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logo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
NTDB id 600 KW2 RS01765 WP 011675413.1       MATKKK.....TNFDDITKKYGAERDKALADALALIEKDFGKGSLMRLGEA.ANQKVSVVSSGSLALDIALGAGGYPKGR    74
NTDB id 269 KZH43 RS08665 WP 001085462.1     .MAKKP.....KKLEEISKKFGAEREKALNDALKLIEKDFGKGSIMRLGER.AEQKVQVMSSGSLALDIALGSGGYPKGR    73
NTDB id 228 SPD RS09265 WP 001085462.1       .MAKKP.....KKLEEISKKFGAEREKALNDALKLIEKDFGKGSIMRLGER.AEQKVQVMSSGSLALDIALGSGGYPKGR    73
NTDB id 194 SPR RS08825 WP 001085462.1       .MAKKP.....KKLEEISKKFGAEREKALNDALKLIEKDFGKGSIMRLGER.AEQKVQVMSSGSLALDIALGSGGYPKGR    73
NTDB id 159 SP RS09750 WP 001085462.1        .MAKKP.....KKLEEISKKFGAEREKALNDALKLIEKDFGKGSIMRLGER.AEQKVQVMSSGSLALDIALGSGGYPKGR    73
NTDB id 527 SMSK321 RS11065 WP 001085454.1   .MAKKP.....KKLDEISKKFGAEREKALNDALKLIEKDFGKGSIMRLGER.AEQKVQVMSSGSLALDIALGSGGYPKGR    73
NTDB id 499 SM12261 RS08315 WP 078228268.1   .MAKKP.....KKLDEISKKFGAEREKALNDALKLIEKDFGKGSIMRLGER.AEQKVQVMSSGSLALDIALGSGGYPKGR    73
NTDB id 408 SMU RS09530 WP 002262392.1       .MAKRI.....KKTEEITKKFGDERKKALDDALKNIEKDFGKGAVMRLGER.AEQKVQVMSSGSLALDIALGAGGYPKGR    73
NTDB id 453 Spy49 1753c ACI62003.1           .MAKKL.....KKNEEITKKFGDERRKALDDALKNIEKDFGKGAVMRLGER.AEQKVQVMSSGSLALDIALGAGGYPKGR    73
NTDB id 115 BSU 16940 NP 389576.2            ......................MSDRQAALDMALKQIEKQFGKGSIMKLGEK.TDTRISTVPSGSLALDTALGIGGYPRGR    58
NTDB id 625 LCA RS02525 WP 011374196.1       ....................MAKDERQAALDAALKKIEKNFGKGSIMRMGEK.VDTQVSTVSSGSLALDEALGVGGYPRGR    60
NTDB id 1313 DR RS12030 WP 010888966.1       .......MSKDATKEISAPTDAKERSKAIETAMSQIEKAFGKGSIMKLGAE.SKLDVQVVSTGSLSLDLALGVGGIPRGR    72
NTDB id 1245 Cj1673c YP 002345041.1          ....................MDDNKRKSLDAALKSLDKTFGKGTILRLGDK.EVEQIDSIGTGSVGLDLALGIGGVPKGR    59
NTDB id 1214 NCTC11637 00359 SQJ03206.1      ...................MAIDEDKQKAISLAIKQIDKVFGKGALVRLGDK.QVEKIDAISTGSLGLDLALGIGGVPKGR    61
NTDB id 1211 C694 RS00795 WP 000963128.1     ...................MAIDEDKQKAISLAIKQIDKVFGKGALVRLGDK.QVEKIDSISTGSLGLDLALGIGGVPKGR    61
NTDB id 1334 RAOC RS04870 WP 004918236.1     ..........MAKT..ETTSPNDDKKKALAAVLEKLDKTYGKGTVMKLGDGTVDHNIEVIPSGSLGLDLALGVGGYPKGR    68
NTDB id 1130 NGFG RS03960 WP 003688695.1     ......................MSDDKSKALAAALAQIEKSFGKGAIMKMDGSQQEENLEVISTGSLGLDLALGVGGLPRGR    60
