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logo
NTDB id 85 BSU 00860 NP 387967.1          ..MMFGRFTERAQKVLALAQEEALRLGHNNIGTEHILLGLVREGEGIAAKALQALGLGSEKIQKEVESLIGRGQ........EMS   75
NTDB id 610 V4T04 RS10165 WP 012897346.1  MKFENIKYTPTLDRILEKAEEYAHQYQYGTIESAHLLAAMATTSGSIAYSLLAGMNVDSSDLLIDLEDLS........SHVKVKR   77
NTDB id 377 SMU RS09275 WP 002262344.1    ....MTDYSLKMQEVFRLAQFEAARFESSYLESWHVLLAMVEIDSSVAGLSFAEFEADVRFEDYQAAAILAIGKKPKSSSN..DI   79
NTDB id 329 STU RS10020 WP 011225298.1    ....MTIYSRKMQAIFHRAQLEAERFESPFLETWHVLLAMVEVPGSVAYLTFTDFEDRIHSEEIETAAVLAMEKRPKDLSESDII   81
NTDB id 297 STER RS00545 WP 011680614.1   ....MTIYSRKMQAIFHRAQLEAERFESPFLETWHVLLAMVEVTGSVAYLTFTDFEDRIHSEEIETAAVLAMEKRPKDLSESDII   81
NTDB id 95396 APQ97 RS01490 WP 002937803.1 .....MKISTGLQRVFEDAQLVAQRYACDYLETWHVLLSFVINHDTVAGAVLAEYPISIS..DYEHATFIVTDKVY..REELDSF   76
NTDB id 287 SP RS11210 WP 001109712.1     .....MNYSKALNECIESAYMVAGHFGARYLESWHLLIAMSNHSYSVAGATLNDYPYEMD..RLEEVALELTETDY..SQD.ETF   75
NTDB id 290 KZH43 RS10025 WP 001109677.1  .....MNYSKALNECIESAYMVAGHFGARYLESWHLLIAMSNHSYSVAGATLNDYPYEMD..RLEEVALELTETDY..SQD.ETF   75
NTDB id 289 SPD RS10700 WP 001109677.1    .....MNYSKALNECIESAYMVAGHFGARYLESWHLLIAMSNHSYSVAGATLNDYPYEMD..RLEEVALELTETDY..SQD.ETF   75
consensus                                     * *** ** *** !** ! ***  *****!*!****  * **!* ** **  **    **  ***  *     * * *

logo
NTDB id 85 BSU 00860 NP 387967.1          QTIHYTPRAKKVIELSMDEARKLGHSYVGTEHILLGLIREGEGVAARVLNNLGVSLNKARQQVLQL..L.......GS.......   144
NTDB id 610 V4T04 RS10165 WP 012897346.1  STLRFSPRAEEVMTAASFLAIHNNSEAVGTEHLLYALLQVEDGFGLQLLKL.........QKINIVSLRKELEKRTGLKVPESKK   153
NTDB id 377 SMU RS09275 WP 002262344.1    MLLEQSHALKRTLAEAAAISQVTHAKEVGTEHVLFAMLLNPNLLATRILELVGFHAKDDGESIRLLDLRKVIERYAGFSKEDIKA   164
NTDB id 329 STU RS10020 WP 011225298.1    DLRAQSPALEAMLQEAQGIASVTGAVEVGSEHVLMAFLLHKDLMVCRLLEVAGFQYKDDSDKPRIIDLRRSLERNAGLSKQDLKA   166
NTDB id 297 STER RS00545 WP 011680614.1   DLRAQSPALEAMLQEAQEIASVTGAVEVGSEHVLMAFLLHKDLMVCRLLEVAGFQYKDDSDKPRIIDLRRSLERNAGLSKQDLKA   166
NTDB id 95396 APQ97 RS01490 WP 002937803.1 RILPSSKRLDETASFAKKIAEVVKAKELGTEHLFMAMLLDKRSTASQILDKVGFCFEDSDDKFRFLDLRKNVEARAGFTKEDLKA   161
NTDB id 287 SP RS11210 WP 001109712.1     TELPFSRRLQVLFDEAEYVASVVHAKVLGTEHVLYAILHDSNALATRILERAGFSYEDKKDQVKIAALRRNLEERAGWTREDLKA   160
