```
logo
```

```
NTDB id 624 LCA RS00040 WP 011373726.1      MINRVVLVGRLTRDVDLRYTSSGAAVGTFSMAVNRQFTNANGDREADFINCVIWRKSAENFANFTKKGSLVGVDGRLQTRNYENQ   85
NTDB id 113 BSU 40900 NP 391970.1           MLNRVVLVGRLTKDPELRYTPNGAAVATFTLAVNRTFTNQSGEREADFINCVTWRRQAENVANFLKKGSLAGVDGRLQTRNYENQ   85
NTDB id 258234 BVQ RS19050 WP 007407557.1   MFNHVMLVGRLTKDPELRFTAAGIPVAHITLAVNRNFKSASGETGTDFVNCTIWRKNAENTALYCQKGSMVGVSGRIQTRSYEKT   85
NTDB id 112 BSU 36310 NP 391512.2           MFNQVMLVGRLTKDPDLRYTSAGAAVAHVTLAVNRSFKNASGEIEADYVNCTLWRKTAENTALYCQKGSLVGVSGRIQTRSYENE   85
NTDB id 597 KW2 RS01935 WP 021036727.1      .MNKTMLIGRLTNAPEISKTTNNKSYVRVTLAVNRRFKNEKGEREADFISIILWGKSAETLVSYAKKGSLISVEGEIRTRNYTDK   84
NTDB id 498 SM12261 RS01980 WP 000282464.1  MYNKVIMIGRLTSTPELHKTNNDKSVARATIAVNRRYKDQNGEREADFVNMVLWGKLAESLASYATKGSLISVDGELRTRRFE.K   84
NTDB id 526 SMSK321 RS08825 WP 000282440.1  MYNKVILIGRLTSTPELHKTNNDKSVARATIAVNRRYKDQNGEREADFVNMVLWGRLAETLASYATKGSLISVDGELRTRRFE.K   84
NTDB id 158 SP RS09595 WP 000282442.1       MYNKVILIGRLTSTPELHKTNNDKSVARATIAVNRRYKDQNGEREADFVNMVLWGRLAETLASYATKGSLISVDGELRTRRFE.K   84
NTDB id 268 KZH43 RS08520 WP 000282467.1    MYNKVIMIGRLTSTPELHKTNNDKSVARATIAVNRRYKDQNGEREADFVNMVLWGRLAETLASYATKGSLISVDGELRTRRFE.K   84
NTDB id 227 SPD RS09110 WP 000282467.1      MYNKVIMIGRLTSTPELHKTNNDKSVARATIAVNRRYKDQNGEREADFVNMVLWGRLAETLASYATKGSLISVDGELRTRRFE.K   84
NTDB id 193 SPR RS08685 WP 000282467.1      MYNKVIMIGRLTSTPELHKTNNDKSVARATIAVNRRYKDQNGEREADFVNMVLWGRLAETLASYATKGSLISVDGELRTRRFE.K   84
NTDB id 583 DLJ51 RS09560 WP 002962590.1    MYNKVILIGRLTAAPEMVKTPSNKSVTHITLAVNRRFKTQDGERQADFVNVVFWGKLAESLVSYAGKGSLVSLDGEIRTRHYE.K   84
NTDB id 409 SMU RS08940 WP 002263454.1      MYNKVILIGRLVATPEMVKTPKDKSVTRVTLAVNRRFKSQDGEKQADFVNVVLWGRLAETIASYGSKGSLISLDGELRTRKYE.K   84
consensus                                   **!*****!!!*  *** *! * ***** **!!!!*** * !****!******!***!!****** !!!*****!***!! ** *
```

```
logo
```

```
NTDB id 624 LCA RS00040 WP 011373726.1      QGQRVYVTEVVVDNFSLLESRTTTEQRQGDGASQNFNSNQSNGSQ.......QSGFTSPQQTGNAPAANNTQADPFANNGQAIDI   163
NTDB id 113 BSU 40900 NP 391970.1           QGQRVFVTEVQAESVQFLEPKNGGGSGSG.....GYNEGNSGGGQYFGGGQNDNPFGGNQNNQRRNQGNSFNDDPFANDGKPIDI   165
NTDB id 258234 BVQ RS19050 WP 007407557.1   DGVKVYVTEVMADTVRFMDQKRKEPLAE.......................................................   113
NTDB id 112 BSU 36310 NP 391512.2           EGVNVYVTEVLADTVRFMDPKPREKAAD.......................................................   113
NTDB id 597 KW2 RS01935 WP 021036727.1      NEQKHYITEILGLSYDLLESRATLALRESAV..K.................................TEELLL   122
NTDB id 498 SM12261 RS01980 WP 000282464.1  NGQMNYVTEVLVTGFQLLESRAQRAMRENNAGQD..................................LADLVL   124
NTDB id 526 SMSK321 RS08825 WP 000282440.1  NGQMNYVAEVLVTGFQLLESRAQRAMRENNAGQD..................................LADLVL   124
NTDB id 158 SP RS09595 WP 000282442.1       NGQMNYVTEVLVTGFQLLESRAQRAMRENNAGQD..................................LADLVL   124
NTDB id 268 KZH43 RS08520 WP 000282467.1    NGQMNYVTEVLVTGFQLLESRAQRAMRENNAGQD..................................LADLVL   124
NTDB id 227 SPD RS09110 WP 000282467.1      NGQMNYVTEVLVTGFQLLESRAQRAMRENNAGQD..................................LADLVL   124
NTDB id 193 SPR RS08685 WP 000282467.1      NGQMNYVTEVLVTGFQLLESRAQRAMRENNAGQD..................................LADLVL   124
NTDB id 583 DLJ51 RS09560 WP 002962590.1    DGQTHYVTEILAQSFQLLESRAQRALRENNGASD..................................LTDLVL   124
NTDB id 409 SMU RS08940 WP 002263454.1      DGVTHFVTEVLGHSFQLLESRAQRAMRENNSEND..................................LADLVL   124
consensus                                   ***  ***!**   ****************** *                                  * ****
```

```
logo
```

```
NTDB id 624 LCA RS00040 WP 011373726.1      SDDDLPF   170
NTDB id 113 BSU 40900 NP 391970.1           SDDDLPF   172
NTDB id 258234 BVQ RS19050 WP 007407557.1   .......   113
NTDB id 112 BSU 36310 NP 391512.2           .......   113
NTDB id 597 KW2 RS01935 WP 021036727.1      EADELPF   129
NTDB id 498 SM12261 RS01980 WP 000282464.1  EEEELPF   131
NTDB id 526 SMSK321 RS08825 WP 000282440.1  EEEELPF   131
NTDB id 158 SP RS09595 WP 000282442.1       EEEELPF   131
NTDB id 268 KZH43 RS08520 WP 000282467.1    EEEELPF   131
NTDB id 227 SPD RS09110 WP 000282467.1      EEEELPF   131
NTDB id 193 SPR RS08685 WP 000282467.1      EEEELPF   131
NTDB id 583 DLJ51 RS09560 WP 002962590.1    EEEELPF   131
NTDB id 409 SMU RS08940 WP 002263454.1      EEEELPF   131
consensus                                   *******
```

X non conserved
X similar
X $\geq$ 50% conserved