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NTDB id 85 BSU 00860 NP 387967.1                ..MMFGRFTERAQKVLALAQEEALRLGHNNIGTEHILLGLVREGEGIAAKALQALGLGSEKIQKEVESLIGRG.......   71
NTDB id 610 V4T04 RS10165 WP 012897346.1        MKFENIKYTPTLDRILEKAEEYAHQYQYGTIESAHLLAAMATTSGSIAYSLLAGMNVDSSDLLIDLEDLS........SH   72
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
NTDB id 1129568 GPW68 RS10060 WP 074389073.1    .....MKISTGLQRVFEDSQLVAQRYACDYLETWHVLLSFVINHDTVAGAVLAEYPISIS..DYEHATFVVTDKVY..RE   71
NTDB id 287 SP RS11210 WP 001109712.1           .....MNYSKALNECIESAYMVAGHFGARYLESWHLLIAMSNHSYSVAGATLNDYPYEMD..RLEEVALELTETDY..SQ   71
NTDB id 290 KZH43 RS10025 WP 001109677.1        .....MNYSKALNECIESAYMVAGHFGARYLESWHLLIAMSNHSYSVAGATLNDYPYEMD..RLEEVALELTETDY..SQ   71
NTDB id 289 SPD RS10700 WP 001109677.1          .....MNYSKALNECIESAYMVAGHFGARYLESWHLLIAMSNHSYSVAGATLNDYPYEMD..RLEEVALELTETDY..SQ   71
consensus                                             * ***  **  ***  ***  !  ***   *****!*!****  *  **!*  **  **   **     **   ***  *      *
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NTDB id 85 BSU 00860 NP 387967.1                .QEMSQTIHYTPRAKKVIELSMDEARKLGHSYVGTEHILLGLIREGEGVAARVLNNLGVSLNKARQQVLQL..L......   142
NTDB id 610 V4T04 RS10165 WP 012897346.1        VKVKRSTLRFSPRAEEVMTAASFLAIHNNSEAVGTEHLLYALLQVEDGFGLQLLKL.........QKINIVSLRKELEKR   143
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
NTDB id 1129568 GPW68 RS10060 WP 074389073.1    ELDSFRILPSSKRLDETASFAKKIAEVVKAKELGTEHLFMAMLLDKRSTASQILDKVGFCFEDSDDKFRFLDLRKNLEAR   151
NTDB id 287 SP RS11210 WP 001109712.1           D.ETFTELPFSRRLQVLFDEAEYVASVVHAKVLGTEHVLYAILHDSNALATRILERAGFSYEDKKDQVKIAALRRNLEER   150
NTDB id 290 KZH43 RS10025 WP 001109677.1        D.ETFTELPFSRRLQILFDEAEYVASVVHAKVLGTEHVLYAILHDGNALATRILERAGFSYEDKKDQVKIAALRRNLEER   150
NTDB id 289 SPD RS10700 WP 001109677.1          D.ETFTELPFSRRLQILFDEAEYVASVVHAKVLGTEHVLYAILHDGNALATRILERAGFSYEDKKDQVKIAALRRNLEER   150
consensus                                       *  *     *  **  **   **  **   *****  **  *!*!!*******  *   *******!*  ***  *  *   *  ****  ***  **  *
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NTDB id 85 BSU 00860 NP 387967.1                .G..................SNETGSSAAGTNSNANTPTLDSLARDLTAIAKEDSLDPVIGRSKEIQRVIEVLSRRTKN   202
