```
logo
NTDB id 23188 LJ RS08675 WP 011162509.1     MAIPTRNEVSDDLKWDLSRVFKDDQEWEQEYNRVAIEIKNLGRFKGNLAKSGQDLYEGITEILSVNRRLEKVYVYATMSSDVDTS   85
NTDB id 480 HSISS4 RS02090 WP 002890133.1   .MSDNRTHLEEKYTWDLTTIFATDADWETEYESTVQDLKKASAYAGHLLDSAKNLLGATELYMSLMRRLEKIYVYASMKNDQDTT   84
consensus                                   *  * ! ** *   !!!* *!  ! *!! !!     **!    * !*!  !*  !  *    *!* !!!!!*!!!!*!  ! !!*

logo
NTDB id 23188 LJ RS08675 WP 011162509.1     NTHYLGLVAKAQSLANQMSAAISFVDPEILSIPEETLAKFMQDEPRLKEYQHRLEQITKKRPHTLPASEEKIIAAAGDAMGTSAN  170
NTDB id 480 HSISS4 RS02090 WP 002890133.1   VGLYQEYQAKASNLYSQLSEAFAYFEPEFMALDDKKLAEFKEQEPGLGLYDHYFERLLANKDHVLSQEAEELLAAAGDIFNGPTD  169
consensus                                     *!    !!!  !  !*! !  * *!! * ***  !! !   !! !  !!  !  *   **! !*   ! **!!!!!    *

logo
NTDB id 23188 LJ RS08675 WP 011162509.1     TFNVLTNSDMEYGYVQDEDGEMVQLSDGLYSLLIQSQDRNVRKNAFDVMYASYGQFENSLASTLSGEVKAHNFNAQVHKYNSARE  255
NTDB id 480 HSISS4 RS02090 WP 002890133.1   TFNVLDNADILFPWVSDGQGDVVELTHGNFITLMESKDRDIRKGAYEAMYGTYEQFQHTYAQTLQGVVKVHNYQAKVRHYNSARH  254
consensus                                   !!!!! ! !* ***! !  !**! !**! *  !* ! !! *!! !** !!**! !! ** ! !! ! !! !!**! !**!!!!!*

logo
NTDB id 23188 LJ RS08675 WP 011162509.1     AALSENGVPTAVYDTLVKEVNSHLNLLHRYVSLRKKILGLSDLQMYDMYVPLTGEPSLSYNFEEAKNEARRALAPLGKDYLEHVD  340
NTDB id 480 HSISS4 RS02090 WP 002890133.1   AALAANFTPESVYDSLLESVNKHLPLLHRYLDLRKKVLGLDELKMYDVYTPLSETE.TALTYEESLKKAEEVLAIFGEEYSKGVH  338
consensus                                   !!!  ! *!  !!!*!*  !! !!*!!!!!* !!!!*!!! *! !!!*! !!*  **    *!!    !   !!* ! *!  *!*

logo
NTDB id 23188 LJ RS08675 WP 011162509.1     YIFNNRVIDVVESQNKVTGAYSGGSYDTDPYELLNWEDNLDSLYTLVHETGHSVHSWYTRNTQPYVYGDYPIFVAEIASTTNENI  425
NTDB id 480 HSISS4 RS02090 WP 002890133.1   AAFTERWIDVHPNKGKRSGAYSGGAYDTNAFMLLNWQDTLDNLFTLVHETGHSLHSTFTRQTQPYVYGDYPIFLAEIASTTNENI  423
consensus                                     !  ! !!!**   ! *!!!!!! !!! ** !!!! ! !! !*!!!!!!!!!*!! *!!*!!!!!!!!!!!!*!!!!!!!!!!!

logo
NTDB id 23188 LJ RS08675 WP 011162509.1     LTEYFLDKITDPKTRAFVLNHYLDSFKGTLFRQTQFAEFEQFIHEADANGQPLTADVLDEFYGNLNQRYYGDSVEPGGEIAKEWA  510
NTDB id 480 HSISS4 RS02090 WP 002890133.1   LTETLLKEVKDDKTRFAILNHYLDGFKGTVFRQTQFAEFEHAIHEADASGQILTADFMNKLYADLNEKYYNLKAEDNYEIQFEWE  508
consensus                                   !!!   !   * !*!!!   *!!!!!! !!!!*!!!!!!!!!!* !!!!!! !!*!!!! *   !* !! *!!    !*   !!   !!

logo
NTDB id 23188 LJ RS08675 WP 011162509.1     RIPHFYYNFYVYQYATGFAAATALANNVVHGTDKERTAYINFLKAGSSDYPTEIMKRAGVDMTKADYLKDAFNTFEERLNEFEKI  595
NTDB id 480 HSISS4 RS02090 WP 002890133.1   RIPHFYMNYYVYQYATGFAAASYLAEKIVHGTEEDKEAYLTYLKAGSSDYPLEVIKKAGVDMTNTDYLDAAFKVFEDRLVELEAL  593
consensus                                   !!!!!! !*!!!!!!!!!!!!!* !!  *!!!!* ** !!* *!!!!!!!!! !**!*!!!!!!  !!!  !!  !!*!! ! ! *
```

```
logo                                          VEKLVTL
                                              DEGKHTS
NTDB id 23188 LJ RS08675 WP 011162509.1       VDELKTI.   602
NTDB id 480 HSISS4 RS02090 WP 002890133.1     VEKGVHLS   601
consensus                                     !*   ***
```

X non conserved
X similar
X $\geq$50% conserved