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logo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
NTDB id 601 KW2 RS02615 WP 021036805.1        ........................................MLCQNCNINEA...............................    11
NTDB id 378 SMU RS02690 WP 002263569.1        ........................................MLCQNCKLNEA...............................    11
NTDB id 241 SP RS04015 WP 000882523.1         ........................................MLCQNCKINDS...............................    11
NTDB id 281 KZH43 RS03550 WP 000882517.1      ........................................MLCQNCKINDS...............................    11
NTDB id 245 SPD RS03860 WP 000882517.1        ........................................MLCQNCKINDS...............................    11
NTDB id 243 SPR RS03635 WP 000882517.1        ........................................MLCQNCKINDS...............................    11
NTDB id 345884 EXW33 RS12985 WP 000971171.1   ..MMFGRFTERAQKVLALSQEEAIRIGHNNIGTEHILLGLVREGEGIAAKALIALGLSPEKVQKEVEALIG........R    70
NTDB id 85 BSU 00860 NP 387967.1              ..MMFGRFTERAQKVLALAQEEALRLGHNNIGTEHILLGLVREGEGIAAKALQALGLGSEKIQKEVESLIG........R    70
NTDB id 610 V4T04 RS10165 WP 012897346.1      MKFENIKYTPTLDRILEKAEEYAHQYQYGTIESAHLLAAMATTSGSIAYSLLAGMNVDSSDLLIDL........EDLSSH    72
NTDB id 290 KZH43 RS10025 WP 001109677.1      .....MNYSKALNECIESAYMVAGHFGARYLESWHLLIAMSNHSYSVAGATLNDYPYEMDRLE.....EVALELTETDYS    70
NTDB id 289 SPD RS10700 WP 001109677.1        .....MNYSKALNECIESAYMVAGHFGARYLESWHLLIAMSNHSYSVAGATLNDYPYEMDRLE.....EVALELTETDYS    70
NTDB id 287 SP RS11210 WP 001109712.1         .....MNYSKALNECIESAYMVAGHFGARYLESWHLLIAMSNHSYSVAGATLNDYPYEMDRLE.....EVALELTETDYS    70
NTDB id 377 SMU RS09275 WP 002262344.1        ....MTDYSLKMQEVFRLAQFEAARFESSYLESWHVLLAMVEIDSSVAGLSFAEFEADVRFEDYQAAAILAIGKKPKSSS    76
NTDB id 297 STER RS00545 WP 011680614.1       ....MTIYSRKMQAIFHRAQLEAERFESPFLETWHVLLAMVEVTGSVAYLTFTDFEDRIHSEEIETAAVLAMEKRPKDLS    76
NTDB id 329 STU RS10020 WP 011225298.1        ....MTIYSRKMQAIFHRAQLEAERFESPFLETWHVLLAMVEVPGSVAYLTFTDFEDRIHSEEIETAAVLAMEKRPKDLS    76
consensus                                         **             *       * * *** ***     **
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logo
                                                                                                                                                                                                                                                                                                                                                                                                                                                
NTDB id 601 KW2 RS02615 WP 021036805.1        ...TIHLYTSVNGQKKQIDLCQNCYQI...MKSGGQEALFGAGNASNGNSDE............PFNP.FNDIFSALGGQ    72
NTDB id 378 SMU RS02690 WP 002263569.1        ...TIHLYANVNGQQKQIDLCQNCYQI...MKTDPENGPLNHLSQQNSSS...............INPFFDDFFGDLNNF    70
