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NTDB id 225349 B5D77 RS20525 WP 008196492.1    ..MELMIEDLMEQLVEMGGSDMHIQSGAPVYFRISGKLSPINEESLTPQDCQKLIFSMLNNTQRKELEQNWELDCSYGVK   78
NTDB id 1307 DR RS10055 WP 010888596.1         MTSGIDITDILRLAADKGASDIILAAGLPPQFKLSGDYDAQGFEPLSASDTRKLMYSMMNERQQRIFEEKRELDFSFALG   80
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 GC085 RS10305 WP 010947729.1      ....MDIAELLAFSVKNKSSDLHISAGMPPMIRVDGDLRKINLPPLEHKDVIKIIYDIMNDRQRKEYEEFFETDFSFEIA   76
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NTDB id 1202 PSJM300 01600 AFN76400.1          ....MDITELLAFSAKQGASDLHLSSGLPPMIRVDGDVRRINLPAMDHKQVHALIYDIMNDKQRKDFEEFLETDFSFEVP   76
NTDB id 1020 ACIAD RS04210 WP 011182164.1      ....MDITELLAFSVQNRASDLHLSAGIPPMIRVDGEVRRINLPAMDHSEVHNLIYDIMNDKQRRDYEEKLETDFSFEVP   76
NTDB id 1060 ABD1 RS04380 WP 000355489.1       ....MDITELLAFSVKNGASDLHLSAGMPPMIRVDGEVRRINLPALEHKDVHRLVYDIMNDKQRRDYEEKLETDFSFEVP   76
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consensus                                          ************ *!!*****!********!******** * * ** *******!**!****** *! *******
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NTDB id 225349 B5D77 RS20525 WP 008196492.1    GLARFRVNVYKERGAYAACLRALSSKIPNFEQLNLPAIVRELSERPRGLILVTGQTGSGKITTLAAILDLINRTRSEHIL   158
NTDB id 1307 DR RS10055 WP 010888596.1         DKARFRVNAFMQRGNVGGVMRLIPITVRTIAEMGLPQTVIDIANAPRGLVLVTGPTGSGKSTTLASMIDHINTTKKLHIL   160
NTDB id 1086 NMV RS00245 WP 002218487.1        NVARFRVNAFNIGRGPAAVFRTIPSTVLSLEELKAPSIFQKIAESPRGMVLVTGPTGSGKSTTLAAMINYINETQPAHIL   156
NTDB id 1116 NGFG RS10615 WP 003690200.1       NVARFRVNAFNTGRGPAAVFRTIPSTVLSLEELKAPSIFQKIAESPRGMVLVTGPTGSGKSTTLAAMINYINETQPAHIL   156
NTDB id 1185 GTF74 RS11940 WP 000350195.1      NVGRFRVNAFHQARGCSAVFRTIPTVIPTLEQLDAPEIFSKIANYEKGLVLVTGPTGSGKSTTLAAMVNYVNAHHNKHIL   156
NTDB id 1176 A1552VC RS01160 WP 000350195.1    NVGRFRVNAFHQARGCSAVFRTIPTVIPTLEQLDAPEIFSKIANYEKGLVLVTGPTGSGKSTTLAAMVNYVNAHHNKHIL   156
NTDB id 1283 ACE17W RS02630 WP 010947729.1     NLARFRVNAFNQSRGAAAVFRTIPSEILSMEDLGLPPIFKEMASFSRGLVLVTGPTGSGKSTTLAAVIDYINSSRYEHIL   156
NTDB id 1259 GC085 RS10305 WP 010947729.1      NLARFRVNAFNQSRGAAAVFRTIPSEILSMEDLGLPPIFKEMASFSRGLVLVTGPTGSGKSTTLAAVIDYINSSRYEHIL   156
NTDB id 1194 PAKAF RS01995 WP 003084552.1      GVARFRVNAFNQNRGAGAVFRTIPSKVLTMEELGMGEVFKRVSDVPRGLVLVTGPTGSGKSTTLAAMLDYLNNTKYHHIL   156
NTDB id 1202 PSJM300 01600 AFN76400.1          GVARFRVNAFNQNRGAGAVFRTIPSKVLTMEDLGMGEVFRKITDVPRGLVLVTGPTGSGKSTTLAAMLDYLNNTKYHHIL   156
