```
logo
NTDB id 409118 GP482 RS04630 WP 074799225.1   MKKYVGMRILRSLVSILLVTTLTYGIIYALVPRHLIFRQDPNYNKMVTTADKRINYENQIYSKTGYIEYKDSKDLSKIAS   80
NTDB id 476 HSISS4 RS06995 WP 013990225.1     MKKYILLRTLRSLLSIFVVTALTYTIIYTMVPRRLIFRQDPNYNKIAKTADSKANYENTIYERMGYIDYYDTKELQEKAS   80
NTDB id 293 STER RS06925 WP 011681416.1       MKKYILLRTLRSLLSIFVVTALTYTIIYTMVPRRLIFRQDPNYNKIAKTADSKANYENTIYERLGYIDYYDTKELQEKAS   80
NTDB id 325 STU RS16125 WP 002946410.1        MKKYILLRTLRSLLSIFVVTALTYTIIYTMVPRRLIFRQDPNYNKIAKTADSKANYENTIYERLGYIDYYDTKELQEKAS   80
consensus                                     !!!!***!*!!!!*!!**!!*!!!*!!!**!!!*!!!!!!!!!!!!***!!!***!!!!*!!***!!!*!*!*!*!***!!

logo
NTDB id 409118 GP482 RS04630 WP 074799225.1   TIDSKVTVDNTKKNKKVYQDCIDKIGKGWKLYQFPESKKFYAVREIPLYERVLKFYSNLIVIDHPWKIKDPSNPNLKRYV   160
NTDB id 476 HSISS4 RS06995 WP 013990225.1     SLDKSVTTKPTKENKAIYQKYVDSLGHGWRLHQFKQSKQFYATRDVPVLERVFGFYTHLFEFDNTGWVKDKTNPNLKRYI   160
NTDB id 293 STER RS06925 WP 011681416.1       SLDKSVTTKPTKENKAVYQKYVDSLGRGWRLHQFKQSKQFYATRDVPVLERVFGFYTHLFEFDNTGWVKDKTNPNLKRYI   160
NTDB id 325 STU RS16125 WP 002946410.1        SLDKSVTTKPTKENKAIYQKYVDSLGRGWRLHQFKQSKQFYATRDVPVLERVFGFYTHLFEFDNTGWVKDKTNPNLKRYI   160
consensus                                     **!**!!***!!*!!**!!***!**!*!!*!*!!**!!*!!!*!**!**!!!**!!**!***!*****!!**!!!!!!!*

logo
NTDB id 409118 GP482 RS04630 WP 074799225.1   RFENDPAIGPALVGSGTEHKYLIYFNGAFPFIHQHIVTMNLGISYPTYANVPILQVINQGQGKAELKEVKFPTGKTKMSS   240
NTDB id 476 HSISS4 RS06995 WP 013990225.1     RIENDPAIGWSVVGSGTKHKYLLYFNSQFPFVHQNFVKMNLGTSYPTYAEQGVLDVITQGQGQTQSSEVNFPTGK.KVSS   239
NTDB id 293 STER RS06925 WP 011681416.1       RIENDPAIGWSVVGSGTKHKYLLYFNGQFPFVHQNFVKMNLGTSYPTYAGQGVLDVITQGQGQTKSSVVNFPTGK.KISS   239
NTDB id 325 STU RS16125 WP 002946410.1        RIENDPAIGWSVVGSGTKHKYLLYFNSQFPFVHQNFVKMNLGTSYPTYAEQGVLDVITQGQGQTKSSVVNFPTGK.KISS   239
consensus                                     !*!!!!!!!***!!!!!*!!!!*!!!  *!!!*!!**!*!!!!*!!!!!!****!*!!*!!!!***** !*!!!!! !*!!

logo
NTDB id 409118 GP482 RS04630 WP 074799225.1   VDIYTRTYKSPKDADAMAVNNFGKGDAYTATKSIYSDPSMVSNSVRIGVIGVLISYLLGLPIGLLMARFKNGFFDRFSTG   320
NTDB id 476 HSISS4 RS06995 WP 013990225.1     VDIYSRTYKSPSQADARDRSYYG.DDPYTATKSRYQYPSMVTSSAIAGLIGLVLSYALAIPLGSYMARFKNTLFDSVSTG   318
