```
logo
NTDB id 1056407 O4J27 RS05780 WP 087920792.1  MTEENKAAQLPDRSDVKAEHTWRLEDIFPSDEAWNKEFQAVKELIPNLSSFKGTLAHSADNLYAALTAQDEVTNRLGKLY   80
NTDB id 480 HSISS4 RS02090 WP 002890133.1     ........MSDNRTHLEEKYTWDLTTIFATDADWETEYESTVQDLKKASAYAGHLLDSAKNLLGATELYMSLMRRLEKIY   72
consensus                                     ********  * !***   *!! !  !!**!  !  !*      **  ! * !*! *!! !! *!      *  !! !*!

logo
NTDB id 1056407 O4J27 RS05780 WP 087920792.1  AYAHMRSDQDTGNSFYQGLNDKAASLYSQAASATAYIEPEILAIQEDKLHQFILEKEELKLYSHAIEEITKQRPHVLSEQ  160
NTDB id 480 HSISS4 RS02090 WP 002890133.1     VYASMKNDQDTTVGLYQEYQAKASNLYSQLSEAFAYFEPEFMALDDKKLAEFKEQEPGLGLYDHYFERLLANKDHVLSQE  152
consensus                                      !!*!* !!!!    !!  * !!  !!!!   ! !! !!! *!* * !!* !    * ! !! !  ! *  ***!!!!

logo
NTDB id 1056407 O4J27 RS05780 WP 087920792.1  EEALLAEASEALSSPSNTFSVLNNADITFPSIKDENGKETQITHGNFINFLESSNREVRKNAFEAVYKTYGQYKNTMATT  240
NTDB id 480 HSISS4 RS02090 WP 002890133.1     AEELLAAAGDIFNGPTDTFNVLDNADILFPWVSDGQGDVVELTHGNFITLMESKDRDIRKGAYEAMYGTYEQFQHTYAQT  232
consensus                                      ! !!! ! *    !* !! !! !!!! !! * ! *!    *!!!!!!  *!!  !**!! !*!!*! !! !* *! ! !

logo
NTDB id 1056407 O4J27 RS05780 WP 087920792.1  LSGTVKKDNFYARVKKFKSAREAALSNNSIPEEVYDNLIKTINKHLPLLHRYIDLRKKVLGLDEVHIYDLYTPLVKDSGM  320
NTDB id 480 HSISS4 RS02090 WP 002890133.1     LQGVVKVHNYQAKVRHYNSARHAALAANFIPESVYDSLLESVNKHLPLLHRYLDLRKKVLGLDELKMYDVYTPLSETE.T  311
consensus                                     ! ! !! *!* !*!*** !!!*!!!   ! !!! !!! !* **!!!!!!!!!!!*!!!!!!!!!!!***!!*!!!!    *

logo
NTDB id 1056407 O4J27 RS05780 WP 087920792.1  KVTYEEAKDYMLKGLAPLGEEYASILKEGLENRWVDVYENKGKRSGAYSSGTYGTNPYILMNWHDNVNNLFTLVHEFGHS  400
NTDB id 480 HSISS4 RS02090 WP 002890133.1     ALTYEESLKKAEEVLAIFGEEYSKGVHAAFTERWIDVHPNKGKRSGAYSGGAYDTNAFMLLNWQDTLDNLFTLVHETGHS  391
consensus                                      *!!!!         !!* !!!!   ** *   !!*!!**!!!!!!!!!! ! ! !!***!*!!*! * !!!!!!!! !!!

logo
NTDB id 1056407 O4J27 RS05780 WP 087920792.1  VHSYYTRKYQPYPYGNYSIFVAEVASTTNEALLGEYMLNSLKDEKQRLYLLNHMLEGFRGTVFRQTMFAEFEHLIHTKAQ  480
NTDB id 480 HSISS4 RS02090 WP 002890133.1     LHSTFTRQTQPYVYGDYPIFLAEIASTTNENILTETLLKEVKDDKTRFAILNHYLDGFKGTVFRQTQFAEFEHAIHEADA  471
consensus                                     *!! *!!  !!!*!! !*!!*!!*!!!!!! *! ! *!  *!!*! !  *!!! !*!!*!!!!!!! !!!!!! !!

logo
NTDB id 1056407 O4J27 RS05780 WP 087920792.1  EGEPLTPELLNELYYDLNKKYFGDNMVIDKEISLEWSRIPHFYYNYYVYQYATGYSAAQALSSQILKEGKPAVERYTEFL  560
NTDB id 480 HSISS4 RS02090 WP 002890133.1     SGQILTADFMNKLYADLNEKYYNLKAEDNYEIQFEWERIPHFYMNYYVYQYATGFAAASYLAEKIVHGTEEDKEAYLTYL  551
consensus                                      ! *!!** *! !! !!! !!*        !!  !! !!!!!! !!!!!!!!!!* !!   !    !**   *  ! !  *!
```

```
logo
NTDB id 1056407 O4J27 RS05780 WP 087920792.1  KAGSSEYPIDILKKAGVDMTSPEPIEAACKMFEEKLNEMEELLSKVNPS.   609
NTDB id 480 HSISS4 RS02090 WP 002890133.1     KAGSSDYPLEVIKKAGVDMTNTDYLDAAFKVFEDRLVELEALVEKGVHLS   601
consensus                                     !!!!!*!!****!!!!!!!! *****!!*!*!!**! !*! !* !     *
```

X non conserved

X similar

X $\geq$ 50% conserved