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<i>Aplysia californica</i>	- - - - -MDATIAKVIITLVVLIILTIAFSCLPYFLVLRGSRSLVSSRVRDV- - - - -AFACLNCFAGGVFLGTFLHLMTEGSEEF EHYKTH-VKW	82
<i>Biomphalaria glabrata</i>	- - - - -MDPLYVKIITLGLIALTL LLGVL PYFLVLRGSRSLISTRKQEK- - - - -VIAYLNCFAAGGVFLGTLLHL LTEGSEVFEEYKSS-INL	82
<i>Danio rerio</i>	- - - - -MDYLLQVRVGALVGLLLLTLFFGFIPARMKWFHVT- -GGTELHKA- - - - -VLSFVSCFAAGGVFLSACL DII PDYLSDIHGELQK-RDL	81
<i>Drosophila melanogaster</i>	- - - - -MSATATMSQEQTQDVDHALLVAKIIVSMVLVVI TVLCGSLPYVLNRCFHWT KASPEETR S- - - - -LVVRCLLF FGGGVLIC TTFL HMLPEVIE VVEAL QECGSLV	102
<i>Homo sapiens</i>	MGPWGEP- - -ELLVWRPEAVASEPVPVGLVKLGALVLLVL TLCLSLVPICVLR RPGANHEGSASRQK- - - - -ALS LVSCFAAGGVFLATCLLDLLPDYLAAIDEALAA-LHV	105
<i>Mizuhopecten yessoensis</i>	- - - - -MVDTNKI IAI FVVFGITFFFGITPIWLLKL LS NKMKNLSRLRY- - - - -IISLTNCFAGGVFLGTAILHLMQESME- - -TVAE-AIP	77
<i>Mus musculus</i>	MGPWGEP- - -ELLVWRPEAVASEPSPVGLVKLGALVLLLL TLICSLPVCVLR RSGANHEASASGQK- - - - -ALS LVSCFAAGGVFLATCLLDLLPDYLAAIDEALEA-LHV	105
<i>Octopus bimaculoides</i>	- - - - -MKVEILKVILLIALFIIVTLICGFLPKVLSYSQRQTTHAGSTRQSNRKRYKHVFSCLSCFSAAGVFLATCLLDLFPDVRQNLSDV LIL-YEI	90
<i>Rattus norvegicus</i>	MGPWGEP- - -ELLVWRPEA IA SEPSPVGLVKLGALVLLLL TLICSLPVCVLR RSGANHEASASGQK- - - - -ALS LVSCFAAGGVFLATCLLDLLPDYLAAIDEALEA-LHV	105
<i>Xenopus laevis</i>	MAGVTEEKDMEKAVWSPG-LDSAPLS VFATELKLGSLVTLLLL TIVSGLVP LFLFRHKGS-TVTS GTRQR- - - - -LLSLISC FS GG V FLSTCLLDLMPSY LASINDALQG-LNI	106
<i>Crassostrea gigas</i>	- - - - -MASAARITGIFILFFITFLIGLIPFALLRI FEKKLSKEN-IKK- - - - -WIA ILNCFTGGVFLATAI LHL LPESRE- - -LLTE-SIS	76

[illegible]