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NTDB id 1123 OK783 RS03845 WP 003688695.1    ......................MSDDKSKALAAALAQIEKSFGKGAIMKMDGSQQEENLEVISTGSLGLDLALGVGGLPRGR    60
NTDB id 205680 BO992 RS15285 WP 011408884.1 ......................MDENKKRALAAALSQIEKQFGKGSVMRMGDR.VIEAVEVIPTGSLMLDIALGTGGLPKGR    59
NTDB id 1427 RS RS02760 WP 011000510.1       .........MEDGK..KAASMSAEKQKALAAALAQIEKQFGKGSIMKMGDA.EVEPVQVVSTGSLGLDVALGVGGLPRGR    68
NTDB id 1389 A4U84 RS07560 WP 021112712.1    .MAENKKSSKNNTV..VKQVEPEQKKQALEAALAQIEKQFGKGSIMKLGQT.EQLDIESVSTGSLGLDLALGIGGLPMGR    76
NTDB id 1165 A1552VC RS01565 WP 000344154.1 ......................MDENKQKALAAALGQIEKQFGKGSIMRLGDN.RAMDVETISTGSLSLDIALGAGGLPMGR    59
NTDB id 1142 GTF74 RS11550 WP 000344154.1    ......................MDENKQKALAAALGQIEKQFGKGSIMRLGDN.RAMDVETISTGSLSLDIALGAGGLPMGR    59
NTDB id 1022 ACIAD RS06390 WP 004925639.1    ......................MDDNKSKALQAALSQIEKQFGKNTVMRLGDN.TVQAVEAVSTGSLTLDIALGIGGLPKGR    59
NTDB id 1074 ABD1 RS10195 WP 000344167.1     ......................MDENKSKALQAALSQIEKQFGKNTVMRLGDN.TVQAVEAVSTGSLTLDIALGIGGLPKGR    59
NTDB id 1205 PSJM300 05545 AFN77183.1        ......................MDENKKRALAAALGQIEKQFGKGAVMRMGDH.DRQAIPSISTGSLGLDIALGIGGLPKGR    59
consensus                                                           *** ***  ** ***! *!!********      *  ***!!**!!*!!! !! !*!!
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logo
NTDB id 600 KW2 RS01765 WP 011675413.1      IVEIYGPESSGKTTVALHAVAAVQKEGGIAAFIDAENALDPEYAKALGVNIDELLLSQPDYGEQGLQIAEKLITSGAVDL   154
NTDB id 269 KZH43 RS08665 WP 001085462.1    IIEIYGPESSGKTTVALHAVAQAQKEGGIAAFIDAEHALDPAYAAALGVNIDELLLSQPDSGEQGLEIAGKLIDSGAVDL   153
NTDB id 228 SPD RS09265 WP 001085462.1      IIEIYGPESSGKTTVALHAVAQAQKEGGIAAFIDAEHALDPAYAAALGVNIDELLLSQPDSGEQGLEIAGKLIDSGAVDL   153
NTDB id 194 SPR RS08825 WP 001085462.1      IIEIYGPESSGKTTVALHAVAQAQKEGGIAAFIDAEHALDPAYAAALGVNIDELLLSQPDSGEQGLEIAGKLIDSGAVDL   153
NTDB id 159 SP RS09750 WP 001085462.1       IIEIYGPESSGKTTVALHAVAQAQKEGGIAAFIDAEHALDPAYAAALGVNIDELLLSQPDSGEQGLEIAGKLIDSGAVDL   153
NTDB id 527 SMSK321 RS11065 WP 001085454.1  IIEIYGPESSGKTTVALHAVAQAQKEGGIAAFIDAEHALDPAYAAALGVNIDELLLSQPDSGEQGLEIAGKLIDSGAVDL   153
NTDB id 499 SM12261 RS08315 WP 078228268.1  IIEIYGPESSGKTTVALHAVAQAQKEGGIAAFIDAEHALDPAYAAALGVNIDELLLSQPDSGEQGLEIAGKLIDSGAVDL   153
NTDB id 408 SMU RS09530 WP 002262392.1      IVEIYGPESSGKTTVALHAVAQAQKDGGIAAFIDAEHALDPAYAAALGVNIDELLLSQPDSGEQGLEIAGKLIDSGAVDL   153
