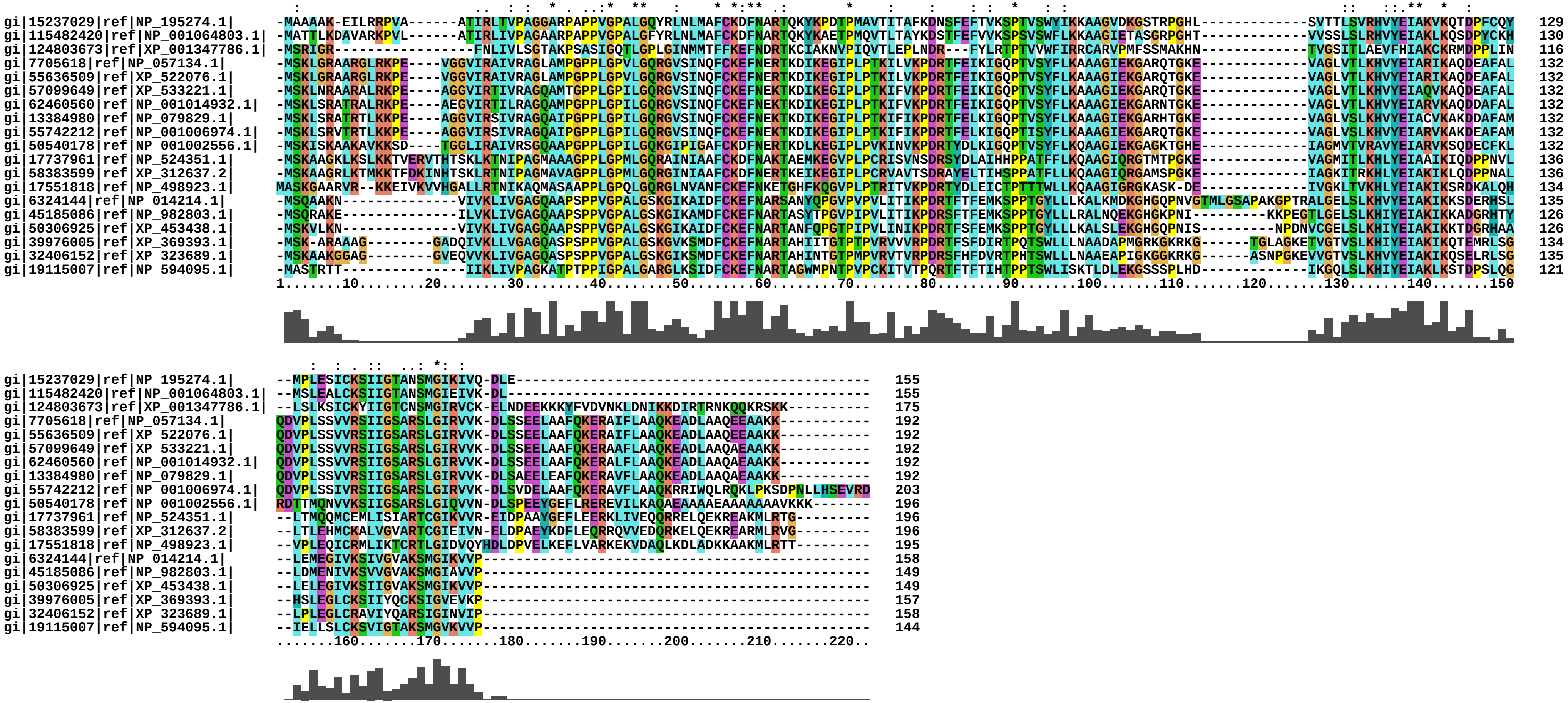

```
                                    :                     ..  : :  * . ..:*  **   :    * *:** .:       *    :    :    : :  *   : :                                :   ::.**  *  :
gi|15237029|ref|NP_195274.1|      -MAAAAK-EILRRPVA------ATIRLTVPAGGARPAPPVGPALGQYRLNLMAFCKDFNARTQKYKPDTPMAVTITAFKDNSFEFTVKSPTVSWYIKKAAGVDKGSTRPGHL-------------SVTTLSVRHVYEIAKVKQTDPFCQY   129
gi|115482420|ref|NP_001064803.1|  -MATTLKDAVARKPVL------ATIRLIVPAGAARPAPPVGPALGFYRLNLMAFCKDFNARTQKYKAETPMQVTLTAYKDSTFEFVVKSPSVSWFLKKAAGIETASGRPGHT-------------VVSSLSLRHVYEIAKLKQSDPYCKH   130
gi|124803673|ref|XP_001347786.1|  -MSRIGR-----------------FNLIVLSGTAKPSASIGQTLGPLGINMMTFFKEFNDRTKCIAKNVPIQVTLEPLNDR---FYLRTPTVVWFIRRCARVPMFSSMAKHN-------------TVGSITLAEVFHIAKCKRMDPPLIN   116
gi|7705618|ref|NP_057134.1|       -MSKLGRAARGLRKPE----VGGVIRAIVRAGLAMPGPPLGPVLGQRGVSINQFCKEFNERTKDIKEGIPLPTKILVKPDRTFEIKIGQPTVSYFLKAAAGIEKGARQTGKE-------------VAGLVTLKHVYEIARIKAQDEAFAL   132
gi|55636509|ref|XP_522076.1|      -MSKLGRAARGLRKPE----VGGVIRAIVRAGLAMPGPPLGPVLGQRGVSINQFCKEFNERTKDIKEGIPLPTKILVKPDRTFEIKIGQPTVSYFLKAAAGIEKGARQTGKE-------------VAGLVTLKHVYEIARIKAQDEAFAL   132
gi|57099649|ref|XP_533221.1|      -MSKLNRAARALRKPE----AGGVIRTIVRAGQAMTGPPLGPILGQRGVSINQFCKEFNEKTKDIKEGIPLPTKIFVKPDRTFEIKIGQPTVSYFLKAAAGIEKGARQTGKE-------------VAGLVTLKHVYEIAQVKAQDEAFAL   132
gi|62460560|ref|NP_001014932.1|   -MSKLSRATRALRKPE----AEGVIRTILRAGQAMPGPPLGPILGQRGVSINQFCKEFNEKTKDIKEGIPLPTKIFVKPDRTFEIKIGQPTVSYFLKAAAGIEKGARNTGKE-------------VAGLVTLKHVYEIARVKAQDDAFAL   132
gi|13384980|ref|NP_079829.1|      -MSKLSRATRTLKKPE----AGGVIRSIVRAGQAIPGPPLGPILGQRGVSINQFCKEFNEKTKDIKEGIPLPTKIFIKPDRTFELKIGQPTVSYFLKAAAGIEKGARHTGKE-------------VAGLVSLKHVYEIACVKAKDDAFAM   132
gi|55742212|ref|NP_001006974.1|   -MSKLSRVTRTLKKPE----AGGVIRSIVRAGQAIPGPPLGPILGQRGVSINQFCKEFNEKTKDIKEGIPLPTKIFIKPDRTFELKIGQPTISYFLKAAAGIEKGARQTGKE-------------VAGLVSLKHVYEIARVKAKDEAFAM   132
gi|50540178|ref|NP_001002556.1|   -MSKISKAAKAVKKSD----TGGLIRAIVRSGQAAPGPPLGPILGQKGIPIGAFCKDFNERTKDLKEGIPLPVKINVKPDRTYDLKIGQPTVSYFLKQAAGIEKGAGKTGHE-------------IAGMVTVRAVYEIARVKSQDECFKL   132
