

	-----motif T-----																																																																																										
Homo sapiens	-----C	V	P	A	A	E	H	R	L	E	E	I	L	A	K	F	L	H	W	L	M	S	-----	-----V	V	V	V	E	L	L	R	S	F	-----	-----F	Y	V	T	E	T	T	F	-----	-----Q	K	N	R	L	F	F	Y	R	K	S	V	W	S	K	L	Q	S	I	G	I	R	Q	H	L	K	R	V	Q	L	R	E	L	S	E	A	E	V	R	Q	H	R	E	A	R	P	-----	
Mesocricetus auratus	-----C	V	P	A	A	E	H	R	T	R	E	R	I	L	A	V	F	L	F	W	L	M	D	-----	-----A	Y	V	V	E	L	L	R	S	F	-----	-----F	Y	V	T	E	T	T	F	-----	-----Q	K	N	R	L	F	F	Y	R	K	S	M	W	R	L	Q	S	I	G	V	R	H	L	E	R	V	L	Q	E	L	S	Q	E	E	V	R	Q	R	E	A	W	P	-----				
Mus musculus	-----R	V	P	A	A	E	H	R	L	R	E	R	I	L	A	T	F	L	F	W	L	M	D	-----	-----S	Y	V	V	Q	L	L	R	S	F	-----	-----F	Y	I	T	E	T	F	-----	-----Q	K	N	R	L	F	F	Y	R	K	S	V	W	S	K	L	Q	S	I	G	I	R	Q	L	E	R	V	L	Q	E	L	S	Q	E	E	V	R	H	Q	D	T	W	L	-----				
Rattus norvegicus	-----T	V	P	A	A	E	H	R	L	R	E	R	I	L	A	M	F	L	F	W	L	M	D	-----	-----S	Y	V	V	Q	L	L	R	S	F	-----	-----F	Y	I	T	E	T	F	-----	-----Q	K	N	R	L	F	F	Y	R	K	S	V	W	S	K	L	Q	S	I	G	I	R	Q	L	E	R	V	L	Q	E	L	S	Q	E	E	V	K	H	H	Q	D	T	W	L	-----			
Canis familiaris	-----C	V	P	A	A	E	H	R	R	E	E	I	L	A	R	F	L	-	V	L	V	D	G	H	I	Y	V	V	K	L	L	R	S	F	-----	-----F	Y	V	T	E	T	T	F	-----	-----Q	K	N	R	L	F	F	Y	R	K	S	V	W	S	Q	L	Q	S	I	G	I	R	Q	L	F	N	S	V	H	L	R	E	L	S	E	A	E	V	R	R	H	R	E	A	R	P	-----
Bos taurus	-----C	V	P	A	A	E	H	R	Q	R	E	A	V	L	G	R	F	L	H	W	L	M	G	-----	-----A	Y	V	V	E	L	L	R	S	F	-----	-----F	Y	V	T	E	T	T	F	-----	-----Q	K	N	R	L	F	F	F	R	K	I	W	S	Q	L	Q	R	L	G	V	R	Q	H	L	D	R	V	L	R	E	L	S	E	A	E	V	R	Q	H	R	E	A	R	P	-----		
Coturnix japonica	-----S	V	P	A	Y	E	H	C	Y	R	E	E	I	L	A	K	F	L	Y	W	L	M	D	-----	-----S	Y	V	I	E	L	L	K	S	F	-----	-----F	Y	I	T	E	T	M	F	-----	-----Q	K	N	T	L	F	Y	R	K	F	I	W	G	L	Q	N	I	G	I	R	N	H	F	A	K	V	H	L	R	A	L	S	E	E	M	D	V	I	R	Q	K	K	Y	-----			
Gallus gallus	-----S	V	P	A	Y	E	H	C	Y	R	E	E	I	L	A	K	F	L	Y	W	L	M	D	-----	-----S	Y	V	I	E	L	L	K	S	F	-----	-----F	Y	I	T	E	T	M	F	-----	-----Q	K	N	M	L	F	Y	R	K	F	I	W	G	L	Q	N	I	G	I	R	D	H	F	A	K	V	H	L	R	A	L	S	S	E	E	M	E	V	I	R	Q	K	K	Y	-----		
Xenopus laevis	-----F	V	P	A	S	E	H	L	L	R	E	K	I	L	A	K	F	V	F	W	L	M	D	-----	-----T	Y	V	I	Q	L	L	K	S	F	-----	-----F	Y	V	T	E	T	M	F	-----	-----Q	K	H	R	L	L	F	Y	R	K	S	V	W	K	L	Q	N	I	G	L	R	K	H	L	E	K	V	L	R	S	L	S	S	D	E	L	N	M	Q	Q	W	K	N	-----			
Oryzias latipes	-----R	F	P	P	S	E	L	A	Y	R	T	R	I	L	S	Q	F	L	T	W	L	D	-----	-----G	F	V	V	G	L	V	R	A	C	-----	-----F	Y	A	T	E	S	V	G	-----	-----Q	K	N	A	I	R	F	Y	R	Q	E	V	W	S	K	L	Q	D	L	A	F	R	R	H	I	A	K	G	M	E	E	L	S	P	A	Q	V	A	S	L	P	K	G	-----				
Oryzias melastigma	-----R	F	P	P	S	E	L	T	Y	R	T	Q	I	L	S	L	F	T	W	L	D	-----	-----G	F	V	V	G	L	V	Q	A	C	-----	-----F	Y	A	T	D	S	V	G	-----	-----Q	K	S	T	I	F	Y	R	P	E	V	W	N	K	L	R	D	L	A	F	R	N	H	F	A	K	G	M	E	E	L	T	P	D	Q	V	A	S	L	P	K	D	-----						
Nothobranchius furzeri (GRZ)	-----R	V	P	P	S	E	L	A	Y	R	T	Q	I	L	G	Q	F	L	A	W	L	D	-----	-----G	Y	V	V	G	L	V	R	A	C	-----	-----F	Y	A	T	E	G	M	R	-----	-----Q	K	C	C	I	R	F	Y	R	R	E	V	W	A	K	L	Q	D	L	A	F	K	D	Y	L	A	K	S	Q	M	K	E	L	C	P	A	E	V	A	S	F	P	K	D	-----			
Nothobranchius furzeri (MZM-04)	-----R	V	P	P	S	E	L	A	Y	R	T	Q	I	L	G	Q	F	L	A	W	L	D	-----	-----G	Y	V	V	G	L	V	R	A	C	-----	-----F	Y	A	T	E	G	M	R	-----	-----Q	K	C	C	I	R	F	Y	R	R	E	V	W	A	K	L	Q	D	L	A	F	K	D	Y	L	A	K	S	Q	M	K	E	L	C	P	A	E	V	A	S	F	P	K	D	-----			
Epinephelus coioides	-----R	F	P	P	S	E	L	S	Y	R	T	Q	I	L	G	Q	F	L	A	W	L	D	-----	-----G	Y	V	V	S	L	V	R	A	C	-----	-----F	Y	V	T	E	S	V	G	-----	-----Q	K	N	A	V	R	F	Y	R	Q	E	V	W	A	K	L	Q	D	L	A	F	R	G	H	L	S	K	G	M	E	E	L	T	P	D	Q	V	A	S	L	P	K	T	-----				
Takifugu rubripes	-----R	V	P	P	S	E	L	S	Y	R	T	Q	I	L	G	Q	F	L	A	W	L	D	-----	-----G	F	V	V	G	L	V	R	A	C	-----	-----F	Y	A	T	E	S	M	G	-----	-----Q	K	N	A	I	R	F	Y	R	Q	E	V	W	A	K	L	Q	D	L	A	F	R	S	H	T	S	K	G	M	E	E	L	T	P	D	Q	V	A	S	L	P	K	S	-----				
Danio rerio	-----C	A	S	E	H	R	Y	R	E	W	M	L	G	Q	C	M	G	W	M	L	S	-----	-----G	F	V	V	G	L	V	R	A	Q	-----	-----F	Y	I	T	E	S	M	G	-----	-----H	K	H	T	L	R	F	Y	R	G	D	V	W	S	R	L	Q	D	Q	A	F	R	A	H	L	C	K	G	Q	W	R	P	L	S	P	S	Q	A	K	V	P	N	S	-----					
Ciona intestinalis	-----S	S	N	L	L	R	F	F	Q	W	M	I	E	-	D	Y	V	F	V	L	S	G	S	-----	-----F	Y	I	T	E	N	S	N	-----	-----F	Y	I	T	E	N	S	N	-----	-----F	K	N	R	L	F	F	Y	H	K	K	M	W	A	E	I	V	A	Y	G	V	A	L	L	K	Q	N	R	W	A	V	P	P	T	A	D	V	T	-----										
Ciona savignyi	-----K	D	T	L	L	R	F	F	Q	W	M	I	E	-	E	Y	L	F	V	L	I	R	G	S	-----	-----F	Y	I	T	D	N	G	-----	-----F	Y	I	T	D	N	G	-----	-----F	K	N	R	L	F	F	Y	P	K	K	I	W	S	E	A	V	A	Y	G	V	A	L	L	K	Q	K	R	W	A	F	P	S	S	E	K	H	T	-----											
Strongylocentrotus purpuratus	-----P	P	F	T	S	L	V	K	Q	R	L	V	T	D	F	F	H	W	L	M	I	-	G	Y	T	V	P	L	I	M	M	C	-----	-----F	Y	V	T	E	T	S	S	-----	-----S	R	N	Q	L	F	F	Y	R	K	P	V	W	L	L	E	K	I	G	I	Q	Y	Y	A	H	G	I	M	K	P	M	K	E	N	D	V	K	L	V	S	A	G	L	-----					
Strongylocentrotus purpuratus	-----P	P	F	T	S	V	V	K	Q	R	L	V	T	D	F	F	H	W	L	M	V	-	G	Y	A	V	P	L	I	M	M	C	-----	-----F	Y	V	T	E	T	S	S	-----	-----S	R	N	Q	L	F	I	F	Y	R	K	P	V	W	L	L	E	K	I	G	I	Q	Y	Y	A	H	G	I	M	K	P	M	K	E	N	D	V	K	L	V	S	A	G	L	-----				
Apis mellifera	-----T	K	W	L	V	M	A	Q	F	V	K	W	F	F	T	-	E	F	L	N	I	L	Y	T	-----	-----F	H	I	T	K	V	S	G	-----	-----F	H	I	T	K	V	S	G	-----	-----N	T	N	E	R	L	Y	I	T	R	F	T	W	N	I	Q	K	K	F	I	K	E	G	I	H	S	N	T	L	Q	P	N	I	K	R	N	T	W	N	P	S	-----						
