.56	42.84
ASG	GLY	B	228	195	C	Coil	174.43	-154.43
ASG	VAL	B	229	196	C	Coil	-89.03	81.43
ASG	ASP	B	230	197	C	Coil	-109.14	1.64
ASG	LEU	B	231	198	C	Coil	55.75	35.56
ASG	ASN	B	232	199	H	AlphaHelix	-64.66	-24.52
ASG	HIS	B	233	200	H	AlphaHelix	-72.50	-8.14
ASG	ILE	B	234	201	H	AlphaHelix	-106.12	-41.83
ASG	TYR	B	235	202	H	AlphaHelix	-104.86	-13.83
ASG	GLY	B	236	203	C	Coil	98.73	150.74
ASG	GLU	B	237	204	C	Coil	-69.61	-43.49
ASG	THR	B	238	205	C	Coil	-105.33	157.09
ASG	LEU	B	239	206	H	AlphaHelix	-60.29	-35.35
ASG	ALA	B	240	207	H	AlphaHelix	-61.41	-44.31
ASG	ARG	B	241	208	H	AlphaHelix	-72.26	-33.98
ASG	GLN	B	242	209	H	AlphaHelix	-61.23	-43.59
ASG	ARG	B	243	210	H	AlphaHelix	-65.30	-26.86

ASG	LYS	B	244	211	H	AlphaHelix	-73.49	-29.75
ASG	LEU	B	245	212	H	AlphaHelix	-93.19	-20.15
ASG	ARG	B	246	213	B	Bridge	-80.25	152.09
ASG	LEU	B	247	214	C	Coil	-90.83	-26.33
ASG	PHE	B	248	215	T	Turn	62.27	27.70
ASG	LYS	B	249	216	T	Turn	-133.90	130.70
ASG	ASP	B	250	217	T	Turn	60.05	20.67
ASG	GLY	B	251	218	T	Turn	74.35	8.77
ASG	LYS	B	252	219	T	Turn	-86.12	163.42
ASG	MET	B	253	220	B	Bridge	-97.72	144.00
ASG	LYS	B	254	221	C	Coil	-55.30	152.32
ASG	TYR	B	255	222	C	Coil	-161.05	176.28
ASG	GLN	B	256	223	E	Strand	-139.61	151.75
ASG	ILE	B	257	224	E	Strand	-100.50	127.95
ASG	ILE	B	258	225	E	Strand	-133.54	114.96
ASG	ASP	B	259	226	T	Turn	58.69	41.92
ASG	GLY	B	260	227	T	Turn	80.06	-9.01
ASG	GLU	B	261	228	E	Strand	-106.33	142.58
ASG	MET	B	262	229	E	Strand	-80.77	125.83
ASG	TYR	B	263	230	E	Strand	-127.69	164.42
ASG	PRO	B	264	231	C	Coil	-60.62	153.63
ASG	PRO	B	265	232	C	Coil	-71.83	174.97
ASG	THR	B	266	233	B	Bridge	-90.36	165.17
ASG	VAL	B	267	234	H	AlphaHelix	-65.08	-36.05
ASG	LYS	B	268	235	H	AlphaHelix	-65.20	-34.73
ASG	ASP	B	269	236	H	AlphaHelix	-80.44	-40.16
ASG	THR	B	270	237	H	AlphaHelix	-93.47	-23.36
ASG	GLN	B	271	238	C	Coil	61.90	26.12
ASG	ALA	B	272	239	C	Coil	-91.53	122.88
ASG	GLU	B	273	240	C	Coil	-61.70	136.01
ASG	MET	B	274	241	C	Coil	-132.73	163.05
ASG	ILE	B	275	242	C	Coil	-98.64	106.57
ASG	TYR	B	276	243	C	Coil	-136.43	138.60
ASG	PRO	B	277	244	T	Turn	-60.52	151.64
ASG	PRO	B	278	245	T	Turn	-60.34	-20.59
ASG	GLN	B	279	246	T	Turn	-81.02	-10.38
