

CSpritz - Accurate detection of protein disorder

Version 1.2

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Status: finished

NB: The data will be kept for two weeks, after which it will be deleted without further notice.

Available files: (help)

Your input parameters:	HTML
Fasta sequences (amino, secondary structure, disorder, confidence):	TXT
Disorder plot:	PDF
Graph of PDB homologue(s) found::	PDF
Disorder Prediction (with disorder probability):	TXT
Protein statistics:	TXT

Disordered residues and stats: (help)

1	10	20	30	40	50	60
						PLLFVSSNKCLKDL
						СССЕСССССНННН
DDDDDD	DDDDDDDDDI	וסססססססססס	וסססססססססס	וסססססססססס	וסססססססססס	וסססססססססססססססס
71	80	90	100	110	120	130
LLKHSG	VSPFEEKGS	FIYLKRGERNI	RKDKNYPFTL	FIEYGTSKSA	NILEKDSNKY	EEGNQKYTNVIMEG
HHCCCC	CCCCCCCC	EEEECCCCCC	CCCCCCEE	EEECCCCCCC	СНИССССССС	CCCCCCCCEECCC
וססססססו	וססססססססס	ומממממממממ	וסססססססססס	וססססססססססס	מסססססססססס	DDDDDDDDDDDDDDD
141	150	160	170	180	190	200
						MDKNIKMDKNIKMD
						ECCCCCCCCCCC
וטטטטטט	וטטטטטטטטט	וטטטטטטטטטטט	יסססמממממממני	יסססמססמממ	OUCOOOC	000000000 <mark>0</mark> 0000
211	220	230	240	250	260	270
						IKMDDNIMMRENKK
						CCCCCCHHHHCCCC(
281	290	300	310	320	330	340
						RSLKLLNIIYNSWK
						ССИНИНИНИНИНИ
						וסססססססססססססססס
351	360	370	380	390	400	410
						NKTLKEYKITYSII
						СССНИННЕССИНИН
DDDDDD	DDDDDDDDDI	וממממממממממ	וסססססססססס	DDDDOOODDI	DDDDDDDDDD	DDDDDDDDDDDDDDD
421	430	440	450	460	470	480
						NVIETFNIFLSLII
						ннининнининн
וטטטטטט	וטטטטטטטטט	ססססמממממממ	וממממססססו	וטטטטטטטטטט	טטטטטטטטטטט	DDDDDDDDDOODDD
491	500	510	520	530	540	550
						ASNELLNNVEDSLV
						CCHHHHCCCCCCHHI DDDDDDDDDDDDDDDDD
561	570	580	590	600	610	620
						FKLSSDDIVNILDV
						ССССИННИНИННИН
וסססססס	וססססססססס	וממממממממממ	וסססססססססס	וסססססססססס	מססססססססס	DDDDDDDDDDDD0000
631	640	650	660	670	680	690
NYLYKK	LYKNISYLK	EKYYIYIPFI:	FESQTLMLN	NSILLLNKIL	YLILKNDVLL	SLFSFDKIKETILP
нннннн	нннннннн	HCCEEEECEEI	ЕЕССИННИНС	СИНИНИНИНИ	нининссини	ннссснисссссс
00000D	DDDDDDDDO	0000000DDDI	וסססססססססס	וסססססססססס	מסססססססססס	DDDDDDDDDDDDDD
701	710	720	730	740	750	760
						NNYKYLNSSILIKF
						CCCCCCHHHHHHH DDDDDDDDDDDDDDDDDD
771	780	790	800	810	820	830
						NNCEVIIQKDDTKR
						CCCEEEECCCCCC
						DDDDDDDDDDDDDD
841	850	860	870	880	890	900
VKGASN	INENVFMKD	NRSNDFHNNMI	NDVITYNKTY	DEINNMNINH	NIRFKFKNEI	IFIYNCLKSSLVSL
ccccc	cccccccc	cccccccc	CCCECCCC	нннсссссс	CCCECCCHE	IFIYNCLKSSLVSL EEEHHHHHHHHHHH DDDDDDDDDDDDDDD

