```
logo
NTDB id 247022 CGZ65 RS06130 WP 096295232.1  MSHSVHAFKPLSVPIQGTNLIEASAGTGKTYGIAALFTRLIVLEKMPVDKVLVVTFTKAATAELKTRLRARLDEVLQALE   80
NTDB id 1132 OK783 RS01905 WP 010951035.1    MSAPIRAFDPLTAPISGTNLIEASAGTGKTYGIAALFTRLIVLEQKSVERVLVVTFTKAATAELKTRLRARLDDVLQVLE   80
consensus                                    !!****!! !!* !! !!!!!!!!!!!!!!!!!!!!!!!!!!!!   *!**!!!!!!!!!!!!!!!!!!!!!!!!!*!!! !!

logo
NTDB id 247022 CGZ65 RS06130 WP 096295232.1  SVANA....AEDSDGLSQYCEREHSGDVFLYGLLQKALEQESQARLIVRLKAAIGGFDNASIYTIHGFCQRVLRDFAFLC  156
NTDB id 1132 OK783 RS01905 WP 010951035.1    SKEIAELGDDTLSDGIAAYCAEHHEGDTFLPALLEQALQKESRTRLIVRLKAAIGQFDNAAIYTIHGFCQRILRDYAFLC  160
consensus                                    !   !****   !!!*  !!  *! !! !!**!!  !!  !!  !!!!!!!!!!! !!!! !!!!!!!!!!*!!!*!!!!

logo
NTDB id 247022 CGZ65 RS06130 WP 096295232.1  QTQFDVELTDDSRERLLVPAQDFWRGRVSNNPQLAKLVFKHQYTPQNMLAEIQSFTGRPYLRFRRPENLLAESQQKVADT  236
NTDB id 1132 OK783 RS01905 WP 010951035.1    QAPFDVELTEEDGDRLLVPAQDFWRERVSGDPVLAALAFKRKAVPQTVLAQIRAYLSRPYLNFRRPQADLKQAQRDAETS  240
consensus                                    ! *!!!!!!**  *!!!!!!!!!!! !!!  ! !! ! !!*   !! *!! !  *  !!!! !!!!   !   !     *

logo
NTDB id 247022 CGZ65 RS06130 WP 096295232.1  WAKVKANLPELEGIFWRIHPDLNGNSYRSNTFQALFNQLKHAAEQDYLPK....NYDKLAMLGADLLAGKAKKGQSLDAA  312
NTDB id 1132 OK783 RS01905 WP 010951035.1    WQTVCRLLPELEAGFWRIHPDLNGNSYRKNSFGNLFKELAQKSAAGQLPCLDKDTHERLLKLSSDKLEAGLKKGKTPDAA  320
consensus                                    !  !*  !!!!!* !!!!!!!!!!!!!! !*!  !!  ! *      !!***** ***!  !  ! ! *  !!! **!!!

logo
NTDB id 247022 CGZ65 RS06130 WP 096295232.1  ALADLQMLANLGRDLTQAEEEEKNALTLLKFDLLDHINLALAEQKKSRRERTFDDLLLDVSNALQPGNPHAQALAEAVAA  392
NTDB id 1132 OK783 RS01905 WP 010951035.1    VFAELQKLADFGRDLNALEEAEETTMIRLQLDLIEYLNSSLAEMKKSRRERGFDDLLLDVHTALT.DNPHAETPARAVAE  399
consensus                                     !*!! !!  !!!!   !! !   *  !  !!****!  !!! !!!!!!! !!!!!!!!* !! * !!!!  *! !!!

logo
NTDB id 247022 CGZ65 RS06130 WP 096295232.1  TWQVALIDEFQDTDPLQYQIFSQIFIRQNNPLFLVGDPKQAIYSFRGADIYAYLQAAEDAQQHYTLATNFRSHAKLINGI  472
NTDB id 1132 OK783 RS01905 WP 010951035.1    NWEIALIDEFQDTDPLQYEIFQKIFIARNRPLFLVGDPKQAIYSFRGADIYAYLQAAEDARHRYTLATNYRSHAALIGSI  479
consensus                                     ! *!!!!!!!!!!!!!! !!   !!!   ! !!!!!!!!!!!!!!!!!!!!
```

```
logo
NTDB id 247022 CGZ65 RS06130 WP 096295232.1  FKGQPLESGDIAVLVRTHNEGSMIAQALKSRRIQSVLLHRESVFASPEAQGLSALLDFYLNPRRTESLRFALSSVLFGYD  632
NTDB id 1132 OK783 RS01905 WP 010951035.1    FKDRPLQSGDIAVLVRTHNEAVMISAALKKRQVQSVLLSRESVFASPEAAALSALIGFWLEPRRAGTLRFVLTSGIFGYD  639
consensus                                    !!  !! !!!!!!!!!!!!!* !!  !!! ! *!!!!!*!!!!!!!!!! *!!!!* !*! !!!  *!!! !*! *!!!!

logo

NTDB id 247022 CGZ65 RS06130 WP 096295232.1  ADALYALNQNEAELLAWIDSAERAAQEWQQKGIYTAMQHFSAEHGIETRLLSDGNNRSLTNYHQLLERLSAENEQSRSPA  712
