```
logo
NTDB id 259 KZH43 RS03480 WP 000491790.1      ..MFSKLKKTWYADDFSYFIRNFGVFTLIFSTMTLIILQVMHSSLYTSVDDKLHGLSENPQAVIQLAINRATEEIKDLEN   78
NTDB id 218 SPD RS03780 WP 000491790.1        ..MFSKLKKTWYADDFSYFIRNFGVFTLIFSTMTLIILQVMHSSLYTSVDDKLHGLSENPQAVIQLAINRATEEIKDLEN   78
NTDB id 184 SPR RS03565 WP 000491790.1        ..MFSKLKKTWYADDFSYFIRNFGVFTLIFSTMTLIILQVMHSSLYTSVDDKLHGLSENPQAVIQLAINRATEEIKDLEN   78
NTDB id 148 SP RS03910 WP 000491790.1         ..MFSKLKKTWYADDFSYFIRNFGVFTLIFSTMTLIILQVMHSSLYTSVDDKLHGLSENPQAVIQLAINRATEEIKDLEN   78
NTDB id 375318 FP508 RS05225 WP 185159754.1  MSKPIKISKFKKNVSDSHFIHFFTVFSGIFLVMTVIILQVMRYGVYSSVDSSLKYISTHPKNYINMVMSRTAAYLDN..S   78
NTDB id 363 SMU RS05195 WP 002262215.1        ..MLIKLRKQKQDENISFFSHFFAVFTGIFFVMTVIIIQVMHFGIYSSVDNSLKIATENVNDYVNMTLSHNNPITEAE.N   77
consensus                                       ***!**!*******!*!***!*!!**!!**!!*!!*!!!****!*!!!**!**********************

logo
NTDB id 259 KZH43 RS03480 WP 000491790.1      ARADASKVEIKPNVSSNTEVILFDKDFTQLLSGNRFLGLDKIKLEKKELGHIYQIQVFNSYGQEEIYRVILMETNISSVS   158
NTDB id 218 SPD RS03780 WP 000491790.1        ARADASKVEIKPNVSSNTEVILFDKDFTQLLSGNRFLGLDKIKLEKKELGHIYQIQVFNSYGQEEIYRVILMETNISSVS   158
NTDB id 184 SPR RS03565 WP 000491790.1        ARADASKVEIKPNVSSNTEVILFDKDFTQLLSGNRFLGLDKIKLEKKELGHIYQIQVFNSYGQEEIYRVILMETNISSVS   158
NTDB id 148 SP RS03910 WP 000491790.1         ARADASKVEIKPNVSSNTEVILFDKDFTQLLSGNRFLGLDKIKLEKKELGHIYQIQVFNSYGQEEIYRVILMETNISSVS   158
NTDB id 375318 FP508 RS05225 WP 185159754.1  N.IASVKLKPGGQTVANTDIILFTSEEEVINYFDAFSNYQFLKPNKKNLGGISELTLTNIFGQDETYHAVTVKVNNP.AY   156
NTDB id 363 SMU RS05195 WP 002262215.1        G.DASFKVKSNGQMAANTDTILYDKKHNVINNVNAFSSLYHIRPKLKDIGDIVEQEAKNIYGQTEKYRTVTVKVNND.FY   155
consensus                                     ******!*********!!**!!************!**********!**!*!******!**!!*!*!*******!*****

logo
NTDB id 259 KZH43 RS03480 WP 000491790.1      TNIKYAAVLINTSQLEQASQKHEQLIVVVMASFWILSLLASLYLARVSVRPLLESMQKQQSFVENASHELRTPLAVLQNR   238
NTDB id 218 SPD RS03780 WP 000491790.1        TNIKYAAVLINTSQLEQASQKHEQLIVVVMASFWILSLLASLYLARVSVRPLLESMQKQQSFVENASHELRTPLAVLQNR   238
NTDB id 184 SPR RS03565 WP 000491790.1        TNIKYAAVLINTSQLEQASQKHEQLIVVVMASFWILSLLASLYLARVSVRPLLESMQKQQSFVENASHELRTPLAVLQNR   238
NTDB id 148 SP RS03910 WP 000491790.1         TNIKYAAVLINTSQLEQASQKHEQLIVVVMASFWILSLLASLYLARVSVRPLLESMQKQQSFVENASHELRTPLAVLQNR   238
NTDB id 375318 FP508 RS05225 WP 185159754.1  PNVTYMTAIVNIDQLVNAKERYEKIIIFVMTTFWIISIGASIYLAKWAQKPIIENYERQKAFVENASHELRIPLAVLQNR   236
NTDB id 363 SMU RS05195 WP 002262215.1        PQIKFATIVINTTQLEEANTRYVTIIISVMIVFWLISVIASVYLAKWSQKPILENYEKQKSFVENASHELRTPLAVLQNR   235