NTDB id 241 SP RS04015 WP 000882523.1         ...TIHLYTNLNGKQKQIDLCQNCYKI...IKTDPNNSLFKGMTDLNNRD...............FDP.FGDFFNDLNNF    69
NTDB id 281 KZH43 RS03550 WP 000882517.1      ...TIHLYTNLNGKQKQIDLCQNCYKI...IKTDPNNSLFKGMTDLNNRD...............FDP.FGDFFNDLNNF    69
NTDB id 245 SPD RS03860 WP 000882517.1        ...TIHLYTNLNGKQKQIDLCQNCYKI...IKTDPNNSLFKGMTDLNNRD...............FDP.FGDFFNDLNNF    69
NTDB id 243 SPR RS03635 WP 000882517.1        ...TIHLYTNLNGKQKQIDLCQNCYKI...IKTDPNNSLFKGMTDLNNRD...............FDP.FGDFFNDLNNF    69
NTDB id 345884 EXW33 RS12985 WP 000971171.1   GTEASQTVHYTPRAKKVIELSMDEARKLGHSYVGTEHILLGLIREGEGVAARVLNNLGVSLNKARQQVLQ..LLGSNE..   146
NTDB id 85 BSU 00860 NP 387967.1              GQEMSQTIHYTPRAKKVIELSMDEARKLGHSYVGTEHILLGLIREGEGVAARVLNNLGVSLNKARQQVLQ..LLGSNE..   146
NTDB id 610 V4T04 RS10165 WP 012897346.1      VKVKRSTLRFSPRAEEVMTAASFLAIHNNSEAVGTEHLLYALLQVEDGFGLQLLKL.........QKINIVSLRKELEKR   143
NTDB id 290 KZH43 RS10025 WP 001109677.1      QDETFTELPFSRRLQILFDEAEYVASVVHAKVLGTEHVLYAILHDGNALATRILERAGFSYEDKKDQVKIAALRRNLEER   150
NTDB id 289 SPD RS10700 WP 001109677.1        QDETFTELPFSRRLQILFDEAEYVASVVHAKVLGTEHVLYAILHDGNALATRILERAGFSYEDKKDQVKIAALRRNLEER   150
NTDB id 287 SP RS11210 WP 001109712.1         QDETFTELPFSRRLQVLFDEAEYVASVVHAKVLGTEHVLYAILHDSNALATRILERAGFSYEDKKDQVKIAALRRNLEER   150
NTDB id 377 SMU RS09275 WP 002262344.1        N..DIMLLEQSHALKRTLAEAAAISQVTHAKEVGTEHVLFAMLLNPNLLATRILELVGFHAKDDGESIRLLDLRKVIERY   154
NTDB id 297 STER RS00545 WP 011680614.1       ESDIIDLRAQSPALEAMLQEAQEIASVTGAVEVGSEHVLMAFLLHKDLMVCRLLEVAGFQYKDDSDKPRIIDLRRSLERN   156
NTDB id 329 STU RS10020 WP 011225298.1        ESDIIDLRAQSPALEAMLQEAQGIASVTGAVEVGSEHVLMAFLLHKDLMVCRLLEVAGFQYKDDSDKPRIIDLRRSLERN   156
consensus                                        ** *   * *  * **       *     ********* * * *     **                  **   **
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logo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
NTDB id 601 KW2 RS02615 WP 021036805.1        .DFNGAASNQ.....TPPTQTGG..........RGPRGPQNPRAKQPKGMLEEFGINITESARRGEIDPVIGRDEEIKRV   136
NTDB id 378 SMU RS02690 WP 002263569.1        RAFNNQDLPN.....TPPTQAGGGNGNGGN.N.RRPGGPQQQASQKPNGLLEEFGINLTDIARKGEIDPVIGRDEEITRV   143
NTDB id 241 SP RS04015 WP 000882523.1         RPSSN..TPP.....IPPTQSGGGYGGNGGYGSQNRGSAQTPPPSQEKGLLEEFGINVTEIARRGDIDPVIGRDDEIIRV   142
NTDB id 281 KZH43 RS03550 WP 000882517.1      RPSSN..TPP.....IPPTQSGGGYGGNGGYGSQNRGSAQTPPPSQEKGLLEEFGINVTEIARRGDIDPVIGRDDEIIRV   142
NTDB id 245 SPD RS03860 WP 000882517.1        RPSSN..TPP.....IPPTQSGGGYGGNGGYGSQNRGSAQTPPPSQEKGLLEEFGINVTEIARRGDIDPVIGRDDEIIRV   142
NTDB id 243 SPR RS03635 WP 000882517.1        RPSSN..TPP.....IPPTQSGGGYGGNGGYGSQNRGSAQTPPPSQEKGLLEEFGINVTEIARRGDIDPVIGRDDEIIRV   142
NTDB id 345884 EXW33 RS12985 WP 000971171.1   ..................................ASSGHQGGSATNANTPTLDSLARDLTVVARENRLDPVIGRGKEIQRV   193
NTDB id 85 BSU 00860 NP 387967.1              ..................................TGSSA.AGTNSNANTPTLDSLARDLTAIAKEDSLDPVIGRSKEIQRV   192