NTDB id 610 V4T04 RS10165 WP 012897346.1        TGLKVPLSKKAVTPMSKRKMA........KGVAENSTTPTLDSVSSDLTEEARLGKLDPMIGREAEIDRLIHILSRRTKN   215
NTDB id 377 SMU RS09275 WP 002262344.1          AGFSKEDIKAI.FEMRKPKKVKNSSSFSDLMKPP.SVTGELADFTRDLTELARQGRLEPVIGREQEISRMVQILSRKTKN   232
NTDB id 297 STER RS00545 WP 011680614.1         AGLSKQDLKAI.HDLRKPKKSKASANFANMMQPPQSSTGELADYTKDLTALAESGNLDPVIGRDEEISRMIQVLSRKTKN   235
NTDB id 329 STU RS10020 WP 011225298.1          AGLSKQDLKAI.HDLRKPKKSKASANFANMMQPPQSSTGELADYTKDLTALAESGNLDPIIGRDEEISRMIQVLSRKTKN   235
NTDB id 1129568 GPW68 RS10060 WP 074389073.1    AGFTKEDLKAI.RSVMKGGKAKPTNMGQMMGMPPAPQSGGLEDYTRDLTALAREGKIEPVIGRDAEIARMIQILSRKTKN   230
NTDB id 287 SP RS11210 WP 001109712.1           AGWTREDLKAL.RQRHRTVADKQNSMANMMGMPQTP.SGGLEDYTHDLTEQARSGKLEPVIGRDKEISRMIQILSRKTKN   228
NTDB id 290 KZH43 RS10025 WP 001109677.1        AGWTREDLKAL.RQRHRTVADKQNSMANMMGMPQTP.SGGLEDYTHDLTEQARSGKLEPVIGRDKEISRMIQILSRKTKN   228
NTDB id 289 SPD RS10700 WP 001109677.1          AGWTREDLKAL.RQRHRTVADKQNSMANMMGMPQTP.SGGLEDYTHDLTEQARSGKLEPVIGRDKEISRMIQILSRKTKN   228
consensus                                       *!**********    * *    ** *    ****     **  !*****!!!**!*******!*!!!*  !!*!****!!!*!!!
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NTDB id 377 SMU RS09275 WP 002262344.1          NPVLVGDAGVGKTALAYGLAQRIVDSAVPFELADMKVLELDMMSVVAGTRFRGDFEERMNQIIADIEADGHIVLFIDELH   312
NTDB id 297 STER RS00545 WP 011680614.1         NPVLVGEAGVGKTALALGLAQRIASGEVPFELADMRILELDMMSVVAGTRFRGDFEERMNQIIDEIEADGKIILFIDELH   315
NTDB id 329 STU RS10020 WP 011225298.1          NPVLVGEAGVGKTALALGLAQRIASGEVPFELADMRILELDMMSVVAGTRFRGDFEERMNQIIDEIEADGKIILFIDELH   315
NTDB id 1129568 GPW68 RS10060 WP 074389073.1    NPVLVGDAGVGKTALALGLAQRVAAGDVPVSLAKMRVLELDLMNVIAGTRFRGDFEERMNNIINDIEEDGQVILFIDELH   310
NTDB id 287 SP RS11210 WP 001109712.1           NPVLVGDAGVGKTALALGLAQRIASGDVPAEMAKMRVLELDLMNVVAGTRFRGDFEERMNNIIKDIEEDGQVILFIDELH   308
NTDB id 290 KZH43 RS10025 WP 001109677.1        NPVLVGDAGVGKTALALGLAQRIASGDVPAEMAKMRVLELDLMNVVAGTRFRGDFEERMNNIIKDIEEDGQVILFIDELH   308
NTDB id 289 SPD RS10700 WP 001109677.1          NPVLVGDAGVGKTALALGLAQRIASGDVPAEMAKMRVLELDLMNVVAGTRFRGDFEERMNNIIKDIEEDGQVILFIDELH   308
consensus                                       !!!!*!**!!!!*!***!!!!******!!  ***  *****!****!*!!!**!!*!!*!*****  ***  **!****!!!!!!