2021
91.93
12
9
29
172 3 1 1 1 1 1 3 3 3 3 3 3 3 3 130 48 32 24 113 9 125 392 36 12 61 14 22 132 79 431

911 920 930 940 950 960 970
KLDLKDKYIYEWLNRNICLFQFPDNYVDKNKDQYSEYIQAGGLQNKRNEEISNTEMNDYNMNKYINVNND
ннсссининниннссссевесссссссссининнинсссссссссс
081 000 1000 1010 1020 1020 1040
981 990 1000 1010 1020 1030 1040
DESQYDNMKNYVEENVLSDDNEEKMNVNDVEPEKKRKDKKEENKDDVIIINYGDELYVDNSLYNNQKIKK
CHHHHCCCCCHHHHHCCCCCCCCCCCCCCCCCCCCCCCC
1051 1060 1070 1080 1090 1100 1110
ENEILAEQNKCEEYDKNGYINSAYKDDIMLESLYDSKKDTIKWYDKDEEYKKNNKYIDNMDDDHNNNNNN
нинининнессиссоссссссснининннессссссссснинсссссссснисссс
1121 1130 1140 1150 1160 1170 1180
NNKMNESDVCLDVLALSKFTKQYSNEMKKKLIDNVEKSLEYSLKIFQNIYNKKKGDLPVYINMNDIYIIK
СССССССНИНИНИНИНИНИНИНИНИНИНИНИНИНИНИНИ
DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD
1191 1200 1210 1220 1230 1240 1250
DKYIVSLYDEETKTFYKKNKNIEFRNIIMPKQLSIFINYLGRNIYLIDKNKLNKIFLLAIQYINITKFNY
CCCEEEECCCCCCHHCCCCCCEECCCCCHHHHHHHHHHCCCCEEEECCCHHHHHH
OODDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD
1261 1270 1280 1290 1300 1310 1320
FTSNDIIHFLQGLLNYYSVQNDNKVVNIYNNKNDINDNSNNYTSNNKIINDYINELIINLCYIAEDTFLK
СССИНИНИНИНИНИНИНССССССЕЕЕЕСССССССССССС
1331 1340 1350 1360 1370 1380 1390
WKLANVCQLVYLLTKFKHIHKNIFNKFDEFLNTIQFPQYVYQKEKSYIRNNSTEINDHKEKNTYDTYDMN
ннининининининининининининининин
DDDDDD00000DDDDDDDDDDDDDDDDDDDDDDDDDDD
1401 1410 1420 1430 1440 1450 1460
HTCEEMLSINQNNNNNNNNNNNNNNNNNNNNNNNNNNNIIKTSYSNNYTNEKNNVVHNKKNNIYINE
CCCHHHHHCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
1471 1490 1490 1500 1510 1520 1520
1471 1480 1490 1500 1510 1520 1530
${\tt FKYDNLGSALWALSSLNKNILKKKYYLKFSYLFSIYFSLHMKFFLQYKLGEQQNRKCTYLNYSNKNSHNK}$
FKYDNLGSALWALSSLNKNILKKKYYLKFSYLFSIYFSLHMKFFLQYKLGEQQNRKCTYLNYSNKNSHNK ECCCCHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHH
${\tt FKYDNLGSALWALSSLNKNILKKKYYLKFSYLFSIYFSLHMKFFLQYKLGEQQNRKCTYLNYSNKNSHNK}$
FKYDNLGSALWALSSLNKNILKKKYYLKFSYLFSIYFSLHMKFFLQYKLGEQQNRKCTYLNYSNKNSHNK ECCCCHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHH
FKYDNLGSALWALSSLNKNILKKKYYLKFSYLFSIYFSLHMKFFLQYKLGEQQNRKCTYLNYSNKNSHNK ECCCCHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHH
FKYDNLGSALWALSSLNKNILKKKYYLKFSYLFSIYFSLHMKFFLQYKLGEQQNRKCTYLNYSNKNSHNK ECCCCHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHHH

Disordered segment motifs: (help) 176 ELM motif(s) in total found in disordered residues

SS Motif for disorder segment 1:

(start,end): (1,172)

Graph of Probability(helix, strand, coil) PDF
Amino SS Probability(helix, strand, coil) TXT

Linear motif(s):

13/01/2022, 08:59 CSpritz PID: 1976228859 seg : KDIIDCTKSEGLONLMNOKVVENNKMDENIKM : CCHHHCCCCCCHHHHCCCEEECCCCCCCCC alpha: 2344333344455554311111111111111111 beta : 12222211000011111245542233211343 coil: 54323455555433345543345655566544 SS Motif for disorder segment 2: (start,end): (176,178) seq : KKM S.S. : CCC alpha: 211 beta : 233 coil : 555 SS Motif for disorder segment 3: (start,end): (224,226) seq : IKM s.s. : ccc alpha: 322 beta : 111 coil : 556 SS Motif for disorder segment 4: (start,end): (230,232) seq : IKM S.S. : CCC alpha: 322 beta : 111 coil : 556 SS Motif for disorder segment 5: (start,end): (236,238) seq : IKM S.S. : CCC alpha: 322 beta : 111 SS Motif for disorder segment 6: (start,end): (242,244) seq : IKM S.S. : CCC alpha: 333 beta : 111 coil : 445 SS Motif for disorder segment 7: (start,end): (248,250)

residues (38.44) LIG_BRCT_BRCA1_2 = TSSMFNK residues (49,59) LIG MAPK 1 = KCRRKEVPLLF residues (67,71) $LIG_CYCLIN_1 = KDLYL$ residues (70.73) $LIG_SH2_STAT5 = YLLK$ residues (75,80) LIG_WW_4 = SGVSPF residues (79,82) LIG_TRAF2_1 = PFEE residues (88,91) LIG_SH2_STAT5 = YLKR residues (102,108) LIG_FHA_1 = PFTLFIE residues (125,128) LIG_SH2_SRC = YEEG residues (131,137) LIG_FHA_1 = KYTNVIM residues (132,135) LIG_SH2_STAT5 = YTNV residues (141,144) LIG_PDZ_3 = KDII residues (145,151) LIG_FHA_2 = DCTKSEG residues (149,152) LIG_PDZ_3 = SEGL. residues (167,170) LIG_PDZ_3 = Graph of Probability(helix, strand, coil) PDF Amino SS Probability(helix, strand, coil) TXT Linear motif(s): Graph of Probability(helix, strand, coil) PDF Amino SS Probability(helix, strand, coil) TXT Linear motif(s): Graph of Probability(helix, strand, coil) PDF Amino SS Probability(helix, strand, coil) TXT Linear motif(s): Graph of Probability(helix, strand, coil) PDF Amino SS Probability(helix, strand, coil) TXT Linear motif(s): Graph of Probability(helix, strand, coil) PDF Amino SS Probability(helix, strand, coil) TXT Linear motif(s): Graph of Probability(helix, strand,

seq : IKM s.s. : ccc

alpha: 222

coil) PDF

TXT

Amino SS Probability(helix, strand, coil)

Linear motif(s):

beta : 111 coil : 556

SS Motif for disorder segment 8:

(start,end): (254,256)

seq : IKM S.S. : CCC alpha: 222 beta : 111 coil : 555

SS Motif for disorder segment 9:

(start,end): (260,389)

260 269 279 289 299 309 319 seq : IKMDKNIKMDDNIMMRENKKVEGKSRKGNNIRNKSLVLKRIGNRKVYNKKRKSITSRVVDIQNTNVRDYL beta: 1110001110001111001333211100012212345444311245532222110125665432222222 5666665666553334566545777778766676432234588743356767778753223456543333 330 339 349 359 369 379 seq : FLPSQGRSLKLLNIIYNSWKEKNFDNFFDVLNSDDFDHTCIENWLHKFSISLSKKYLKIK alpha: 201121247899998765665433333333211111245677776654322222211000 beta: 2100000100000000000000012333320000011110000012333210124777 coil : 587778641000000123333455553323357887742111122233334566654211