NTDB id 1132 OK783 RS01905 WP 010951035.1    AQQLHDFNQNESEILHWAESARTALDIWQKYGIFAAMQQFSQTHGIETRLLSRNNGRSLTNYFQLLELLAAEDAQNRNPA  719
consensus                                    !  !*  !!!! !*!*! *!!  !   !!  !!* !!!*!!  !!!!!!!!!  ! !!!!!!*!!!! ! !!  ! ! !!

logo

NTDB id 247022 CGZ65 RS06130 WP 096295232.1  SLHQWLLAQINLAENGNKSESHVLRLESDEALVKIVTMHAAKGLQYPLVYCPFVWDAQDNKAHDWQILHRDGGESELLAE  792
NTDB id 1132 OK783 RS01905 WP 010951035.1    ALHKWLRDQISLAGNN.GGDNRAIRLESDEDLVKIVTMHASKGLQYPLVYCPFAWDAQDTGPSDWQILHQGANRAELLAK  798
consensus                                     !! !!  !! !! ! *  * * *!!!!!! !!!!!!!!! !!!!!!!!!!!! !!!!!  **!!!!!!  *   !!!!

logo

NTDB id 247022 CGZ65 RS06130 WP 096295232.1  HQLDDGDHIQLSDEEMAERLRLLYVALTRAEEQLNIYAAYCQDTDDNTFAYLLEGRADSTREAVKAAYESERKAGKGAAE  872
NTDB id 1132 OK783 RS01905 WP 010951035.1    AQLSESEQKQYADEEMAERLRLLYVALTRAEEQLNIYAAYSSDTADNPLAYLIEGLPQDSRETVRRTYACEKD......G  872
consensus                                    *!! * ** !  !!!!!!!!!!!!!!!!!!!!!!!!!!!!* !! !!* !!!*!! *  *!! !*  ! *!* ******

logo

NTDB id 247022 CGZ65 RS06130 WP 096295232.1  MAMLKNNWIKFISGQAENENTDFVFTEDAPLSAAYHSARQTDVQYQAASIPPRGFEYIRHTSFTGLSRHVKAHDSEREEL  952
NTDB id 1132 OK783 RS01905 WP 010951035.1    ITMLKRNWRRVADN..APAGTDFTFTEDAPPPAAYRGNADQAAEFAANSIPERGFRFVRHTSFTALSRHTQTPDGGEEDA  950
consensus                                    * !!! !! *    ** *  !!! !!!!!!**!!!*        * ! !!!*!!! **!!!!!!*!!!!    !    !*

logo

NTDB id 247022 CGZ65 RS06130 WP 096295232.1  QPSLDAAESNIRPSENVVEESDHDELSIHRFPRGTNAGLCLHEMLENLEFQTPAAEQSKQILETLTRHGFEEKWLPAVMT  1032
NTDB id 1132 OK783 RS01905 WP 010951035.1    CPSLDAAETSVPAMP.SETPTASDGISIHDFPKGTQAGLCLHEILEDFKFGQAAAEQETLIADKLKKYGFEEIWLPAVAE  1029
consensus                                    *!!!!!!!* *** **   ** *! *!!! !!*!!*!!!!!!**!!   !  *!!!!   ! * ! **!!!! !!!!!

logo

NTDB id 247022 CGZ65 RS06130 WP 096295232.1  LLDCCRETPISGKDTLSDIQPNERLPEMGFTLYMHDFNLAALRAWFAQPHLGLPPECLEAAQRLDFQDVQGYLNGFIDMT  1112
NTDB id 1132 OK783 RS01905 WP 010951035.1    MAEACRKTPLTGAYGLSDIPPGCRRPEMGFTLHTEDFGLKRLRDWLARDDIRLPEVCRAAAETLDFHTVNGFLNGFIDMV  1109
consensus                                    * **!! !!**!   !!!!*! *! !!!!!!!* *!! !  !! ! ! *** !!* !  !!  !!!* !*!*!!!!!!!
```

```
logo
NTDB id 247022 CGZ65 RS06130 WP 096295232.1  CLTSDGQVCVIDYKSNYLGTNAAAYTPQAMNEAMAEHHYYLQALIYAIAVGRYFKLRGLALPQIAVRYLFLRGMNGTENG  1192
NTDB id 1132 OK783 RS01905 WP 010951035.1    CQDPDGNICIIDYKSNHL....SAYTRQAMDEAVAHQHYYLQALIYAVAARYFKLRGQPPAAVSVRYLFLRGLDGKGGG  1185
consensus                                    !  *!!**!*!!!!!!*!**** !!!*!!! !!*!**!!!!!!!!!!*! *!!!!!!! *** * !!!!!!!!* !   !

logo
NTDB id 247022 CGZ65 RS06130 WP 096295232.1  IWSWDIHAEDLADWV  1207
NTDB id 1132 OK783 RS01905 WP 010951035.1    VWRWDIDAAALEQIK  1200
consensus                                    *! !!!*!  !
```

X non conserved

X similar

X $\geq$ 50% conserved