NTDB id 610 V4T04 RS10165 WP 012897346.1      TGLKVPESKKAVTPMSKRKMAKG..................VAENSTTPTLDSVSSDLTEEARLGKLDPMIGREAEIDRL   205
NTDB id 290 KZH43 RS10025 WP 001109677.1      AGWTREDLKA.LRQRHRTV.ADK..........QNSMANMMGMPQTPSGGLEDYTHDLTEQARSGKLEPVIGRDKEISRM   218
NTDB id 289 SPD RS10700 WP 001109677.1        AGWTREDLKA.LRQRHRTV.ADK..........QNSMANMMGMPQTPSGGLEDYTHDLTEQARSGKLEPVIGRDKEISRM   218
NTDB id 287 SP RS11210 WP 001109712.1         AGWTREDLKA.LRQRHRTV.ADK..........QNSMANMMGMPQTPSGGLEDYTHDLTEQARSGKLEPVIGRDKEISRM   218
NTDB id 377 SMU RS09275 WP 002262344.1        AGFSKEDIKA.IFEMRKPKKVKN..........SSSFSDLMKPP.SVTGELADFTRDLTELARQGRLEPVIGREQEISRM   222
NTDB id 297 STER RS00545 WP 011680614.1       AGLSKQDLKA.IHDLRKPKKSKA..........SANFANMMQPPQSSTGELADYTKDLTALAESGNLDPVIGRDEEISRM   225
NTDB id 329 STU RS10020 WP 011225298.1        AGLSKQDLKA.IHDLRKPKKSKA..........SANFANMMQPPQSSTGELADYTKDLTALAESGNLDPIIGRDEEISRM   225
consensus                                        *             *    *                        **  ** !***  **!**!* * **!*!!!* !! !*

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NTDB id 601 KW2 RS02615 WP 021036805.1        IEILNRRTKNNPVLIGEPGVGKTAVVEGLAQKIVDGDVPQKLQNKEVIRLDVVSLVQGTGIRGQFEERMQKLMDEIRKRN   216
NTDB id 378 SMU RS02690 WP 002263569.1        IEILNRRTKNNPVLIGEPGVGKTAVVEGLAQKIVDGDVPQKLHGKNVIRLDVVSLVQGTGIRGQFEERMQKLMEEIRQRQ   223
NTDB id 241 SP RS04015 WP 000882523.1         IEILNRRTKNNPVLIGEPGVGKTAVVEGLAQKIVDGDVPHKLQGKQVIRLDVVSLVQGTGIRGQFEERMQKLMEEIRKRE   222
NTDB id 281 KZH43 RS03550 WP 000882517.1      IEILNRRTKNNPVLIGEPGVGKTAVVEGLAQKIVDGDVPHKLQGKQVIRLDVVSLVQGTGIRGQFEERMQKLMEEIRKRE   222
NTDB id 245 SPD RS03860 WP 000882517.1        IEILNRRTKNNPVLIGEPGVGKTAVVEGLAQKIVDGDVPHKLQGKQVIRLDVVSLVQGTGIRGQFEERMQKLMEEIRKRE   222
NTDB id 243 SPR RS03635 WP 000882517.1        IEILNRRTKNNPVLIGEPGVGKTAVVEGLAQKIVDGDVPHKLQGKQVIRLDVVSLVQGTGIRGQFEERMQKLMEEIRKRE   222
NTDB id 345884 EXW33 RS12985 WP 000971171.1   IEVLSRRTKNNPVLIGEPGVGKTAIAEGLAQQIVNNEVPETLRDKRVMTLDMGTVVAGTKYRGEFEDRLKKVMDEIRQAG   273
NTDB id 85 BSU 00860 NP 387967.1              IEVLSRRTKNNPVLIGEPGVGKTAIAEGLAQQIINNEVPEILRDKRVMTLDMGTVVAGTKYRGEFEDRLKKVMDEIRQAG   272
NTDB id 610 V4T04 RS10165 WP 012897346.1      IHILSRRTKNNPVLVGEPGVGKSAIIEGLAQRIVNGQVPIGLMNSRIMALNMATVVAGTKFRGEFEDRLTAIVEEVSSDP   285
NTDB id 290 KZH43 RS10025 WP 001109677.1      IQILSRKTKNNPVLVGDAGVGKTALALGLAQRIASGDVPAEMAKMRVLELDLMNVVAGTRFRGDFEERMNNIIKDIEEDG   298
NTDB id 289 SPD RS10700 WP 001109677.1        IQILSRKTKNNPVLVGDAGVGKTALALGLAQRIASGDVPAEMAKMRVLELDLMNVVAGTRFRGDFEERMNNIIKDIEEDG   298
NTDB id 287 SP RS11210 WP 001109712.1         IQILSRKTKNNPVLVGDAGVGKTALALGLAQRIASGDVPAEMAKMRVLELDLMNVVAGTRFRGDFEERMNNIIKDIEEDG   298
NTDB id 377 SMU RS09275 WP 002262344.1        VQILSRKTKNNPVLVGDAGVGKTALAYGLAQRIVDSAVPFELADMKVLELDMMSVVAGTRFRGDFEERMNQIIADIEADG   302
NTDB id 297 STER RS00545 WP 011680614.1       IQVLSRKTKNNPVLVGEAGVGKTALALGLAQRIASGEVPFELADMRILELDMMSVVAGTRFRGDFEERMNQIIDEIEADG   305
