```
logo
NTDB id 248511 CPQ89 RS09535 WP 112195451.1  MSEVTRLPKRSEVPLELTWDLTKIFATDAEFEEAFGQVVKAAEDFEQYKGTLENGAQAFLVALMAMLKLDRQLEVVYVYA   80
NTDB id 480 HSISS4 RS02090 WP 002890133.1    .....MSDNRTHLEEKYTWDLTTIFATDADWETEYESTVQDLKKASAYAGHLLDSAKNLLGATELYMSLMRRLEKIYVYA   75
consensus                                    *****  * !****   !!!!! !!!!!!**!  *   !         ! !*!   !   ! !    * ! ! !! *!!!!

logo
NTDB id 248511 CPQ89 RS09535 WP 112195451.1  SMKNDEDTANAKYQALMARVQKLLADVSAKLAWFQPELLALAPEKLASYYQAESRLNAYKTLVNDWTRLRAHVLSEKEEA  160
NTDB id 480 HSISS4 RS02090 WP 002890133.1    SMKNDQDTTVGLYQEYQAKASNLYSQLSEAFAYFEPEFMALDDKKLAEFKEQEPGLGLYDHYFERLLANKDHVLSQEAEE  155
consensus                                    !!!!! !!  * !!   !*   !   *!   !*! !! *!! * !!! *   !* !  ! *        * !!!!   !

logo
NTDB id 248511 CPQ89 RS09535 WP 112195451.1  LLAGASDILGASANVFEVLNNADLKFPVVTDGSGSKVELSNGVYGKLLEATERSVRREAFEQLYTVYKQFRHTFAATLSA  240
NTDB id 480 HSISS4 RS02090 WP 002890133.1    LLAAAGDIFNGPTDTFNVLDNADILFPWVSDGQGDVVELTHGNFITLMESKDRDIRKGAYEAMYGTYEQFQHTYAQTLQG  235
consensus                                    !!!*! !!  **   ! !! !!!* !! !*!! !  !!!**! *  !*!  *! *!* !*! *!  ! !! !!*! !! *

logo
NTDB id 248511 CPQ89 RS09535 WP 112195451.1  HVRKHNFSAKLRNYQSAKEASLAQNNIPVAVYDTLVKTVNENLELLHDYVALRKDILRVDELHMYDMYTPLTGEPTLTFT  320
NTDB id 480 HSISS4 RS02090 WP 002890133.1    VVKVHNYQAKVRHYNSARHAALAANFIPESVYDSLLESVNKHLPLLHRYLDLRKKVLGLDELKMYDVYTPLSETE.TALT  314
consensus                                    *!* !!* !!*!*!*!!**! !! ! !!  !!!*!* *!! *!*!!! !* !!! *! *!!!*!!!*!!!!*  **   !

logo
NTDB id 248511 CPQ89 RS09535 WP 112195451.1  YEQAKKMTLEALSVLGEEYTTYVEKAFAERWIDVVANAGKRSGAYSGGAYDTAPYILLNWQDTLDNLFTLVHEMGHTMHS  400
NTDB id 480 HSISS4 RS02090 WP 002890133.1    YEESLKKAEEVLAIFGEEYSKGVHAAFTERWIDVHPNKGKRSGAYSGGAYDTNAFMLLNWQDTLDNLFTLVHETGHSLHS  394
consensus                                    !!   !   ! ! * !!!!*  !* !! !!!!!!**! !!!!!!!!!!!!! ***!!!!!!!!!!!!!!!! !!**!!

logo
NTDB id 248511 CPQ89 RS09535 WP 112195451.1  YYTRTNQPYQYGDYSIFVAEIASTTNENLLTQYLLETQTDPKVRAYVLNHYLDGFKGTVYRQTQFAEFEAWIHEQDASQV  480
NTDB id 480 HSISS4 RS02090 WP 002890133.1    TFTRQTQPYVYGDYPIFLAEIASTTNENILTETLLKEVKDDKTRFAILNHYLDGFKGTVFRQTQFAEFEHAIHEADASGQ  474
consensus                                     *!!  !!! !!!!*!!*!!!!!!!!!!*!!  !!    !*! !  *!!!!!!!!!!!!*!!!!!!!!!* !!! !!!

logo
NTDB id 248511 CPQ89 RS09535 WP 112195451.1  PLTADLMSDFYSKLNQRYYGDAVENDPEIAYEWSRIPHFYYNFYVYQYATGFGAASTLAERVLDEEPAHTEAYLNYLKAG  560
NTDB id 480 HSISS4 RS02090 WP 002890133.1    ILTADFMNKLYADLNEKYYNLKAEDNYEIQFEWERIPHFYMNYYVYQYATGFAAASYLAEKIVHGTEEDKEAYLTYLKAG  554
consensus                                    *!!!! !   !  !! *!!    !  *!! *!! !!!!!! !*!!!!!!!!!*!!! !!!****  * * !!!! !!!!!
```

```
logo

NTDB id 248511 CPQ89 RS09535 WP 112195451.1   SSAAPLEVMKKAGVDMTDSQYLEKAFGIFKERLAELKELLAK.....   602
NTDB id 480 HSISS4 RS02090 WP 002890133.1     SSDYPLEVIKKAGVDMTNTDYLDAAFKVFEDRLVELEALVEKGVHLS   601
consensus                                     !!  !!!!*!!!!!!!! * !!* !! *! *!! !!  !* !*****
```

X non conserved

X similar

X $\geq$ 50% conserved