logo



```
NTDB id 1250 GC085 RS13065 WP 027219989.1    .....MNNLQPLLALNRMKRIGPRTVLKLQKRWPDLNLMFQLSSVDLEEAGLPSWLAQTIKNFDPDFIKTDLNWLSSSEN   75
NTDB id 1445 BW25113 RS17035 WP 000228551.1  .....MVDTEIWLRLMSISSLYGDDMVRIA.HWV..AKQSHIDAVVLQQTGLTLRQAQRFLSFPRKSIESSLCWLEQP.N   71
NTDB id 1388 A4U84 RS04945 WP 062924099.1    .....MTHLTKLLALLQVPQLGAQRIGRLL.SEVDFGEFCQYDKTALKQMGWNERQIQRWFNPEHKWIDQALQWAEQD.Q   73
NTDB id 1466 ASU2 RS09750 WP 015674213.1     ......MSQTDLLKLLQIPQLGAQRIARLL.SEVDFAQFCQYDKRQLQQIGWNEKQIQRWFNPEKRWIESALAWAEQP.N   72
NTDB id 1399 DSB67 RS15600 WP 010645755.1    MTPQNDIDLAAWLKLSCLPGIGGVKMNKLL.SKDTPSNIVQYSTEQLQLLGLTAKQLQAW.SQVDKEVDACLTWVAASSH   78
NTDB id 1152 A1552VC RS00200 WP 000654772.1  ...MKDQDLAAWLALCFTPKLGSKTISHLL.ATRLPAQLQSFTPKQWLACGLKPEQLVFLTTQAAKQAEQCLQWRSAANN   76
consensus                                              *   ! !  ** ***  * ***      *   **     *   !*  **** *      * **  ! !       *
```

logo



```
NTDB id 1250 GC085 RS13065 WP 027219989.1    HHILTWDSPYYPALLKEIADPPFILYAKGELSALTQPSLAIVGSRNASVTGNENARAFSREISRHGVSIVSGLALGIDAH   155
NTDB id 1445 BW25113 RS17035 WP 000228551.1  HHLIPADSEFYPPQLLATTDYPGALFVEGELHALHSFQLAVVGSRAHSWYGERWGRLFCETLATRGVTITSGLARGIDGV   151
NTDB id 1388 A4U84 RS04945 WP 062924099.1    QQILTLFDEDYPFLLKQISTAPPVLFVRGNVESLSLPQIAIVGSRDYSHYGEHWAGHFSAELVKHQLAVTSGLAIGIDGF   153
NTDB id 1466 ASU2 RS09750 WP 015674213.1     QRLLTLFDEEYPFLLRQISTAPPVLFVRGSISSLSLPQIAIVGSRDFSAYGEYWAGYFSEQLIKHHLAVTSGLAIGIDGF   152
NTDB id 1399 DSB67 RS15600 WP 010645755.1    HHILTLADALYPPLLKQTVAPPLLFVKGEASCLPQPQIAMVGSRNASVDGLQHTRTFASDLVQHDLIVTSGLALGIDGH   158
NTDB id 1152 A1552VC RS00200 WP 000654772.1  RYIVTPHCPLYPRLLKEINSSPPVLFIEGIWEAVHDPAVAIVGSRNASVDGRQIARQFATELAQSGLVVTSGLALGIDGY   156
consensus                                      ***     !! *!* *   !**!***! *  *  ***!*!!!! !  !   ** !  **  * * **!!!!*!!!*
```

logo



```
NTDB id 1250 GC085 RS13065 WP 027219989.1    AHLGCLEGGGKTIAVLGTGIDCIYPRRHLKLAEQITE.NGLLLSEFPLKSPPIAGHFPLRNRIISGLSLCILVIEAAIKS   234
NTDB id 1445 BW25113 RS17035 WP 000228551.1  AHKAALQVNGVSIAVLGNGLNTIHPRRHARLAASLLEQGGALVSEFPLDVPPLAYNFPRRNRIISGLSKGVLVVEAALRS   231
NTDB id 1388 A4U84 RS04945 WP 062924099.1    CHQRAANENGITIAVLGSGLDQVYPARHKKLAEQIVETSGALVSEFFPSQPPIAENFPRRNRIISGLSLGTLVIEATVNS   233
NTDB id 1466 ASU2 RS09750 WP 015674213.1     CHQRAVAEQGITIAVLGSGLDQVYPARHKKLAEQIVESGGALVSEFFPNHPPLAENFPRRNRIISGLSLGTLVVEATVNS   232
NTDB id 1399 DSB67 RS15600 WP 010645755.1    AHDGALLAGGKTIAVLGSGLEQVYPARHRGLAQRVAE.NGALVSEFRPDAKPRAENFPRRNRIISGLSLGVLVVEAAEKS   237
NTDB id 1152 A1552VC RS00200 WP 000654772.1  AHDGALQAQGQTVAVLGSGLAQVYPKQHQGLAERIIA.QGALVSEFAPHTPPKADHFPRRNRIISGLSLGVVVVEAAEKS   235
consensus                                    *! ***  *! **!!!!*!*****! *! *!!* ***  !*!*!!! *  *!*!**!!*!!!!!!!!!!****!*!!***!
```