Bombyx mori	-----Y	T	I	L	H	K	I	L	L	W	L	T	-	A	I	L	P	S	I	I	C	L	T	-----	-----F	Y	V	T	C	K	L	D	-----	-----S	D	E	N	K	L	I	Y	F	W	K	S	Q	W	S	F	C	D	K	K	I	S	K	M	L	F	S	N	V	M	E	K	F	E	P	Y	C	L	G	K	K	I	K	R	N	L	P	I	A	-----								
Bombyx mandarina	-----F	N	I	L	H	K	I	L	L	W	L	T	-	A	I	L	P	S	I	I	C	L	T	-----	-----F	Y	V	T	C	K	L	D	-----	-----S	D	E	N	K	L	I	Y	F	W	K	S	Q	W	S	F	C	D	K	K	I	S	K	M	L	F	S	N	V	M	E	K	F	E	P	Y	C	L	G	K	K	V	K	R	N	L	P	I	A	-----								
Tribolium castaneum	-----N	L	R	P	K	L	L	L	K	H	N	L	-	F	L	L	D	N	I	V	K	P	I	I	-----	-----A	F	Y	Y	K	P	I	K	T	-----	-----N	G	H	E	I	K	F	I	R	K	E	E	Y	I	S	F	E	S	K	V	F	H	K	L	K	M	K	Y	L	E	V	Q	D	E	V	K	-----																			
Caenorhabditis elegans	-----V	D	P	N	V	K	R	N	I	Q	T	S	I	V	N	L	K	S	G	V	H	-	W	W	A	L	M	A	L	R	Q	V	-----	-----M	I	P	I	V	I	K	-----	-----E	E	E	R	V	L	L	R	D	G	Y	L	N	I	L	T	K	E	I	K	D	F	Q	R	Y	I	V	Q	A	P	H	I	R	P	N	-----														
Caenorhabditis remanei	-----V	D	P	L	S	K	R	Y	S	Q	F	S	I	N	H	L	R	G	A	L	I	-	W	W	I	F	A	A	L	R	Q	I	-----	-----M	I	P	I	D	V	K	-----	-----R	K	K	V	Y	L	R	G	G	Y	L	K	L	L	R	R	E	M	K	D	F	K	E	R	Y	K	V	K	R	K	P	A	F	V	L	N	P	S	P	N	-----									
Schizosaccharomyces pombe	-----A	K	M	C	L	S	D	F	E	K	R	Q	I	F	A	E	F	I	Y	W	L	N	-	S	F	I	P	I	L	Q	S	F	-----	-----F	Y	I</																																																							

	motif 1	-2-
Homo sapiens	ALLTSRLRFIPKPDG	LRPIVNM DYVVGAR
Mesocricetus auratus	AMPICRRLRFIPKPSG	LRPIVNMSY-MGTR
Mus musculus	AMPICRRLRFIPKPNG	LRPIVNMSYSMGTR
Rattus norvegicus	AMPICRRLRFIPKLNG	LRPIVNMSYGM DTR
Canis familiaris	ALLTSRLRFLPKPSG	LRPIVNM DYIMGAR
Bos taurus	ALLTSRLRFVPKPGG	LRPIVNVGCVEGAP
Coturnix japonica	FPIASRLRFIPKING	LRPIVRLSRVVEGQK
Gallus gallus	FPIASRLRFIPKMNG	LRPVVRLSRVVEGQK
Xenopus laevis	VPVLSRLRFIPKTNG	LRPISKISSTLSSQ
Oryzias latipes	TVISQLRFIPKTDG	MRPITRVIGAD
Oryzias melastigma	AIISQLRFIPKADG	MRPITRVIRAD
Nothobranchius furzeri (GRZ)	TVISRLRFIPKTDG	MRPISRFIGRD
Nothobranchius furzeri (MZM-04)	TVISRLRFIPKTDG	MRPITRFIGRD
Epinephelus coioides	TVISRLRFIPKTDG	MRPITRVVGAD
Takifugu rubripes	TIISRLRFIPKTDG	MRPITRVIGAD
Danio rerio	AVTSRIRFIPKTSS	MRPITRLSGSR
Ciona intestinalis	IRPYFSVRFCPKVNG	LRPIMRLRNAD
Ciona savignyi	VPPYFAVRFCPKLNG	LRPIMKLRLNPK
Strongylocentrotus purpuratus	TLGFSRLRFVPKTKG	LRPITRMGKSV
Strongylocentrotus purpuratus	TLGFSRLRFVPKTKS	LRPITRMGKSV
Apis mellifera	IGIYKLLCKYSD	VRPIFKLKKK
Bombyx mori	KRLDLKKLIKEVPKLHLVLKPNYD	CRPIVKYRN
Bombyx mandarina	KRLDLKKLIKEVPKLHLVLKPNYD	CRPIVKYRN
Tribolium castaneum	PRGVNIIIPKQDN	FRAIVSIFP
Caenorhabditis elegans	VATFKLSISRQK	LRPLFKRKA
Caenorhabditis remanei	SVVGRLKFDIVENK	FRPIIRNP
Schizosaccharomyces pombe	TLPPAVIRLLPKKNT	FRLITNLRKRFLIKQ
Saccharomyces cerevisiae	NFNHSKMRIIPKKSNEFRIIAIPC	CGA
Saccharomyces kudriavzevii	NFNHCRMRIIPKKSNEFRIIAIPC	CEGA
Saccharomyces bayanus	NFNHSMRIIPKKSNEFRIIAIPC	CGA
Saccharomyces paradoxus	NFNHSKMRIIPKKNNEFRIIAIPC	CGGA
Saccharomyces mikatae	NFNHSMRVIPKKSNEFRIIAIPC	CGGA
Kluyveromyces lactis	KFNHNRNLRLIPKKSGLDFRIIAVPC	CKGV
Candida albicans	PCGKTKLIPKRSS	FRVICVPIKRSKLKLNKKL
Ashbya gossypii	DYNHRYLRLIPKRHKQFVRLAIPC	CKGI
Aspergillus nidulans	KKSGYGSRLLPKTTG	IRPILNLRRLVRSIYA
Aspergillus fumigatus	GRSLGYSSLRLLPKTTG	VRPILNLRRLMLQPGWA
Aspergillus clavatus	SRLGYSSLRLLPKTTG	VRPILNLRRLMLKPGWA
Neosartorya fischeri	GRSLGYSSLRLLPKTTG	VRPILNLRRLMLQPGWA
Neurospora crassa	GRKLGFSQVRLLPKGVGSNLRPIMNLRRLVLRGLGS	
Encephalitozoon cuniculi	SYSELRCIPKMNG	ARTISNMS
Ostreococcus lucimarinus	GFSNMRFLPKGSG	LRPLATLNKPTTFVVKGG
Arabidopsis thaliana	KLSKFRFLPKANG	VRMVL
Doryanthes excelsa	NFGFSRVRLPKQKC	VRILANTKVPSKIPLHRN
Iris tectorum	GFGFSRVRLIPKKHD	IRIIANARIPSKL
Oryza sativa	NCSSRVRLPKAKD	MRPLVD
Zea mays	SCYFSTVRFIPKAKD	MRPLVNLRA
Tetrahymena thermophila	YPQGLRIIPKKS	FRPIMTFLRKDKQKN
Paramecium caudatum	YVGKLRIVPKPGT	FRPIVTYNRKA
Paramecium tetraurelia	YIGKLRIVPKPGT	FRPIVTYNRKS
Euplotes aediculatus	GFAPGKLRLIPKKT	FRPIMTFNKKIVNSD
Euplotes crassus (micronuclear)	RFAPGKLRLIPKKT	FRPIMTFNKKIVDPE
Euplotes crassus (macronuclear)	RFAPGKLRLIPKKT	FRPIMTFNKKIVDPD
Oxytricha trifallax	NFAPGKLRLIPKGD	FRPIMTFNRKIPNQV
Cryptosporidium parvum	LIDKNSEFSENIPIKIRWVPKSKG	LRPLINLSKVSGSQILQQNLERDHTC-EEKKKIGFCDCNSVWTCG
Eimeria tenella	ELDKNISFSENIPIKIRWVPKSKG	LRPLINSLKLVSGQIGLVQNLQEDHTVREEKKCKGFCDICSVWCTN
Giardia lamblia	DAVNRIFWKQVSPGRLSFVYKSNGR	VRPLCNFSFC
Giardia intestinalis	DAVNRIFWKQVSPGRLSFVYKSNGR	VRPLCNFSFC
Leishmania amazonensis	PNACGGAAVAAFPSPHSAASNASAAISAPRDEWRAVRTGGALAHWSARATLATRGGGASCLYAGVRFRRPDRRK	LRPIAVVRSASLR
Leishmania infantum	PCACEGAATAALPTPHSAASKASAAISAPRDVWRAVRTDGLAHRGARATLATRGGGASCLYASVRFRRPDRRK	LRPIAVVRSASLR
Trypanosoma brucei	RVTSEGLMQLIGPS	SQPVGGDSGGVSDVCKLRDSSSPLLYSDVRFVLDGSK-LRPIARPRFGWQR

|motif 1| |-2-|

		-----3A
Homo sapiens	-----	-TFRREKRAERLTSRVKALF
Mesocricetus auratus	-----	-AFD K G K QAQHFTQ C L K TLF
Mus musculus	-----	-ALGRRKQAQHFTQRL K TLF
Rattus norvegicus	-----	-AFG K K K QTQ C FTQSL K TLF
Canis familiaris	-----	-TF H RD K K V QH L TS S QL K TLF
Bos taurus	-----	-APPRD K K V QH L SSRV K TLF
Coturnix japonica	-----	-LS K ESRE K K I QRYNTQ L KN L F
Gallus gallus	-----	-LS K ESRE K K I QRYNTQ L KN L F
Xenopus laevis	-----	-Q S KE N Q E K K I H HFSSQ I R N L F
Oryzias latipes	-----	-SN T RL H H K R I RD L M
Oryzias melastigma	-----	-L H TRL H H C IRD L M
Nothobranchius furzeri (GRZ)	-----	-TK T K L Y Q A K ARN F L