NTDB id 290 KZH43 RS10025 WP 001109677.1  TELPFSRRLQILFDEAEYVASVVHAKVLGTEHVLYAILHDGNALATRILERAGFSYEDKKDQVKIAALRRNLEERAGWTREDLKA   160
NTDB id 289 SPD RS10700 WP 001109677.1    TELPFSRRLQILFDEAEYVASVVHAKVLGTEHVLYAILHDGNALATRILERAGFSYEDKKDQVKIAALRRNLEERAGWTREDLKA   160
consensus                                   * **  **  **  **  ***** ** *!*!!****** *  ******!* *** * *  * **** *** ** **!********

logo
NTDB id 85 BSU 00860 NP 387967.1          ............NETGSSAAGTNSNANTPTLDSLARDLTAIAKEDSLDPVIGRSKEIQRVIEVLSRRTKNNPVLIGEPGVGKTAI   217
NTDB id 610 V4T04 RS10165 WP 012897346.1  AVTPMSKRKMA........KGVAENSTTPTLDSVSSDLTEEARLGKLDPMIGREAEIDRLIHILSRRTKNNPVLVGEPGVGKSAI   230
NTDB id 377 SMU RS09275 WP 002262344.1    I.FEMRKPKKVKNSSSFSDLMKPP.SVTGELADFTRDLTELARQGRLEPVIGREQEISRMVQILSRKTKNNPVLVGDAGVGKTAL   247
NTDB id 329 STU RS10020 WP 011225298.1    I.HDLRKPKKSKASANFANMMQPPQSSTGELADYTKDLTALAESGNLDPIIGRDEEISRMIQVLSRKTKNNPVLVGEAGVGKTAL   250
NTDB id 297 STER RS00545 WP 011680614.1   I.HDLRKPKKSKASANFANMMQPPQSSTGELADYTKDLTALAESGNLDPVIGRDEEISRMIQVLSRKTKNNPVLVGEAGVGKTAL   250
NTDB id 95396 APQ97 RS01490 WP 002937803.1 I.RSVMKGGKAKPANMGQMMGMPPAPQSGGLEDYTRDLTALAREGKIEPVIGRDAEIARMIQILSRKTKNNPVLVGDAGVGKTAL   245
NTDB id 287 SP RS11210 WP 001109712.1     L.RQRHRTVADKQNSMANMMGMPQTP.SGGLEDYTHDLTEQARSGKLEPVIGRDKEISRMIQILSRKTKNNPVLVGDAGVGKTAL   243
NTDB id 290 KZH43 RS10025 WP 001109677.1  L.RQRHRTVADKQNSMANMMGMPQTP.SGGLEDYTHDLTEQARSGKLEPVIGRDKEISRMIQILSRKTKNNPVLVGDAGVGKTAL   243
NTDB id 289 SPD RS10700 WP 001109677.1    L.RQRHRTVADKQNSMANMMGMPQTP.SGGLEDYTHDLTEQARSGKLEPVIGRDKEISRMIQILSRKTKNNPVLVGDAGVGKTAL   243
consensus                                 *   * *    ** *    ****    ** !*****!!!**!******!*!!!* !!*!****!!!*!!!!!!!*!**!!!!*!*

logo
NTDB id 85 BSU 00860 NP 387967.1          AEGLAQQIINNEVPEILRDKRVMTLDMGTVVAGTKYRGEFEDRLKKVMDEIRQAGNIILFIDELHTLIGAGG.AEGAIDASNILK   301
NTDB id 610 V4T04 RS10165 WP 012897346.1  IEGLAQRIVNGQVPIGLMNSRIMALNMATVVAGTKFRGEFEDRLTAIVEEVSSDPDVIIFIDELHTIIGAGGGMDSVNDAANILK   315
NTDB id 377 SMU RS09275 WP 002262344.1    AYGLAQRIVDSAVPFELADMKVLELDMMSVVAGTRFRGDFEERMNQIIADIEADGHIVLFIDELHTIMGSGSGIDSTLDAANILK   332
NTDB id 329 STU RS10020 WP 011225298.1    ALGLAQRIASGEVPFELADMRILELDMMSVVAGTRFRGDFEERMNQIIDEIEADGKIILFIDELHTIIGSGSGIDSTLDAANILK   335
NTDB id 297 STER RS00545 WP 011680614.1   ALGLAQRIASGEVPFELADMRILELDMMSVVAGTRFRGDFEERMNQIIDEIEADGKIILFIDELHTIIGSGSGIDSTLDAANILK   335
