logo



```
NTDB id 1361 HI 0985 AAC22646.1          ....MNDITYTLLRLMQVPKLGGVGIDKI....LSNITLNELLNYDDVAFRQMGWGAIQIRRWFKPEAKFIEPALVWSQK   72
NTDB id 1388 A4U84 RS04945 WP 062924099.1 .....MTHLTKLLALLQVPQLGAQRIGRL....LSEVDFGEFCQYDKTALKQMGWNERQIQRWFNPEHKWIDQALQWAEQ   71
NTDB id 1466 ASU2 RS09750 WP 015674213.1  ......MSQTDLLKLLQIPQLGAQRIARL....LSEVDFAQFCQYDKRQLQQIGWNEKQIQRWFNPEKRWIESALAWAEQ   70
NTDB id 1250 GCO85 RS13065 WP 027219989.1 .....MNNLQPLLALNRMKRIGPRTVLKLQKRWPDLNL...MFQLSSVDLEEAGLPSWLAQTIKNFDPDFIKTDLNWLSS   72
NTDB id 1445 BW25113 RS17035 WP 000228551.1 .....MVDTEIWLRLMSISSLYGDDMVRIA.HWVAKQS.....HIDAVVLQQTGLTLRQAQRFLSFPRKSIESSLCWLEQ   69
NTDB id 1399 DSB67 RS15600 WP 010645755.1 MTPQNDIDLAAWLKLSCLPGIGGVKMNKL....LSKDTPSNIVQYSTEQLQLLGLTAKQLQAW.SQVDKEVDACLTWVAA   75
NTDB id 1152 A1552VC RS00200 WP 000654772.1 ...MKDQDLAAWLALCFTPKLGSKTISHL....LATRLPAQLQSFTPKQWLACGLKPEQLVFLTTQAAKQAEQCLQWRSA   73
consensus                                  *  *!*!* ** *** * **     **      * ***    * **!*  *****    * ****  ! !
```

logo



```
NTDB id 1361 HI 0985 AAC22646.1          EGNH.LVNYFSPFYPFLLKQTASFPPLLFVKGNLTALSQRQMAMVGSRYCTTYGEYWAKHFATELSLAGFTITSGLALGI   151
NTDB id 1388 A4U84 RS04945 WP 062924099.1 DQQQ.ILTLFDEDYPFLLKQISTAPPVLFVRGNVESLSLPQIAIVGSRDYSHYGEHWAGHFSAELVKHQLAVTSGLAIGI   150
NTDB id 1466 ASU2 RS09750 WP 015674213.1  PNQR.LLTLFDEEYPFLLRQISTAPPVLFVRGSISSLSLPQIAIVGSRDFSAYGEYWAGYFSEQLIKHHLAVTSGLAIGI   149
NTDB id 1250 GCO85 RS13065 WP 027219989.1 SENHHILTWDSPYYPALLKEIADPPFILYAKGELSALTQPSLAIVGSRNASVTGNENARAFSREISRHGVSIVSGLALGI   152
NTDB id 1445 BW25113 RS17035 WP 000228551.1 PNHH.LIPADSEFYPPQLLATTDYPGALFVEGELHALHSFQLAVVGSRAHSWYGERWGRLFCETLATRGVTITSGLARGI   148
NTDB id 1399 DSB67 RS15600 WP 010645755.1 SSHHHILTLADALYPPLLKQTVAPPPLLFVKGEASCLPQPQIAMVGSRNASVDGLQHTRTFASDLVQHDLIVTSGLALGI   155
NTDB id 1152 A1552VC RS00200 WP 000654772.1 ANNRYIVTPHCPLYPRLLKEINSSPPVLFIEGIWEAVHDPAVAIVGSRNASVDGRQIARQFATELAQSGLVVTSGLALGI   153
consensus                                  *** ***     !! *!*** * !**!***! ***** ***!*!!!!  * *!* *** !  **  *** **!!!!*!!
```

logo



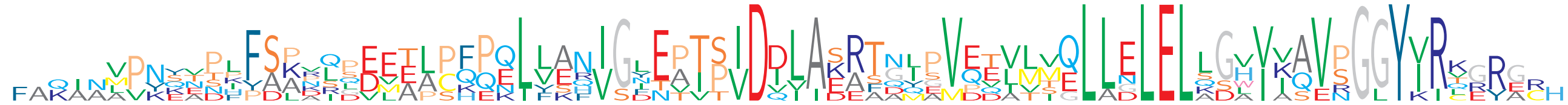
```
NTDB id 1361 HI 0985 AAC22646.1          DGHCHQAVVNIQGQTIAVLGSGLEQIYPSKHQRLSAQIIENNGALVSEFLPNQAPIAANFPRRNRIISGLSVGTLVVEAT   231
NTDB id 1388 A4U84 RS04945 WP 062924099.1 DGFCHQRAANENGITIAVLGSGLDQVYPARHKKLAEQIVETSGALVSEFFPSQPPIAENFPRRNRIISGLSLGTLVIEAT   230
NTDB id 1466 ASU2 RS09750 WP 015674213.1  DGFCHQRAVAEQGITIAVLGSGLDQVYPARHKKLAEQIVESGGALVSEFFPNHPPLAENFPRRNRIISGLSLGTLVVEAT   229
NTDB id 1250 GCO85 RS13065 WP 027219989.1 DAHAHLGCLEGGGKTIAVLGTGIDCIYPRRHLKLAEQITEN.GLLLSEFPLKSPPIAGHFPLRNRIISGLSLCILVIEAA   231
NTDB id 1445 BW25113 RS17035 WP 000228551.1 DGVAHKAALQVNGVSIAVLGNGLNTIHPRRHARLAASLLEQGGALVSEFPLDVPPLAYNFPRRNRIISGLSKGVLVVEAA   228
NTDB id 1399 DSB67 RS15600 WP 010645755.1 DGHAHDGALLAGGKTIAVLGSGLEQVYPARHRGLAQRVAEN.GALVSEFRPDAKPRAENFPRRNRIISGLSLGVLVVEAA   234
NTDB id 1152 A1552VC RS00200 WP 000654772.1 DGYAHDGALQAQGQTVAVLGSGLAQVYPKQHQGLAERIIAQ.GALVSEFAPHTPPKADHFPRRNRIISGLSLGVVVVEAA   232
consensus                                  !* *! **** *! **!!!!*!*****! *! *!******* !*!*!!! *  *!*!**!!*!!!!!!!!!*****!*!!*
```

