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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 1448 BW25113 RS15320 WP 001326494.1  ....MNMEEIVALSVKHNVSDLHLCSAWPARWRIRGRMEA...APFDTPDVEELLREWLDDDQRAILLENGQLDFAVSLA   73
NTDB id 1086 NMV RS00245 WP 002218487.1      ....MQITDLLAFGAKNKASDLHLSSGISPMIRVHGDMRRINLPEMSAEEVGNMVTSVMNDHQRKIYQQNLEVDFSFELP   76
NTDB id 1116 NGFG RS10615 WP 003690200.1     ....MQITDLLAFGAKNKASDLHLSSGISPMIRVHGDMRRINLPEMSAEEVGNMVTSVMNDHQRKIYQQNLEVDFSFELP   76
NTDB id 1185 GTF74 RS11940 WP 000350195.1    ....MDIAELLEFSVKHNASDLHLSAGVPPMVRIDGEVRKLGVPAFTHSDVHRLIFEIMNDAQRSEYEEKLEVDFSFELP   76
NTDB id 1176 A1552VC RS01160 WP 000350195.1  ....MDIAELLEFSVKHNASDLHLSAGVPPMVRIDGEVRKLGVPAFTHSDVHRLIFEIMNDAQRSEYEEKLEVDFSFELP   76
NTDB id 1283 ACE17W RS02630 WP 010947729.1   ....MDIAELLAFSVKNKSSDLHISAGMPPMIRVDGDLRKINLPPLEHKDVIKIIYDIMNDRQRKEYEEFFETDFSFEIA   76
NTDB id 1259 GCO85 RS10305 WP 010947729.1    ....MDIAELLAFSVKNKSSDLHISAGMPPMIRVDGDLRKINLPPLEHKDVIKIIYDIMNDRQRKEYEEFFETDFSFEIA   76
NTDB id 1194 PA0395 NP 249086.1              ....MDITELLAFSAKQGASDLHLSAGLPPMIRVDGDVRRINLPPLEHKQVHALIYDIMNDKQRKDFEEFLETDFSFEVP   76
NTDB id 1202 PSJM300 01600 AFN76400.1        ....MDITELLAFSAKQGASDLHLSSGLPPMIRVDGDVRRINLPAMDHKQVHALIYDIMNDKQRKDFEEFLETDFSFEVP   76
NTDB id 1020 ACIAD RS04210 WP 011182164.1    ....MDITELLAFSVQNRASDLHLSAGIPPMIRVDGEVRRINLPAMDHSEVHNLIYDIMNDKQRRDYEEKLETDFSFEVP   76
NTDB id 1081 FDQ49 RS05335 WP 006581387.1    ....MDITELLAFSVKNGASDLHLSAGMPPMIRVDGEVRRINLPALEHKDVHRLVYDIMNDKQRRDYEEKLETDFSFEVP   76
NTDB id 1060 ABD1 RS04380 WP 000355489.1     ....MDITELLAFSVKNGASDLHLSAGMPPMIRVDGEVRRINLPALEHKDVHRLVYDIMNDKQRRDYEEKLETDFSFEVP   76
NTDB id 1040 HON27 RS13360 WP 000355489.1    ....MDITELLAFSVKNGASDLHLSAGMPPMIRVDGEVRRINLPALEHKDVHRLVYDIMNDKQRRDYEEKLETDFSFEVP   76
NTDB id 68811 ABWW09 RS00090 WP 143584087.1  MAKAPDVVDLLALAVERGASDLVITVGLPPMLKIDGEFHPTEYEPLTPQETRRLMYALMDEKQQRIFEEEKELDFSFSLP   80
NTDB id 1307 DR RS10055 WP 010888596.1       MTSGIDITDILRLAADKGASDIILAAGLPPQFKLSGDYDAQGFEPLSASDTRKLMYSMMNERQQRIFEEKRELDFSFALG   80
consensus                                          *** ********* *!!*********************!********* *** **  ********************** ** *!*****
