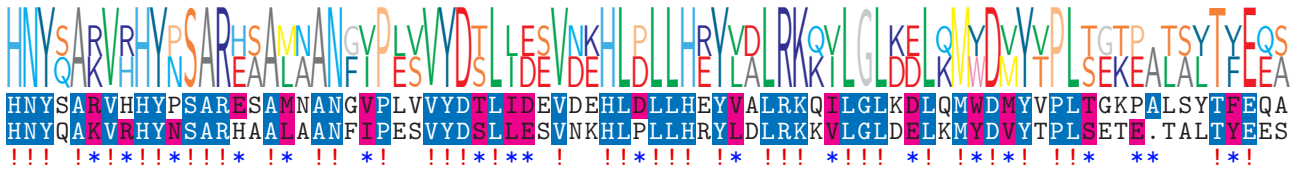
```
NTDB id 293050 DKL58 RS08045 WP 109586743.1  MSIPKRNEVPENLKWDLTRIFKTDNDWEDEYTLVKKEIPVLSTLKENFTTSGASLYNGITQILTVSRRLEKVYSYATLAS  80
NTDB id 480 HSISS4 RS02090 WP 002890133.1    .MSDNRTHLEEKYTWDLTTIFATDADWETEYESTVQDLKKASAYAGHLLDSAKNLLGATELYMSLMRRLEKIYVYASMKN  79
consensus                                    *  *  !  ***!   !!!! !! !! !!! !!     ***  !    *  !*  !  *    *** !!!!!*! !!**
```

```
NTDB id 293050 DKL58 RS08045 WP 109586743.1  DVDTGNAHYLSYVAQVQGLASQFEAATSFMNPAILSLSAEKLSALEREEPKLGNYKHLLDQITRLRPYTLSAQEEKLIAD  160
NTDB id 480 HSISS4 RS02090 WP 002890133.1    DQDTTVGLYQEYQAKASNLYSQLSEAFAYFEPEFMALDDKKLAEFKEQEPGLGLYDHYFERLLANKDHVLSQEAEELLAA  159
consensus                                    ! !!  **!  ! !    ! !!  !  * ! * !  !!      !! !! ! !  * *  *** !!   ! !*!
```

```
NTDB id 293050 DKL58 RS08045 WP 109586743.1  AGDALSASENTYNVLTNSDMEYGYTQDDNGEMVQLSDGLYSLLIQSQNREVRKNAFASMYATYGQFENSLAATLSGAVKE  240
NTDB id 480 HSISS4 RS02090 WP 002890133.1    AGDIFNGPTDTFNVLDNADILFPWVSDGQGDVVELTHGNFITLMESKDRDIRKGAYEAMYGTYEQFQHTYAQTLQGVVKV  239
consensus                                    !!!   **  !*!!! ! !* ***  ! *!**! !**! *  !* !  !**!! !*  !!*!! !! ** ! !! ! !!
```

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NTDB id 293050 DKL58 RS08045 WP 109586743.1  HNYSARVHHYPSARESAMNANGVPLVVYDTLIDEVDEHLDLLHEYVALRKQTLGLKDLQMWDMYVPLTGKPALSYTFEQA  320
NTDB id 480 HSISS4 RS02090 WP 002890133.1    HNYQAKVRHYNSARHAALAANFIPESVYDSLLESVNKHLPLLHRYLDLRKKVLGLDELKMYDVYTPLSETE.TALTYEES  318
consensus                                    !!!  !*!*!!*!!!* !*  !!  *!  !!!*!** !  !!*!!! !* !!! *!!! *! !*!*! !!*  **   !*!
```

```
NTDB id 293050 DKL58 RS08045 WP 109586743.1  KAEAKKALAPLGEDYLKQVDYIFNNRVIDVVESQNKATGAYSGGCYDTDAYELLNWEDNVDSLYTLVHETGHSVHSMYTR  400
NTDB id 480 HSISS4 RS02090 WP 002890133.1    LKKAEEVLAIFGEEYSKGVHAAFTERWIDVHPNKGKRSGAYSGGAYDTNAFMLLNWQDTLDNLFTLVHETGHSLHSTFTR  398
consensus                                       !  !!* !!*! ! !*  !  ! !!!**  ! *!!!!!!*!!! !* !!!! ! *! !*!!!!!!!!!*!! *!!
```

```
NTDB id 293050 DKL58 RS08045 WP 109586743.1  QNQPYVYGDYPIFVAEIASTTNENILTEYFLNHISDPKTRAFVLNYYLDSFKGTLFRQTQFAEFEQQIHEMDATGEPLTA  480
NTDB id 480 HSISS4 RS02090 WP 002890133.1    QTQPYVYGDYPIFLAEIASTTNENILTETLLKEVKDDKTRFAILNHYLDGFKGTVFRQTQFAEFEHAIHEADASGQILTA  478
consensus                                    !  !!!!!!!!!!!*!!!!!!!!!!!!!!!!  ! ** !*!!!  *!!*!!! !!!!*!!!!!!!!!!* !!! !!*!  *!!!
```

```
NTDB id 293050 DKL58 RS08045 WP 109586743.1  DRLDDIYGKINQRYYGDAVESGGEIAKEWARVPHFYNFYVYQYATGFAAATLALNNVVHGSTEQRNAYLNFLKAGSSDY  560
NTDB id 480 HSISS4 RS02090 WP 002890133.1    DFMNKLYADLNEKYYNLKAEDNYEIQFEWERIPHFYMNYYVYQYATGFAAASYLAEKIVHGTEEDKEAYLTYLKAGSSDY  558
consensus                                    !  *  *!* *! *!!    !   !!  !! !*!!!! !*!!!!!!!!!!!!!* !!  *!!!* ! * !!! *!!!!!!!!
```

logo

```
NTDB id 293050 DKL58 RS08045 WP 109586743.1   PAEIMKKAGVDMTKPDYLEEAFKTFANRLSEFRKIIQNNYN..   601
NTDB id 480 HSISS4 RS02090 WP 002890133.1     PLEVIKKAGVDMTNTDYLDAAFKVFEDRLVELEALVEKGVHLS   601
consensus                                     ! !**!!!!!!!! *!!!* !!! !  !! !   **    ***
```

X non conserved

X similar

X ≥ 50% conserved