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NTDB id 1177 A1552VC RS01165 WP 000422572.1  ....MELNQYLDGMLTHKASDLYITVGAPILYRVDGELRAQGE.....AL.SVADVTALLHAMMDDARQAEFKQTREANF   70
NTDB id 1203 PSJM300 01605 AFN76401.1        ....MEFEKLLRLMVEKGGSDLFITAGVPPSMKVNGKILPVNK.....TPMSPEMTRETVHGVMNEQQRREFTENHECNF   71
NTDB id 1019 ACIAD RS04205 WP 004922051.1    ....MDFNDLLNLMAKHKASDLFITAGVEPSLKINGEITPVSK.....TKLDGDMIAQLIDSITTQKQRQEFIETHECNF   71
NTDB id 397272 BR63 RS03775 WP 034425503.1   ....MDVIELLKSAVKAGASDIHLSVGAYPMFRINGQLKRWVPEEGENLPLKREDTLKAAEILMNSEQMEAWQQKGELDF   76
NTDB id 1307 DR RS10055 WP 010888596.1       MTSGIDITDILRLAADKGASDIILAAGLPPQFKLSGDYDAQGF.....EPLSASDTRKLMYSMMNERQQRIFEEKRELDF   75
NTDB id 1086 NMV RS00245 WP 002218487.1      ....MQITDLLAFGAKNKASDLHLSSGISPMIRVHGDMRRINL.....PEMSAEEVGNMVTSVMNDHQRKIYQQNLEVDF   71
NTDB id 1116 NGFG RS10615 WP 003690200.1     ....MQITDLLAFGAKNKASDLHLSSGISPMIRVHGDMRRINL.....PEMSAEEVGNMVTSVMNDHQRKIYQQNLEVDF   71
NTDB id 1185 GTF74 RS11940 WP 000350195.1    ....MDIAELLEFSVKHNASDLHLSAGVPPMVRIDGEVRKLGV.....PAFTHSDVHRLIFEIMNDAQRSEYEEKLEVDF   71
NTDB id 1176 A1552VC RS01160 WP 000350195.1  ....MDIAELLEFSVKHNASDLHLSAGVPPMVRIDGEVRKLGV.....PAFTHSDVHRLIFEIMNDAQRSEYEEKLEVDF   71
NTDB id 1283 ACE17W RS02630 WP 010947729.1   ....MDIAELLAFSVKNKSSDLHISAGMPPMIRVDGDLRKINL.....PPLEHKDVIKIIYDIMNDRQRKEYEEFFETDF   71
NTDB id 1259 GCO85 RS10305 WP 010947729.1    ....MDIAELLAFSVKNKSSDLHISAGMPPMIRVDGDLRKINL.....PPLEHKDVIKIIYDIMNDRQRKEYEEFFETDF   71
NTDB id 1194 PAKAF RS01995 WP 003084552.1    ....MDITELLAFSAKQGASDLHLSAGLPPMIRVDGDVRRINL.....PPLEHKQVHALIYDIMNDKQRKDFEEFLETDF   71
NTDB id 1202 PSJM300 01600 AFN76400.1        ....MDITELLAFSAKQGASDLHLSSGLPPMIRVDGDVRRINL.....PAMDHKQVHALIYDIMNDKQRKDFEEFLETDF   71
NTDB id 1020 ACIAD RS04210 WP 011182164.1    ....MDITELLAFSVQNRASDLHLSAGIPPMIRVDGEVRRINL.....PAMDHSEVHNLIYDIMNDKQRRDYEEKLETDF   71
NTDB id 1081 FDQ49 RS05335 WP 006581387.1    ....MDITELLAFSVKNGASDLHLSAGMPPMIRVDGEVRRINL.....PALEHKDVHRLVYDIMNDKQRRDYEEKLETDF   71
NTDB id 1060 ABD1 RS04380 WP 000355489.1     ....MDITELLAFSVKNGASDLHLSAGMPPMIRVDGEVRRINL.....PALEHKDVHRLVYDIMNDKQRRDYEEKLETDF   71
NTDB id 1040 HON27 RS13360 WP 000355489.1    ....MDITELLAFSVKNGASDLHLSAGMPPMIRVDGEVRRINL.....PALEHKDVHRLVYDIMNDKQRRDYEEKLETDF   71
consensus                                       *** **!****** *!!*****!*********!********      * * *  **  ********************* *! *!