NTDB id 95396 APQ97 RS01490 WP 002937803.1 ALGLAQRVAAGDVPVSLAKMRVLELDLMNVIAGTRFRGDFEERMNNIINDIEEDGQVILFIDELHTIMGSGSGIDSTLDAANILK   330
NTDB id 287 SP RS11210 WP 001109712.1     ALGLAQRIASGDVPAEMAKMRVLELDLMNVVAGTRFRGDFEERMNNIIKDIEEDGQVILFIDELHTIMGSGSGIDSTLDAANILK   328
NTDB id 290 KZH43 RS10025 WP 001109677.1  ALGLAQRIASGDVPAEMAKMRVLELDLMNVVAGTRFRGDFEERMNNIIKDIEEDGQVILFIDELHTIMGSGSGIDSTLDAANILK   328
NTDB id 289 SPD RS10700 WP 001109677.1    ALGLAQRIASGDVPAEMAKMRVLELDLMNVVAGTRFRGDFEERMNNIIKDIEEDGQVILFIDELHTIMGSGSGIDSTLDAANILK   328
consensus                                 **!!!!******!! *** *****!****!*!!!**!!*!!*!***** *** ******!!!!!!!*!*!*******!!*!!!!
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logo
NTDB id 85 BSU 00860 NP 387967.1          PSLARGELQCIGATTLDEYRKYIEKDAALERRFQPIQVDQPSVDESIQILQGLRDRYEAHHRVSITDDAIEAAVKLSDRYISDRF   386
NTDB id 610 V4T04 RS10165 WP 012897346.1  PALARGDFQMVGATTYHEYQKYIEKDEALERRLARINVDEPSPDEAIAILQGLREKFEDYHQVKFTDQAIKSAVMLSVRYMTSRK   400
NTDB id 377 SMU RS09275 WP 002262344.1    PALARGSLRTIGATTQEEYQKHIEKDAALSRRFAKVTIEEPSEEEAYQILLGLKKSYETYHHVIISDAAVMAAVKGAHRYLSGKN   417
NTDB id 329 STU RS10020 WP 011225298.1    PALARGTLHMVGATTQAEYQKHIEKDAALSRRFAKITIEEPSVSEAIDILNGLRSSYEDYHRVTITDAAVETAVKAAHRYLTSKN   420
NTDB id 297 STER RS00545 WP 011680614.1   PALARGTLHMVGATTQAEYQKHIEKDAALSRRFAKITIEEPSVSEAIDILNGLRSSYEDYHRVTITDAAVETAVKAAHRYLTSKN   420
NTDB id 95396 APQ97 RS01490 WP 002937803.1 PALARGTLRTVGATTQTEYQKHIEKDAALVRRFAKVTIEEPTVEDSIAILTGLKGTFEKYHRVRIGQAAVETAVTYAKRYLTSKN   415
NTDB id 287 SP RS11210 WP 001109712.1     PALARGTLRTVGATTQEEYQKHIEKDAALSRRFAKVTIEEPSVADSMTILQGLKATYEKHHRVQITDEAVETAVKMAHRYLTSRH   413
NTDB id 290 KZH43 RS10025 WP 001109677.1  PALARGTLRTVGATTQEEYQKHIEKDAALSRRFAKVTIEEPSVADSMTILQGLKATYEKHHRVQITDEAVETAVKMAHRYLTSRH   413
NTDB id 289 SPD RS10700 WP 001109677.1    PALARGTLRTVGATTQEEYQKHIEKDAALSRRFAKVTIEEPSVADSMTILQGLKATYEKHHRVQITDEAVETAVKMAHRYLTSRH   413
consensus                                 !*!!!!*****!!!!**!!*!*!!!!*!!*!!********!** ***  !!*!!*  **!  *!*!  ***  !***!!****!!****

logo
NTDB id 85 BSU 00860 NP 387967.1          LPDKAIDLIDEAGSKVRLRSFTTPPNLKELEQKLDEVRKEKDAAVQSQEFEKAASLRDTEQRLREQVEDTKKSWK.EKQGQENSE   470
NTDB id 610 V4T04 RS10165 WP 012897346.1  LPDKAIDLLDEAAAVKISVKNQQTKRLDLEKELAEAQEELSEAVIKLDIKASRTKEKAVEKIAD......KIYKFSVKEDKRQE   479
