

Homo sapiens GM130 AAF65550.1	958	M	O	N	P	R	E	R	P	G	--	L	---	G	S	N	P	C	I	P	F	F	Y	R	A	D	E	N	D	E	V	K	I	T	V	I	F975		
Gallus gallus GM130 XP_004945878.1	1017	I	O	N	P	Q	E	R	S	G	S	L	L	---	E	N	P	C	I	P	F	F	Y	R	A	D	E	N	D	E	V	K	I	M	V	V	*		
Xenopus tropicalis GM130 453473	922	I	O	N	P	Q	E	R	P	S	A	L	L	---	Q	N	P	C	I	P	F	F	Y	R	A	D	E	N	D	E	V	R	I	M	V	I			
Danio rerio GM130 XP_009299396.1	1022	I	O	N	P	Q	S	R	P	A	P	F	L	---	G	E	N	P	C	I	P	F	F	Y	R	P	D	E	H	D	E	V	K	I	L	V	V		
Callorhinchus milii GM130 XP_007898513.1	997	I	O	N	P	Q	A	K	Q	S	P	F	L	---	S	Y	S	P	C	I	P	F	F	Y	R	A	D	E	H	D	E	V	R	I	L	V	V		
Ciona intestinalis GM130 291865	581	M	O	N	P	S	F	M	N	S	D	K	A	---	P	R	G	F	C	L	R	Y	M	---	---	---	---	---	G	R	Y	T	A	V					
Drosophila melanogaster GM130 FBpp0071703	769	I	K	E	N	T	E	Q	P	S	H	N	H	A	G	D	H	L	N	C	M	---	---	---	---	---	---	---	G	K	F	E	V	V					
Caenorhabditis elegans GM130 NP_494929.3	905	I	S	R	P	Q	I	L	P	A	G	Q	L	---	H	C	T	Q	C	I	---	---	---	---	---	---	---	G	D	L	Q	E	L						
Amphimedon queenslandica GM130 2508048534	563	L	T	S	P	L	T	S	I	E	P	N	V	---	H	C	P	C	S	---	---	---	---	---	---	---	G	N	L	I	I	V							
Mnemiopsis leidyi GM130 ML05262a	686	T	D	V	E	R	K	Q	V	S	G	P	M	---	Y	A	G	G	R	---	---	---	---	---	---	---	G	P	I	K	D	F							
Salpingoeca rosetta GM130 PTSG_06277T0	404	Q	Q	R	Q	R	A	R	V	P	E	W	V	---	Q	A	A	T	S	H	G	Y	Y	A	K	---	---	F	S	V	M	S	L						
Capsaspora owczarzaki GM130 CAOG_04888T0	930	M	L	D	S	I	E	G	T	A	T	S	I	E	F	L	P	C	K	K	C	S	---	---	---	---	---	A	T	V	Q	V	V						
Sphaeroforma arctica GM130 SARC_07317T0	893	-	K	D	T	Q	K	V	P	I	G	I	Q	---	H	V	V	P	I	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---					

			Met164
		*	
Homo sapiens GRASP65 NP_114105.1	160	PLKLMVYN	
Xenopus tropicalis GRASP65 296814	162	PLKLLVYN	
Gallus gallus GRASP65 NP_001026134.1	160	PLKLMVYN	
Danio rerio GRASP65 XP_002666782.2	157	SLKLLVYN	
Danio rerio GRASP65 NP_001007412.1	161	PLKLLVYN	
Callorhinchus milii GRASP65 XP_007906430.1	161	PLKLLVYN	
Homo sapiens GRASP55 NP_056345.3	160	PLKLYVYN	
Xenopus tropicalis GRASP55 148637	160	PLKLYVYN	
Gallus gallus GRASP55 NP_001012612.1	160	PLKLYVYN	
Danio rerio GRASP55 NP_956997.1	160	GLKLYVYN	
Callorhinchus milii GRASP55 XP_007888153.1	160	PLKLYVYN	
Callorhinchus milii GRASP XP_007908127.1	181	PLKIVVYN	
Petromyzon marinus GRASP ENSPMAP00000002299.1	112	PLKLYVYN	
Petromyzon marinus GRASP ENSPMAP00000000179.1	160	PLKLYVYN	
Ciona intestinalis GRASP 252974	160	QLKLEVYN	
Branchiostoma floridae GRASP 118294	160	PLKLYVYN	