NTDB id 1020 ACIAD RS04210 WP 011182164.1      NLARFRVNVFNQNRGAGAVFRTIPSQVLTLEELGLGKIFRDICDYPRGLVLVTGPTGSGKSTTLAAMLDYINNHRYDHIL   156
NTDB id 1060 ABD1 RS04380 WP 000355489.1       NVARFRVNAFNQNRGAGAVFRTIPSKVLTMEDLGLGQIFKDICDYPRGIVLVTGPTGSGKSTTLAAMLDYINENRYDHIL   156
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NTDB id 1081 FDQ49 RS05335 WP 006581387.1      NVARFRVNAFNQNRGAGAVFRTIPSKVLTMEDLGLGQIFKDICDYPRGIVLVTGPTGSGKSTTLAAMLDYINENRYDHIL   156
consensus                                      ***!!!!*****  *******!****  ********** *** * *  **!**!**!*!!*!!*!*!!******!   *   !!*
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NTDB id 1203 PSJM300 01605 AFN76401.1        SIEDPIEFIHQHQNCIVTQREVGIDTDSFEVALKNTLRQAPDVILIGEVRTRETMDHAVAFAETGHLCLATLHANNANQA   236
NTDB id 225349 B5D77 RS20525 WP 008196492.1  TVEDPIEYVFPNIKSLFHQRQKGEDTKSFANALRAALREDPDIILVGEMRDLETISLAITAAETGHLVLGTLHTSSAAGT   238
NTDB id 1307 DR RS10055 WP 010888596.1       TIEDPIEFMHPNKASIINQREVGSDTLSFDDALRAALRQAPDVILVGEMRDYETIKAAVTAAETGHLVMGTLHTNSAPES   240
NTDB id 1086 NMV RS00245 WP 002218487.1      TIEDPIEFVHQSKKSLINQRELHQHTLSFANALRSALREDPDVILVGEMRDPETIGLALTAAETGHLVFGTLHTIGAAKT   236
NTDB id 1116 NGFG RS10615 WP 003690200.1     TIEDPIEFVHQSKKSLINQRELHQHTLSFANALSSALREDPDVILVGEMRDPETIGLALTAAETGHLVFGTLHTTGAAKT   236
NTDB id 1185 GTF74 RS11940 WP 000350195.1    TIEDPIEFVHSNNKCLINQREVHRDTHSFKNALRSALREDPDVILVGELRDQETISLALTAAETGHLVFGTLHTSSAAKT   236
NTDB id 1176 A1552VC RS01160 WP 000350195.1  TIEDPIEFVHSNNKCLINQREVHRDTHSFKNALRSALREDPDVILVGELRDQETISLALTAAETGHLVFGTLHTSSAAKT   236
NTDB id 1283 ACE17W RS02630 WP 010947729.1   TVEDPIEFVHQSKKCLVNQREVHKDTLSFNAALRSALREDPDIILVGELRDLETIRLAMTAAETGHLVFGTLHTNSATKT   236
NTDB id 1259 GC085 RS10305 WP 010947729.1    TVEDPIEFVHQSKKCLVNQREVHKDTLSFNAALRSALREDPDIILVGELRDLETIRLAMTAAETGHLVFGTLHTNSATKT   236
NTDB id 1194 PAKAF RS01995 WP 003084552.1    TIEDPIEFVHESKKCLVNQREVHRDTLGFSEALRSALREDPDIILVGEMRDLETIRLALTAAETGHLVFGTLHTTSAAKT   236
NTDB id 1202 PSJM300 01600 AFN76400.1        TIEDPIEFVHESKKCLVNQREVHRDTLGFSEALRSALREDPDIILVGEMRDLETIRLALTAAETGHLVFGTLHTTSAAKT   236
NTDB id 1020 ACIAD RS04210 WP 011182164.1    TVEDPIEFVHEPKKCLINQREVHRDTLGFNEALRSALREDPDIILVGEMRDLETIRLALTAAETGHLVFGTLHTTSAAKT   236
NTDB id 1060 ABD1 RS04380 WP 000355489.1     TVEDPIEFVHQSKKCLINQREVHRDTHGFNEALRSALREDPDIILVGEMRDLETIRLALTAAETGHLVFGTLHTTSAAKT   236
NTDB id 1040 HON27 RS13360 WP 000355489.1    TVEDPIEFVHQSKKCLINQREVHRDTHGFNEALRSALREDPDIILVGEMRDLETIRLALTAAETGHLVFGTLHTTSAAKT   236
