```
logo

NTDB id 1159470 QOS64 RS16395 WP 094032817.1  MKKFIRNFSIVLLFVSLFYVAHIIYFTQNGILVGTYVVENNNHELQVVKLSKSTYGKYMGLKEGDRIIEISGKIPTEENI   80
NTDB id 91 BSU 31690 NP 391047.2              MKNLIKKFTIAVIVLSILYISYTTYISMNGIIIGTKIHKNDKSQFMIEEISESSYGQFVGLRQGDIILKINKEKPSDKHL   80
consensus                                     !!  !* !*! ** *!* !* *  ! * !!!**!! ** !  *  *  *! !*!! **!!* !! !* !    !** **

logo

NTDB id 1159470 QOS64 RS16395 WP 094032817.1  KGQYLAKAEHMKIIRDNHKIDLHNTEFISLNSSYSFFIYIIPCILFALSLLCIFYIYKVNRVKDTYSAYILIIFLLFTSI  160
NTDB id 91 BSU 31690 NP 391047.2              KWGYLSHINSLDILRSGKKIHLKDFDLVTLNRPYSFFLFVLPLFFYFLSIICIFYILKVNKKRRSFAAYILILLLLDISI  160
consensus                                     !  !! *  ** !*!  *!!*!*  * **!! *!!!!****!*  * !!**!!!!! !!!* * ** !!!!!* !!  !!

logo

NTDB id 1159470 QOS64 RS16395 WP 094032817.1  AYLSAGGVTRGYEINRYINLFTFLNVPVLYYHFLYQYFKELKIKFSSGYVVSALYILPVINIIIEIFQNHFAFQL..VTN  238
NTDB id 91 BSU 31690 NP 391047.2              AYISAGGPFRGHIINRYINLFTFISSPILYLQFIQRYLGEIGKTFLN..RISFLYIIPIFNLGIEFFQDYLQVDIDFLAT  238
consensus                                     !!*!!!!* !!* !!!!!!!!!!*  !*!! *!*  !  !*   !  ** *! !!!*!* !* !! !! *    ****

logo

NTLNLVTFFTLTMVVYTVIYLYLNVYRYKEHSYLLKVLLLTNTLSFFPFTVFYVLPIVLTGRVIYSALVTSSLLVLIPLGLV
NTLGSFALEMLFSFSAIFHGLKKKADHFFTLKLLTTSNTIAFAPFLIFFITEIFFGNIIFPATASAPFTITIPFALV

NTDB id 1159470 QOS64 RS16395 WP 094032817.1  INLGTFFLEMMVVYTVIIFYGLVYRKKDHFYLLKVLLISNTIAFFPFTVFYIIPEVLFGRYIYSAIVTSPFIIIIPLALV  318
NTDB id 91 BSU 31690 NP 391047.2              LNLVSFATLTLFSFSAIYLHLNKYKYAEHSFILKLLILTNTLSFAPFLIFFVLPIIFTGNYIFPALASASLLVLIPFGLV  318
consensus                                     *!! *!    *  ** !  *   !*  *! **!!*!***!!* ! !! *!***! *  ! !!**!* * * ***!! *!!

logo

YQFVVNKIYDIDFLLGRIRYYGFLSIVPTIGVVWLNILFDSKGNNFNIIQITVYVFLIFLAVFYIKELLDYKFRLKRFSE

NTDB id 1159470 QOS64 RS16395 WP 094032817.1  YQFVVNKIYDIDFLLGRIRYYGFLSIVPTIGVVWLNILFDSKGNNFNIIQITVYVFLIFLAVFYIKELLDYKFRLKRFSE  398
NTDB id 91 BSU 31690 NP 391047.2              YQFVANKMFDIEFILGRMRYYALLAMIPTLLIVGALVLFDVMDIQMNPVRQTVFFFVVMFAVFYFKEVMDFKFRLKRFSE  398
consensus                                     !!!! !!**!!*!*!!!*!!!* ! **!!* *!   *!!!    * !**  !!* !**  !!!! !!**!*!!!!!!!!!

