```
NTDB id 269980 C3K22 RS10785 WP 126708969.1  MAIPTRNEVPEELKWDLTRIFKNDDEWEQAYAAAQEKVAKLAELKGTLAKSGKNLYESLTKILAVKRDVENIYVYATMSS  80
NTDB id 480 HSISS4 RS02090 WP 002890133.1    .MSDNRTHLEEKYTWDLTTIFATDADWETEYESTVQDLKKASAYAGHLLDSAKNLLGATELYMSLMRRLEKIYVYASMKN  79
consensus                                    *  * ! ***!  !!!! !!  ! *!! !      * !      !*! !*!!!       * * ! *! !!!!!*!
```

```
NTDB id 269980 C3K22 RS10785 WP 126708969.1  DVDTSNSHYLGYVSRVQSLANQFEAATSFINPEILSIPSDKLEQFKQAEPRLKDYAHYLETITNKRPHTLPAEQEKLIAD  160
NTDB id 480 HSISS4 RS02090 WP 002890133.1    DQDTTVGLYQEYQAKASNLYSQLSEAFAYFEPEFMALDDKKLAEFKEQEPGLGLYDHYFERLLANKDHVLSQEAEELLAA  159
consensus                                    ! !!*  *!  !  *   !  !  !  * !! * **  !!  !! !! ! ! !! ! *   **! !* ! ! !*!
```

```
NTDB id 269980 C3K22 RS10785 WP 126708969.1  AGDALSVSENTFNVLTNSDMEYGYVQDDDGNMEQLSDGLYSLLIQSQNRDVRKGAFDTLYATYGQFQNSLASTLSGVVKK  240
NTDB id 480 HSISS4 RS02090 WP 002890133.1    AGDIFNGPTDTFNVLDNADILFPWVSDGQGDVVELTHGNFITLMESKDRDIRKGAYEAMYGTYEQFQHTYAQTLQGVVKV  239
consensus                                    !!!    *  !!!!! ! !* ***! !  ! *  !**! *  !* !  !!*!!!** *!*!! !!!** ! !! !!!!
```

```
NTDB id 269980 C3K22 RS10785 WP 126708969.1  HNYNARVHKYNSAREAALADNGVPVAVYDTLIQEVDSHLDLLHRYVALRKKILGLKDLQMWDMYVPLTGRPSLSYNFEEA  320
NTDB id 480 HSISS4 RS02090 WP 002890133.1    HNYQAKVRHYNSARHAALAANFIPESVYDSLLESVNKHLPLLHRYLDLRKKVLGLDELKMYDVYTPLSETET.ALTYEES  318
consensus                                    !!!*!*!**!!!!!*!!!! ! *!  !!!*!*  !  !!*!!!!!* !!!!*!!! *! !*!*! !!*  ***   *!!
```

```
NTDB id 269980 C3K22 RS10785 WP 126708969.1  KETAKKALAPLGEDYLKHVDYIFNNRVIDPIESKNKVTGAYSGGAYDTDPYELLNWEDNIDSLYTLVHETGHSVHSWYTR  400
NTDB id 480 HSISS4 RS02090 WP 002890133.1    LKKAEEVLAIFGEEYSKGVHAAFTERWIDVHPNKGKRSGAYSGGAYDTNAFMLLNWQDTLDNLFTLVHETGHSLHSTFTR  398
consensus                                       !  !!* !!*! !*!*  !  ! !!*** ! ! *!!!!!!!!! ** !!!! ! *! !*!!!!!!!!!*!! *!!
```

```
NTDB id 269980 C3K22 RS10785 WP 126708969.1  NTQPYVYGDYPIFVAEIASTTNENILTEYFLDHITDPKTRAFILNYSLDSFKGTLFRQTQFAVFEQFLHEADAKGEPLTA  480
NTDB id 480 HSISS4 RS02090 WP 002890133.1    QTQPYVYGDYPIFLAEIASTTNENILTETLLKEVKDDKTRFAILNHYLDGFKGTVFRQTQFAEFEHAIHEADASGQILTA  478
consensus                                    *!!!!!!!!!!!!!*!!!!!!!!!!!!!!!!  ! ** !*!!!  !!!* !! !!!!*!!!!!!! !!* *!!!!! ! *!!!
```

```
NTDB id 269980 C3K22 RS10785 WP 126708969.1  DTLDDVYGQINQHYYGDSVEPGGDIALEWSRIPHFYNFYVYQYATGFAAATLALANKVVHGTPAERDAYLGFLKAGSSDY  560
NTDB id 480 HSISS4 RS02090 WP 002890133.1    DFMNKLYADLNEKYYNLKAEDNYEIQFEWERIPHFYMNYYVYQYATGFAAASYLAEKIVHGTEEDKEAYLTYLKAGSSDY  558
consensus                                    ! *  *!* *! *!!    !*  *!  !! !!!!!! !*!!!!!!!!!!!!!* !! !*!!!!* ***!!! *!!!!!!!!
```

```
logo

NTDB id 269980 C3K22 RS10785 WP 126708969.1   PTEIMKRAGVDMTKPDYLEDAFKTFEKRLNEFESLIEK.....   598
NTDB id 480 HSISS4 RS02090 WP 002890133.1     PLEVIKKAGVDMTNTDYLDAAFKVFEDRLVELEALVEKGVHLS   601
consensus                                     ! !**!*!!!!!! *!!!* !!! !! !! ! ! !*!!*****
```

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