```
logo
NTDB id 1059209 ACFKHJ RS04855 WP 392453165.1  MSKRFKKIISTDKFSFFIRYFAVFTLIFGLMTAIIFQLMRSTMYQTSDSTLARIKDAPALVVGFAIARTYEPNSEFIIQD   80
NTDB id 259 KZH43 RS03480 WP 000491790.1       MFSKLKKTWYADDFSYFIRNFGVFTLIFSTMTLIILQVMHSSLYTSVDDKLHGLSENPQAVIQLAINRATEEIKDLENAR   80
NTDB id 218 SPD RS03780 WP 000491790.1         MFSKLKKTWYADDFSYFIRNFGVFTLIFSTMTLIILQVMHSSLYTSVDDKLHGLSENPQAVIQLAINRATEEIKDLENAR   80
NTDB id 184 SPR RS03565 WP 000491790.1         MFSKLKKTWYADDFSYFIRNFGVFTLIFSTMTLIILQVMHSSLYTSVDDKLHGLSENPQAVIQLAINRATEEIKDLENAR   80
NTDB id 148 SP RS03910 WP 000491790.1          MFSKLKKTWYADDFSYFIRNFGVFTLIFSTMTLIILQVMHSSLYTSVDDKLHGLSENPQAVIQLAINRATEEIKDLENAR   80
NTDB id 363 SMU RS05195 WP 002262215.1         MLIKLRKQKQDENISFFSHFFAVFTGIFFVMTVIILQVMHFGIYSSVDNSLKIATENVNDYVNMTLSHNN.PITEAENGD   79
consensus                                      !*****!*******!*!***!*!!!*!!**!!*!!*!*!****!***!**!*************************
```

```
logo
NTDB id 1059209 ACFKHJ RS04855 WP 392453165.1  GNIADESDSAESNSDTTNSPKNQKDDQLKLGYNTHVLLYSND.GVVVNPDNFTGLSDLSLDKKNLGEIKEATVDSTFGGS  159
NTDB id 259 KZH43 RS03480 WP 000491790.1       AD....A..............SKVEIKPNVSSNTEVILFDKDFTQLLSGNRFLGLDKIKLEKKELGHIYQIQVFNSYGQE  142
NTDB id 218 SPD RS03780 WP 000491790.1         AD....A..............SKVEIKPNVSSNTEVILFDKDFTQLLSGNRFLGLDKIKLEKKELGHIYQIQVFNSYGQE  142
NTDB id 184 SPR RS03565 WP 000491790.1         AD....A..............SKVEIKPNVSSNTEVILFDKDFTQLLSGNRFLGLDKIKLEKKELGHIYQIQVFNSYGQE  142
NTDB id 148 SP RS03910 WP 000491790.1          AD....A..............SKVEIKPNVSSNTEVILFDKDFTQLLSGNRFLGLDKIKLEKKELGHIYQIQVFNSYGQE  142
NTDB id 363 SMU RS05195 WP 002262215.1         .A....S..............FKVKSNGQMAANTDTILYDKKHNVINNVNAFSSLYHIRPKLKDIGDIVEQEAKNIYGQT  140
consensus                                      **    *             **********!!***!************!**!*******!**!*!*********!**
```

```
logo
NTDB id 1059209 ACFKHJ RS04855 WP 392453165.1  EDYRYVTIELAPDDLGYYSSYDIKYATIFVNVSQIKSSIETYETAVAIVMVSAWLISILASIYLSNLSMRPILISYQKQK  239
NTDB id 259 KZH43 RS03480 WP 000491790.1       EIYRVILMETNISSV....STNIKYAAVLINTSQLEQASQKHEQLIVVVMASFWILSLLASLYLARVSVRPLLESMQKQQ  218
NTDB id 218 SPD RS03780 WP 000491790.1         EIYRVILMETNISSV....STNIKYAAVLINTSQLEQASQKHEQLIVVVMASFWILSLLASLYLARVSVRPLLESMQKQQ  218
NTDB id 184 SPR RS03565 WP 000491790.1         EIYRVILMETNISSV....STNIKYAAVLINTSQLEQASQKHEQLIVVVMASFWILSLLASLYLARVSVRPLLESMQKQQ  218
NTDB id 148 SP RS03910 WP 000491790.1          EIYRVILMETNISSV....STNIKYAAVLINTSQLEQASQKHEQLIVVVMASFWILSLLASLYLARVSVRPLLESMQKQQ  218
NTDB id 363 SMU RS05195 WP 002262215.1         EKYRTVTVKVNN.DF....YPQIKFATIVINTTQLEEANTRYVTIIISVMIVFWLISVIASVYLAKWSQKPILENYEKQK  215
consensus                                      !*!!***********    ***!!*!****!**!***************!!***!**!**!!*!!****!**!*!***!!*