Nothobranchius furzeri (MZM-04)	-----	-TK T K L Y Q A K ARN F L
Epinephelus coioides	-----	-AK T R V Y R G R VRD L L
Takifugu rubripes	-----	-AK T RLY Q S H VRD L L
Danio rerio	-----	-D T L Q Y F Q S C V RV L Q
Ciona intestinalis	-----	-----K M P D M V P F EV I A
Ciona savignyi	-----	-----E P SS K MS F NS I S
Strongylocentrotus purpuratus	-----	-----I E E K GL S VR L L L Q D L F
Strongylocentrotus purpuratus	-----	-----I E E K GL S VR L L L Q D L F
Apis mellifera	-----	-----F R D T D Y L F I I F
Bombyx mori	-----	-----D E L N K R Q K Y R I K
Bombyx mandarina	-----	-----D E L N K R Q K Y R I K
Tribolium castaneum	-----	-----D S AR K P F F K L L TS K I
Caenorhabditis elegans	-----	-----I D K K T E T M Q W K R L N
Caenorhabditis remanei	-----	-----I D K V K D K M H W K K V N
Schizosaccharomyces pombe	-----	-----M G S N K K M L V S T N Q T L R P V A
Saccharomyces cerevisiae	-----	-----D E E E F T I Y KE N H K NA I Q P T Q
Saccharomyces kudriavzevii	-----	-----D E E E F M V Y KE N H K R V I A P T Q
Saccharomyces bayanus	-----	-----D E E E F A V Y KE N H K K A V T P T Q
Saccharomyces paradoxus	-----	-----D E E E F M I Y KE N H K NA V A P T Q
Saccharomyces mikatae	-----	-----D E E E Y M I Y KE N H K NA V A P T Q
Kluyveromyces lactis	-----	-----N I Q E F N E F N D Y V T N AL K P T K
Candida albicans	-----	-----E L D T LE K E K R E F E R Y R K E V L S P V G
Ashbya gossypii	-----	-----D E ED K R E Y E D Y V R T V I K P V Q
Aspergillus nidulans	-----	-----G K N R Y H PA Q S V NS A I A P V Y
Aspergillus fumigatus	-----	-----G K AP F L G PS I NS T M T P I F
Aspergillus clavatus	-----	-----G K AP F L G PS I NS T I A P V F
Neosartorya fischeri	-----	-----G K AP F L G PS I NS T I T P I F
Neurospora crassa	-----	-----K G I W G K Q K Q M L G PS I NS V L G P V N
Encephalitozoon cuniculi	-----	-----K A R N G R PS I N K S I Y E F
Ostreococcus lucimarinus	-----	-----G K NS M R W L K K F D A IN R R L K D V Q
Arabidopsis thaliana	-----	-----F S SS S R S Q S L R D T H
Doryanthes excelsa	-----	-----N N R K R R F V L K S I NS S L K E L H
Iris tectorum	-----	-----I Y F Y K S I N T S L K E L H
Oryza sativa	-----	-----L R A K S K D A N L N K C H
Zea mays	-----	-----Q S K N A L L N N C H
Tetrahymena thermophila	-----	-----I K L N L N Q I L M D S Q
Paramecium caudatum	-----	-----K T S K I S L N R K L V
Paramecium tetraurelia	-----	-----R I S K L S L N K K L L
Euplotes aediculatus	-----	-----R K T T K L T T N T K L L N S H
Euplotes crassus (micronuclear)	-----	-----G K T S K M T T N T K L S Y S H
Euplotes crassus (macronuclear)	-----	-----G K A S K M T T T T K L F Y S H
Oxytricha trifallax	-----	-----G K F Q S R M T T N N K L Q T A H
Cryptosporidium parvum	GD-LPTSW-INNNYYYNY-FNSNG-NNGIV-GNNHNYGHI N NI G G K N F TS F SS Q NC-QIMTP P G R L G V L G F G N Y I G I G I NS G SS V PT P IN K VM R RP S SN R I D IR P ST N N M L F Y P S	
Eimeria tenella	GDCLPTGSCINNNWYYNYF S YNG N NG I V N N H Y N Y G H I Y N NG G G I K F TS F S S NS Q CTQIM T N P P G R G V L G F G N L N I G I G Y I S G SS V PT N T P IN V M R RP S SN R K I D I R P ST N N R M L F Y P	
Giardia lamblia	-----	-----H R VS L NS F LS A L Q VI E F E L
Giardia intestinalis	-----	-----H R VS L NS F LS A L Q VI E F E L
Leishmania amazonensis	-----SLK E M A R G SPSPY S A I VR L LR L GC S D A D G QL P A A T A T L LR Q V Q ARS R HN R RT G V H RS A HL P -P H L P H K A A L Q D A LR C L V S G V	
Leishmania infantum	-----SLK E M A R G SPSPY S A I VR L LR L C R LG C S D T D G Q L P A A T A T L LR R V Q ARS R HN H HT G V H RF P HL P -P H L P H K A A LR D AL R C L V S G V	
Trypanosoma brucei	-----S L L K A A D G V G SS T LA S AL A K A G K Y L A T D G K A M-W P SP N SA V LR D AL R C L D A G V	
		-----3A

	----- -----3B (linker)----- -----3C-----	--motif A--	--IFD A--	----- -----3B (linker)----- -----3C-----	--motif A--	--IFD A--
Homo sapiens	SVLNYERA-----RRPGLLGASVLGLDDIHRAWRTFVLVRVAQD-----	PPPELYFVKVDVTGAYDTIPQDRLTEVIASIIKPQNTYCVRRYAVVQKA----				
Mesocricetus auratus	SVLNYELT-----KHTNLLGASVLGLNDIYRTWRTFVLVRVRLD-----	PAPRMFYVKADVGTGAYDAIPQDKLVEIVANMIRHPDNSYCIHQYAVVQR----				
Mus musculus	SMLNYERT-----KHPHLMGSSVLGMNDIYRTWRAFVLVRVRLD-----	QTPRMFYVKADVGTGAYDAIPQGKLVEVVMANMIRSESTYVCIRYAVVRR----				
Rattus norvegicus	SVLNYERT-----KHPNLMGASVLGTSDSYRIWRTFVLVRVRLD-----	QTPRMFYVKADVGTGAYDAIPQDKLVEIVANIIRRSSEMYCIRQYAVVQK----				
Canis familiaris	SVLNYERA-----RRPSLLGASMLGMDIHRAWRTFVLRLRAQN-----	PAPQLYFVKVDVTGAYDALPQDRLEVIANVIRPQESTYCVRRHYAVVQR----				
Bos taurus	AVLNYERA-----RRPGLLGASVLGMDIHRAWRAFLPLRARG-----	PAPPLYFVKVDVVGAYDALPQDKLAEIVANVLQPQENTYCVRRHCAMVRT----				
Coturnix japonica	SVLNYERT-----VNTSIISSSVFGRDDIYRKWKFEVTKVFESG-----	GEMPHYFVKVDVSRADFDTIPHKKLVEVISQVLKPESQTVYGIRWYAVIM----				
Gallus gallus	SVLNYERT-----VNTSIISSSVFGRDDIYRKWKFEVTKVFESG-----	GEMPHYFVKVDVSRADFDTIPHKKLVEVISQVLKPESQTVYGIRWYAVIM----				
Xenopus laevis	SVLNYEWN-----RNCSLIGSSVFGMDIYKKWKKFVLDLFEKFPQ-----	VEKLQFYFVKTDVKGAYDTIPHSKLDDEVISKVINPNANEVYCIIRYATVS----				
Oryzias latipes	SMLQARVR-----SAPALLGSTVWGMDIHKVLRSLAPAQKDK-----	PQPLYFVKVDVSGAYDSLPHDKLKEVITEALSPVQEEVFTIRHYAKIW----				