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NTDB id 85 BSU 00860 NP 387967.1                    TLIGAGG.AEGAIDASNILKPSLARGELQCIGATTLDEYRKYIEKDAALERRFQPIQVDQPSVDESIQILQGLRDRYEAH 361
NTDB id 610 V4T04 RS10165 WP 012897346.1            TIIGAGGGMDSVNDAANILKPALARGDFQMVGATTYHEYQKYIEKDEALERRLARINVDEPSPDEAIAILQGLREKFEDY 375
NTDB id 377 SMU RS09275 WP 002262344.1              TIMGSGSGIDSTLDAANILKPALARGSLRTIGATTQEEYQKHIEKDAALSRRFAKVTIEEPSEEEAYQILLGLKKSYETY 392
NTDB id 297 STER RS00545 WP 011680614.1             TIIGSGSGIDSTLDAANILKPALARGTLHMVGATTQAEYQKHIEKDAALSRRFAKITIEEPSVSEAIDILNGLRSSYEDY 395
NTDB id 329 STU RS10020 WP 011225298.1              TIIGSGSGIDSTLDAANILKPALARGTLHMVGATTQAEYQKHIEKDAALSRRFAKITIEEPSVSEAIDILNGLRSSYEDY 395
NTDB id 1129568 GPW68 RS10060 WP 074389073.1        TIMGSGSGIDSTLDAANILKPALARGTLRTVGATTQTEYQKHIEKDAALVRRFAKVTIEEPTVEDSIAILTGLKGTFEKY 390
NTDB id 287 SP RS11210 WP 001109712.1               TIMGSGSGIDSTLDAANILKPALARGTLRTVGATTQEEYQKHIEKDAALSRRFAKVTIEEPSVADSMTILQGLKATYEKH 388
NTDB id 290 KZH43 RS10025 WP 001109677.1            TIMGSGSGIDSTLDAANILKPALARGTLRTVGATTQEEYQKHIEKDAALSRRFAKVTIEEPSVADSMTILQGLKATYEKH 388
NTDB id 289 SPD RS10700 WP 001109677.1              TIMGSGSGIDSTLDAANILKPALARGTLRTVGATTQEEYQKHIEKDAALSRRFAKVTIEEPSVADSMTILQGLKATYEKH 388
consensus                                           !**!*!*******!!*!!!!!*!!!!*****!!!!**!!*!*!!!!*!!*!!**********!** ***  !!*!!* **!  *
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NTDB id 85 BSU 00860 NP 387967.1                    HRVSITDDAIEAAVKLSDRYISDRFLPDKAIDLIDEAGSKVRLRSFTTPPNLKELEQKLDEVRKEKDAAVQSQEFEKAAS 441
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NTDB id 377 SMU RS09275 WP 002262344.1              HHVISDAAVMAAVKGAHRYLSGKNLPDSAIDLLDEASATVQGLVKKK..APAYLT........DLDHALITNDYQLAKR 462
NTDB id 297 STER RS00545 WP 011680614.1             HRVTITDAAVETAVKAAHRYLTSKNLPDSAIDLLDEASATVQVRIKKE..DKREIT........PLDEALISGDIGAAVK 465
NTDB id 329 STU RS10020 WP 011225298.1              HRVTITDAAVETAVKAAHRYLTSKNLPDSAIDLLDEASATVQVRIKKE..AKREIT........PLDEALISGDIGAAVK 465
NTDB id 1129568 GPW68 RS10060 WP 074389073.1        HRVRIGQAAVETAVTYAKRYLTSKKLPDSAIDLLDEASATVQNRVKGQ.AEETGLT........SIDKALMDKKYKTVSK 461
NTDB id 287 SP RS11210 WP 001109712.1               HRVQITDEAVETAVKMAHRYLTSRHLPDSAIDLLDEAAATVQNKAKHVKADDSDLS........PADKALMDGKWKQAAQ 460
NTDB id 290 KZH43 RS10025 WP 001109677.1            HRVQITDEAVETAVKMAHRYLTSRHLPDSAIDLLDEAAATVQNKAKHVKADDSDLS........PADKALMDGKWKQAAQ 460
NTDB id 289 SPD RS10700 WP 001109677.1              HRVQITDEAVETAVKMAHRYLTSRHLPDSAIDLLDEAAATVQNKAKHVKADDSDLS........PADKALMDGKWKQAAQ 460
