```
logo
NTDB id 228887 FORC57 RS11670 WP 014602170.1  MSKTNALPLREEVPENLTWDLTTIYPNDETWEKAFTDLQKITEESDQFKGRLSESSQTLYEALQFRDKAYDLISNLYVYA   80
NTDB id 480 HSISS4 RS02090 WP 002890133.1     .....MSDNRTHLEEKYTWDLTTIFATDADWETEYESTVQDLKKASAYAGHLLDSAKNLLGATELYMSLMRRLEKIYVYA   75
consensus                                     *****  * ! ***!  !!!!!!!** !  !!  *          * !*! *!   !  !          *  *!!!!

logo
NTDB id 228887 FORC57 RS11670 WP 014602170.1  HLKMDQDTANAKYQGLHSRAGSLVTKLMSALSYYDPEILAMDENVLKQFLDENKDLQLYDHLLEELNLSRPYILSEKEEA  160
NTDB id 480 HSISS4 RS02090 WP 002890133.1     SMKNDQDTTVGLYQEYQAKASNLYSQLSEAFAYFEPEFMALDDKKLAEFKEQEPGLGLYDHYFERLLANKDHVLSQEAEE  155
consensus                                     **! !!!!  * !!  * *!  ! * !  !  !**!! *!*!*  !  ! *  * ! !!!!  ! !   ****!!   !

logo
NTDB id 228887 FORC57 RS11670 WP 014602170.1  LLANAGEVLGSSSNTFNTLNNADMKFPTIKDENGEDIEITHGRFGKLLESNDPRVRRDAFHGVYSVYEGLKNTLASTLNG  240
NTDB id 480 HSISS4 RS02090 WP 002890133.1     LLAAAGDIFNGPTDTFNVLDNADILFPWVSDGQGDVVELTHGNFITLMESKDRDIRKGAYEAMYGTYEQFQHTYAQTLQG  235
consensus                                     !!! !!**   ** !!! ! !!!* !! * ! *!* *!*!!! !  !*!! !* *!* !****!  !!   *! ! !!*!

logo
NTDB id 228887 FORC57 RS11670 WP 014602170.1  QVKKSNFYASTRGYTSAREAALSGNHIPETVYDSLLKSVNANASLLHRYVKLRKELLGLEELHMYDLYTPLSDNVNLEFT  320
NTDB id 480 HSISS4 RS02090 WP 002890133.1     VVKVHNYQAKVRHYNSARHAALAANFIPESVYDSLLESVNKHLPLLHRYLDLRKKVLGLDELKMYDVYTPLSETE.TALT  314
consensus                                      !! *!* !  !*! !!!*!!! *!*!!!*!!!!!! !!! * *!!!!!* !!! *!!!*!!*!!!*!!!!!*  *   !

logo
NTDB id 228887 FORC57 RS11670 WP 014602170.1  YEEAKELVLEALKPLGDEYQAILKEAFDSRWIDVMENKGKRSGAYSSGSYSTNPYILLNWQDNINNVYTLAHELGHSVHS  400
NTDB id 480 HSISS4 RS02090 WP 002890133.1     YEESLKKAEEVLAIFGEEYSKGVHAAFTERWIDVHPNKGKRSGAYSGGAYDTNAFMLLNWQDTLDNLFTLVHETGHSLHS  394
consensus                                     !!!        ! ! * !*!!   ** !!  !!!!!**!!!!!!!!!! ! ! !!***!!!!!! * !**!! !! !!!*!!

logo
NTDB id 228887 FORC57 RS11670 WP 014602170.1  YYTRKNQPFVYGDYSIFLAEVASTTNENLLTDYLLKKYKDPKVRAYLLNHYLDGFKGTVFRQTQFAEFEHAIHQADQQGV  480
NTDB id 480 HSISS4 RS02090 WP 002890133.1     TFTRQTQPYVYGDYPIFLAEIASTTNENILTETLLKEVKDDKTRFAILNHYLDGFKGTVFRQTQFAEFEHAIHEADASGQ  474
consensus                                      *!!   !!*!!!!!*!!!!!*!!!!!!!*!!* !!!    !*! !   *!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!  !!   !

logo
NTDB id 228887 FORC57 RS11670 WP 014602170.1  ALTADFLTETYFDINKKYYGEAMVYDAEIGYEWSRIPHFYMNYYVFQYATGFSAASALSAKILTEGQDAVTAYIDFLKAG  560
NTDB id 480 HSISS4 RS02090 WP 002890133.1     ILTADFMNKLYADLNEKYYNLKAEDNYEIQFEWERIPHFYMNYYVYQYATGFAAASYLAEKIVHGTEEDKEAYLTYLKAG  554
consensus                                      !!!!!*    ! !*! !!!        !! *!! !!!!!!!!!!!!*!!!!!! !!! !  !!**   *   !!* *!!!!
```

```
logo
NTDB id 228887 FORC57 RS11670 WP 014602170.1  SSDYPIDVLKKAGVDMATPNPVDDALKVFEQRLDELEELVK......  601
NTDB id 480 HSISS4 RS02090 WP 002890133.1     SSDYPLEVIKKAGVDMTNTDYLDAAFKVFEDRLVELEALVEKGVHLS  601
consensus                                     !!!!!**!*!!!!!!!  * **! ! !!!! !! !!! !! ******
```

X non conserved
X similar
X ≥ 50% conserved