```
logo
NTDB id 361 SMU RS01310 WP 002262737.1      ..MSKEKILQVNNLHVNFHTYAGEVKAIRDVSFYLEKGETLAIVGESGSGKSVTTRTLMGLSAKNAEI.FGDIEFKGHNLNDLK.   81
NTDB id 85726 STYK RS01635 WP 084927004.1   MTKEKNVILTARDIVVEFDVRDKVLTAIRGVSLELVEGEVLALVGESGSGKSVLTKTFTGMLEENGRIAQGGIDYRGQDLTALSS   85
NTDB id 478 HSISS4 RS06985 WP 021143811.1   MTENKNVILSARDIVVEFDVRDRVLTAIRGVSLDLVEGEVLALVGESGSGKSVLTKTFTGMLEENGRVASGSIDYRGQDLTKLKS   85
NTDB id 327 STU RS16115 WP 011226304.1      MTENKNVILSARDIVVEFDVRDRVLTAIRGVSLDLVEGEVLALVGESGSGKSVLTKTFTGMLEENGRVASGSIDYRGKDLTKFKS   85
NTDB id 295 STER RS06915 WP 011226304.1     MTENKNVILSARDIVVEFDVRDRVLTAIRGVSLDLVEGEVLALVGESGSGKSVLTKTFTGMLEENGRVASGSIDYRGKDLTKFKS   85
consensus                                   ****!**!!******!*!*********!!!*!!**!**!!*!!*!!!!!!!!!!*!*!**!****!*****!*!***!  *!******
```

```
logo
NTDB id 361 SMU RS01310 WP 002262737.1      EEDWVHIRGNDISMIFQDPMTSLDPTMRIGLQIAEPIIKHEKVTKKEALKRALDMMEKVGIPNAGEHINDYPHQWSGGMRQRAVI  166
NTDB id 85726 STYK RS01635 WP 084927004.1   HKDWEQIRGAKIATIFQDPMTSLDPIKTIGSQITEVIVKHQGKTAKEAKELAIDYMNKVGIPDADRRFDEYPFQYSGGMRQRIVI  170
NTDB id 478 HSISS4 RS06985 WP 021143811.1   HQDWAHIRGAKIATIFQDPMTSLDPIKTIGSQIVEVIVKHQGKSAKEAKKMAIDYMDKVGIPDAEKRFNEYPFQYSGGMRQRIVI  170
NTDB id 327 STU RS16115 WP 011226304.1      HQDWAAIRGAKIATIFQDPMTSLNPIKTIGSQIIEVIVKHQGKTAKEAKKMAIDYMDKVGIPDAEKRFNEYPFQYSGGMRQRIVI  170
NTDB id 295 STER RS06915 WP 011226304.1     HQDWAAIRGAKIATIFQDPMTSLNPIKTIGSQIIEVIVKHQGKTAKEAKKMAIDYMDKVGIPDAEKRFNEYPFQYSGGMRQRIVI  170
consensus                                   **!!* !!!**!**!!!!!!!!!*!***!!*!!*!*!*!!*****!!!***!*!*!*!!!!!*!******!!*!*!!!!!!!*!!
```

```
logo
NTDB id 361 SMU RS01310 WP 002262737.1      AIALATNPEILVADEPTTALDVTIQAQILHLMKEIQKNTDSSIIFITHDLGVVAGMADRVAVMYAGKIVEYGTVDEVFYNPQHPY  251
NTDB id 85726 STYK RS01635 WP 084927004.1   AIALACRPDVLICDEPTTALDVTIQAQIIDLLKSLQNEYHFTTIFITHDLGVVASIADKVAVMYAGEIVEYGTVEEVFYDPRHPY  255
NTDB id 478 HSISS4 RS06985 WP 021143811.1   AIALACRPDVLICDEPTTALDVTIQAQIIDLLKSLKEEYGFSVIFITHDLGVVASIADKVAVMYAGEIIEYATVEEIFYEPCHPY  255
NTDB id 327 STU RS16115 WP 011226304.1      AIALACRPDVLICDEPTTALDVTIQAQIIDLLKSLKEEYGFSVIFITHDLGVVASIADKVAVMYAGEIIEYATVEEIFYEPCHPY  255
NTDB id 295 STER RS06915 WP 011226304.1     AIALACRPDVLICDEPTTALDVTIQAQIIDLLKSLKEEYGFSVIFITHDLGVVASIADKVAVMYAGEIIEYATVEEIFYEPCHPY  255
consensus                                   !!!!!**!**!**!!!!!!!!!!!!!!!!!!*!*!**********!!!!!!!!!!!!**!!*!!!!!!!*!*!!*!!*!*!!*!*!!!
```

```
logo
NTDB id 361 SMU RS01310 WP 002262737.1      TWGLLNSMPTTNTASGSLHSIPGTPPDLLQPPQGDAFAPRNEFALDIDLKEEPPFFKVSDSHYAATWLLDDRAPKITPPERILQR  336
NTDB id 85726 STYK RS01635 WP 084927004.1   TWSLLSSLPQLADDKGDLYSIPGTPPSLYTDLKGDAFALRSDYAMQIDFEQKAPQFSVSETHWAKTWLLHEDAPKVEKPAVIANL  340
NTDB id 478 HSISS4 RS06985 WP 021143811.1   TWSLLSSLPQLADDKGELFSIPGTPPSLYTPVVGDAFALRSDYAMQIDFEEKAPQFQVSDTHWAKTWLLHEDAPKVEKPAVIQNL  340
NTDB id 327 STU RS16115 WP 011226304.1      TWSLLSSLPQLADDNGKLFSIPGTPPSLYTPVVGDAFALRSDYALQIDFEEKAPQFQVSDTHWAKTWLLHEDAPKVDKPAVIQNL  340
NTDB id 295 STER RS06915 WP 011226304.1     TWSLLSSLPQLADDNGKLFSIPGTPPSLYTPVVGDAFALRSDYALQIDFEEKAPQFQVSDTHWAKTWLLHEDAPKVDKPAVIQNL  340
consensus                                   !!*!!*!*!***** ! !*!!!!!!!*!*****!!!!!*!***!**!!*****!*!*!!**!*!*!!!!***!!!***!**!***
```

```
logo
NTDB id 361 SMU RS01310 WP 002262737.1      WEKWKSLQGEKHND.......   350
NTDB id 85726 STYK RS01635 WP 084927004.1   HDKIREKMGFAHLAD......   355
NTDB id 478 HSISS4 RS06985 WP 021143811.1   HEKIRANMGFAHLGDEEEGNA   361
NTDB id 327 STU RS16115 WP 011226304.1      HEKILANMGFAHLGDEEEGNA   361
NTDB id 295 STER RS06915 WP 011226304.1     HEKILANMGFAHLGDEEEGNA   361
consensus                                   **!*****!**!*********
```

X non conserved
X similar
X ≥ 50% conserved