Branchiostoma floridae GRASP 230855	160	PLKLYVYN	
Caenorhabditis elegans GRASP NP_501354.1	160	PLKLYVYN	
Drosophila melanogaster GRASP FBpp0074664	160	PLKMIVYN	
Hellobdella robusta GRASP 78857	160	PLKLYVYN	
Amphimedon queenslandica GRASP 2508050749	160	TIRLEVYN	
Nematostella vectensis GRASP 80798	160	PLKLYVYN	
Trichoplax adhaerens GRASP 23196	161	PIRLVYVS	
Mnemiopsis leidyi GRASP ML45521a	159	PIKVIVYS	
Capsaspora owczarzaki GRASP CAOG_03909T0	164	ALSLFVYN	
Salpingoeca rosetta GRASP PTSG_00209T0	159	PLRLVYN	
Aspergillus nidulans GRASP ANID_11248T0	167	TLVLVWVYN	
Neurospora crassa GRASP NCU09217T0	169	PLRLYIVYN	
Schizosaccharomyces pombe GRASP SPAC1D4.02c	168	PLRLYIVYN	
Yarrowia lipolytica GRASP 68261	230	PIQLFVYN	
Pichia pastoris GRASP 40255	209	TLVLVYN	

Homo sapiens GMAP210 NP_004230.2
 Rattus norvegicus GMAP210 NP_001178701.1
 Xenopus tropicalis GMAP210 450527
 Gallus gallus GMAP210 XP_421324.3
 Danio rerio GMAP210 NP_001265632.1
 Callorhinchus milii GMAP210 XP_007906720.1
 Petromyzon marinus GMAP210 ENSPMAP00000007865.1
 Botryllus schlosseri GMAP210 chr7.g44844.01.p
 Branchiostoma floridae GMAP210 113252
 Nematostella vectensis GMAP210 107960
 Amphimedon queenslandica GMAP210 2508048722
 Trichoplax adhaerens GMAP210 18703
 Caenorhabditis elegans GMAP210 NP_001255174.1
 Drosophila melanogaster GMAP210 FBpp0073859
 Hellobdella robusta GMAP210 191137
 Monosiga brevicollis GMAP210 MONBRDRAFT_09072T0
 Sphaeroforma arctica GMAP210 SARC_05656T0
 Rhizophagus irregularis GMAP210 3061
 Mortierella verticillata GMAP210 MVEG_01046T0
 Cryptococcus neoformans GMAP210 2453
 Ustilago maydis GMAP210 3240
 Thecamonas trahens GMAP210 AMSG_02016T0
 Dictyostelium discoideum GMAP210 DDB0346834
 Dictyostelium fasciculatum GMAP210 DFA1571496
 Arabidopsis thaliana GMAP210 AT3G61570.1
 Physcomitrella patens GMAP210 Phpat.003G072700.1.p
 Klebsormidium flaccidum GMAP210 kf100170_0140
 Cryptosporidium parvum GMAP210 cgd3_3310
 Thalassiosira pseudonana GMAP210 9503

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1  --MSSWLG-----GLGSGLGQSLGQVGGSLASLTGQISNFTKDML
1  --MSSWLG-----GLGSGLGQSLGQVGGSLASLTGQISNFTKDML
1  --MASWFG-----GLSSGIGQSLGQVGGSLSSITGQISNFTKDML
1  --MASWLG-----GLGSGLGQSLGQVGGSLSSLTGQISSFTKDIL
1  --MSSWLG-----GLGSGLGQSLGQVGGSLSSFTGQISNFTKDIL
1  --MASWFG-----GIGSGLGQSLGQVGGSLSSFTGQLSSFTKDIL
1  --TMSWLG-----LGS LGGGLGQSLGQVGGSLSSLSGQISSLT KDIL
1  MMYGTWHS-----LTPIGHSSPQVHQVRRALL
1  -----
1  ---MSWLG-----
1  --MSSWFS-----GSSFTSLTDQITSFTKDVL
