```
logo
NTDB id 303952 SAC12 RS07880 WP 015473911.1  MKQIPKRSEVPTALTWDLTTIFPDEAAFKAAIAAIKTQTTVVAGLKGQLAQSGAALYRVTTAVFDLNRQLERVYVYASLN   80
NTDB id 480 HSISS4 RS02090 WP 002890133.1    ..MSDNRTHLEEKYTWDLTTIFATDADWETEYESTVQDLKKASAYAGHLLDSAKNLLGATELYMSLMRRLEKIYVYASMK   78
consensus                                    **  * !****   !!!!!!!!* *! *              *  !*!  !*  !   !    ! ! !!**!!!!!*

logo
NTDB id 303952 SAC12 RS07880 WP 015473911.1  NDQDTGNAAAQALMGQAESLVATVGAATAWFEPEVLALSADQLQTLIDNDPRLADYQHVFDVLGQQRAHTLSVAEEKLLA  160
NTDB id 480 HSISS4 RS02090 WP 002890133.1    NDQDTTVGLYQEYQAKASNLYSQLSEAFAYFEPEFMALDDKKLAEFKEQEPGLGLYDHYFERLLANKDHVLSQEAEELLA  158
consensus                                    !!!!!  *  !   * !  !   *  ! !*!!!! *!!   !    ***! !* ! ! !* !  ** ! !!   ! !!!

logo
NTDB id 303952 SAC12 RS07880 WP 015473911.1  GASDIFGASAKTYSVLSDADLKFPVVQDEAGNDVRLSEGLYGVLLQSTTPRVRQQAFEALYSVYQQFRHTFAATLASEVK  240
NTDB id 480 HSISS4 RS02090 WP 002890133.1    AAGDIFNGPTDTFNVLDNADILFPWVSDGQGDVVELTHGNFITLMESKDRDIRKGAYEAMYGTYEQFQHTYAQTLQGVVK  238
consensus                                    *! !!! **  !* !!  !!* !! ! !  !  ! !**! *  !* !  * *!  !*!!*!  ! !! !!*! !!   !!

logo
NTDB id 303952 SAC12 RS07880 WP 015473911.1  THNFSAETRHYASARAAAMSRNNVPAVVYDTLVETVNDHLDSLHRYVNLRKEILDLPQLHMYDLYTPITGEPSLKYTYQE  320
NTDB id 480 HSISS4 RS02090 WP 002890133.1    VHNYQAKVRHYNSARHAALAANFIPESVYDSLLESVNKHLPLLHRYLDLRKKVLGLDELKMYDVYTPLSETE.TALTYEE  317
consensus                                     !!* !  !!! !!!*!!*  ! *!  !!!*!*!*!! !!* !!!!* !!! *! !* !*!!!*!!!**  **   !! !

logo
NTDB id 303952 SAC12 RS07880 WP 015473911.1  AQEMALKALAVLGPDYTANVQKMFDGRAIDVVENQGKRTGAYSGGMYDTKPYILLNWQDSLESLFTLVHEMGHSMHSHYT  400
NTDB id 480 HSISS4 RS02090 WP 002890133.1    SLKKAEEVLAIFGEEYSKGVHAAFTERWIDVHPNKGKRSGAYSGGAYDTNAFMLLNWQDTLDNLFTLVHETGHSLHSTFT  397
consensus                        !   !!* !**!*  !*  !  ! !!!**! !!!*!!!!!! !!! ***!!!!!!*!* !!!!!!! !!!*!!**!

logo
NTDB id 303952 SAC12 RS07880 WP 015473911.1  RTNQPYQYGDYSIFVAEIASTTNENLLTDYLLKTQTDPKVRAYVLNHYLDGFKGTVYRQTQFAEFEDYIHQQDAAGETLT  480
NTDB id 480 HSISS4 RS02090 WP 002890133.1    RQTQPYVYGDYPIFLAEIASTTNENILTETLLKEVKDDKTRFAILNHYLDGFKGTVFRQTQFAEFEHAIHEADASGQILT  477
consensus                                    !  !!! !!!!*!!*!!!!!!!!!!*!!* !!!   !*! !  *!!!!!!!!!!!!*!!!!!!!!* !!  !! !  !!

logo
NTDB id 303952 SAC12 RS07880 WP 015473911.1  ADFMSDFYGKLNQRYYGDGVISDPQIADEWTRIPHFYYDYYVYQYATGFAAATTLSQRILSGDEAKRDAYLAYLKAGSSA  560
NTDB id 480 HSISS4 RS02090 WP 002890133.1    ADFMNKLYADLNEKYYNLKAEDNYEIQFEWERIPHFYMNYYVYQYATGFAAASYLAEKIVHGTEEDKEAYLTYLKAGSSD  557
consensus                                    !!!!   !* !! *!!       * !  !! !!!!!!  !!!!!!!!!!!!!!* !  *!**! !  **!!! !!!!!!!
```

```
logo
                                                  YPLEVMKQAGVDMTQTGYLQTAFKVFEERLYELTQLVHKLV
                                                  LPLDVKKAGVDMTNPDYLDAAFATFDDRLAEFEALAEEGNHLS
NTDB id 303952 SAC12 RS07880 WP 015473911.1  LPLDVMKQAGVDMTQPGYLQTAFATFDERLAEFTQLAHELN...   601
NTDB id 480 HSISS4 RS02090 WP 002890133.1    YPLEVIKKAGVDMTNTDYLDAAFKVFEDRLVELEALVEKGVHLS   601
consensus                                     !!*!*! !!!!!!** !!  !!  !**!! !   ! *   ***
```

X non conserved

X similar

X $\geq$ 50% conserved