logo



```
NTDB id 1177 A1552VC RS01165 WP 000422572.1  ....MELNQYLDGMLTHKASDLYITVGAPILYRVDGELRAQGEA.LSVADVTALLHAMMDDARQAEFKQTREANF  70
NTDB id 1019 ACIAD RS04205 WP 004922051.1    ....MDFNDLLNLMAKHKASDLFITAGVEPSLKINGEITPVSKTKLDGDMIAQLIDSITTQKQRQEFIETHECNF  71
NTDB id 227690 XcfCFBP6996P RS14365 WP 003489921.1  .MSTIDFTSFLKLMAHQKASDLFITSGMPPAIKVHGKISPITQTPLTAQQSRDLVLNVMTPSQREEFEKTHECNF  74
NTDB id 1203 PSJM300 01605 AFN76401.1        ....MEFEKLLRLMVEKGGSDLFITAGVPPSMKVNGKILPVNKTPMSPEMTRETVHGVMNEQQRREFTENHECNF  71
NTDB id 1307 DR RS10055 WP 010888596.1       MTSGIDITDILRLAADKGASDIILAAGLPPQFKLSGDYDAQGFEPLSASDTRKLMYSMMNERQQRIFEEKRELDF  75
NTDB id 1194 PAKAF RS01995 WP 003084552.1    ....MDITELLAFSAKQGASDLHLSAGLPPMIRVDGDVRRINLPPLEHKQVHALIYDIMNDKQRKDFEEFLETDF  71
NTDB id 1081 FDQ49 RS05335 WP 006581387.1    ....MDITELLAFSVKNGASDLHLSAGMPPMIRVDGEVRRINLPALEHKDVHRLVYDIMNDKQRRDYEEKLETDF  71
NTDB id 1060 ABD1 RS04380 WP 000355489.1     ....MDITELLAFSVKNGASDLHLSAGMPPMIRVDGEVRRINLPALEHKDVHRLVYDIMNDKQRRDYEEKLETDF  71
NTDB id 1040 HON27 RS13360 WP 000355489.1    ....MDITELLAFSVKNGASDLHLSAGMPPMIRVDGEVRRINLPALEHKDVHRLVYDIMNDKQRRDYEEKLETDF  71
consensus                                        ******!    *****!!* ***!*********!*** **    **  **  *** ************  ! *!
```

logo



```
NTDB id 1177 A1552VC RS01165 WP 000422572.1  AVVR..DSGRFRVSAFFQRELPGAVIRRIETRIPTFEELKLPEVLQNLAIAKRGLVLVVGATGSGKSTTMAAMTG  143
NTDB id 1019 ACIAD RS04205 WP 004922051.1    AILNREKNERFRVSAFQQRDMPGMVIRRIETKIPSPDDLHLPPILKELAMSKRGIIIFSGATGTGKSTSLASMIQ  146
NTDB id 227690 XcfCFBP6996P RS14365 WP 003489921.1  AIGVS.GVGRFRVSCFYQRNQVGMVLRRIETRIPTVDELSLPPVIKTLSMTKRGIIIFVGATGTGKSTSLAAMIG  148
NTDB id 1203 PSJM300 01605 AFN76401.1         AISAR.GIGRFRVSAFYQRNLAGMVLRRIETNIPTIEDLKLPDVLKKLALTKRGLVLFVGATGTGKSTSLAAMIG  145
NTDB id 1307 DR RS10055 WP 010888596.1       SFALG.DKARFRVNAFMQRGNVGGVMRLIPTTVRTIAEMGLPQTVIDIANAPRGLVLVTGPTGSGKSTTLASMID  149
NTDB id 1194 PAKAF RS01995 WP 003084552.1    SFEVP.GVARFRVNAFNQNRGAGAVFRTIPSKVLTMEELGMGEVFKRVSDVPRGLVLVTGPTGSGKSTTLAAMLD  145
NTDB id 1081 FDQ49 RS05335 WP 006581387.1    SFEVP.NVARFRVNAFNQNRGAGAVFRTIPSKVLTMEDLGLGQIFKDICDYPRGIVLVTGPTGSGKSTTLAAMLD  145
NTDB id 1060 ABD1 RS04380 WP 000355489.1     SFEVP.NVARFRVNAFNQNRGAGAVFRTIPSKVLTMEDLGLGQIFKDICDYPRGIVLVTGPTGSGKSTTLAAMLD  145
NTDB id 1040 HON27 RS13360 WP 000355489.1    SFEVP.NVARFRVNAFNQNRGAGAVFRTIPSKVLTMEDLGLGQIFKDICDYPRGIVLVTGPTGSGKSTTLAAMLD  145
consensus                                    ** *   **!!!!**!*!*  *!*!*! !**** ******** *****   *!!******!*!!*!!!!**!*!**
```

