```
logo
NTDB id 363 SMU RS05195 WP 002262215.1        MLIKLRKQKQDENISFFSHFFAVFTGIFFVMTVIIIQVMHFGIYSSVDNSLKIATENVNDYVNMTLSHNNP.ITEAENG.   78
NTDB id 284703 SK637 RS03845 WP 033688608.1   MFSKLKKTWYADDFSYFIRNFGVFTLIFSTMTLIILQVMHSSLYTSVDDKLHGLSENPQAVIQLAVNRATEEIKDLENAA   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
consensus                                     !**!!*!*******!*!***!*!!!*!!**!!*!!*!!!!***!*!!!**!****!!*********************!***!!**

logo
NTDB id 363 SMU RS05195 WP 002262215.1        DASFKVKSNGQMAANTDTILYDKKHNVINNVNAFSSLYHIRPKLKDIGDIVEQEAKNIYGQTEKYRTVTVKVNN.DFYPQ   157
NTDB id 284703 SK637 RS03845 WP 033688608.1   TDTSKTDVKPNVSSNTEVILFDKNFTQLLSGNRFLGLDKIKLEKKELGHIYQIQVFNSYGQEEIYRMILMETNISSVSTN   160
NTDB id 259 KZH43 RS03480 WP 000491790.1      ADASKVEIKPNVSSNTEVILFDKDFTQLLSGNRFLGLDKIKLEKKELGHIYQIQVFNSYGQEEIYRVILMETNISSVSTN   160
NTDB id 218 SPD RS03780 WP 000491790.1        ADASKVEIKPNVSSNTEVILFDKDFTQLLSGNRFLGLDKIKLEKKELGHIYQIQVFNSYGQEEIYRVILMETNISSVSTN   160
NTDB id 184 SPR RS03565 WP 000491790.1        ADASKVEIKPNVSSNTEVILFDKDFTQLLSGNRFLGLDKIKLEKKELGHIYQIQVFNSYGQEEIYRVILMETNISSVSTN   160
NTDB id 148 SP RS03910 WP 000491790.1         ADASKVEIKPNVSSNTEVILFDKDFTQLLSGNRFLGLDKIKLEKKELGHIYQIQVFNSYGQEEIYRVILMETNISSVSTN   160
consensus                                     ****!*********!!**!!*!!********!*!**!**!****!**!*!******!*!!!*!*!!******!*******

logo
NTDB id 363 SMU RS05195 WP 002262215.1        IKFATIVINTTQLEEANTRYVTIIISVMIVFWLISVIASVYLAKWSQKPILENYEKQKSFVENASHELRTPLAVLQNRLE   237
NTDB id 284703 SK637 RS03845 WP 033688608.1   IKYAAVLINTSQLEQASQKHEQLIVIVMASFWILSLLASLYLARVSVRPLLESMQKQQSFVENASHELRTPLAVLQNRLE   240
NTDB id 259 KZH43 RS03480 WP 000491790.1      IKYAAVLINTSQLEQASQKHEQLIVVVMASFWILSLLASLYLARVSVRPLLESMQKQQSFVENASHELRTPLAVLQNRLE   240
NTDB id 218 SPD RS03780 WP 000491790.1        IKYAAVLINTSQLEQASQKHEQLIVVVMASFWILSLLASLYLARVSVRPLLESMQKQQSFVENASHELRTPLAVLQNRLE   240
NTDB id 184 SPR RS03565 WP 000491790.1        IKYAAVLINTSQLEQASQKHEQLIVVVMASFWILSLLASLYLARVSVRPLLESMQKQQSFVENASHELRTPLAVLQNRLE   240
NTDB id 148 SP RS03910 WP 000491790.1         IKYAAVLINTSQLEQASQKHEQLIVVVMASFWILSLLASLYLARVSVRPLLESMQKQQSFVENASHELRTPLAVLQNRLE   240
consensus                                     !!*!***!!!*!!!*!*******!**!!**!!**!**!!*!!!**!**!*!!***!!*!!!!!!!!!!!!!!!!!!!!!!!

logo
NTDB id 363 SMU RS05195 WP 002262215.1        SLFRKPEATILDSSESIASSLEEVRNMRMLTANLLNLARRDDGIKPEITEIQPRFFDDTFKNYEMIARENGKKLHIINKV   317
