```
logo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
NTDB id 1168 A1552VC RS11070 WP 000957200.1          ..........MLTNLVAILRQAELISATQEQAVVTQVSASGTSVPEALLELSIFHAQELTEQLSHIFGLPETDLS    65
NTDB id 1293 VP RS12240 WP 005479695.1               ..........MHSNLSTILRQKGLLTFSQEESLIEQVKASGISMPEALLSSGFFTSSELAEHLSSIFGLSQPELS    65
NTDB id 1401 DSB67 RS12665 WP 010643259.1            ..........MLTNLSTVLRQAGILTFSQEESLLEQVKASGISMPEALLSSGFFQSHELTEHLSSVFGLSCTSLN    65
NTDB id 1110 NGFG RS09235 WP 003689817.1             ..........MSVGLLRILVQNQVVTVEQAEHYYNESQ.AGKEVLPMLFSDGVISPKSLAALIARVFSYSILDLR    64
NTDB id 1251 GC085 RS07725 WP 011946523.1            ..MALATEEYRLQGIGQLLVLEKLLDKTKAIELHKLAAAEKISLLQYIVKNKILSAEQIALTAAQNFGVPMLDIN    73
NTDB id 237756 XcvCFBP7112P RS16490 WP 089142726.1  MNSVVTANLVGITGIARRLVQEGAVEEAVARSAMDQASAAKIPLPQWFAEKKLVTASQLAAANAVEFGMPLLDVS    75
NTDB id 1058 ABD1 RS01615 WP 001274986.1            MSA..LHTSPKFTGFFRRLVEEKHVSAATMQTALDAAKRAKQDTVAYLIEEVHLSPSLLAETISAEFAEPYFDLD    73
NTDB id 1018 ACIAD RS01685 WP 004920473.1           MSA..FTTPPKFSGFIRRLVEEGYVNAQNMQQALEKAKKFKQDIVPYLIDNFSISPLTIAEIISLEFGEPLLDLG    73
consensus                                                   ***  *!**  ***  *    **   *    *   **    **   *** **  !***  **

logo

NTDB id 1168 A1552VC RS11070 WP 000957200.1          RYDYANLCQQLGLRELITRYDALPIAKQGNLLLLAVSDPTLLQAEEEFRFATGLQVELALADHRALQAAIRRLYG   140
NTDB id 1293 VP RS12240 WP 005479695.1               QYEYASLCQQLGLRELITRHNALPLHRTPSTLLLAVADPTNQQAEDDFRFATGLQVELVLADFRELSTAIRRLYG   140
NTDB id 1401 DSB67 RS12665 WP 010643259.1            QYEYASLCQTLGLRDLITRHNALPLNRTSSTLILAVADPTNLQAEDDFRFATGLQVELVLADFRELTAAIRRLYG   140
NTDB id 1110 NGFG RS09235 WP 003689817.1             HYPRHRVLMGVLTEEQMVEFHCVPVFRRGDKVFFAVSDPTQMPQIQKTVSAAGIAVELVIVEDDQLAGLLD.WVG   138
NTDB id 1251 GC085 RS07725 WP 011946523.1            CIDVGTIPVNLVNEKLIKRHAMVPLFSRGTNLYLATDDPSKQASLKEIQFHTGLNTHAIVVETDKLSALIDNLLT   148
NTDB id 237756 XcvCFBP7112P RS16490 WP 089142726.1  AFDASQNAVKLVSEELLQKHQVLPLFKRGNRLFVGVSNPTQTRALDDIKFHTNLVVEPILVDEDQIRRTLEQWQA   150
NTDB id 1058 ABD1 RS01615 WP 001274986.1            VYDTSQIPKDLVDQKLILKHRILPLIQRGQILYVATSNPSNIEAIDAIRFNSKLLVEPVIVEHHKLEKVLGQHFA   148
NTDB id 1018 ACIAD RS01685 WP 004920473.1           VFDPALFLKDKIDEKLIQKYRIMPLVHRGHVLYVATSNPTNIEAMDAIRFNSKLKVEPIIVEHDKLERLLSEHFV   148
consensus                                             ** * *   **  *** **  *!* ***  *******!*** **** ** *** ** ****   *   *   **