SS Motif for disorder segment 10:

(start,end): (394,441)

SS Motif for disorder segment 11:

(start,end): (452,483)

SS Motif for disorder segment 12:

(start,end): (487,510)

 Graph of Probability(helix, strand, coil) PDF
Amino SS Probability(helix, strand, coil) TXT

Linear motif(s):

Graph of Probability(helix, strand, coil) PDF
Amino SS Probability(helix, strand, coil) TXT

Linear motif(s):

residues (269,272) LIG_PDZ_3 = residues (293,297) LIG_CYCLIN_1 = KSLVL residues (311,316) LIG 14-3-3 3 = KSITSR residues (312,318) LIG_FHA_1 = SITSRVV residues (326,329) LIG_PDZ_3 = RDYL residues (328.331) LIG_SH2_STAT5 = YLFL residues (336,340) LIG CYCLIN 1 = RSLKL residues (357,360) LIG_PDZ_3 = **FDVL** residues (361,365) LIG_BRCT_BRCA1_1 = NSDDF residues (366,372) LIG_FHA_2 = DHTCIEN residues (384,388) LIG_CYCLIN_1 = KYLKI residues (385,388) LIG_SH2_STAT5 = YLKI

Graph of Probability(helix, strand, coil) PDF
Amino SS Probability(helix,

strand, coil) TXT

Linear motif(s):

Graph of Probability(helix, strand, coil) PDF
Amino SS Probability(helix, strand, coil) TXT

Linear motif(s):

Graph of Probability(helix, strand, coil) PDF
Amino SS Probability(helix, strand, coil) TXT

Linear motif(s):

residues (494,501) LIG_MAPK_1 = KVKYNLSI residues (502,505) LIG_PDZ_3 = DESI.

SS Motif for disorder segment 13:

(start,end): (514,626)

533 543 553 563 LLYFNISFDNYYIKLKKRISSILNKDNKNELRASNELLNNVEDSLVMYKNNNENYDKVRNIKMIDKEFML • нининссининининссссининсссссосисстининссссссининиссссссинссссининин alpha: 7766432556777754334455432113344322456542333455554211223344433322267765 coil: 1112345333211134554322356776543466433356555533224677776643344556732233 584 593 603 613 623 KDNKKDEENICYDNIYNNSSYTNYQISYMMKKFKLSSDDIVNI : нсссссссссссссссскинниннинисссиннинни alpha: 4322223443322222111112688888886531005567789 coil: 4567665544456766788777210000012457894431110

SS Motif for disorder segment 14:

(start,end): (636,644)

seq : KLYKNISYL S.S. : НИНИНИНН alpha: 999888887 beta : 00000000 coil : 000111112

SS Motif for disorder segment 15:

(start,end): (653,777)

SS Motif for disorder segment 16:

(start,end): (789,1180)