NTDB id 329 STU RS10020 WP 011225298.1        IQVLSRKTKNNPVLVGEAGVGKTALALGLAQRIASGEVPFELADMRILELDMMSVVAGTRFRGDFEERMNQIIDEIEADG   305
consensus                                     * *!*!*!!!!!!!*!**!!!!*!* *!!!!*!* **!!   *    *** !*****!*!!**!!*!!*!** *****
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NTDB id 601 KW2 RS02615 WP 021036805.1        DVIMFIDEIHEIVGAGSAGDGNMDAGNILKPALARGELQLVGATTLNEYR.IIEKDAALERRMQPVKVDEPSVDETITIL   295
NTDB id 378 SMU RS02690 WP 002263569.1        DVILFIDEIHEIVGAGSAGDGNMDAGNILKPALARGELQLVGATTLNEYR.IIEKDAALERRMQPVKVDEPSVAETITIL   302
NTDB id 241 SP RS04015 WP 000882523.1         DIILFIDEIHEIVGAGSASDGNMDAGNILKPALARGELQLVGATTLNEYR.IIEKDAALERRMQPVKVDEPTVDETITIL   301
NTDB id 281 KZH43 RS03550 WP 000882517.1      DIILFIDEIHEIVGAGSASDGNMDAGNILKPALARGELQLVGATTLNEYR.IIEKDAALERRMQPVKVDEPTVDETITIL   301
NTDB id 245 SPD RS03860 WP 000882517.1        DIILFIDEIHEIVGAGSASDGNMDAGNILKPALARGELQLVGATTLNEYR.IIEKDAALERRMQPVKVDEPTVDETITIL   301
NTDB id 243 SPR RS03635 WP 000882517.1        DIILFIDEIHEIVGAGSASDGNMDAGNILKPALARGELQLVGATTLNEYR.IIEKDAALERRMQPVKVDEPTVDETITIL   301
NTDB id 345884 EXW33 RS12985 WP 000971171.1   NIILFIDELHTLIGAGG.AEGAIDASNILKPSLARGELQCIGATTLDEYRKYIEKDAALERRFQPIHVDEPSLEESIQIL   352
NTDB id 85 BSU 00860 NP 387967.1              NIILFIDELHTLIGAGG.AEGAIDASNILKPSLARGELQCIGATTLDEYRKYIEKDAALERRFQPIQVDQPSVDESIQIL   351
NTDB id 610 V4T04 RS10165 WP 012897346.1      DVIIFIDELHTIIGAGGGMDSVNDAANILKPALARGDFQMVGATTYHEYQKYIEKDEALERRLARINVDEPSPDEAIAIL   365
NTDB id 290 KZH43 RS10025 WP 001109677.1      QVILFIDELHTIMGSGSGIDSTLDAANILKPALARGTLRTVGATTQEEYQKHIEKDAALSRRFAKVTIEEPSVADSMTIL   378
NTDB id 289 SPD RS10700 WP 001109677.1        QVILFIDELHTIMGSGSGIDSTLDAANILKPALARGTLRTVGATTQEEYQKHIEKDAALSRRFAKVTIEEPSVADSMTIL   378
NTDB id 287 SP RS11210 WP 001109712.1         QVILFIDELHTIMGSGSGIDSTLDAANILKPALARGTLRTVGATTQEEYQKHIEKDAALSRRFAKVTIEEPSVADSMTIL   378
NTDB id 377 SMU RS09275 WP 002262344.1        HIVLFIDELHTIMGSGSGIDSTLDAANILKPALARGSLRTIGATTQEEYQKHIEKDAALSRRFAKVTIEEPSEEEAYQIL   382
NTDB id 297 STER RS00545 WP 011680614.1       KIILFIDELHTIIGSGSGIDSTLDAANILKPALARGTLHMVGATTQAEYQKHIEKDAALSRRFAKITIEEPSVSEAIDIL   385
NTDB id 329 STU RS10020 WP 011225298.1        KIILFIDELHTIIGSGSGIDSTLDAANILKPALARGTLHMVGATTQAEYQKHIEKDAALSRRFAKITIEEPSVSEAIDIL   385
consensus                                      ***!!!!*!***!*!**  *   *!!*!!!!!*!!!!*****!!!!   !!  *  !!!!*!!*!!    *  ***!*******!!

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NTDB id 601 KW2 RS02615 WP 021036805.1        RGIQARYEDYHHVKYTDEAIEAAAHLSNRYIQDRFLPDKAIDLLDESGSKKNLTLKFV..DPEDINRRIADAENKKNEAT   373
NTDB id 378 SMU RS02690 WP 002263569.1        KGIQPKYEDYHHVKYTDEAIEAAANLSNRYIQDRFLPDKAIDLLDEAGSKMNLTLNFV..DPKEIDHRLIEAENLKAQAT   380
NTDB id 241 SP RS04015 WP 000882523.1         KGIQKKYEDYHHVQYTDAAIEAAATLSNRYIQDRFLPDKAIDLLDEAGSKMNLTLNFV..DPKVIDQRLIEAENLKSQAT   379
NTDB id 281 KZH43 RS03550 WP 000882517.1      KGIQKKYEDYHHVQYTDAAIEAAATLSNRYIQDRFLPDKAIDLLDEAGSKMNLTLNFV..DPKVIDQRLIEAENLKSQAT   379