Oryzias melastigma	DLLQARVR-----SMPSSLGSTVWGGLTIHKVLRSLAPAQKAK-----	PQQLYFVKVDVSGAYESLPHDKLKQVVSSEALSPICEQVFAIRHYAKIW----				
Nothobranchius furzeri (GRZ)	DALQACVQ-----SNPSLLGSTVWGGLDKIHKVLRSLAPAQKDK-----	PQHLYFVKVDVSSAYESLPHDKLMEVIGQVLSPVQEEFTVRCYSKIW----				
Nothobranchius furzeri (MZM-04)	DALQACVQ-----SNPSLLGSTVWGGLDKIHKVLRSLAPAQKDK-----	PQHLYFVKVDVSSAYESLPHDKLMEVIGQVLSPVQEEFTVRCYSKIW----				
Epinephelus coioides	DMLRACVR-----STPSLLGSTVWGMDIHRVLRSLQAQKDK-----	PQPLYFVKVDVSGAYESLPHDKLIEVIGQALSPVQDELFTIRHYAKIW----				
Takifugu rubripes	DMLRACVC-----STPSLLGSTVWGMDIHKVLRSLQAQKDK-----	PQPLYFVKVDVSGAYESLPHDKLIEVINQVLTPLNVEFTIRHYAKIW----				
Danio rerio	NVLSVCVR-----EAPGPMGSTVWGWDIHRRLQDFSPQKQSS-----	PRPLYFVKVDVSGAYDSLPHKLKLEVLKEVLGPFQAEQSFFLRQYSSVW----				
Ciona intestinalis	SVLKLVCSS-----KVPQATGFATQHHAHYNGWKLFVLSLAGIP-----	GRKRLFFVKMDIHRCFDSIPVVKLTLIVEGLLD-----				
Ciona savignyi	SVLKLALQ-----RFPDSLGFATKDRSDIYCKWRQFLLLKKEIN-----	AKRWQIFYVKLDICRCFDSIPIPKLLRIVQDLLD-----				
Strongylocentrotus purpuratus	DVLTYYHKI-----NQPSVMGSSLLGIDGYYHKVLFKFIKDRKERK-----	DTRPLYFVKIDIEKCYDSIKHKKLQIISMLLQGHDKPDEYQLQRYVTV----				
Strongylocentrotus purpuratus	DVLTYYHKI-----NQPSVMGSSLLGIDGYYHKVLFKFIKDRKERK-----	DTRPLYFVKIDIEKCYDSIKHKKLQIISMLLQGHDKPDEYQLQRYVTV----				
Apis mellifera	KFLKQLYV-----TNYEVINFPKKWKSIVQKLNST-----	EKLYFVCCDVINAFGSIIQVELYNIQSLCKDLPENLILK-----				
Bombus mori	EKLQLLKL-----LTGNQKHKIEATAYPKLHSHKWLNLN-----	PKLYFIKTDLSDAFGSINTDKMMKILHENYLNHYKTESNM-----				
Bombus mandarina	EKLQLLKL-----LTGNQKHKIEATAYPKLHSHKWLNLN-----	PKLYFIKTDLSNAFGSINTDKMMKILHENYLNHYKTESNM-----				
Tribolium castaneum	YKVLEEKY-----KTSGLSYTCWSEFTQKTQ-----	GQTYGIKVDIRDAYGNVKIPVLCKLIQSIPT-----				
Caenorhabditis elegans	SMLSWCLE-----RSGVYRHTIRDSCCKVSDFLKKNS-----	QNSKIIGYTAADVSKCFSTVNHDLVLSIIDRLFSQEH-----				
Caenorhabditis remanei	SMLTWCLE-----KGGETRQSSINSSCKILLKFLRRND-----	TFPKLFGYTADVSKCFSAVKHSTLTSIIERLLDWT-----				
Schizosaccharomyces pombe	SILKHLIN-----EESSGIPFNLEVYMKLLTFKKDILLKHMR-----	FGRKKYFVVRDIDIKSCYDRIKQDLMFIRVKKKLKDPFVIRK-----				
Saccharomyces cerevisiae	KILEYLRN-----KRPTSFTKIYSPQIADRIKEFKQRLKKFNN-----	ALPELYFMKFVVKSCYDSIPRMECMRIKDLKNEGFFVRSQYFFNT-----				
Saccharomyces kudriavzevii	KILEYLRN-----KRPTDFVKIYSPQIADRIKEFKQGLKKFNN-----	VLPELYFMKFVVKSCYDSIPRTECMRIKRLKKEGFFVRSQSFFNT-----				
Saccharomyces bayanus	KILEYLRN-----KRPTSFTKIYSPQISDIEFKQILLKKFNN-----	ILPALYFMKFVVKSCYDSIPRTKSMQIIRKALENEGFFVRSQSFFNT-----				
Saccharomyces paradoxus	KVLEYLRN-----KRQTSFTKMSPMQIADRIKEFKQSLKKFNN-----	VLPELYFMKFVVKSCYDSIPRMECMRIKALKSENGFFVRSQSFFNT-----				
Saccharomyces mikatae	KILEYLRN-----KRLTSFTKIYSPQIADRIKEFKLSLLKKFNN-----	VLPELYFMKFVVKSCYDSIPRIECMRIKRLKKEGFFVRSQYSNT-----				
Kluyveromyces lactis	IILRLRM-----RRNTKFTKAFSPLEIPKIVLSYKQRLLLKHG-----	KIPNLYLLKFIDQSCYDSIPVQVKMLVEARICEEQQFFIRSQDILTT-----				
Candida albicans	QILRLKLSKLRD-----TYESYRASVHSSSDVAEKISDYRDSLPLRG-----	EIPKLFILKFDMKECYDRLSQPVLMKKLEELFENQDNKTSYYVRYAQLDAS-----				
Ashbya gossypii	QILEYLRM-----RRAVRFQRLYSPAQIAKYIGEFRSSILTKHK-----	VIPPLFVLKFDIASCYDSIPMIKIVTEVVKLMKDETCFYLKMLIYDT-----				
Aspergillus nidulans	SMLNYERG-----RRNDLLGSSMFSVGMDHSLRKKFKESLMSRGW-----	DQRKLYFVKLDIQSCFDTIPQAKIVRLVEKLSSEENYHMKVYEMRLASEFDN-----				
Aspergillus fumigatus	NVLKYETA-----RNPASLGSTLSFVGEIHTRLKSFKERLSQSHSS-----	DRRKRLYFVKLDIQSCFDTIPQKELIPLVESLSEEGYQIGKHVEVRPPDEFSS-----				
Aspergillus clavatus	NVLNYEKR-----RNPDSLGAALSFFVGEIHTRLKGFKERLTQKHAG-----	HPRPHLYFVKVDIQSCFDTIPQENLVLVESLSEEGYVAKHVEVRPPDEFSS-----				
Neosartorya fischeri	NVLNYEKA-----RNPASLGSTLSFVGEIHTRLKSFKERLSQSHSS-----	DRRKLYFVKLDIQSCFDTIPQELIPLVESLSEEGYQIGKHVEVRPPDEFSS-----				
Neurospora crassa	SMLKFEKR-----ERPGRLLGGGFAVGDYIYQVKEFRARVMSSEVSK-----	KKGKKKFYFVKVDIQSCFDTIPQAAVVEVLLGKIPGHGVYKESKHVEVRLDYEHN-----				
Encephalitozoon cuniculi	CVLRHETH-----GMLGNSILNHSGMYEKLSSYLSRSV-----	RPLYILKVDLSGCFDNIPQDEVVSLVRLRLHKSRYHTKSFSILEEV-----				
Ostreococcus lucimarinus	DILHHETV-----RDPNVLGAADVGDYKAALLRLGCLRAIRRQKL-----	LGRRPQAYILATDIKGAFDNLPLESLEVALDLISSSSYQTLHYAVVQKNGEAKYK-----				
Arabidopsis thaliana	AVLKDIQL-----KEPDVLGSSVFDHDDFYRNLCPYLHLRSQS-----	GELPPLYFVVADVFAFDSVDQGKLLHVIQSFLLKDEYILNRCRLVCC-----				
Doryanthes excelsa	AILRRIKH-----EHPQALGSSVFGYDDAYRKLQFLPKVKEGS-----	PMMPKYYIVGVDSVKAFFDSINQDKLVEIMKDIIQDKYLLSYARVISTTK-----				
Iris tectorum	AVLKTIKQ-----EHPQLLGSSVFGYNEIHKESQFLPKLRGRK-----	QKIPNVYIVVADVAKAFDSIDQDKLLEILKGIENVDRYFLREYTHVCTKK-----				
Oryza sativa	LIMKKLRD-----EKPEMFSSVFDYNNVHQNLQSFISSKRSQ-----	MKKLKYYIVVADVSAFDCVSHDMVLKMIIDAFKDEYTVRKCSKVIKNSRK-----				
Zea mays	LIIKVKVD-----ENPDKFSSSVFDYNNVHQNIWHFISSVSHL-----	KEKIKYIVVADVSAFDCIHDMLLKVVDDALKCDDYVLRKCKKVVNSK-----				
Tetrahymena thermophila	LVFRNLKD-----MLGQKIGYSVFDNQIIEKFAKFIKWKNK-----	GRPQLYYVTLDIKKCYDSIDQMKLLNFFNQSDLIQDTYFNIKLLYFQRNKRPL-----				
Paramecium caudatum	DIKYILRN-----LRIQPLGYSVFGNPEVFSRLKEFKLWKI-----	QQPKTYIITMDIQKCYDTIILQKLLQFIEESKQFSSIIYANKYHIVSRNNRML-----				
Paramecium tetraurelia	DIKYILRN-----LRSQQLGFSVFGNPGIFNRLKEFKLWKI-----	QFPQTYFMSMDIHKCYDSIQLEFLFKFIEESNLISQAYVNIKYLIIRNNRQS-----				
Euplotes aediculatus	LMLKTLKN-----RMFKDPFGFAVFNYDDVMKKYEEFVCKWKQV-----	GQPKLFFATMDIEKCYDSVNREKLSTFLKTTKLLSSDFWIMTAQILKRKNIV-----				
