```
logo
NTDB id 1045 H0N27 RS16330 WP 168727019.1       ...MAEQQPLVLLVDDEEDLCLLMQMTLARMGIKTHLAYRVEQAKQLFTQFHYDACLTDLNLPDGSGLDLVKHVSQNYPN   77
NTDB id 1014680 ABV520 RS02385 WP 367432556.1  MNSQVELKKPVLVIDDEADIRDLMELTLIKMGLSVQTAAGVAEAKKALRNHAFSLVLTDMRMPDGSGLEIVDYITEHNLD   80
NTDB id 1473 PAKAF RS24000 WP 003094694.1      .....MSRQKALIVDDEPDIRELLEITLGRMKLDTRSARNVKEARELLAREPFDLCLTDMRLPDGSGLDLVQYIQQRHPQ   75
consensus                                          * *  *!**!!! !***!***!!**!** * *!  ! *!* ** *  ****!!!***!!!!!!**! ****  **

logo
NTDB id 1045 H0N27 RS16330 WP 168727019.1       TPIAVLTAYGNMDIAIAALKAGAFDFVSKPVNQVHLDQLLQKALNRQKVEHD........................TTEN  133
NTDB id 1014680 ABV520 RS02385 WP 367432556.1  IPIAVITAYGNAVQAVQALKNGAFDYLQKPITLAQLRTLVKSVLTINHSSDTDTITKAATTTKQTEVKSQNVSEPGRGNQ  160
NTDB id 1473 PAKAF RS24000 WP 003094694.1      TPVAMITAYGSLDTAIQALKAGAFDFLTKPVDLGRLRELVATALRLRNPE..........................AEE  128
consensus                                      *!*!**!!!!*** !**!!!*!!!!***!!* ** !* !* **! **  *                            ***

logo
NTDB id 1045 H0N27 RS16330 WP 168727019.1       ALENKLLIGRSLPIQQLRIAIKKIARSQAPVFVTGESGTGKEVVANLVHRLSNRSEGPFIAINCGAIPTELMESELFGHK  213
NTDB id 1014680 ABV520 RS02385 WP 367432556.1  SAAQERLLGHSPLIAEVRQLISKLAKSNVPVYIAGESGSGKEQAARSIHEQSARKDKAFVAVNCGAIPEALMESEFFGYK  240
NTDB id 1473 PAKAF RS24000 WP 003094694.1      APVDNRLLGESPPMRALRNQIGKLARSQAPVYISGESGSGKELVARLIHEQGPRIERPFVPVNCGAIPSELMESEFFGHK  208
consensus                                      *  * *!*! !***  *!* ! !*!*!**!!***!!!!*!!!**!***!*** ! ***!***!!!!!!**!!!!!*!!*!

logo
NTDB id 1045 H0N27 RS16330 WP 168727019.1       KGSFTGATQDKQGLILSAHGGSLFLDEIAELPLSMQVKLLRAVQEKKIRPVGSDQEIDVDFRVISASHQDLDLLVRQGKF  293
NTDB id 1014680 ABV520 RS02385 WP 367432556.1  KGSFTGADSDRAGFFQHADGGTLFLDEVADLPLSMQVKLLRAIQERAVRRIGEMEEKQVDVRLICATHKDLNALVESGQF  320
NTDB id 1473 PAKAF RS24000 WP 003094694.1      KGSFTGAIEDKQGLFQAASGGTLFLDEVADLPMAMQVKLLRAIQEKAVRAVGGQQEVAVDVRILCATHKDLAAEVGAGRF  288
consensus                                      !!!!!!!  !**!*** ! !!*!!!!!*!*!!**!!!!!!!!*!!***! *!  *!* !!*!***!*!*!! **!  !*!

logo
NTDB id 1045 H0N27 RS16330 WP 168727019.1       RQDLFFRIHVMDLILPPLRERGEDVLLLANHFIQKICMEWETPPKQLTEAAETYLLQQHFPGNVRELRNMIERAITLSED  373
NTDB id 1014680 ABV520 RS02385 WP 367432556.1  RQDLFYRLNVVSITMPPLRELRDDLPELIQVLLQRILRDETMT...LSPAAEQALLQYSYPGNFRELENILERAIALSKN  397
NTDB id 1473 PAKAF RS24000 WP 003094694.1      RQDLYYRLNVIELRVPPLRERREDIPLLAERILKRLAGDTGLPAARLTGDAQEKLKNYRFPGNVRELENMLERAYTLCED  368
consensus                                      !!!!**!**!*** *!!!!!***!***!** *****  *  **   !* *!*  !*** *!!!*!!!*!**!!!**!***

logo
NTDB id 1045 H0N27 RS16330 WP 168727019.1       ATIDISHLHPAPLRANISNPFASAAQSIQTTVA..APQAVKKLPSEGLERYLENIEKDILLNALNMTHWNRTLAAKKLGM  451
NTDB id 1014680 ABV520 RS02385 WP 367432556.1  HIIEVDDLQIQSLSFDNQRNLSV..DSVRNSVGENPARTDFQFGHTQIQDYLDDVERHILQQALAQTRYNRTQAAKLLGI  475
NTDB id 1473 PAKAF RS24000 WP 003094694.1      DQIQPHDLRLADAPGASQ..................EGAASLSEIDNLEDYLEDIERKLIMQALEETRWNRTAAAQRLGL  430
consensus                                        !** *! ** * *  *         **  ***     *       *****!!***!* ****!!  !**!!! !!**!!*
```

```
logo

NTDB id 1045 H0N27 RS16330 WP 168727019.1        TFRSLRYRLKKFGLDTETEQEV   473
NTDB id 1014680 ABV520 RS02385 WP 367432556.1    SFRSMRYRMERLGIA.......   490
NTDB id 1473 PAKAF RS24000 WP 003094694.1        TFRSMRYRLKKLGID.......   445
consensus                                        *!!!*!!!****!**
```

X non conserved
X similar
X ≥ 50% conserved