```
REM  -------------------- Secondary structure summary -------------------  ~~~~
REM                                                                        ~~~~
CHN  /home/proj/stride/tmp/tmpEbxraLpdb A                                  ~~~~
REM                                                                        ~~~~
REM               .         .         .         .         .               ~~~~
SEQ  1    SGFRKMAFPSGKVEGCMVQVTCGTTTLNGLWLDDTVYCPRHVICTAEDML   50          ~~~~
STR       TTTT     HHHHHH EEEEEETTEEEEEEEETTEEEEGGGG  HHHHH               ~~~~
REM                                                                        ~~~~
REM               .         .         .         .         .               ~~~~
SEQ  51   NPNYEDLLIRKSNHSFLVQAGNVQLRVIGHSMQNCLLRLKVDTSNPKTPK  100         ~~~~
STR          HHHHHHH  GGG EEEETTEEE EEEEEEETTEEEEEE   TTTT                ~~~~
REM                                                                        ~~~~
REM               .         .         .         .         .               ~~~~
SEQ  101  YKFVRIQPGQTFSVLACYNGSPSGVYQCAMRPNHTIKGSFLNGSCGSVGF  150         ~~~~
STR            TTTEEEEEEEEETTEEEEEEEEEETTTT B    TTTTTTTEE                ~~~~
REM                                                                        ~~~~
REM                                                                        ~~~~
REM                                                                        ~~~~
LOC  AlphaHelix   SER    10 A      GLY     15 A                            ~~~~
LOC  AlphaHelix   ALA    46 A      LEU     50 A                            ~~~~
LOC  AlphaHelix   TYR    54 A      ARG     60 A                            ~~~~
LOC  310Helix     ARG    40 A      ILE     43 A                            ~~~~
LOC  310Helix     ASN    63 A      SER     65 A                            ~~~~
LOC  Strand       MET    17 A      CYS     22 A                            ~~~~
LOC  Strand       THR    25 A      LEU     32 A                            ~~~~
LOC  Strand       THR    35 A      PRO     39 A                            ~~~~
LOC  Strand       LEU    67 A      ALA     70 A                            ~~~~
LOC  Strand       VAL    73 A      LEU     75 A                            ~~~~
LOC  Strand       VAL    77 A      GLN     83 A                            ~~~~
LOC  Strand       LEU    86 A      VAL     91 A                            ~~~~
LOC  Strand       GLN   110 A      TYR    118 A                            ~~~~
LOC  Strand       SER   121 A      MET    130 A                            ~~~~
LOC  Strand       VAL   148 A      GLY    149 A                            ~~~~
LOC  TurnVIII     SER     1 A      ARG      4 A                            ~~~~
LOC  TurnII'      CYS    22 A      THR     25 A                            ~~~~
LOC  TurnII'      LEU    32 A      THR     35 A                            ~~~~
LOC  TurnIV       GLN    69 A      ASN     72 A                            ~~~~
LOC  TurnII'      ALA    70 A      VAL     73 A                            ~~~~