789 798 808 818 828 838 848 seq : YGYKNIKSKDYSSKCNTYNEKDTSKNSMHNNNNNNNNCEVIIQKDTKRNVKGASNINENVFMKDNRS

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Graph of Probability(helix, strand,
                    coil) PDF
      Amino SS Probability(helix,
             strand, coil)
                          TXT
        Linear motif(s):
             residues (516,519)
       LIG_SH2_STAT5 = YFNI
             residues (525,528)
       LIG_SH2_STAT5 = YIKL
residues (548,551) LIG_PDZ_3 =
residues (555,558) LIG PDZ 3 =
                         EDSL.
             residues (561,564)
      LIG_SH2_GRB2 = YKNN
residues (568,571) LIG_PDZ_3 =
                        VDKV
                 LIG_PDZ_3 =
residues (590,593)
                         EENI
             residues (595,598)
         LIG_SH2_SRC = YDNI
             residues (599,602)
       LIG_SH2_GRB2 = YNNS
             residues (604.607)
      LIG SH2 STAT5 = YTNY
             residues (607,610)
         LIG_SH2_SRC = YQIS
residues (617,622) LIG 14-3-3 3
                    = KLSSDD
residues (620,623)
                  LIG_PDZ_3 =
Graph of Probability(helix, strand,
                    coil) PDF
      Amino SS Probability(helix,
             strand, coil)
        Linear motif(s):
             residues (638,641)
       LIG SH2 GRB2 = YKNI
Graph of Probability(helix, strand,
                    coil)
                         PDF
      Amino SS Probability(helix,
             strand, coil)
                          TXT
        Linear motif(s):
 residues (659,665) LIG_FHA_1
                  = SOTLMLN
             residues (673,677)
      LIG_CYCLIN_1 = KILYL
             residues (676,679)
       LIG\_SH2\_STAT5 = YLIL
residues (681,684) LIG_PDZ_3 =
             residues (687,691)
LIG Clathr ClatBox 1 = LFSFD
residues (690,693) LIG_PDZ_3 =
residues (694.697)
                 LIG PDZ 3=
                         KETI
 residues (700,706) LIG_FHA_1
                  = PVTKKVE
residues (709,712) LIG_PDZ_3 =
                        EEKL.
             residues (711,715)
     LIG_CYCLIN_1 = KLLHY
residues (725,730)
                  LIG 14-3-3 3
                     = KTLSKI
             residues (737,741)
  LIG_BRCT_BRCA1_1 = ISKIF
             residues (760,763)
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Graph of Probability(helix, strand, coil) PDF

LIG_SH2_STAT5 = YLNS residues (774,777) LIG_PDZ_3 =

Amino SS Probability(helix,

beta : 2111111100000121110111000011111000000124899863100122211111101123221000 coil : 366666677777666777776554446677778874100035888766677666665433457887 888 : NDFHNNMNDVITYNKTYDEINNMNINHNIRFKFKNEIIFIYNCLKSSLVSLIKLDLKDKYIYEWLNRNIC alpha: 1222222332222244554322222233322223333444444556666543445677887642111 coil : 7766666653334565443345666766433445531001234444432111235554221001256643 : LFQFPDNYVDKNKDQYSEYIQAGGLQNKRNEEISNTEMNDYNMNKYINVNNDDESQYDNMKNYVEENVLS SS alpha: 11000122211122456776542122222333332233233333321111355654444444454321 $\hbox{:}\ \ DDNEEKMNVNDVEPEKKRKDKKEENKDDVIIINYGDELYVDNSLYNNQKIKKENEILAEQNKCEEYDKNG\\$ alpha: 1134442122111222211123321111000000011111123444456666767888765344543222 coil: 7765445666777766677765567787300147875333565445433233222111234544445677 1088 1108 1078 1098 : YINSAYKDDIMLESLYDSKKDTIKWYDKDEEYKKNNKYIDNMDDDHNNNNNNNKMNESDVCLDVLALSK alpha: 2333333456677764212211111112245554323332223444443332111112234577888777 coil: 5455555543211234677777544577644334666556665544445556776676653211001122 1139 1148 1158 1168 1178 : FTKQYSNEMKKKLIDNVEKSLEYSLKIFQNIYNKKKGDLPVY alpha: 76665568899999999999999999998863211000000 coil: 22223421100000000000000000001125788988721

```
residues (791,794)
       LIG_SH2_GRB2 = YKNI
 residues (803,809) LIG_FHA_2
                  = CNTYNEK
residues (828,831)
                LIG_PDZ_3 =
                         CEVI
residues (848,851) LIG_PDZ_3 =
                        NENV
             residues (857.861)
LIG_BRCT_BRCA1_1 = RSNDF
residues (866,869) LIG_PDZ_3 =
                        NDVI
 residues (872,878) LIG FHA 2
                  = NKTYDEI
            residues (875.878)
         LIG SH2 SRC = YDEI
            residues (888,897)
  LIG_MAPK_1 = RFKFKNEIIF
residues (893,896) LIG_PDZ_3 =
                         NEII
            residues (909,913)
LIG_Clathr_ClatBox_1 = LIKLD
            residues (918,921)
       LIG_SH2_STAT5 = YIYE
residues (920,923) LIG_PDZ_3 =
                       YEWL
            residues (930,933)
         LIG MAPK 2 = FOFP
            residues (936,939)
      LIG\_SH2\_STAT5 = YVDK
residues (945,948) LIG_PDZ_3 =
            residues (947,950)
      LIG_SH2_STAT5 = YIQA
residues (958,961) LIG_PDZ_3 =
                         NEEL
             residues (974.977)
       LIG_SH2_STAT5 = YINV
            residues (985,988)
      LIG SH2 GRB2 = YDNM
            residues (991,994)
      LIG\_SH2\_STAT5 = YVEE
residues (993,996) LIG_PDZ_3 =
                        EENV
           residues (1024,1027)
           LIG_PDZ_3 = KDDV
           residues (1033,1036)
           LIG PDZ 3 = GDEL
           residues (1037,1040)
      LIG\_SH2\_STAT5 = YVDN
           residues (1043,1046)
      LIG_SH2_STAT3 = YNNQ
           residues (1049,1053)
LIG_APCC_KENbox_2 = KKENE
          residues (1052,1055)
           LIG PDZ 3 = NEIL
          residues (1069,1072)
       LIG\_SH2\_STAT5 = YINS
          residues (1075,1078)
           LIG PDZ 3 = KDDI
           residues (1080,1083)
           LIG_PDZ_3 = LESL
          residues (1088,1091)
           LIG_PDZ_3 = KDTI
           residues (1106,1109)
       LIG\_SH2\_STAT5 = YIDN
           residues (1131,1134)
           LIG PDZ 3 = LDVL
           residues (1143,1146)
       LIG_SH2_GRB2 = YSNE
           residues (1149,1152)
       LIG CYCLIN 1 = KKLI
           residues (1152,1155)
           LIG_PDZ_3 = IDNV
           residues (1157,1161)
      LIG CYCLIN 1 = KSLEY
```