1  ---MAWFT-----GSFNNITDQISNFTKDVL
1  --MSGWLR-----NIQGQLTDLANEVLNEANDVL
1  ---MSWLN-----SSLSQLKGQLTNLAQEV
1  ---MSWLO-----TGLSSLTGQLGNFTREVL
1  ---MSWLS-----NSMTGLVGQVRSLTEDIL
1  ---MSWFTDSLAKGLSDNLGASGITANLSNNFTNLTGQLSEFTNNLL
1  -----
1  ---MSWLT-----KNVGS LGN LASRIASEAN
1  -----
1  -----
1  -----MGTYAEQAGELTKDVL
1  -----
1  -----MWSSIENMKANLHKIVLDVH
1  -----MWSSI AKLKDNFAAIANDVL
1  -----MRAAWGALKGAVQELNDALL
1  -----MWGSLARGITQSVKDTAGAVAPHAGDVL
  
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Homo sapiens GMAP210 NP_004230.2	1757	RQEMLDDVQKKLMSLANSSEGKVDKVLMRNLFIGHFHTPKN--QRHEVLRLMGSILGVRR
Danio rerio GMAP210 NP_001265632.1	1761	RQEMLEEAQRKLMNLLNTTEGKVDKVLMMKNLYLGYFHTPQN--KRGEVLRLMGNVLGLDR
Drosophila melanogaster GMAP210 FBpp0073859	1195	LKEANGQLEQRLSSSESSQTDKIDKSLIKSLLIGYVVSghA-GDKQQVLRMISSVLDfNA
Amphimedon queenslandica GMAP210 2508048722	800	YQLTLKKCRAKIEQLSCDQDTNVDKQLVRNLFSLSYISKQDEIKKRDKIVHVLQKVLDidQ
Saccharomyces cerevisiae GMAP210(Sgmlp) NP_014859.3	386	LNEHLTKALAMLKK--SSDSESVDKELISNLLISFVSI PRADPRKF EVLEILLSNFLNwDE
Cryptococcus neoformans GMAP210 2453	343	SNEHLKEALRRLRK--NQSDNNVDRRLVTNILLSLFMTSRGDPKRFEMLSLLATILSWDD
Mortierella verticillata GMAP210 MVEG_01046T0	834	QOGHLTEAMRRLKE--ENSONTVDIPLISNLFISFLNIPRGDQKRFEILQOLISGVLKFTD
Ustilago maydis GMAP210 3240	316	LNEHLTEALRRLRN--DQSDSNVDKRLVTNLLISFLTTPRTDGKRYEMLNLIAGVLGWKE
Thecamonas trahens GMAP210 AMSG_02016T0	853	IKASMQKMMAAQOAL-TASDARIDKALVANLLVTYFTKADA--EKAGVLSVLSSMLDLDE
Dictyostelium discoideum GMAP210 DDB0346834	519	LKVAFDKTILRLGDMCLOEQESVDKRVVSKLFLNYFSGN---KKTEILELIAKILNFSD
Arabidopsis thaliana GMAP210 AT3G61570.1	544	VRRVLEQSMTRLNRMSMESDYLVDRRIVIKLLVTYFQKNHN---KEVLDLMVRMLGFSE
Klebsormidium flaccidum GMAP210 kf100170_0140	662	LRKALEQSMTRIHRMSSDSQYVDRRIVIKLLVTYFEKRHS---AEALDLMARILGFTE
Thalassiosira pseudonana GMAP210 9503	828	LRRALDEAISRLQ---TSQEDVTDRSLIKNIILDWHAKKGK--AKQDVMILLGSILHFTE
Homo sapiens GMAP210 NP_004230.2	1815	EEMEQLFHDDQGC-----VTRWMTGWL-GG
Danio rerio GMAP210 NP_001265632.1	1819	DEVGQLLKEEVKSG-----MTGWVSSWLGGR
Drosophila melanogaster GMAP210 FBpp0073859	1254	QEADKVGLNKQ-----QSSW--LG
Amphimedon queenslandica GMAP210 2508048722	860	SEIEKV-LGRK-----AMW--LP
Saccharomyces cerevisiae GMAP210(Sgmlp) NP_014859.3	444	DKKQQAGLISN-----
Cryptococcus neoformans GMAP210 2453	401	AEREKAGLQRO-----GAVGGGG
Mortierella verticillata GMAP210 MVEG_01046T0	892	EOREQAGLIRKAGG-----LG
Ustilago maydis GMAP210 3240	374	EERELAGLQKSAGA-----VRASMGSSRGSA