Euplotes crassus (micronuclear)	LMLKTLKN-----RMFKDPFGFAVFNYDDVMKKYEEFVCKWKQV-----	DRPKLYFVTMDIEKCYDSVDREKLSQFLGTTQLLSSFRIMTIQSMKKNNAEVV-----				
Euplotes crassus (macronuclear)	LMLKTLKN-----RMFKDPFGFAVFNYDDVMKKYEEFVCKWKQV-----	GRPKLYFVTMDIEKCYDSVDREKLSQFLGTTQLLSSFRIMTIQSMKKNNAEVV-----				
Oxytricha trifallax	MMLKNLKS-----KMFKHSFGFAVFNYDDIMKRYENFVQKWKQI-----	NSPKLYFVAMDIKCYDNDVCERVNFLQKSDLMQKEYFILTNTFVLKRKNIIIV-----				
Cryptosporidium parvum	KILRSFLL-----RMTGKNHGLASLVQFGDIYKIIKNWIKNRRDKQFQMNEDFY-----	QNQGKKMSHVYIYIADLVNCFENINKSKIFEFLDVISLPNEISLLSLYSRALSKTTIIP-----				
Eimeria tenella	SILRSFKL-----LRMGKNTLASLVGQDIYKFIKKNWIKNRRDKQFQMNEDFY-----	QNDKQKMSHVYIYIADLVNCFENINKSKIFEFLDVISLPNEISLLSLYSRALSKTTIIP-----				
Giardia lamblia	ERPRNRYL-----QAHLAKNLGHIAVDYAAWLDATYITENPE-----	AQIYMTTDMITAFESVSPRLLYYISHYIVTGNAYVVLTYKEIAPSKMP-----				
Giardia intestinalis	ERPRNRYL-----QAHLAKNLGHIAVDYAAWLDATYITENPE-----	AQIYMTTDMITAFESVSPRLLYYISHYIVTGNAYVVLTYKEIAPSKMP-----				
Leishmania amazonensis	EEQRVRDGL-----PRLSNLSHQDEYAEALRSFCEEVRGRHAIPCEGPAKTTAVSSASPPGATAC-----	FAPYVITLLRSDASRCYDNLPPQGRVLAARSLVKHGDAYRVLRTFTIHAVDSEATC-----				
Leishmania infantum	EEQRVRDGL-----PRLSNLSHQDEYAEALRSFCEEVRGRHAIPCEGPAKTTAVSSASPPGATAC-----	FAPYVITLLRSDASRCYDNLPPQGRVLAARSLVKHGDAYRVLRTFTIHAVDSEATC-----				
Trypanosoma brucei	EERRITTGA-----RQRAIGSHNDEYIEVRSFIQCARQFCTIPTLVQGETSAALLA-----	DATAVTMVRGDAARCYDHLPEAVVNIMRGLVTHETYYSLKLTVTLTTVKNVS-----				

	-----IFD B (linker)-----
Homo sapiens	-----AHGHVVRKAFKSHVSTLTDLQPYMRQFVAHLQETSPLRDAAVVEQSSSLNEAS
Mesocricetus auratus	-----DRQGQIHKSFRQVSTLSDLQPMGQFLKHLQSDTSALRNSVVEIQSLSLNEAS
Mus musculus	-----DSQGQVHKSFRRQVTTLSDLQPYMGQFLKHLQSDASALRNSVVEIQSISMNESS
Rattus norvegicus	-----DSQGQVHKSFRRQVSTLSDLQPYMGQFTKHLQSDASALRNSVVEIQSISMNETG
Canis familiaris	-----TARGHVVRKAFKRHVSTFADLQPYMRQFVERLQETSLLRDAAVVEQSSSLNEAG
Bos taurus	-----ARGRMRSFKRHVSTFSDFPYLRQLVEHLQAMGSLRDAAVVEQCSLNEPG
Coturnix japonica	-----ITPTGKARKLYKRHVSTFEDFIPDMKQFVSKLQERTSLRNAIVVEQCLTFNENS
Gallus gallus	-----ITPTGKARKLYKRHVSTFEDFIPDMKQFVSKLQERTSLRNAIVVEQCLTFNENS
Xenopus laevis	-----VDPTGRIIKSFKRHVSELADVLPMKQFVSNQEQKNLLRNTILVEQNLLNESS
Oryzias latipes	-----ADSHGELKKAFARQVDFSDGSMGSTSMKGFMVSLQKSSKVHHAHLVEQAFGSNLRG
Oryzias melastigma	-----RDSHEGVKKTFTKQVDFSDGLGSSSTMKNFTMALQQTSAHNSVIVEQASTFNIQG
Nothobranchius furzeri (GRZ)	-----MDPHEGLKKAFVRQADFLDHDFRPTNMKGFLMSQQKSGKIHSAVTVEQHFCSDYRG
Nothobranchius furzeri (MZM-04)	-----MDPHEGLKKSFVRQADFLDHDFRPTNMKGFLMSQQKSGKIHSAVTVEQHFCSDYRG
Epinephelus coioides	-----ADSHGELKKSFVRQADFLEDNMGSTNMKGFTSLQKRQKVHHAHLVEQHFFSSDLHG
Takifugu rubripes	-----ADSHGELKKAFIRQADFLEANMGSINMKQFLTSLQKKGKHHSVLVEQIFSSDLEG
Danio rerio	-----SDPTRGLRKRFCCKAEMSEPLNMKGFFVDEQVSGRLHDAILVERHSSEVRG
Ciona intestinalis	-----RSGEVDLTSATKGKLNCKVKHCT
Ciona savignyi	-----RAGTLDVSIIVTKGKLRCCKIHCS
Strongylocentrotus purpuratus	-----TRAASASTGLQKRSHRHVTTLESSFHRQLIQMAQHKGKIKNAIIINQVHTVKVTP
Strongylocentrotus purpuratus	-----TRAASAPTGLQKRSHRHVTTLESSFHRQLIQMAQHKGKIKNAIIINQVHTVKVTP
Apis mellifera	-----YYTMKSEISKKDNTYHKYFSDLQLPFPDQFYANLVDNQWYQLINK
Bombyx mori	-----VLKKRVS
Bombyx mandarina	-----VLKKRVS
Tribolium castaneum	-----LLD
Caenorhabditis elegans	-----IYTVCGKGRNHGGFHKLIFCSAGTELNAHEALRRKMEKLGVFNFVFCYREMSSS
Caenorhabditis remanei	-----CGKGRDKKGFFHKLIFCSNDSEEGAYQSLKKKMEKSHVEDHTVIYCNVCS
Schizosaccharomyces pombe	-----YATIHATSDRATKNFVSEAFSYFDMVPFEKVVLQSMKTSDFLFDVDFYWTKSS
Saccharomyces cerevisiae	-----NTGVLKLFNVVNASRVPKPYELYIDNVRTVHLSN
Saccharomyces kudriavzevii	-----NTGILKLTNVVNASRTPKPYELYIDNVRTVHLSN
Saccharomyces bayanus	-----NTGVLRLVDVNASRTPKPHELYIDNVRTVHLSN
Saccharomyces paradoxus	-----NTGVLKLVNVNASRVPKPYELYIDNVRTIHLSN
Saccharomyces mikatae	-----NTGALKLVNVNASRTPKPYELYIDNVRTVHLSN
Kluyveromyces lactis	-----ASTRLKRLHAVNGDIQFQENDLVIDSVKTTVLK
Candida albicans	-----HKLKKVKTITDQYHNLTLSRRHLNSCKSLVDKTKTIALQK
Ashbya gossypii	-----KHIIKRKSAVNGNLQASDGSIIIDNSQTMYSK
Aspergillus nidulans	-----MWPRLRPQRRRTWSKYLQRVGPVGRPENLADATANGSVGRRNTVLVDITIAQKEYNG
Aspergillus fumigatus	-----MWPVQESQSKALRKYVGRAAPVSKAQTDAITDGGISHRRNTVFVDTPAHKEYSG
Aspergillus clavatus	-----MWPVQESQSKALRKYVGRAAPVNSQDLTEATAEGGISHRRNTVFVDTPAHKEYSG
Neosartorya fischeri	-----MWPVQESQSKALRKYVGRAAPVSRAQDLDAITDGGISHRRNTVFVDTPAHKEYSG
Neurospora crassa	PANNDDTNID-----NPKYKLPKTRWHSTTTSFPSITTTTTTSTTSASISILPQQQDSVATTCKNTLFIPIHSSTKLHTS
Encephalitozoon cuniculi	-----GGELRSRYVCKVTENAETINELMMEPGAFFNVKVVKENASQRILSR
Ostreococcus lucimarinus	KLVSSLPTAA-----KGERVPGPLVTEAQRVSNTGGAAILGRESRNSIVDAGFAKEISD
Arabidopsis thaliana	-----GKRSNWVNKILVSSDKNSNFSRFTSTVPYNALQSIIVDKGENHRVRK
Doranthus excelsa	-----GIKTFFEQVSSDHSSSSNDIINFALTRLRPSYSVYIDQGTSCIKK
Iris tectorum	-----CVRTFTDRISCEDHGNNNQIIRSKVAARVCSSPSIIIDQGRSQCVDK
Oryza sativa	-----NSLYRFDNSASIGNNSIYDLSIQLSSGGGIFVDQGTICRILK
Zea mays	-----NAIYRFDNSVSIISGDNVCDFLIQLSSRGGILVDQKSKCKIRK
Tetrahymena thermophila	QIQNTNNLNSA-----MEIEEEKINKKPFKMDNINFPYYFNLKERQIAYSLYDDDDQILQKGIFYQDDRPFIVINQDKPKCITK
Paramecium caudatum	-----KPSFSMKDLFNILDRTPCAIPFNKPQLLQKGYIEHIQKNKQTIINQGFQNSVTF
Paramecium tetraurelia	-----RGSQMRLEFNIFDRTPCAIPINNPAQALQKGYIEYIQQNKLAIIANLGIQTTVTF