NTDB id 293 STER RS06925 WP 011681416.1       VDIYSRTYKSPSQADARDRSYYG.NDPYTATKSRYQYPSMVTSSAIAGLIGLVLSYALAIPLGSYMALFKNTLFDSVSTG   318
NTDB id 325 STU RS16125 WP 002946410.1        VDIYSRTYKSPSQADARDRSYYG.NDPYTATKSRYQYPSMVTSSAIAGLIGLVLSYALAIPLGSYMALFKNTIFDSVSTG   318
consensus                                     !!!!*!!!!!!**!!!!!!!!!  *!*!!!!!!*!**!!!!**!***!*!!***!!*!**!*!**!!  !!!**!!**!!!

logo
NTDB id 409118 GP482 RS04630 WP 074799225.1   VVTFLLAVPSIAIIYAIRFLGSAIGLPDAFPTLGAHDWRSYVLPAFILGFLSIPGIVVWFRRYVVDLQNSDFVKFARAKG   400
NTDB id 476 HSISS4 RS06995 WP 013990225.1     ILTFLLSLPTIALVYIIRLIGSEIGLPDSFPILGAGDWRSYVLPSVILGLLSTPGLAIWIRRYMIDLQSQDFVRFARAKG   398
NTDB id 293 STER RS06925 WP 011681416.1       VLTFLLSLPTIALVYIIRLIGSEIGLPDSFPILGAGDWRSYVLPSVILGLLSTPGLAIWIRRYMIDLQSQDFVRFARAKG   398
NTDB id 325 STU RS16125 WP 002946410.1        VLTFLLSLPTIALVYIIRLIGSEIGLPDSFPILGAGDWRSYVLPSVILGLLSTPGLAIWIRRYMIDLQSQDFVRFARAKG   398
consensus                                     **!!!!**!*!!**!*!!**!!*!!!!!*!!*!!!!*!!!!!!!!**!!!*!!*!!***!*!!!!**!!!**!!!*!!!!!!

logo
NTDB id 409118 GP482 RS04630 WP 074799225.1   LSENEISKKHLFKQAMVPIVNGIPEAILGTIVGATLTETIFAFPGMGKMLIDSIKATNNSMVVGLVFLFTSLSIISLLLG   480
NTDB id 476 HSISS4 RS06995 WP 013990225.1     LSEQEISNKHIFKNAMVSLVSGIPASIVSVITGATLTETIFAYPGMGKMLIDSVRASNNAMVVGLVFIFTALIIFSLLVG   478
NTDB id 293 STER RS06925 WP 011681416.1       LSEQEISNKHILKNAMVSLVSGIPASIVGVITGATLTETIFAYPGMGKMLIDSVRASNNAMVVGLVFIFTALSIFSLLVG   478
NTDB id 325 STU RS16125 WP 002946410.1        LSEQEISNKHILKNAMVSLVSGIPASIVGVITGATLTETIFAYPGMGKMLIDSVRASNNAMVVGLVFIFTALSIFSLLVG   478
consensus                                     !!!*!!!*!!*  !*!!!**!*!!!**!***!*!!!!!!!!!!*!!!!!!!!!!**!*!!*!!!!!!!*!!*!*!*!!!*!
```

```
logo

NTDB id 409118 GP482 RS04630 WP 074799225.1   DLLMVLLDPRIKLSSKGGKK   500
NTDB id 476 HSISS4 RS06995 WP 013990225.1     DILMTMIDPRIKLTSKGGK.   497
NTDB id 293 STER RS06925 WP 011681416.1       DILMTIIDPRIKLTSKGGK.   497
NTDB id 325 STU RS16125 WP 002946410.1        DILMTIIDPRIKLTSKGGK.   497
consensus                                     !*!!***!!!!!!*!!!!!
```

X non conserved

X similar

X $\geq$ 50% conserved