```

```
logo
NTDB id 1059209 ACFKHJ RS04855 WP 392453165.1  DFVENASHELRTPLAVLQNRLEGLFRHPNATILESSESIGSSLEEVRNMRMLTTNLLNLARRDDGFKLDIVEVPPSYFDE  319
NTDB id 259 KZH43 RS03480 WP 000491790.1       SFVENASHELRTPLAVLQNRLETLFRKPEATIMDVSESIASSLEEVRNMRFLTTSLLNLARRDDGIKPELAEVPTSFFNT  298
NTDB id 218 SPD RS03780 WP 000491790.1         SFVENASHELRTPLAVLQNRLETLFRKPEATIMDVSESIASSLEEVRNMRFLTTSLLNLARRDDGIKPELAEVPTSFFNT  298
NTDB id 184 SPR RS03565 WP 000491790.1         SFVENASHELRTPLAVLQNRLETLFRKPEATIMDVSESIASSLEEVRNMRFLTTSLLNLARRDDGIKPELAEVPTSFFNT  298
NTDB id 148 SP RS03910 WP 000491790.1          SFVENASHELRTPLAVLQNRLETLFRKPEATIMDVSESIASSLEEVRNMRFLTTSLLNLARRDDGIKPELAEVPTSFFNT  298
NTDB id 363 SMU RS05195 WP 002262215.1         SFVENASHELRTPLAVLQNRLESLFRKPEATILDSSESIASSLEEVRNMRMLTANLLNLARRDDGIKPEITEIQPRFFDD  295
consensus                                      *!!!!!!!!!!!!!!!!!!!!!!*!!!*!*!!!***!!!!*!!!!!!!!!!!*!!**!!!!!!!!!!!*!****!*****!**
```

```
logo
NTDB id 1059209 ACFKHJ RS04855 WP 392453165.1  IFENYMMIADENGKTVTVNNLIDQPIRTDKVLVKQLLTILFDNAMKYTEDDGAIQVTANIKDKSVYFTVADNGLGISDSD  399
NTDB id 259 KZH43 RS03480 WP 000491790.1       TFTNYEMIASENNRVFRFENRIHRTIVTDQLLLKQLMTILFDNAVKYTEEDGEIDFLISATDRNLYLLVSDNGIGISTED  378
NTDB id 218 SPD RS03780 WP 000491790.1         TFTNYEMIASENNRVFRFENRIHRTIVTDQLLLKQLMTILFDNAVKYTEEDGEIDFLISATDRNLYLLVSDNGIGISTED  378
NTDB id 184 SPR RS03565 WP 000491790.1         TFTNYEMIASENNRVFRFENRIHRTIVTDQLLLKQLMTILFDNAVKYTEEDGEIDFLISATDRNLYLLVSDNGIGISTED  378
NTDB id 148 SP RS03910 WP 000491790.1          TFTNYEMIASENNRVFRFENRIHRTIVTDQLLLKQLMTILFDNAVKYTEEDGEIDFLISATDRNLYLLVSDNGIGISTED  378
NTDB id 363 SMU RS05195 WP 002262215.1         TFKNYEMIAREN GKKLHIINKVNRQIKTDKTLLKQLMTILFDNAVKYTDNDGEIWLDVKTTDRSLIFSVADNGQGISDED  375
consensus                                      *!*!!*!!!!*!*******!*****!*!!**!*!!!!*!!!!!!!*!!!**!!*!*******!******!*!!!*!!!**!
```

```
logo
NTDB id 1059209 ACFKHJ RS04855 WP 392453165.1  KKKIFDRFYRVDKARTRSKGGFGLGLSLALQISNSLKGTITVRDNQPKGTIFEVRLPR........  457
NTDB id 259 KZH43 RS03480 WP 000491790.1       KKKIFDRFYRVDKARTRQKGGFGLGLSLAKQIVDALKGTVTVKDNKPKGTIFEVKIAIQTPSKKKK  444
NTDB id 218 SPD RS03780 WP 000491790.1         KKKIFDRFYRVDKARTRQKGGFGLGLSLAKQIVDALKGTVTVKDNKPKGTIFEVKIAIQTPSKKKK  444
NTDB id 184 SPR RS03565 WP 000491790.1         KKKIFDRFYRVDKARTRQKGGFGLGLSLAKQIVDALKGTVTVKDNKPKGTIFEVKIAIQTPSKKKK  444
NTDB id 148 SP RS03910 WP 000491790.1          KKKIFDRFYRVDKARTRQKGGFGLGLSLAKQIVDALKGTVTVKDNKPKGTIFEVKIAIQTPSKKKK  444
NTDB id 363 SMU RS05195 WP 002262215.1         KKKIFDRFYRVDKARTRQKGGFGLGLSLAKQITDSLKGSIIVKDKKPQGVMFEARLLANK......  435
consensus                                      !!!!!!!!!!!!!!!!!!*!!!!!!!!!!!!*!!***!!!***!*!**!*!**!!************
```

X non conserved

X similar

X $\geq$ 50% conserved