logo



```
NTDB id 1250 GC085 RS13065 WP 027219989.1    GSLITARMALEQNRDVLAIPGSIHNPLARGCHYLLQQGAKLVTSVADVLDELKIEHHQFTS.....NKPIFSL.......   302
NTDB id 1445 BW25113 RS17035 WP 000228551.1  GSLVTARCALEQGREVFALPGPIGNPGSEGPHWLIKQGAILVTEPEEILENLQFGLHWLPDAPE...NSFYSPD......   302
NTDB id 1388 A4U84 RS04945 WP 062924099.1    GSLITARYALEQGREVFALPNSVQNPYSEGCHKLIKEGALLVENVEDILEAIA....WQRQ.SVHIQPSLFDTKPKQ...   305
NTDB id 1466 ASU2 RS09750 WP 015674213.1     GSLITARYALEQGREVFALPNSVQNPYAQGCHKLIKEGAVLTETIEDILQAIQ....YQLP.DQPRQQALFETEQAVEKT   307
NTDB id 1399 DSB67 RS15600 WP 010645755.1    GSLITARYALEQGREVFALPASINAPNASGGNQLIQNGACLVQNTQEVLNEIQSLLDWSINQSL....DLFSAPIDEE..   311
NTDB id 1152 A1552VC RS00200 WP 000654772.1  GSLITARYAAEQGREVFVVPGSIFNAASQGSNQLIRQGACLVQSVQQIHQELKNALTWSLSEQVPYQATLFSAVQSDE..   313
consensus                                    !!!*!!!*!*!!*!*!***!*** **    ! * !***!! !*  * ***  *      *        *  ***
```

logo



```
NTDB id 1250 GC085 RS13065 WP 027219989.1    ......................ASGKENLVKFIGFETTTIDQIIDRSGYGMEQVTSGLAELELKGAVIAVPGGYIRCEYE   360
NTDB id 1445 BW25113 RS17035 WP 000228551.1  ...................QQDVALPFPELLANVGDEVTPVDVVAERAGQPVPEVVTQLLELELAGWIAAVPGGYVRLRRA   364
NTDB id 1388 A4U84 RS04945 WP 062924099.1    .......AVKSEPKFAKNLPELTACQQQLFEQISLEPISVDDLAKATDMAVETALIELLNLELLGVVKQVRGGYVIT...   375
NTDB id 1466 ASU2 RS09750 WP 015674213.1     QFFAKANMPNKVNHFAKKLPEMTACQQQIVEHIGLNPISIDDLAKATALEVETLLVELLGLELLSVIKQVSGGYVRQ...   384
NTDB id 1399 DSB67 RS15600 WP 010645755.1    ......................ELPFPQLLANVGNEATPVDILASRTNIPVQEVMMQLLELELSGHVVAVSGGYIRKGRG   369
NTDB id 1152 A1552VC RS00200 WP 000654772.1  ......................ELPFPELLANVGIEATPIDILASRTQIPVQDIMMQLLELELLGHVVAVPGGYIRKGRG   371
consensus                                                          *** *** * * *! ** ** * *  *** !**!!! * * *! !!!**
```

logo



```
NTDB id 1250 GCO85 RS13065 WP 027219989.1    R.........   361
NTDB id 1445 BW25113 RS17035 WP 000228551.1  CHVRRTNVFV  374
NTDB id 1388 A4U84 RS04945 WP 062924099.1     ..........  375
NTDB id 1466 ASU2 RS09750 WP 015674213.1      ..........  384
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 ≥ 50% conserved