Thecamonas trahens GMAP210 AMSG_02016T0	910	EQQAAIGVGAGAG-----LTGWISSW--FG
Dictyostelium discoideum GMAP210 DDB0346834	575	AEKISIGLTKK-----GQWSLLP
Arabidopsis thaliana GMAP210 AT3G61570.1	600	EDKERIGAAKQGGGKGVVRGVLGFPGRF--VG
Klebsormidium flaccidum GMAP210 kf100170_0140	718	EDKKRVGLAQL-GRRGVVSGVLGAPGRI--VG
Thalassiosira pseudonana GMAP210 9503	883	DEKDKAFISEGPGT-----VD

Homo sapiens Golgin-84 NP_005104.3	673	VRKAASSIDQFSIRLGIFLRRYPPIARVVFVIIYMALHLHLMIVLLTYT---
Danio rerio Golgin-84 NP_998576.1	702	VRKAASTIDRFSIRLGIFLRRYPMARVVFVIIYMALHLHLMIVLLTYT---
Callorhinchus milii Golgin-84 XP_007902048.1	680	VRKAANTIDRFSIRLGIFLRRYPPIARVVFVIIYMVLLHLHLMIVLLTYT---
Ciona intestinalis Golgin-84 239131	680	VRKAASVLDKFSIRLGIFLKRYPPEARLFVLIYMGLLHVVMIVLLTYS---
Amphimedon queenslandica Golgin-84 2508051726	712	VRNTLDSVDKIGLRVAWVLRYPVRLLTIGYIILLHLHLMIVLFTYQ---
Salpingoeca rosetta Golgin-84 PTSG_02257T0	718	FKTAANALDAISIRLGVFLRRYPAAIRLVIIYMILLHLHLMIVLLTTHHVP
Capsaspora owczarzaki Golgin-84 CAOG_09625T0	446	VRQAATVLDTFISIRLGRFLRIYPMARVFVIFYMLLHLHLMIVLFTYS---
Acanthamoeba castellanii Golgin-84 ELR13889.1	471	TLRAASALDNFTAQVGRILRRNPLARLLILYMVFLHVWVFLFLSRP----
Bigelowiella natans Golgin-84 75024	1030	VAKAMRFLDSFSSFSVMLRRNPAARLFFGLYVLMIHLMVFLVLLHFMGHE
Phytophthora sojae Golgin-84 297683	519	VVTAIDVLDLWLLFLGRVVFQAPFARLGMLCYVVLHFWVFMIILSFHT---
Arabidopsis thaliana Golgin-84 AT1G18190.1	596	LGWLVMQLNAIFISGTVFLRRNPTAKIWAVVYLVCLHLWVLYIILSH----
Bodo saltans Golgin-84 BS19790	473	VANAAQGLDKVSLKKTGSFLRRNALLRVMLVAVVMMHLHVWVFLVLTM----
Naegleria gruberi Golgin-84 69983	603	VAHVMAFIDFSISITSGSILRRPLLRILLVIYIITLHIWVFYIILSHL----
Naegleria gruberi CASP 30519	526	RLNNMNAAEKLIYRCSGLMLSHKLGRFLFFYLVTLHTLVFFTLTKLTGLT
Bodo saltans CASP BS41845	595	TVRR--AADGVAVLVANLVVHSPPTTRLFLVGYLIALHAIVMITTYVMAFRG
Chrysochromulina tobin CASP K0027568.1	437	RYAETPAPEKMLNFSSQFFLANRHARLFLFGYMCVCLHLVSGAMYAASHHC
Bigelowiella natans CASP 73975	715	HYDNLSTQEKIIHKFWFELFSKHSRFLFLFGYALFLHFLVFVTLWRHSHIP
Phytophthora sojae CASP 484998	659	RFTNLNPVDKILLTSAKLLLAHRITRNMAFGYMLLLHFLVATLYSFMHVC
Toxoplasma gondii CASP TGME49_278890	1032	RLQTLGAERIVVIWGRLLLSCRATRLFALFYFVLLHFLVFLVLFYHADLQ
Guillardia theta CASP 106475	639	RKEKMPLHERLMLEMSOFFLGNSVARKFLFFYVMVIMHILVFVTLYRFTHNT
Arabidopsis thaliana CASP AT3G18480.1	617	RIKDLGIRDITLSSGRFLLGNKYARTFAFFYTIGLHVLVFTCLYRMSAYS
Acanthamoeba castellanii CASP ELR24051.1	553	RYKGLNTAEKVTLHTGRFFLANKYSRTFIFFYALALHLLVFLTLTKLANTA
Batrachomyxium dendrobatidis CASP 88000	597	RFHSMNPAERAALSITRLSLSTNKYSRWIFVIYSGALHLLVFFTLFQLMSD