LOC  TurnII'      GLN    83 A      LEU     86 A                            ~~~~
LOC  TurnI        ASN    95 A      THR     98 A                            ~~~~
LOC  TurnII       GLN   107 A      GLN    110 A                            ~~~~
LOC  TurnIV       CYS   117 A      GLY    120 A                            ~~~~
LOC  TurnI'       TYR   118 A      SER    121 A                            ~~~~
LOC  TurnI        ARG   131 A      HIS    134 A                            ~~~~
LOC  TurnII       LEU   141 A      SER    144 A                            ~~~~
LOC  TurnII       SER   144 A      SER    147 A                            ~~~~
REM                                                                        ~~~~
REM  --------------- Detailed secondary structure assignment-------------  ~~~~
REM                                                                        ~~~~
REM  |---Residue---|    |--Structure--|   |-Phi-|   |-Psi-|  |-Area-|      ~~~~
ASG  SER A    1    1    T          Turn    360.00    114.46     109.8      ~~~~
ASG  GLY A    2    2    T          Turn    -66.60    -24.47      91.7      ~~~~
ASG  PHE A    3    3    T          Turn   -142.74    102.86     188.2      ~~~~
ASG  ARG A    4    4    T          Turn    -81.84    140.92     191.0      ~~~~
ASG  LYS A    5    5    C          Coil    -71.44    131.66     170.8      ~~~~
ASG  MET A    6    6    C          Coil   -119.68    132.19     153.1      ~~~~
ASG  ALA A    7    7    C          Coil    -96.07    157.94      30.3      ~~~~
ASG  PHE A    8    8    C          Coil    -76.86    154.78     125.1      ~~~~
ASG  PRO A    9    9    C          Coil    -63.35    136.28     118.6      ~~~~
ASG  SER A   10   10    H    AlphaHelix    -94.72     -3.80      19.8      ~~~~
ASG  GLY A   11   11    H    AlphaHelix    -43.48    -49.99      47.8      ~~~~
ASG  LYS A   12   12    H    AlphaHelix    -62.41    -30.20     159.4      ~~~~
ASG  VAL A   13   13    H    AlphaHelix    -85.74    -32.57      20.3      ~~~~
ASG  GLU A   14   14    H    AlphaHelix    -54.10    -44.48      86.0      ~~~~
ASG  GLY A   15   15    H    AlphaHelix    -69.19      2.02      22.7      ~~~~
ASG  CYS A   16   16    C          Coil   -109.81     -5.96       3.0      ~~~~
ASG  MET A   17   17    E        Strand    -84.95    128.58      12.3      ~~~~
ASG  VAL A   18   18    E        Strand   -134.93    172.17       0.8      ~~~~
ASG  GLN A   19   19    E        Strand   -110.69    136.01      34.1      ~~~~
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ASG	VAL	A	20	20	E	Strand	-125.60	127.49	0.0	~~~~
ASG	THR	A	21	21	E	Strand	-123.98	145.70	25.1	~~~~
ASG	CYS	A	22	22	E	Strand	-149.99	97.50	7.2	~~~~
ASG	GLY	A	23	23	T	Turn	75.22	-133.71	70.0	~~~~
ASG	THR	A	24	24	T	Turn	-80.97	-8.44	150.1	~~~~
ASG	THR	A	25	25	E	Strand	-92.80	125.22	37.4	~~~~
ASG	THR	A	26	26	E	Strand	-132.11	130.84	38.5	~~~~
ASG	LEU	A	27	27	E	Strand	-149.46	-178.11	2.6	~~~~
ASG	ASN	A	28	28	E	Strand	-87.11	148.00	0.0	~~~~
ASG	GLY	A	29	29	E	Strand	-132.42	158.90	0.0	~~~~
