```
logo
NTDB id 1390 A4U84 RS00055 WP 021115958.1        MAGVNKVIIVGNLGNDPDMRTMPNGDAVATLSVATSESWNDKMTGERREVTEWHRIVFFRRQAEVAGQYLRKGSKVYVEG   80
NTDB id 624 LCA RS00040 WP 011373726.1           ..MINRVVLVGRLTRDVDLRYTSSGAAVGTFSMAVNRQFTNANG.D..READFINCVIWRKSAENFANFTKKGSLVGVDG   75
NTDB id 112 BSU 36310 NP 391512.2                ..MFNQVMLVGRLTKDPDLRYTSAGAAVAHVTLAVNRSFKNASG.E..IEADYVNCTLWRKTAENTALYCQKGSLVGVSG   75
NTDB id 50664 SAEMRSA15 RS01715 WP 000934799.1   ..MLNRVVLVGRLTKDPEYRTTPSGVSVATFTLAVNRTFTNAQG.E..READFINCVVFRRQADNVNNYLSKGSLAGVDG   75
NTDB id 113 BSU 40900 NP 391970.1                ..MLNRVVLVGRLTKDPELRYTPNGAAVATFTLAVNRTFTNQSG.E..READFINCVTWRRQAENVANFLKKGSLAGVDG   75
consensus                                          **!*!**!!*!**!***!***  !**!*****!********  *  *  **********!**!** *****!!!***!*!
```

```
logo
NTDB id 1390 A4U84 RS00055 WP 021115958.1        KLKTRKWQDQNGQDRYTTEIQGDVLQMLDSRSSGGDFGGNQGSGWNQAPAQTNYNQGGYSDNYAQNNNFNGGNATRPQPA   160
NTDB id 624 LCA RS00040 WP 011373726.1           RLQTRNYENQQGQRVYVTEVVVDNFSLLESRTTTEQRQGDGASQNFNS...NQSNGSQQSG..FTSPQQTGNAPAANNTQ   150
NTDB id 112 BSU 36310 NP 391512.2                RIQTRSYENEEGVNVYVTEVLADTVRFMDPKPREKAAD.........................................   113
NTDB id 50664 SAEMRSA15 RS01715 WP 000934799.1   RLQSRNYENQEGRRVFVTEVVCDSVQFLEPKNAQQNGGQRQQNEFQDY...GQGFGGQQSG.....QNNSYNNSSNTKQS   147
NTDB id 113 BSU 40900 NP 391970.1                RLQTRNYENQQGQRVFVTEVQAESVQFLEPKNGGGSGSGGYNEGNSGG...GQYFGGGQNDNPFGGNQNNQRRNQGNSFN   152
consensus                                        ****!******!*****!!*************      * *              *  ** **      ***
```

```
logo
NTDB id 1390 A4U84 RS00055 WP 021115958.1        QKPAAQAEPPMDNFDDDIPF   180
NTDB id 624 LCA RS00040 WP 011373726.1           ADPFANNGQAIDISDDDLPF   170
NTDB id 112 BSU 36310 NP 391512.2                ......................   113
NTDB id 50664 SAEMRSA15 RS01715 WP 000934799.1   DNPFANANGPIDISDDDLPF   167
NTDB id 113 BSU 40900 NP 391970.1                DDPFANDGKPIDISDDDLPF   172
consensus                                          ****    ***********
```

X non conserved

X similar

X $\geq$ 50% conserved