Saccharomyces cerevisiae CASP NP_012742.1	588	KNKKLSALEKLFSSFAKVILQNMTRMVFLFYCIGLHGLVFMMSMYVINIS
Capsaspora owczarzaki CASP CAOG_05174T0	694	KVQALNATERITLSMGRFIMSNKYARSFVFFYSIILHALVFLVLYKLSWSQ
Salpingoeca rosetta CASP PTSG_00349T0	631	RIMNLNAGDRLTLTLGKAVMSGKNARLIFLGYAIIIVHLLIFVVLYKYSHAG
Amphimedon queenslandica CASP 2508059134	570	KYMQLSGPDKATLILGRFILSNKVARMITFFYIIIIHLIIMLVLAKLNTA
Nematostella vectensis CASP 40279	381	RYMNLGPHEKVTLNLGRFVLGSKMARTIAFFYMLFLHCLVFLV-----
Ciona intestinalis CASP 286365	581	KYMNLTPPEKVTLGLGKVILSSKIARNIFFFYMLFMHCLLYIVLYKYA-YA
Danio rerio CASP NP_001003514.1	593	RYQSLSPWDKATLSLGRVILSNKTARTIAFFYTLMLHCLVFLVLYKAA-WS
Homo sapiens CASP XP_005250211.1	682	KYLSLSPWDKATLSMGRVLVSNKMARTIGFFYTLFLHCLVFLVLYKLA-WS

Homo sapiens Golgin-84 NP_005104.3	1 -MSWF---VDLAGKAEDLLNRVDQGA
Rattus norvegicus Golgin-84 NP_001028237.1	1 -MSWF---ADLAGRAEDLLNRVDQGA
Xenopus tropicalis Golgin-84 475595	1 -MSWF---TGLAGRAEDFLNLVDQGA
Gallus gallus Golgin-84 XP_421329.2	1 -MSWL---ADLAGKAEDLLNRVDQGA
Danio rerio Golgin-84 NP_998576.1	1 -MSWF---VDLAGKAEDFLNKVDQGA
Callorhinchus milii Golgin-84 XP_007902048.1	1 -MSWF---TDLAGKAEDFLNKVDQGA
Ciona intestinalis Golgin-84 239131	1 -MSWL---NNLAGKAESLLNNIDQSA
Branchiostoma floridae Golgin-84 154839	1 -MSWI---SDFAGKAFAALLNKVDQTA
Drosophila melanogaster Golgin-84 FBpp0084013	1 MSSWI---TGLADKAENILNKLDQNA
Caenorhabditis elegans Golgin-84 NP_492137.1	1 -MSWLSKVSDIAGAAENLLNKLDDEKT
Nematostella vectensis Golgin-84 239710	1 -MSWF---SELAVKAESLLEKVDNTA
Amphimedon queenslandica Golgin-84 2508051726	1 -MAWF---SSIAGKAEOQLLNQLDEAA
Mnemiopsis leidyi Golgin-84 ML14421a	1 MAGLV-----
Monosiga brevicollis Golgin-84 MONBRDRAFT_23784T0	1 MASLF-----TSLTMMLEADARRA
Salpingoeca rosetta Golgin-84 PTSG_02257T0	1 MSNWF---AEFRDTAVSVLEQADQLA
Capsaspora owczarzaki Golgin-84 CAOG_09625T0	1 -----
Sphaeroforma arctica Golgin-84 SARC_09713T0	1 -MNL-----IQPPNVAS
Acanthamoeba castellanii Golgin-84 ELR13889.1	1 -----
Thecamonas trahens Golgin-84 AMSG_05059T0	1 MSSWF-----STASSFLDAMDQSA
Arabidopsis thaliana Golgin-84 AT1G18190.1	1 MANWI---SSKLKAAETILQQLDQQA
Arabidopsis thaliana Golgin-84 AT2G19950.2	1 MASWL-----KAAEDLFEVVDRAA
Physcomitrella patens Golgin-84 Phpat.002G025400.2.p1	1 MAGWL---SSRLKAAEOQLQOQIDQQA
Klebsormidium flaccidum Golgin-84 kfl00053_0020	1 MASWL---QNQFKKAEELFEAVDQTA
Klebsormidium flaccidum Golgin-84 kfl00291_0020	1 MASWL---SSRLKAAEOFLNQIDATA
Volvox carteri Golgin-84 Vocar20014314m	1 MASWI---TAQLKAAEGLLEAVDKTV
