```
logo
NTDB id 146904 PDR5 RS15890 WP 064596992.1   ....MEIDALLKLLASRHGSDLFLSTGAPPSARFDGVLTPLSDQPFKPGEVSSVAASLMDAEQRREFDRDLEMNLAISRT   76
NTDB id 1177 A1552VC RS01165 WP 000422572.1  ....MELNQYLDGMLTHKASDLYITVGAPILYRVDGELRAQGEAL.SVADVTALLHAMMDDARQAEFKQTREANFAVVRD   75
NTDB id 1203 PSJM300 01605 AFN76401.1        ....MEFEKLLRLMVEKGGSDLFITAGVPPSMKVNGKILPVNKTPMSPEMTRETVHGVMNEQQRREFTENHECNFAISAR   76
NTDB id 1019 ACIAD RS04205 WP 004922051.1    ....MDFNDLLNLMAKHKASDLFITAGVEPSLKINGEITPVSKTKLDGDMIAQLIDSITTQKQRQEFIETHECNFAILNR   76
NTDB id 1202 PSJM300 01600 AFN76400.1        ....MDITELLAFSAKQGASDLHLSSGLPPMIRVDGDVRRINLPAMDHKQVHALIYDIMNDKQRKDFEEFLETDFSFEVP   76
NTDB id 1194 PAKAF RS01995 WP 003084552.1    ....MDITELLAFSAKQGASDLHLSAGLPPMIRVDGDVRRINLPPLEHKQVHALIYDIMNDKQRKDFEEFLETDFSFEVP   76
NTDB id 1307 DR RS10055 WP 010888596.1       MTSGIDITDILRLAADKGASDIILAAGLPPQFKLSGDYDAQGFEPLSASDTRKLMYSMMNERQQRIFEEKRELDFSFALG   80
consensus                                        *** **! ***   **!!*****!*** ****!**  *    **     *  **  *********!**  ! ****

logo
NTDB id 146904 PDR5 RS15890 WP 064596992.1   G.IGRFRVNIFKQRNDVSIVIRNVKLDIPRFEDLKLPPVLLETVMLKQGLILFVGATDSGKSTSLAALIDHRNRHSSGHI   155
NTDB id 1177 A1552VC RS01165 WP 000422572.1  ..SGRFRVSAFFQRELPGAVIRRIETRIPTFEELKLPEVLQNLAIAKRGLVLVVGATGSGKSTTMAAMTGYRNQHRTGHI   153
NTDB id 1203 PSJM300 01605 AFN76401.1        G.IGRFRVSAFYQRNLAGMVLRRIETNIPTIEDLKLPDVLKKLALTKRGLVLFVGATGTGKSTSLAAMIGYRNKNSSGHI   155
NTDB id 1019 ACIAD RS04205 WP 004922051.1    EKNERFRVSAFQQRDMPGMVIRRIETKIPSPDDLHLPPILKELAMSKRGIIIFSGATGTGKSTSLASMIQHRNQHSKGHI   156
NTDB id 1202 PSJM300 01600 AFN76400.1        G.VARFRVNAFNQNRGAGAVFRTIPSKVLTMEDLGMGEVFRKITDVPRGLVLVTGPTGSGKSTTLAAMLDYLNNTKYHHI   155
NTDB id 1194 PAKAF RS01995 WP 003084552.1    G.VARFRVNAFNQNRGAGAVFRTIPSKVLTMEELGMGEVFKRVSDVPRGLVLVTGPTGSGKSTTLAAMLDYLNNTKYHHI   155
NTDB id 1307 DR RS10055 WP 010888596.1       D.KARFRVNAFMQRGNVGGVMRLIPTTVRTIAEMGLPQTVIDIANAPRGLVLVTGPTGSGKSTTLASMIDHINTTKKLHI   159
consensus                                    * **!!!!**! !*    **!*! * ********* ****** *** **!*****!*!**!!!!**!******!* * *!!

logo
NTDB id 146904 PDR5 RS15890 WP 064596992.1   ITIEDPVEYIHRHKKSIINQREVGVDTRSFHAALKNTLRQAPDVVLIGEIRDRETMEHALAFAETGHLVLSTLHAVNASQ   235
NTDB id 1177 A1552VC RS01165 WP 000422572.1  LTVEDPIEFVHEHKRCIVTQREVGLDTESYEVALKNSLRQAPDMILIGEIRSRETMEYAMTFAETGHLCMATLHANNANQ   233
NTDB id 1203 PSJM300 01605 AFN76401.1        ISIEDPIEFIHQHQNCIVTQREVGIDTDSFEVALKNTLRQAPDVILIGEVRTRETMDHAVAFAETGHLCLATLHANNANQ   235
NTDB id 1019 ACIAD RS04205 WP 004922051.1    ITIEDPIEFIHEHAGCIITQREVGIDTDSFEIALKNTLRQAPDVILIGEIRSREVMDYALAFAETGHLVFATLHANNANQ   236
NTDB id 1202 PSJM300 01600 AFN76400.1        LTIEDPIEFVHESKKCLVNQREVHRDTLGFSEALRSALREDPDIILVGEMRDLETIRLALTAAETGHLVFGTLHTTSAAK   235
NTDB id 1194 PAKAF RS01995 WP 003084552.1    LTIEDPIEFVHESKKCLVNQREVHRDTLGFSEALRSALREDPDIILVGEMRDLETIRLALTAAETGHLVFGTLHTTSAAK   235