<i>Aplysia_californica</i>	DRS - DTHGGGGGE I L T N G L R Q G G L Q A F L L L M A L S F H T I F D G L A V G L Q K D A N E V W Q V F A A I A V H K S I I A F C L G L E M F K N Y A H S P V K A F L W M C L F S L M S P I G I G L G I I L T S G N I N E D A K -	314
<i>Biomphalaria_glabrata</i>	E E S - V T L Q V K V I S D S K T K T P T G I R A Y L L L V A L S F H T I F D G L A V G L Q K N T S E V W Q V F A A I S I H K S I I A F C L G L E M F K S E P Q R P S R A F I W L C F F A L M S P I G I G I G I F L T S G E V D D H A R -	309
<i>Danio_erio</i>	H H V H V D F - - - - - - - - - - H A H S S F R S F M L F L S L S L H S V F E G L A I G L Q T T N A K V L E I C I A I L V H K S I I V F S L S V K L V Q S - A V K P L W V V L Y V T V F A I M S P L G I G I G - - I V V I E T E R - Q A G	247
<i>Drosophila_melanogaster</i>	P Q P H K D H H G H S H M P V P A D D G S S A R G L G I I L A L S L H E L F E G M A I G L E G T V S T V W F M F G A V S A H K L V L A F C V G M E L L V A - R T R S S L A I L Y L V T F S I V T P I G I G V G - - L G I S Q Q V A A G Q P	289
<i>Homo_sapiens</i>	P Q A S G A P - - - - - - - - - - A T P S A L R A C V L V F S L A L H S V F E G L A V G L Q R D R A R A M E L C L A L L H K G I L A V S L S R L L Q S - H L R A Q V V A G C G I L F S C M T P L G I G L G - - A A L A E S A G - P L H	268
<i>Mizuhopecten_essoensis</i>	D R K K K T T I I D V S G D G R S R T T K R I R T V I L V I A L S I H M I F E G M A I G L Q D T V S N T W T L V A A I S V H K A V I V F S V G M K M K E V - V E G N I K I I L Y I L Y L S L V S P V G I A V G L V V T N T G V G D E S I Q	310
<i>Mus_musculus</i>	P Q A G G T P - - - - - - - - - - A A P S A L R A C V L V F S L A L H S V F E G L A V G L Q R D R A R A M E L C L A L L H K G I L A V S L S R L L Q S - H L R V Q V V A G C G I L F S C M T P L G I G L G - - A A L A E S A G - P L H	268
<i>Octopus_bimaculoides</i>	H H H H D Q N - - - - - I S K G H S Q S V L R S I L T V A L S L H S I F E G L A I G L A R K E S N I L T I T S A I I L H K C T L S L S L G I N L S H S - K L H Y G S I I R S L L L S L A A P I G I S I G - - I L I I D L W D S L T S	309
<i>Rattus_norvegicus</i>	P Q A S G T P - - - - - - - - - - A A P S A L R A C V L V F S L A L H S V F E G L A V G L Q R D R A R A M E L C L A L L H K G I L A V S L S R L L Q S - H L R A Q V V A G C G I L F S C M T P L G I G L G - - A A L A E S A G - P L H	268
<i>Xenopus_laevis</i>	H H V H V D V - - - - - - - - - - N A H S A V R T M A L I L S L S L H S A M E G V A L G L Q Q G R G E V L K S C L A L L V H K S I M S F S L I L R L G Q G - R L H I R A M L V C L F F Y S F M C P L G I G L G - - I A W A G Q A D - P V E	263
<i>Crassostrea_gigas</i>	D K S T E E V I I E Q P - - - - N L K F L V F R S F L L L L A L S F H M I F E G L A V G L Q K E E D A W I L L G V L S L H K I A V A F S V G F Q L E E N - L R K F K Y V I L S L F L L S I V A P I G V V I G Y I V T E V G - D D A H G Q	255

<i>Aplysia_californica</i>	DLSSSILQGVAAGTFLYVTFLEILCSYMGHRCVKSRFIYILCSAAGFGIMAFVKVLDSDDH - - - - -	375
<i>Biomphalaria_glabrata</i>	MLSSSILQGLAAGIFLYVTFLELLCVYIGHNSHG-EFFSIFFSLVGFVVMALVKLIDE - - - - -	366
<i>Danio_erio</i>	GLIQAVLEGLAAGTFIYITFLEILPHELNSSE - -RPLLKVLFLLCGFSIMAALCFLG - - - - -	302
<i>Drosophila_melanogaster</i>	SLPSGVLQGIACGTLLYVVFFFEILIESHAGWR - - - - -ALVAAVAGFALMFGLQILSDEAEGDDSLTCSS - - - - -	352
<i>Homo_sapiens</i>	QLAQSVLEGMAAGTFLYITFLEILPQELASSE - -QRILKVIILLAGFALLTGLLFIQI - - - - -	324
<i>Mizuhopecten_yessoensis</i>	EKSSGILQSLASGTFLYVTFFEILQKEL-SNG - -YSLQKVFFCMLGFAAMAGLKVLDTD - - - - -	366
<i>Mus_musculus</i>	QLAQSVLEGMAAGTFLYITFLEILPQELATSE - -QRILKVIILLAGFALLTGLLFVQI - - - - -	324
<i>Octopus_bimaculoides</i>	SLIQGLLQGIACGTFLYITFFEIFPSEFNNTKG-RRCLKVLFVLFGFSVVCIMFNLNAEPATPIDPCSHPRLHP	382
<i>Rattus_norvegicus</i>	QLAQSVLEGMAAGTFLYITFLEILPQELATSE - -QRILKVIILLAGFALLTGLLFVQV - - - - -	324
<i>Xenopus_laevis</i>	QLTRSVLEGMATGAFLYVTFLEILPHELSSHH - -PQIDRVLVLLCGFSAIAAVLFIKI - - - - -	319
<i>Crassostrea_gigas</i>	DVASGVLQSLSVGCFLYVTFFEILNHEI-HITKERSHWKVFFFTIIGFAIVVGIQFVKHDHEGHDH - - - - -	319

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