

logo

|                                          |                                                                                         |    |
|------------------------------------------|-----------------------------------------------------------------------------------------|----|
| NTDB id 601 KW2 RS02615 WP 021036805.1   | .....MLCQNCNINEAT.....I                                                                 | 13 |
| NTDB id 241 SP RS04015 WP 000882523.1    | .....MLCQNCNKINDST.....I                                                                | 13 |
| NTDB id 281 KZH43 RS03550 WP 000882517.1 | .....MLCQNCNKINDST.....I                                                                | 13 |
| NTDB id 245 SPD RS03860 WP 000882517.1   | .....MLCQNCNKINDST.....I                                                                | 13 |
| NTDB id 243 SPR RS03635 WP 000882517.1   | .....MLCQNCNKINDST.....I                                                                | 13 |
| NTDB id 378 SMU RS02690 WP 002263569.1   | .....MLCQNCNKINEAT.....I                                                                | 13 |
| NTDB id 85 BSU 00860 NP 387967.1         | ..MMFGRFTERAQKVLALAQEEALRLGHNNIGTEHILLGLVREGEGIAAKALQALGLGSEKIQKEVESLIG.....RGQEMS      | 75 |
| NTDB id 610 V4T04 RS10165 WP 012897346.1 | MKFENIKYPTPTLDRILEKAEYYAHQYQYGTIESAHLIAAMATTSGSIAYSLLAGMNVDSDDLIDL.....EDLSSHVKVKR      | 77 |
| NTDB id 287 SP RS11210 WP 001109712.1    | .....MNYSKALNECIESAYMVAGHFGARYLESWHLLIAMSNHSYSVAGATLNDYPYEMDRLE.....EVALELTETDYSQDET    | 75 |
| NTDB id 290 KZH43 RS10025 WP 001109677.1 | .....MNYSKALNECIESAYMVAGHFGARYLESWHLLIAMSNHSYSVAGATLNDYPYEMDRLE.....EVALELTETDYSQDET    | 75 |
| NTDB id 289 SPD RS10700 WP 001109677.1   | .....MNYSKALNECIESAYMVAGHFGARYLESWHLLIAMSNHSYSVAGATLNDYPYEMDRLE.....EVALELTETDYSQDET    | 75 |
| NTDB id 377 SMU RS09275 WP 002262344.1   | ....MTDYSLKMQEVFRLAQFEAAERFESSYLESWHVLLAMVEIDSSVAGLSFAEFADVRFEDYQAAAILAIGKKPKSSSN..DI   | 79 |
| NTDB id 297 STER RS00545 WP 011680614.1  | ....MTIYSRKMQAIFHRAQLEAERFESPFLLETWHVLLAMVEVTGSAVYLTFDTDFEDRIHSEEIETAAVLAMEKRPKDLSESDII | 81 |
| NTDB id 329 STU RS10020 WP 011225298.1   | ....MTIYSRKMQAIFHRAQLEAERFESPFLLETWHVLLAMVEVPGSAVYLTFDTDFEDRIHSEEIETAAVLAMEKRPKDLSESDII | 81 |
| consensus                                | *** * * * * ** *                                                                        |    |

