```
logo
NTDB id 1284 ACE17W RS12370 WP 010946666.1      MRKIIAILIL..ISASLSMAYSKDNSLISVKVLPLPENRVRIDFQFSKPLKQLPASFITQKPPRLVLDFISTDMQIPSDQ   78
NTDB id 1257 GC085 RS04855 WP 163621000.1       MRKIIAILIL..ISASLSLAYSKDNSLISVKVLPLPENRVRIDFQFSKPLKQLPASFITQKPPRLVLDFISTDMQIPSDQ   78
NTDB id 1069290 ACFELM RS27515 WP 003116137.1  MNSGLSRLGIALLAA.MFAPALLAADLEKLDVAALPGDRVELKLQFDEPVA.APRGYTIEQPARIALDLPGVQNKLG..T   76
NTDB id 1193 PAKAF RS26665 WP 003161249.1      MNSGLSRLGIALLAA.MFAPALLAADLEKLDVAALPGDRVELKLQFDEPVA.APRGYTIEQPARIALDLPGVQNKLG..T   76
NTDB id 1009 ACIAD RS15175 WP 004923730.1      MKQIIRQFSIGTVAYAIMQVASAQVAITNVVPMNIPGQGTEIRVMFNGLPP.QPQAYQLEQPARLILDFDKAGQKLA..K   77
NTDB id 1039 HON27 RS01460 WP 031993779.1      MNHVFRQFSMGAVAIAIMQAASAQVSMTNIVPMQIAGQGTEIRVMFNGLPP.QPQAYQLENPSRLILDFDKAQQGLK..Q   77
NTDB id 1052 ABD1 RS15850 WP 001017033.1       MNHVFRQFSMGAVAIAIMQAASAQVSMTNIVPMQIAGQGTEIRVMFNGLPP.QPQAYQLENPSRLILDFDKAQQGLK..Q   77
consensus                                      !* **  * ** *** *  ***   **  * ** ***********!  **   ! ** ***! !**!!*   ** *   *

logo
NTDB id 1284 ACE17W RS12370 WP 010946666.1      KTKTIQLGSLHSYNIVAVGDRVRAILELDRSVSYSGSTAGSIYSLVLNGKSNDLFENS.............KEVFITNQV   145
NTDB id 1257 GC085 RS04855 WP 163621000.1       KTKTIQLGSLHSYNIVAVGDRVRAILELDRSVSYSGSTAGSVYSLVLNGKSNDLFENS.............KEVFITNQV   145
NTDB id 1069290 ACFELM RS27515 WP 003116137.1  KNRELSVGNTRSVTVVEAKDRTRLIINLTTLSSYTTRVEGNNLFVVVGNSPAGASVASAAPVKASPAPASYAQPIKPKPY   156
NTDB id 1193 PAKAF RS26665 WP 003161249.1      KNRELSVGNTRSVTVVEAKDRTRLIINLTTLSSYTTRVEGNNLFVVVGNSPAGASVASTAPVKASPAPASYAQPIKPKPY   156
NTDB id 1009 ACIAD RS15175 WP 004923730.1      SLIPVTTNEASSIDVSSDDKRARVVVNLKDAGAFTTRVEGNVFILKINNIQSTAT.....P.....VAT..SA.......   138
NTDB id 1039 HON27 RS01460 WP 031993779.1      SKISVATNEASSVDVTSDDQRSRLTVNLKDTGAFTTRVEGNTFILKINSAQTSNK.....P.....LPV..VS.......   138
NTDB id 1052 ABD1 RS15850 WP 001017033.1       SKISVATNEASSVDVTSDDQRSRLTVNLKDAGAFTTRVEGNTFILKINSAQTSNK.....P.....LPV..VS.......   138
consensus                                      * *** **   !* **   *!*!****!    *******!* * ****         *  *      *

logo
NTDB id 1284 ACE17W RS12370 WP 010946666.1      VNAKHEIKRIDFRGIEKQGGRVLIDVSDTGIPIDVTQVGKEIVVNFLNTKIPLNLMKRYDVSDFHSPVQIITMQQEGKKV   225
NTDB id 1257 GC085 RS04855 WP 163621000.1       VNAKHEIKRIDFRGIEKQGGRVLIDVSDTGIPIDVTQVGKEIVVNFLNTKIPLNLMKRYDVSDFHSPVQIITMQQEGKKV   225
NTDB id 1069290 ACFELM RS27515 WP 003116137.1  VPAGRAIRNIDFQRGEKGEGNVVIDLSDPTLSPDIQEQGGKIRLDFAKTQLPDALRVRLDVKDFATPVQFVNASAQSDRT   236
NTDB id 1193 PAKAF RS26665 WP 003161249.1      VPAGRAIRNIDFQRGEKGEGNVVIDLSDPTLSPDIQEQGGKIRLDFAKTQLPDALRVRLDVKDFATPVQFVNASAQSDRT   236
NTDB id 1009 ACIAD RS15175 WP 004923730.1      PAPQQGIGNIGFQRGAQGEGLVVIDLQGTNTPVDVQQQGSKVVVRFPGIKIPTHLARRLNTTDFATPVASIDSYNDGSNG   218