NTDB id 453 Spy49 1753c ACI62003.1          IIEIYGPESSGKTTVALHAVAQAQKEGGIAAFIDAEHALDPAYAAALGVNIDELLLAQPDSGEQGLEIAGKLIDSGAVDL   153
NTDB id 115 BSU 16940 NP 389576.2           IIEVYGPESSGKTTVALHAIAEVQQQGGQAAFIDAEHALDPVYAQKLGVNIEELLLSQPDTGEQALEIAEALVRSGAVDI   138
NTDB id 625 LCA RS02525 WP 011374196.1      IVEIYGPESSGKTTVALHAVAEVQKQGGTAAYIDAENAMDPKYATALGVNIDDLLLSQPDTGEQGLEIADALVSSGAVDI   140
NTDB id 1313 DR RS12030 WP 010888966.1      ITEIYGPESGGKTTLALAIVAQAQKAGGTCAFIDAEHALDPVYARALGVNTDELLVSQPDNGEQALEIMELLVRSGAIDV   152
NTDB id 1245 Cj1673c YP 002345041.1         IIEIYGPESSGKTTLTLHIIAECQKAGGVCAFIDAEHALDVKYAKNLGVNTDDLYVSQPDFGEQALEIVETIARSGAVDL   139
NTDB id 1214 NCTC11637 00359 SQJ03206.1     IIEIYGPESSGKTTLSLHIIAECQKNGGVCAFIDAEHALDVHYAKRLGVDTENLLVSQPDTGEQALEILETITRSGGIDL   141
NTDB id 1211 C694 RS00795 WP 000963128.1    IIEIYGPESSGKTTLSLHIIAECQKNGGVCAFIDAEHALDVHYAKRLGVDTENLLVSQPDTGEQALEILETITRSGGIDL   141
NTDB id 1334 RAOC RS04870 WP 004918236.1    IVEIYGPESSGKTTLTLHAIAEAQKVGGTAAFIDAEHAFDMHYAEKLGINLEELIVSQPDNGEQALEIADSLIRSGGVDI   148
NTDB id 1130 NGFG RS03960 WP 003688695.1    IVEIFGPESSGKTTLCLEAVAQCQKNGGVCAFVDAEHAFDPVYARKLGVKVEELYLSQPDTGEQALEICDTLVRSGGIDM   140
NTDB id 1124 NGFG RS03960 WP 003688695.1    IVEIFGPESSGKTTLCLEAVAQCQKNGGVCAFVDAEHAFDPVYARKLGVKVEELYLSQPDTGEQALEICDTLVRSGGIDM   140
NTDB id 1123 OK783 RS03845 WP 003688695.1   IVEIFGPESSGKTTLCLEAVAQCQKNGGVCAFVDAEHAFDPVYARKLGVKVEELYLSQPDTGEQALEICDTLVRSGGIDM   140
NTDB id 205680 BO992 RS15285 WP 011408884.1 VVEIYGPESSGKTTLTLQAIAQCQKLGGTAAFIDAEHALDPVYAAKLGVNVDDLLLSQPDTGEQALEIADMLVRSSSVDI   139
NTDB id 1427 RS RS02760 WP 011000510.1      VVEIYGPESSGKTTLTLQVVAEMQKLGGTCAFIDAEHALDVTYADKLGVKVPDLLISQPDTGEQALEIADALVRSGSVDL   148
NTDB id 1389 A4U84 RS07560 WP 021112712.1   IVEIYGPESSGKTTLTLSLIAQAQKGNKTCAFIDAEHALDPVYARNLGVNTDELLISQPDNGEQALEICDALVRSGAVDV   156
NTDB id 1165 A1552VC RS01565 WP 000344154.1 IVEIFGPESSGKTTLTLELIAAAQREGKTCAFIDAEHALDPVYAKKLGVNIDELLVSQPDTGEQALEICDALARSGAVDV   139
NTDB id 1142 GTF74 RS11550 WP 000344154.1   IVEIFGPESSGKTTLTLELIAAAQREGKTCAFIDAEHALDPVYAKKLGVNIDELLVSQPDTGEQALEICDALARSGAVDV   139
NTDB id 1022 ACIAD RS06390 WP 004925639.1   IVEIYGPESSGKTTMTLQAIAQCQKAGGTCAFIDAEHALDPQYARKLGVDIDNLLVSQPDHGEQALEIADMLVRSGAIDL   139
NTDB id 1074 ABD1 RS10195 WP 000344167.1    IIEIYGPESSGKTTMTLQAIAQCQKSGGTCAFIDAEHALDPQYARKLGVDIDNLLVSQPDNGEQALEIADMLVRSGAIDL   139