Euplotes aediculatus	-----DSKNFRKKEMKDYFRQKFQKIALEGGQYPTLFVLENEQNDLNAKKTLLIVEAKQRNYFKK
Euplotes crassus (micronuclear)	-----DSQNFKKKKMRDYFRKKWQKIALEGDQYPSLFNVLENDQNELNAKKTLLVENQKRDOPYKK
Euplotes crassus (macronuclear)	-----DQEKCEKMKDCFRQKWHKIALESNQSPSLLDVLENDQNELNAKKTLLVENQKRDOPYKK
Oxytricha trifallax	-----ERSNFRKLPIKQYFRYFKQKIGIDGSSYPTLFEILEDEFDNLNMKRTIIVEQEQRKFKPK
Cryptosporidium parvum	PFDNMNRDSY-QDELGRSCIITSKGLNMVPIFEKDHD-EDQKVVKSKIKRIIGPDLDELLWNLKNSCLSNKDLISILGQKKAEIFTLNRRVINWKLVEIKIHLNLSFFRLRTC
Eimeria tenella	PFDNMNRDSYIQDELRSCEI-TSKGKLMIVIFEKDHDPEQDKVVKSKIKIIGPDLDELLWNLKNSCLSKDLSINLGQ-KAEIFTFKLSRRVINWKLVEIKIHLNLSFFRLRTC
Giardia lamblia	-----KIRTVALPCQHNCGVSMDSISRYLLCKETPKKQPNMSMLCPMHARIYKR
Giardia intestinalis	-----KIRTVALPCQHNCGVSMDSISRYLLCKETPKKQPNMSMLCPMHARIYKR
Leishmania amazonensis	KGGCLLRRTFTTTRTIPCAEAECG-----FLARIPRGIHYWEEEGRTPTGPHSTAAVSRTTDASSRCGANLISGA
Leishmania infantum	KGGCLLRRTFTTTRTIPCAEAECGV-----LARIPRGIHYWEEEEGRTLSPGHTAAVSRTTKASSRCGANLISGA
Trypanosoma brucei	KKTRSSHAESQLSSMKETNGSTVK-----HRKLQLSKRVKLVPGRYVQEGVLYGIARGCIAEYEEQSVGSDSLVSG
	-----IFD B (linker)-----

	---IFD C---	-----motif B-----
Homo sapiens	SGLFDFVFLRFMCHHAVRIRGKS	YVQCQG-IPQGSILSTLLCSLCYGD MENKLFAGIR
Mesocricetus auratus	SSLFDFFLFRVNSVVKIGGRC	YVQCQG-IPQGSILSTLLCSLCFGD MENKLF AEVQ
Mus musculus	SSLFDFFLHFLRHSVVKIGDRC	YTQCQG-IPQGSILSTLLCSLCFGD MENKLF AEVQ
Rattus norvegicus	SSLLHFFLFRVRSVVKIDGRF	YVQCQG-IPQGSILSTLLCSLCFGD MENKLF AEVQ
Canis familiaris	SSLFHLFLRLVHNHVIRIGGKS	YIQCQG-VPQGSILSTLLCSLCYGD MERRLFPGE
Bos taurus	SSLFNLFLHLVRSVHVRIGGRS	YIQCQG-IPQGSILSTLLCSFCYGD MENKLFPGVQ
Coturnix japonica	STLFSFFLQMLHNNILEIGHRY	YMQCSG-IPQGSILSTLLCSLCYGD MENKLLPGIQ
Gallus gallus	STLFTFFLQMLHNNILEIGHRY	YIQCQG-IPQGSILSTLLCSLCYGD MENKLLCGIQ
Xenopus laevis	VKLLAVFQQIIRSHILRIKDRY	YMQCCG-IPQGSMLSTILCSLCYGD MENAMLGGIQ
Oryzias latipes	KDALQFFTQMLTGSVVQHGKKT	YRQCRG-IPQGSVSSLLCCLCYGH MENVLF RDIK
Oryzias melastigma	KDAVQVFMQMLTGSIVQYGNKT	YRQCRG-IPQGSVSSLLCCLCYGH MERVLF RDLSK
Nothobranchius furzeri (GRZ)	VETLQFFTQMTSSVVQYRKKE	YRRCRG-IPQGSIMSSLLCCLCYGH MERVLF KTMSA
Nothobranchius furzeri (MZM-04)	VETLQFFTQMTSSVVQYRKKE	YRRCRG-IPQGSIMSSLLCCLCYGH MERVLF KTMSA
Epinephelus coioides	REALQFFTQMLTGSVVQHGKKT	YRQCRG-IPQGSVSSLLCCLCYGH MENVLF KDITE
Takifugu rubripes	KDALQFFTQILKGSVIQFGKKT	YRQCQG-VPQGSVSSLLCCLCYGH MENVLF KDIIIN
Danio rerio	GDVFQFFQKMLCSYVIHYDQQM	FRQVCG-IPQGSVSSLLCNLCYGH MEKALLKDIA
Ciona intestinalis	HCILTTLKYFLNKVTL SVLSKK	FVKLHG-IPQGWELSNLLCDIFYGH MEQQHLIN VLDPIDG
Ciona savignyi	QYIVDQLKFFLRDVTLSVLSKT	FIKLNH-IPQGWLLSSLLCNIFYGH MEQTHL FKFVEGINH
Strongylocentrotus purpuratus	KDLLQRLKQHYMADVKSGRKY	YWRQDG-ISQGSILSSLLCSFFYAH LERCYLSDDID
Strongylocentrotus purpuratus	KDLLQRLKQHYMADVKSGRKY	YWRQDG-ISQGSILSSLLCSFFYAH LERCYLSDIV
Apis mellifera	SWLLESISKYIFYQRITKINKNI	HIIGKG-IVQGSMLSPILSDIYYNYILNKEMSTYLK
Bombyx mori	EQFRNLVAELRKPLLVRFGSTI	FRWKEG-LVQGYKYSPALSELYSSYMDK KYLTEHLKVDNR
Bombyx mandarina	EQFRNLVAELRKPLLVRFGSTI	FRWKEG-LVQGYKYSPALSELYSSYMDK KYLTEHLKVDNR
Tribolium castaneum	SEKKNFIVDHSNQVFAFRRI	YKWNHG-LLQGDPLSGCLCELYMAFMDRLYFSNLD
Caenorhabditis elegans	TTLYSVIRTTLSYTYKRGPTS	WRITKG-VPQGHPTSSNLAHMYLNNFEQKYWSNEKED
Caenorhabditis remanei	KWLLDQLRSTISSYCYKRGKTT	FKITKG-VPQGHPLSPNFAFMYLND FEKENWRKVEHD
Schizosaccharomyces pombe	SEIFKMLKEHLSGHIVKIGNSQ	YLQKVG-IPQGSILSSFLCHFYMEDLIDEYLSFTKK
Saccharomyces cerevisiae	QDVINVVEMEIFKTALWVEDKC	YIREDEG-LFQGSLLSAPIVDLVYDDLLEFYSEFKASPS
Saccharomyces kudriavzevii	QDVIDVIEMETFKTALWVDKC	YLREDEG-LFQGSLLSAPIVDLVYDDLLEFYDEFKASPN
Saccharomyces bayanus	QDVINVIEMEMFKTSLWIQDKC	YLREDEG-LFQGSLLSAQIVDLVYDDLLESYNEFKASPN
Saccharomyces paradoxus	QDVINVVEMEIFKTALWVEDKC	YLREDEG-LFQGSLLSAPIVDLMYDDLLEFYGEFKTCPN
Saccharomyces mikatae	QDVINVIEEMEIFKTALWVDKC	YLREEG-LFQGSCLSAPIVDLVYDDLLEFYDEFKSSSN
Kluyveromyces lactis	EDVLTVVKMELFKTSIFYRGKC	YLRKDG-LFQGTPLSSVLVDILYDDLLEFYTEFTDEND
Candida albicans	GNILEVCRSQIYDVVGSVKDARGNLH	LYKRKG-VFQGFSLSSIFCDILYSAMVHDCFQFLWKSQK
Ashbya gossypii	EEIMSVLEMETKRTAFRHGNC	FLRKDG-IFQGSQLSCLVDIVYDDLLESYKEFGTPPG
Aspergillus nidulans	EGLDLDLNEHIRNNLVKIGKKY	FRQRKG-IPQGSVLSLLCSLLYAE MERVLFGLQT
Aspergillus fumigatus	DYLLDLDLDEHIRYNLVKVGKRY	FRQRNG-IPQGSILSSVLCNLFYAQMERE SLSFLDP
Aspergillus clavatus	DYLLDLDLDEHIRYNLVRVGKKY	FRQRNG-IPQGSILSGVLCNLFYARMERE CLGFLQS
Neosartorya fischeri	DYLLDLDLDEHIRYNLVKVGKRY	FRQRNG-IPQGSILSSVLCNLFYAQMERE SLSGLDP
Neurospora crassa	SALLSLAKEHITQNLVKIGKKY	YRQKTG-IPQGSVLSSTLCNYFYAD LERSQGLAFLGLGTEDDDEG
Encephalitozoon cuniculi	EEVEGAMTNMIKRNYYKNGKL	FVQKTG-IAQGSVASTLLCSLYKSIDDL YFDRVF
Ostreococcus lucimarinus	ENIVPLLRALHRENIISARGKF	LLQTVG-IPQGSIVSPLLCSLFYGHLEHEYGLLSG
Arabidopsis thaliana	KDLMVWIGNMLKNNMLQLDKSF	YVQIAG-IPQGHRLLSSLLCCFYGH LERTLIYPFLEEASKDVSSKECS
Doryanthes excelsa	DVLHLLLT EHLKNNILQIGQNF	YLQKVG-LSQGSISCLCSFYLGHIERSIVLPYLEKAHEQSNANIMNKELVWNRCMLTSDDCRTEL RGNASHNIESVKDDVACL
Iris tectorum	KTLLHSLMAEHLGNILRIGWRF	YLQKVG-ICQGGISLLCSFYLAHLERSKILPHLEKARGLKSEPSCDPYRKKDLDRDDTSCIRNSAIINL
Oryza sativa	EQFHLLLYEQIKCNILKIGQKY	YLQQVG-IAQGSKLSPNLCSLYFGHLENSVLSKFLHDSKLNAG
Zea mays	KEIQCFLSKQVKCNILKIGQNF	YSQRVG-ITQGNKLSPNLCSLYFGHLENS ELLKSLHDKNI
