```
logo
NTDB id 58066 SPN034156 RS10670 WP 015511383.1  MVLQRNEINEKDTWDLSTIYPTDQAWEEALKDLTEQLETVAQYEGHLLDSADNLLEITEFSLEMERQMEKLYVYAHMKND   80
NTDB id 480 HSISS4 RS02090 WP 002890133.1       MSDNRTHLEEKYTWDLTTIFATDADWETEYESTVQDLKKASAYAGHLLDSAKNLLGATELYMSLMRRLEKIYVYASMKND   80
consensus                                       !  *! ** !! !!!!*!!**!!  !!        !     ! !!!!!!! !!!  !!  * * ! *!!*!!!!*!!!!

logo
NTDB id 58066 SPN034156 RS10670 WP 015511383.1  QDTREAKYQEYYAKAMTLYSQLDQAFSFYDPEFMEISEKQYADFLEAQQKLQVYQHYFDKLLQGKDHVLSQREEELLAGA  160
NTDB id 480 HSISS4 RS02090 WP 002890133.1       QDTTVGLYQEYQAKASNLYSQLSEAFAYFEPEFMALDDKKLAEFKEQEPGLGLYDHYFERLLANKDHVLSQEAEELLAAA  160
consensus                                       !!!  * !!!!! !!!  !!!!!  !! ***!!!! * *!  !*! !  * ! *! !!!**!!  !!!!!!!  !!!!!*!

logo
NTDB id 58066 SPN034156 RS10670 WP 015511383.1  GEIFGSASETFAILDNADIVFPYVLDDDGKEVQLSHGTYTRLMESKKREVRRGAYQALYATYEQFQHTYAKTLQTNVKVQ  240
NTDB id 480 HSISS4 RS02090 WP 002890133.1       GDIFNGPTDTFNVLDNADILFPWVSDGQGDVVELTHGNFITLMESKDRDIRKGAYEAMYGTYEQFQHTYAQTLQGVVKVH  240
consensus                                       !*!!  ***!! *!!!!!!*!!*! !  !  ! !*!! *  !!!!! !**!*!!! !*!*!!!!!!!!!! !!!   !!!*

logo
NTDB id 58066 SPN034156 RS10670 WP 015511383.1  NYRAKVRNYKSARHAALAANFVPESVYDNLVAAVRKHLPLLHRYLELRSKILGISDLKMYDVYTPLSSVEYNFTYQEALK  320
NTDB id 480 HSISS4 RS02090 WP 002890133.1       NYQAKVRHYNSARHAALAANFIPESVYDSLLESVNKHLPLLHRYLDLRKKVLGLDELKMYDVYTPLSETETALTYEESLK  320
consensus                                       !! !!!!*! !!!!!!!!!!!*!!!!!! !*  ! !!!!!!!!!!*!! !*!!* *!!!!!!!!!!!  !   !! ! !!

logo
NTDB id 58066 SPN034156 RS10670 WP 015511383.1  KAEDALAVLGEDYLSRVKRAFSERWIDVYENQGKRSGAYSGGSYDTNAFMLLNWQDNLDNLFTLVHETGHSMHSSYTRET  400
NTDB id 480 HSISS4 RS02090 WP 002890133.1       KAEEVLAIFGEEYSKGVHAAFTERWIDVHPNKGKRSGAYSGGAYDTNAFMLLNWQDTLDNLFTLVHETGHSLHSTFTRQT  400
consensus                                       !!!* !!* !!*!   !* !!*!!!!!!**! !!!!!!!!!! !!!!!!!!!!!!! !!!!!!!!!!!!!!*!!**!! !

logo
NTDB id 58066 SPN034156 RS10670 WP 015511383.1  QPYVYGDYSIFLAEIASTTNENILTETLLKEVEDDATRFAILNNFLDGFRGTVFRQTQFAEFEHAIHQADQNGEVLTSDF  480
NTDB id 480 HSISS4 RS02090 WP 002890133.1       QPYVYGDYPIFLAEIASTTNENILTETLLKEVKDDKTRFAILNHYLDGFKGTVFRQTQFAEFEHAIHEADASGQILTADF  480
consensus                                       !!!!!!!!*!!!!!!!!!!!!!!!!!! !!  !!  !! !!!!!!!**!!!!*!!!!!!!!!!!!!!!!!  !!   ! *!! !!

logo
NTDB id 58066 SPN034156 RS10670 WP 015511383.1  LNKLYADLNQEYYGLSKEDNPEIQYEWARIPHFYYNYYVYQYSTGFAAASALAEKIVHGSQEDRDRYIDYLKAGKSDYPL  560
NTDB id 480 HSISS4 RS02090 WP 002890133.1       MNKLYADLNEKYYNLKAEDNYEIQFEWERIPHFYMNYYVYQYATGFAAASYLAEKIVHGTEEDKEAYLTYLKAGSSDYPL  560
consensus                                       *!!!!!!!!  !! !  !!!*!!!*!! !!!!!! !!!!!!! !!!!!!! !!!!!!!!* !!** !* !!!!! !!!!!
```

```
logo
                                                  NVMRKAGVDMEKEDYLNDAFAVFERRLNEFEALVEKLGLA.   600
NTDB id 58066 SPN034156 RS10670 WP 015511383.1    NVMRKAGVDMEKEDYLNDAFAVFERRLNEFEALVEKLGLA.   600
NTDB id 480 HSISS4 RS02090 WP 002890133.1         EVIKKAGVDMTNTDYLDAAFKVFEDRLVELEALVEKGVHLS   601
consensus                                          !**!!!!!!   !!!  !! !!! !! ! !!!!!!  * *
```

X non conserved

X similar

X $\geq$ 50% conserved