```
                                                  :   *               * .**.::.*  :****: *: : :  :.  ** *   .  * .   *:** ::**. ::*.:**:** :.*  :
gi|5174647|ref|NP_005966.1|      ------------------------------------------MVSRDQAHLGP---------------KYVGLWDFKSRTDEELSFRAGDVFHVARKEEQWWWATLLDEAGGAVAQGYVPHNYLAERETVESEPWFFGCISRSEAVRR   150
gi|76632905|ref|XP_608273.2|     ------------------------------------------MGSEGQVPLGP---------------RYMGLWDFEARTAEELSFQAGDLFYVARKEEEWWWAVRLDGAGRALAEGYVPYNYLAEKETVESEPWFFGRISRSEALHR   150
gi|6677971|ref|NP_033210.1|      ------------------------------------------MVSWDKAHLGP---------------KYVGLWDFKARTDEELSFQAGDLLHVTKKEELWWWATLLDAEGKALAEGYVPHNYLAEKETVESEPWFFGCISRSEAMHR   150
gi|34861104|ref|XP_345486.1|     ------------------------------------------MVSLDKAHLGP---------------KYVGLWDFKARTDEELSFQAGDLLHVTRKEEQWWWATLLDAEGKALAEGYVPHNYLAEKETVESEPWFFGCISRSEAMHR   150
gi|115496864|ref|NP_001070140.1| MG-ECCRKTCPCLKTIWDKIYGPPQAEGENSVKVDGDFTNKGFDKNETERRYSKPKIKPPLPPSANNNAAIYMALWDFKARNDQELSFKAGDKFEITDRSGDWWTANKKDIFGRVT-TGFVPYNYLAR-DSVESQPWFFGKMNRVGAVSH   150
gi|189522492|ref|XP_682778.3|    MSQEEVCCSCPGLRAFCQGLFTSP------------DKTEAEKPTNTAKQTVNVP--NPSRASACEPGSELYKALWSYKARGADELSFQEGEQFRICERQGEWWTALKLGRDGAVTGRGFVPNHFLARRQTVKEQPWYFGTLNRFETEIL   150
                                 1.......10........20........30........40........50........60........70........80........90.......100.......110.......120.......130.......140.......150
```

```
                                 * :     *:**:* *:.  . *****   :    .:* :*       ::::   .* .: ::::::    *.  *  .* :   :*      .  ::** *:*** * .:** *.*.:*: . **.  .**:*:: . : :  : :
gi|5174647|ref|NP_005966.1|      LQAEGNATGAFLIRVSEKPSADYVLSVRDTQA---VRHYKIWRRAGGRLHLNEAVSFLSLPELVNYHRAQSLSHGLRLAAPCRKHEPEP----LPHWDDWERPREEFTLCRKLGSGYFGEVFEGLWKDRVQVAIKVISRDNLLHQQMLQS   300
gi|76632905|ref|XP_608273.2|     LQAMGNEQGSFLIRISEKPGADYVLSVRDQQT---VRHYKIWWRAG-RLHLNEAVSFPGLSELVDHHKVQSLSHGLRLTSPCRKHEPEP----LPHCDDWERPREEFTLCRKLGSGYFGEVFEGLWKDKVRVAIKVIARADLLHQHTFQS   300
gi|6677971|ref|NP_033210.1|      LQAEDNSKGAFLIRVSQKPGADYVLSVRDAQA---VRHYRIWKNNEGRLHLNEAVSFSNLSELVDYHKTQSLSHGLQLSMPCWKHKTEP----LPHWDDWERPREEFTLCKKLGAGYFGEVFEALWKGQVHVAVKVISRDNLLHQHTFQA   300
gi|34861104|ref|XP_345486.1|     LQSEDYPKGTFLIRVSQKPGADYVLSVWDAEA---VRHYRIWRNSAGRLHLNEVVSFSSLSELVNYHKTHNLSPGLQLSMACWKLKTEP----LPHWDDWERPREEFTLCKKLGSGYFGEVFEGLWKGLVRVAVKVISRDNLLHQHTFQA   300
gi|115496864|ref|NP_001070140.1| LMSDENNYGSFLVRVSESDDMGYVLSVRTKEN---AKHFKIFQTG-DQFYVDALFKFSSIVEVIEHYQSHPLSIGDLLSEPCIR--IKPENVPPPSTDEWELPKEEFQLENQLGSGHFADVYSGKWKNHSKVAIKILKNNDALVLREFQL   300
gi|189522492|ref|XP_682778.3|    LLAPENDVGAFLVRHSEKDNIGYVLSVLSGDRSREVKHIKIHQNQNESFYLDKSQTFQSLEKLVDYYWKYSLDGDSFLKQPCRRPEPKPKDLSHSTVNDWELPKEEFTLEEELGKGFFADVYRGKWKGMVNVAIKILKN-DSINHREFML   300