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NTDB id 1177 A1552VC RS01165 WP 000422572.1  AVVRD..SGRFRVSAFFQRELPGAVIRRIETRIPTFEELKLPEVLQNLAIAKRGLVLVVGATGSGKSTTMAAMTGYRNQH   148
NTDB id 1203 PSJM300 01605 AFN76401.1        AISARG.IGRFRVSAFYQRNLAGMVLRRIETNIPTIEDLKLPDVLKKLALTKRGLVLFVGATGTGKSTSLAAMIGYRNKN   150
NTDB id 1019 ACIAD RS04205 WP 004922051.1    AILNREKNERFRVSAFQQRDMPGMVIRRIETKIPSPDDLHLPPILKELAMSKRGIIIFSGATGTGKSTSLASMIQHRNQH   151
NTDB id 397272 BR63 RS03775 WP 034425503.1   SYSLPG.VGRFRVNIYRQRGCVSLALRPVPYQIPSLESLGVPQAVVGLADKTNGLVLVTGPTGSGKSTTLAALINKINQE   155
NTDB id 1307 DR RS10055 WP 010888596.1       SFALGD.KARFRVNAFMQRGNVGGVMRLIPTTVRTIAEMGLPQTVIDIANAPRGLVLVTGPTGSGKSTTLASMIDHINTT   154
NTDB id 1086 NMV RS00245 WP 002218487.1      SFELPN.VARFRVNAFNIGRGPAAVFRTIPSTVLSLEELKAPSIFQKIAESPRGMVLVTGPTGSGKSTTLAAMINYINET   150
NTDB id 1116 NGFG RS10615 WP 003690200.1     SFELPN.VARFRVNAFNTGRGPAAVFRTIPSTVLSLEELKAPSIFQKIAESPRGMVLVTGPTGSGKSTTLAAMINYINET   150
NTDB id 1185 GTF74 RS11940 WP 000350195.1    SFELPN.VGRFRVNAFHQARGCSAVFRTIPTVIPTLEQLDAPEIFSKIANYEKGLVLVTGPTGSGKSTTLAAMVNYVNAH   150
NTDB id 1176 A1552VC RS01160 WP 000350195.1  SFELPN.VGRFRVNAFHQARGCSAVFRTIPTVIPTLEQLDAPEIFSKIANYEKGLVLVTGPTGSGKSTTLAAMVNYVNAH   150
NTDB id 1283 ACE17W RS02630 WP 010947729.1   SFEIAN.LARFRVNAFNQSRGAAAVFRTIPSEILSMEDLGLPPIFKEMASFSRGLVLVTGPTGSGKSTTLAAVIDYINSS   150
NTDB id 1259 GCO85 RS10305 WP 010947729.1    SFEIAN.LARFRVNAFNQSRGAAAVFRTIPSEILSMEDLGLPPIFKEMASFSRGLVLVTGPTGSGKSTTLAAVIDYINSS   150
NTDB id 1194 PAKAF RS01995 WP 003084552.1    SFEVPG.VARFRVNAFNQNRGAGAVFRTIPSKVLTMEELGMGEVFKRVSDVPRGLVLVTGPTGSGKSTTLAAMLDYLNNT   150
NTDB id 1202 PSJM300 01600 AFN76400.1        SFEVPG.VARFRVNAFNQNRGAGAVFRTIPSKVLTMEDLGMGEVFRKITDVPRGLVLVTGPTGSGKSTTLAAMLDYLNNT   150
NTDB id 1020 ACIAD RS04210 WP 011182164.1    SFEVPN.LARFRVNVFNQNRGAGAVFRTIPSQVLTLEELGLGKIFRDICDYPRGLVLVTGPTGSGKSTTLAAMLDYINNH   150
NTDB id 1081 FDQ49 RS05335 WP 006581387.1    SFEVPN.VARFRVNAFNQNRGAGAVFRTIPSKVLTMEDLGLGQIFKDICDYPRGIVLVTGPTGSGKSTTLAAMLDYINEN   150
NTDB id 1060 ABD1 RS04380 WP 000355489.1     SFEVPN.VARFRVNAFNQNRGAGAVFRTIPSKVLTMEDLGLGQIFKDICDYPRGIVLVTGPTGSGKSTTLAAMLDYINEN   150
NTDB id 1040 HON27 RS13360 WP 000355489.1    SFEVPN.VARFRVNAFNQNRGAGAVFRTIPSKVLTMEDLGLGQIFKDICDYPRGIVLVTGPTGSGKSTTLAAMLDYINEN   150
consensus                                    ****** **!!!!*****  **  ****!****  ********** ***  **    *!*****!*!!*!!!!**!***  **!