NTDB id 377 SMU RS09275 WP 002262344.1    LPDSAIDLLDEASATVQGLVKKK..APAYLT........DLDHALITNDYQLAKRLLKKEKKP................LLKKRAE   477
NTDB id 329 STU RS10020 WP 011225298.1    LPDSAIDLLDEASATVQVRIKKE..AKREIT........PLDEALISGDIGAAVKQYKANQKA................KFPKPAL   480
NTDB id 297 STER RS00545 WP 011680614.1   LPDSAIDLLDEASATVQVRIKKE..DKREIT........PLDEALISGDIGAAVKQYKANQKA................KFPKPAL   480
NTDB id 95396 APQ97 RS01490 WP 002937803.1 LPDSAIDLLDEASATVQNRVKGQ.AEETGLT........SIDKALMDKKYKTVSKLLIKTKEDA............EASQNYDLE   479
NTDB id 287 SP RS11210 WP 001109712.1     LPDSAIDLLDEAAATVQNKAKHVKADDSDLS........PADKALMDGKWKQAAQLIAKEEE................VPVYKDL   474
NTDB id 290 KZH43 RS10025 WP 001109677.1  LPDSAIDLLDEAAATVQNKAKHVKADDSDLS........PADKALMDGKWKQAAQLIAKEEE................VPVYKDL   474
NTDB id 289 SPD RS10700 WP 001109677.1    LPDSAIDLLDEAAATVQNKAKHVKADDSDLS........PADKALMDGKWKQAAQLIAKEEE................VPVYKDL   474
consensus                                 !!!*!!!!*!!!***!* ***    *  ***        *** !** **** *  ** ** *                     * *

logo
NTDB id 85 BSU 00860 NP 387967.1          VTVDDIAMVVSSWTGVPVSKIAQTETDKLLNMENILHSRVIGQDEAVVAVAKAVRRARAGLKDPKRPIGSFIFLGPTGVGKTELA   555
NTDB id 610 V4T04 RS10165 WP 012897346.1  VTDQAVVAVASTLTGVPITQMTKSESDRLINLEKELHKRVVGQEEAISAVSRAIRRARSGVADSRRPMGSFMFLGPTGVGKTELA   564
NTDB id 377 SMU RS09275 WP 002262344.1    VKEEDILATLSKLSGIPVKKLTQADSKKYLNLERELHKRVIGQDDAVSSISRAIRRNQSGIRVGKRPIGSFMFLGPTGVGKTELA   562
NTDB id 329 STU RS10020 WP 011225298.1    VDADQIMQTLSRLSGIPVEKMTQTDSKRYLNLESELHKRVIGQDEAVSAISRAIRRNQSGIRTGKRPIGSFMFLGPTGVGKTELA   565
NTDB id 297 STER RS00545 WP 011680614.1   VDADQIMQTLSRLSGIPVEKMTQTDSKRYLNLESELHKRVIGQDEAVSAISRAIRRNQSGIRTGKRPIGSFMFLGPTGVGKTELA   565
NTDB id 95396 APQ97 RS01490 WP 002937803.1 VTEEDVLETLSRLSGIPVAKLSQSDTKKYLNLEAELHKRVIGQEEAISAVSRAIRRNQSGIRTGRRPIGSFMFLGPTGVGKTELA   564
NTDB id 287 SP RS11210 WP 001109712.1     VTESDILTTLSRLSGIPVQKLTQTDAKKYLNLEAELHKRVIGQDQAVSSISRAIRRNQSGIRSHKRPIGSFMFLGPTGVGKTELA   559
NTDB id 290 KZH43 RS10025 WP 001109677.1  VTESDILTTLSRLSGIPVQKLTQTDAKKYLNLEAELHKRVIGQDQAVSSISRAIRRNQSGIRSHKRPIGSFMFLGPTGVGKTELA   559
NTDB id 289 SPD RS10700 WP 001109677.1    VTESDILTTLSRLSGIPVQKLTQTDAKKYLNLEAELHKRVIGQDQAVSSISRAIRRNQSGIRSHKRPIGSFMFLGPTGVGKTELA   559
consensus                                 !******  **!***!*!* ***********!*! *!!*!!*!!**!******!*!!***!*** *!!*!!!*!!!!!!!!!!!!!!