NTDB id 245 SPD RS03860 WP 000882517.1        KGIQKKYEDYHHVQYTDAAIEAAATLSNRYIQDRFLPDKAIDLLDEAGSKMNLTLNFV..DPKVIDQRLIEAENLKSQAT   379
NTDB id 243 SPR RS03635 WP 000882517.1        KGIQKKYEDYHHVQYTDAAIEAAATLSNRYIQDRFLPDKAIDLLDEAGSKMNLTLNFV..DPKVIDQRLIEAENLKSQAT   379
NTDB id 345884 EXW33 RS12985 WP 000971171.1   KGLRDRYEAHHRVSITDDAIDAAVKLSDRYITDRFLPDKAIDLIDEAASKVRLRSYTTPPNLKELEVKLEEIRKEKDAAV   432
NTDB id 85 BSU 00860 NP 387967.1              QGLRDRYEAHHRVSITDDAIEAAVKLSDRYISDRFLPDKAIDLIDEAGSKVRLRSFTTPPNLKELEQKLDEVRKEKDAAV   431
NTDB id 610 V4T04 RS10165 WP 012897346.1      QGLREKFEDYHQVKFTDQAIKSAVMLSVRYMTSRKLPDKAIDLLDEAAAAVKISVKNQQTKRLDLEKELAEAQEELSEAV   445
NTDB id 290 KZH43 RS10025 WP 001109677.1      QGLKATYEKHHRVQITDEAVETAVKMAHRYLTSRHLPDSAIDLLDEAAATVQNKAKHVKADDSDL....S....PADKAL   450
NTDB id 289 SPD RS10700 WP 001109677.1        QGLKATYEKHHRVQITDEAVETAVKMAHRYLTSRHLPDSAIDLLDEAAATVQNKAKHVKADDSDL....S....PADKAL   450
NTDB id 287 SP RS11210 WP 001109712.1         QGLKATYEKHHRVQITDEAVETAVKMAHRYLTSRHLPDSAIDLLDEAAATVQNKAKHVKADDSDL....S....PADKAL   450
NTDB id 377 SMU RS09275 WP 002262344.1        LGLKKSYETYHHVIISDAAVMAAVKGAHRYLSGKNLPDSAIDLLDEASATVQGLVKK..KAPAYL....T....DLDHAL   452
NTDB id 297 STER RS00545 WP 011680614.1       NGLRSSYEDYHRVTITDAAVETAVKAAHRYLTSKNLPDSAIDLLDEASATVQVRIKK..EDKREI....T....PLDEAL   455
NTDB id 329 STU RS10020 WP 011225298.1        NGLRSSYEDYHRVTITDAAVETAVKAAHRYLTSKNLPDSAIDLLDEASATVQVRIKK..EAKREI....T....PLDEAL   455
consensus                                      !**  **!**!  !   *!  !***!* ** !!** * !!!*!!!!*!!**  *** *  *  * ***   * *       !*
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logo
NTDB id 601 KW2 RS02615 WP 021036805.1        KAEDFEKAAHFRDQISKLRELQK......QEVTDEDMPVITEKDIEQIVEQKTQIPVGDLKEKEQTQLINLADDLKAHVI   447
NTDB id 378 SMU RS02690 WP 002263569.1        RDEDYEKAAYFRDQIAKYKEMQS......AKLDKENTPVITEKNIEVIVEQKTNIPVGELKEKEQSQLIHLADDLKTRVI   454
NTDB id 241 SP RS04015 WP 000882523.1         REEDFEKAAYFRDQIAKYKEMQK......KKITDQDTPSISEKTIEHIIEQKTNIPVGDLKEKEQSQLIHLAEDLKSHVI   453
NTDB id 281 KZH43 RS03550 WP 000882517.1      REEDFEKAAYFRDQIAKYKEMQK......KKITDQDTPIISEKTIEHIIEQKTNIPVGDLKEKEQSQLIHLAEDLKSHVI   453
NTDB id 245 SPD RS03860 WP 000882517.1        REEDFEKAAYFRDQIAKYKEMQK......KKITDQDTPIISEKTIEHIIEQKTNIPVGDLKEKEQSQLIHLAEDLKSHVI   453
NTDB id 243 SPR RS03635 WP 000882517.1        REEDFEKAAYFRDQIAKYKEMQK......KKITDQDTPIISEKTIEHIIEQKTNIPVGDLKEKEQSQLIHLAEDLKSHVI   453
NTDB id 345884 EXW33 RS12985 WP 000971171.1   QSQEFEKAASLRDMEQRLREKLEDTKRQWKEQQGKENSEVTVEDIANVVSTWTRIPVSKLAQTETDKLLNLESILHDRLI   512
NTDB id 85 BSU 00860 NP 387967.1              QSQEFEKAASLRDTEQRLREQVEDTKKSWKEKQGQENSEVTVDDIAMVVSSWTGVPVSKIAQTETDKLLNMENILHSRVI   511
NTDB id 610 V4T04 RS10165 WP 012897346.1      IKLDIKASRTKEKAVEKIADKIYKFS.....VKEDKRQEVTDQAVVAVASTLTGVPITQMTKSESDRLINLEKELHKRVV   520
NTDB id 290 KZH43 RS10025 WP 001109677.1      MDGKWKQAAQLIAKEE.........E.....VPV.YKDLVTESDILTTLSRLSGIPVQKLTQTDAKKYLNLEAELHKRVI   515