NTDB id 1307 DR RS10055 WP 010888596.1       LTIEDPIEFMHPNKASIINQREVGSDTLSFDDALRAALRQAPDVILVGEMRDYETIKAAVTAAETGHLVMGTLHTNSAPE   239
consensus                                    ***!!!*!**!********!!!!*!!  ***  !!***!!**!!**!*!!*!**!*** !***!!!!!!***!!!***!  *

logo
NTDB id 146904 PDR5 RS15890 WP 064596992.1   ALDRAVNLFPEERRPQLMHALGNNLKALVSQRLVRTVDGQR.RAAVEVMLGSPTIADLIKNNQLDDLKVIMEKSGELGMR   314
NTDB id 1177 A1552VC RS01165 WP 000422572.1  ALERILHLVPKEQREQFLLDLSLNLKGVIAQQLLRDKNGKGRHGVFEVLLNSPRIADLIRRGELHELKATMARSQEVGMQ   313
NTDB id 1203 PSJM300 01605 AFN76401.1        ALDRIINFFPADRQNQVWMDLSLNLKAIVAQQLVPTPDGKGRRAVIEVLINTPLAADLIRKGEVHELKGLMKRSTDLGMQ   315
NTDB id 1019 ACIAD RS04205 WP 004922051.1    TLERIIHFFDADRHQQIFMDLSLNLKAVISQQLIPTHDGQSRRAAVEVLINTPLLSDYIRQGEIYKIKELMARSGELGMQ   316
NTDB id 1202 PSJM300 01600 AFN76400.1        TIDRVVDVFPAEEKSMVRSMLSESLQAVISQTLLKK.VGGGRVAAHEIMIGTPAIRNLIREDKVAQMYSSIQTGGSLGMQ   314
NTDB id 1194 PAKAF RS01995 WP 003084552.1    TIDRVVDVFPAEEKAMVRSMLSESLQSVISQTLIKK.IGGGRVAAHEIMIGTPAIRNLIREDKVAQMYSAIQTGGSLGMQ   314
NTDB id 1307 DR RS10055 WP 010888596.1       SIDRIVDVFPEEQQEQIRVQLANNLVAVMTQQLLPRADGQGRVLAYEILLANPAVRALIREGKTFQITSVMQTGAREGMV   319
consensus                                    ***!** ***** * ** * !* *!*****!*!**  *! ** ** !*****! * **!* * *  ** ** *****!!*
```

```
logo

NTDB id 146904 PDR5 RS15890 WP 064596992.1   TFDSALHQLVIEGAISEDEALRNADSVNNLRLSLKLNEQNV.RADKTS....SESWGLLDE...................   370
NTDB id 1177 A1552VC RS01165 WP 000422572.1  TFDQALYQLVVDDKISEQDALHSADSANDLRLMLKTKRGDD.Y...GS....GSLQNVKIDME.................   368
NTDB id 1203 PSJM300 01605 AFN76401.1        TFDQALYNLYVQGEITYEDALLHADSSNDLRLMIKLGSETD.GEHLTS....VS.QGLTLEMSDDDPGRSFR........   381
NTDB id 1019 ACIAD RS04205 WP 004922051.1    TFDQALFDLYDHQHISYADALKHADSPNNLRLQIKLSEEAN.KPLDNR....ERMSEMERKMTFDGQRRNLK........   383
NTDB id 1202 PSJM300 01600 AFN76400.1        TLDSCLKGLLAKGLISRDSAKEKAKQPENF...................................................   344
NTDB id 1194 PAKAF RS01995 WP 003084552.1    TLDMCLKGLVAKGLISRENAREKAKIPENF...................................................   344
NTDB id 1307 DR RS10055 WP 010888596.1       TMDAYLAGLFRRHLITYDKGLERAIDPKEFARLANDASAGLGGASMTPAAPPVPAYNSA.SSSSTGRGGDFGRGAAAPAT   398
consensus                                    !*! *!  !*  * !* ****  !******** **                        *

logo

                                             PAAPAAGRSEPGRAGGFGRR
NTDB id 146904 PDR5 RS15890 WP 064596992.1   ....................   370
NTDB id 1177 A1552VC RS01165 WP 000422572.1  ....................   368
NTDB id 1203 PSJM300 01605 AFN76401.1        ....................   381
NTDB id 1019 ACIAD RS04205 WP 004922051.1    ....................   383
NTDB id 1202 PSJM300 01600 AFN76400.1        ....................   344
NTDB id 1194 PAKAF RS01995 WP 003084552.1    ....................   344
NTDB id 1307 DR RS10055 WP 010888596.1       PAAPAAGRSEPGRAGGFGRR   418
consensus
```

X non conserved

X similar

X ≥ 50% conserved