strand, coil)

Linear motif(s):

TXT

(start,end): (1193,1228)

1193 1202 1212 1222 eq : YIVSLYDEETKTFYKKNKNIEFRNIIMPKQLSIFIN Graph of Probability(helix, strand, coil) PDF
Amino SS Probability(helix, strand, coil) TXT

S.S.: CEEEECCCCCCCHHCCCCCCEECCCCCHHHHHHHH alpha: 2222223333344321011122221035666666 beta: 355543100112222101134433331000012222 coil: 421124555554334678644334447532210001

SS Motif for disorder segment 18:

(start,end): (1233,1244)

seq : NIYLIDKNKLNK
S.S.: CEEECCCHHHH
alpha: 111001334555
beta: 256653000001
coil : 632235554442

SS Motif for disorder segment 19:

(start,end): (1253,1313)

SS Motif for disorder segment 20:

(start,end): (1323,1336)

1323 1332
seq : IAEDTFLKWKLANV
S.S. : HHHHHHHHHHHH
alpha: 8887677777668
beta : 0000000000000
coil : 0112322223331

SS Motif for disorder segment 21:

(start,end): (1342,1363)

SS Motif for disorder segment 22:

(start,end): (1367,1498)

Linear motif(s):

residues (1193,1196)
LIG_SH2_STAT5 = YIVS
residues (1207,1214)
LIG_MAPK_1 = KKNKNIEF
residues (1208,1215) LIG_PP1 =
KNKNIEFR
residues (1221,1225)
LIG_CYCLIN_1 = KQLSI

Graph of Probability(helix, strand, coil) PDF
Amino SS Probability(helix, strand, coil) TXT

Linear motif(s):

residues (1235,1238) LIG_SH2_STAT5 = YLID

Graph of Probability(helix, strand, coil) PDF
Amino SS Probability(helix, strand, coil) TXT