NTDB id 1205 PSJM300 05545 AFN77183.1       IVEIYGPESSGKTTLTLSVIAAAQRMGSTCAFVDAEHALDPDYAGKLGVNVDDLLVSQPDTGEQALEITDMLVRSNAVDV   139
consensus                                   **!**!!!!*!!!!* ! **!  !* **  !*!!!*!*!* !!  !!*****!***!!!*!!!*!*! * ***!***!*
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logo
NTDB id 600 KW2 RS01765 WP 011675413.1      VVIDSVAALVPKAEIDGEIGDSSVGLQARMMSQAMRKLAGHINKTKTTAIFINQLREKVGVMFG..SPETTPGGRALKFY   232
NTDB id 269 KZH43 RS08665 WP 001085462.1    VVVDSVAALVPRAEIDGDIGDSHVGLQARMMSQAMRKLGASINKTKTIAIFINQLREKVGVMFG..NPETTPGGRALKFY   231
NTDB id 228 SPD RS09265 WP 001085462.1      VVVDSVAALVPRAEIDGDIGDSHVGLQARMMSQAMRKLGASINKTKTIAIFINQLREKVGVMFG..NPETTPGGRALKFY   231
NTDB id 194 SPR RS08825 WP 001085462.1      VVVDSVAALVPRAEIDGDIGDSHVGLQARMMSQAMRKLGASINKTKTIAIFINQLREKVGVMFG..NPETTPGGRALKFY   231
NTDB id 159 SP RS09750 WP 001085462.1       VVVDSVAALVPRAEIDGDIGDSHVGLQARMMSQAMRKLGASINKTKTIAIFINQLREKVGVMFG..NPETTPGGRALKFY   231
NTDB id 527 SMSK321 RS11065 WP 001085454.1  VVVDSVAALVPRAEIDGDIGDSHVGLQARMMSQAMRKLGASINKTKTIAIFINQLREKVGVMFG..NPETTPGGRALKFY   231
NTDB id 499 SM12261 RS08315 WP 078228268.1  VVVDSVAALVPRAEIDGDIGDSHVGLQARMMSQAMRKLGASINKTKTIAIFINQLREKVGVMFG..NPETTPGGRALKFY   231
NTDB id 408 SMU RS09530 WP 002262392.1      VVVDSVAALVPRAEIDGDIGDSHVGLQARMMSQAMRKLSASINKTKTIAIFINQLREKVGIMFG..NPETTPGGRALKFY   231
NTDB id 453 Spy49 1753c ACI62003.1          VVVDSVAALVPRAEIDGDIGDSHVGLQARMMSQAMRKLSASINKTKTIAIFINQLREKVGVMFG..NPETTPGGRALKFY   231
NTDB id 115 BSU 16940 NP 389576.2           VVVDSVAALVPKAEIEGDMGDSHVGLQARLMSQALRKLSGAINKSKTIAIFINQIREKVGVMFG..NPETTPGGRALKFY   216
NTDB id 625 LCA RS02525 WP 011374196.1      LVVDSVAALVPRAEIEGEMGDAHVGLQARLMSQALRKLSGTINKTKTIALFINQIREKVGVMFG..NPEVTPGGRALKFY   218
NTDB id 1313 DR RS12030 WP 010888966.1      VVVDSVAALTPRAEIEGDMGDSLPGLQARLMSQALRKLTAILSKTGTAAIFINQVREKIGVMYG..NPETTTGGRALKFY   230
NTDB id 1245 Cj1673c YP 002345041.1         IVVDSVAALTPKAEIEGDMGDQHVGLQARLMSQALRKLTGIVHKMNTTVIFINQIRMKIGAMG.YGTPETTTGGNALKFY   218
NTDB id 1214 NCTC11637 00359 SQJ03206.1     VVVDSVAALTPKAEIDGDMGDQHVGLQARLMSHALRKITGVLHKMNTTLIFINQIRMKIGMMG.YGSPETTTGGNALKFY   220
NTDB id 1211 C694 RS00795 WP 000963128.1    VVVDSVAALTPKAEIDGDMGDQHVGLQARLMSHALRKITGVLHKMNTTLIFINQIRMKIGMMG.YGSPETTTGGNALKFY   220
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NTDB id 1130 NGFG RS03960 WP 003688695.1    VVVDSVAALVPKAEIEGDMGDSHVGLQARLMSQALRKLTGHIKKTNTLVVFINQIRMKIGVMFG..SPETTTGGNALKFY   218