NTDB id 1081 FDQ49 RS05335 WP 006581387.1    TVEDPIEFVHQSKKCLINQREVHRDTHGFNEALRSALREDPDIILVGEMRDLETIRLALTAAETGHLVFGTLHTTSAAKT   236
consensus                                    **!!!!!*** ******!!*****! *!   !!***!!**!!*!!*!!*!**!!***!***!!!!!!***!!!***!***

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NTDB id 1203 PSJM300 01605 AFN76401.1        LDRIINFFPADRQNQVWMDLSLNLKAIVAQQLVPTPD....GKGRRAVIEVLINTPLAADLIRKGEVHELKGLMKRSTDL   312
NTDB id 225349 B5D77 RS20525 WP 008196492.1  VDRIIDVFPANQQAQIRAMLSNSLLAVFSQNLVKKKNPKPGEFGRAMVQEIMVVTPAIANLIREGKAPQIYSAIQTGMKL   318
NTDB id 1307 DR RS10055 WP 010888596.1       IDRIVDVFPEEQQEQIRVQLANNLVAVMTQQLLPRAD....GQGRVLAYEILLANPAVRALIREGKTFQITSVMQTGARE   316
NTDB id 1086 NMV RS00245 WP 002218487.1      VDRIVDVFPAGEKEMVRSMLSESLTAVISQNLLKTHD....GNGRVASHEILIANPAVRNLIRENKITQINSVLQTGQAS   312
NTDB id 1116 NGFG RS10615 WP 003690200.1     VDRIVDVFPAGEKEMVRSMLSESLTAVISQNLLKTHD....GNGRVASHEILIANPAVRNLIRENKITQINSVLQTGQAS   312
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NTDB id 1283 ACE17W RS02630 WP 010947729.1   INRIIDVFPAEEKSMVRSMLSESLQAVVAQSLLKK.N....KGGRVAALEIMMCTGAIRNLIREDKIAQMYSSIQTGQAK   311
NTDB id 1259 GC085 RS10305 WP 010947729.1    INRIIDVFPAEEKSMVRSMLSESLQAVVAQSLLKK.N....KGGRVAALEIMMCTGAIRNLIREDKIAQMYSSIQTGQAK   311
NTDB id 1194 PAKAF RS01995 WP 003084552.1    IDRVVDVFPAEEKAMVRSMLSESLQSVISQTLIKK.I....GGGRVAAHEIMIGTPAIRNLIREDKVAQMYSAIQTGGSL   311
NTDB id 1202 PSJM300 01600 AFN76400.1        IDRVVDVFPAEEKSMVRSMLSESLQAVISQTLLKK.V....GGGRVAAHEIMIGTPAIRNLIREDKVAQMYSSIQTGGSL   311
NTDB id 1020 ACIAD RS04210 WP 011182164.1    IDRIIDVFPAEEKDMVRTMLSESLQAVISQTLLKK.E....GGGRVAAHEIMIGIPAIRNLIREGKVAQMYSSIQTGATH   311
NTDB id 1060 ABD1 RS04380 WP 000355489.1     IDRVIDVFPAEEKDMVRAMLSESLQAVISQTLLKK.N....GGGRVAAHEIMIGIPAIRNLIRENKVAQMYSAIQTGANH   311
NTDB id 1040 HON27 RS13360 WP 000355489.1    IDRVIDVFPAEEKDMVRAMLSESLQAVISQTLLKK.N....GGGRVAAHEIMIGIPAIRNLIRENKVAQMYSAIQTGANH   311
NTDB id 1081 FDQ49 RS05335 WP 006581387.1    IDRVIDVFPAEEKDMVRAMLSESLQAVISQTLLKK.N....GGGRVAAHEIMIGIPAIRNLIRENKVAQMYSAIQTGANH   311
consensus                                    **!****!!**********!***! ****! !***      **!!****!**** *****!!!* ******* *****
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NTDB id 1203 PSJM300 01605 AFN76401.1        GMQTFDQALYNLYVQGEITYEDALLHADSSNDLRLMIKLGS..ETDGEHLTSVSQGLTL....EMSDDDPGRSFR.....   381
NTDB id 225349 B5D77 RS20525 WP 008196492.1  GMQTMEQGLANLVVRGVVSLEEAISKSGK.PDELQRLVAGASVNAKARI...............................   366