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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 1448 BW25113 RS15320 WP 001326494.1  E.NQRLRGSAFAQRHGISLALRLLPSHCPQLEQLGAPTVLPELLKSENGLILVTGATGSGKSTTLAAMVGYLNQHADAHI   152
NTDB id 1086 NMV RS00245 WP 002218487.1      N.VARFRVNAFNIGRGPAAVFRTIPSTVLSLEELKAPSIFQKIAESPRGMVLVTGPTGSGKSTTLAAMINYINETQPAHI   155
NTDB id 1116 NGFG RS10615 WP 003690200.1     N.VARFRVNAFNTGRGPAAVFRTIPSTVLSLEELKAPSIFQKIAESPRGMVLVTGPTGSGKSTTLAAMINYINETQPAHI   155
NTDB id 1185 GTF74 RS11940 WP 000350195.1    N.VGRFRVNAFHQARGCSAVFRTIPTVIPTLEQLDAPEIFSKIANYEKGLVLVTGPTGSGKSTTLAAMVNYVNAHHNKHI   155
NTDB id 1176 A1552VC RS01160 WP 000350195.1  N.VGRFRVNAFHQARGCSAVFRTIPTVIPTLEQLDAPEIFSKIANYEKGLVLVTGPTGSGKSTTLAAMVNYVNAHHNKHI   155
NTDB id 1283 ACE17W RS02630 WP 010947729.1   N.LARFRVNAFNQSRGAAAVFRTIPSEILSMEDLGLPPIFKEMASFSRGLVLVTGPTGSGKSTTLAAVIDYINSSRYEHI   155
NTDB id 1259 GCO85 RS10305 WP 010947729.1    N.LARFRVNAFNQSRGAAAVFRTIPSEILSMEDLGLPPIFKEMASFSRGLVLVTGPTGSGKSTTLAAVIDYINSSRYEHI   155
NTDB id 1194 PA0395 NP 249086.1              G.VARFRVNAFNQNRGAGAVFRTIPSKVLTMEELGMGEVFKRVSDVPRGLVLVTGPTGSGKSTTLAAMLDYLNNTKYHHI   155
NTDB id 1202 PSJM300 01600 AFN76400.1        G.VARFRVNAFNQNRGAGAVFRTIPSKVLTMEDLGMGEVFRKITDVPRGLVLVTGPTGSGKSTTLAAMLDYLNNTKYHHI   155
NTDB id 1020 ACIAD RS04210 WP 011182164.1    N.LARFRVNVFNQNRGAGAVFRTIPSQVLTLEELGLGKIFRDICDYPRGLVLVTGPTGSGKSTTLAAMLDYINNHRYDHI   155
NTDB id 1081 FDQ49 RS05335 WP 006581387.1    N.VARFRVNAFNQNRGAGAVFRTIPSKVLTMEDLGLGQIFKDICDYPRGIVLVTGPTGSGKSTTLAAMLDYINENRYDHI   155
NTDB id 1060 ABD1 RS04380 WP 000355489.1     N.VARFRVNAFNQNRGAGAVFRTIPSKVLTMEDLGLGQIFKDICDYPRGIVLVTGPTGSGKSTTLAAMLDYINENRYDHI   155
NTDB id 1040 HON27 RS13360 WP 000355489.1    N.VARFRVNAFNQNRGAGAVFRTIPSKVLTMEDLGLGQIFKDICDYPRGIVLVTGPTGSGKSTTLAAMLDYINENRYDHI   155
NTDB id 68811 ABWW09 RS00090 WP 143584087.1  G.KGRYRVNVFLQRGSVGGVLRVVPSTVKSFEELGLPKNIAEIAMSPRGLVLVTGPTGSGKSTTLAAMIDYINERKACHI   159
NTDB id 1307 DR RS10055 WP 010888596.1       D.KARFRVNAFMQRGNVGGVMRLIPTTVRTIAEMGLPQTVIDIANAPRGLVLVTGPTGSGKSTTLASMIDHINTTKKLHI   159
consensus                                    * **!*!***!** ** ****!**** ********** ****** **!******!*!!*!!!!!**!******!  *  !!