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NTDB id 1123 OK783 RS03845 WP 003688695.1   VVVDSVAALVPKAEIEGDMGDSHVGLQARLMSQALRKLTGHIKKTNTLVVFINQIRMKIGVMFG..SPETTTGGNALKFY   218
NTDB id 205680 BO992 RS15285 WP 011408884.1 VVIDSVAALTPKAEIEGEMGDQLPGLQARLMSQALRKLTGNIKRSNTLVVFINQLRMKIGVMMPGQSPEVTTGGNALKFY   219
NTDB id 1427 RS RS02760 WP 011000510.1      IVIDSVAALVPKAEIEGEMGDALPGLQARLMSQALRKLTGTIKRTNCLVIFINQIRMKIGVMFG..SPETTTGGNALKFY   226
NTDB id 1389 A4U84 RS07560 WP 021112712.1   IIVDSVAALTPKAEIEGDMGDSHMGLQARLMSQALRKLTANIKNTNCLVVFINQIRMKIGVMFG..NPETTTGGNALKFY   234
NTDB id 1165 A1552VC RS01565 WP 000344154.1 IVVDSVAALTPKAEIEGEMGDSHMGLQARMLSQAMRKLTGNLKQSNCMCIFINQIRMKIGVMFG..NPETTTGGNALKFY   217
NTDB id 1142 GTF74 RS11550 WP 000344154.1   IVVDSVAALTPKAEIEGEMGDSHMGLQARMLSQAMRKLTGNLKQSNCMCIFINQIRMKIGVMFG..NPETTTGGNALKFY   217
NTDB id 1022 ACIAD RS06390 WP 004925639.1   IVVDSVAALTPKAEIEGEMGDSHMGLQARLMSQALRKITGNAKRSNCMVIFINQIRMKIGVMFG..SPETTTGGNALKFY   217
NTDB id 1074 ABD1 RS10195 WP 000344167.1    IVVDSVAALTPKAEIEGEMGDSHMGLQARLMSQALRKITGNAKRSNCMVIFINQIRMKIGVMFG..SPETTTGGNALKFY   217
NTDB id 1205 PSJM300 05545 AFN77183.1       IIVDSVAALVPKAEIEGEMGDAHVGLQARLMSQALRKITGNIKNANCLVIFINQIRMKIGVMFG..SPETTTGGNALKFY   217
consensus                                   ***!!!!!! !*!!!*!**!!***!!*!!**!*!*!!*** * ** ** *!!!!*! !*!*!**   !!*! !! !!!!!
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logo
NTDB id 600 KW2 RS01765 WP 011675413.1        ASVRLDVRGSTKIEEGS.GDNKTQIGKITKIKVVKNKVAPPFKVALVDIMFGEGISSTGELLNIAVEEGIIKKSGAWFAY   311
NTDB id 269 KZH43 RS08665 WP 001085462.1      ASVRLDVRGNTQIKGTG.DQKETNVGKETKIKVVKNKVAPPFKEAVVEIMYGEGISKTGELLKIASDLDIIKKAGAWYSY   310
NTDB id 228 SPD RS09265 WP 001085462.1        ASVRLDVRGNTQIKGTG.DQKETNVGKETKIKVVKNKVAPPFKEAVVEIMYGEGISKTGELLKIASDLDIIKKAGAWYSY   310
NTDB id 194 SPR RS08825 WP 001085462.1        ASVRLDVRGNTQIKGTG.DQKETNVGKETKIKVVKNKVAPPFKEAVVEIMYGEGISKTGELLKIASDLDIIKKAGAWYSY   310
NTDB id 159 SP RS09750 WP 001085462.1         ASVRLDVRGNTQIKGTG.DQKETNVGKETKIKVVKNKVAPPFKEAVVEIMYGEGISKTGELLKIASDLDIIKKAGAWYSY   310
NTDB id 527 SMSK321 RS11065 WP 001085454.1    ASVRLDVRGSTQIKGTG.DQKDTNVGKETKIKVVKNKVAPPFKEAFVEIMYGEGISKTGELLKIASDLDIIKKAGAWYSY   310
NTDB id 499 SM12261 RS08315 WP 078228268.1    ASVRLDVRGSTQIKGTG.DQKDTNVGKETKIKVVKNKVAPPFKEAFVEIMYGEGISKTGELLKIASDLDIIKKAGAWYSY   310
NTDB id 408 SMU RS09530 WP 002262392.1        SSVRLDVRGNTQIKGTG.EQKDSNIGKETKIKVVKNKVAPPFKEAFVEIIYGEGISRTGELVKIASDLGIIQKAGAWYSY   310