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NTDB id 1177 A1552VC RS01165 WP 000422572.1  RTGHILTVEDPIEFVHEHKRCIVTQREVGLDTESYEVALKNSLRQAPDMILIGEIRSRETMEYAMTFAETGHLCMATLHA  228
NTDB id 1203 PSJM300 01605 AFN76401.1        SSGHIISIEDPIEFIHQHQNCIVTQREVGIDTDSFEVALKNTLRQAPDVILIGEVRTRETMDHAVAFAETGHLCLATLHA  230
NTDB id 1019 ACIAD RS04205 WP 004922051.1    SKGHIITIEDPIEFIHEHAGCIITQREVGIDTDSFEIALKNTLRQAPDVILIGEIRSREVMDYALAFAETGHLVFATLHA  231
NTDB id 397272 BR63 RS03775 WP 034425503.1   RACHIITIEDPIEYLYQHQKSVVDQRELGSDTFSLAGALRACLRQDPDVILVGEMRDLETIATAITAAETGHLVFATLHT  235
NTDB id 1307 DR RS10055 WP 010888596.1       KKLHILTIEDPIEFMHPNKASIINQREVGSDTLSFDDALRAALRQAPDVILVGEMRDYETIKAAVTAAETGHLVMGTLHT  234
NTDB id 1086 NMV RS00245 WP 002218487.1      QPAHILTIEDPIEFVHQSKKSLINQRELHQHTLSFANALRSALREDPDVILVGEMRDPETIGLALTAAETGHLVFGTLHT  230
NTDB id 1116 NGFG RS10615 WP 003690200.1     QPAHILTIEDPIEFVHQSKKSLINQRELHQHTLSFANALSSALREDPDVILVGEMRDPETIGLALTAAETGHLVFGTLHT  230
NTDB id 1185 GTF74 RS11940 WP 000350195.1    HNKHILTIEDPIEFVHSNNKCLINQREVHRDTHSFKNALRSALREDPDVILVGELRDQETISLALTAAETGHLVFGTLHT  230
NTDB id 1176 A1552VC RS01160 WP 000350195.1  HNKHILTIEDPIEFVHSNNKCLINQREVHRDTHSFKNALRSALREDPDVILVGELRDQETISLALTAAETGHLVFGTLHT  230
NTDB id 1283 ACE17W RS02630 WP 010947729.1   RYEHILTVEDPIEFVHQSKKCLVNQREVHKDTLSFNAALRSALREDPDIILVGELRDLETIRLAMTAAETGHLVFGTLHT  230
NTDB id 1259 GCO85 RS10305 WP 010947729.1    RYEHILTVEDPIEFVHQSKKCLVNQREVHKDTLSFNAALRSALREDPDIILVGELRDLETIRLAMTAAETGHLVFGTLHT  230
NTDB id 1194 PAKAF RS01995 WP 003084552.1    KYHHILTIEDPIEFVHESKKCLVNQREVHRDTLGFSEALRSALREDPDIILVGEMRDLETIRLALTAAETGHLVFGTLHT  230
NTDB id 1202 PSJM300 01600 AFN76400.1        KYHHILTIEDPIEFVHESKKCLVNQREVHRDTLGFSEALRSALREDPDIILVGEMRDLETIRLALTAAETGHLVFGTLHT  230
NTDB id 1020 ACIAD RS04210 WP 011182164.1    RYDHILTVEDPIEFVHEPKKCLINQREVHRDTLGFNEALRSALREDPDIILVGEMRDLETIRLALTAAETGHLVFGTLHT  230
NTDB id 1081 FDQ49 RS05335 WP 006581387.1    RYDHILTVEDPIEFVHQSKKCLINQREVHRDTHGFNEALRSALREDPDIILVGEMRDLETIRLALTAAETGHLVFGTLHT  230
NTDB id 1060 ABD1 RS04380 WP 000355489.1     RYDHILTVEDPIEFVHQSKKCLINQREVHRDTHGFNEALRSALREDPDIILVGEMRDLETIRLALTAAETGHLVFGTLHT  230
NTDB id 1040 HON27 RS13360 WP 000355489.1    RYDHILTVEDPIEFVHQSKKCLINQREVHRDTHGFNEALRSALREDPDIILVGEMRDLETIRLALTAAETGHLVFGTLHT  230
consensus                                    *  !!***!!!!!***  ******!!!****! **  !!***!!**!!*!!*!!*!* !** *!***!!!!!!***!!!*
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NTDB id 1177 A1552VC RS01165 WP 000422572.1  NNANQALERILHLVPKEQREQFLLDLSLNLKGVIAQQLLRDKNGKGRHGVFEVLLNSPRIADLIRRGELHELKATMARSQ  308