NTDB id 1039 HON27 RS01460 WP 031993779.1      .AQPQGVSNIGFQRGSQGEGLVVVDLLGSNTPVDVQQQGSKVVIRTIGTKIPTHLARRLNVNDFATPVSSIDAYNDKGVG   217
NTDB id 1052 ABD1 RS15850 WP 001017033.1       .AQPQGVSNIGFQRGSQGEGLVVVDLLGSNTPVDVQQQGSKVVIRTIGTKIPTHLARRLNVNDFATPVSSIDAYNDKGVG   217
consensus                                      * *  ****!*!*******! !**!**** ***!****! **** ** ***!  ! *!*** !!**!!* * * **  *

logo
NTDB id 1284 ACE17W RS12370 WP 010946666.1      RMTILSKGDYGHFVYQVNKQFMVDVFPLTAEEIRQAKLKKQVFTGKRISLNFQNISIRAVLQLLADFTGINMVVSDKVQG   305
NTDB id 1257 GC085 RS04855 WP 163621000.1       RMTILSKGDYGHFVYQVNKQFMVDVFPLTAEEIRQAKLKKQVFTGKRISLNFQNISIRAVLQLLADFTGINMVVSDKVQG   305
NTDB id 1069290 ACFELM RS27515 WP 003116137.1  SITIEPSGLYDYLVYQTDNRLTVSIKPMTMEDAERRKKDNFAYTGEKLSLNFQDIDVRSVLQLIADFTDLNLVASDTVQG   316
NTDB id 1193 PAKAF RS26665 WP 003161249.1      SITIEPSGLYDYLVYQTDNRLTVSIKPMTTEDAERRKKDNFAYTGEKLSLNFQDIDVRSVLQLIADFTDLNLVASDTVQG   316
NTDB id 1009 ACIAD RS15175 WP 004923730.1      VISIQSTGSYEYMAYQAENKLTISLKRPQDNV.RLNSKNNQNYTGKKISLDFQDIEVRRVLQLLADFTNINMVTADSVQG   297
NTDB id 1039 HON27 RS01460 WP 031993779.1      VITIQSSGSYEYMAYQAENKLTISLKRPQDKN.VTSLYKTPNYSGNKLSLDFQDIEVRRVLQLLADFTGINMVAADSVQG   296
NTDB id 1052 ABD1 RS15850 WP 001017033.1       VITIQSSGSYEYMAYQAENKLTISLKRPQDKN.VTSLYKTPNYSGNKLSLDFQDIEVRRVLQLLADFTGINMVAADSVQG   296
consensus                                       **! **! !****!! ************ **     * *   **! **!!*!!*!**! !!!!*!!!!**!*!**!*!!!
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logo
NTDB id 1284 ACE17W RS12370 WP 010946666.1      DITLRLNDIPWDQALDIILTTQGLDKRRKGNVMLIDTKASMDKMEEEQLKSQQTIEKLEPIRSDLIQINYAKAADIAVLI   385
NTDB id 1257 GC085 RS04855 WP 163621000.1       DITLRLNDIPWDQALDIILTTQGLDKRRKGNVMLIDTKASMDKMEEEQLKSQQTIEKLEPIRSDLIQINYAKAADIAVLI   385
NTDB id 1069290 ACFELM RS27515 WP 003116137.1  NITLRLQNVPWDQALDLVLKTKGLDKRKLGNVLLVAPADEIAARERQELEAQKQIAELAPLRRELIQVNYAKAADIAKLF   396
NTDB id 1193 PAKAF RS26665 WP 003161249.1      NITLRLQNVPWDQALDLVLKTKGLDKRKLGNVLLVAPADEIAARERQELEAQKQIAELAPLRRELIQVNYAKAADIAKLF   396
NTDB id 1009 ACIAD RS15175 WP 004923730.1      NITLHLKDVPWDQALDIILKTKNLDKRRNGNVIWIAPVSELIKSEEDEAKAIAQSTKLAPLQTEYILLKYAKAADIEKLI   377
NTDB id 1039 HON27 RS01460 WP 031993779.1      NITLRLKDVPWDQALDIILKTKNLDKRRNGNVIWIAPVAELIKAEEEEAKAVAQSVKLAPLQTEYIQLKYAKAGDIMGLI   376
NTDB id 1052 ABD1 RS15850 WP 001017033.1       NITLRLKDVPWDQALDIILKTKNLDKRRNGNVIWIAPVAELIKAEEEEAKAVAQSVKLAPLQTEYIQLKYAKAGDIMGLI   376
consensus                                      *!!!*!***!!!!!!!**!*!**!!!!* !!!***** *** * !******* ** *!*!*****!***!!!!*!!* !*

logo
NTDB id 1284 ACE17W RS12370 WP 010946666.1      KDKQN...............................SLLSDRGKISVDARTNTIWIQDTGTKIEEVRELIKQLDIPVKQV   434
NTDB id 1257 GC085 RS04855 WP 163621000.1       KDKQN...............................SLLSDRGKISVDARTNTIWIQDTGTKIEEVRELIKQLDIPVKQV   434
NTDB id 1069290 ACFELM RS27515 WP 003116137.1  QSVTSSGE...........................EKENSRGSITVDDRTNSIIAYQPQERLDELRRIVSQLDIPVRQV   448
