```
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 373435 FO455 RS08095 WP 002461102.1  ..MLNRVVLVGRLTKDPEYRTTPSGVSVATFTLAVNRTFTNAQG.E..READFINCVVFRRQAENVNNYLNKGSLAGVDG    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       RLQTRNYENQQGQRVYVTEVVVDNFSLLESRTTTEQRQGDGASQNFN...SNQSNGSQQSGF..TSPQQTGNAPAANNTQ   150
NTDB id 112 BSU 36310 NP 391512.2            RIQTRSYENEEGVNVYVTEVLADTVRFMDPKPREKAAD.......................................   113
NTDB id 373435 FO455 RS08095 WP 002461102.1  RLQSRSYENQEGRRIFVTEVVCDSVQFLEPKNAQHGGQRSQNNEFQD...YGQGFGGQQSGQNTSYNNN...NASKSNQN   149
NTDB id 113 BSU 40900 NP 391970.1            RLQTRNYENQQGQRVFVTEVQAESVQFLEPKNGGGSGSGGYNEGNSG...GGQYFGGGQNDNPFGGNQNNQRRNQGNSFN   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 373435 FO455 RS08095 WP 002461102.1  DNPFANANGPIDISDDDLPF   169
NTDB id 113 BSU 40900 NP 391970.1            DDPFANDGKPIDISDDDLPF   172
consensus                                      ****    ***********
```

X non conserved

X similar

X $\geq$ 50% conserved