



*Thalassiosirapseudonana*_XP_002288730.1/1-118
*Trypanosomacruz*i_XP_811204.1/1-109
*Trypanosomacruz*i_EFZ25723.1/1-109
*Leishmaniamexicana*_CBZ30551.1/1-108
*Selaginellamoellendorffii*_XP_002962414.1/1-110
*Physcomitrellapatens*_XP_001752716.1/1-108
*PerkinsusMarinus*_XP_002773936.1/1-111
*Phytophthorainfestans*_XP_002899691.1/1-111
*Aureococcusanophagefferens*_EGB04453.1/1-111
*Volvoxcarteri*_XP_002946058.1/1-111
*Chlamydomonasreinhardtii*_XP_001697145.1/1-111
*Xenopuslaevis*_NP_001085797.1/1-116
*Daniorerio*_NP_001138265.1/1-115
*Homo sapiens*_NP_003722.2/1-118
*Mus musculus*_NP_075953.1/1-118
*Trichoplaxadhaerens*_XP_002112060.1/1-117
*Branchiostomafloridae*_XP_002600134.1/1-118
*Cionaintestinalis*_XP_002119469.1/1-116
*Strongylocentrotuspurpuratus*_XP_791762.1/1-118
*Nematostellavectensis*_XP_001638072.1/1-99
*Monosigabrevicollis*_XP_001748803.1/1-111
*Salpingoecasp.*ATCC50818_EGD79377.1/1-106
*Cryptosporidiumparvum*_XP_627075.1/1-109
gi|209876928|ref|XP_002139906.1/1-111
*Schistosomamanson*i_XP_002571763.1/1-114
*Naegleriagruber*i_XP_002673069.1/1-109
*Neosporacanium*_CBZ49743.1/1-118
*Toxoplasma gondii*_CAJ20270.1/1-118
*Plasmodiumfalciparum*_XP_002809104.1/1-117
*Giardiaintestinalis*_XP_001705162.1/1-106

	60	70	80	90
LQERLSNANSNLEALRESKEAYNNTIEQTELAYRKIIEESSQTLLHVIKR				
LNARLTTIEESLQKIQAKSVLDKVIHETSEGFRGIVEASSKLLSNVRE				
LNARLTTIEESLRQKIQAKSVLDKVIHETSEGFRGIVEASSRLLSNVRE				
MQERLAA LKDSLAKKQAVRADLERTISEETYSAFKSILDASSKLLSTAKE				
LSKRRLAELEDSLSRKYAYSSEYDKTIREVESAYAKILESSKALLHVLKT				
LTKRRLAEIDDSSLRKYAYTNEYDKTIREVEEAYSKAW-CIEIFVAFNRN				
LTDR LQRINEESLVRKQTQARNEYDKTIQETEAAYMKILESSQTLLHVLKR				
LTDR LSKINEEALARKTQARNEYDRTIQETEAAYMKILESSQTLLHVLKR				
LTDR LSKINEEALARRVMARNEYDKTIQETEAAYMKILESSQTLLHVLKR				
LTKRRLAQVND S IARKTETKNEYDKVISETEEAAYLKILESSQTLLTVLKR				
LTKRRLAQVNESIARKTETKNEYDKVISETEEAAYLKILESSQTLLTVLKR				
LTEKLSRVNENLARKMASRNEFDKTI AETEAAYMKILESSQTLLNVLKR				
LTEKLSRVNESLAHRLSARAEFDRTI AETEAAYMKILESSQTLLSVLKK				
LTEKLARVNENLARKIASRNEFDRTI AETEAAYLKILESSQTLLSVLKR				
LTEKLARVNENLARKIASRNEFDRTI AETEAAYLKILESSQTLLSVLKR				
LTEKLAKINEESLAKKMANRNEFDKTI AETEGAYMKILESSQALLGILKR				
LTERLAKVNESLSKMATRNEFDRTI AETEAAYMKILESSQTLLNVLKR				
LTERLAKVNESLARKMAARNEFDKTI AETESAYMKILETSQTLLNSVKG				
LTEKLAKLNEESLAKKIATRNEYDKTI G ETEEAAYMKILESSHSLLNVLQK				
LTERLAKINEESLARKIASRNEFDKTI AETEAAYMKILESSQTLLHVLKN				
LTERLNRITESTLRKQATRTEYDRTI AETEGAYFKILESSQSLLQVLKR				
LTERLARVTESLNKKISIRNEYDRTISETESAYMKILDSSQSLLQVLKR				
LNERLKRVS EESLQRKTIARA EYDKTIQEI EGAYTKILESSQTLLHVLKR				
LNERLKKVHESLQRKTIARA EYDKTIQEI ENAYTKILESSQTLLHVLKR				
LNDKLSRVNESLQKLLSTRNEYDRTI A ESEAAYMKILESSQTLLTVLKR				
LS EKLNR LNDGLSRKLQAKQ EYERTLQETEAAYNKILESSQTLLHVLKR				
LQDR LQKLNESLTRKIQARNEYDKTISETEEAAYTKILESAQTLLHVLKR				
LQER LQKLNDSITRKIQARNEYDKTILETEEAAYTKILESAQTLLHVLKR				
LNDK LQEVCHSIAKKLQTRLE YDRTIKETS AAYTKIRESAKSL LHILKR				
LQNR YKELDAALIQKTQARAEYEKTIRES E LAYNSIIE SAKKLTGILKD				