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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 1448 BW25113 RS15320 WP 001326494.1  LTLEDPVEYLYASQRCLIQQREIGLHCMTFASGLRAALREDPDVILLGELRDSETIRLALTAAETGHLVLATLHTRGAAQ  232
NTDB id 1086 NMV RS00245 WP 002218487.1      LTIEDPIEFVHQSKKSLINQRELHQHTLSFANALRSALREDPDVILVGEMRDPETIGLALTAAETGHLVFGTLHTTGAAK  235
NTDB id 1116 NGFG RS10615 WP 003690200.1     LTIEDPIEFVHQSKKSLINQRELHQHTLSFANALSSALREDPDVILVGEMRDPETIGLALTAAETGHLVFGTLHTTGAAK  235
NTDB id 1185 GTF74 RS11940 WP 000350195.1    LTIEDPIEFVHSNNKCLINQREVHRDTHSFKNALRSALREDPDVILVGELRDQETISLALTAAETGHLVFGTLHTSSAAK  235
NTDB id 1176 A1552VC RS01160 WP 000350195.1  LTIEDPIEFVHSNNKCLINQREVHRDTHSFKNALRSALREDPDVILVGELRDQETISLALTAAETGHLVFGTLHTSSAAK  235
NTDB id 1283 ACE17W RS02630 WP 010947729.1   LTVEDPIEFVHQSKKCLVNQREVHKDTLSFNAALRSALREDPDIILVGELRDLETIRLAMTAAETGHLVFGTLHTNSATK  235
NTDB id 1259 GCO85 RS10305 WP 010947729.1    LTVEDPIEFVHQSKKCLVNQREVHKDTLSFNAALRSALREDPDIILVGELRDLETIRLAMTAAETGHLVFGTLHTNSATK  235
NTDB id 1194 PA0395 NP 249086.1              LTIEDPIEFVHESKKCLVNQREVHRDTLGFSEALRSALREDPDIILVGEMRDLETIRLALTAAETGHLVFGTLHTTSAAK  235
NTDB id 1202 PSJM300 01600 AFN76400.1        LTIEDPIEFVHESKKCLVNQREVHRDTLGFSEALRSALREDPDIILVGEMRDLETIRLALTAAETGHLVFGTLHTTSAAK  235
NTDB id 1020 ACIAD RS04210 WP 011182164.1    LTVEDPIEFVHEPKKCLINQREVHRDTLGFNEALRSALREDPDIILVGEMRDLETIRLALTAAETGHLVFGTLHTTSAAK  235
NTDB id 1081 FDQ49 RS05335 WP 006581387.1    LTVEDPIEFVHQSKKCLINQREVHRDTHGFNEALRSALREDPDIILVGEMRDLETIRLALTAAETGHLVFGTLHTTSAAK  235
NTDB id 1060 ABD1 RS04380 WP 000355489.1     LTVEDPIEFVHQSKKCLINQREVHRDTHGFNEALRSALREDPDIILVGEMRDLETIRLALTAAETGHLVFGTLHTTSAAK  235
NTDB id 1040 HON27 RS13360 WP 000355489.1    LTVEDPIEFVHQSKKCLINQREVHRDTHGFNEALRSALREDPDIILVGEMRDLETIRLALTAAETGHLVFGTLHTTSAAK  235
NTDB id 68811 ABWW09 RS00090 WP 143584087.1  VTIEDPIEFFHKHKRAIVNQREIGSDTKSFHKALRSVLRQAPDVILVGEMRDYETIAAAITAAETGHLVMGTLHTNSAPE  239
NTDB id 1307 DR RS10055 WP 010888596.1       LTIEDPIEFMHPNKASIINQREVGSDTLSFDDALRAALRQAPDVILVGEMRDYETIKAAVTAAETGHLVMGTLHTNSAPE  239
consensus                                    ***!!!*!*** ********!!!******  **   *!***!!**!!*!!*!!*!* !****!***!!!!!!***!!!***!**
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NTDB id 1177 A1552VC RS01165 WP 000422572.1  ALERILHLVPKEQREQFLLDLSLNLKGVIAQQLLRDKNGKGRHGVFEVLLNSPRIADLIRRGELHEELKATMARSQEVGMQ  313
NTDB id 1203 PSJM300 01605 AFN76401.1        ALDRIINFFPADRQNQVWMDLSLNLKAIVAQQLVPTPDGKGRRAVIEVLINTPLAADLIRKGEVHELKGLMKRSTDLGMQ  315
NTDB id 1019 ACIAD RS04205 WP 004922051.1    TLERIIHFFDADRHQQIFMDLSLNLKAVISQQLIPTHDGQSRRAAVEVLINTPLLSDYIRQGEIYKIKELMARSGELGMQ  316
NTDB id 1448 BW25113 RS15320 WP 001326494.1  AVERLVDSFPAQEKDPVRNQLAGSLRAVLSQKLEVD.KQEGRVALFELLINTPAVGNLIREGKTHQLPHVIQTGQQVGMI  311