logo

NTDB id 1168 A1552VC RS11070 WP 000957200.1          RSIQGAANQGKEISQDELANLVKVSDD....ELQSIEDLSQDDSPVSRFINQVLLDAVRKGASDIHFEPYENQYR   211
NTDB id 1293 VP RS12240 WP 005479695.1               RSLSHEKSGLKEINQEELASLVDVGAD....EIDNIEDLSQDESPVSRYINQILLDAVRKGASDIHFEPYEKMYR   211
NTDB id 1401 DSB67 RS12665 WP 010643259.1            RSLGQEKSGLKEINQDELAGLVDIGED....EIENIEDLSQDESPVSRYINQILLDAVRKGASDIHFEPYENMYR   211
NTDB id 1110 NGFG RS09235 WP 003689817.1             SRSTSLLQELGEGQEEEESH............TLYIDNEEAEDGPVPRFIHKTLSDALRSGASDIHFEFYEHNAR   201
NTDB id 1251 GC085 RS07725 WP 011946523.1            AKESQGLSEYVEDSGDLEGLEISADDEDQ...DIDTATSVTDDAPIVKFVNKILLDAIRQGASDIHFEPYEREYR   220
NTDB id 237756 XcvCFBP7112P RS16490 WP 089142726.1  SNAALGSAL.GDDEEGMGDLDVSAGDEDMGAGGDSGVDAKGDDTPVVKFVNKVLVDAIRRGASDIHFEPYEDDYR   224
NTDB id 1058 ABD1 RS01615 WP 001274986.1            EESSFDFN....D....EEFDLDVNLDGPTAQEDEEEAPQGDEAPIVKYINKLLIDAIRMGASDLHFEPYEKSYR   215
NTDB id 1018 ACIAD RS01685 WP 004920473.1           EETHFNFD....T....EELDLDVEVDPHTTDDDDEDDKLKDEAPIVKYINKLLIDAIRMSASDLHFEPYEKSYR   215
consensus                                                  *   *      * *  *       *  **   ** !* ******!*!!*! *!!!*!!!*!!  *!

logo

NTDB id 1168 A1552VC RS11070 WP 000957200.1          IRLRCDGILVETQQPASHLSRRLAARIKILSKLDIAERRLPQDGRIKLRLSR.DTAIDMRVSTLPTLWGEKIVLR   285
NTDB id 1293 VP RS12240 WP 005479695.1               VRLRCDGILIETQQPPNHLSRRLSARIKILSKLDIAERRLPQDGRIKLKLNQ.DTAIDMRVSTLPTLFGEKIVLR   285
NTDB id 1401 DSB67 RS12665 WP 010643259.1            VRLRCDGILIEIQQPPSHLSRRLSARIKILSKLDIAERRLPQDGRIKLKLNQ.DTAIDMRVSTLPTLFGEKIVLR   285
NTDB id 1110 NGFG RS09235 WP 003689817.1             IRFRVDGQLREVVQPPIAVRGQLASRIKVMSRLDISEKRIPQDGRMQLTFQKGGKPVDFRVSTLPTLFGEKVVMR   276
NTDB id 1251 GC085 RS07725 WP 011946523.1            IRYRQDGILHEVATPPASLSSRITARIKVMSNLDISERRIPQDGGFKMKISK.SRAIDFRVSTCPTSAGEKVVMR   294
NTDB id 237756 XcvCFBP7112P RS16490 WP 089142726.1  VRLRIDGLLKNVAKAPVKLNQRIAARLKVMSQLDIAEKRVPQDGRIKLNLSK.TKQIDFRVSTLPTLFGEKVVLR   298
NTDB id 1058 ABD1 RS01615 WP 001274986.1            VRYRVDGVLRQIANPPLQLANRLASRLKVMSQMDISEKRVPQDGRIKLKLSK.SKAIDFRVNSLPTLFGEKLVLR   289
NTDB id 1018 ACIAD RS01685 WP 004920473.1           VRYRVDGVLRLIATPPLQLATRLASRLKVMSQMDISEKRVPQDGRIKLKMSK.SKTIDFRVNSLPTLFGEKIVLR   289
consensus                                           *! ! !!*! ** ***  *  ****!*!**! *!! !*!*!!!!********  ***!*!!***!!**!!!*!*!