NTDB id 289 SPD RS10700 WP 001109677.1        MDGKWKQAAQLIAKEE.........E.....VPV.YKDLVTESDILTTLSRLSGIPVQKLTQTDAKKYLNLEAELHKRVI   515
NTDB id 287 SP RS11210 WP 001109712.1         MDGKWKQAAQLIAKEE.........E.....VPV.YKDLVTESDILTTLSRLSGIPVQKLTQTDAKKYLNLEAELHKRVI   515
NTDB id 377 SMU RS09275 WP 002262344.1        ITNDYQLAKRLLKKEK.........K.....PLLKKRAEVKEEDILATLSKLSGIPVKKLTQADSKKYLNLERELHKRVI   518
NTDB id 297 STER RS00545 WP 011680614.1       ISGDIGAAVKQYKANQ.........K.....AKFPKPALVDADQIMQTLSRLSGIPVEKMTQTDSKRYLNLESELHKRVI   521
NTDB id 329 STU RS10020 WP 011225298.1        ISGDIGAAVKQYKANQ.........K.....AKFPKPALVDADQIMQTLSRLSGIPVEKMTQTDSKRYLNLESELHKRVI   521
consensus                                        **  **       *  *           *      ****  *  ***  * *!*  *   *  ****** *!* ***
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logo
NTDB id 601 KW2 RS02615 WP 021036805.1        GQDEAVDKISKAIRRSRVGLGKPNRPIGSFLFVGPTGVGKTELAKQLAKELFGSSESMIRFDMSEYMEKHSVAKLIGAPP   527
NTDB id 378 SMU RS02690 WP 002263569.1        GQDAAVDKIAKAIRRNRVGLGTPNRPIGSFLFVGPTGVGKTELSKQLAIELFGSEDSMIRFDMSEYMEKHAVAKLVGAPP   534
NTDB id 241 SP RS04015 WP 000882523.1         GQDDAVDKIAKAIRRNRVGLGTPNRPIGSFLFVGPTGVGKTELSKQLAIELFGSADSMIRFDMSEYMEKHSVAKLVGAPP   533
NTDB id 281 KZH43 RS03550 WP 000882517.1      GQDDAVDKIAKAIRRNRVGLGTPNRPIGSFLFVGPTGVGKTELSKQLAIELFGSADSMIRFDMSEYMEKHSVAKLVGAPP   533
NTDB id 245 SPD RS03860 WP 000882517.1        GQDDAVDKIAKAIRRNRVGLGTPNRPIGSFLFVGPTGVGKTELSKQLAIELFGSADSMIRFDMSEYMEKHSVAKLVGAPP   533
NTDB id 243 SPR RS03635 WP 000882517.1        GQDDAVDKIAKAIRRNRVGLGTPNRPIGSFLFVGPTGVGKTELSKQLAIELFGSADSMIRFDMSEYMEKHSVAKLVGAPP   533
NTDB id 345884 EXW33 RS12985 WP 000971171.1   GQDEAVVAVAKAVRRARAGLKDPKRPIGSFIFLGPTGVGKTELARALAESMFGDEDAMIRIDMSEYMEKHSTSRLVGSPP   592
NTDB id 85 BSU 00860 NP 387967.1              GQDEAVVAVAKAVRRARAGLKDPKRPIGSFIFLGPTGVGKTELARALAESIFGDEESMIRIDMSEYMEKHSTSRLVGSPP   591
NTDB id 610 V4T04 RS10165 WP 012897346.1      GQEEAISAVSRAIRRARSGVADSRRPMGSFMFLGPTGVGKTELAKALADSVFGSEDNMIRVDMSEFMEKHSTSRLIGAPP   600
NTDB id 290 KZH43 RS10025 WP 001109677.1      GQDQAVSSISRAIRRNQSGIRSHKRPIGSFMFLGPTGVGKTELAKALAEVLFDDESALIRFDMSEYMEKFAASRLNGAPP   595
NTDB id 289 SPD RS10700 WP 001109677.1        GQDQAVSSISRAIRRNQSGIRSHKRPIGSFMFLGPTGVGKTELAKALAEVLFDDESALIRFDMSEYMEKFAASRLNGAPP   595
NTDB id 287 SP RS11210 WP 001109712.1         GQDQAVSSISRAIRRNQSGIRSHKRPIGSFMFLGPTGVGKTELAKALAEVLFDDESALIRFDMSEYMEKFAASRLNGAPP   595
NTDB id 377 SMU RS09275 WP 002262344.1        GQDDAVSSISRAIRRNQSGIRVGKRPIGSFMFLGPTGVGKTELAKALAEVLFDDESALIRFDMSEYMEKFAASRLNGAPP   598
NTDB id 297 STER RS00545 WP 011680614.1       GQDEAVSAISRAIRRNQSGIRTGKRPIGSFMFLGPTGVGKTELAKALAEVLFDDESALLRFDMSEYMEKFAASRLNGAPP   601
NTDB id 329 STU RS10020 WP 011225298.1        GQDEAVSAISRAIRRNQSGIRTGKRPIGSFMFLGPTGVGKTELAKALAEVLFDDESALLRFDMSEYMEKFAASRLNGAPP   601
consensus                                     !!*!*  * *!*!!** !* * *!!*!!!*!*!!!!!!!!!!*!!* *!* ** **!*!!!!*!!!*  **!*!*!!