logo

|                                          |                                                                                       |     |
|------------------------------------------|---------------------------------------------------------------------------------------|-----|
| NTDB id 601 KW2 RS02615 WP 021036805.1   | HLYTSVNGQKKQIDLCQNCYQI...MKSQGGQALFGAGNASNGNSDE.....PFNP.FNDIFSALQG.QDFNGAASN.        | 80  |
| NTDB id 241 SP RS04015 WP 000882523.1    | HLYTNLNGKQKQIDLCQNCYKI...IKTDPNNSLFKGMTDLNNRD.....FDP.FGDDFFNDLNNFRPSSN..TP.          | 76  |
| NTDB id 281 KZH43 RS03550 WP 000882517.1 | HLYTNLNGKQKQIDLCQNCYKI...IKTDPNNSLFKGMTDLNNRD.....FDP.FGDDFFNDLNNFRPSSN..TP.          | 76  |
| NTDB id 245 SPD RS03860 WP 000882517.1   | HLYTNLNGKQKQIDLCQNCYKI...IKTDPNNSLFKGMTDLNNRD.....FDP.FGDDFFNDLNNFRPSSN..TP.          | 76  |
| NTDB id 243 SPR RS03635 WP 000882517.1   | HLYTNLNGKQKQIDLCQNCYKI...IKTDPNNSLFKGMTDLNNRD.....FDP.FGDDFFNDLNNFRPSSN..TP.          | 76  |
| NTDB id 378 SMU RS02690 WP 002263569.1   | HLYANVNGQKKQIDLCQNCYQI...MKTDPENGPLNHLSSQNNSS.....INPFFDDFFGDLNNFRAFNNQLP.            | 79  |
| NTDB id 85 BSU 00860 NP 387967.1         | QTIHYTPRAKKVIELSMDEARKLGHSYVGTEHILLGLIREGEGVAARVILNNLGVSLNKARQQVLQL.....LGSNET....    | 147 |
| NTDB id 610 V4T04 RS10165 WP 012897346.1 | STLRFSPRAEEVMTAASFLAIHNNSEAVGTEHLLYALLQVEDGFGLQLKL.....QKINIVSLRKELEKRTGLKVPESSKK     | 153 |
| NTDB id 287 SP RS11210 WP 001109712.1    | TELPFSRRLQVLFDAAEYVASVHAKVLGTEHVLYAILHDSNALATRILERAGFSYEDKKDQVKIAALRRNLEERAGWTREDLKA  | 160 |
| NTDB id 290 KZH43 RS10025 WP 001109677.1 | TELPFSRRLQILFDAAEYVASVHAKVLGTEHVLYAILHDSNALATRILERAGFSYEDKKDQVKIAALRRNLEERAGWTREDLKA  | 160 |
| NTDB id 289 SPD RS10700 WP 001109677.1   | TELPFSRRLQILFDAAEYVASVHAKVLGTEHVLYAILHDSNALATRILERAGFSYEDKKDQVKIAALRRNLEERAGWTREDLKA  | 160 |
| NTDB id 377 SMU RS09275 WP 002262344.1   | MILEQSHALKRTIAEAAAISQVTHAKEVGTEHVLFAMLLNPNLLATRILELVGFHAKDDGESIRLLDLRKVTERYACFSKEDIKA | 164 |
| NTDB id 297 STER RS00545 WP 011680614.1  | DLRAQSPALEAMLQEAQGIASVTGAVEVGSEHVLMAFLHLKDLMVCRLLEVAGFQYKDDSDKPRIIDLRRSLERNAGLSKQDLKA | 166 |
| NTDB id 329 STU RS10020 WP 011225298.1   | DLRAQSPALEAMLQEAQGIASVTGAVEVGSEHVLMAFLHLKDLMVCRLLEVAGFQYKDDSDKPRIIDLRRSLERNAGLSKQDLKA | 166 |
| consensus                                | * ** * * * * * * * * * * * * * * *                                                    |     |