NTDB id 1193 PAKAF RS26665 WP 003161249.1      QSVTSDGGQE.........................GKEGGRGSITVDDRTNSIIAYQPQERLDELRRIVSQLDIPVRQV   450
NTDB id 1009 ACIAD RS15175 WP 004923730.1      TQGRNSGTSNSN.........TNGSATVEPLGDSVGTLLSPRGTISLDPRTNTLIINDTSQKIDQIRKMIDLLDIPVKQV   448
NTDB id 1039 HON27 RS01460 WP 031993779.1      TQGSNNSNGLQHTSGGGTSTSTNLNTGVDSLGNNVGSLLSPRGTITQDDRTNTLIINDTAQSIDQIRKMIDLLDVQVKQV   456
NTDB id 1052 ABD1 RS15850 WP 001017033.1       TQGSNNSNGLQHTSGGGTSTSTNLNTGVDSLGNNVGSLLSPRGTITQDDRTNTLIINDTAQSIDQIRKMIDLLDVQVKQV   456
consensus                                        **                                **** !!*!**!*!!!******** *****!*** *!!**!*!!

logo
NTDB id 1284 ACE17W RS12370 WP 010946666.1      LIEARIVEVTKDFSQDIGIRWGVSRPTHLSG..TLEGANE.LA..........RG.TAPANVVPLERRLNLDLAAAPLTG   500
NTDB id 1257 GC085 RS04855 WP 163621000.1       LIEARIVEVTKDFSQDIGIRWGVSRPTHLSG..TLEGANE.LA..........RG.TAPANVVPLERRLNLDLAAVPLTG   500
NTDB id 1069290 ACFELM RS27515 WP 003116137.1  MIEARIVEANVGYDKSLGVRWGGAYHNGNWNSY....GKNGNM.GIKDKEGYNCGPFQGQCTFPTRD..NSPTPFVDMGA   521
NTDB id 1193 PAKAF RS26665 WP 003161249.1      MIEARIVEANVGYDKSLGVRWGGAYHKGNWSGY....GKDGNI.GIKDEDGMNCGPIAGSCTFPTTGTSKSPSPFVDLGA   525
NTDB id 1009 ACIAD RS15175 WP 004923730.1      MIEARIVRATTSFSKEMGVKWGILSQGINQNSNLLVGGSETTLWNLRNP...DSN.....GTYTIE...RPDNLNVDLGV   517
NTDB id 1039 HON27 RS01460 WP 031993779.1      MVEARIVRASTSFTKELGVKWGILSQGITNNNNLLVGGSETTLWNLREP...KKDETTGGYKYTIE...RPDNLNVDLGV   530
NTDB id 1052 ABD1 RS15850 WP 001017033.1       MVEARIVRASTSFTKELGVKWGILSQGITNNNNLLVGGSETTLWNLREP...KKDETTGGYKYTIE...RPDNLNVDLGV   530
consensus                                      **!!!!!***  *****!**!!*       *   * ** *  *  ***     ** * **  ****   * *   *****

logo
NTDB id 1284 ACE17W RS12370 WP 010946666.1      ATPASVGIALAKL.NDNILLDLELSALESEGRAELISSPRLITTNQQAAVIESGEEIPYQEATSSGA...TAVAFKKAVL   576
NTDB id 1257 GC085 RS04855 WP 163621000.1       ATPASVGIALAKL.NDNILLDLELSALESEGRAELISSPRLITTNQQAAVIESGEEIPYQEATSSGA...TAVAFKKAVL   576
NTDB id 1069290 ACFELM RS27515 WP 003116137.1  KDA.TSGIGIGFI.TDNIILDLQLSAMEKTGNGEVVSQPKVVTSDKETAKILKGSEIPYQEASSSGA...TSTSFKEAAL   596
NTDB id 1193 PAKAF RS26665 WP 003161249.1      KDA.TSGIGIGFI.TDNIILDLQLSAMEKTGNGEIVSQPKVVTSDKETAKILKGSEVPYQEASSSGA...TSTSFKEAAL   600
NTDB id 1009 ACIAD RS15175 WP 004923730.1      TTTGASSIAFGLISLSDFMLDLELSALQADGYGEVISTPKVMSADKQKAKVATGVEVPYQSTTNSAAGSTATTSFKEALL   597
NTDB id 1039 HON27 RS01460 WP 031993779.1      SNP.AGSIAFGLISMSDFMLDLELSALQADGYGEVISTPKVMTADKQTAKVATGQQVPYQSTTNSAAGSTATTSFKDALL   609
NTDB id 1052 ABD1 RS15850 WP 001017033.1       SNP.AGSIAFGLISMSDFMLDLELSALQADGYGEVISTPKVMTADKQTAKVATGQQVPYQSTTNSAAGSTATTSFKDALL   609
consensus                                        * * *!*** *  ****!!!*!!!** *! *!**!*!*********!** *! **!!!****!*!   ****!!*!*!
