```
logo
NTDB id 286 KZH43 RS05975 WP 000782664.1  MKMKQISDTTLKITISLEDLMDRGMEIADFLVPQEKTEEFFYAILDELEMPDSFLDTGMLSFRVTPKPDKVDVFVTKSKIDQNLD   85
NTDB id 285 SPD RS06395 WP 000782664.1    MKMKQISDTTLKITISLEDLMDRGMEIADFLVPQEKTEEFFYAILDELEMPDSFLDTGMLSFRVTPKPDKVDVFVTKSKIDQNLD   85
NTDB id 284 SPR RS06100 WP 000782664.1    MKMKQISDTTLKITISLEDLMDRGMEIADFLVPQEKTEEFFYAILDELEMPDSFLDTGMLSFRVTPKPDKVDVFVTKSKIDQNLD   85
NTDB id 283 SP RS06670 WP 000782668.1     MKMKQISDTTLKITISLEDLMDRGMEIADFLVPQEKTEEFFYAILDELEMPDSFLDTGMLSFRVTPKPDKVDVFVTKSKIDQNLD   85
NTDB id 299 STER RS01050 WP 011680667.1   MEMKQISETTLKIMITMEDLEEHGMELKDFLIPQEKTEEFFYTVMDELDLPDNFKNSGMLSFRVTPRKDRVDVFVTKSDLKEDLD   85
NTDB id 331 STU RS10485 WP 011225365.1    MEMKQINETTLKIMITMEDLEEHGMELKDFLIPQEKTEEFFYTVMDELDLPDNFKNSGMLSFRVTPRKDRVDVFVTKSDLKEALD   85
NTDB id 20129 Spy49 0240 ACI60580.1       MEMKQISETTLKITISMDDLEERGMELKDFLIPQEKTEEFFYSVMDELDLPDNFKDSGMLSFRVTPRKDRLDVFVTKSEINKDIN   85
NTDB id 380 SMU RS01250 WP 002262749.1    MEMKQISETTLKITISMEDLEERGMELKDFLIPQEKTEEFFYTVMDELDLPENFKDSGMLSFRVTPRNDRIDVFVTKSEINKNLN   85
consensus                                 ! !!!!**!!!!!*!***!! **!!!* !!!*!!!!!!!!!! **!!!**!* ! **!!!!!!!!!* !**!!!!!!! *  ***

logo
NTDB id 286 KZH43 RS05975 WP 000782664.1  FEDLSDLPDMEELAQMSPDEFIKTLEKSIADKTKDDIEAIQSLEQVEAKEEEQ...........EQAEQEAESKKEPYIYYILSF  159
NTDB id 285 SPD RS06395 WP 000782664.1    FEDLSDLPDMEELAQMSPDEFIKTLEKSIADKTKDDIEAIQSLEQVEAKEEEQ...........EQAEQEAESKKEPYIYYILSF  159
NTDB id 284 SPR RS06100 WP 000782664.1    FEDLSDLPDMEELAQMSPDEFIKTLEKSIADKTKDDIEAIQSLEQVEAKEEEQ...........EQAEQEAESKKEPYIYYILSF  159
NTDB id 283 SP RS06670 WP 000782668.1     FEDLSDLPDMEELAQMSPDEFIKTLEKSIADKTKDDIEAIQSLEQVEVKEEEQ...........EQAEQEAESKKEPYIYYILSF  159
NTDB id 299 STER RS01050 WP 011680667.1   FNDLSDM...EDYSGLSPEEFLKALEDNFMDK..GDIEAHHKLEEHDKTLKEVDETMTE.....PAKEVAEETIREDYTHYVLAF  160
NTDB id 331 STU RS10485 WP 011225365.1    FNDLSDM...EDYSGLSPEEFLKALEDNFMDK..GDIEAHHKLEEHDKTLKEVDETMTE.....PAKEVAEETIREDYTHYVLAF  160
NTDB id 20129 Spy49 0240 ACI60580.1       LEDLAEF...GDMSQMTPEDFFKSLEQSMREK..GDVKAHEKLEKIEEIMEDVVEATLANQSEAADPSTNHESEPLDYVHYVLDF  165
NTDB id 380 SMU RS01250 WP 002262749.1    LEDLSDF...DDISKMSPEDFFNTLEETMREK..GDAAALDKLAEIEKREEEK...........TQQEKGETKEKRDYVHFVLDF  154
consensus                                 **!!***   *** ***!**!***!! ** *!   !**!*  !* ** ****            * *   ** ** !* **! !

logo
NTDB id 286 KZH43 RS05975 WP 000782664.1  AKLADLVAFAKTV.TFEMETSELYKMNERYYLTILVDIENHPSPYPAWLLARMREFADDSDISRSVLQEYGQVLMSHDAVLNLQK  243
NTDB id 285 SPD RS06395 WP 000782664.1    AKLADLVAFAKTV.TFEMETSELYKMNERYYLTILVDIENHPSPYPAWLLARMREFADDSDISRSVLQEYGQVLMSHDAVLNLQK  243
NTDB id 284 SPR RS06100 WP 000782664.1    AKLADLVAFAKTV.TFEMETSELYKMNERYYLTILVDIENHPSPYPAWLLARMREFADDSDISRSVLQEYGQVLMSHDAVLNLQK  243
NTDB id 283 SP RS06670 WP 000782668.1     AKLADLVAFAKTV.TFEMETSELYKMNERYYLTILVDIENHPSPYPAWLLARMREFADDSDISRSVLQEYGQVLMSHDAVLNLQK  243
NTDB id 299 STER RS01050 WP 011680667.1   SDFDQVVTFAQGLKNVSVEGSEFYKLGDVYYMTILLYLADEPDYYANNMYARFLEYANVADRTRPYLQEHATILMEEDALPVLQA  245
NTDB id 331 STU RS10485 WP 011225365.1    SDFDQVVTFAQGLKNVSVEGSEFYKLGDVYYMTILLYLADEPDYYANNMYARFLEYANVADRTRPYLQEHATILMEEDALPVLQA  245
NTDB id 20129 Spy49 0240 ACI60580.1       STITEAVAFAKTI.DFSIEASELYKGSNCYHMTILLDVQQQPSYFANVMYARLIEHANPGSKTRAYLQEHGLQLMLDGAVEQLQK  249
NTDB id 380 SMU RS01250 WP 002262749.1    PNIQQVINFAKTV.DYDVEASELFKESDAYHMTVLLNLEDKPDYYADLMFARMLEHAGRGTKTRAYLLEHGVQLIKADALQELQM  238
consensus                                   * ****!!***  ***! !!**!* * !**!*!***** !* *   * !!* !*!   * *!  !*! * *!*  *!* *!!*

logo
NTDB id 286 KZH43 RS05975 WP 000782664.1  IG..   245
NTDB id 285 SPD RS06395 WP 000782664.1    IG..   245
NTDB id 284 SPR RS06100 WP 000782664.1    IG..   245
NTDB id 283 SP RS06670 WP 000782668.1     IG..   245
NTDB id 299 STER RS01050 WP 011680667.1   TKWS   249
NTDB id 331 STU RS10485 WP 011225365.1    TKWS   249
NTDB id 20129 Spy49 0240 ACI60580.1       IELG   253
NTDB id 380 SMU RS01250 WP 002262749.1    IG..   240
consensus                                 **
```

X non conserved
X similar
X $\geq$ 50% conserved