```
logo
NTDB id 192642 BFC20 RS11555 WP 069129145.1  MAGKAITRSEVPVKDTWDLTSIFETDDAWETEFKAVQVLAEEATKFQKTLGDSADQLLAALKYSDELVVRLSQVYVYASM   80
NTDB id 480 HSISS4 RS02090 WP 002890133.1    ...MSDNRTHLEEKYTWDLTTIFATDADWETEYESTVQDLKKASAYAGHLLDSAKNLLGATELYMSLMRRLEKIYVYASM   77
consensus                                    ***     !**** ! !!!!!*!! !!  !!!!*         !* *  *! !!! *!!*!       !* !!  *!!!!!!

logo
NTDB id 192642 BFC20 RS11555 WP 069129145.1  KHDQDTSNTEYQALNSRAESLAAKASAALSFFEPELLDIDEAVLAAFISESDELGVYAHELEQINKKRPHTLSAPEEALL  160
NTDB id 480 HSISS4 RS02090 WP 002890133.1    KNDQDTTVGLYQEYQAKASNLYSQLSEAFAYFEPEFMALDDKKLAEFKEQEPGLGLYDHYFERLLANKDHVLSQEAEELL  157
consensus                                    !*!!!!*   !!  * *!  !    ! !  *!!!! * *!*  !! !    * !!*! !  ! *   **! !! * ! !!

logo
NTDB id 192642 BFC20 RS11555 WP 069129145.1  AKASEVLGSSQNTFGILNNADLRFPTIKDENGEDVEITHGLYGPLLENSDRRVRRDAFQNVYKTYKSLLNTFASTLTGQI  240
NTDB id 480 HSISS4 RS02090 WP 002890133.1    AAAGDIFNGPTDTFNVLDNADILFPWVSDGQGDVVELTHGNFITLMESKDRDIRKGAYEAMYGTYEQFQHTYAQTLQGVV  237
consensus                                    ! ! **   *  !! *! !!!* !! * ! *!* !!*!!! * *!*!  !! *!* !*  *! !!    *!*! !! ! *

logo
NTDB id 192642 BFC20 RS11555 WP 069129145.1  KQDNFNASVRKFSTARESAVFSNNIPESVHKTLLETVGNNVDLLHRYVSLRKQVLGLDELHVYDLYTPLVADVDELSFTY  320
NTDB id 480 HSISS4 RS02090 WP 002890133.1    KVHNYQAKVRHYNSARHAALAANFIPESVYDSLLESVNKHLPLLHRYLDLRKKVLGLDELKMYDVYTPLSETET..ALTY  315
consensus                                    ! *!**! !!** *!!* !*  ! !!!!!* *!!!*!  ***!!!!!* !!! !!!!!!!**!!*!!!!     **  !!

logo
NTDB id 192642 BFC20 RS11555 WP 069129145.1  EEAKQVTINALAPLGEEYVSILKEGFDKRWVDVVENKGKRSGAYSGGSYGTNPFILLNWHDTLDNLYTLVHEFGHSVHSY  400
NTDB id 480 HSISS4 RS02090 WP 002890133.1    EESLKKAEEVLAIFGEEYSKGVHAAFTERWIDVHPNKGKRSGAYSGGAYDTNAFMLLNWQDTLDNLFTLVHETGHSLHST  395
consensus                                    !!        !!* !!!!   ** *!  !!*!!**!!!!!!!!!!!! ! !!*!*!!!!*!!!!!!*!!!!! !!!*!!

logo
NTDB id 192642 BFC20 RS11555 WP 069129145.1  LTRKNQPAVYGDYTIFLAEIASTTNENLLTEYLLKKYKDKKIQAYIINHFLDGFKGTVFRQTQFAEFEHLIHVADQEGNA  480
NTDB id 480 HSISS4 RS02090 WP 002890133.1    FTRQTQPYVYGDYPIFLAEIASTTNENILLTETLLKEVKDDKTRFAILNHYLDGFKGTVFRQTQFAEFEHAIHEADASGQI  475
consensus                                     !!   !! !!!!!*!!!!!!!!!!!!!*!!* !!!    ! !    !*!!*!!!!!!!!!!!!!!!!!!! !! !!   !*

logo
NTDB id 192642 BFC20 RS11555 WP 069129145.1  LTAEYLTDLYYGINKKYYGDALVHDEEIGNEWARIPHFYYNYYVYQYATGFSAASALAQHILDEGAPAVERYMTFLKAGN  560
NTDB id 480 HSISS4 RS02090 WP 002890133.1    LTADFMNKLYADLNEKYYNLKAEDNYEIQFEWERIPHFYMNYYVYQYATGFAAASYLAEKIVHGTEEDKEAYLTYLKAGS  555
consensus                                    !!!***  !!  *! !!!     *  !!  !! !!!!!! !!!!!!!!!!!! !!! !! *!**   *  ! !*!*!!!!
```

```
logo

NTDB id 192642 BFC20 RS11555 WP 069129145.1   SDYPIDVLKAAGVDMTTAKPIEDALKVFEARLTEFEAIIIEK....   602
NTDB id 480 HSISS4 RS02090 WP 002890133.1     SDYPLEVIKKAGVDMTNTDYLDAAFKVFEDRLVELEALVEKGVHLS   601
consensus                                     !!!!**!*! !!!!!!   *** ! !!!! !! ! !!**   ****
```

X non conserved

X similar

X $\geq$ 50% conserved