ASG	LEU	A	30	30	E	Strand	-114.57	116.16	27.4	~~~~
ASG	TRP	A	31	31	E	Strand	-101.53	109.24	20.8	~~~~
ASG	LEU	A	32	32	E	Strand	-124.86	123.68	7.1	~~~~
ASG	ASP	A	33	33	T	Turn	57.67	-128.67	67.9	~~~~
ASG	ASP	A	34	34	T	Turn	-106.96	32.98	65.5	~~~~
ASG	THR	A	35	35	E	Strand	-132.36	136.75	5.6	~~~~
ASG	VAL	A	36	36	E	Strand	-116.13	122.15	0.0	~~~~
ASG	TYR	A	37	37	E	Strand	-103.50	138.77	23.5	~~~~
ASG	CYS	A	38	38	E	Strand	-158.15	162.74	3.1	~~~~
ASG	PRO	A	39	39	E	Strand	-59.39	136.76	24.1	~~~~
ASG	ARG	A	40	40	G	310Helix	-68.53	-17.27	47.7	~~~~
ASG	HIS	A	41	41	G	310Helix	-69.70	-0.49	61.7	~~~~
ASG	VAL	A	42	42	G	310Helix	-65.49	-22.40	0.0	~~~~
ASG	ILE	A	43	43	G	310Helix	-85.59	-2.95	5.5	~~~~
ASG	CYS	A	44	44	C	Coil	-97.82	146.40	4.9	~~~~
ASG	THR	A	45	45	C	Coil	-94.56	165.80	71.3	~~~~
ASG	ALA	A	46	46	H	AlphaHelix	-52.03	-34.54	95.4	~~~~
ASG	GLU	A	47	47	H	AlphaHelix	-76.97	-40.93	172.7	~~~~
ASG	ASP	A	48	48	H	AlphaHelix	-56.19	-34.39	48.2	~~~~
ASG	MET	A	49	49	H	AlphaHelix	-60.25	-29.59	69.8	~~~~
ASG	LEU	A	50	50	H	AlphaHelix	-57.38	-42.81	150.1	~~~~
ASG	ASN	A	51	51	C	Coil	-158.91	82.16	143.8	~~~~
ASG	PRO	A	52	52	C	Coil	-83.92	145.30	38.8	~~~~
ASG	ASN	A	53	53	C	Coil	-118.03	82.97	88.3	~~~~
ASG	TYR	A	54	54	H	AlphaHelix	-51.78	-47.45	30.0	~~~~
ASG	GLU	A	55	55	H	AlphaHelix	-55.27	-41.07	106.1	~~~~
ASG	ASP	A	56	56	H	AlphaHelix	-74.64	-39.13	100.2	~~~~
ASG	LEU	A	57	57	H	AlphaHelix	-67.69	-35.40	30.4	~~~~
ASG	LEU	A	58	58	H	AlphaHelix	-69.82	-38.22	17.3	~~~~
ASG	ILE	A	59	59	H	AlphaHelix	-53.22	-37.93	136.6	~~~~
ASG	ARG	A	60	60	H	AlphaHelix	-73.47	-4.57	81.0	~~~~
ASG	LYS	A	61	61	C	Coil	-100.59	162.43	58.6	~~~~
ASG	SER	A	62	62	C	Coil	-140.04	166.91	49.8	~~~~
ASG	ASN	A	63	63	G	310Helix	-52.49	-43.61	54.1	~~~~
ASG	HIS	A	64	64	G	310Helix	-68.45	-3.09	164.3	~~~~
ASG	SER	A	65	65	G	310Helix	-83.64	-12.88	35.2	~~~~
ASG	PHE	A	66	66	C	Coil	-109.76	125.90	8.3	~~~~
ASG	LEU	A	67	67	E	Strand	-108.63	103.79	72.9	~~~~
ASG	VAL	A	68	68	E	Strand	-102.20	124.42	0.2	~~~~
ASG	GLN	A	69	69	E	Strand	-127.78	121.72	52.4	~~~~
ASG	ALA	A	70	70	E	Strand	-105.45	98.67	19.3	~~~~
ASG	GLY	A	71	71	T	Turn	76.37	-110.38	61.9	~~~~
ASG	ASN	A	72	72	T	Turn	-111.47	-7.39	156.4	~~~~
ASG	VAL	A	73	73	E	Strand	-95.54	127.00	91.4	~~~~
ASG	GLN	A	74	74	E	Strand	-82.66	135.96	130.8	~~~~
ASG	LEU	A	75	75	E	Strand	-103.23	150.98	15.4	~~~~
ASG	ARG	A	76	76	C	Coil	-97.85	116.27	45.1	~~~~
ASG	VAL	A	77	77	E	Strand	-82.10	121.12	17.5	~~~~
ASG	ILE	A	78	78	E	Strand	-110.07	17.80	98.1	~~~~
ASG	GLY	A	79	79	E	Strand	172.56	149.48	17.5	~~~~
ASG	HIS	A	80	80	E	Strand	-145.03	136.63	57.4	~~~~
ASG	SER	A	81	81	E	Strand	-149.47	161.93	56.3	~~~~
ASG	MET	A	82	82	E	Strand	-106.62	134.81	55.4	~~~~
ASG	GLN	A	83	83	E	Strand	-127.80	94.16	67.6	~~~~
ASG	ASN	A	84	84	T	Turn	56.33	-125.01	143.6	~~~~
ASG	CYS	A	85	85	T	Turn	-90.68	11.45	83.0	~~~~
ASG	LEU	A	86	86	E	Strand	-109.49	151.90	65.5	~~~~
ASG	LEU	A	87	87	E	Strand	-102.71	126.56	1.0	~~~~
ASG	ARG	A	88	88	E	Strand	-105.21	110.04	60.0	~~~~

ASG	LEU	A	89	89	E	Strand	-103.64	117.22	0.0	~~~~