ASG	VAL	B	280	247	T	Turn	-73.60	120.87
ASG	PRO	B	281	248	C	Coil	-66.85	153.24
ASG	GLU	B	282	249	G	310Helix	-55.68	-36.89
ASG	HIS	B	283	250	G	310Helix	-74.44	-14.31

ASG	LEU	B	284	251	G	310Helix	-101.21	1.51
ASG	ARG	B	285	252	C	Coil	-84.12	82.90
ASG	PHE	B	286	253	B	Bridge	-70.24	135.56
ASG	ALA	B	287	254	C	Coil	-104.90	118.86
ASG	VAL	B	288	255	T	Turn	-129.91	175.94
ASG	GLY	B	289	256	T	Turn	-55.04	-47.24
ASG	GLN	B	290	257	T	Turn	-90.56	128.29
ASG	GLU	B	291	258	T	Turn	-63.50	-21.88
ASG	VAL	B	292	259	T	Turn	-103.73	0.67
ASG	PHE	B	293	260	T	Turn	-73.15	-10.84
ASG	GLY	B	294	261	T	Turn	-74.62	-5.96
ASG	LEU	B	295	262	T	Turn	-62.85	-37.24
ASG	VAL	B	296	263	T	Turn	-144.38	132.59
ASG	PRO	B	297	264	H	AlphaHelix	-53.30	-32.44
ASG	GLY	B	298	265	H	AlphaHelix	-57.78	-41.88
ASG	LEU	B	299	266	H	AlphaHelix	-71.42	-41.16
ASG	MET	B	300	267	H	AlphaHelix	-68.53	-23.76
ASG	MET	B	301	268	H	AlphaHelix	-65.73	-50.88
ASG	TYR	B	302	269	H	AlphaHelix	-67.28	-32.26
ASG	ALA	B	303	270	H	AlphaHelix	-64.41	-38.51
ASG	THR	B	304	271	H	AlphaHelix	-69.05	-43.64
ASG	ILE	B	305	272	H	AlphaHelix	-61.15	-46.92
ASG	TRP	B	306	273	H	AlphaHelix	-69.02	-30.22
ASG	LEU	B	307	274	H	AlphaHelix	-63.41	-45.33
ASG	ARG	B	308	275	H	AlphaHelix	-63.13	-41.63
ASG	GLU	B	309	276	H	AlphaHelix	-61.45	-43.26
ASG	HIS	B	310	277	H	AlphaHelix	-58.21	-48.26
ASG	ASN	B	311	278	H	AlphaHelix	-70.44	-27.17
ASG	ARG	B	312	279	H	AlphaHelix	-67.07	-47.52
ASG	VAL	B	313	280	H	AlphaHelix	-62.76	-34.18
ASG	CYS	B	314	281	H	AlphaHelix	-58.71	-42.78
ASG	ASP	B	315	282	H	AlphaHelix	-64.85	-39.27
ASG	VAL	B	316	283	H	AlphaHelix	-64.65	-44.39
ASG	LEU	B	317	284	H	AlphaHelix	-69.75	-33.81
ASG	LYS	B	318	285	H	AlphaHelix	-65.95	-35.61
ASG	GLN	B	319	286	H	AlphaHelix	-65.78	-38.67
ASG	GLU	B	320	287	H	AlphaHelix	-75.61	-36.18
ASG	HIS	B	321	288	T	Turn	-128.75	74.66
ASG	PRO	B	322	289	T	Turn	-66.56	-8.95
ASG	GLU	B	323	290	T	Turn	-92.82	-8.29

ASG	TRP	B	324	291	T	Turn	-80.51	154.67
ASG	GLY	B	325	292	C	Coil	-99.02	178.65
ASG	ASP	B	326	293	H	AlphaHelix	-61.50	-43.61
ASG	GLU	B	327	294	H	AlphaHelix	-61.58	-49.61
ASG	GLN	B	328	295	H	AlphaHelix	-67.16	-33.93
ASG	LEU	B	329	296	H	AlphaHelix	-65.68	-41.50
ASG	PHE	B	330	297	H	AlphaHelix	-64.51	-51.67
