```
logo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
NTDB id 1119 NGFG RS11465 WP 017147169.1     .......MNTLQKGFTLIELMIVIAIVGILAAVALPAYQDYTARAQVSEAILLAEGQKSAVTEYYLNHGKWPENNTSAG.......   72
NTDB id 85330 J3989 RS01575 WP 207177168.1   .......MNTLQKGFTLIELMIVIAIVGILAAVALPAYQDYTARAQVSEAILLAEGQKSAVTEYYLNHGEWPANNSSAG.......   72
NTDB id 1109 OK783 RS10670 WP 157147416.1    .......MNTLQKGFTLIELMIVIAIVGILAAVALPAYQDYTARAQVSEAILLAEGQKSAVTEYYLNHGIWPKDNTSAG.......   72
NTDB id 1188 NELON RS01755 WP 003772458.1    .......MKAMQKGFTLIELMIVIAIIGILAAIALPAYQDYTVRSKVSEALIAASSPKSALSEAFQTDGITGMTAAAKAFNKTAA   78
NTDB id 1424 RS RS02795 WP 011000517.1       MKSMRHLNKRVQKGFTLIELMIVVAIVGILAAIAIPAYQDYTVRARVTEGLSLAAQAKALVSENAANAQSDLSV...........   74
NTDB id 1002 ACIAD RS15100 WP 004923779.1    ........MNAQKGFTLIELMIVIAIIGILAAIAIPAYTDYTVRARVSEGLTAASSMKTTVSENILNAGALVAGTPSTAGS....   73
NTDB id 1258 GCO85 RS09745 WP 014844212.1    .........MRQKGFTLIELMIVVAIIGILAAIAIPAYQDYTIRARVTEGLTLADSAKLAVSETAITNNALPATQAATGYV....   72
NTDB id 1274 LPP RS09530 WP 011214168.1      .........MRQKGFTLIELMIVVAIIGILAAIAIPAYQDYTIRARVTEGLTLADSAKLAVSETAITNNALPATQAATGYV....   72
consensus                                                 *!!!!!!!!!!!!*!!*!!!!!*!*!!!*!!!*!**!*!** *!*  !****!  ** *  *  *   *
```

```
logo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
NTDB id 1119 NGFG RS11465 WP 017147169.1     .......VASPPTDIKGKYVKEVEV.....KNGVVTATMLS...SGVNNEIKGKKLSLWG..........RRENGSVKWFCGQPV   132
NTDB id 85330 J3989 RS01575 WP 207177168.1   .......VATS.ADIKGKYVEKVEV.....AKGVITATMLS...SGVNKEIQGKKLSLWA..........KRQNGSVKWFCGQPV   131
NTDB id 1109 OK783 RS10670 WP 157147416.1    .......VASA.STIKGKYVQKVEV.....AKGVVTAQMAS...TGVNKEIQDKKLSLWA..........KRQDGSVKWFCGQPV   131
NTDB id 1188 NELON RS01755 WP 003772458.1   AGGGAGGAAAAGTQHASKYVKSV..KVTEASPWDITVAISATEANGIPTGLDGNTIRLFPLVNK.AVP.AATSTGAIDWACASAA   159
NTDB id 1424 RS RS02795 WP 011000517.1       ......GSSVF...TPTKNVANLTIAGTGTVPGQITVTYTT.A.......AGGGTLALVPTAAGTALPVSSAPSGPIMWTCYAQN   142
NTDB id 1002 ACIAD RS15100 WP 004923779.1    ...SCVGVQEISASNATTNVAT..ATCGASSAGQIIVTMDTTK.......AKGANITLTP..........TYASGAVTWKCTTT.   135
NTDB id 1258 GCO85 RS09745 WP 014844212.1    ............SPAATPNVQS..IAIG..ANGVITITYTA.A.......AGGGTIIMTPT.........LQANGDVTWTCTGG.   123
NTDB id 1274 LPP RS09530 WP 011214168.1      ............SPAATPNVAS..IAIG..ANGVITITYTA.A.......AGGGTIVMTPT.........LQANGDVTWTCTGG.   123
consensus                                                 *   ** !  * *       *******  *           *  * * *             ! * ! !
```

```
logo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
NTDB id 1119 NGFG RS11465 WP 017147169.1     TRADD..DTVADAKDGKEIDTKHLPSTCRDKASDAK   166
NTDB id 85330 J3989 RS01575 WP 207177168.1   TRAGTDDTVAADNTGNKKINTKHLPSTCRDASSAS.   166
NTDB id 1109 OK783 RS10670 WP 157147416.1    TRTGDNDDTVAD..ANNAIDTKHLPSTCRDESSAT.   164
NTDB id 1188 NELON RS01755 WP 003772458.1   KETADKRFGTGSGVAVGTLPAKYAPSECK.......   188
NTDB id 1424 RS RS02795 WP 011000517.1       KAQAASSVAPS...GTMSLAAKYAPAECR.......   168
NTDB id 1002 ACIAD RS15100 WP 004923779.1    ..................S.DKKYVPSECRG......   147
NTDB id 1258 GCO85 RS09745 WP 014844212.1    ..................TLLAKYRPASCRP......   136
NTDB id 1274 LPP RS09530 WP 011214168.1      ..................TLLAKYRPASCRP......   136
consensus                                                       **  !* !**!*
```

X non conserved

X similar

X $\geq$ 50% conserved