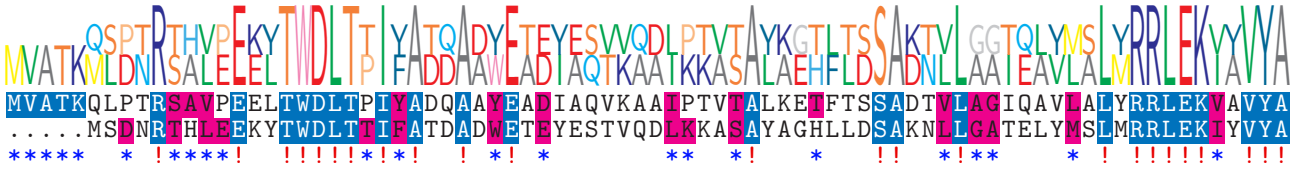


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NTDB id 197797 BIZ31 RS09290 WP 085764539.1  MVATKQLPTRSAVPEELTWDLTPIYADQAAYEADIAQVKAAIPTVTALKETFTSSADTVLAGIQAVLALYRRLEKVAVYA  80
NTDB id 480 HSISS4 RS02090 WP 002890133.1    .....MSDNRTHLEEKYTWDLTTIFATDADWETEYESTVQDLKKASAYAGHLLDSAKNLLGATELYMSLMRRLEKIYVYA  75
consensus                                    *****  * !****!  !!!!!*!*!  ! *! *       **  *!   *   !!  *!**    * ! !!!!!* !!!
```

```
NTDB id 197797 BIZ31 RS09290 WP 085764539.1  SLKSDQDTGNSTNAALDDQASSLTAKVSAATAWFEPAILELTPGELDTYLDENVDLRDYRHLLLTIRLQKGHVLSESEEA  160
NTDB id 480 HSISS4 RS02090 WP 002890133.1    SMKNDQDTTVGLYQEYQAKASNLYSQLSEAFAYFEPEFMALDDKKLAEFKEQEPGLGLYDHYFERLLANKDHVLSQEAEE  155
consensus                                    !*! !!!!          !! !  *! ! !*!!!  * ! * !  * *  *! !!!!   !
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```
NTDB id 197797 BIZ31 RS09290 WP 085764539.1  LLAGASDIFGASAKTFGVLNNADFQFPTVKDDDGNPVKLSQGIYGVLLESVHPAVRREAFEALYKVYGQFRRTLASTLAS  240
NTDB id 480 HSISS4 RS02090 WP 002890133.1    LLAAAGDIFNGPTDTFNVLDNADILFPWVSDGQGDVVELTHGNFITLMESKDRDIRKGAYEAMYGTYEQFQHTYAQTLQG  235
consensus                                    !!!*! !!! **  !! !! !!!  !! ! !  ! *! !**! *  !*!! ** *!* !*!!*!  ! !! *! ! !!
```

```
NTDB id 197797 BIZ31 RS09290 WP 085764539.1  QVKVHNFVAQAHNYPDARTAALAANQIPTAVYDSLVTSVDKHLDLLHRYVALRKQLLGVDQLHMYDMYTPLAPKPTTNYS  320
NTDB id 480 HSISS4 RS02090 WP 002890133.1    VVKVHNYQAKVRHYNSARHAALAANFIPESVYDSLLESVNKHLPLLHRYLDLRKKVLGLDELKMYDVYTPLSETE.TALT  314
consensus                                     !!!!!* !  **!* !!*!!!!!! !!  !!!!!* !! !!!*!!!!!* !!! *!!*! !*!!!*!!!! * **!  *
```

```
NTDB id 197797 BIZ31 RS09290 WP 085764539.1  YQQAQATALQALKILGSDYLKHVKTAFASRWIDVVENQGKRSGAYSSGMYDTAPYMLLNWQDNIDNLYTLVHEMGHSMHS  400
NTDB id 480 HSISS4 RS02090 WP 002890133.1    YEESLKKAEEVLAIFGEEYSKGVHAAFTERWIDVHPNKGKRSGAYSGGAYDTNAFMLLNWQDTLDNLFTLVHETGHSLHS  394
consensus                                    !    !  ! ! ! *! !*!* !!  !!!!!**! !!!!!!!! ! !!! **!!!!!!! *!!!*!!!!! !!!*!!
```

```
NTDB id 197797 BIZ31 RS09290 WP 085764539.1  YFTTHHQPYQYGDYSIFVAEIASTTNENLLTNYFLATEQDPKMRAYVLNYYLDGFKGTVFRQTQFAEFEQWLHEQDQEDQ  480
NTDB id 480 HSISS4 RS02090 WP 002890133.1    TFTRQTQPYVYGDYPIFLAEIASTTNENILTETLLKEVKDDKTRFAILNHYLDGFKGTVFRQTQFAEFEHAIHEADASGQ  474
consensus                                     !! **!!! !!!!*!!*!!!!!!!!!!*!!    !     !*! !  *!!*!!!!!!!!!!!!!!!!!!!* *!! !    !
```

```
NTDB id 197797 BIZ31 RS09290 WP 085764539.1  ALTADRLSKHYLQLNQRYYGDAVVSDPQIADEWSRIPHFYYNYYVYQYATGFAAASTLADRISTQQTDAVADYLGYLKAG  560
NTDB id 480 HSISS4 RS02090 WP 002890133.1    ILTADFMNKLYADLNEKYYNLKAEDNYEIQFEWERIPHFYMNYYVYQYATGFAAASYLAEKIVHGTEEDKEAYLTYLKAG  554
consensus                                     !!!! * !*!  !! *!!       * !  !! !!!!!! !!!!!!!!!!!!!!!! !!**! *   *    !! !!!!!
```

logo

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NTDB id 197797 BIZ31 RS09290 WP 085764539.1   SSAFPIDVMHRAGVDMTKPDYLDAAFEVFEERLNEFFEQLVTQD....   603
NTDB id 480 HSISS4 RS02090 WP 002890133.1     SSDYPLEVIKKAGVDMTNTDYLDAAFKVFEDRLVELEALVEKGVHLS   601
consensus                                     !! *!**!***!!!!!! *!!!!!!! !!!*!! ! ! !!    ****
```

X non conserved

X similar

X ≥ 50% conserved