ASG	GLN	B	331	298	H	AlphaHelix	-63.21	-42.15
ASG	THR	B	332	299	H	AlphaHelix	-66.30	-41.70
ASG	SER	B	333	300	H	AlphaHelix	-58.88	-42.38
ASG	ARG	B	334	301	H	AlphaHelix	-59.60	-48.45
ASG	LEU	B	335	302	H	AlphaHelix	-59.09	-39.23
ASG	ILE	B	336	303	H	AlphaHelix	-65.69	-44.12
ASG	LEU	B	337	304	H	AlphaHelix	-66.47	-28.91
ASG	ILE	B	338	305	H	AlphaHelix	-64.12	-44.43
ASG	GLY	B	339	306	H	AlphaHelix	-60.73	-45.96
ASG	GLU	B	340	307	H	AlphaHelix	-57.35	-42.27
ASG	THR	B	341	308	H	AlphaHelix	-61.66	-52.02
ASG	ILE	B	342	309	H	AlphaHelix	-61.99	-41.80
ASG	LYS	B	343	310	H	AlphaHelix	-57.27	-51.03
ASG	ILE	B	344	311	H	AlphaHelix	-66.03	-41.88
ASG	VAL	B	345	312	H	AlphaHelix	-59.40	-43.75
ASG	ILE	B	346	313	H	AlphaHelix	-74.11	-50.65
ASG	GLU	B	347	314	H	AlphaHelix	-93.04	-6.08
ASG	ASP	B	348	315	H	AlphaHelix	-121.36	-53.85
ASG	TYR	B	349	316	H	AlphaHelix	-72.09	-60.64
ASG	VAL	B	350	317	H	AlphaHelix	-64.76	-33.83
ASG	GLN	B	351	318	H	AlphaHelix	-58.81	-46.16
ASG	HIS	B	352	319	H	AlphaHelix	-68.35	-43.11
ASG	LEU	B	353	320	H	AlphaHelix	-64.60	-39.60
ASG	SER	B	354	321	H	AlphaHelix	-69.42	-36.50
ASG	GLY	B	355	322	C	Coil	76.87	14.11
ASG	TYR	B	356	323	C	Coil	-69.92	147.23
ASG	HIS	B	357	324	C	Coil	-89.54	-24.61
ASG	PHE	B	358	325	C	Coil	-64.98	135.13
ASG	LYS	B	359	326	C	Coil	-87.56	106.94
ASG	LEU	B	360	327	C	Coil	-60.31	151.29
ASG	LYS	B	361	328	C	Coil	-135.99	132.69
ASG	PHE	B	362	329	C	Coil	-91.70	109.00
ASG	ASP	B	363	330	C	Coil	-154.83	95.27

ASG	PRO	B	364	331	G	310Helix	-52.47	-25.48
ASG	GLU	B	365	332	G	310Helix	-67.44	-19.81
ASG	LEU	B	366	333	G	310Helix	-60.45	-23.01
ASG	LEU	B	367	334	G	310Helix	-103.21	-11.28
ASG	PHE	B	368	335	T	Turn	-61.00	-16.89
ASG	ASN	B	369	336	T	Turn	-111.44	17.92
ASG	LYS	B	370	337	T	Turn	-117.82	166.71
ASG	GLN	B	371	338	C	Coil	-85.89	117.27
ASG	PHE	B	372	339	C	Coil	-158.36	135.20
ASG	GLN	B	373	340	C	Coil	-95.95	117.83
ASG	TYR	B	374	341	C	Coil	-82.51	66.42
ASG	GLN	B	375	342	C	Coil	-159.21	159.67
ASG	ASN	B	376	343	C	Coil	-158.24	152.30
ASG	ARG	B	377	344	C	Coil	-133.13	123.24
ASG	ILE	B	378	345	C	Coil	-67.88	123.71
ASG	ALA	B	379	346	B	Bridge	-83.53	140.93
ASG	ALA	B	380	347	H	AlphaHelix	-61.15	-34.36
ASG	GLU	B	381	348	H	AlphaHelix	-69.84	-31.57