consensus                                           !*!  ***  !***!!****!!**** !!!*!!!!*!!!***!* ***    *  ***        *** !** **** *
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NTDB id 610 V4T04 RS10165 WP 012897346.1            KEKAVEKIAD......KIYKFSVKEDKRQEVTDQAVVAVASTLTGVPITQMTKSESDRLINLEKELHKRVVGQEEAISAV 529
NTDB id 377 SMU RS09275 WP 002262344.1              LLKKEKKP..............LLKKRAEVKEEDILATLSKLSGIPVKKLTQADSKKYLNLERELHKRVIGQDDAVSSI 527
NTDB id 297 STER RS00545 WP 011680614.1             QYKANQKA..............KFPKPALVDADQIMQTLSRLSGIPVEKMTQTDSKRYLNLESELHKRVIGQDEAVSAI 530
NTDB id 329 STU RS10020 WP 011225298.1              QYKANQKA..............KFPKPALVDADQIMQTLSRLSGIPVEKMTQTDSKRYLNLESELHKRVIGQDEAVSAI 530
NTDB id 1129568 GPW68 RS10060 WP 074389073.1        LLIKTKEDA.............EASQNYDLEVTEEDVLETLSRLSGIPVAKLSQSDTKKYLNLEAELHKRVIGQEEAISAV 529
NTDB id 287 SP RS11210 WP 001109712.1               LIAKEEE...............VPVYKDLVTESDILTTLSRLSGIPVQKLTQTDAKKYLNLEAELHKRVIGQDQAVSSI 524
NTDB id 290 KZH43 RS10025 WP 001109677.1            LIAKEEE...............VPVYKDLVTESDILTTLSRLSGIPVQKLTQTDAKKYLNLEAELHKRVIGQDQAVSSI 524
NTDB id 289 SPD RS10700 WP 001109677.1              LIAKEEE...............VPVYKDLVTESDILTTLSRLSGIPVQKLTQTDAKKYLNLEAELHKRVIGQDQAVSSI 524
consensus                                           **  **  *                * *!******  **!***!*!* ************!*!  *!!*!!*!!**!****
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NTDB id 85 BSU 00860 NP 387967.1                    AKAVRRARAGLKDPKRPIGSFIFLGPTGVGKTELARALAESIFGDEESMIRIDMSEYMEKHSTSRLVGSPPGYVGYDEGG 600
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NTDB id 377 SMU RS09275 WP 002262344.1              SRAIRRNQSGIRVGKRPIGSFMFLGPTGVGKTELAKALAEVLFDDESALIRFDMSEYMEKFAASRLNGAPPGYVGYEEGG 607
NTDB id 297 STER RS00545 WP 011680614.1             SRAIRRNQSGIRTGKRPIGSFMFLGPTGVGKTELAKALAEVLFDDESALLRFDMSEYMEKFAASRLNGAPPGYVGYDEGG 610
NTDB id 329 STU RS10020 WP 011225298.1              SRAIRRNQSGIRTGKRPIGSFMFLGPTGVGKTELAKALAEVLFDDESALLRFDMSEYMEKFAASRLNGAPPGYVGYDEGG 610
NTDB id 1129568 GPW68 RS10060 WP 074389073.1        SRAIRRNQSGIRTGRRPIGSFMFLGPTGVGKTELAKALAEVLFDDESALIRFDMSEYMEKFAASRLNGAPPGYVGYEEGG 609
NTDB id 287 SP RS11210 WP 001109712.1               SRAIRRNQSGIRSHKRPIGSFMFLGPTGVGKTELAKALAEVLFDDESALIRFDMSEYMEKFAASRLNGAPPGYVGYEEGG 604
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NTDB id 289 SPD RS10700 WP 001109677.1              SRAIRRNQSGIRSHKRPIGSFMFLGPTGVGKTELAKALAEVLFDDESALIRFDMSEYMEKFAASRLNGAPPGYVGYEEGG 604
consensus                                           **!*!!***!*** *!!*!!!*!!!!!!!!!!!!!*!!!***!**!****!*!!!!*!!!***!!!*!*!!!!!!!*!!!
