```
logo
NTDB id 1177 A1552VC RS01165 WP 000422572.1  ...........MELNQYLDGMLTHKASDLYITVGAPILYRVDGELRAQGEALSVAD.VTALLHAMMDDARQAEFKQTREA   68
NTDB id 181523 AsACE RS07605 WP 076753629.1  MFTAELLEEARKFMHHMLTKVVEYGGSDLFITADFPPSIKHQGLMKPFGQQELTPEKTKLFAYALMNEKQRKEYEAELEC   80
NTDB id 1203 PSJM300 01605 AFN76401.1        ...........MEFEKLLRLMVEKGGSDLFITAGVPPSMKVNGKILPVNKTPMSPEMTRETVHGVMNEQQRREFTENHEC   69
NTDB id 1019 ACIAD RS04205 WP 004922051.1    ...........MDFNDLLNLMAKHKASDLFITAGVEPSLKINGEITPVSKTKLDGDMIAQLIDSITTQKQRQEFIETHEC   69
consensus                                    **** *! ***** *!!!*!!*********!******** ******* ************!* ***!*

logo
NTDB id 1177 A1552VC RS01165 WP 000422572.1  NFAVVRD..SGRFRVSAFFQRELPGAVIRRIETRIPTFEELKLPEVLQNLAIAKRGLVLVVGATGSGKSTTMAAMTGYRN  146
NTDB id 181523 AsACE RS07605 WP 076753629.1  NFAITVPG.VSRFRVNVFQQQLNVGMVIRTITAEIPNFQKLKLPESLKHVIMEKRGLVLVVGGTGSGKSTSLAAMIDYRN  159
NTDB id 1203 PSJM300 01605 AFN76401.1        NFAISARG.IGRFRVSAFYQRNLAGMVLRRIETNIPTIEDLKLPDVLKKLALTKRGLVLFVGATGTGKSTSLAAMIGYRN  148
NTDB id 1019 ACIAD RS04205 WP 004922051.1    NFAILNREKNERFRVSAFQQRDMPGMVIRRIETKIPSPDDLHLPPILKELAMSKRGIIIFSGATGTGKSTSLASMIQHRN  149
consensus                                    !!!*  ** **!!!!**!*!****!*!*!*!***!!****!*!!**!* ****!!!*** *!*!!*!!!!**!*!***!!

logo
NTDB id 1177 A1552VC RS01165 WP 000422572.1  QHRTGHILTVEDPIEFVHEHKRCIVTQREVGLDTESYEVALKNSLRQAPDMILIGEIRSRETMEYAMTFAETGHLCMATL  226
NTDB id 181523 AsACE RS07605 WP 076753629.1  ENSAGHIITVEDPVEYVHKHKKSMITHREVGVDSHSWHNALKNTLRQAPDVILIGEIRDTETMEHAIAFAETGHLCLGTL  239
NTDB id 1203 PSJM300 01605 AFN76401.1        KNSSGHIISIEDPIEFIHQHQNCIVTQREVGIDTDSFEVALKNTLRQAPDVILIGEVRTRETMDHAVAFAETGHLCLATL  228
NTDB id 1019 ACIAD RS04205 WP 004922051.1    QHSKGHIITIEDPIEFIHEHAGCIITQREVGIDTDSFEIALKNTLRQAPDVILIGEIRSREVMDYALAFAETGHLVFATL  229
consensus                                    ****!!!***!!!*!**!*!*****!*!!!!*!**!***!!!!*!!!!!!*!!!!!*!**!*!**!**!!!!!!!***!!

logo
NTDB id 1177 A1552VC RS01165 WP 000422572.1  HANNANQALERILHLVPKEQREQFLLDLSLNLKGVIAQQLLRDKNGKGRHGVFEVLLNSPRIADLIRRGELHELKATMAR  306
NTDB id 181523 AsACE RS07605 WP 076753629.1  HSNNANQTLDRIINFFPEERRNQLLMDLSSNMKAIVSQRLVRTEDGKGRRAAVEIMLNTPLVSDLILKGDFHELKAIMGK  319
NTDB id 1203 PSJM300 01605 AFN76401.1        HANNANQALDRIINFFPADRQNQVWMDLSLNLKAIVAQQLVPTPDGKGRRAVIEVLINTPLAADLIRKGEVHELKGLMKR  308
NTDB id 1019 ACIAD RS04205 WP 004922051.1    HANNANQTLERIIHFFDADRHQQIFMDLSLNLKAVISQQLIPTHDGQSRRAAVEVLINTPLLSDYIRQGEIYKIKELMAR  309
consensus                                    !*!!!!! !*!!**********!***!!!*!*!*** !*!*** *!**!** *!***!*!** !*!**!*****!**!**

logo
NTDB id 1177 A1552VC RS01165 WP 000422572.1  SQEVGMQTFDQALYQLVVDDKISEQDALHSADSANDLRLMLKTKRGDDYGSGSLQNVKIDME..................  368
NTDB id 181523 AsACE RS07605 WP 076753629.1  SRELGMQTFDQALFDLYNEGAISYEEALRNADSTNELRLQIKLKSTRANPAMNNTATAFSMVEEKKLDNEADEDTSSTEQ  399
NTDB id 1203 PSJM300 01605 AFN76401.1        STDLGMQTFDQALYNLYVQGEITYEDALLHADSSNDLRLMIKLGSETDGEHLTSVS.Q.GLTLEMSDDDPG....RSFR.  381
NTDB id 1019 ACIAD RS04205 WP 004922051.1    SGELGMQTFDQALFDLYDHQHISYADALKHADSPNNLRLQIKLSEEANKPLDNRERMS.EMERKMTFDGQR....RNLK.  383
consensus                                    ! **!!!!!!!!!**!**** !****!!**!!!*!*!!! *!**** * * **    *  *** *** *  *     ** *

logo
```

```
SS
NTDB id 1177 A1552VC RS01165 WP 000422572.1  ..   368
NTDB id 181523 AsACE RS07605 WP 076753629.1  SS   401
NTDB id 1203 PSJM300 01605 AFN76401.1        ..   381
NTDB id 1019 ACIAD RS04205 WP 004922051.1    ..   383
consensus
```

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