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logo

NTDB id 1168 A1552VC RS11070 WP 000957200.1          LLDSSAANLDIDKLGYNPQQKQLYLNALKRPQGMILMTGPTGSGKTVSLYTGLRILNTSQINISTAEDPVEINLS   360
NTDB id 1293 VP RS12240 WP 005479695.1               LLDSSSASLDIDKLGYSEQQKQLYLEALRRPQGMILMTGPTGSGKTVSLYTGLNILNKPEINISTAEDPVEINLS   360
NTDB id 1401 DSB67 RS12665 WP 010643259.1            LLDSSSAALDINKLGYSDSQKQLYLDALRRPQGMILMTGPTGSGKTVSLYTGLSILNKPEINISTAEDPVEIYLP   360
NTDB id 1110 NGFG RS09235 WP 003689817.1             ILNSDAASLNIDQLGFEPFQKKLLLEAIHRPYGMVLVTGPTGSGKTVSLYTCLNILNTESVNIATAEDPAEINLP   351
NTDB id 1251 GCO85 RS07725 WP 011946523.1           VLDSGAAKLGIEALGFNPVQRTNFLKAIQRPQGMILVTGPTGSGKTVTLYTALNILNTIEVNISTAEDPVEIKVP   369
NTDB id 237756 XcvCFBP7112P RS16490 WP 089142726.1  ILDGSAAKLGIDKLGYEADQQKLFLEAIHKPYGMVLVTGPTGSGKTVSLYTALGILNDETRNISTAEDPVEIRLP   373
NTDB id 1058 ABD1 RS01615 WP 001274986.1            ILDPSSAMLGIDALGYEEDQKALFMEALDKPQGMLLITGPTGSGKTVSLYTGLNILNTESSNISTAEDPVEINLE   364
NTDB id 1018 ACIAD RS01685 WP 004920473.1           ILDPASAMLGIDALGYEPEQKALFMEALNKPQGMLLITGPTGSGKTVSLYTGLNILNTEHANISTAEDPVEINLE   364
consensus                                            *!*** ! ! !* !!*   !* ****!* *!*!!*!*!!!!!!!!!!*!!!*!*!!!*  *!!*!!!!!*!!**

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NTDB id 1168 A1552VC RS11070 WP 000957200.1          GINQVQVQPKIGFGFAEALRSFLRQDPDVVMVGEIRDLETAEIAVKAAQTGHLVLSTLHTNSAAETVIRLANMGV   435
NTDB id 1293 VP RS12240 WP 005479695.1               GINQVQVQPKIGFGFAEALRSFLRQDPDVVMVGEIRDLDTAEIAIKASQTGHLVLSTLHTNSAAETIIRLSNMGV   435
NTDB id 1401 DSB67 RS12665 WP 010643259.1            GINQVQVQPKIGFGFAEALRSFLRQDPDVVMVGEIRDLDTAEIAIKASQTGHLVLSTLHTNSAAETVIRLSNMGV   435
NTDB id 1110 NGFG RS09235 WP 003689817.1             GINQVNVNDKQGLTFAAALKSFLRQDPDIIMVGEIRDLETADIAIKAAQTGHMVFSTLHTNNAPATLSRMLNMGV   426
NTDB id 1251 GCO85 RS07725 WP 011946523.1           GINQVNINPKAGLTFSGALRSFLRQDPDIIMVGEIRDLETAEIAIKAAQTGHLVLSTLHTNSAAETLNRLVNMGI   444
NTDB id 237756 XcvCFBP7112P RS16490 WP 089142726.1  GVNQVQQNNKRGMTFAAALRSFLRQDPDIIMVGEIRDLETAEIAIKAAQTGHMVLSTLHTNDAPQTIARLMNMGI   448
NTDB id 1058 ABD1 RS01615 WP 001274986.1            GINQVNVNPKVGLTFAAALKSFLRQDPDIIMVGEIRDLETAEIAIKAAQTGHMVMSTLHTNSAPETLTRLRNMGV   439
NTDB id 1018 ACIAD RS01685 WP 004920473.1           GVNQVNVNPKVGLTFAAALRSFLRQDPDIIMVGEIRDLETAEIAIKAAQTGHLVMSTLHTNNAAETLTRLRNMGV   439
consensus                                            !*!!!****!*!**!**!!*!!!!!!!!**!!!!!!!!*!!*!!*!!*!!!!*!*!!!!!!*!**!*  !*  !!!*