logo

|                                          |                                                                                        |     |
|------------------------------------------|----------------------------------------------------------------------------------------|-----|
| NTDB id 601 KW2 RS02615 WP 021036805.1   | ....QTPPTQTGG.....RGPRGPQNPRAKQPKGMLEEFGINITESARRGETDPVIGRDEEIKRVIEILNRRRTKNNPVL       | 151 |
| NTDB id 241 SP RS04015 WP 000882523.1    | ....PIPTTQSGGGYGGNGGYGSQNRGSAQTTPPSQEKGLLEEFGINVTEIARRGIDPVIIGRDEEIRVIEILNRRRTKNNPVL   | 157 |
| NTDB id 281 KZH43 RS03550 WP 000882517.1 | ....PIPTTQSGGGYGGNGGYGSQNRGSAQTTPPSQEKGLLEEFGINVTEIARRGIDPVIIGRDEEIRVIEILNRRRTKNNPVL   | 157 |
| NTDB id 245 SPD RS03860 WP 000882517.1   | ....PIPTTQSGGGYGGNGGYGSQNRGSAQTTPPSQEKGLLEEFGINVTEIARRGIDPVIIGRDEEIRVIEILNRRRTKNNPVL   | 157 |
| NTDB id 243 SPR RS03635 WP 000882517.1   | ....PIPTTQSGGGYGGNGGYGSQNRGSAQTTPPSQEKGLLEEFGINVTEIARRGIDPVIIGRDEEIRVIEILNRRRTKNNPVL   | 157 |
| NTDB id 378 SMU RS02690 WP 002263569.1   | ....NTPPTQAGGGNGNGGN.N.RRPGGPQQQASQKPNGLLEEFGINLTDIARKGEIDPVIIGRDEEITRVIEILNRRRTKNNPVL | 158 |
| NTDB id 85 BSU 00860 NP 387967.1         | .....GSSAAGTNSNANTPTLDSLARDLTAIAKEDSLDPVIGRSKEIQRVIEVLSRRTKNNPVL                       | 207 |
| NTDB id 610 V4T04 RS10165 WP 012897346.1 | AVTPMSKRKMAKG.....VAENSTPTLDSVSSDLTEEARLCKLDPMIGRAEIDRIIHLISRRTKNNPVL                  | 220 |
| NTDB id 287 SP RS11210 WP 001109712.1    | .LRQRHRTV.ADK.....QNSMANMMGMPTPSSGGLDYTHDLTEQARSCKLEPVIIGRDKEISRMQILSRKTNNPVL          | 233 |
| NTDB id 290 KZH43 RS10025 WP 001109677.1 | .LRQRHRTV.ADK.....QNSMANMMGMPTPSSGGLDYTHDLTEQARSCKLEPVIIGRDKEISRMQILSRKTNNPVL          | 233 |
| NTDB id 289 SPD RS10700 WP 001109677.1   | .LRQRHRTV.ADK.....QNSMANMMGMPTPSSGGLDYTHDLTEQARSCKLEPVIIGRDKEISRMQILSRKTNNPVL          | 233 |
| NTDB id 377 SMU RS09275 WP 002262344.1   | .IFEMRKPKKVKN.....SSFSFLMKPP.SVTGELADFTRODLTELARQGRLEPVIIGREQEISRMVQILSRKTNNPVL        | 237 |
| NTDB id 297 STER RS00545 WP 011680614.1  | .IHDLRKPKKSKA.....SANFANMMQPPQSSGTGELADYTKDLTALAESGNLDPVIIGRDEEISRMQIVLSRKTNNPVL       | 240 |
| NTDB id 329 STU RS10020 WP 011225298.1   | .IHDLRKPKKSKA.....SANFANMMQPPQSSGTGELADYTKDLTALAESGNLDPVIIGRDEEISRMQIVLSRKTNNPVL       | 240 |
| consensus                                | * * * * * ! * * * * * * * * * * * * * * *                                              |     |