gi|17737961|ref|NP_524351.1|      -MSKAAGKLKSLKKTVERVTHTSKLKTNIPAGMAAAGPPLGPMLGQRAINIAAFCKDFNAKTAEMKEGVPLPCRISVNSDRSYDLAIHHPPATFFLKQAAGIQRGTMTPGKE-------------VAGMITLKHLYEIAAIKIQDPPNVL   136
gi|58383599|ref|XP_312637.2|      -MSKAAGRLKTMKKTFDKINHTSKLRTNIPAGMAVAGPPLGPMLGQRGINIAAFCKDFNERTKEIKEGIPLPCRVAVTSDRAYELTIHSPPATFLLKQAAGIQRGAMSPGKE-------------IAGKITRKHLYEIAKIKLQDPPNAL   136
gi|17551818|ref|NP_498923.1|      MASKGAARVR--KKEIVKVVHGALLRTNIKAQMASAAPPLGPQLGQRGLNVANFCKEFNKETGHFKQGVPLPTRITVKPDRTYDLEICTPTTTWLLKQAAGIGRGKASK-DE-------------IVGKLTVKHLYEIAKIKSRDKALQH   134
gi|6324144|ref|NP_014214.1|       -MSQAAKN--------------VIVKLIVGAGQAAPSPPVGPALGSKGIKAIDFCKEFNARSANYQPGVPVPVLITIKPDRTFTFEMKSPPTGYLLLKALKMDKGHGQPNVGTMLGSAPAKGPTRALGELSLKHVYEIAKIKKSDERHSL   135
gi|45185086|ref|NP_982803.1|      -MSQRAKE--------------ILVKLIVGAGQAAPSPPVGPALGSKGIKAMDFCKEFNARTASYTPGVPIPVLITIKPDRSFTFEMKSPPTGYLLLRALNQEKGHGKPNI---------KKPEGTLGELSLKHIYEIAKIKKADGRHTY   126
gi|50306925|ref|XP_453438.1|      -MSKVLKN--------------VIVKLIVGAGQAAPSPPVGPALGSKGIKAIDFCKEFNARTANFQPGTPIPVLINIKPDRTFSFEMKSPPTGYLLLKALSLEKGHGQPNIS---------NPDNVCGELSLKHIYEIAKIKKTDGRHAA   126
gi|39976005|ref|XP_369393.1|      -MSK-ARAAAG--------GADQIVKLLVGAGQASPSPPVGPALGSKGVKSMDFCKEFNARTAHIITGTPTPVRVVVRPDRTFSFDIRTPQTSWLLLNAADAPMGRKGKRKG------TGLAGKETVGTVSLKHIYEIAKIKQTEMRLSG   134
gi|32406152|ref|XP_323689.1|      -MSKAAKGGAG--------GVEQVVKLIVGAGQASPSPPVGPALGSKGIKSMDFCKEFNARTAHINTGTPMPVRVTVRPDRSFHFDVRTPHTSWLLLNAAEAPIGKGGKRKG------ASNPGKEVVGTVSLKHVYEIAKIKQSELRLSG   135
gi|19115007|ref|NP_594095.1|      -MASTRTT---------------IIKLIVPAGKATPTPPIGPALGARGLKSIDFCKEFNARTAGWMPNTPVPCKITVTPQRTFTFTIHTPPTSWLISKTLDLEKGSSSPLHD-------------IKGQLSLKHIYEIAKLKSTDPSLQG   121
                                  1.......10........20........30........40........50........60........70........80........90.......100.......110.......120.......130.......140.......150

                                      :  : . ::  ..: *: :
gi|15237029|ref|NP_195274.1|      --MPLESICKSIIGTANSMGIKIVQ-DLE-------------------------------------------   155