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logo
NTDB id 601 KW2 RS02615 WP 021036805.1        GYVGYEEAGQLTERVRRNPYSLILLDEIEKAHPDVMHMFLQILEDGRLTDAQGRTVSFKDSLIIMTSNAGTGK..VEASV   605
NTDB id 378 SMU RS02690 WP 002263569.1        GYVGYEEAGQLTEKVRRNPYSLILLDEVEKAHPDVMHMFLQVLDDGRLTDGQGRTVSFKDTIIIMTSNAGTGK..SEANV   612
NTDB id 241 SP RS04015 WP 000882523.1         GYVGYDEAGQLTEKVRHNPYSLILLDEVEKAHPDVMHMFLQVLDDGRLTDGQGRTVSFKDAIIIMTSNAGTGK..TEASV   611
NTDB id 281 KZH43 RS03550 WP 000882517.1      GYVGYDEAGQLTEKVRHNPYSLILLDEVEKAHPDVMHMFLQVLDDGRLTDGQGRTVSFKDAIIIMTSNAGTGK..TEASV   611
NTDB id 245 SPD RS03860 WP 000882517.1        GYVGYDEAGQLTEKVRHNPYSLILLDEVEKAHPDVMHMFLQVLDDGRLTDGQGRTVSFKDAIIIMTSNAGTGK..TEASV   611
NTDB id 243 SPR RS03635 WP 000882517.1        GYVGYDEAGQLTEKVRHNPYSLILLDEVEKAHPDVMHMFLQVLDDGRLTDGQGRTVSFKDAIIIMTSNAGTGK..TEASV   611
NTDB id 345884 EXW33 RS12985 WP 000971171.1   GYVGYEEGGQLTEKVRRKPYSVVLLDEVEKAHPDVFNILLQVLEDGRLTDSKGRTVDFRNTIVIMTSNVGADALKRNKYL   672
NTDB id 85 BSU 00860 NP 387967.1              GYVGYDEGGQLTEKVRRKPYSVVLLDEIEKAHPDVFNILLQVLEDGRLTDSKGRTVDFRNTILIMTSNVGASELKRNKYV   671
NTDB id 610 V4T04 RS10165 WP 012897346.1      GYVGYDEGGQLTERVRNKPYSVVLLDEVEKAHPDVFNIMLQILDDGFVTDTKGRKVDFRNTIIIMTSNLGATALRDDKTV   680
NTDB id 290 KZH43 RS10025 WP 001109677.1      GYVGYEEGGELTEKVRNKPYSVLLFDEVEKAHPDIFNVLLQVLDDGVLTDSKGRKVDFSNTIIIMTSNLGATALRDDKTV   675
NTDB id 289 SPD RS10700 WP 001109677.1        GYVGYEEGGELTEKVRNKPYSVLLFDEVEKAHPDIFNVLLQVLDDGVLTDSKGRKVDFSNTIIIMTSNLGATALRDDKTV   675
NTDB id 287 SP RS11210 WP 001109712.1         GYVGYEEGGELTEKVRNKPYSVLLFDEVEKAHPDIFNVLLQVLDDGVLTDSKGRKVDFSNTIIIMTSNLGATALRDDKTV   675
NTDB id 377 SMU RS09275 WP 002262344.1        GYVGYEEGGELTEKVRNKPYSVLLFDEVEKAHPDIFNILLQVLDDGVLTDSRGRKVDFSNTIIIMTSNLGATALRDDKTV   678
NTDB id 297 STER RS00545 WP 011680614.1       GYVGYDEGGELTEKVRNKPYSVLLFDEIEKAHPDIFNILLQVLDDGVLTDSRGRKVDFSNTIIIMTSNLGATALRDDKTV   681
NTDB id 329 STU RS10020 WP 011225298.1        GYVGYDEGGELTEKVRNKPYSVLLFDEIEKAHPDIFNVLLQVLDDGVLTDSRGRKVDFSNTIIIMTSNLGATALRDDKTV   681
consensus                                     !!!!!*!*!*!!!*!! *!!!**!*!!*!!!!!!*****!!*!*!! *!!**!! !*!*****!!!!!*!*  ** ****
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logo
NTDB id 601 KW2 RS02615 WP 021036805.1        GFGAAREGR.....TKSVLGQLGDFFSPEFMNRFDGIIEFSALSKENLLKIVDLMLDEVNEQIGRNDIHLSVTQAAKEKL   680
NTDB id 378 SMU RS02690 WP 002263569.1        GFGASREGR.....TNSVLGELGNFFSPEFMNRFDGIIEFQALSKDNLLQIVSLMLDDVNQRLAVNAIHLDVTDKVKEKL   687
NTDB id 241 SP RS04015 WP 000882523.1         GFGAAREGR.....TNSVLGELGNFFSPEFMNRFDGIIEFKALSKDNLLQIVELMLADVNKRLSSNNIRLDVTDKVKEKL   686
NTDB id 281 KZH43 RS03550 WP 000882517.1      GFGAAREGR.....TNSVLGELGNFFSPEFMNRFDGIIEFKALSKDNLLQIVELMLADVNKRLSSNNIRLDVTDKVKEKL   686
NTDB id 245 SPD RS03860 WP 000882517.1        GFGAAREGR.....TNSVLGELGNFFSPEFMNRFDGIIEFKALSKDNLLQIVELMLADVNKRLSSNNIRLDVTDKVKEKL   686
NTDB id 243 SPR RS03635 WP 000882517.1        GFGAAREGR.....TNSVLGELGNFFSPEFMNRFDGIIEFKALSKDNLLQIVELMLADVNKRLSSNNIRLDVTDKVKEKL   686
NTDB id 345884 EXW33 RS12985 WP 000971171.1   GFNVQDESRDYSDMKGKVMDELKKAFRPEFLNRIDEIIVFHMLEKKHIQEIVTLMVNQLVNRLKEQEIELQLTEGAISAI   752