NTDB id 453 Spy49 1753c ACI62003.1            ASVRLDVRGTTQIKGTG.DQKDSSIGKETKIKVVKNKVAPPFKVAEVEIMYGEGISRTGELVKIASDLDIIQKAGAWFSY   310
NTDB id 115 BSU 16940 NP 389576.2             SSVRLEVRRAEQLKQGN.....DVMGNKTKIKVVKNKVAPPFRTAEVDIMYGEGISKEGEIIDLGTELDIVQKSGSWYSY   291
NTDB id 625 LCA RS02525 WP 011374196.1        STVRLEVRRAETIKNGT.....DMIGNRARIKVVKNKVAPPFKVAEVDIMYGQGISRTGELVDMAVEKDIINKSGSWYSY   293
NTDB id 1313 DR RS12030 WP 010888966.1        ASVRLDVRKIGQ....PTKVGNDAVANTVKIKTVKNKVAAPFKEVELALVYGKGFDQLSDLVGLAADMDIIKKAGSFYSY   306
NTDB id 1245 Cj1673c YP 002345041.1           ASVRLDVRKVAT....L.KQNEEPIGNRVKVKVVKNKVAPPFRQAEFDVMFGEGLSREGELIDYGVKLDIVDKSGAWFSY   293
NTDB id 1214 NCTC11637 00359 SQJ03206.1       ASVRIDIRRIAA....L.KQNEQHIGNRAKAKVVKNKVAPPFREAEFDIMFGEGISKEGEIIDYGVKLDIVDKSGAWLSY   295
NTDB id 1211 C694 RS00795 WP 000963128.1      ASVRIDIRRIAS....L.KQNEQHIGNRAKAKVVKNKVAPPFREAEFDIMFGEGISKEGEIIDYGVKLDIVDKSGAWLSY   295
NTDB id 1334 RAOC RS04870 WP 004918236.1      ASVRIDIRRSLSDTGKIKDKSGEVIGNRTKVKVVKNKVAPPFKSAEFDIMYGEGVSKVGEILDVATDLDIIQKSGSWFSY   306
NTDB id 1130 NGFG RS03960 WP 003688695.1      SSVRLDIRRTGS....I.KKGEEVLGNETRVKVIKNKVAPPFRQAEFDILYGEGISWEGELIDIGVKNDIINKSGAWYSY   293
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NTDB id 1123 OK783 RS03845 WP 003688695.1     SSVRLDIRRTGS....I.KKGEEVLGNETRVKVIKNKVAPPFRQAEFDILYGEGISWEGELIDIGVKNDIINKSGAWYSY   293
NTDB id 205680 BO992 RS15285 WP 011408884.1   ASVRLDIRRIGA....I.KKGDEIIGNQTKIKVVKNKLAPPFKQVVTEILYGEGISREGELIDMGVEAKLVEKAGAWYSY   294
NTDB id 1427 RS RS02760 WP 011000510.1        ASVRLDIRRIGS....I.KKGDEVVGNETKVKVVKNKVAPPFREAIFDILYGAGVSREGEIIDLGVEAKVVEKSGAWYSY   301
NTDB id 1389 A4U84 RS07560 WP 021112712.1     ASVRLDIRRCGV....V.KDGDEIIGSETKVKVVKNKVAPPFREVQFDIMYGEGISRMNELLILAEANGFIKKSGAWFSY   309
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NTDB id 1022 ACIAD RS06390 WP 004925639.1     ASVRLDIRRIGQ....V.KEGDEIIGSETKVKVVKNKMAPPFREAIFQILYGKGVNQLGELVDLAVQQNIVQKAGAWYSY   292
NTDB id 1074 ABD1 RS10195 WP 000344167.1      ASVRLDIRRIGQ....V.KEGDEIVGSETKVKVVKNKMAPPFKEAIFQILYGKGTNQLGELVDLAVQQDIVQKAGAWYSY   292
NTDB id 1205 PSJM300 05545 AFN77183.1         ASVRLDIRRTGA....V.KEGDEVVGSETRVKVVKNKVAPPFRQAEFQILYGKGIYRNGEIIDLGVQQGLVEKSGAWYAY   292
consensus                                     **!!***!*             *  ** ****!**!!!*!*!!* *  ****!*!*** **** **   *** ! !****!