                                 .......160.......170.......180.......190.......200.......210.......220.......230.......240.......250.......260.......270.......280.......290.......300
```

```
                                 * * :*:*****:::*:** : ..*.**:***: **.** :*:. : : *    * ::* ***:**.*** :* *********:**   . :**:.*:****::** :* * : ::****:****:.:* :* ***:****:**:*:.: *
gi|5174647|ref|NP_005966.1|      EIQAMKKLRHKHILALYAVVSVGDPVYIITELMAKGSLLELLRDSDEKVLPVSELLDIAWQVAEGMCYLESQNYIHRDLAARNILVGENTLCKVGDFGLARLIKEDVYLSHDHNIPYKWTAPEALSRGHYSTKSDVWSFGILLHEMFSRG   450
gi|76632905|ref|XP_608273.2|     EIQAMKKLRHKHILALYAVASAGDPVYIVTELMPKGSLLELLRDSDEKALPVSELMDIAAQVAEGMCYLESQNYIHRDLAARNILVGENNICKVGDFGLARLIKEDIYLSYDHNIPYKWTAPEALSRGHYSIKSDIWSFGVLLHEIFSRG   450
gi|6677971|ref|NP_033210.1|      EIQAMKKLRHKHILSLYAVATAGDPVYIITELMPKGNLLQLLRDSDEKALPILELVDFASQVAEGMCYLESQNYIHRDLAARNVLVTENNLCKVGDFGLARLVKEDIYLSHEHNVPYKWTAPEALSRGHYSIKSDVWSFGVLLHEIFSRG   450
gi|34861104|ref|XP_345486.1|     EIQAMKKLRHKHILSLYAVATAGDPVYIITELMPKGSLLQLLRDSDEKDLPILELVDFASQVAEGMCYLESQNYIHRDLAARNVLVTENNLCKVGDFGLARLVKEDIYLSRDHNVPYKWTAPEALSRGHYSIKSDVWSFGVLLHEIFSRG   450
gi|115496864|ref|NP_001070140.1| EVQIMKRLRHKHLISLFAVCTSSSPFYIITELIEKGDLLHFLRNPEGRSLQMESLIDMAAQVADGMAYLEANNSIHRDLAARNVLVGDGYVCKIADFGLARIIKEPVYLSDDKKIPYKWTAPEAIGHGTYSSKSDVWSFGILLYEIVTHG   450
gi|189522492|ref|XP_682778.3|    ETQILKKLRHKHLIALFAVCTSSSPFYIITELMEKGDLLSLLKGKEGQDLNAQMLTEMASQVADGMAYLEEQNSIHRDLAARNVLVGANYICKVADLGLARIVKESVYSSEDAQIPYKWSAPEAISHGRFSNKSDVWSFGVLLYEMFTYG   450
                                 .......310.......320.......330.......340.......350.......360.......370.......380.......390.......400.......410.......420.......430.......440.......450
```

```
                                  :***.... *.:  :    **** * :**   :.:*  **    .. :** *. *   *  .
gi|5174647|ref|NP_005966.1|      QVPYPGMSNHEAFLRVDAG-YRMPCPLECPPSVHKLMLTCWCRDPEQRPCFKALRERLSSFTSYENPT--------   526
gi|76632905|ref|XP_608273.2|     QMPYPGMSNHEAFLRVESG-YRMPRPPECPPTTHKLMLSCWHKDPEQRPYFKGLWEKLSSLTRYENPL--------   526
gi|6677971|ref|NP_033210.1|      QMPYPGMSNHETFLRVDAG-YRMPCPLECPPNIHKLMLSCWSRDPKQRPCFKDLCEKLTGITRYENLV--------   526
gi|34861104|ref|XP_345486.1|     QMPYPGMSNHETFLRVDAG-YRMPCPLECPPNIHKLMLSCWSRDPKQRPCFKDLCEKLSGITRYENLV--------   526
gi|115496864|ref|NP_001070140.1| GIPYPGVNTGEVYDLITKENYRMPSPPKCPQAIYNIMRACWRIESVDRPNFKVLKDELDNYQGQYSSVGN------   526
gi|189522492|ref|XP_682778.3|    GVPYPAFSNIEVYNMITSG-YRMPAPPNCPSHIYDIMLMCWRYSAEERPDFSELLRLLEDYCAPCTDQNTESCSGT   526
                                 .......460.......470.......480.......490.......500.......510.......520......
```