```
logo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
NTDB id 1184 GTF74 RS02335 WP 000649326.1      ...MKAYKNKQQKGFTLIELMIVVAVIGVLAAIAIPQYQNYVKKSAIGVGLANITALKTNIEDYIATEGSFPATTAGTAA    77
NTDB id 1167 A1552VC RS11065 WP 000649326.1    ...MKAYKNKQQKGFTLIELMIVVAVIGVLAAIAIPQYQNYVKKSAIGVGLANITALKTNIEDYIATEGSFPATTAGTAA    77
NTDB id 1160 ABDM36 RS02330 WP 000649326.1     ...MKAYKNKQQKGFTLIELMIVVAVIGVLAAIAIPQYQNYVKKSAIGVGLANITALKTNIEDYIATEGSFPATTAGTAA    77
NTDB id 1292 VP RS12235 WP 005479693.1         ...MKHSKQKKQQGFTLIELMIVVAIIGVLAAAAIPAYQNYVTRSEVTSGLATVKALITPAELHYQENGI.AAAAT....    72
NTDB id 1192 PAKAF RS23870 WP 024947914.1      ........MKAQKGFTLIELMIVVAIIGILAAIAIPQYQNYVARSEGASALASVNPLKTTVEEALSRGWS.VKSGTGT.E    70
NTDB id 1038 HON27 RS01510 WP 000993725.1      ........MNAQKGFTLIELMIVVAIIGILAAIAIPQYQNYIAKSQVNSGFSEISSIKTGYENAVNEGAV.PTKLSDV..    69
NTDB id 1146453 PD5205 RS03995 WP 002812272.1 ........MKKQQGFTLIELMIVVAIIAILAAIALPAYQNYVAKSQVAAGLAEITPGKTQYEVMVNEGKA.STITP....    67
NTDB id 1197 PSJM300 03940 AFN76866.1          ......MKAQMQKGFTLIELMIVVAIIGILAAIALPAYQDYTVRSNAAAALAEITPGKIGFEQAINEGKT.PSLTSTD.E    72
NTDB id 1204 PSJM300 03935 AFN76865.1          ....MKPVKSSCRGFSLIELMIVVAIIGILAAIALPAYQNYTVRSTAASALAEITPAKAAFEQAISEGHT.PSLVSSL.P    74
NTDB id 1109 OK783 RS10670 WP 157147416.1      .......MNTLQKGFTLIELMIVIAIVGILAAVALPAYQDYTARAQVSEAILLAEGQKSAVTEYYLNHGIWPKDNTSAGV    73
NTDB id 1424 RS RS02795 WP 011000517.1         MKSMRHLNKRVQKGFTLIELMIVVAIVGILAAIAIPAYQDYTVRARVTEGLSLAAQAKALVSENAANAQSDLSV......    74
NTDB id 1002 ACIAD RS15100 WP 004923779.1      ........MNAQKGFTLIELMIVIAIIGILAAIAIPAYTDYTVRARVSEGLTAASSMKTTVSENILNAGALVAGTPSTAG    72
NTDB id 1274 LPP RS09530 WP 011214168.1        .........MRQKGFTLIELMIVVAIIGILAAIAIPAYQDYTIRARVTEGLTLADSAKLAVSETAITNNALPATQAATGY    71
NTDB id 1258 GCO85 RS09745 WP 014844212.1      .........MRQKGFTLIELMIVVAIIGILAAIAIPAYQDYTIRARVTEGLTLADSAKLAVSETAITNNALPATQAATGY    71
consensus                                                **!!*!!!!!!!*!****!!!*!*!*!**!   ** *  *** **  ** *** *       *
```

```
logo
                                                                                                                                                                                                                                                                                                                                                                                                                                                
NTDB id 1184 GTF74 RS02335 WP 000649326.1      GF................TRLGTVED.MGDGKIVIAPTASGALGGTIKYTFDA....GVVSSSKIQLA.RD.ANGLWTCS   134
NTDB id 1167 A1552VC RS11065 WP 000649326.1    GF................TRLGTVED.MGDGKIVIAPTASGALGGTIKYTFDA....GVVSSSKIQLA.RD.ANGLWTCS   134
NTDB id 1160 ABDM36 RS02330 WP 000649326.1     GF................TRLGTVED.MGDGKIVIAPTASGALGGTIKYTFDA....GVVSSSKIQLA.RD.ANGLWTCS   134
NTDB id 1292 VP RS12235 WP 005479693.1         ................LAQLGVDVAANDLGAI.....DSALAGGSPTLTFTF.DADSSIDGGILTFT.RD.AATGWSCL   127
NTDB id 1192 PAKAF RS23870 WP 024947914.1      DA.............TKKEVPLGVAADANKLGTIALKPDP.ADGTADITLTFTMGGAGPKNKGKIITLT.RTAADGLWKCT   136
