```
logo

NTDB id 1426 RS RS05575 WP 011001070.1      MRALLIGFVAGCMALQTRPALAPVWQPALLGLACLLAMALLRRGARLPRLVPVMAVLAAACAGFGWSDWRAQQRLSVVLA    80
NTDB id 150002 PA50071 RS09905 WP 019371624.1 MRLGLPALAAGLLALRFLAELPS........VGWLLGMAAAG....LLLLFGRLYWLGLFLLGFAWACGSAQVALDGRLA    68
NTDB id 1199 PSJM300 12650 AFN78592.1       MRAGMLALAAGLLLLRFLPQLPS........FGWLLALAPVG....LLLLPFRWRPLAFFLFGLVWACLNAQWALDDRLP    68
consensus                                   !!********!!***!**** !**        ***!!**! **    !**!   **  !* ** !**!**  !! *!* *!*

logo

NTDB id 1426 RS RS05575 WP 011001070.1      PAWEGKDIRATGVVAELPEVTEDATRFLFRIESSDAGDAVPPRVRLSWYGLRSWHERQREAEAATDRRAGIPDLQPGQRW   160
NTDB id 150002 PA50071 RS09905 WP 019371624.1 AELDGRTLWLEGRVVDLPASGEGVTRFRLEEVSAARGVLLPERLRLSWRG....................APPLMGGERW   128
NTDB id 1199 PSJM300 12650 AFN78592.1       VDLDGRTFWLEGQVTGLPDRRGDVVRFELEDIHS.RHAGLPSRIRLAWYG....................GPEIRSGERW   127
consensus                                    ***!******! ! *!!*  ****!! ****** ** **! !*!!*!*!                     *!**  !*!!

logo

NTDB id 1426 RS RS05575 WP 011001070.1      QLTLRLKRPHSLMNPGGFDGEYAMLADDVRAAGYVYTGKRARNALMGEADAGSGVGLRVERWRAAVRRHLLAALPEARYA   240
NTDB id 150002 PA50071 RS09905 WP 019371624.1 RLAVTLKRPRGLVNAAGFDYEAWLLAQRVGAVGTVKAGQRLQPAS............GLDAWRDAWRQRLLAVDAQG.RG   195
NTDB id 1199 PSJM300 12650 AFN78592.1       RLAARLKRPSGMVNPSAFDYEAWLLARRIGATGTIKAGERIAEAA............SSGAWRDRLRQRLLTVEAHG.RA   194
consensus                                   *!***!!!! ***!***!!*!***!! ***! !****! !*  !              ***!!***!**!!**** * **

logo

NTDB id 1426 RS RS05575 WP 011001070.1      PVIVALVVGDQSGIAQADWERFRRTGISHLVSISGLHITMIAGLFGALWMALWRRSFGLARWLRTPLPLRMPAQRAGAVA   320
NTDB id 150002 PA50071 RS09905 WP 019371624.1 AALAALVLGDGSGLSAAEWRMFQDTGTVHLMVISGSHISLLAGMLYGLVAALHRLG.......C..WPRRLPWLPCACAL   266
NTDB id 1199 PSJM300 12650 AFN78592.1       GAIAALVVGDGSGLSTADWRVLQDTGTVHLMVISGQHVGMLAGLLYAVVLLLARWG.......I..WPQRLPWLPWACGL   265
consensus                                   ****!!!*!!*!!** !*!*****!!**!!**!!! !****!!********! ! *          *! !*!***  ****

logo

NTDB id 1426 RS RS05575 WP 011001070.1      AMAAAFAYCLLAGMGVPAQRTLLMLATVAVARLADRSVPVSLSLCWAAALVALVDPWAVMSAGGWLSFGAVAVIFLAARI   400
NTDB id 150002 PA50071 RS09905 WP 019371624.1 GLLGAWSYGLMAGFEVPVRRACLMVSLALVWRLRFRHLGLLTPLLGTLVLVLLVEPLASLQAGFWLSFLAVALLLWLFA.   345
NTDB id 1199 PSJM300 12650 AFN78592.1       AFAGALGYGWLAGFEVPVRRACLMVAIVLLWRLRFRHLGVWLPLLIALVGVLMVDPLASLQPGFWLSFVAVALLIWIFR.   344
consensus                                   ****!**!***!!**!!**!**!!*******!!**!**** **!* ****!**!*!*!****!*!!!!*!!!*******

logo

NTDB id 1426 RS RS05575 WP 011001070.1      VAADARDDVRRPAWPVRAWRGLRGAARVQLAVTFGLLPLTLLLFQQVSVVSAVANALAIPVVSFVTTPLALMGTAL.PEP   479
NTDB id 150002 PA50071 RS09905 WP 019371624.1 ......GRLGRWRW.......WAAWGRAQWGMALGLAMPLLALGLPLSLSGAPANLLAVPWIELLVVPPALAGSLLLWVP   412