logo

KYNYQDSIYKYTQLMRSVTSLQQVFMNLKNTILDVLPVSKAYTFEYTSDHKYLYLDKQNVGPNWQPYQKEFVNVTSEIGK

NTDB id 1159470 QOS64 RS16395 WP 094032817.1  KYNYQDSIYKYTQLLKSVSALNQVFMNLKKTILDVLPVSKAYIFEINSDGDILYFDKQNSEPNWQPYKKEFVKVTSEIGK  478
NTDB id 91 BSU 31690 NP 391047.2              KFNYQDSIFKYTQLMRGVTSLQQVFKELKNTILDVLLVSKAYTFEVTPDHKVIFLDKHEVGPDWNFYQEEFENVTSEIGK  478
consensus                                     !*!!!!!!*!!!!!** !* !*!!!   !! !!!!!!*!!!!! !!* *!* *** !!*    ! !**!   !!  !!!!!!!

logo

IIEVNQGFLMKYGERGANSYVLLCLSSINTPRLTRDEISWLKTLSFYTSVSMENYLQIEELMNHLQDLKQQGSNPYWLKK

NTDB id 1159470 QOS64 RS16395 WP 094032817.1  IIEVNQGFLMKIGERGANSYVLLCLSSINTPRLTRDEISWLKTLSFYTSVSMENILQIEELMNHLQDLKQQGSNPVWLKK  558
NTDB id 91 BSU 31690 NP 391047.2              IIEVNQGFLMKVGERGGSSYVLLCLSNINTPRLTRDEISWLKTLSFYTSVSMENVLHIEELMEHLKDLKQEGTNPIWLKK  558
consensus                                     !!!!!!!!!!!!*!!!!* !!!!!!!! !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!*!*!!!!! !! !!!! !*!!*!!!!
```

```
logo

NTDB id 1159470 QOS64 RS16395 WP 094032817.1  LMFTIEEKQRSDLARDLHDSVLQDLISLKRQCELFLADFKK.EEPCQLEVQDKLHQMNEQMSDVILMTRETCHELRPQLL   637
NTDB id 91 BSU 31690 NP 391047.2              LMFAIEEKQRSGLARDLHDSVLQDLISLKRQCELFLGDFKKDDNPCREEVQDKLVQMNEQMSDVISMTRETCHELRPQLL   638
consensus                                     !!! !!!!!!! !!!!!!!!!!!!!!!!!!!!!!!!*!!!!** !!  !!!!!!*!!!!!!!!!! !!!!!!!!!!!!!!

logo

NTDB id 1159470 QOS64 RS16395 WP 094032817.1  YDLGLVKAVSKLAAQQQERAPFHIRLNTGRFTAALDLDTQLNLYRIIQEFLSNAMKHSQANEVLIMLISIQNKVILHYED   717
NTDB id 91 BSU 31690 NP 391047.2              YDLGLVKALSKLVAQQQERVPFHIRLNTGRFTASLDLDSQLNLYRIIQEFLSNAVKHSQATDVLIMLISIQNKIVLHYED   718
consensus                                     !!!!!!!!*!!!! !!!!!! !!!!!!!!!!!!! !!!!*!!!!!!!!!!!!!!!!*!!!!! *!!!!!!!!!!!!**!!!!!

logo

NTDB id 1159470 QOS64 RS16395 WP 094032817.1  DGVGCNQEEGGGQSMSMGLSGIKERVRALDGRMKIDTSEGNGFKVDIEMEL   768
NTDB id 91 BSU 31690 NP 391047.2              DGVGFDQEKNTEHSMSMGLSGIKERVRALDGRLRIETSEGKGFKADIEIEL   769
consensus                                     !!!!* !!    *!!!!!!!!!!!!!!!!!!!!!**!*!!!! !!! !!!*!!
```

X non conserved

X similar

X $\geq$ 50% conserved