ASG	PHE	B	382	349	H	AlphaHelix	-62.78	-44.70
ASG	ASN	B	383	350	H	AlphaHelix	-58.16	-49.34
ASG	THR	B	384	351	H	AlphaHelix	-60.71	-44.87
ASG	LEU	B	385	352	H	AlphaHelix	-73.37	-12.05
ASG	TYR	B	386	353	H	AlphaHelix	-95.90	18.51
ASG	HIS	B	387	354	C	Coil	-84.10	73.08
ASG	TRP	B	388	355	C	Coil	-89.48	53.09
ASG	HIS	B	389	356	G	310Helix	-57.45	-33.55
ASG	PRO	B	390	357	G	310Helix	-59.28	-17.83
ASG	LEU	B	391	358	G	310Helix	-60.07	-32.14
ASG	LEU	B	392	359	C	Coil	-64.79	139.90
ASG	PRO	B	393	360	T	Turn	-82.76	172.79
ASG	ASP	B	394	361	T	Turn	-69.20	-41.30
ASG	THR	B	395	362	T	Turn	-141.26	164.36
ASG	PHE	B	396	363	E	Strand	-102.93	125.40
ASG	GLN	B	397	364	E	Strand	-108.16	102.21
ASG	ILE	B	398	365	E	Strand	-118.13	114.27
ASG	HIS	B	399	366	T	Turn	61.21	-123.10
ASG	ASP	B	400	367	T	Turn	-91.51	-3.10
ASG	GLN	B	401	368	E	Strand	-111.01	147.82
ASG	LYS	B	402	369	E	Strand	-115.41	125.06
ASG	TYR	B	403	370	E	Strand	-110.41	128.28

ASG	ASN	B	404	371	C	Coil	-76.67	177.57
ASG	TYR	B	405	372	H	AlphaHelix	-65.32	-42.93
ASG	GLN	B	406	373	H	AlphaHelix	-62.13	-28.82
ASG	GLN	B	407	374	H	AlphaHelix	-81.21	-35.38
ASG	PHE	B	408	375	H	AlphaHelix	-85.79	-29.56
ASG	ILE	B	409	376	T	Turn	-72.58	131.90
ASG	TYR	B	410	377	T	Turn	60.76	19.62
ASG	ASN	B	411	378	T	Turn	-108.12	82.61
ASG	ASN	B	412	379	H	AlphaHelix	-75.10	-12.55
ASG	SER	B	413	380	H	AlphaHelix	-67.10	-27.09
ASG	ILE	B	414	381	H	AlphaHelix	-62.54	-39.82
ASG	LEU	B	415	382	H	AlphaHelix	-64.55	-44.03
ASG	LEU	B	416	383	H	AlphaHelix	-70.74	-37.54
ASG	GLU	B	417	384	H	AlphaHelix	-57.94	-44.66
ASG	HIS	B	418	385	H	AlphaHelix	-97.19	-35.51
ASG	GLY	B	419	386	H	AlphaHelix	89.67	163.26
ASG	ILE	B	420	387	H	AlphaHelix	-65.57	-37.58
ASG	THR	B	421	388	H	AlphaHelix	-60.37	-50.08
ASG	GLN	B	422	389	H	AlphaHelix	-63.55	-34.22
ASG	PHE	B	423	390	H	AlphaHelix	-60.55	-48.65
ASG	VAL	B	424	391	H	AlphaHelix	-63.37	-46.71
ASG	GLU	B	425	392	H	AlphaHelix	-58.50	-46.51
ASG	SER	B	426	393	H	AlphaHelix	-70.48	-48.57
ASG	PHE	B	427	394	H	AlphaHelix	-66.09	-31.99
ASG	THR	B	428	395	H	AlphaHelix	-60.13	-30.06
ASG	ARG	B	429	396	H	AlphaHelix	-91.78	-19.34
ASG	GLN	B	430	397	C	Coil	-90.48	125.48
ASG	ILE	B	431	398	B	Bridge	-73.96	143.84