consensus                                     **********!**!!**!*******!**!!**!!**!**!!*!!!*****!**!****!**!!!!!!!!!!*!!!!!!!!

logo
NTDB id 259 KZH43 RS03480 WP 000491790.1      LETLFRKPEATIMDVSESIASSLEEVRNMRFLTTSLLNLARRDDGIKPELAEVPTSFFNTTFTNYEMIASENNRVFRFEN   318
NTDB id 218 SPD RS03780 WP 000491790.1        LETLFRKPEATIMDVSESIASSLEEVRNMRFLTTSLLNLARRDDGIKPELAEVPTSFFNTTFTNYEMIASENNRVFRFEN   318
NTDB id 184 SPR RS03565 WP 000491790.1        LETLFRKPEATIMDVSESIASSLEEVRNMRFLTTSLLNLARRDDGIKPELAEVPTSFFNTTFTNYEMIASENNRVFRFEN   318
NTDB id 148 SP RS03910 WP 000491790.1         LETLFRKPEATIMDVSESIASSLEEVRNMRFLTTSLLNLARRDDGIKPELAEVPTSFFNTTFTNYEMIASENNRVFRFEN   318
NTDB id 375318 FP508 RS05225 WP 185159754.1  LETLFRKPNATILENSENIASSLDEVRNMRILTTNLLNLARRDDGIKPELAVIKPTLFDSIFENYDLIAQENGKNFTGHN   316
NTDB id 363 SMU RS05195 WP 002262215.1        LESLFRKPEATILDSSESIASSLEEVRNMRMLTANLLNLARRDDGIKPEITEIQPRFFDDTFKNYEMIARENGKKLHIIN   315
consensus                                     !!*!!!!!*!!!***!!*!!!!!!*!!!!!!*!!**!!!!!!!!!!!!!!!!!!*********!***!*!!**!!*!!*******!

logo
NTDB id 259 KZH43 RS03480 WP 000491790.1      RIHRTIVTDQLLLKQLMTILFDNAVKYTEEDGEIDFLISATDRNLYLLVSDNGIGISTEDKKKIFDRFYRVDKARTRQKG   398
NTDB id 218 SPD RS03780 WP 000491790.1        RIHRTIVTDQLLLKQLMTILFDNAVKYTEEDGEIDFLISATDRNLYLLVSDNGIGISTEDKKKIFDRFYRVDKARTRQKG   398
NTDB id 184 SPR RS03565 WP 000491790.1        RIHRTIVTDQLLLKQLMTILFDNAVKYTEEDGEIDFLISATDRNLYLLVSDNGIGISTEDKKKIFDRFYRVDKARTRQKG   398
NTDB id 148 SP RS03910 WP 000491790.1         RIHRTIVTDQLLLKQLMTILFDNAVKYTEEDGEIDFLISATDRNLYLLVSDNGIGISTEDKKKIFDRFYRVDKARTRQKG   398
NTDB id 375318 FP508 RS05225 WP 185159754.1  MIQDSFKTDKTLLKQLMTILFDNAIKYTDNDGSIDFTISETDKYLFLEIADNGPGISEEDKVRIFDRFYRVDKARTRQQG   396
NTDB id 363 SMU RS05195 WP 002262215.1        KVNRQIKTDKTLLKQLMTILFDNAVKYTDNDGEIWLDVKTTDRSLIFSVADNGQGISDEDKKKIFDRFYRVDKARTRQKG   395
consensus                                     ******!!**!!!!!!!!!!!!!!!*!!!**!!*!******!!**!*****!!!*!!!!*!!!**!!!!!!!!!!!!!!!!*!
```

```
logo

NTDB id 259 KZH43 RS03480 WP 000491790.1        GFGLGLSLAKQIVDALKGTVTVKDNKPKGTIFEVKIAIQTPSKKKK   444
NTDB id 218 SPD RS03780 WP 000491790.1          GFGLGLSLAKQIVDALKGTVTVKDNKPKGTIFEVKIAIQTPSKKKK   444
NTDB id 184 SPR RS03565 WP 000491790.1          GFGLGLSLAKQIVDALKGTVTVKDNKPKGTIFEVKIAIQTPSKKKK   444
NTDB id 148 SP RS03910 WP 000491790.1           GFGLGLSLAKQIVDALKGTVTVKDNKPKGTIFEVKIAIQTPSKKKK   444
NTDB id 375318 FP508 RS05225 WP 185159754.1     GFGLGLSLAQQIVNSLRGNITVIDNKPRGSIFKIKLPKVKG.....   437
NTDB id 363 SMU RS05195 WP 002262215.1          GFGLGLSLAKQITDSLKGSIIVKDKKPQGVMFEARLLANK......   435
consensus                                       !!!!!!!!!*!!***!*!***!*!*!!*!**!*************
```

X non conserved

X similar

X $\geq$ 50% conserved