NTDB id 1199 PSJM300 12650 AFN78592.1       ......GRLGVPSW.......WRALLYAQWAMALGLLPAMLVLGLPVSLSGPLANLLAVPWISVLVVPLALLGSFLLWVP   411
consensus                                          ****** !       *** ***!*****!!** *!*!****!*****!!*!!!*!*******!*!!*!* !***!
```

```
logo
NTDB id 1426 RS RS05575 WP 011001070.1      WSQPVLIWAEASFAWLMPWLDALALPGGSVWVAPAAPAWAWGLAVVGVPLLLVPGGYRAWAWRAQGAVLLLPMLLARAPA   559
NTDB id 150002 PA50071 RS09905 WP 019371624.1 GLGEGLLRAAGVSLDLLFRALGLLAGLAEAWQPPAAAAWSVALGMLGALCWLAPAGLP...LRALGAALLLPALLPSSPP   489
NTDB id 1199 PSJM300 12650 AFN78592.1       WLGEALLWLAGGLLAVLFELLALIAGWQPAWLASALPLWAWSLVALGTLVLLLPAGVP...LRVLGTLLLAPLLFAPDSR   488
consensus                                   ****!*****  * *** ***!*** * *!***!***!***!***! ***!*!*!**   *!**!**!!*!*!**  *

logo
NTDB id 1426 RS RS05575 WP 011001070.1      PPPGEFRMVAFDIGQGAATLVETAGHRLLFDTGPRQGDLADAADRVIVPYLRGHGVQAIDTLVVSHEDSDHAGGTETVMA   639
NTDB id 150002 PA50071 RS09905 WP 019371624.1 VEWGRAEVRVLDVGQGLAVLVRTREHVLLYDSGARQGAF.DMGERVVVPVLRSLDLRRLDGLLLSHADNDHAGGAPTVAS   568
NTDB id 1199 PSJM300 12650 AFN78592.1       PEQGRAEVWVFDVGQGLSVLVRTRDHALLYDAGPRYGDF.DIGERVVFPSLRQLGLERLDLMMLSHADSDHAGGALAIQR   567
consensus                                   ** !**** **!*!!!***!!*!**! !!*!*!*!*!** !***!!**! !! *** **! ***!!*!*!!!!!* **

logo
NTDB id 1426 RS RS05575 WP 011001070.1      GVPVRTMLASLPPGHGLERQARALGIEPAGCVAGQRWAWDGVAFEILYPVQVPSDRAAVSSNARSCVLRLANARYAAMLA   719
NTDB id 150002 PA50071 RS09905 WP 019371624.1 RFPPVWLVSGEPAR.......LPSPLFADSCDE.RSWSWDGVVFEQWAWAQ......AGDSNDRSCVLRVEADGEVLLLT   634
NTDB id 1199 PSJM300 12650 AFN78592.1       AMPVGAVLSGEPER.......LPAALDARSCRTGQRWTWNQVNFSVWRWPQ......ATNGNQASCVLMVEAAGERLLLT   634
consensus                                   **!*  *****! *       ** **** *!  ***!*!**! !*** * !      !  *! *!!!!******* **!*

logo
NTDB id 1426 RS RS05575 WP 011001070.1      GDIGRAQEAALIAAEAPERLMADILLVPHHGSRTSSSGAFLDAVSAQVAVFQVGYRNRYGHPHPQVWQRYGARGIERLRT   799
NTDB id 150002 PA50071 RS09905 WP 019371624.1 GDISRAAEHAWLARQAD..PRVDWLLAPHHGSRSSSGVAFVLRTRPRHVLVSRGWRNAFGHPHGEVMERYARVAAQVHDT   712
NTDB id 1199 PSJM300 12650 AFN78592.1       GDIDAQAERALVDGGME..VNARWLLAPHHGSNSSSSAVFLAAVAADGALISRSSHNAFGHPHPAVLKRLQNAGAELHDT   712
consensus                                   !!! ***! !**** **  * ***!!*!!!!!**!!***!* ** *  ********!**!!!!* !* !**  ******!

logo
NTDB id 1426 RS RS05575 WP 011001070.1      DATGAVVIET..RGDALAVRTARSMRPRYWSSALEVAALAETTEPTGAQP   847
NTDB id 150002 PA50071 RS09905 WP 019371624.1 ARDGALTFLLGSRGGARR....ERDSAHFWREK.................   741
NTDB id 1199 PSJM300 12650 AFN78592.1       AEHGALSLQLGAFGGARR....MRDEPRFWREK.................   741
consensus                                   *  !!*** ** *!*!**     ** ***!***
```

X non conserved

X similar

X ≥50% conserved