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NTDB id 85 BSU 00860 NP 387967.1          RALAESIFGDEESMIRIDMSEYMEKHSTSRLVGSPPGYVGYDEGGQLTEKVRRKPYSVVLLDEIEKAHPDVFNILLQVLEDGRLT   640
NTDB id 610 V4T04 RS10165 WP 012897346.1  KALADSVFGSEDNMIRVDMSEFMEKHSTSRLIGAPPGYVGYDEGGQLTERVRNKPYSVVLLDEVEKAHPDVFNIMLQILDDGFVT   649
NTDB id 377 SMU RS09275 WP 002262344.1    KALAEVLFDDESALIRFDMSEYMEKFAASRLNGAPPGYVGYEEGGELTEKVRNKPYSVLLFDEVEKAHPDIFNILLQVLDDGVLT   647
NTDB id 329 STU RS10020 WP 011225298.1    KALAEVLFDDESALLRFDMSEYMEKFAASRLNGAPPGYVGYDEGGELTEKVRNKPYSVLLFDEIEKAHPDIFNVLLQVLDDGVLT   650
NTDB id 297 STER RS00545 WP 011680614.1   KALAEVLFDDESALLRFDMSEYMEKFAASRLNGAPPGYVGYDEGGELTEKVRNKPYSVLLFDEIEKAHPDIFNILLQVLDDGVLT   650
NTDB id 95396 APQ97 RS01490 WP 002937803.1 KALAEVLFDDESALIRFDMSEYMEKFAASRLNGAPPGYVGYEEGGELTEKVRNKPYSVLLFDEVEKAHPDIFNVLLQVLDDGVLT   649
NTDB id 287 SP RS11210 WP 001109712.1     KALAEVLFDDESALIRFDMSEYMEKFAASRLNGAPPGYVGYEEGGELTEKVRNKPYSVLLFDEVEKAHPDIFNVLLQVLDDGVLT   644
NTDB id 290 KZH43 RS10025 WP 001109677.1  KALAEVLFDDESALIRFDMSEYMEKFAASRLNGAPPGYVGYEEGGELTEKVRNKPYSVLLFDEVEKAHPDIFNVLLQVLDDGVLT   644
NTDB id 289 SPD RS10700 WP 001109677.1    KALAEVLFDDESALIRFDMSEYMEKFAASRLNGAPPGYVGYEEGGELTEKVRNKPYSVLLFDEVEKAHPDIFNVLLQVLDDGVLT   644
consensus                                 *!!!***!**!****!*!!!!*!!!***!!!!*!*!!!!!!!*!!!!*!!!*!!*!!!!!!*!*!!*!!!!!!*!!*!!*!!*!!**!
