```
logo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
NTDB id 1184 GTF74 RS02335 WP 000649326.1      MKAYKNKQQKGFTLIELMIVVAVIGVLAAIAIPQYQNYVKKSAIGVGLANITALKTNIEDYIATEGSFPATTAGTAAGFT   80
NTDB id 1167 A1552VC RS11065 WP 000649326.1    MKAYKNKQQKGFTLIELMIVVAVIGVLAAIAIPQYQNYVKKSAIGVGLANITALKTNIEDYIATEGSFPATTAGTAAGFT   80
NTDB id 1160 ABDM36 RS02330 WP 000649326.1     MKAYKNKQQKGFTLIELMIVVAVIGVLAAIAIPQYQNYVKKSAIGVGLANITALKTNIEDYIATEGSFPATTAGTAAGFT   80
NTDB id 1292 VP RS12235 WP 005479693.1         MKHSKQKKQQGFTLIELMIVVAIIGVLAAAAIPAYQNYVTRSEVTSGLATVKALITPAELHYQE.NGIAAAAT.......   72
NTDB id 1192 PAKAF RS23870 WP 024947914.1      .....MKAQKGFTLIELMIVVAIIGILAAIAIPQYQNYVARSEGASALASVNPLKTTVEEALSR.GWSVKSGTGTEDATK   74
NTDB id 1038 HON27 RS01510 WP 000993725.1      .....MNAQKGFTLIELMIVVAIIGILAAIAIPQYQNYIAKSQVNSGFSEISSIKTGYENAVNE.GAVPTKLS......D   68
NTDB id 1039127 ABQZ61 RS17110 WP 316687920.1 .....MKKQQGFTLIELMIVVAIIAILAAIALPMYQDYVAKSQATAGLAEITPGKTQYEVLVNE.GTIPTTA........   66
NTDB id 1197 PSJM300 03940 AFN76866.1          ...MKAQMQKGFTLIELMIVVAIIGILAAIALPAYQDYTVRSNAAAALAEITPGKIGFEQAINE.GKTPSLTS......T   70
NTDB id 1204 PSJM300 03935 AFN76865.1          .MKPVKSSCRGFSLIELMIVVAIIGILAAIALPAYQNYTVRSTAASALAEITPAKAAFEQAISE.GHTPSLVS......S   72
NTDB id 1109 OK783 RS10670 WP 157147416.1      ....MNTLQKGFTLIELMIVIAIVGILAAVALPAYQDYTARAQVSEAILLAEGQKSAVTEYYLNHGIWPKDNTSAGVASA   76
NTDB id 1119 NGFG RS11465 WP 017147169.1       ....MNTLQKGFTLIELMIVIAIVGILAAVALPAYQDYTARAQVSEAILLAEGQKSAVTEYYLNHGKWPENNTSAGVASP   76
NTDB id 1191 AAC28468.1 484..945( )            ...MLKKVQKGFTLIELMIVIAIIGILAAIALPAYQDYTARAQATEGFKATAGLQTDLGAWRADRGSFPNAAALVAGNVI   77
NTDB id 1002 ACIAD RS15100 WP 004923779.1      .....MNAQKGFTLIELMIVIAIIGILAAIAIPAYTDYTVRARVSEGLTAASSMKTTVSENILNAGALVAGTPSTAGSSC   75
NTDB id 1274 LPP RS09530 WP 011214168.1        ......MRQKGFTLIELMIVVAIIGILAAIAIPAYQDYTIRARVTEGLTLADSAKLAVSETAITNNALPATQAATGYV..   72
NTDB id 1258 GCO85 RS09745 WP 014844212.1      ......MRQKGFTLIELMIVVAIIGILAAIAIPAYQDYTIRARVTEGLTLADSAKLAVSETAITNNALPATQAATGYV..   72
consensus                                                **!!*!!!!!!!*!***!!!*!*!*!* !  ** *  **  *   ** *** *   *  *      *
```

```
logo
                                                                                                                                                                                                                                                                                                                                                                                                                                                
NTDB id 1184 GTF74 RS02335 WP 000649326.1      R...LGTVEDMG..DGKIVI....APTASGALGGTIKY.TFD...AGVVSSSKIQLARD......ANGLWTCST......   135
NTDB id 1167 A1552VC RS11065 WP 000649326.1    R...LGTVEDMG..DGKIVI....APTASGALGGTIKY.TFD...AGVVSSSKIQLARD......ANGLWTCST......   135
NTDB id 1160 ABDM36 RS02330 WP 000649326.1     R...LGTVEDMG..DGKIVI....APTASGALGGTIKY.TFD...AGVVSSSKIQLARD......ANGLWTCST......   135
NTDB id 1292 VP RS12235 WP 005479693.1         .LAQLGVDVAAND.LGAI......D...SALAGGSPTL.TFTFDADSSIDGGILTFTRD......AATGWSCLP......   128
NTDB id 1192 PAKAF RS23870 WP 024947914.1      KEVPLGVAADANK.LGTIAL....KPD.PADGTADITLTFTMGGAGPKNKGKIITLTRT.....AADGLWKCTS......   137
NTDB id 1038 HON27 RS01510 WP 000993725.1      ....VGFTAATSSVCATYSI....DAFTETDGAGKITC.TLKGN..PKIATKIVELTRS......TDGAWTCVS......   125
NTDB id 1039127 ABQZ61 RS17110 WP 316687920.1 ..TQIGLTASTA.RCG.........IAVA...STGITC.TLK.GNAAKIQGKTISLNRD.....STLGTWSCVTG.....   119
NTDB id 1197 PSJM300 03940 AFN76866.1          DEGYIGITDSTS.YCD.........VDLDTAADGHIEC.TAKGGNAGKFDGKTITLNRT......ADGEWSCAS......   127
NTDB id 1204 PSJM300 03935 AFN76865.1          LPGFIGIGASTN.YCT.........VTLIATATGSITC.TTQNGMPDRFNGKTITIART......TDGLWDCTS......   129
NTDB id 1109 OK783 RS10670 WP 157147416.1      ...........STIKGKYVQKV.......EVAKGVVTAQMASTGVNKEIQDKKLSLW...AKRQDGSVKWFCGQPVTRTG   135
NTDB id 1119 NGFG RS11465 WP 017147169.1       P..........TDIKGKYVKEV.......EVKNGVVTATMLSSGVNNEIKGKKLSLW...GRRENGSVKWFCGQPVTRAD   136
NTDB id 1191 AAC28468.1 484..945( )            F.......DSANGLDGKYFAPG...GVTVTPDTGAINIAFDAG....ANAGKTMTITPTVIAASGQISTWTCAPG.....   138
NTDB id 1002 ACIAD RS15100 WP 004923779.1      V.......GV.QEISASNATTNVATATCGASSAGQIIVTMDTT....KAKGANITLTPT.YAS..GAVTWKCTTT.....   135
NTDB id 1274 LPP RS09530 WP 011214168.1        ...............SPAATPNVASIAIGA..NGVITITY.TA....AAGGGTIVMTPTLQAN..GDVTWTCTGG.....   123
NTDB id 1258 GCO85 RS09745 WP 014844212.1      ...............SPAATPNVQSIAIGA..NGVITITY.TA....AAGGGTIIMTPTLQAN..GDVTWTCTGG.....   123
consensus                                          **         *             *   *  **             *  *** *       *   !*! *
```

