```
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 122505 L2676 RS00225 WP 003721668.1  ..MMNRVVLVGRLTKDPELRYTPAGVAVATFTLAVNRTFTNQQG.E..READFINCVVWRKPAENVANFLKKGSMAGVDG    75
NTDB id 113 BSU 40900 NP 391970.1            ..MLNRVVLVGRLTKDPELRYTPNGAAVATFTLAVNRTFTNQSG.E..READFINCVTWRRQAENVANFLKKGSLAGVDG    75
consensus                                      **!*!**!!*!**!***!***  !*!!*****!*******  * *  *********!*!* !!* *****!!!***!*!
```

```
logo
NTDB id 1390 A4U84 RS00055 WP 021115958.1    KLKTRKWQDQNGQDRYTTEIQGDVLQMLDSRSSGGDFGGNQGSGWNQAPAQTNYNQGGYS..DNYAQNNNFNGG.....N    153
NTDB id 624 LCA RS00040 WP 011373726.1       RLQTRNYENQQGQRVYVTEVVVDNFSLLESRTTTEQRQGDGASQNF....NSNQS........NGSQQSGFTSPQQTGNA    143
NTDB id 112 BSU 36310 NP 391512.2            RIQTRSYENEEGVNVYVTEVLADTVRFMDPKPREKAAD.......................................    113
NTDB id 122505 L2676 RS00225 WP 003721668.1  RVQTRNYEGNDGKRVYVTEIVAESVQFLEPRNSNGGGGNNYQSGNN....NNNYNSGGNNFGQAPTNNGGFGQDQQQSQN    151
NTDB id 113 BSU 40900 NP 391970.1            RLQTRNYENQQGQRVRVTEVQAESVQFLEPKNGGGSGSGGYNEGNS....GG.....GQYFGG.GQNDNPFGGNQNNQRR    145
consensus                                    ***!!******!*****!!************ * * * *   ***     * *    *        **  *   **
```

```
logo
NTDB id 1390 A4U84 RS00055 WP 021115958.1    ATRPQPAQKPAAQAEPPMDNFDDDIPF    180
NTDB id 624 LCA RS00040 WP 011373726.1       PAANNTQADPFANNGQAIDISDDDLPF    170
NTDB id 112 BSU 36310 NP 391512.2            ..........................    113
NTDB id 122505 L2676 RS00225 WP 003721668.1  QNYQSTNNDPFASDGKPIDISDDDLPF    178
NTDB id 113 BSU 40900 NP 391970.1            NQGNSFNDDPFANDGKPIDISDDDLPF    172
consensus                                       *  * ***** * ***********
```

X non conserved

X similar

X $\geq$ 50% conserved