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logo
NTDB id 85 BSU 00860 NP 387967.1          DSKGRTVDFRNTILIMTSNVGASELKRNKYVGFNVQDETQNHKDMKDKVMGELKRAFRPEFINRIDEIIVFHSLEKKHLTEIVSL   725
NTDB id 610 V4T04 RS10165 WP 012897346.1  DTKGRKVDFRNTIIIMTSNLGATALRDDKTVGFGAKNITADYSAMKSRILEELKRHYRPEFLNRIDENIVFHSLESQEIEQIVKI   734
NTDB id 377 SMU RS09275 WP 002262344.1    DSRGRKVDFSNTIIIMTSNLGATALRDDKTVGFGAKSFSQDYKAMESRILEELKKVYRPEFINRIDEKVVFHNLGQEDIRHIVKI   732
NTDB id 329 STU RS10020 WP 011225298.1    DSRGRKVDFSNTIIIMTSNLGATALRDDKTVGFGAQTISHNHQAMQARIMEELKKSYRPEFINRIDEKVVFHSLEEEQLHDIVKI   735
NTDB id 297 STER RS00545 WP 011680614.1   DSRGRKVDFSNTIIIMTSNLGATALRDDKTVGFGAQTISHNHQAMQARIMEELKKSYRPEFINRIDEKVVFHSLEEEQLHDIVKI   735
NTDB id 95396 APQ97 RS01490 WP 002937803.1 DSKGRKVDFSNTIIIMTSNLGATALRDDKTVGFGALDLSKDHKEVEKRIFEELKKAYRPEFINRIDEKVVFHSLTESDMQDVVKV   734
NTDB id 287 SP RS11210 WP 001109712.1     DSKGRKVDFSNTIIIMTSNLGATALRDDKTVGFGAKDIRFDQENMEKRMFEELKKAYRPEFINRIDEKVVFHSLSSDHMQEVVKI   729
NTDB id 290 KZH43 RS10025 WP 001109677.1  DSKGRKVDFSNTIIIMTSNLGATALRDDKTVGFGAKDIRFDQENMEKRMFEELKKAYRPEFINRIDEKVVFHSLSSDHMQEVVKI   729
NTDB id 289 SPD RS10700 WP 001109677.1    DSKGRKVDFSNTIIIMTSNLGATALRDDKTVGFGAKDIRFDQENMEKRMFEELKKAYRPEFINRIDEKVVFHSLSSDHMQEVVKI   729
consensus                                 !**!!*!!!*!!!*!!!!!*!!**!***!*!!!****** *   ** ****!!!***!!!!*!!!!!**!!!*!   * * **!**

logo
NTDB id 85 BSU 00860 NP 387967.1          MSDQLTKRLKEQDLSIELTDAAKAKVAEEGVDLEYGARPLRRAIQKHVEDRLSEELLRGNIHKGQHIVLDVEDGEFVVKTTAKTN   810
NTDB id 610 V4T04 RS10165 WP 012897346.1  MSKSLIKRLAEQDIHVKLTPSAVKLIAEVGFDPEYGARPLRKALQKEVEDLLSEQLLSGEIKAGNHVSIGASNKKIKIAQIV...   816
NTDB id 377 SMU RS09275 WP 002262344.1    MVAPLIAHLADQGITLKFQPSALKHLALAGYDAEMGARPLRRTLQTEVEDKLAELILSGKLASGQTLKIGIQKEKLKFDIV....   813
NTDB id 329 STU RS10020 WP 011225298.1    MVKPLISALADKGISLKFQPAALKHLAKDGYDIEMGARPLRRTIQTQVEDKLSELLLGGQVVSGQTLKIGCSKDKLTFTVV....   816
NTDB id 297 STER RS00545 WP 011680614.1   MVKPLISALADKGISLKFQPAALKHLAKDGYDIEMGARPLRRTIQTQVEDKLSELLLGGQVVSGQTLKIGCSKDKLTFTVV....   816
NTDB id 95396 APQ97 RS01490 WP 002937803.1 MVKPLFAVTAEKGITLKLQPSALKLLAKQGYDPEMGARPLRRLLQTKLEDPLAEMLLRGDLATGSTLKVGVKGEELKFDVVKG..   817
NTDB id 287 SP RS11210 WP 001109712.1     MVKPLVASLTEKGIDLKLQASALKLLANQGYDPEMGARPLRRTLQTEVEDKLAELLLKGDLVAGSTLKIGVKAGQLKFDIA....   810
NTDB id 290 KZH43 RS10025 WP 001109677.1  MVKPLVASLAEKGIDLKLQASALKLLANQGYDPEMGARPLRRTLQTEVEDKLAELLLKGDLVAGSILKIGVKAGQLKFDIA....   810
NTDB id 289 SPD RS10700 WP 001109677.1    MVKPLVASLAEKGIDLKLQASALKLLANQGYDPEMGARPLRRTLQTEVEDKLAELLLKGDLVAGSILKIGVKAGQLKFDIA....   810
consensus                                 !***!** ******************!****!  !*!*!*!!!!!!***!***!!*!*!**!*!*** !*******    ******
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X non conserved

X similar

X $\geq$ 50% conserved