logo



```
NTDB id 1177 A1552VC RS01165 WP 000422572.1  YRNQHRTGHILTVEDPIEFVHEHKRCIVTQREVGLDTESYEVALKNSLRQAPDMILIGEIRSRETMEYAMTFAET  218
NTDB id 1019 ACIAD RS04205 WP 004922051.1    HRNQHSKGHIITIEDPIEFIHEHAGCIITQREVGIDTDSFEIALKNTLRQAPDVILIGEIRSREVMDYALAFAET  221
NTDB id 227690 XcfCFBP6996P RS14365 WP 003489921.1  YRNQNSTGHIITIEDPIEFVHKHEGCIITQREVGIDTDSWENALKNTLRQAPDVIMIGEVRTREGMDHAIAFAET  223
NTDB id 1203 PSJM300 01605 AFN76401.1         YRNKNSSGHIISIEDPIEFIHQHQNCIVTQREVGIDTDSFEVALKNTLRQAPDVILIGEVRTRETMDHAVAFAET  220
NTDB id 1307 DR RS10055 WP 010888596.1       HINTTKKLHILTIEDPIEFMHPNKASIINQREVGSDTLSFDDALRAALRQAPDVILVGEMRDYETIKAAVTAAET  224
NTDB id 1194 PAKAF RS01995 WP 003084552.1    YLNNTKYHHILTIEDPIEFVHESKKCLVNQREVHRDTLGFSEALRSALREDPDIILVGEMRDLETIRLALTAAET  220
NTDB id 1081 FDQ49 RS05335 WP 006581387.1    YINENRYDHILTVEDPIEFVHQSKKCLINQREVHRDTHGFNEALRSALREDPDIILVGEMRDLETIRLALTAAET  220
NTDB id 1060 ABD1 RS04380 WP 000355489.1     YINENRYDHILTVEDPIEFVHQSKKCLINQREVHRDTHGFNEALRSALREDPDIILVGEMRDLETIRLALTAAET  220
NTDB id 1040 HON27 RS13360 WP 000355489.1    YINENRYDHILTVEDPIEFVHQSKKCLINQREVHRDTHGFNEALRSALREDPDIILVGEMRDLETIRLALTAAET  220
consensus                                    **!  **   !!***!!!!!!*!   ******!!!!* !!  ****!!* *!!**!!*!**!!*!* !*** !***!!!
```

logo



```
NTDB id 1177 A1552VC RS01165 WP 000422572.1  GHLCMATLHANNANQALERILHLVPKEQREQFLLDLSLNLKGVIAQQLLRDKNGKGRHGVFEVLLNSPRIADLIR  293
NTDB id 1019 ACIAD RS04205 WP 004922051.1    GHLVFATLHANNANQTLERIIHFFDADRHQQIFMDLSLNLKAVISQQLIPTHDGQSRRAAVEVLINTPLLSDYIR  296
NTDB id 227690 XcfCFBP6996P RS14365 WP 003489921.1  GHLVLCTLHANNANQAMDRIINFFPEDRRNQLLMDLSLNLKGVVAQQLIPTPDGRSRRVAMEIMLGTPLVQDYIR  298
NTDB id 1203 PSJM300 01605 AFN76401.1         GHLCLATLHANNANQALDRIINFFPADRQNQVWMDLSLNLKAIVAQQLVPTPDGKGRRAVIEVLINTPLAADLIR  295
NTDB id 1307 DR RS10055 WP 010888596.1       GHLVMGTLHTNSAPESIDRIVDVFPEEQQEQIRVQLANNLVAVMTQQLLPRADGQGRVLAYEILLANPAVRALIR  299
NTDB id 1194 PAKAF RS01995 WP 003084552.1    GHLVFGTLHTTSAAKTIDRVVDVFPAEEKAMVRSMLSESLQSVISQTLIK.KIGGGRVAAHEIMIGTPAIRNLIR  294
NTDB id 1081 FDQ49 RS05335 WP 006581387.1    GHLVFGTLHTTSAAKTIDRVIDVFPAEEKDMVRAMLSESLQAVISQTLLK.KNGGGRVAAHEIMIGIPAIRNLIR  294
NTDB id 1060 ABD1 RS04380 WP 000355489.1     GHLVFGTLHTTSAAKTIDRVIDVFPAEEKDMVRAMLSESLQAVISQTLLK.KNGGGRVAAHEIMIGIPAIRNLIR  294
NTDB id 1040 HON27 RS13360 WP 000355489.1    GHLVFGTLHTTSAAKTIDRVIDVFPAEEKDMVRAMLSESLQAVISQTLLK.KNGGGRVAAHEIMIGIPAIRNLIR  294
consensus                                    !!!***!!!***!  ***!********* ****** !* *! ****!*!** * ! *!*** !*****!*** *!!
```