logo

|                                          |                                                                                            |     |
|------------------------------------------|--------------------------------------------------------------------------------------------|-----|
| NTDB id 601 KW2 RS02615 WP 021036805.1   | ENLLKIVDLMLDEVNEQIGRNDIHLSTVTTQAAKEKLVLDLGYNPAMGARPLRRTIQENTIEDSTADFFYTEHPEYKQ.LVADLIDDKIV | 729 |
| NTDB id 241 SP RS04015 WP 000882523.1    | DNLLQIVELMLADVNKRLSSNNIRLDVTDKVKEKLVLDLGYDPKMGARPLRRTIQDYIEDTITDYYLENPSEKD.LKAVMTSKGNI     | 735 |
| NTDB id 281 KZH43 RS03550 WP 000882517.1 | DNLLQIVELMLADVNKRLSSNNIRLDVTDKVKEKLVLDLGYDPKMGARPLRRTIQDYIEDTITDYYLENPSEKD.LKAVMTSKGNI     | 735 |
| NTDB id 245 SPD RS03860 WP 000882517.1   | DNLLQIVELMLADVNKRLSSNNIRLDVTDKVKEKLVLDLGYDPKMGARPLRRTIQDYIEDTITDYYLENPSEKD.LKAVMTSKGNI     | 735 |
| NTDB id 243 SPR RS03635 WP 000882517.1   | DNLLQIVELMLADVNKRLSSNNIRLDVTDKVKEKLVLDLGYDPKMGARPLRRTIQDYIEDTITDYYLENPSEKD.LKAVMTSKGNI     | 735 |
| NTDB id 378 SMU RS02690 WP 002263569.1   | DNLLQIVSLMLDDVNQRLAVNAIHLDVTDKVKEKLVLDLGYDPKMGARPLRRTIQEHIEDAITDFYLEHPEQKE.LKAIMTSNCKI     | 736 |
| NTDB id 85 BSU 00860 NP 387967.1         | KHLTEIVSLMSDQLTKRLKEQDLSTIELTDAAKAKVAEEGVLDLEYGARPLRRAIQKHVEDRLSEELLRGNIHKGQHIVLDVEDGEF    | 801 |
| NTDB id 610 V4T04 RS10165 WP 012897346.1 | QEIEQIVKIMSKSLIKRLAEQDIHVKLTPSAVKLIAEVGFDPEYGARPLRKALQKEVEDLLSEQLLSGETKAGNHVSTIGASNKKI     | 810 |
| NTDB id 287 SP RS11210 WP 001109712.1    | DHMQEVVKIMVKPLVASLTEKGIDLKLQASALKLLANQGYDPEMGARPLRRTLQTEVEDKLAELLKGDIVAGSTLKIGVKAGQL       | 805 |
| NTDB id 290 KZH43 RS10025 WP 001109677.1 | DHMQEVVKIMVKPLVASLAEKGIDLKLQASALKLLANQGYDPEMGARPLRRTLQTEVEDKLAELLKGDIVAGSTLKIGVKAGQL       | 805 |
| NTDB id 289 SPD RS10700 WP 001109677.1   | DHMQEVVKIMVKPLVASLAEKGIDLKLQASALKLLANQGYDPEMGARPLRRTLQTEVEDKLAELLKGDIVAGSTLKIGVKAGQL       | 805 |
| NTDB id 377 SMU RS09275 WP 002262344.1   | EDIRHIVKIMVAPLIAHLADQGKITLKFQPSALKHLALAGYDAEMGARPLRRTLQTEVEDKLAELLTSGKLASGQTLKIGIQKEKL     | 808 |
| NTDB id 297 STER RS00545 WP 011680614.1  | EQLHDIVKIMVKPLISALADKGISLKFQPAALKHLAKDGYDIEMGARPLRRTIQTQVEDKLSLELLGGQVVSQQTLLKIGCSKDKL     | 811 |
| NTDB id 329 STU RS10020 WP 011225298.1   | EQLHDIVKIMVKPLISALADKGISLKFQPAALKHLAKDGYDIEMGARPLRRTIQTQVEDKLSLELLGGQVVSQQTLLKIGCSKDKL     | 811 |
| consensus                                | *** *! *!* * **** * * * * **** !*****!!!!!!***** *!! *** ** * * * * * * * *                |     |

logo

|                                          |                      |     |
|------------------------------------------|----------------------|-----|
| NTDB id 601 KW2 RS02615 WP 021036805.1   | ISNQTQETAETTDEEVPAE  | 748 |
| NTDB id 241 SP RS04015 WP 000882523.1    | QIKSAKKA.EVKSSSEKEK. | 752 |
| NTDB id 281 KZH43 RS03550 WP 000882517.1 | QIKSAKKA.EVKSSSEKEK. | 752 |
| NTDB id 245 SPD RS03860 WP 000882517.1   | QIKSAKKA.EVKSSSEKEK. | 752 |
| NTDB id 243 SPR RS03635 WP 000882517.1   | QIKSAKKA.EVKSSSEKEK. | 752 |
| NTDB id 378 SMU RS02690 WP 002263569.1   | VIKASNKV.ETVTKATSD.  | 753 |
| NTDB id 85 BSU 00860 NP 387967.1         | VVKTTAKTN.....       | 810 |
| NTDB id 610 V4T04 RS10165 WP 012897346.1 | KIAQIV.....          | 816 |
| NTDB id 287 SP RS11210 WP 001109712.1    | KFDIA.....           | 810 |
| NTDB id 290 KZH43 RS10025 WP 001109677.1 | KFDIA.....           | 810 |
| NTDB id 289 SPD RS10700 WP 001109677.1   | KFDIA.....           | 810 |
| NTDB id 377 SMU RS09275 WP 002262344.1   | KFDIV.....           | 813 |
| NTDB id 297 STER RS00545 WP 011680614.1  | TFTVV.....           | 816 |
| NTDB id 329 STU RS10020 WP 011225298.1   | TFTVV.....           | 816 |
| consensus                                |                      |     |

- ⓧ non conserved
- ✖ similar
- ⓧ ≥ 50% conserved