ASG	ALA	B	432	399	C	Coil	-94.87	166.75
ASG	GLY	B	433	400	B	Bridge	-86.60	153.28
ASG	ARG	B	434	401	C	Coil	-69.71	139.07
ASG	VAL	B	435	402	C	Coil	-88.76	-46.55
ASG	ALA	B	436	403	C	Coil	-90.96	171.87
ASG	GLY	B	437	404	C	Coil	101.49	-12.62
ASG	GLY	B	438	405	C	Coil	82.94	164.15
ASG	ARG	B	439	406	C	Coil	50.20	51.73
ASG	ASN	B	440	407	C	Coil	-141.84	17.96
ASG	VAL	B	441	408	B	Bridge	-88.05	121.75
ASG	PRO	B	442	409	C	Coil	-57.61	131.56
ASG	PRO	B	443	410	G	310Helix	-57.61	-22.54

ASG	ALA	B	444	411	G	310Helix	-57.58	-31.42
ASG	VAL	B	445	412	G	310Helix	-115.47	29.09
ASG	GLN	B	446	413	H	AlphaHelix	-55.22	-48.79
ASG	LYS	B	447	414	H	AlphaHelix	-67.75	-24.91
ASG	VAL	B	448	415	H	AlphaHelix	-71.23	-40.07
ASG	SER	B	449	416	H	AlphaHelix	-66.18	-37.07
ASG	GLN	B	450	417	H	AlphaHelix	-67.36	-37.75
ASG	ALA	B	451	418	H	AlphaHelix	-60.66	-36.74
ASG	SER	B	452	419	H	AlphaHelix	-57.60	-40.43
ASG	ILE	B	453	420	H	AlphaHelix	-74.40	-48.88
ASG	ASP	B	454	421	H	AlphaHelix	-57.38	-45.12
ASG	GLN	B	455	422	H	AlphaHelix	-66.66	-40.18
ASG	SER	B	456	423	H	AlphaHelix	-65.71	-26.41
ASG	ARG	B	457	424	H	AlphaHelix	-77.74	-34.37
ASG	GLN	B	458	425	H	AlphaHelix	-60.36	-37.38
ASG	MET	B	459	426	H	AlphaHelix	-89.71	0.28
ASG	LYS	B	460	427	C	Coil	58.59	55.50
ASG	TYR	B	461	428	C	Coil	-64.44	140.06
ASG	GLN	B	462	429	C	Coil	-72.52	170.09
ASG	SER	B	463	430	C	Coil	-64.42	166.15
ASG	PHE	B	464	431	H	AlphaHelix	-57.60	-44.72
ASG	ASN	B	465	432	H	AlphaHelix	-67.16	-27.89
ASG	GLU	B	466	433	H	AlphaHelix	-70.07	-33.17
ASG	TYR	B	467	434	H	AlphaHelix	-78.37	-27.30
ASG	ARG	B	468	435	H	AlphaHelix	-64.09	-47.64
ASG	LYS	B	469	436	H	AlphaHelix	-66.70	-34.87
ASG	ARG	B	470	437	H	AlphaHelix	-59.78	-31.08
ASG	PHE	B	471	438	H	AlphaHelix	-111.44	34.90
ASG	MET	B	472	439	C	Coil	58.70	39.34
ASG	LEU	B	473	440	C	Coil	-112.76	142.77
ASG	LYS	B	474	441	C	Coil	-67.63	129.86
ASG	PRO	B	475	442	C	Coil	-67.27	146.91
ASG	TYR	B	476	443	C	Coil	-69.71	140.91
ASG	GLU	B	477	444	C	Coil	-87.56	-23.36
ASG	SER	B	478	445	C	Coil	-154.26	168.72
ASG	PHE	B	479	446	H	AlphaHelix	-68.93	-31.29
ASG	GLU	B	480	447	H	AlphaHelix	-68.18	-38.03
ASG	GLU	B	481	448	H	AlphaHelix	-65.73	-31.20
ASG	LEU	B	482	449	H	AlphaHelix	-70.78	-53.42