	100	110
<i>Thalassiosirapseudonana</i> _XP_002288730.1/1-118	E S K S I Q K S R R Q K Q Y C D E V D F	
<i>Trypanosomacruzi</i> _XP_811204.1/1-109	G S S G I P R H D G L - - - - -	
<i>Trypanosomacruzi</i> _EFZ25723.1/1-109	E S S G L P R H D G L - - - - -	
<i>Leishmaniamexicana</i> _CBZ30551.1/1-108	E S S A L K A Q I N - - - - -	
<i>Selaginellamoellendorffii</i> _XP_002962414.1/1-110	E P M N P S M D L L K K P - - - - -	
<i>Physcomitrellapatens</i> _XP_001752716.1/1-108	N N N N H H H H N I E - - - - -	
<i>PerkinsusMarinus</i> _XP_002773936.1/1-111	E S V N L T K K K Q V S D - - - - -	
<i>Phytophthorainfestans</i> _XP_002899691.1/1-111	E T V Q L T K K K Q T S S - - - - -	
<i>Aureococcusanophagefferens</i> _EGB04453.1/1-111	E T V N L T K K K Q Y S S - - - - -	
<i>Volvoxcarteri</i> _XP_002946058.1/1-111	E A V N I A K K K Q A S S - - - - -	
<i>Chlamydomonasreinhardtii</i> _XP_001697145.1/1-111	E A V N I A K K K Q A S S - - - - -	
<i>Xenopuslaevis</i> _NP_001085797.1/1-116	E A G N L G K A T D L R G N A T N S - -	
<i>Daniorerio</i> _NP_001138265.1/1-115	E A G N L T K A T E P R S S K D H - - -	
<i>Homo sapiens</i> _NP_003722.2/1-118	E A G N L T K A T A P D Q K S S G G R D	
<i>Mus musculus</i> _NP_075953.1/1-118	E A G N L T K A T A S D Q K S S G G K D	
<i>Trichoplaxadhaerens</i> _XP_002112060.1/1-117	D T Y K L K D G P K S T S E G Q T R A -	
<i>Branchiostomafloridae</i> _XP_002600134.1/1-118	E A T S L K E P T A A S S S P P P Q K G	
<i>Cionaintestinalis</i> _XP_002119469.1/1-116	S I H H M D G G K G H K M E Y G A K - -	
<i>Strongylocentrotuspurpuratus</i> _XP_791762.1/1-118	E A A V L K D K G V P G F T N A S S T T	
<i>Nematostellavectensis</i> _XP_001638072.1/1-99	E - - - - - - - - - - - - - - - - -	
<i>Monosigabrevicollis</i> _XP_001748803.1/1-111	D S V A L Q E S G D N S S - - - - -	
<i>Salpingoecasp.</i> ATCC50818_EGD79377.1/1-106	D S V A L E E R - - - - -	
<i>Cryptosporidiumparvum</i> _XP_627075.1/1-109	E S V N L S N P K K R A - - - - -	
<i>gi 209876928 ref XP_002139906.1/1-111</i>	E S V N L S N P K K H I G I - - - - -	
<i>Schistosomamansonii</i> _XP_002571763.1/1-114	E G Q N I V Q K A T A K N V P F - - - -	
<i>Naegleriagruberii</i> _XP_002673069.1/1-109	E S A S L S K K V G Q - - - - -	
<i>Neosporacanium</i> _CBZ49743.1/1-118	E S V H L G R K T S G E R G D V P G V G	
<i>Toxoplasma gondii</i> _CAJ20270.1/1-118	E S V H L G R K T S G D R A E L P G I G	
<i>Plasmodiumfalciparum</i> _XP_002809104.1/1-117	E E S H L G N K L Y S G T S D E D L R S	
<i>Giardiaintestinalis</i> _XP_001705162.1/1-106	R A G N I I S N - - - - -	