```
logo
NTDB id 289094 LpLQ80 RS09895 WP 108909986.1   MVATKQLPTRSAVPEELTWDLTPIYADQAAYEADIAQVKAAIPTVTALKETFTSSADTVLAGIQAVLALYRRLEKVAVYA   80
NTDB id 480 HSISS4 RS02090 WP 002890133.1      .....MSDNRTHLEEKYTWDLTTIFATDADWETEYESTVQDLKKASAYAGHLLDSAKNLLGATELYMSLMRRLEKIYVYA   75
consensus                                      *****  * !****!  !!!!!*!*!  ! *! *      **  *!   *   !!  *!**    * ! !!!!!* !!!

logo
NTDB id 289094 LpLQ80 RS09895 WP 108909986.1   SLKSDQDTGNSTNAALDDQASSLTAKVSAATAWFEPAILELTPGELDAYLDENVDLRDYRHLLDTIRLQKGHVLSESEEA   160
NTDB id 480 HSISS4 RS02090 WP 002890133.1      SMKNDQDTTVGLYQEYQAKASNLYSQLSEAFAYFEPEFMALDDKKLAEFKEQEPGLGLYDHYFERLLANKDHVLSQEAEE   155
consensus                                      !*! !!!!           !! !   *! ! !*!!!  * ! *  !  * *  * !  ! !  * *  *! !!!!   !

logo
NTDB id 289094 LpLQ80 RS09895 WP 108909986.1   LLAGASDIFGASAKTFGVLNNADFQFPTVKDDDGNPVKLSQGIYGVLLESVHPAVRREAFEALYKVYGQFRRTLASTLAS   240
NTDB id 480 HSISS4 RS02090 WP 002890133.1      LLAAAGDIFNGPTDTFNVLDNADILFPWVSDGQGDVVELTHGNFITLMESKDRDIRKGAYEAMYGTYEQFQHTYAQTLQG   235
consensus                                      !!!*! !!! **  !! !! !!!  !! ! !  ! *! !**! *  !*!! ** *!* !*!!*!  ! !! *! ! !!

logo
NTDB id 289094 LpLQ80 RS09895 WP 108909986.1   QVKVHNFVAQAHHYPDARTAALAANQIPTAVYDSLVTSVDKHLDLLHRYVALRKQLLGVDQLHMYDMYTPLAPKPTTNYS   320
NTDB id 480 HSISS4 RS02090 WP 002890133.1      VVKVHNYQAKVRHYNSARHAALAANFIPESVYDSLLESVNKHLPLLHRYLDLRKKVLGLDELKMYDVYTPLSETE.TALT   314
consensus                                       !!!!!* !  *!!* !!*!!!!!! !!  !!!!!* !! !!!*!!!!!* !!! *!!*! !*!!!*!!!! * **!  *

logo
NTDB id 289094 LpLQ80 RS09895 WP 108909986.1   YQQAQATALQALKILGPDYLKHVKTAFASRWIDVVENQGKRSGAYSSGMYDTAPYMLLNWQDNIDNLYTLVHEMGHSMHS   400
NTDB id 480 HSISS4 RS02090 WP 002890133.1      YEESLKKAEEVLAIFGEEYSKGVHAAFTERWIDVHPNKGKRSGAYSGGAYDTNAFMLLNWQDTLDNLFTLVHETGHSLHS   394
consensus                                      !     !   ! ! !**! !*!* !!  !!!!!**! !!!!!!!! ! !!! **!!!!!!! *!!!*!!!!! !!!*!!

logo
NTDB id 289094 LpLQ80 RS09895 WP 108909986.1   YFTTHHQPYQYGDYSIFVAEIASTTNENLLTNYFLATEQDPKMRAYVLNYYLDGFKGTVFRQTQFAEFEQWLHEQDQEGQ   480
NTDB id 480 HSISS4 RS02090 WP 002890133.1      TFTRQTQPYVYGDYPIFLAEIASTTNENILTETLLKEVKDDKTRFAILNHYLDGFKGTVFRQTQFAEFEHAIHEADASGQ   474
consensus                                       !! **!!! !!!!*!!*!!!!!!!!!!*!!   !    !*! !  *!!*!!!!!!!!!!!!!!!!!!!* *!! !   !!

logo
NTDB id 289094 LpLQ80 RS09895 WP 108909986.1   ALTADRLSKHYLQLNQRYYGDAVVSDPQIADEWSRIPHFYYNYYVYQYATGFAAASTLADRISTQQTDAVADYLGYLKAG   560
NTDB id 480 HSISS4 RS02090 WP 002890133.1      ILTADFMNKLYADLNEKYYNLKAEDNYEIQFEWERIPHFYMNYYVYQYATGFAAASYLAEKIVHGTEEDKEAYLTYLKAG   554
consensus                                       !!!! * !*!   !! *!!       * !  !! !!!!!! !!!!!!!!!!!!!!! !!**! *   *    !! !!!!!
```

```
logo
                                                  SSDYPLEVMKRAGVDMTNTDYLDAAFKVFEERLVELEQLVTQG
                                                  AFPIDVHKKAGVDMTKPDYLDAAFEVFEDRLNEFEALVEKDVHLS

NTDB id 289094 LpLQ80 RS09895 WP 108909986.1     SSAFPIDVMHRAGVDMTKPDYLDAAFEVFEERLNEFEQLVTQD....   603
NTDB id 480 HSISS4 RS02090 WP 002890133.1         SSDYPLEVIKKAGVDMTNTDYLDAAFKVFEDRLVELEALVEKGVHLS   601
consensus                                         !! *!**!***!!!!!! *!!!!!!! !!!*!! ! ! !!    ****
```

X non conserved

X similar

X $\geq$ 50% conserved