Bigelowiella natans Golgin-84 75024	1 MSNWI-----EWASKALDDLDST
Reticulomyxa filosa Golgin-84 ETO03839	1 -----
Thalassiosira pseudonana Golgin-84 21843	1 MSRWL-----RNVNALLENLDSQV
Phytophthora sojae Golgin-84 297683	1 -MNWV---SSSLELAGSLLESVDQQA
Bodo saltans Golgin-84 BS19790	1 -MSFL-----QGVTSFLESVDQKA
Naegleria gruberi Golgin-84 69983	1 --MWA---NSVLKWAEOQTLTVDRST

Homo sapiens TMF NP_009045.2	985	I I E N L O S Q L K L R E G E I T H L Q L E I G N L E K T R S I M A E E L V K L T N Q N D E L E E K V K E I P K L R T Q
Danio rerio TMF NP_001003522.1	1028	V I E S L O S Q L K L R E G E I T O L O M E I A S L E R S R T V M S E E L V R L T N E N D E M E S K V K E I P R L K V Q
Callorhinchus milii TMF XP_007893394.1	1029	V F E N L O S Q L K Q R E G E I A Q L Q L E I S S L E K T R A I M A E E L V K L T T Q N D E L Q E K V N E I P I L R E Q
Ciona intestinalis TMF 293917	779	L L E N L O S Q L K Q R D G E I A Q L Q G E I N T L E R T R S S M A E E I V R L T N E N E E M E V T V G Q V D E L T R K
Drosophila melanogaster TMF FBpp0070954	816	T F E H L Q A L L K Q R D G E L T H L O W E V S R L Q A E R S V L D A E I S N L T I E L E T M K E K Q Q M Y E V M E K G
Amphimedon queenslandica TMF 2508061876	937	V L E Q L Q S S L K Q K E G E L S N S Q L M V A S L E R S R A S L T Q E L A T V S E R N E V L E Q K V K M I P D L Q Q K
Saccharomyces cerevisiae TMF(Sgmlp) NP_012668.3	597	L V N K L S T E L K R L E G E L S A S K E L Y D N L L K E K T K A N D E I L R L L E E N D K F N E V N K Q K D D L L K R
Batrachochytrium dendrobatidis TMF 87032	1405	I I E R L Q L M I K Q S E S Q I S S L Q L Q L R M A T Q T R N E M S D E F V R L T A E S E E L K A K A D K A Q A I E S E
Thecamonas trahens TMF AMSG_08612T2	736	A L E T M L A R A K L O G D E I E A L K R H M S S L S Q T R Q F L E D R L V E S N A S A E A L A E R V H Q L E A F A G R
Dictyostelium discoideum TMF DDB0237556	972	S L E Y L Q S S L S Q K E G E A M S L Q A Q V Q S L N H S R K K L E D E L V K L T T D N E E L L S E C K E L K L Q R Q E
Mastigamoeba balamuthi TMF m51a1_g1405	605	-----Q R S E L T A L Q E Q I S V L K S A R A D L E E E I V R I S T R N T E L Q Q E I E R L K R A G Q E
Arabidopsis thaliana TMF AT1G79830.1	849	T P S A Y E A T L R Q K E G E L A S Y M T R L A S M E S I R D S L A E E L V K M T A E C E K L R G E A D R V P G I K A E
Phytophthora sojae TMF 497264	16	G L S Q L Q Q R L R L R E G E N R M L K Q Q L E A L E A R Q K Q T T D E I V R L S T R N A L L E S G E A Q R E Q A Q Q E