NTDB id 284703 SK637 RS03845 WP 033688608.1   TLFRKPEATIMDVSESIASSLEEVRNMRFLTTNLLNLARRDDGIKPELAEVPTSFFNTTFTNYEMIASENDRVFRFENRI   320
NTDB id 259 KZH43 RS03480 WP 000491790.1      TLFRKPEATIMDVSESIASSLEEVRNMRFLTTSLLNLARRDDGIKPELAEVPTSFFNTTFTNYEMIASENNRVFRFENRI   320
NTDB id 218 SPD RS03780 WP 000491790.1        TLFRKPEATIMDVSESIASSLEEVRNMRFLTTSLLNLARRDDGIKPELAEVPTSFFNTTFTNYEMIASENNRVFRFENRI   320
NTDB id 184 SPR RS03565 WP 000491790.1        TLFRKPEATIMDVSESIASSLEEVRNMRFLTTSLLNLARRDDGIKPELAEVPTSFFNTTFTNYEMIASENNRVFRFENRI   320
NTDB id 148 SP RS03910 WP 000491790.1         TLFRKPEATIMDVSESIASSLEEVRNMRFLTTSLLNLARRDDGIKPELAEVPTSFFNTTFTNYEMIASENNRVFRFENRI   320
consensus                                     *!!!!!!!!!!*!*!!!!!!!!!!!!!!!!!!*!!**!!!!!!!!!!!!!!!!**!****!!**!!*!!!!!!!*!!*******!**

logo
NTDB id 363 SMU RS05195 WP 002262215.1        NRQIKTDKTLLKQLMTILFDNAVKYTDNDGEIWLDVKTTDRSLIFSVADNGQGISDEDKKKIFDRFYRVDKARTRQKGGF   397
NTDB id 284703 SK637 RS03845 WP 033688608.1   HRTIVTDQLLLKQLMTILFDNAVKYTEEDGEIDFLISATDRNLYLLVSDNGVGISTEDKKKIFDRFYRVDKARTRQKGGF   400
NTDB id 259 KZH43 RS03480 WP 000491790.1      HRTIVTDQLLLKQLMTILFDNAVKYTEEDGEIDFLISATDRNLYLLVSDNGIGISTEDKKKIFDRFYRVDKARTRQKGGF   400
NTDB id 218 SPD RS03780 WP 000491790.1        HRTIVTDQLLLKQLMTILFDNAVKYTEEDGEIDFLISATDRNLYLLVSDNGIGISTEDKKKIFDRFYRVDKARTRQKGGF   400
NTDB id 184 SPR RS03565 WP 000491790.1        HRTIVTDQLLLKQLMTILFDNAVKYTEEDGEIDFLISATDRNLYLLVSDNGIGISTEDKKKIFDRFYRVDKARTRQKGGF   400
NTDB id 148 SP RS03910 WP 000491790.1         HRTIVTDQLLLKQLMTILFDNAVKYTEEDGEIDFLISATDRNLYLLVSDNGIGISTEDKKKIFDRFYRVDKARTRQKGGF   400
consensus                                     *!*!*!!**!!!!!!!!!!!!!!!!!!!!!!**!!!!******!!!*!***!*!!!!*!!!*!!!!!!!!!!!!!!!!!!!!!!!
```

```
logo

NTDB id 363 SMU RS05195 WP 002262215.1          GLGLSLAKQITDSLKGSIIVKDKKPQGVMFEARLLANK......   435
NTDB id 284703 SK637 RS03845 WP 033688608.1     GLGLSLAKQIVDALKGTITVKDNKPKGTIFEVKIAIHTPSKKKK   444
NTDB id 259 KZH43 RS03480 WP 000491790.1        GLGLSLAKQIVDALKGTVTVKDNKPKGTIFEVKIAIQTPSKKKK   444
NTDB id 218 SPD RS03780 WP 000491790.1          GLGLSLAKQIVDALKGTVTVKDNKPKGTIFEVKIAIQTPSKKKK   444
NTDB id 184 SPR RS03565 WP 000491790.1          GLGLSLAKQIVDALKGTVTVKDNKPKGTIFEVKIAIQTPSKKKK   444
NTDB id 148 SP RS03910 WP 000491790.1           GLGLSLAKQIVDALKGTVTVKDNKPKGTIFEVKIAIQTPSKKKK   444
consensus                                       !!!!!!!!!!*!*!!!*****!!!*!!*!**!!**************
```

X non conserved

X similar

X $\geq$ 50% conserved