```
logo
```

```
NTDB id 624 LCA RS00040 WP 011373726.1        MINRVVLVGRLTRDVDLRYTSSGAAVGTFSMAVNRQFTNANGDREADFINCVIWRKSAENFANFTKKGSLVGVDGRLQTR   80
NTDB id 113 BSU 40900 NP 391970.1             MLNRVVLVGRLTKDPELRYTPNGAAVATFTLAVNRTFTNQSGEREADFINCVTWRRQAENVANFLKKGSLAGVDGRLQTR   80
NTDB id 970519 SOZ35 RS18985 WP 003326616.1  MFNQVMLVGRLTKDPELRYTSVGAAVANITIAVNRSFKNASGEIDADFVNCTLWRKTAENTAVYCQKGSLIGVSGRIQTR   80
NTDB id 112 BSU 36310 NP 391512.2             MFNQVMLVGRLTKDPDLRYTSAGAAVAHVTLAVNRSFKNASGEIEADYVNCTLWRKTAENTALYCQKGSLVGVSGRIQTR   80
NTDB id 597 KW2 RS01935 WP 021036727.1        .MNKTMLIGRLTNAPEISKTTNNKSYVRVTLAVNRRFKNEKGEREADFISIILWGKSAETLVSYAKKGSLISVEGEIRTR   79
NTDB id 498 SM12261 RS01980 WP 000282464.1    MYNKVIMIGRLTSTPELHKTNNDKSVARATIAVNRRYKDQNGEREADFVNMVLWGKLAESLASYATKGSLISVDGELRTR   80
NTDB id 526 SMSK321 RS08825 WP 000282440.1    MYNKVILIGRLTSTPELHKTNNDKSVARATIAVNRRYKDQNGEREADFVNMVLWGRLAETLASYATKGSLISVDGELRTR   80
NTDB id 158 SP RS09595 WP 000282442.1         MYNKVILIGRLTSTPELHKTNNDKSVARATIAVNRRYKDQNGEREADFVNMVLWGRLAETLASYATKGSLISVDGELRTR   80
NTDB id 268 KZH43 RS08520 WP 000282467.1      MYNKVIMIGRLTSTPELHKTNNDKSVARATIAVNRRYKDQNGEREADFVNMVLWGRLAETLASYATKGSLISVDGELRTR   80
NTDB id 227 SPD RS09110 WP 000282467.1        MYNKVIMIGRLTSTPELHKTNNDKSVARATIAVNRRYKDQNGEREADFVNMVLWGRLAETLASYATKGSLISVDGELRTR   80
NTDB id 193 SPR RS08685 WP 000282467.1        MYNKVIMIGRLTSTPELHKTNNDKSVARATIAVNRRYKDQNGEREADFVNMVLWGRLAETLASYATKGSLISVDGELRTR   80
NTDB id 583 DLJ51 RS09560 WP 002962590.1      MYNKVILIGRLTAAPEMVKTPSNKSVTHITLAVNRRFKTQDGERQADFVNVVFWGKLAESLVSYAGKGSLVSLDGEIRTR   80
NTDB id 409 SMU RS08940 WP 002263454.1        MYNKVILIGRLVATPEMVKTPKDKSVTRVTLAVNRRFKSQDGEKQADFVNVVLWGRLAETIASYGSKGSLISLDGELRTR   80
consensus                                     **!*****!!!*  *** *! * ***** **!!!!*** * !***!!******!***!!****** !!!!****!***!!
```

```
logo
```

```
NTDB id 624 LCA RS00040 WP 011373726.1        NYENQQGQRVYVTEVVVDNFSLLESRTTTEQRQGDGASQNFNSNQSNGS.......QQSGFTSPQQTGNAPAANNTQADP   153
NTDB id 113 BSU 40900 NP 391970.1             NYENQQGQRVFVTEVQAESVQFLEPKNGGGSGSGG.....YNEGNSGGGQYFGGGQNDNPFGGNQNNQRRNQGNSFNDDP   155
NTDB id 970519 SOZ35 RS18985 WP 003326616.1  SYENAEGAKVYVTEVMADSVRFMDPKPQELLTD.......................................................   113
NTDB id 112 BSU 36310 NP 391512.2             SYENEEGVNVYVTEVLADTVRFMDPKPREKAAD.......................................................   113
NTDB id 597 KW2 RS01935 WP 021036727.1        NYTDKNEQKHYITEILGLSYDLLESRATLALRESAV..K.................................................   116
NTDB id 498 SM12261 RS01980 WP 000282464.1    RFE.KNGQMNYVTEVLVTGFQLLESRAQRAMRENNAGQD.................................................   118
NTDB id 526 SMSK321 RS08825 WP 000282440.1    RFE.KNGQMNYVAEVLVTGFQLLESRAQRAMRENNAGQD.................................................   118
NTDB id 158 SP RS09595 WP 000282442.1         RFE.KNGQMNYVTEVLVTGFQLLESRAQRAMRENNAGQD.................................................   118
NTDB id 268 KZH43 RS08520 WP 000282467.1      RFE.KNGQMNYVTEVLVTGFQLLESRAQRAMRENNAGQD.................................................   118
NTDB id 227 SPD RS09110 WP 000282467.1        RFE.KNGQMNYVTEVLVTGFQLLESRAQRAMRENNAGQD.................................................   118
NTDB id 193 SPR RS08685 WP 000282467.1        RFE.KNGQMNYVTEVLVTGFQLLESRAQRAMRENNAGQD.................................................   118
NTDB id 583 DLJ51 RS09560 WP 002962590.1      HYE.KDGQTHYVTEILAQSFQLLESRAQRALRENNGASD.................................................   118
NTDB id 409 SMU RS08940 WP 002263454.1        KYE.KDGVTHFVTEVLGHSFQLLESRAQRAMRENNSEND.................................................   118
consensus                                      **  ****   ***!**    ****************** *
```

```
logo
```

```
NTDB id 624 LCA RS00040 WP 011373726.1        FANNGQAIDISDDDLPF   170
NTDB id 113 BSU 40900 NP 391970.1             FANDGKPIDISDDDLPF   172
NTDB id 970519 SOZ35 RS18985 WP 003326616.1  .................   113
NTDB id 112 BSU 36310 NP 391512.2             .................   113
NTDB id 597 KW2 RS01935 WP 021036727.1        ....TEELLLEADELPF   129
NTDB id 498 SM12261 RS01980 WP 000282464.1    ....LADLVLEEEELPF   131
NTDB id 526 SMSK321 RS08825 WP 000282440.1    ....LADLVLEEEELPF   131
NTDB id 158 SP RS09595 WP 000282442.1         ....LADLVLEEEELPF   131
NTDB id 268 KZH43 RS08520 WP 000282467.1      ....LADLVLEEEELPF   131
NTDB id 227 SPD RS09110 WP 000282467.1        ....LADLVLEEEELPF   131
NTDB id 193 SPR RS08685 WP 000282467.1        ....LADLVLEEEELPF   131
NTDB id 583 DLJ51 RS09560 WP 002962590.1      ....LTDLVLEEEELPF   131
NTDB id 409 SMU RS08940 WP 002263454.1        ....LADLVLEEEELPF   131
consensus                                         * **********
```

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