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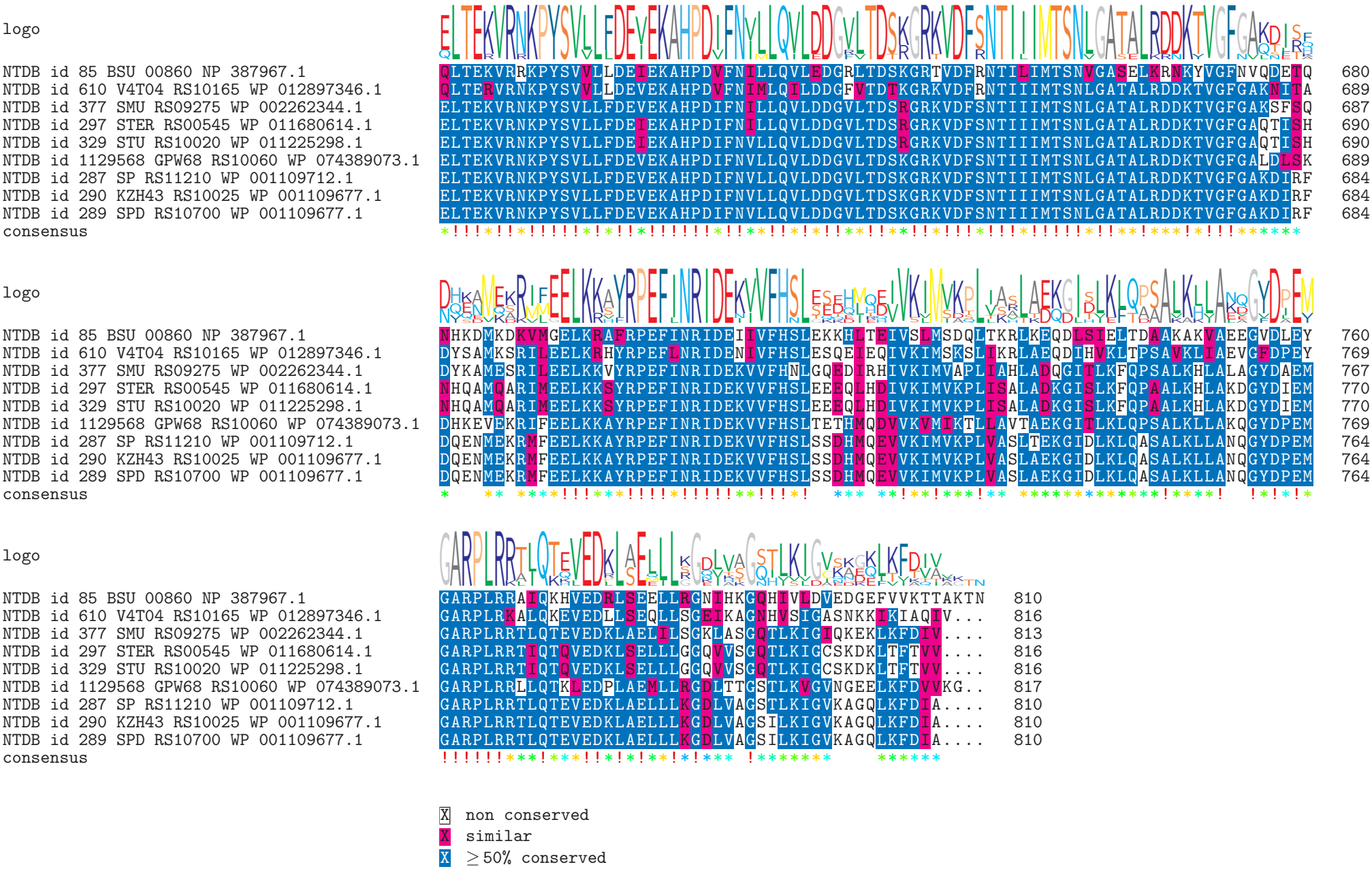
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NTDB id 329 STU RS10020 WP 011225298.1
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X similar
X ≥ 50% conserved