NTDB id 85 BSU 00860 NP 387967.1              GFNVQDETQNHKDMKDKVMGELKRAFRPEFINRIDEIIVFHSLEKKHLTEIVSLMSDQLTKRLKEQDLSIELTDAAKAKV   751
NTDB id 610 V4T04 RS10165 WP 012897346.1      GFGAKNITADYSAMKSRILEELKRHYRPEFLNRIDENIVFHSLESQEIEQIVKIMSKSLIKRLAEQDIHVKLTPSAVKLI   760
NTDB id 290 KZH43 RS10025 WP 001109677.1      GFGAKDIRFDQENMEKRMFEELKKAYRPEFINRIDEKVVFHSLSSDHMQEVVKIMVKPLVASLAEKGIDLKLQASALKLL   755
NTDB id 289 SPD RS10700 WP 001109677.1        GFGAKDIRFDQENMEKRMFEELKKAYRPEFINRIDEKVVFHSLSSDHMQEVVKIMVKPLVASLAEKGIDLKLQASALKLL   755
NTDB id 287 SP RS11210 WP 001109712.1         GFGAKDIRFDQENMEKRMFEELKKAYRPEFINRIDEKVVFHSLSSDHMQEVVKIMVKPLVASLTEKGIDLKLQASALKLL   755
NTDB id 377 SMU RS09275 WP 002262344.1        GFGAKSFSQDYKAMESRILEELKKVYRPEFINRIDEKVVFHNLGQEDIRHIVKIMVAPLIAHLADQGITLKFQPSALKHL   758
NTDB id 297 STER RS00545 WP 011680614.1       GFGAQTISHNHQAMQARIMEELKKSYRPEFINRIDEKVVFHSLEEEQLHDIVKIMVKPLISALADKGISLKFQPAALKHL   761
NTDB id 329 STU RS10020 WP 011225298.1        GFGAQTISHNHQAMQARIMEELKKSYRPEFINRIDEKVVFHSLEEEQLHDIVKIMVKPLISALADKGISLKFQPAALKHL   761
consensus                                     !!**          *  *** *!** **!!!*!!*!* **!* !* * *  *! *!*  *   * ** * * **  *   *
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logo

NTDB id 601 KW2 RS02615 WP 021036805.1        VDLGYNPAMGARPLRRTIQENIEDSIADFYIEHPEYKQLV.ADLIDDKIVISNQTQETAETTDEEVPAE   748
NTDB id 378 SMU RS02690 WP 002263569.1        VDLGYDPKMGARPLRRTIQEHIEDAITDFYLEHPEQKELK.AIMTSNGKIVIKASNK.VETVTKATSD.   753
NTDB id 241 SP RS04015 WP 000882523.1         VDLGYDPKMGARPLRRTIQDYIEDTITDYYLENPSEKDLK.AVMTSKGNIQIKSAKK.AEVKSSEKEK.   752
NTDB id 281 KZH43 RS03550 WP 000882517.1      VDLGYDPKMGARPLRRTIQDYIEDTITDYYLENPSEKDLK.AVMTSKGNIQIKSAKK.AEVKSSEKEK.   752
NTDB id 245 SPD RS03860 WP 000882517.1        VDLGYDPKMGARPLRRTIQDYIEDTITDYYLENPSEKDLK.AVMTSKGNIQIKSAKK.AEVKSSEKEK.   752
NTDB id 243 SPR RS03635 WP 000882517.1        VDLGYDPKMGARPLRRTIQDYIEDTITDYYLENPSEKDLK.AVMTSKGNIQIKSAKK.AEVKSSEKEK.   752
NTDB id 345884 EXW33 RS12985 WP 000971171.1   ADKGFDREYGARPLRRAIQKHVEDRLSEELLKGAIEKGQKVIFDVEGESFVIHSAEKVK..........   811
NTDB id 85 BSU 00860 NP 387967.1              AEEGVDLEYGARPLRRAIQKHVEDRLSEELLRGNIHKGQHIVLDVEDGEFVVKTTAKTN..........   810
NTDB id 610 V4T04 RS10165 WP 012897346.1      AEVGFDPEYGARPLRKALQKEVEDLLSEQLLSGEIKAGNHVSIGASNKKIKIAQIV.............   816
NTDB id 290 KZH43 RS10025 WP 001109677.1      ANQGYDPEMGARPLRRTLQTEVEDKLAELLLKGDLVAGSILKIGVKAGQLKFDIA..............   810
NTDB id 289 SPD RS10700 WP 001109677.1        ANQGYDPEMGARPLRRTLQTEVEDKLAELLLKGDLVAGSILKIGVKAGQLKFDIA..............   810
NTDB id 287 SP RS11210 WP 001109712.1         ANQGYDPEMGARPLRRTLQTEVEDKLAELLLKGDLVAGSTLKIGVKAGQLKFDIA..............   810
NTDB id 377 SMU RS09275 WP 002262344.1        ALAGYDAEMGARPLRRTLQTEVEDKLAELILSGKLASGQTLKIGIQKEKLKFDIV..............   813
NTDB id 297 STER RS00545 WP 011680614.1       AKDGYDIEMGARPLRRTIQTQVEDKLSELLLGGQVVSGQTLKIGCSKDKLTFTVV..............   816
NTDB id 329 STU RS10020 WP 011225298.1        AKDGYDIEMGARPLRRTIQTQVEDKLSELLLGGQVVSGQTLKIGCSKDKLTFTVV..............   816
consensus                                     ** !*****!!!!!!***!  *!! *** ** * *  *  * *    * *
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X non conserved

X similar

X $\geq$ 50% conserved