NTDB id 1307 DR RS10055 WP 010888596.1       GMVTMDAYLAGLFRRHLITYDKGLERAID.PKEFARLANDASAGLGGASMTPAAPPVPAYNSASSSSTGRGGDFGRGAAA   395
NTDB id 1086 NMV RS00245 WP 002218487.1      GMQTMDQSLQSLVRQGLIAPEVARRRAQNSESMSF............................................   347
NTDB id 1116 NGFG RS10615 WP 003690200.1     GMQTMDQSLQSLVRQGLIAPEAARRRAQNSESMSF............................................   347
NTDB id 1185 GTF74 RS11940 WP 000350195.1    GMQTMEQNAKQLIARGVVDAQEVQSKIELDLKAF..............................................   345
NTDB id 1176 A1552VC RS01160 WP 000350195.1  GMQTMEQNAKQLIARGVVDAQEVQSKIELDLKAF..............................................   345
NTDB id 1283 ACE17W RS02630 WP 010947729.1   GMQTLDQHLTELVNKNIISKHTAHEAALN.KSLF..............................................   344
NTDB id 1259 GC085 RS10305 WP 010947729.1    GMQTLDQHLTELVNKNIISKHTAHEAALN.KSLF..............................................   344
NTDB id 1194 PAKAF RS01995 WP 003084552.1    GMQTLDMCLKGLVAKGLISRENAREKAKI.PENF..............................................   344
NTDB id 1202 PSJM300 01600 AFN76400.1        GMQTLDSCLKGLLAKGLISRDSAKEKAKQ.PENF..............................................   344
NTDB id 1020 ACIAD RS04210 WP 011182164.1    GMTTLDQSLKQLLAKGIINLPTARAVAKS.PESF..............................................   344
NTDB id 1060 ABD1 RS04380 WP 000355489.1     GMTTLDQSLKGLVARGVISPQTARTAAKQ.PESFL.............................................   345
NTDB id 1040 HON27 RS13360 WP 000355489.1    GMTTLDQSLKGLVARGVISPQTARTAAKQ.PESFL.............................................   345
NTDB id 1081 FDQ49 RS05335 WP 006581387.1    GMTTLDQSLKGLVSRGVISPQTARTAAKQ.PESFL.............................................   345
consensus                                    !!*!*** *  !* *****   *   *      *

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NTDB id 1203 PSJM300 01605 AFN76401.1        ........................   381
NTDB id 225349 B5D77 RS20525 WP 008196492.1  ........................   366
NTDB id 1307 DR RS10055 WP 010888596.1       PATPAAPAAGRSEPGRAGGFGRR   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 GC085 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 1060 ABD1 RS04380 WP 000355489.1     ........................   345
NTDB id 1040 HON27 RS13360 WP 000355489.1    ........................   345
NTDB id 1081 FDQ49 RS05335 WP 006581387.1    ........................   345
consensus
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X non conserved
X similar
X $\geq$ 50% conserved