Linear motif(s):

residues (1260,1263) LIG SH2 STAT5 = YFTS residues (1260,1266) LIG_FHA_2 = YFTSNDI residues (1264,1267) LIG PDZ 3 = NDHresidues (1269,1275) LIG_NRBOX = FLQGLLN residues (1277,1280) LIG_SH2_STAT3 = YSVQ residues (1289,1292) LIG_SH2_GRB2 = YNNK residues (1302,1305) LIG_SH2_STAT5 = YTSN residues (1310.1313) $LIG_PDZ_3 = NDYI$

Graph of Probability(helix, strand, coil) PDF
Amino SS Probability(helix, strand, coil) TXT

Linear motif(s):

Graph of Probability(helix, strand, coil) PDF
Amino SS Probability(helix, strand, coil) TXT

Linear motif(s):

residues (1358,1361) LIG_PDZ_3 = DEFL

Graph of Probability(helix, strand, coil) PDF
Amino SS Probability(helix, strand, coil) TXT

Linear motif(s):

residues (1369,1372)
LIG_SH2_STAT5 = YVYQ
residues (1377,1380)
LIG_SH2_STAT5 = YIRN
residues (1400,1406)
LIG_FHA_2 = NHTCEEM
residues (1402,1405)
LIG_TRAF2_1 = TCEE
residues (1404,1407)
LIG_PDZ_3 = EEML
residues (1447,1450)
LIG_SH2_GRB2 = YSNN
residues (1451,1454)
LIG_SH2_STAT5 = YTNE

residues (1462.1468) LIG MAPK 1 = KKNNIYI residues (1467,1470) LIG SH2 STAT5 = YINE residues (1473,1476) LIG_SH2_GRB2 = YDNL residues (1482,1486) LIG_USP7_1 = ALSSL

Graph of Probability(helix, strand, coil) PDF Amino SS Probability(helix, strand, coil) TXT

Linear motif(s):

residues (1529,1532) LIG_SH2_STAT5 = YLNY residues (1542,1545) $LIG_PDZ_3 = NDDI$ residues (1554.1557) LIG_SH2_STAT5 = YFKH residues (1561,1567) LIG FHA 1 = SMTISIY residues (1567,1570) $LIG_SH2_STAT5 = YINT$ residues (1571,1574) LIG_SH2_STAT5 = YIRK residues (1580,1583) LIG SH2 STAT5 = YFLY residues (1583,1586) $LIG_PDZ_3 = YDVI$

Graph of Probability(helix, strand, coil) PDF Amino SS Probability(helix, strand, coil)

Linear motif(s):

residues (1599,1603) LIG CYCLIN 1 = KELSY residues (1603,1606) LIG_SH2_STAT5 = YVLY residues (1637,1640) LIG PDZ 3 = EEKLresidues (1739,1742) $LIG_PDZ_3 = ADKL$ residues (1773,1776) LIG PDZ 3 = VDDLresidues (1778,1781) $LIG_SH2_STAT5 = YLYN$ residues (1782,1785)

LIG PDZ 3 = LDYIresidues (1784,1787) LIG_SH2_STAT5 = YIKD residues (1794,1800) LIG FHA 2 = IKTLNDI residues (1801,1804) $LIG_PDZ_3 = NETI$ residues (1807,1810) $LIG_PDZ_3 = HDDI$ residues (1817,1822) LIG_14-3- $3_3 = KSSSSF$ residues (1818,1822) $LIG_BRCT_BRCA1_1 = SSSSF$ residues (1825,1829) $LIG_USP7_1 = PKSSD$ residues (1828,1831) LIG PDZ 3 = SDIL

residues (1836,1842) LIG_FHA_2 = KKTNKEK

residues (1836,1847) LIG MAPK 1=

KKTNKEKKGIVI

residues (1848,1855) LIG_MAPK_1 = KKDKFLIF

residues (1851,1855) LIG_CYCLIN_1 = KFLIF residues (1857,1860)

> $LIG_PDZ_3 = NERI$ residues (1862,1866)