Ectocarpus siliculosus TMF Esi0075_0002	1278	E V E R L H S L A K Q R Q G Q A D V L Q Q R L E A V Q A T R D A L T E E V T S L G R R N T E L E A L A K A V P L L R D Q
Naegleria gruberi TMF 79996	542	T N S E L L E I I E K K N N K I K T L F V Q I R D L E E I K E D L S E R L A M Y K Q T N Q T L A N E I N E K E L T L K Q
Homo sapiens TMF NP_009045.2	1045	L R D I D Q R Y N T I L Q M Y G E K A E E A E E L R L D L E D V K N M Y K T Q I D E L L R Q S L S --
Danio rerio TMF NP_001003522.1	1088	L K D L E Q R H N T I L Q M Y G E K A E E A E E L R L D L E D V K N M Y K L Q I D E L L K N Q K Q --
Callorhinchus milii TMF XP_007893394.1	1089	L K D I D Q R Y N T I L Q M Y G E K A E E A E E L R L D L E D V K N M Y K A Q I D E L L K Q R P H --
Ciona intestinalis TMF 293917	839	L K E V T A R H D A V L T M Y G E K A E E A E E L K L D L E D V K T M Y R N Q T Q H A K I S I V T V Q
Drosophila melanogaster TMF FBpp0070954	876	Y E D L Q H R Y D A L L Q M Y G E K V E R T E E L E L D L T E L K A A Y K L Q I D E L L A A P P P N L
Amphimedon queenslandica TMF 2508061876	997	L K E M S Q K H E A L L Q M F G E K A E E T E E L R M D I E D L K T M Y R Q Q I E D L I S K N Q Q H K
Saccharomyces cerevisiae TMF(Sgmlp) NP_012668.3	657	V E Q M S K L E T S L Q L L G E K T E Q V E E L E N D V S D L K E M M H Q Q V Q Q M V E M Q G K M R
Batrachochytrium dendrobatidis TMF 87032	1465	L T E L Q K R Y N T A L E I L G E K T E R A E E L Q E D I K D M R L A F K A Q V E D L V R Q L G R H A
Thecamonas trahens TMF AMSG_08612T2	796	T A E I E R R L N A A L E I I G E K E E T I E D I R A D R D L Y K Q M Y K E Q L P G L V E Q I E L Q R
Dictyostelium discoideum TMF DDB0237556	1032	I K D I Q Q R Y Q T T L L M L G E K E E A V N E L R L D I M D L K D L Y K N Q I N E L L L Q I E V L K
Mastigamoeba balamuthi TMF m51a1_g1405	655	A E E A E R R H Q A A L V L L G E R E E Q L A E L R L D V E D L K E T Y R M Q L N S L A L Q L E H N G
Arabidopsis thaliana TMF AT1G79830.1	909	L E A L Q R H A A A L E L M G E R D E E L E E L R A D I V D L K E M Y R E Q V N M L V N K I Q ---
Phytophthora sojae TMF 497264	76	L A Q L Q K H Q V L L E L F G E K E E Q V E E L Q A E V S E L K A F Y R K Q L D T L A T H N E Q Q Q
Ectocarpus siliculosus TMF Esi0075_0002	1338	A L E L Q D K N G V L D L L G E K T E D L E A V Q A D M R E M Q N M Y R A Q Y D E L L T R A G A G V
Naegleria gruberi TMF 79996	602	F N D L K F R Y E A A L D L I G E K E E A L Q T I Q E E F K Y V K E T F R T Q I S S L L K E I E T L K