gi|115482420|ref|NP_001064803.1|  --MSLEALCKSIIGTANSMGIEIVK-DL--------------------------------------------   155
gi|124803673|ref|XP_001347786.1|  --LSLKSICKYIIGTCNSMGIRVCK-ELNDEEKKKYFVDVNKLDNIKKDIRTRNKQQKRSKK----------   175
gi|7705618|ref|NP_057134.1|       QDVPLSSVVRSIIGSARSLGIRVVK-DLSSEELAAFQKERAIFLAAQKEADLAAQEEAAKK-----------   192
gi|55636509|ref|XP_522076.1|      QDVPLSSVVRSIIGSARSLGIRVVK-DLSSEELAAFQKERAIFLAAQKEADLAAQEEAAKK-----------   192
gi|57099649|ref|XP_533221.1|      QDVPLSSVVRSIIGSARSLGIRVVK-DLSSEELAAFQKERAAFLAAQKEADLAAQAEAAKK-----------   192
gi|62460560|ref|NP_001014932.1|   QDVPLSSVVRSIIGSARSLGIRVVK-DLSSEELAAFQKERALFLAAQKEADLAAQAEAAKK-----------   192
gi|13384980|ref|NP_079829.1|      QDVPLSSVVRSIIGSARSLGIRVVK-DLSAEELEAFQKERAVFLAAQKEADLAAQAEAAKK-----------   192
gi|55742212|ref|NP_001006974.1|   QDVPLSSIVRSIIGSARSLGIRVVK-DLSVDELAAFQKERAVFLAAQKRRIWQLRQKLPKSDPNLLHSEVRD   203
gi|50540178|ref|NP_001002556.1|   RDTTMQNVVKSIIGSARSLGIQVVN-DLSPEEYGEFLREREVILKAQAEAAAAEAAAAAAAVKKK-------   196
gi|17737961|ref|NP_524351.1|      --LTMQQMCEMLISIARTCGIKVVR-EIDPAAYGEFLEERKLIVEQQRRELQEKREAKMLRTG---------   196
gi|58383599|ref|XP_312637.2|      --LTLEHMCKALVGVARTCGIEIVN-ELDPAEYKDFLEQRRQVVEDQRKELQEKREARMLRVG---------   196
gi|17551818|ref|NP_498923.1|      --VPLEQICRMLIKTCRTLGIDVQYHDLDPVELKEFLVARKEKVDAQLKDLADKKAAKMLRTT---------   195
gi|6324144|ref|NP_014214.1|       --LEMEGIVKSIVGVAKSMGIKVVP-----------------------------------------------   158
gi|45185086|ref|NP_982803.1|      --LDMENIVKSVVGVAKSMGIAVVP-----------------------------------------------   149
gi|50306925|ref|XP_453438.1|      --LELEGIVKSIIGVAKSMGIKVVP-----------------------------------------------   149
gi|39976005|ref|XP_369393.1|      --HSLEGLCKSIIYQCKSIGVEVKP-----------------------------------------------   157
gi|32406152|ref|XP_323689.1|      --LPLEGLCRAVIYQARSIGINVIP-----------------------------------------------   158
gi|19115007|ref|NP_594095.1|      --IELLSLCKSVIGTAKSMGVKVVP-----------------------------------------------   144
                                  .......160.......170.......180.......190.......200.......210.......220..
```