ASG	LYS	A	90	90	E	Strand	-82.61	128.77	73.2	~~~~
ASG	VAL	A	91	91	E	Strand	-115.86	159.65	1.2	~~~~
ASG	ASP	A	92	92	C	Coil	-80.48	-4.92	92.1	~~~~
ASG	THR	A	93	93	C	Coil	-125.19	133.62	60.7	~~~~
ASG	SER	A	94	94	C	Coil	-86.88	135.00	67.7	~~~~
ASG	ASN	A	95	95	T	Turn	-66.16	113.31	8.3	~~~~
ASG	PRO	A	96	96	T	Turn	-67.53	-13.15	114.9	~~~~
ASG	LYS	A	97	97	T	Turn	-104.37	13.14	149.9	~~~~
ASG	THR	A	98	98	T	Turn	-58.69	121.82	34.3	~~~~
ASG	PRO	A	99	99	C	Coil	-87.71	177.68	30.5	~~~~
ASG	LYS	A	100	100	C	Coil	-73.59	135.57	194.6	~~~~
ASG	TYR	A	101	101	C	Coil	-154.71	167.37	90.1	~~~~
ASG	LYS	A	102	102	C	Coil	-144.06	157.18	176.2	~~~~
ASG	PHE	A	103	103	C	Coil	-107.57	124.53	122.2	~~~~
ASG	VAL	A	104	104	C	Coil	-131.02	143.85	123.3	~~~~
ASG	ARG	A	105	105	C	Coil	-103.66	117.09	234.2	~~~~
ASG	ILE	A	106	106	C	Coil	-84.67	166.23	55.7	~~~~
ASG	GLN	A	107	107	T	Turn	-100.92	159.50	134.2	~~~~
ASG	PRO	A	108	108	T	Turn	-56.74	140.84	67.4	~~~~
ASG	GLY	A	109	109	T	Turn	93.56	-19.53	48.3	~~~~
ASG	GLN	A	110	110	E	Strand	-76.11	154.70	81.2	~~~~
ASG	THR	A	111	111	E	Strand	-108.98	164.60	87.8	~~~~
ASG	PHE	A	112	112	E	Strand	-167.18	163.20	30.1	~~~~
ASG	SER	A	113	113	E	Strand	-97.97	146.50	0.0	~~~~
ASG	VAL	A	114	114	E	Strand	-120.67	127.71	9.4	~~~~
ASG	LEU	A	115	115	E	Strand	-95.39	95.44	2.8	~~~~
ASG	ALA	A	116	116	E	Strand	-72.02	125.83	1.6	~~~~
ASG	CYS	A	117	117	E	Strand	-127.77	155.39	0.0	~~~~
ASG	TYR	A	118	118	E	Strand	-135.70	124.91	47.9	~~~~
ASG	ASN	A	119	119	T	Turn	56.35	32.54	92.8	~~~~
ASG	GLY	A	120	120	T	Turn	92.49	-2.33	12.4	~~~~
ASG	SER	A	121	121	E	Strand	-122.63	136.18	71.5	~~~~
ASG	PRO	A	122	122	E	Strand	-57.25	133.58	54.5	~~~~
ASG	SER	A	123	123	E	Strand	-108.11	-48.70	84.5	~~~~
ASG	GLY	A	124	124	E	Strand	-165.80	172.38	25.9	~~~~
ASG	VAL	A	125	125	E	Strand	-121.41	131.37	60.9	~~~~
ASG	TYR	A	126	126	E	Strand	-123.98	148.08	130.7	~~~~
ASG	GLN	A	127	127	E	Strand	-104.92	132.16	40.9	~~~~
ASG	CYS	A	128	128	E	Strand	-149.43	-177.06	23.9	~~~~
ASG	ALA	A	129	129	E	Strand	-133.56	153.35	27.4	~~~~
ASG	MET	A	130	130	E	Strand	-81.39	115.36	28.6	~~~~
ASG	ARG	A	131	131	T	Turn	-64.58	158.19	97.6	~~~~
ASG	PRO	A	132	132	T	Turn	-59.97	-28.93	88.5	~~~~
ASG	ASN	A	133	133	T	Turn	-88.15	19.32	104.9	~~~~
ASG	HIS	A	134	134	T	Turn	67.39	20.78	133.7	~~~~
ASG	THR	A	135	135	C	Coil	-112.69	174.51	68.2	~~~~
ASG	ILE	A	136	136	B	Bridge	-125.25	136.87	67.6	~~~~
ASG	LYS	A	137	137	C	Coil	-94.70	141.63	153.1	~~~~
ASG	GLY	A	138	138	C	Coil	155.94	-149.95	61.9	~~~~
ASG	SER	A	139	139	C	Coil	-150.13	109.45	108.1	~~~~
ASG	PHE	A	140	140	C	Coil	-110.48	136.19	107.1	~~~~
ASG	LEU	A	141	141	T	Turn	-94.95	168.97	118.0	~~~~
ASG	ASN	A	142	142	T	Turn	-59.75	117.64	162.4	~~~~
ASG	GLY	A	143	143	T	Turn	106.67	-2.04	14.5	~~~~
ASG	SER	A	144	144	T	Turn	-82.06	-15.64	7.2	~~~~
ASG	CYS	A	145	145	T	Turn	-54.64	144.97	53.3	~~~~
ASG	GLY	A	146	146	T	Turn	98.38	-18.52	16.9	~~~~
ASG	SER	A	147	147	T	Turn	-64.46	148.70	23.9	~~~~
ASG	VAL	A	148	148	E	Strand	-114.56	157.71	36.2	~~~~
ASG	GLY	A	149	149	E	Strand	-108.29	146.66	40.3	~~~~
ASG	PHE	A	150	150	C	Coil	-158.18	360.00	72.3	~~~~