```
logo
```

```
NTDB id 624 LCA RS00040 WP 011373726.1          MINRVVLVGRLTRDVDLRYTSSGAAVGTFSMAVNRQFTNANGDREADFINCVIWRKSAENFANFTKKGSLVGVDGRLQTR   80
NTDB id 113 BSU 40900 NP 391970.1               MLNRVVLVGRLTKDPELRYTPNGAAVATFTLAVNRTFTNQSGEREADFINCVTWRRQAENVANFLKKGSLAGVDGRLQTR   80
NTDB id 196901 BL1202 RS20380 WP 003185893.1    MFNEIMLVGRLTKDPELRYTSDGVPVANVTLAVSRPFKNAAGEVEADFVNCTLWRKTAVNTAEYCEKGSIIGLSGRIQTR   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          NYENQQGQRVYVTEVVVDNFSLLESRTTTEQRQGDGASQNFNSNQSNGSQ.......QSGFTSPQQTGNAPAANNTQADP   153
NTDB id 113 BSU 40900 NP 391970.1               NYENQQGQRVFVTEVQAESVQFLEPKNGGGSG.....SGGYNEGNSGGGQYFGGGQNDNPFGGNQNNQRRNQGNSFNDDP   155
NTDB id 196901 BL1202 RS20380 WP 003185893.1    QYVNSEGERTFITEVVARSVRFLGESRKAHEP.....ADA........................................   115
NTDB id 112 BSU 36310 NP 391512.2               SYENEEGVNVYVTEVLADTVRFMDPKPREKAA.....D..........................................   113
NTDB id 597 KW2 RS01935 WP 021036727.1          NYTDKNEQKHYITEILGLSYDLLESRATLALRESAV............................................   115
NTDB id 498 SM12261 RS01980 WP 000282464.1      RFE.KNGQMNYVTEVLVTGFQLLESRAQRAMRENNAGQ..........................................   117
NTDB id 526 SMSK321 RS08825 WP 000282440.1      RFE.KNGQMNYVAEVLVTGFQLLESRAQRAMRENNAGQ..........................................   117
NTDB id 158 SP RS09595 WP 000282442.1           RFE.KNGQMNYVTEVLVTGFQLLESRAQRAMRENNAGQ..........................................   117
NTDB id 268 KZH43 RS08520 WP 000282467.1        RFE.KNGQMNYVTEVLVTGFQLLESRAQRAMRENNAGQ..........................................   117
NTDB id 227 SPD RS09110 WP 000282467.1          RFE.KNGQMNYVTEVLVTGFQLLESRAQRAMRENNAGQ..........................................   117
NTDB id 193 SPR RS08685 WP 000282467.1          RFE.KNGQMNYVTEVLVTGFQLLESRAQRAMRENNAGQ..........................................   117
NTDB id 583 DLJ51 RS09560 WP 002962590.1        HYE.KDGQTHYVTEILAQSFQLLESRAQRALRENNGAS..........................................   117
NTDB id 409 SMU RS08940 WP 002263454.1          KYE.KDGVTHFVTEVLGHSFQLLESRAQRAMRENNSEN..........................................   117
consensus                                        **  ****   ***!**    ****************
```

```
logo
```

```
NTDB id 624 LCA RS00040 WP 011373726.1          FANNGQAIDISDDDLPF   170
NTDB id 113 BSU 40900 NP 391970.1               FANDGKPIDISDDDLPF   172
NTDB id 196901 BL1202 RS20380 WP 003185893.1    .................   115
NTDB id 112 BSU 36310 NP 391512.2               .................   113
NTDB id 597 KW2 RS01935 WP 021036727.1          ...KTEELLLEADELPF   129
NTDB id 498 SM12261 RS01980 WP 000282464.1      ...DLADLVLEEEELPF   131
NTDB id 526 SMSK321 RS08825 WP 000282440.1      ...DLADLVLEEEELPF   131
NTDB id 158 SP RS09595 WP 000282442.1           ...DLADLVLEEEELPF   131
NTDB id 268 KZH43 RS08520 WP 000282467.1        ...DLADLVLEEEELPF   131
NTDB id 227 SPD RS09110 WP 000282467.1          ...DLADLVLEEEELPF   131
NTDB id 193 SPR RS08685 WP 000282467.1          ...DLADLVLEEEELPF   131
NTDB id 583 DLJ51 RS09560 WP 002962590.1        ...DLTDLVLEEEELPF   131
NTDB id 409 SMU RS08940 WP 002263454.1          ...DLADLVLEEEELPF   131
consensus                                          ** ***********
```

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