NTDB id 1086 NMV RS00245 WP 002218487.1      TVDRIVDVFPAGEKEMVRSMLSESLTAVISQNLLKTHDGNGRVASHEILIANPAVRNLIRENKITQINSVLQTGQASGMQ  315
NTDB id 1116 NGFG RS10615 WP 003690200.1     TVDRIVDVFPAGEKEMVRSMLSESLTAVISQNLLKTHDGNGRVASHEILIANPAVRNLIRENKITQINSVLQTGQASGMQ  315
NTDB id 1185 GTF74 RS11940 WP 000350195.1    TIDRIIDVFPGSDKDMVRSMLSESLRAVIAQKLLKR.VGGGRVACHEIMLATPAIRNLIREDKVAQMYSIIQTGAAHGMQ  314
NTDB id 1176 A1552VC RS01160 WP 000350195.1  TIDRIIDVFPGSDKDMVRSMLSESLRAVIAQKLLKR.VGGGRVACHEIMLATPAIRNLIREDKVAQMYSIIQTGAAHGMQ  314
NTDB id 1283 ACE17W RS02630 WP 010947729.1   TINRIIDVFPAEEKSMVRSMLSESLQAVVAQSLLKK.NKGGRVAALEIMMCTGAIRNLIREDKIAQMYSSIQTGQAKGMQ  314
NTDB id 1259 GCO85 RS10305 WP 010947729.1    TINRIIDVFPAEEKSMVRSMLSESLQAVVAQSLLKK.NKGGRVAALEIMMCTGAIRNLIREDKIAQMYSSIQTGQAKGMQ  314
NTDB id 1194 PA0395 NP 249086.1              TIDRVVDVFPAEEKAMVRSMLSESLQSVISQTLIKK.IGGGRVAAHEIMIGTPAIRNLIREDKVAQMYSAIQTGGSLGMQ  314
NTDB id 1202 PSJM300 01600 AFN76400.1        TIDRVVDVFPAEEKSMVRSMLSESLQAVISQTLLKK.VGGGRVAAHEIMIGTPAIRNLIREDKVAQMYSSIQTGGSLGMQ  314
NTDB id 1020 ACIAD RS04210 WP 011182164.1    TIDRIIDVFPAEEKDMVRTMLSESLQAVISQTLLKK.EGGGRVAAHEIMIGIPAIRNLIREGKVAQMYSSIQTGATHGMT  314
NTDB id 1081 FDQ49 RS05335 WP 006581387.1    TIDRVIDVFPAEEKDMVRAMLSESLQAVISQTLLKK.NGGGRVAAHEIMIGIPAIRNLIRENKVAQMYSAIQTGANHGMT  314
NTDB id 1060 ABD1 RS04380 WP 000355489.1     TIDRVIDVFPAEEKDMVRAMLSESLQAVISQTLLKK.NGGGRVAAHEIMIGIPAIRNLIRENKVAQMYSAIQTGANHGMT  314
NTDB id 1040 HON27 RS13360 WP 000355489.1    TIDRVIDVFPAEEKDMVRAMLSESLQAVISQTLLKK.NGGGRVAAHEIMIGIPAIRNLIRENKVAQMYSAIQTGANHGMT  314
NTDB id 1307 DR RS10055 WP 010888596.1       SIDRIVDVFPEEQQEQIRVQLANNLVAVMTQQLLPRADGQGRVLAYEILLANPAVRALIREGKTFQITSVMQTGAREGMV  319
consensus                                    ***!*************** *!***!  ****!  !***   ***!****!************!!* ******* *****   !!*
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NTDB id 1177 A1552VC RS01165 WP 000422572.1   TFDQALYQLVVDDKISEQDALHSADSANDLRLMLKTKRGDDY...GSGSLQNVKI........DME..............   368
NTDB id 1203 PSJM300 01605 AFN76401.1         TFDQALYNLYVVQGEITYEDALLHADSSNDLRLMIKLGSETDGEHLTSVS.QGLTL.......EMSDDDPGRSFR.....   381
NTDB id 1019 ACIAD RS04205 WP 004922051.1     TFDQALFDLYDHQHISYADALKHADSPNNLRLQIKLSEEANKPLDNRERMSEMER........KMTFDGQRRNLK.....   383
NTDB id 1448 BW25113 RS15320 WP 001326494.1  TFQQSYQHRVGEGRL.................................................................   326
NTDB id 1086 NMV RS00245 WP 002218487.1       TMDQSLQSLVRQGLIAPEVARRRAQNSESMSF................................................   347
NTDB id 1116 NGFG RS10615 WP 003690200.1      TMDQSLQSLVRQGLIAPEAARRRAQNSESMSF................................................   347
NTDB id 1185 GTF74 RS11940 WP 000350195.1     TMEQNAKQLIARGVVDAQEVQSKIELDLKAF.................................................   345
