```
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 181304 BSA145 RS01170 WP 007497456.1  ..MLNRVVLVGRLTKDPELRYTPNGAAVATFTLAVNRTFTNQSG.E..READFINCVTWRRQAENVANFLKKGSLAGVDG   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      KLKTRKWQDQNGQDRYTTEIQGDVLQMLDSRSSGGDFGGN.........QGSGWNQAPAQTNYNQGGYSDNYAQNNN...   148
NTDB id 624 LCA RS00040 WP 011373726.1         RLQTRNYENQQGQRVYVTEVVVDNFSLLESRTTTEQRQGDGASQNFNSNQSNGSQQS.........GFT........SPQ   138
NTDB id 181304 BSA145 RS01170 WP 007497456.1  RLQTRNYENQQGQRVFVTEVQAESVQFLEPKSG.GAGSGG.....YSGGGNSGGQYYG.GSQNDQNPFGNEPSQNPYGNQ   148
NTDB id 113 BSU 40900 NP 391970.1              RLQTRNYENQQGQRVFVTEVQAESVQFLEPKNGGGSGSGG.....YNEGNSGGGQYFG.GGQND.NPFG........GNQ   140
NTDB id 112 BSU 36310 NP 391512.2              RIQTRSYENEEGVNVYVTEVLADTVRFMDPKPREKAAD.........................................   113
consensus                                      ***!!******!*****!!*************  * * *      *   *  * *      *     *           *
```

```
logo
NTDB id 1390 A4U84 RS00055 WP 021115958.1      FNGGNATRPQPAQKPAAQAEPPMDNFDDDIPF   180
NTDB id 624 LCA RS00040 WP 011373726.1         QTGNAPAANNTQADPFANNGQAIDISDDDLPF   170
NTDB id 181304 BSA145 RS01170 WP 007497456.1  NNQNRNQGNSFNDDPFANDGKPIDISDDDLPF   180
NTDB id 113 BSU 40900 NP 391970.1              NNQRRNQGNSFNDDPFANDGKPIDISDDDLPF   172
NTDB id 112 BSU 36310 NP 391512.2              ................................   113
consensus                                      **     **  * ***** * ***********
```

X non conserved

X similar

X $\geq$ 50% conserved