```
logo
NTDB id 1033109 JNUCC21 RS05785 WP 094031915.1  MTEENKAAQLPDRSEVKAEHTWRLEDIFPSDEAWNKEFQAVKELIPNLSSFKGTLAHSADNLYAALTAQDEVTNRLGKLY   80
NTDB id 480 HSISS4 RS02090 WP 002890133.1       ........MSDNRTHLEEKYTWDLTTIFATDADWETEYESTVQDLKKASAYAGHLLDSAKNLLGATELYMSLMRRLEKIY   72
consensus                                       ********  * !***   *!! !  !!**!  !  !*     **  ! * !*! *!! !! *!      *  !! !*!

logo
NTDB id 1033109 JNUCC21 RS05785 WP 094031915.1  AYAHMRSDQDTGNSFYQGLNDKAASLYSQAASATAYIEPEILAIQEDKLHQFILEKEELKLYSHAIEEITKQRPHVLSEQ  160
NTDB id 480 HSISS4 RS02090 WP 002890133.1       VYASMKNDQDTTVGLYQEYQAKASNLYSQLSEAFAYFEPEFMALDDKKLAEFKEQEPGLGLYDHYFERLLANKDHVLSQE  152
consensus                                        !!*!* !!!!    !!  * !!  !!!!   ! !! !!! *!* * !!* !    * ! !! !  ! *  ***!!!!

logo
NTDB id 1033109 JNUCC21 RS05785 WP 094031915.1  EEALLAEASEALSSPSNTFSVLNNADITFPSIKDENGKETQITHGNFINFLESSNREVRKNAFEAVYKTYGQYKNTMATT  240
NTDB id 480 HSISS4 RS02090 WP 002890133.1       AEELLAAAGDIFNGPTDTFNVLDNADILFPWVSDGQGDVVELTHGNFITLMESKDRDIRKGAYEAMYGTYEQFQHTYAQT  232
consensus                                        ! !!! ! *    !* !! !! !!!! !! * ! *!    *!!!!!!  *!!  !**!! !*!!*! !! !* *! ! !

logo
NTDB id 1033109 JNUCC21 RS05785 WP 094031915.1  LSGTVKKDNFYARVKKYKSAREAALSNNSIPEEVYDNLIKTINKHLPLLHRYIDLRKKVLGLDEVHIYDLYTPLVKDSGM  320
NTDB id 480 HSISS4 RS02090 WP 002890133.1       LQGVVKVHNYQAKVRHYNSARHAALAANFIPESVYDSLLESVNKHLPLLHRYLDLRKKVLGLDELKMYDVYTPLSETE.T  311
consensus                                       ! ! !! *!* !*!**! !!!*!!!   ! !!! !!! !* **!!!!!!!!!!!*!!!!!!!!!!!***!!*!!!!    *

logo
NTDB id 1033109 JNUCC21 RS05785 WP 094031915.1  KVTYEEAKEYMLKGLAPLGEEYASILKEGLENRWVDIYENKGKRSGAYSSGTYGTNPYILMNWHDNVNNLFTLVHEFGHS  400
NTDB id 480 HSISS4 RS02090 WP 002890133.1       ALTYEESLKKAEEVLAIFGEEYSKGVHAAFTERWIDVHPNKGKRSGAYSGGAYDTNAFMLLNWQDTLDNLFTLVHETGHS  391
consensus                                        *!!!!         !!* !!!!   ** *   !!*!***!!!!!!!!!! ! ! !!***!*!!*! * !!!!!!!! !!!

logo
NTDB id 1033109 JNUCC21 RS05785 WP 094031915.1  VHSYYTRKYQPYPYGNYSIFVAEVASTTNEALLGEYMLNSLKDEKQRLYLLNHMLEGFRGTVFRQTMFAEFEHLIHTKAQ  480
NTDB id 480 HSISS4 RS02090 WP 002890133.1       LHSTFTRQTQPYVYGDYPIFLAEIASTTNENILTETLLKEVKDDKTRFAILNHYLDGFKGTVFRQTQFAEFEHAIHEADA  471
consensus                                       *!! *!!   !!!*!! !*!!*!!*!!!!!! *! ! *!   *!!*! !   *!!! !*!!*!!!!!!! !!!!!! !!

logo
NTDB id 1033109 JNUCC21 RS05785 WP 094031915.1  EGEPLTPELLNELYYDLNKKYFGDNMVIDKEISLEWSRIPHFYYNYYVYQYATGYSAAQALSSQILKEGKPAVERYTEFL  560
NTDB id 480 HSISS4 RS02090 WP 002890133.1       SGQILTADFMNKLYADLNEKYYNLKAEDNYEIQFEWERIPHFYMNYYVYQYATGFAAASYLAEKIVHGTEEDKEAYLTYL  551
consensus                                        ! *!!** *! !! !!! !!*         !!  !! !!!!!! !!!!!!!!!!* !!   !   !**   *  ! !  *!
```

```
logo
NTDB id 1033109 JNUCC21 RS05785 WP 094031915.1  KAGSSEYPIDILKKAGVDMTSPEPIEAACKMFEEKLNEMEELLSKVNPS.   609
NTDB id 480 HSISS4 RS02090 WP 002890133.1       KAGSSDYPLEVIKKAGVDMTNTDYLDAAFKVFEDRLVELEALVEKGVHLS   601
consensus                                       !!!!!*!!****!!!!!!!! *****!!*!*!!**! !*! !* !     *
```

X non conserved

X similar

X $\geq$ 50% conserved