ASG	THR	B	483	450	H	AlphaHelix	-89.30	-28.32

ASG	GLY	B	484	451	C	Coil	80.22	11.56
ASG	GLU	B	485	452	C	Coil	-144.40	-170.54
ASG	LYS	B	486	453	H	AlphaHelix	-109.67	-38.13
ASG	GLU	B	487	454	H	AlphaHelix	-67.64	-58.10
ASG	MET	B	488	455	H	AlphaHelix	-66.51	-33.27
ASG	SER	B	489	456	H	AlphaHelix	-54.48	-48.39
ASG	ALA	B	490	457	H	AlphaHelix	-62.53	-45.92
ASG	GLU	B	491	458	H	AlphaHelix	-65.78	-33.81
ASG	LEU	B	492	459	H	AlphaHelix	-63.67	-47.29
ASG	GLU	B	493	460	H	AlphaHelix	-67.38	-32.47
ASG	ALA	B	494	461	H	AlphaHelix	-67.57	-32.32
ASG	LEU	B	495	462	H	AlphaHelix	-83.19	-55.17
ASG	TYR	B	496	463	H	AlphaHelix	-91.64	-31.24
ASG	GLY	B	497	464	C	Coil	84.97	-47.85
ASG	ASP	B	498	465	C	Coil	-119.41	147.31
ASG	ILE	B	499	466	G	310Helix	-69.34	-32.17
ASG	ASP	B	500	467	G	310Helix	-78.18	3.74
ASG	ALA	B	501	468	G	310Helix	-105.25	-7.77
ASG	VAL	B	502	469	C	Coil	-68.20	136.04
ASG	GLU	B	503	470	C	Coil	-83.69	158.73
ASG	LEU	B	504	471	H	AlphaHelix	-57.39	-58.84
ASG	TYR	B	505	472	H	AlphaHelix	-63.65	-50.22
ASG	PRO	B	506	473	H	AlphaHelix	-61.34	-34.79
ASG	ALA	B	507	474	H	AlphaHelix	-67.54	-37.68
ASG	LEU	B	508	475	H	AlphaHelix	-62.05	-37.18
ASG	LEU	B	509	476	H	AlphaHelix	-84.03	-18.36
ASG	VAL	B	510	477	H	AlphaHelix	-106.64	-5.05
ASG	GLU	B	511	478	C	Coil	-57.97	144.72
ASG	LYS	B	512	479	C	Coil	-56.37	115.28
ASG	PRO	B	513	480	B	Bridge	-70.58	148.86
ASG	ARG	B	514	481	T	Turn	-58.69	159.97
ASG	PRO	B	515	482	T	Turn	-51.05	116.87
ASG	ASP	B	516	483	T	Turn	53.78	33.49
ASG	ALA	B	517	484	T	Turn	-115.31	168.17
ASG	ILE	B	518	485	C	Coil	-86.03	-26.94
ASG	PHE	B	519	486	C	Coil	-121.71	166.23
ASG	GLY	B	520	487	B	Bridge	-93.75	177.82
ASG	GLU	B	521	488	H	AlphaHelix	-56.11	-48.57
ASG	THR	B	522	489	H	AlphaHelix	-62.04	-47.22
ASG	MET	B	523	490	H	AlphaHelix	-49.57	-45.16

ASG	VAL	B	524	491	H	AlphaHelix	-72.00	-49.58
ASG	GLU	B	525	492	H	AlphaHelix	-69.18	-23.63
ASG	VAL	B	526	493	H	AlphaHelix	-91.31	-41.29
ASG	GLY	B	527	494	H	AlphaHelix	-72.48	-37.21
ASG	ALA	B	528	495	H	AlphaHelix	-63.00	-42.50
ASG	PRO	B	529	496	H	AlphaHelix	-58.79	-44.96
ASG	PHE	B	530	497	H	AlphaHelix	-59.82	-41.18
ASG	SER	B	531	498	H	AlphaHelix	-67.36	-50.68
ASG	LEU	B	532	499	H	AlphaHelix	-66.79	-35.30
ASG	LYS	B	533	500	H	AlphaHelix	-66.35	-36.86