NTDB id 1203 PSJM300 01605 AFN76401.1        NNANQALDRIINFFPADRQNQVWMDLSLNLKAIVAQQLVPTPDGKGRRAVIEVLINTPLAADLIRKGEVHELKGLMKRST  310
NTDB id 1019 ACIAD RS04205 WP 004922051.1    NNANQTLERIIHFFDADRHQQIFMDLSLNLKAVISQQLIPTHDGQSRRAAVEVLINTPLLSDYIRQGEIYKIKELMARSG  311
NTDB id 397272 BR63 RS03775 WP 034425503.1   NSAAQSVDRIIDVFPPGQQEQIKVQLAATLQGVVTQQLLPRADGMGRVLAAEVMIVTPAVRNLIREGKTHQIQTVLQTGG  315
NTDB id 1307 DR RS10055 WP 010888596.1       NSAPESIDRIVDVFPEEQQEQIRVQLANNLVAVMTQQLLPRADGQGRVLAYEILLANPAVRALIREGKTFQITSVMQTGA  314
NTDB id 1086 NMV RS00245 WP 002218487.1      TGAAKTVDRIVDVFPAGEKEMVRSMLSESLTAVISQNLLKTHDGNGRVASHEILIANPAVRNLIRENKITQINSVLQTGQ  310
NTDB id 1116 NGFG RS10615 WP 003690200.1     TGAAKTVDRIVDVFPAGEKEMVRSMLSESLTAVISQNLLKTHDGNGRVASHEILIANPAVRNLIRENKITQINSVLQTGQ  310
NTDB id 1185 GTF74 RS11940 WP 000350195.1    SSAAKTIDRIIDVFPGSDKDMVRSMLSESLRAVIAQKLLKR.VGGGRVACHEIMLATPAIRNLIREDKVAQMYSIIQTGA  309
NTDB id 1176 A1552VC RS01160 WP 000350195.1  SSAAKTIDRIIDVFPGSDKDMVRSMLSESLRAVIAQKLLKR.VGGGRVACHEIMLATPAIRNLIREDKVAQMYSIIQTGA  309
NTDB id 1283 ACE17W RS02630 WP 010947729.1   NSATKTINRIIDVFPAEEKSMVRSMLSESLQAVVAQSLLKK.NKGGRVAALEIMMCTGAIRNLIREDKIAQMYSSIQTGQ  309
NTDB id 1259 GCO85 RS10305 WP 010947729.1    NSATKTINRIIDVFPAEEKSMVRSMLSESLQAVVAQSLLKK.NKGGRVAALEIMMCTGAIRNLIREDKIAQMYSSIQTGQ  309
NTDB id 1194 PAKAF RS01995 WP 003084552.1    TSAAKTIDRVVDVFPAEEKAMVRSMLSESLQSVISQTLIKK.IGGGRVAAHEIMIGTPAIRNLIREDKVAQMYSAIQTGG  309
NTDB id 1202 PSJM300 01600 AFN76400.1        TSAAKTIDRVVDVFPAEEKSMVRSMLSESLQAVISQTLLKK.VGGGRVAAHEIMIGTPAIRNLIREDKVAQMYSSIQTGG  309
NTDB id 1020 ACIAD RS04210 WP 011182164.1    TSAAKTIDRIIDVFPAEEKDMVRTMLSESLQAVISQTLLKK.EGGGRVAAHEIMIGIPAIRNLIREGKVAQMYSSIQTGA  309
NTDB id 1081 FDQ49 RS05335 WP 006581387.1    TSAAKTIDRVIDVFPAEEKDMVRAMLSESLQAVISQTLLKK.NGGGRVAAHEIMIGIPAIRNLIRENKVAQMYSAIQTGA  309
NTDB id 1060 ABD1 RS04380 WP 000355489.1     TSAAKTIDRVIDVFPAEEKDMVRAMLSESLQAVISQTLLKK.NGGGRVAAHEIMIGIPAIRNLIRENKVAQMYSAIQTGA  309
NTDB id 1040 HON27 RS13360 WP 000355489.1    TSAAKTIDRVIDVFPAEEKDMVRAMLSESLQAVISQTLLKK.NGGGRVAAHEIMIGIPAIRNLIRENKVAQMYSAIQTGA  309
consensus                                    **!*****!**************** *!***! ****! !***  ***!****!**************!!* ******* *****
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NTDB id 1177 A1552VC RS01165 WP 000422572.1   EVGMQTFDQALYQLVDDKISEQDALHSADSA..NDLRLMLKTKRGDDY...GSGSLQ..NV.KIDME.............   368
NTDB id 1203 PSJM300 01605 AFN76401.1         DLGMQTFDQALYNLYVQGEITYEDALLHADSS..NDLRLMIKLGSETDGEHLTSVS.Q..GL.TLEMSDDDPGRSFR...   381
NTDB id 1019 ACIAD RS04205 WP 004922051.1     ELGMQTFDQALFDLYDHQHISYADALKHADSP..NNLRLQIKLSEEANKPLDNRERMS..EM.ERKMTFDGQRRNLK...   383