LIG_BRCT_BRCA1_1 = LSNEF residues (1864,1867) $LIG_PDZ_3 = NEFL$

SS Motif for disorder segment 23:

(start,end): (1508,1586)

1508 1517 1527 1537 1547 1557 1567 : SLHMKFFLQYKLGEQQNRKCTYLNYSNKNSHNKYNDDISFFKHNMNYFKHVLDSMTISIYINTYIRKIKK alpha: 555666666542123322211222221111111112367887654454322222234445678888765 coil : 122211112346766666665555677777776775221122444445555555321001110011123 seg : GFYFLYDVI : нининини alpha: 54555555 beta: 012222223 coil: 432111111

SS Motif for disorder segment 24:

(start,end): (1591,2021)

1610 1620 1630 1640 : EIIDIFSLKELSYVLYSLSTINKNEINNTVYRGEMGKTEKNGLLNREEKLNELNOSNELSESNESNKLSE alpha: 11112227776666655554324553111111011011221122244555444332222222221112 coil : 41123452212110012234564435764335778877677776654444444566666666776677777 1680 1690 1700 SNESNKLSESNESNKLSESNESNKLSESNESNKLSESNESNELRESNKLSDSNESNQSNQSNQSNISNIS 1740 1750 1760 1770 1780 ${\tt NISNISNEADKLGFQKNNIDNEENKSEEDFFFTFLKSNISLCVDDLDYLYNLDYIKDEEMSNPIKTLNDI}$ 444343344433222232223322133444555443333334345666544444334432123434445 alpha: coil : 5445555445567666666776677765544433455655444554333344545565567875554554 1830 1840 1850 1801 1810 1820 NETIDKHDDIKNNEVEKSSSSFTLPKSSDILNDDNKKTNKEKKGIVIKKDKFLIFKNERIHLSNEFLNKL 4433222233322222211111000122343322222111111011211123343333343335788888 alpha: coil 1920 1871 1880 1890 1900 1910 1930 $\verb|LTKINEYTKLILNEKKNKEKSFINDNHNVSNASKKNRMEIIDLIKLIYSFFILLNQKVQINQAQTINFVQ|$ 777666666666543222333332211222222224567778887766666654322222322112455 alpha: 1222332322224556765554567777667666664321000011122111134554445566665322 coil 1941 1950 1960 1970 1980 1990 2000 VEKLIFQYNMVVKKFLHSFNYIYHIIDTYSLISNIYVLDDFTKNIIREFVQICIKKLEEEKILDMEKKKI seq : alpha: 66666554334444332222222211233443333333434456666555554444455433332111 beta : 2011 2020 seq : TLSIQNLKVTN s.s. : ccccccccc alpha: 12233221100 beta : 22211101110 coil: 55445567789

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residues (1866,1872)
    LIG_NRBOX = FLNKLLT
residues (1869,1874) LIG 14-3-
               3_3 = KLLTKI
         residues (1876,1882)
      LIG_FHA_1 = EYTKLIL
         residues (1877,1880)
     LIG_SH2_STAT5 = YTKL
         residues (1904,1913)
LIG_MAPK_1 = KKNRMEIIDL
         residues (1908,1911)
          LIG_PDZ_3 = MEII
         residues (1941,1944)
         LIG_PDZ_3 = VEKL
         residues (1961,1964)
     LIG_SH2_STAT5 = YIYH
         residues (1966,1972)
       LIG_FHA_1 = IDTYSLI
         residues (1976,1979)
     LIG_SH2_STAT5 = YVLD
         residues (1980,1986)
      LIG_FHA_1 = DFTKNII
         residues (1987,1990)
         LIG_PDZ_3 = REFV
         residues (1999,2002)
          LIG_PDZ_3 = EEKI
         residues (2001,2005)
    LIG_CYCLIN_1 = KILDM
         residues (2007,2014)
   LIG\_MAPK\_1 = KKKITLSI
         residues (2009,2015)
      LIG_FHA_1 = KITLSIQ
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