logo



```
NTDB id 1361 HI 0985 AAC22646.1          EKSGSLITARYALEQNREVFAVPGNIQNKSSQGCHRLIKQGAMLVENAKDILETLYQHSIHSQ.TEIDFD.........   300
NTDB id 1388 A4U84 RS04945 WP 062924099.1 VNSGSLITARYALEQGREVFALPNSVQNPYSEGCHKLIKEGALLVENVEDILEAIAWQRQSVHIQPSLFDTKPKQ.....   305
NTDB id 1466 ASU2 RS09750 WP 015674213.1  VNSGSLITARYALEQGREVFALPNSVQNPYAQGCHKLIKEGAVLTETIEDILQAIQYQLPDQPRQQALFETEQAVEKTQF   309
NTDB id 1250 GCO85 RS13065 WP 027219989.1 IKSGSLITARMALEQNRDVLAIPGSIHNPLARGCHYLLQQGAKLVTSVADVLDELKIEHHQFTSNK.............   297
NTDB id 1445 BW25113 RS17035 WP 000228551.1 LRSGSLVTARCALEQGREVFALPGPIGNPGSEGPHWLIKQGAILVTEPEEILENLQFGLHWLPDAP.............   294
NTDB id 1399 DSB67 RS15600 WP 010645755.1 EKSGSLITARYALEQGREVFALPASINAPNASGGNQLIQNGACLVQNTQEVLNEIQSLLDWSINQS.............   300
NTDB id 1152 A1552VC RS00200 WP 000654772.1 EKSGSLITARYAAEQGREVFVVPGSIFNAASQGSNQLIRQGACLVQSVQQIHQELKNALTWSLSEQ.............   298
consensus                                  **!!!!*!!!*!*!!*!*!***!*****  * !** !***!!*!*  * ****  *    *      *
```

logo



```
NTDB id 1361 HI 0985 AAC22646.1           ..QIAVPNYTPPPDPRRLVEAPSHPKLYSRIGYTPVSIDDLAEEFNLSVDVLLVQLLDLELQDLIISENGLYKRV.....    373
NTDB id 1388 A4U84 RS04945 WP 062924099.1 .....AVKSEPKFAKNLPELTACQQQLFEQISLEPISVDDLAKATDMAVETALIELLNLELLGVVKQVRGGYVIT.....    375
NTDB id 1466 ASU2 RS09750 WP 015674213.1  FAKANMPNKVNHFAKKLPEMTACQQQIVEHIGLNPISIDDLAKATALEVETLLVELLGLELLSVIKQVSGGYVRQ.....    384
NTDB id 1250 GC085 RS13065 WP 027219989.1 ..........PIFSLASG.....KENLVKFIGFETTTIDQIIDRSGYGMEQVTSGLAELELKGAVIAVPGGYIRCEYER.    361
NTDB id 1445 BW25113 RS17035 WP 000228551.1 ........ENSFYSPDQQDVALPFPELLANVGDEVTPVDVVAERAGQPVPEVVTQLLELELAGWIAAVPGGYVRLRRACH    366
NTDB id 1399 DSB67 RS15600 WP 010645755.1 .....L....DLFSAPIDEEELPFPQLLANVGNEATPVDILASRTNIPVQEVMMQLLELELSGHVVAVSGGYIRKGRG..    369
NTDB id 1152 A1552VC RS00200 WP 000654772.1 .....VPYQATLFSAVQSDEELPFPELLANVGIEATPIDILASRTQIPVQDIMMQLLELELLGHVVAVPGGYIRKGRG..    371
consensus                                      *      **     *      **** *** * ***!  ** ** * ** ****!**!!! * **** !*!**
```

logo



```
NTDB id 1361 HI 0985 AAC22646.1             ........   373
NTDB id 1388 A4U84 RS04945 WP 062924099.1   ........   375
NTDB id 1466 ASU2 RS09750 WP 015674213.1    ........   384
NTDB id 1250 GC085 RS13065 WP 027219989.1   ........   361
NTDB id 1445 BW25113 RS17035 WP 000228551.1 VRRTNVFV   374
NTDB id 1399 DSB67 RS15600 WP 010645755.1   ........   369
NTDB id 1152 A1552VC RS00200 WP 000654772.1 ........   371
consensus
```

X non conserved

X similar

X $\geq 50\%$ conserved