NTDB id 397272 BR63 RS03775 WP 034425503.1    RWGMQTMDMALRELVRSGAVTMETALKYTND.QENFSRLVNATGF.................................   359
NTDB id 1307 DR RS10055 WP 010888596.1        REGMVTMDAYLAGLFRRHLITYDKGLERAID.PKEFARLANDASAGLGGASMTPAAPPVPAYNSASSSSTGRGGDFGRGA   393
NTDB id 1086 NMV RS00245 WP 002218487.1       ASGMQTMDQSLQSLVRQGLIAPEVARRRAQNSESMSF.........................................   347
NTDB id 1116 NGFG RS10615 WP 003690200.1      ASGMQTMDQSLQSLVRQGLIAPEAARRRAQNSESMSF.........................................   347
NTDB id 1185 GTF74 RS11940 WP 000350195.1     AHGMQTMEQNAKQLIARGVVDAQEVQSKIELDLKAF...........................................   345
NTDB id 1176 A1552VC RS01160 WP 000350195.1   AHGMQTMEQNAKQLIARGVVDAQEVQSKIELDLKAF...........................................   345
NTDB id 1283 ACE17W RS02630 WP 010947729.1    AKGMQTLDQHLTELVNKNIISKHTAHEAALN.KSLF...........................................   344
NTDB id 1259 GCO85 RS10305 WP 010947729.1     AKGMQTLDQHLTELVNKNIISKHTAHEAALN.KSLF...........................................   344
NTDB id 1194 PAKAF RS01995 WP 003084552.1     SLGMQTLDMCLKGLVAKGLISRENAREKAKI.PENF...........................................   344
NTDB id 1202 PSJM300 01600 AFN76400.1         SLGMQTLDSCLKGLLAKGLISRDSAKEKAKQ.PENF...........................................   344
NTDB id 1020 ACIAD RS04210 WP 011182164.1     THGMTTLDQSLKQLLAKGIINLPTARAVAKS.PESF...........................................   344
NTDB id 1081 FDQ49 RS05335 WP 006581387.1     NHGMTTLDQSLKGLVSRGVISPQTARTAAKQ.PESFL..........................................   345
NTDB id 1060 ABD1 RS04380 WP 000355489.1      NHGMTTLDQSLKGLVARGVISPQTARTAAKQ.PESFL..........................................   345
NTDB id 1040 HON27 RS13360 WP 000355489.1     NHGMTTLDQSLKGLVARGVISPQTARTAAKQ.PESFL..........................................   345
consensus                                       !!*!*** *  !* *****   *   *      *
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logo


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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 397272 BR63 RS03775 WP 034425503.1    ..........................   359
NTDB id 1307 DR RS10055 WP 010888596.1        AAPATPAAPAAGRSEPGRAGGFGRR   418
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 GCO85 RS10305 WP 010947729.1     ..........................   344
NTDB id 1194 PAKAF RS01995 WP 003084552.1     ..........................   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
consensus
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X non conserved
X similar
X ≥ 50% conserved