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logo
NTDB id 1284 ACE17W RS12370 WP 010946666.1      SLKVTPQITPDGKILMDLQINQDTPS.PQTFLGVPAIITKEIQTNVLVNNGQTIVLGGIYKQDKNKVINRIPFFGELPVV   655
NTDB id 1257 GC085 RS04855 WP 163621000.1       SLKVTPQITPDGKILMDLQINQDTPS.PQTFLGVPAIITKEIQTNVLVNNGQTIVLGGIYKQDKNKVINRIPFFGELPVV   655
NTDB id 1069290 ACFELM RS27515 WP 003116137.1  SLEVTPQITPDNRIIVEVKVTKDAPDFQNALNGVPPINKNEVNAKILVNDGETIVIGGVFSNTQTKAVDKVPFLGDLPYL   676
NTDB id 1193 PAKAF RS26665 WP 003161249.1      SLEVTPQITPDNRIIVEVKVTKDAPDYQNMLNGVPPINKNEVNAKILVNDGETIVIGGVFSNEQSKSVEKVPFLGELPYL   680
NTDB id 1009 ACIAD RS15175 WP 004923730.1      SLEVTPNITPDGKILMELNIANDSIN.SYAQNGEAILNKNTINTNVLVNNGETVVLGGVFEQTTNNAVTKVPFLGDLPYV   676
NTDB id 1039 H0N27 RS01460 WP 031993779.1      SLNVTPSITPDGKIQMKLDISKDSVA.GAAPNGELILNKNNINTNVLVDNGETVILGGVFEQTTMNSQTKVPFFGDIPVV   688
NTDB id 1052 ABD1 RS15850 WP 001017033.1       SLNVTPSITPDGKIQMKLDISKDSVA.GAAPNGELILNKNNINTNVLVDNGETVILGGVFEQTTMNSQTKVPFFGDIPVV   688
consensus                                      !! !!!*!!!!**!**** ***!**   ** *!** **********!!**!*!***!!** **  * * **!!*!**!**

logo
NTDB id 1284 ACE17W RS12370 WP 010946666.1      GILFSNRQITLKNEELLIFITPRIITNALSITTIEGREKDVYK   698
NTDB id 1257 GC085 RS04855 WP 163621000.1       GILFSNRQITLKNEELLIFITPRIITNALSITTIEGREKDVYK   698
NTDB id 1069290 ACFELM RS27515 WP 003116137.1  GRLFRRDTVSDTKNELLVFLTPRIMNNQAIAIGR.........   710
NTDB id 1193 PAKAF RS26665 WP 003161249.1      GRLFRRDTVTDRKNELLVFLTPRIMNNQAIAIGR.........   714
NTDB id 1009 ACIAD RS15175 WP 004923730.1      GRLFKKTAKSEAKNELLIFVTPRIVNDTIVGNH..........   709
NTDB id 1039 H0N27 RS01460 WP 031993779.1      GRLFRKDVKSDDKQELLIFVTPRIVNDTLARNH..........   721
NTDB id 1052 ABD1 RS15850 WP 001017033.1       GRLFRKDVKSDDKQELLIFVTPRIVNDTLARNH..........   721
consensus                                      !*!!*** *** **!!!*!*!!!!*** *
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X non conserved

X similar

X $\geq$ 50% conserved