NTDB id 1038 HON27 RS01510 WP 000993725.1      GF..................TAATSS..VCATYSIDAFTETDGAGKITC.TLKGN..PKIATKIVELT.RS.TDGAWTCV   124
NTDB id 1146453 PD5205 RS03995 WP 002812272.1 DL...................IGLKTS.TRCTI....STPSPSETGAITC.ALLNTS.PKVAGQSISWT.RA.ADGTWTCS   120
NTDB id 1197 PSJM300 03940 AFN76866.1          GY..................IGITDS.TSYCD....VDLDTAADGHIEC.TAKGGNAGKFDGKTITLN.RT.ADGEWSCA   126
NTDB id 1204 PSJM300 03935 AFN76865.1          GF..................IGIGAS.TNYCT....VTLIATATGSITC.TTQNGMPDRFNGKTITIA.RT.TDGLWDCT   128
NTDB id 1109 OK783 RS10670 WP 157147416.1      ASASTI.......KGKYVQKVEV.....AKGVVTAQMAST...GVNKEIQ..........DKKLSLWAKRQDGSVKWFCG   128
NTDB id 1424 RS RS02795 WP 011000517.1         ....GSSVF...TPTKNVANLTIAGTGTVPGQITVTYT.TAAGGGTLALV.......PTAAGTALPVSSAPSGPIMWTCY   139
NTDB id 1002 ACIAD RS15100 WP 004923779.1      SSCVGVQEISASNATTNVATA..TCGASSAGQIIVTMDTTKAKGANITLT.......PT..........YASGAVTWKCT   133
NTDB id 1274 LPP RS09530 WP 011214168.1        V.........SPAATPNVASI..AIGA..NGVITITY.TAAAGGGTIVMT.......PTL.........QANGDVTWTCT   121
NTDB id 1258 GCO85 RS09745 WP 014844212.1      V.........SPAATPNVQSI..AIGA..NGVITITY.TAAAGGGTIIMT.......PTL.........QANGDVTWTCT   121
consensus                                                        **         * * *    ********  *         *    * *  *  * * !*!*
```

```
logo
                                                                                                                                                                                                                                                                                                                                                                                                                                                
NTDB id 1184 GTF74 RS02335 WP 000649326.1      TTVTSE..................IAPKGCTAGATIN......   153
NTDB id 1167 A1552VC RS11065 WP 000649326.1    TTVTSE..................IAPKGCTAGATIN......   153
NTDB id 1160 ABDM36 RS02330 WP 000649326.1     TTVTSE..................IAPKGCTAGATIN......   153
NTDB id 1292 VP RS12235 WP 005479693.1         PTAPAI...................AVDGCS............   139
NTDB id 1192 PAKAF RS23870 WP 024947914.1      SDQDEQ..................FIPKGCSK...........   150
NTDB id 1038 HON27 RS01510 WP 000993725.1      SDVPTE..................FLPKGCTAGTPTEGAITSL   149
NTDB id 1146453 PD5205 RS03995 WP 002812272.1 TTLSATD.............KPKYAPATCQG...........   138
NTDB id 1197 PSJM300 03940 AFN76866.1          STLDAK..................YKPGKCS............   139
NTDB id 1204 PSJM300 03935 AFN76865.1          SDLDSR..................YKPGKCL............   141
NTDB id 1109 OK783 RS10670 WP 157147416.1      QPVTRTGDNDDTVADANNAIDTKHLPSTCRDESSAT......   164
NTDB id 1424 RS RS02795 WP 011000517.1         AQNKAQAA.SSVAPSGTMSLAAKYAPAECR............   168
NTDB id 1002 ACIAD RS15100 WP 004923779.1      TT................S.DKKYVPSECRG...........   147
NTDB id 1274 LPP RS09530 WP 011214168.1        GG................TLLAKYRPASCRP...........   136
NTDB id 1258 GCO85 RS09745 WP 014844212.1      GG................TLLAKYRPASCRP...........   136
consensus                                      * *                     * *  !
```

X non conserved
X similar
X $\geq$50% conserved