ASG	GLY	B	534	501	H	AlphaHelix	-71.57	-30.91
ASG	LEU	B	535	502	H	AlphaHelix	-82.16	-59.27
ASG	MET	B	536	503	H	AlphaHelix	-74.17	-23.32
ASG	GLY	B	537	504	H	AlphaHelix	-72.40	-14.03
ASG	ASN	B	538	505	C	Coil	-56.48	143.29
ASG	VAL	B	539	506	G	310Helix	-60.04	-33.08
ASG	ILE	B	540	507	G	310Helix	-67.17	-15.41
ASG	CYS	B	541	508	G	310Helix	-86.25	-10.06
ASG	SER	B	542	509	T	Turn	-72.42	151.50
ASG	PRO	B	543	510	T	Turn	-56.36	-35.47
ASG	ALA	B	544	511	T	Turn	-68.41	-27.82
ASG	TYR	B	545	512	T	Turn	-97.06	-34.61
ASG	TRP	B	546	513	T	Turn	-76.93	68.59
ASG	LYS	B	547	514	C	Coil	-135.58	155.79
ASG	PRO	B	548	515	G	310Helix	-62.22	-35.25
ASG	SER	B	549	516	G	310Helix	-61.69	-28.88
ASG	THR	B	550	517	G	310Helix	-61.73	-30.25
ASG	PHE	B	551	518	G	310Helix	-111.48	21.63
ASG	GLY	B	552	519	C	Coil	85.46	13.13
ASG	GLY	B	553	520	C	Coil	115.23	-175.71
ASG	GLU	B	554	521	H	AlphaHelix	-64.74	-32.81
ASG	VAL	B	555	522	H	AlphaHelix	-61.63	-48.33
ASG	GLY	B	556	523	H	AlphaHelix	-64.77	-42.78
ASG	PHE	B	557	524	H	AlphaHelix	-61.52	-33.75
ASG	GLN	B	558	525	H	AlphaHelix	-73.37	-26.56
ASG	ILE	B	559	526	H	AlphaHelix	-60.41	-47.11
ASG	ILE	B	560	527	H	AlphaHelix	-59.64	-53.36
ASG	ASN	B	561	528	H	AlphaHelix	-74.03	-11.02
ASG	THR	B	562	529	H	AlphaHelix	-114.99	12.30
ASG	ALA	B	563	530	C	Coil	-70.92	149.68

ASG	SER	B	564	531	C	Coil	-159.14	166.13
ASG	ILE	B	565	532	H	AlphaHelix	-64.33	-33.78
ASG	GLN	B	566	533	H	AlphaHelix	-70.71	-41.72
ASG	SER	B	567	534	H	AlphaHelix	-72.65	-31.38
ASG	LEU	B	568	535	H	AlphaHelix	-60.60	-40.06
ASG	ILE	B	569	536	H	AlphaHelix	-73.26	-45.56
ASG	CYS	B	570	537	H	AlphaHelix	-62.37	-35.54
ASG	ASN	B	571	538	H	AlphaHelix	-78.06	-20.95
ASG	ASN	B	572	539	C	Coil	-128.88	-5.05
ASG	VAL	B	573	540	T	Turn	-120.09	125.72
ASG	LYS	B	574	541	T	Turn	-57.10	130.09
ASG	GLY	B	575	542	T	Turn	92.46	-4.51
ASG	CYS	B	576	543	T	Turn	47.78	58.34
ASG	PRO	B	577	544	C	Coil	-64.43	148.46
ASG	PHE	B	578	545	C	Coil	-63.06	139.66
ASG	THR	B	579	546	C	Coil	-146.05	169.15
ASG	SER	B	580	547	C	Coil	-174.86	168.21
ASG	PHE	B	581	548	C	Coil	-96.72	-0.32
ASG	SER	B	582	549	B	Bridge	-125.74	150.52
ASG	VAL	B	583	550	C	Coil	-65.61	142.18
ASG	PRO	B	584	551	C	Coil	-83.01	360.00