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logo
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NTDB id 269 KZH43 RS08665 WP 001085462.1     KDEKIGQGSENAKKYLAEHPEIFDEIDKQVRSKFGLIDGEEVSEQDTENKKDE....PKKEEA..VNEEVPLDLGDELEI  384
NTDB id 228 SPD RS09265 WP 001085462.1       KDEKIGQGSENAKKYLAEHPEIFDEIDKQVRSKFGLIDGEEVSEQDTENKKDE....PKKEEA..VNEEVPLDLGDELEI  384
NTDB id 194 SPR RS08825 WP 001085462.1       KDEKIGQGSENAKKYLAEHPEIFDEIDKQVRSKFGLIDGEEVSEQDTENKKDE....PKKEEA..VNEEVPLDLGDELEI  384
NTDB id 159 SP RS09750 WP 001085462.1        KDEKIGQGSENAKKYLAEHPEIFDEIDKQVRSKFGLIDGEEVSEQDTENKKDE....PKKEEA..VNEEVPLDLGDELEI  384
NTDB id 527 SMSK321 RS11065 WP 001085454.1   KDEKIGQGSENAKKYLADNPEVFAEIDHQVRVQFGLIDGEEAAE....SKKDE....VAQVDS..VNEEVTLDLGDELEI  380
NTDB id 499 SM12261 RS08315 WP 078228268.1   KDEKIGQGSENAKKYLADNPEIFDEIDHQVRVQFGLIDGEEIAE....SKKDE....AAQVDS..VNEEVTLDLGDELEI  380
NTDB id 408 SMU RS09530 WP 002262392.1       NGEKIGQGSENAKKFLADNPEIFDDIDHKVRVQYGLIEEDNTEEKQSSKEK.......ETDEK..ADKNLVLELDDTIEL  381
NTDB id 453 Spy49 1753c ACI62003.1           NGEKIGQGSENAKRYLADHPQLFDEIDRKVRVKFGLLEESEEESAMAVASE.......E.......TDDLALDLDNGIEI  376
NTDB id 115 BSU 16940 NP 389576.2            EEERLGQGRENAKQFLKENKDIMLMIQEQIREHYGLDNNGVVQQQAEETQEEL.EFE.E.....................  348
NTDB id 625 LCA RS02525 WP 011374196.1       GSERIGQGRENAKNYLADHEDVEDEVRLKVRAAYGISDVPEEDLPTTEDE.QI.NILPDDST.....EE...........  355
NTDB id 1313 DR RS12030 WP 010888966.1       GDERIGQGKEKTIAYIAERPEMEQEIRDRVMAAIRAGNAGEAPALAPAPAAPEAAEA.......................  363
NTDB id 1245 Cj1673c YP 002345041.1          KDKKLGQGRENSKAFLKENPEIADEITKAIQNSMGIEGMI.....SGSEDDEGEE.........................  343
NTDB id 1214 NCTC11637 00359 SQJ03206.1      QDKKLGQGRENAKALLKEDKALADEITLKIKESIGSNEEI.....MPLPDEPLEEME.......................  347
NTDB id 1211 C694 RS00795 WP 000963128.1     QDKKLGQGRENAKALLKEDKALADEITLKIKESIGSNEEI.....MPLPDEPLEEME.......................  347
NTDB id 1334 RAOC RS04870 WP 004918236.1     QDTKLGQGRDTVKELIKDNPELAEELEAKIREKLQAK.........................................  343
NTDB id 1130 NGFG RS03960 WP 003688695.1     NGAKIGQGKDNVRVWLKENPEISDEIDAKIRALNGVEMHI.....TEGTQDETDGERP........EE............  348
NTDB id 1124 NGFG RS03960 WP 003688695.1     NGAKIGQGKDNVRVWLKENPEISDEIDAKIRALNGVEMHI.....TEGTQDETDGERP........EE............  348
NTDB id 1123 OK783 RS03845 WP 003688695.1    NGAKIGQGKDNVRVWLKENPEISDEIDAKIRALNGVEMHI.....TEGTQDETDGERP........EE............  348
NTDB id 205680 BO992 RS15285 WP 011408884.1 GDERIGQGKDNARTYLRDNPQVAVRLEAELREKFQPAEAP.....REAGDDEEKE.........................  344
NTDB id 1427 RS RS02760 WP 011000510.1       NGERIGQGRDNCREFLRENAELAREIENKVREHLGVTPMG.....AVTLAEEVEED........................  352