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NTDB id 1168 A1552VC RS11070 WP 000957200.1          EPFNLASSLSLIIAQRLARRLCKHCKIAV.RPSALLQSQFAFQPNEIL....YEANAAGCNECT.GGYSGRVGIY   504
NTDB id 1293 VP RS12240 WP 005479695.1               ESFNLASSLSLIIAQRLARKLCPYCKQPQ.EHTVQL.QHLGIQTTDNI....FRANPDGCNECT.HGYSGRTGIY   503
NTDB id 1401 DSB67 RS12665 WP 010643259.1            ESFNLASSLSLIIAQRLARKLCPYCRQPQ.EPNSQL.QHIGIANTEQI....FQANPDGCNECT.HGYSGRTGIY   503
NTDB id 1110 NGFG RS09235 WP 003689817.1             APFNIASSVSLIMAQRLLRRLCSSCKQEVERPSASALKEVGFTDEDLAK.DWKLYRAVGCDRCRGQGYKGRAGVY   500
NTDB id 1251 GCO85 RS07725 WP 011946523.1           PTFNIASSVTLIIAQRLARKLCNQCKAVRDDFTNQGLIELGFKEADLV..NLKLYKAVGCEQCT.SGYRGRVGLF   516
NTDB id 237756 XcvCFBP7112P RS16490 WP 089142726.1  APYNITSSVTLVIAQRLARRLCNNCKRK.STLPDNALLAEGFTPAQLAA.GIELYEAVGCDECT.EGYKGRTGIY   520
NTDB id 1058 ABD1 RS01615 WP 001274986.1            PSFNIATSVNLVIAQRLARRLCSQCKIP.ADIPKQSLLEMGFTEQDLAHPDFRVFQPVGCLECR.EGYKGRVGIY   512
NTDB id 1018 ACIAD RS01685 WP 004920473.1           ASFNIATSVNLVIAQRLARRLCSQCKRP.IQVPERSLLEMGFTPEDLAQPEFQIFEPVGCHDCR.EGYKGRVGIY   512
consensus                                             **!***!**!**!!!!*!*!!   !*         * *  ***   **       **  *!! *!*   !!*!! !**

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NTDB id 1168 A1552VC RS11070 WP 000957200.1          EVMAFNTELAEAIMQRASIHQIERLAKANGMQTLQESGLEKLREGITSFAELQRVLYF   562
NTDB id 1293 VP RS12240 WP 005479695.1               EVMRFDESLSEALIKGASVHELEKLAIANGMSTLQMSGIEKLKQGITSFSELQRVLYF   561
NTDB id 1401 DSB67 RS12665 WP 010643259.1            EVMKFDESLSEALIKGASVHELEKLAIANGMQTLQMSGIEKLKQGITSFRELQRVLYF   561
NTDB id 1110 NGFG RS09235 WP 003689817.1             EVMPISEEMQRVIMNNGTEVGILDVAYKEGMVDLRRAGILKIMQGITSLEEVTANTND   558
NTDB id 1251 GCO85 RS07725 WP 011946523.1           EVLPMTKELGQLIMSGGNSLDILKLAQSEGMLTIFQSGIEKVKEGITTIEEVNRVTVD   574
NTDB id 237756 XcvCFBP7112P RS16490 WP 089142726.1  QVMPMTDEIGAIVLEGGNAMQIAEAAQAIGIRDLRQSALMKAAHGVTSLAEINRVTKD   578
NTDB id 1058 ABD1 RS01615 WP 001274986.1            EVMKVTPEISKIIMEDGNALEIAAASEKLGFNNLRRSGLKKVMQGVTSLQEVNRVTSE   570
NTDB id 1018 ACIAD RS01685 WP 004920473.1           EVMKITPEISKIIMEDGNALEIAATAETLGFNNLRRSGLKKVMQGVTSLQEINRVTSE   570
consensus                                            *!* ** **  ***  *  ***  **   !*  *  *** !* *!*!** !***** *
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X non conserved
X similar
X $\geq$ 50% conserved