Tetrahymena thermophila	DIIHNHLKHISQYNLVISFNKVK	FRQKRK-IPQGLNISGVLCSFYFGKLEEEYTQFLKNAEQVNG
Paramecium caudatum	SEFLNSIKNICQNNIVQFENRY	FRQTLG-IPQGLNISGILCSFYLANLEQKLTNKILG
Paramecium tetraurelia	SEFLLSIKELCQNNIVQFEDRY	FIQTLG-IPQGLNISGILCSFYIANIEKNLTRKLIG
Euplotes aediculatus	DNLLQPVINICQYNYINFNGKF	YKQTKG-IPQGLCVSSILSSFYATLEESSLGFLRDESMNPENP
Euplotes crassus (micronuclear)	KALLDPVIKICRHHNYEFNRKY	YKQTKG-IPQGLCVSSILSSFYASLEENALGYLRKESMDANDP
Euplotes crassus (macronuclear)	KALLDPVIEICRHHNYEFNRKY	YKQTKG-IPQGLCVSSILSSFYASLEEHALGYLRKESMDTINP
Oxytricha trifallax	NDLLQPVLKICQNNYVTFNKKQ	YKQMKG-IPQGLCVSYILSSFYANLEENALQFLRKESMDPEKP
Cryptosporidium parvum	LRLIKSKQLGNSIKFGKRFSL	FKQDFG-IPQGSISYILCCLYYNFDLNP EIQNLLGHSSFSSSYISLSFLNP IKQEKVQLLDPT EKDLFSQHDL ETGLSR-YPEFKENEINI
Eimeria tenella	SLRLISKQLGNSIKFGKRFSL	FKQDFGIPQGSISYILCCLYYNFDLNP EIQNLLGHSSFSSSYFISSFLNP IKLQE-VQLLDKPTEDLFSQHDKOLEGLSRTYPEKENEIFNI
Giardia lamblia	EDIIMKLELHLLNPLVIEGGV	YRLTSG-IPQGSVSTVLFNCYSSLLHVQLLNTGIVS
Giardia intestinalis	EDIIMKLELHLLNPLVIEGGV	YRLTSG-IPQGSVSTVLFNCYSSLLHVQLLNTGIVS
Leishmania amazonensis	AVRALLSEHIRHLLVVVSGSL	FEQRVG-ILQGSVPAMLLCDRLFSNVVD TALSSILS
Leishmania infantum	AVRALLSEHIRHLLVVVSGSL	LEQRVG-ILQGSVPAMLLCDRLFSDVVD TALSGILS
Trypanosoma brucei	EEIRSVLQKHLQSHLVMLNGKM	YIQRMG-INQGSVAMLLCDQLLERVDAALSSILS

		--motif C--	-----motif D-----
Homo sapiens	-----	RDGLLRLVDDFLLVTPHLLTAKTFLRTLVRG----	VPEYGCVVNLKRTVVFNPVEDEAL
Mesocricetus auratus	-----	QDGLLLRFVDDFLLVTPHLLVQAEAFRLALVRG----	IPYEGCMINLQKTVVNFVPDAGTL
Mus musculus	-----	RDGLLLRVDDFLLVTPHLLDQAKTFLSTLVHG----	VPEYGCVMINLQKTVVNFVPDEGTL
Rattus norvegicus	-----	QDGLLLRFVDDFLLVTPHLLAHAKAFLSTLVHG----	VPEYGCVMINLQKTVVNFVPETGAL
Canis familiaris	-----	QDGVLLRLVDDFLLVTPHLLTQAQAFRLTLVGK----	VPEYGCRLANLQKTAVNFVPEDGAL
Bos taurus	-----	QDGVLLRLVDDFLLVTPHLLTRARDFLRTLVRG----	VPEYGCQVNLKRTVVFNPVEPGAL
Coturnix japonica	-----	KDGVLLRLIDD FLLVTPHLLMQARTFLRTIAAG----	IPYEGVMINLQKTVVNFVPDDIPG
Gallus gallus	-----	KDGVLLRLIDD FLLVTPHLLMQARTFLRTIAAG----	IPYEGFLINAKKTVVNFVPDDIPG
Xenopus laevis	-----	KNGVLMRLIDD FLLVTPHLLDQAKTFLRTLAEG----	IPQYGCSSISPKTQVVNFVPDDIPE
Oryzias latipes	-----	NKGCLMRLVDD FLLITPDRNQAQSFLLSILLAG----	VPQYGVVANPQKVVVNFQGGSEGGG
Oryzias melastigma	-----	NSGCLMRLVDD FLLITPDLNQAHTFLRIFLAG----	VPQYGVVANPQKVVVNFQVSEFGD
Nothobranchius furzeri (GRZ)	-----	TKGCLMRLVDD FLLITPDQRQAHTFLKTLLAG----	VPQYGLVVNPQKVVVNFPIPERPW
Nothobranchius furzeri (MZM-04)	-----	TKGCLMRLVDD FLLITPDQRQAHTFLKTLLAG----	VPQYGLVVNPQKVVVNFPIPERPW
Epinephelus coioides	-----	KKRCLMRLVDD FLLITPDLQEAQSFLLRILLAG----	VPQYGLVVNPQKVVVNFQMLGSVG
Takifugu rubripes	-----	KKGCLMRLVDD FLLITPDLNQAHTFLRIFLAG----	VPQYGLVVNPQKVVVNFQDYGSTD
Danio rerio	-----	KGGCLMRLIDD FLLITPHLSKATEFLTTLLSG----	VPDYGCQINPQKVVVNFVPCVSWV
Ciona intestinalis	-----	EPHLLIRYVDDYLFVTTSTRYKANAFLLMYSD----	NFKEYGFIVNTKKTCTNFASDCSQQ
Ciona savignyi	-----	EPCLLLRYVDDYLFITTNQDKATTFLLQMLHSG----	FEDYGCINPKKTCINFHPNFIDS
Strongylocentrotus purpuratus	-----	QEGLMRLIDD FLLITPHHDKAQRFLQLLLSG----	VKQYGCANPSKTLANFDFMHDDQ
Strongylocentrotus purpuratus	-----	QEGLMRLIDD FLLITPHHDKAQRFLQLLLSG----	VKQYGCANPSKTLANFDFMHDDQ
Apis mellifera	-----	TGEIIKYMDLITENKTLAEQFLELTKKG----	IPQYNCYFKQSKTQSNLISDRNK-
Bombyx mori	-----	KIKMFFRVDDYLYITDCFDDAIAFLSKISNY-----	RNVNYSKTAVNFQHPHSIR-
Bombyx mandarina	-----	NIKMFVRVDDYLYITDCFDDAKAFLSKILNY-----	RNVNYSKTAVNFQHPHSIQ-
Tribolium castaneum	-----	KDAFIHRTVDDYFFCSPHPHKVYDFELLIKGV-----	YQVNPTKTRTNLQPHRHP-
Caenorhabditis elegans	-----	SRIVFCRYEDDFIFITTENSLFEKMMKPLSTG----	NNTHFLTANPKFKKSERCG---
Caenorhabditis remanei	-----	ARIICYRYVDDYVFMMDKDLFKQISQPLFTG----	KNQHGVKANYECKVLTQFES---
Schizosaccharomyces pombe	-----	KGSVLLRVDDFLFIVTNKKDAKKFLNLSLRG----	FEKHNSTLEKTVINFENSNGII
Saccharomyces cerevisiae	-----	QDTLILKLADD FLIISTDRQQVINIKKLAMGG----	FEKYNAKANRDKILAVSSQSD---
Saccharomyces kudriavzevii	-----	QDTLILRLADD FLVISTDQQQISRIKKLAMGG----	FEKYNAKANEDKIITVCSQPN---
Saccharomyces bayanus	-----	QDTLILRIADD FLIISTDQQQIIDIKNLATCG----	FEKYNAKANEDKIITVSSQSN---
Saccharomyces paradoxus	-----	QDTLILRLADD FLIISTDQQQIINIKNLASGG----	FEKYNAKANEDKILAVSSHSD---
Saccharomyces mikatae	-----	QDTLILKLADD FLIISTDQQQIINVKKLAMDG----	FEKYNAKANRDKILSVCSPSD---
Kluyveromyces lactis	-----	SDPMIIRLVDD FLIVSTSKKYIERLNNLAQTG----	FKSFNTYINPQKVLVTSSESE---
Candida albicans	-----	DFLFVRLVDD FLLVTPDSNIYDQVHNILSGK----	ILESYGAFVNDKTVVVNQTTT---
Ashbya gossypii	-----	HASLVMKLADD FLVISTSKHEVDRLLKTLHHG----	FQDYNASVNRDKVMSFYSPEL---
Aspergillus nidulans	-----	DDALLRLDD FLLVTLDSGLAMDFLRMVVRG----	QPDYGISVNPAKSLVNFAAVVDGA
Aspergillus fumigatus	-----	SEAVLLRLVDD FLLITINSNLAMRFLQVMLKG----	QPKYGISINPAKSLVNFSAAMDGV
Aspergillus clavatus	-----	DESVLLRLIDD FLLVTTDSSLAMRFLQVMLKG----	QPEYGITVNPAKSLVNFSAAMDGV
Neosartorya fischeri	-----	SEAVLLRLVDD FLLITINSNLAMRFLQVMLKG----	QPKYGISINPAKSLVNFSAAMDGV
Neurospora crassa	-----	RGISRDNLTLLMRLIDD FLLITTSRSKARRFVEMHSG----	FAEYGVTVSANKSLVNFDCVGGT
Encephalitozoon cuniculi	-----	KEGILTRYVDD FLVISPCIDEIMKFLEVSQSI-----	SHLGINFSGEKMESNFGLEEHLK
Ostreococcus lucimarinus	-----	FCGEQSTVCRWMDMLLVTTDLDRAKAFVDMCKKG----	FEAHGCTLNTTKLSNFDHGEDVR