<0

```
logo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
NTDB id 1184 GTF74 RS02335 WP 000649326.1      ...........TVTSEIAPKGCTAGATIN......   153
NTDB id 1167 A1552VC RS11065 WP 000649326.1    ...........TVTSEIAPKGCTAGATIN......   153
NTDB id 1160 ABDM36 RS02330 WP 000649326.1     ...........TVTSEIAPKGCTAGATIN......   153
NTDB id 1292 VP RS12235 WP 005479693.1         ............TAPAIAVDGCS............   139
NTDB id 1192 PAKAF RS23870 WP 024947914.1      ...........DQDEQFIPKGCSK...........   150
NTDB id 1038 HON27 RS01510 WP 000993725.1      ...........DVPTEFLPKGCTAGTPTEGAITSL   149
NTDB id 1039127 ABQZ61 RS17110 WP 316687920.1  ..........NSLDPKYKPAGCS............   132
NTDB id 1197 PSJM300 03940 AFN76866.1          ...........TLDAKYKPGKCS............   139
NTDB id 1204 PSJM300 03935 AFN76865.1          ...........DLDSRYKPGKCL............   141
NTDB id 1109 OK783 RS10670 WP 157147416.1      DNDDTVADANNAIDTKHLPSTCRDESSAT......   164
NTDB id 1119 NGFG RS11465 WP 017147169.1       DDTVADAKDGKEIDTKHLPSTCRDKASDAK.....   166
NTDB id 1191 AAC28468.1 484..945( )            ........AANGIETRRLPTSCQ*...........   153
NTDB id 1002 ACIAD RS15100 WP 004923779.1      ........S....DKKYVPSECRG...........   147
NTDB id 1274 LPP RS09530 WP 011214168.1        ........T...LLAKYRPASCRP...........   136
NTDB id 1258 GCO85 RS09745 WP 014844212.1      ........T...LLAKYRPASCRP...........   136
consensus                                                   *   *   *   !
```

X non conserved

X similar

X ≥ 50% conserved