```
logo
NTDB id 166451 AUL54 RS04850 WP 099745180.1  MTEENKAAQLPDRSEVKAEHTWRLEDIFPSDEAWNKEFQAVKELIPNLSSFKGTLAHSADNLYAALTAQDEVTSRLGKLY   80
NTDB id 480 HSISS4 RS02090 WP 002890133.1    ........MSDNRTHLEEKYTWDLTTIFATDADWETEYESTVQDLKKASAYAGHLLDSAKNLLGATELYMSLMRRLEKIY   72
consensus                                    ********  * !***   *!! !  !!**!  !  !*     **  ! * !*! *!! !! *!      *  !! !*!

logo
NTDB id 166451 AUL54 RS04850 WP 099745180.1  AYAHMRSDQDTGNSFYQGLNDKAASLYSQAASATAYIEPEILAIQEDKLHQFILEKEELKLYSHAIEEITKQRPHVLSER  160
NTDB id 480 HSISS4 RS02090 WP 002890133.1    VYASMKNDQDTTVGLYQEYQAKASNLYSQLSEAFAYFEPEFMALDDKKLAEFKEQEPGLGLYDHYFERLLANKDHVLSQE  152
consensus                                     !!*!* !!!!    !!  * !!  !!!!   ! !!! !!! *!* * !!* !    * ! !! !  ! *  ***!!!!

logo
NTDB id 166451 AUL54 RS04850 WP 099745180.1  EEALLAEASEALSSPSNTFSVLNNADITFPSIKDEDGKETQITHGNFINFLESSDREVRKNAFKAVYKTYGQYKNTMATT  240
NTDB id 480 HSISS4 RS02090 WP 002890133.1    AEELLAAAGDIFNGPTDTFNVLDNADILFPWVSDGQGDVVELTHGNFITLMESKDRDIRKGAYEAMYGTYEQFQHTYAQT  232
consensus                                     ! !!! ! *    !* !! !! !!!! !! * !  !    *!!!!!!  *!! !!**!! !* !*! !! !* *! ! !

logo
NTDB id 166451 AUL54 RS04850 WP 099745180.1  LSGTVKKDNFYARVKKYKSAREAALSNNSIPEEVYDNLIKTINKHLPLLHRYIDLRKKVLGLDEVHIYDLYTPLVKDSGM  320
NTDB id 480 HSISS4 RS02090 WP 002890133.1    LQGVVKVHNYQAKVRHYNSARHAALAANFIPESVYDSLLESVNKHLPLLHRYLDLRKKVLGLDELKMYDVYTPLSETE.T  311
consensus                                    ! ! !! *!* !*!**! !!!*!!!  ! !!! !!! !* **!!!!!!!!!!*!!!!!!!!!!!***!!*!!!!    *

logo
NTDB id 166451 AUL54 RS04850 WP 099745180.1  KVTYEEAKDYMLKGLAPLGEEYASILKEGLENRWVDVYENKGKRSGAYSSGTYGTNPYILMNWHDNVNNLFTLVHEFGHS  400
NTDB id 480 HSISS4 RS02090 WP 002890133.1    ALTYEESLKKAEEVLAIFGEEYSKGVHAAFTERWIDVHPNKGKRSGAYSGGAYDTNAFMLLNWQDTLDNLFTLVHETGHS  391
consensus                                     *!!!!         !!* !!!!   ** *   !!*!!**!!!!!!!!!! ! ! !!***!*!!*! * !!!!!!!! !!!

logo
NTDB id 166451 AUL54 RS04850 WP 099745180.1  VHSYYTRKYQPYPYGNYSIFVAEVASTTNEALLGEYMLNSLKDEKQRLYLLNHMLEGFRGTVFRQTMFAEFEHLIHTKAQ  480
NTDB id 480 HSISS4 RS02090 WP 002890133.1    LHSTFTRQTQPYVYGDYPIFLAEIASTTNENILTETLLKEVKDDKTRFAILNHYLDGFKGTVFRQTQFAEFEHAIHEADA  471
consensus                                    *!! *!!  !!!*!! !*!!*!!*!!!!!! *! ! *!  *!!*! !  *!!! !*!!*!!!!!!! !!!!!! !!

logo
NTDB id 166451 AUL54 RS04850 WP 099745180.1  EGEPLTPELLSKLYYDLNKKYFGDNMVIDKEISLEWSRIPHFYYNYYVYQYATGYSAAQALSSQILKEGKPAVERYTEFL  560
NTDB id 480 HSISS4 RS02090 WP 002890133.1    SGQILTADFMNKLYADLNEKYYNLKAEDNYEIQFEWERIPHFYMNYYVYQYATGFAAASYLAEKIVHGTEEDKEAYLTYL  551
consensus                                     ! *!!** * !!! !!! !!*        !!  !! !!!!!! !!!!!!!!!!* !!  !   !**   *  ! !  *!
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logo
NTDB id 166451 AUL54 RS04850 WP 099745180.1  KAGSSEYPIDILKKAGVDMTSPEPIEAACKMFEEKLNEMEELLSKVNPS.   609
NTDB id 480 HSISS4 RS02090 WP 002890133.1    KAGSSDYPLEVIKKAGVDMTNTDYLDAAFKVFEDRLVELEALVEKGVHLS   601
consensus                                    !!!!!*!!****!!!!!!!! *****!!*!*!!**! !*! !* !    *
```

X non conserved

X similar

X $\geq$ 50% conserved