NTDB id 1389 A4U84 RS07560 WP 021112712.1    DGTKIGQGKNNAVKWLKENPEIADKLEQEIRNTLASNPNS.....VLKATASDSNDESDVE..EFSEEEL..........  372
NTDB id 1165 A1552VC RS01565 WP 000344154.1 NGDKIGQGKANACKYLKENPEIAKTLDKKLREMLLNPENM.....QLIAETSSAADDVEFG..AVPEEF...........  354
NTDB id 1142 GTF74 RS11550 WP 000344154.1    NGDKIGQGKANACKYLKENPEIAKTLDKKLREMLLNPENM.....QLIAETSSAADDVEFG..AVPEEF...........  354
NTDB id 1022 ACIAD RS06390 WP 004925639.1    QGNKIGQGKNNVIRYLEENPQISTEIEAVIREQLLTKASD.....QTAA.HDETEEEPDLL....ES.............  349
NTDB id 1074 ABD1 RS10195 WP 000344167.1     QGNKIGQGKNNVIRYFEENNQIAEEIERNIREQLLTTGTN.....GAVQ.I.EDEEEPDLL....LES............  349
NTDB id 1205 PSJM300 05545 AFN77183.1        KGSKIGQGKANAAKYLEENPEIGQEIEQQIRAKLLVTSAN.....TKATPVAEDLADADI....................  347
consensus                                       **!!!***** ** ***** ****  **    **
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logo
                                                EIEE
NTDB id 600 KW2 RS01765 WP 011675413.1          ....   387
NTDB id 269 KZH43 RS08665 WP 001085462.1        EIEE   388
NTDB id 228 SPD RS09265 WP 001085462.1          EIEE   388
NTDB id 194 SPR RS08825 WP 001085462.1          EIEE   388
NTDB id 159 SP RS09750 WP 001085462.1           EIEE   388
NTDB id 527 SMSK321 RS11065 WP 001085454.1      EIEE   384
NTDB id 499 SM12261 RS08315 WP 078228268.1      EIEE   384
NTDB id 408 SMU RS09530 WP 002262392.1          ED..   383
NTDB id 453 Spy49 1753c ACI62003.1              ED..   378
NTDB id 115 BSU 16940 NP 389576.2               ....   348
NTDB id 625 LCA RS02525 WP 011374196.1          ....   355
NTDB id 1313 DR RS12030 WP 010888966.1          ....   363
NTDB id 1245 Cj1673c YP 002345041.1             ....   343
NTDB id 1214 NCTC11637 00359 SQJ03206.1         ....   347
NTDB id 1211 C694 RS00795 WP 000963128.1        ....   347
NTDB id 1334 RA0C RS04870 WP 004918236.1        ....   343
NTDB id 1130 NGFG RS03960 WP 003688695.1        ....   348
NTDB id 1124 NGFG RS03960 WP 003688695.1        ....   348
NTDB id 1123 OK783 RS03845 WP 003688695.1       ....   348
NTDB id 205680 BO992 RS15285 WP 011408884.1     ....   344
NTDB id 1427 RS RS02760 WP 011000510.1          ....   352
NTDB id 1389 A4U84 RS07560 WP 021112712.1       ....   372
NTDB id 1165 A1552VC RS01565 WP 000344154.1     ....   354
NTDB id 1142 GTF74 RS11550 WP 000344154.1       ....   354
NTDB id 1022 ACIAD RS06390 WP 004925639.1       ....   349
NTDB id 1074 ABD1 RS10195 WP 000344167.1        ....   349
NTDB id 1205 PSJM300 05545 AFN77183.1           ....   347
consensus
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X non conserved
X similar
X $\geq$50% conserved