NTDB id 1176 A1552VC RS01160 WP 000350195.1   TMEQNAKQLIARGVVDAQEVQSKIELDLKAF.................................................   345
NTDB id 1283 ACE17W RS02630 WP 010947729.1    TLDQHLTELVNKNIISKHTAHEAALN.KSLF.................................................   344
NTDB id 1259 GC085 RS10305 WP 010947729.1     TLDQHLTELVNKNIISKHTAHEAALN.KSLF.................................................   344
NTDB id 1194 PA0395 NP 249086.1               TLDMCLKGLVAKGLISRENAREKAKI.PENF.................................................   344
NTDB id 1202 PSJM300 01600 AFN76400.1         TLDSCLKGLLAKGLISRDSAKEKAKQ.PENF.................................................   344
NTDB id 1020 ACIAD RS04210 WP 011182164.1     TLDQSLKQLLAKGIINLPTARAVAKS.PESF.................................................   344
NTDB id 1081 FDQ49 RS05335 WP 006581387.1     TLDQSLKGLVSRGVISPQTARTAAKQ.PESFL................................................   345
NTDB id 1060 ABD1 RS04380 WP 000355489.1      TLDQSLKGLVARGVISPQTARTAAKQ.PESFL................................................   345
NTDB id 1040 HON27 RS13360 WP 000355489.1     TLDQSLKGLVARGVISPQTARTAAKQ.PESFL................................................   345
NTDB id 68811 ABWW09 RS00090 WP 143584087.1   TMDACLADLYKRKLITYEMGLARAVD.PKEFMRL..AGAPEGARR...................................   361
NTDB id 1307 DR RS10055 WP 010888596.1       TMDAYLAGLFRRHLITYDKGLERAID.PKEFARL..ANDASAGLGG.ASMTPAAPPVPAYNSASSSSTGRGGDFGRGAAA   395
consensus                                     !*** *  ** *****   *   *      *
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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 1448 BW25113 RS15320 WP 001326494.1  .......................   326
NTDB id 1086 NMV RS00245 WP 002218487.1       .......................   347
NTDB id 1116 NGFG RS10615 WP 003690200.1      .......................   347
NTDB id 1185 GTF74 RS11940 WP 000350195.1     .......................   345
NTDB id 1176 A1552VC RS01160 WP 000350195.1   .......................   345
NTDB id 1283 ACE17W RS02630 WP 010947729.1    .......................   344
NTDB id 1259 GC085 RS10305 WP 010947729.1     .......................   344
NTDB id 1194 PA0395 NP 249086.1               .......................   344
NTDB id 1202 PSJM300 01600 AFN76400.1         .......................   344
NTDB id 1020 ACIAD RS04210 WP 011182164.1     .......................   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
NTDB id 68811 ABWW09 RS00090 WP 143584087.1   .......................   361
NTDB id 1307 DR RS10055 WP 010888596.1       PATPAAPAAGRSEPGRAGGFGRR   418
consensus
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X non conserved
X similar
X ≥ 50% conserved