```
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 228095 CAB88 RS28515 WP 002094213.1  ..MMNRVILVGRLTKDPDLRYTPNGVAVATFTLAVNRAFANQQG.E..READFINCVIWRKQAENVANYLKKGSLAGVDG    75
NTDB id 113 BSU 40900 NP 391970.1             ..MLNRVVLVGRLTKDPELRYTPNGAAVATFTLAVNRTFTNQSG.E..READFINCVTWRRQAENVANFLKKGSLAGVDG    75
NTDB id 112 BSU 36310 NP 391512.2             ..MFNQVMLVGRLTKDPDLRYTSAGAAVAHVTLAVNRSFKNASG.E..IEADYVNCTLWRKTAENTALYCQKGSLVGVSG    75
consensus                                       **!*!**!!*!**!***!****!*!!*****!*****  *   *  *   *********!**!!!* *****!!!***!*!
```

```
logo
NTDB id 1390 A4U84 RS00055 WP 021115958.1     KLKTRKWQDQNGQDRYTTEIQGDVLQMLDSRSSGGDFGGNQGSGWNQAPAQTNYNQGGYSDNYAQNNNFNGGNA......   154
NTDB id 624 LCA RS00040 WP 011373726.1        RLQTRNYENQQGQRVYVTEVVVDNFSLLESRTTTEQRQGD..........GASQNFNSNQSNGSQQSGFTSPQQT....G   141
NTDB id 228095 CAB88 RS28515 WP 002094213.1  RLQTRNYDGQDGKRVYVTEVLAESVQFLEPRNGGGEQRGS....FNQQPSGAGF...GNQGS....NPFGQSSNSGNQGN   144
NTDB id 113 BSU 40900 NP 391970.1             RLQTRNYENQQGQRVFVTEVQAESVQFLEPKNGGGSGSGG....YNEGNSGGGQYFGGGQND....NPFGGNQNN....Q   143
NTDB id 112 BSU 36310 NP 391512.2             RIQTRSYENEEGVNVYVTEVLADTVRFMDPKPREKAAD.......................................   113
consensus                                     ***!!*****!*****!!*************  **    *     **    **     * *      * *   **
```

```
logo
NTDB id 1390 A4U84 RS00055 WP 021115958.1     ...TRPQPAQKPAAQAEPPMDNFDDDIPF   180
NTDB id 624 LCA RS00040 WP 011373726.1        NAPAANNTQADPFANNGQAIDISDDDLPF   170
NTDB id 228095 CAB88 RS28515 WP 002094213.1  QGNSGFTKNDDPFSNVGQPIDISDDDLPF   173
NTDB id 113 BSU 40900 NP 391970.1             RRNQGNSFNDDPFANDGKPIDISDDDLPF   172
NTDB id 112 BSU 36310 NP 391512.2             ............................   113
consensus                                         *   * ***** * ***********
```

X non conserved

X similar

X $\geq$ 50% conserved