logo



```
NTDB id 1177 A1552VC RS01165 WP 000422572.1          RGELHELKATMARSQEVGMQTFDQALYQLVVDDKISEQDALHSADSANDLRLMLK.TKRGDDYG...SGSLQNVK   364
NTDB id 1019 ACIAD RS04205 WP 004922051.1            QGEIYKIKELMARSGELGMQTFDQALFDLYDHQHISYADALKHADSPNNLRLQIK.LSEEANKPLDNRERMSEME   370
NTDB id 227690 XcfCFBP6996P RS14365 WP 003489921.1   DGEIHKLKEIMKESTNLGMRTFDQSLFELYQAGEISYEDALRYADSQNEVRLRIK.LSQGGDAKTLSQG.LDGVE   371
NTDB id 1203 PSJM300 01605 AFN76401.1                KGEVHELKGLMKRSTDLGMQTFDQALYNLYVQGEITYEDALLHADSSNDLRLMIK.LGSETDGEHLTSV.SQGLT   368
NTDB id 1307 DR RS10055 WP 010888596.1               EGKTFQITSVMQTGAREGMVTMDAYLAGLFRRHLITYDKGLERAIDPKEFARLANDASAGLGGASMTPA.APPVP   373
NTDB id 1194 PAKAF RS01995 WP 003084552.1            EDKVAQMYSAIQTGGSLGMQTLDMCLKGLVAKGLISRENAREKAKIPENF.........................   344
NTDB id 1081 FDQ49 RS05335 WP 006581387.1            ENKVAQMYSAIQTGANHGMTTLDQSLKGLVSRGVISPQTARTAAKQPESFL........................   345
NTDB id 1060 ABD1 RS04380 WP 000355489.1             ENKVAQMYSAIQTGANHGMTTLDQSLKGLVARGVISPQTARTAAKQPESFL........................   345
NTDB id 1040 HON27 RS13360 WP 000355489.1            ENKVAQMYSAIQTGANHGMTTLDQSLKGLVARGVISPQTARTAAKQPESFL........................   345
consensus                                            **** ** * ***** *!! !*!* ! *!* ***!*    **   !   *   *                      *
```

logo



```
NTDB id 1177 A1552VC RS01165 WP 000422572.1          ....IDME.....................................   368
NTDB id 1019 ACIAD RS04205 WP 004922051.1            ....RKMTFDGQRRNLK............................   383
NTDB id 227690 XcfCFBP6996P RS14365 WP 003489921.1   ....ISEVR....................................   376
NTDB id 1203 PSJM300 01605 AFN76401.1                ....LEMSDDDPGRSFR............................   381
NTDB id 1307 DR RS10055 WP 010888596.1               AYNSASSSSTGRGGDFGRGAAAPATPAAPAAGRSEPGRAGGFGRR   418
NTDB id 1194 PAKAF RS01995 WP 003084552.1            .............................................   344
NTDB id 1081 FDQ49 RS05335 WP 006581387.1            .............................................   345
NTDB id 1060 ABD1 RS04380 WP 000355489.1             .............................................   345
NTDB id 1040 HON27 RS13360 WP 000355489.1            .............................................   345
consensus
```

X non conserved

X similar

X ≥ 50% conserved