Arabidopsis thaliana	-----	REEELIPTS YKLLRFIDDFLVSTSRDQASSFYHRLKHG----	FKDYNCFMNETKFCINFEDKEEHR
Doryanthes excelsa	-----	GNSAIIIDLDEGDVACLDNGRWCKQDHATRGANETRHENLSSPMNLLRLIDD FLFISTSKQAISFYIRMTRG----	FEKYKCFMNETKFCINFEDAGQNSH
Iris tectorum	-----	HKKDVSLETDLWHRRDHTSGCTDDARHENSSSSPNMMLRLIDD FLFISTSKQATTFNRYVKG----	FGEYCNMNNSKFGLNFDLGKAKH
Oryza sativa	-----	EAFSEPEYLLMRFIIDDFIFISFSLEHAQKFLNRMRRG----	FVFNVCYMDSDSKYGFNFCAGNSEP
Zea mays	-----	DSEKDVLT PRSLLMRFIIDDFIFISFSKEQALNFFNRMRRG----	FVNVCYMDSDSKYGFNFVANSEH
Tetrahymena thermophila	-----	SINLLMRLTDDYLLFISDSQQNALNLIVQLQNC----	ANNNGFMFNDKQITTFNFPQEDY
Paramecium caudatum	-----	DTLIMRLTDDYCCLAFSQDSSIKILNNFTQI-----	EKQYQIRLNHDKTQHNIERSD---
Paramecium tetraurelia	-----	DTLIMRLTDDYCCLTFDKQNLITIKNNFKEV-----	EKQYSIHLNDDKTQHNIDQKI---
Euplotes aediculatus	-----	NVNLLMRLTDDYLLITTQENNAVLFIIEKLINV-----	SRENGFKFNMKKLQTSFPLSPSKF
Euplotes crassus (micronuclear)	-----	NITLLMRLTDDYLLITTQENNAVLFIIEKLINV-----	SRQNKFFNMKKLQTNFPLDPSKL
Euplotes crassus (macronuclear)	-----	NITLLMRLTDDYLLVTTKKSNAVLFIIEKLEEV-----	SSLNKFKNMKKLQTNFPLDPSKL
Oxytricha trifallax	-----	ETNLLMRLTDDYLLMTTEKNNAVLFIIEKLYQL-----	SLGNFFKFMKKLKTNFALNLQKI
Cryptosporidium parvum	YNTSTSKRRRIEISEYNINAKSVLLQPSSEFNNNINNQNCQIRANLKS YDQESPSQSNKQESLLLRWDD FLFLTS DLES AKKFLKLYI-----	QKLWGSNVSKDKINSNFPWIDHNN	
Eimeria tenella	YNTS-SKTRRLIEISEYNINAKSVLLQPEEFNNNSINQNCQIRANLS YDQESPKSSNKQESLLLRWDD FLFLTS DLES AKKFLKLYI-----	QKLWGSNVSKDKINSNFPWIDHNN	
Giardia lamblia	-----	SRLFFYRTFVDD WLLLTTSIALLDAYIEYLNIMRDHGAYFRLSCFTKPHKNSPFAPFIATLDC	
Giardia intestinalis	-----	SRLFFYRTFVDD WLLLTTSIALLDAYIEYLNIMRDHGAYFRLSCFTKPHKNSPFAPFIATLDC	
Leishmania amazonensis	-----	EHAERSLLLRVDDVLVATTSPAAAEERCLRAM-----	QRGWPSVGYLSNP SKLTLSTA
Leishmania infantum	-----	EHAERSLLLRVDDVLVATTSPAAAEERCLQAM-----	QRGWPSVGYLSNP SKLTLSTA
Trypanosoma brucei	-----	EHEEPALLLRVDDVLVVTLSRAAASRCEDAL-----	RSGWSEIGFFCQEEKLRRVT---
		--motif C--	-----motif D-----

		-motif E
Homo sapiens	GGTAFVQMP-----	AHGLFPWCGLLLDTRT
Mesocricetus auratus	DGTAPHQLP-----	AHCLFPWCGLLLDTQT
Mus musculus	GGAAPYQLP-----	AHCLFPWCGLLLDTQT
Rattus norvegicus	GGAAPHQLP-----	AHCLFPWCGLLLDTRT
Canis familiaris	GSAAPLQLP-----	AHCLFPWCGLLLDTRT
Bos taurus	GGAAPLQLP-----	AHCLFPWCGLLLDTRT
Coturnix japonica	CSKFKQLP-----	DCRLISWCGLLLDVQT
Gallus gallus	CSKFKHLP-----	DCRLISWCGLLLDVQT
Xenopus laevis	CSEVEQLP-----	SHCLFRWCGLLLDTQT
Oryzias latipes	AFPPDIRVLP-----	PHCLFPWCGLLLDTRS
Oryzias melastigma	AFTDVRVLP-----	SHCLFPWCGLLLDTQS
Nothobranchius furzeri (GRZ)	SGFDVHVLP-----	SHCLFPWCGLLLDTQS
Nothobranchius furzeri (MZM-04)	SGFDVHVLP-----	SHCLFPWCGLLLDTQS
Epinephelus coioides	SCPGIRVLP-----	PHCLFPWCGLLLDTHS
Takifugu rubripes	SCPGLRVLP-----	LRCLFPWCGLLLDTHT
Danio rerio	NSGVSVLP-----	SSCLFPWCGLMIHTHT
Ciona intestinalis	LEDLQ-----	EQDTFPWFGYLFPTCL
Ciona savignyi	QVLILN-----	NEEPFHWFGYIFPTCI
Strongylocentrotus purpuratus	LVPR-----	SKELFPWCGIVFKTQT
Strongylocentrotus purpuratus	LVPR-----	SKELFPWCGIVFKTQT
Apis mellifera	-----	IVKKNIIGYKINCTT
Bombyx mori	-----	YSEEDITFIGSYNTVT
Bombyx mandarina	-----	YSENIITFIGSYNTVT
Tribolium castaneum	-----	QDEIPYCGKIFNLTT
Caenorhabditis elegans	-----	ASQVLQWCGVKLDFQS
Caenorhabditis remanei	-----	DDKLIWCGVKMDLKN
Schizosaccharomyces pombe	NNTFFNE-----	SKKRMPPFGFSVMRS
Saccharomyces cerevisiae	-----	DDTVIQFCAMHIFVKE
Saccharomyces kudriavzevii	-----	NDTVIQFCAMHIFIKE
Saccharomyces bayanus	-----	NDTIIQFCAMHIFIKE
Saccharomyces paradoxus	-----	DDTVIQFCAMHIFVKK
Saccharomyces mikatae	-----	SGTVIQFCAMYSISKN
Kluyveromyces lactis	-----	TSTNVPFCAQLNLRT
Candida albicans	-----	KTSIDFVGLEVNTTD
Ashbya gossypii	-----	SDPIFSFCSVINILK
Aspergillus nidulans	QIPRLVD-----	TPLFPYCGSLIDTRT
Aspergillus fumigatus	QIPRLEG-----	SHLFPYCGSLIDTRT
Aspergillus clavatus	QIPRLVD-----	SALFPYCGSLINTAT
Neosartorya fischeri	QIPRLEG-----	SHLFPYCGSLIDTRT
Neurospora crassa	RVLKLRRG-----	RKTKFPYCGLMIDTRT
Encephalitozoon cuniculi	AASSISELSKHKHSM-----	KITNAPVGWCGTKIYSDG
Ostreococcus lucimarinus	QRTFVNAD-----	GRSYIPWCGILIDCLT
Arabidopsis thaliana	CSSNRMFVGD-----	NGVPFVRWTGLLINSRT
Doryanthes excelsa	LLNLLYTGKD-----	GVQFLPWSGLLINCYT
Iris tectorum	LPNRLYTGAD-----	GIQFLPWSGLLINCRT
Oryza sativa	SSNRLYRGDD-----	GVSFMPWSGLLINCET
Zea mays	CSNRIYKGDD-----	GFSFIPWSGLLINCET
Tetrahymena thermophila	NLEHFKIS-----	VQNECQWIGKSIDMNT
Paramecium caudatum	-----	RYFKWIGKIIDIET
Paramecium tetraurelia	-----	VSFKWIGKIINLDK
Euplotes aediculatus	AKYGMDSVEEQNI-----	VQDYCDWIGISIDMKT
Euplotes crassus (micronuclear)	NKYGMASVEDQNI-----	AHDYIDWIGISIDMST
Euplotes crassus (macronuclear)	AKYGITSVEDQNI-----	AHKYIDWIGISIDMTT
Oxytricha trifallax	GCTNTTQDIDSI-----	NDDLFWIGISIDIKT
Cryptosporidium parvum	EIIILEEDDVLLSSPSSS-CSSSCSSSSSSSSSSSSSSSSSSPPSTECTSSPVEKRINTNKSEKDCQNEKEMINKAKIASQFHKQVSWTGMKFSSEY	
Eimeria tenella	EIIIFILEDVLLSSPSSSECSSSCSSSSSSSSSSSSSSSSSSSPPSTEC-SSPVEKRINTNKISEKDCNEKEMINKQAKIASQFHKQVSWTGMKFSSE	
Giardia lamblia	SREPIPKKSLYTP-----	NLNQDMYKLDVPRYCGYIFLENV
Giardia intestinalis	SREPIPKKSLYTP-----	NLNQDMYKLDVPRYCGYIFLENV
Leishmania amazonensis	-----	CGSLVPWCGLLLHDTT
Leishmania infantum	-----	CGSLVPWCGLLLHDTT
Trypanosoma brucei	-----	CGQPVRWCGLLWDPVT

| -motif E|