```
logo
NTDB id 279 KZH43 RS00140 WP 074017595.1    MAKKKATFVCQNCGYNSPKYLGRCPNCGSWSSFVEEVEVAEVKNARVSLTG...EKTKPMKLAEVTSINVNRTKTEMEEFNRVLG   82
NTDB id 238 SPD RS00140 WP 074017595.1      MAKKKATFVCQNCGYNSPKYLGRCPNCGSWSSFVEEVEVAEVKNARVSLTG...EKTKPMKLAEVTSINVNRTKTEMEEFNRVLG   82
NTDB id 204 SPR RS00140 WP 074017595.1      MAKKKATFVCQNCGYNSPKYLGRCPNCGSWSSFVEEVEVAEVKNARVSLTG...EKTKPMKLAEVTSINVNRTKTEMEEFNRVLG   82
NTDB id 169 SP RS00155 WP 074017595.1       MAKKKATFVCQNCGYNSPKYLGRCPNCGSWSSFVEEVEVAEVKNARVSLTG...EKTKPMKLAEVTSINVNRTKTEMEEFNRVLG   82
NTDB id 509 SM12261 RS00130 WP 078228442.1 MAKKKATFVCQNCGYNSPKYLGRCPNCGSWSSFVEEVEVAEVKNARVSLTG...EKTKPMKLAEVTSINVNRTKTEMEEFNRVLG   82
NTDB id 537 SMSK321 RS07120 WP 080550752.1 MAKKKATFVCQNCGYNSPKYLGRCPNCGSWSSFVEEVEVAEVKNARVSLTG...EKTKPMKLAEVTSINVNRTKTEMEEFNRVLG   82
NTDB id 266793 RK67 RS01585 WP 001085219.1 MAKKKVIFECMACGYQSPKWMGKCPNCGAWNQMEEIVEKAANPKHGVKTK...ELAGKVQKLNSIKHETTPRVLTDSAEFNRVLG   82
NTDB id 125 BSU 00870 NP 387968.1           MAKTKSKFICQSCGYESPKWMGKCPGCGAWNTMVEEMIKKAPANRRAAFSHSVQTVQKPSPITSIETSEEPRVKTQLGEFNRVLG   85
consensus                                   !!!*!**!*!**!!!*!!!**!*!!*!!*!****!***************   ***!*************!**!***!!!!!!!

logo
NTDB id 279 KZH43 RS00140 WP 074017595.1    GGVVPGSLVLIGGDPGIGKSTLLLQVSTQLSQ.VGTVLYVSGEESAQQIKLRAERLGDIDSEFYLYAETNMQSVRAEVERIQPDF  166
NTDB id 238 SPD RS00140 WP 074017595.1      GGVVPGSLVLIGGDPGIGKSTLLLQVSTQLSQ.VGTVLYVSGEESAQQIKLRAERLGDIDSEFYLYAETNMQSVRAEVERIQPDF  166
NTDB id 204 SPR RS00140 WP 074017595.1      GGVVPGSLVLIGGDPGIGKSTLLLQVSTQLSQ.VGTVLYVSGEESAQQIKLRAERLGDIDSEFYLYAETNMQSVRAEVERIQPDF  166
NTDB id 169 SP RS00155 WP 074017595.1       GGVVPGSLVLIGGDPGIGKSTLLLQVSTQLSQ.VGTVLYVSGEESAQQIKLRAERLGDIDSEFYLYAETNMQSVRAEVERIQPDF  166
NTDB id 509 SM12261 RS00130 WP 078228442.1 GGVVPGSLVLIGGDPGIGKSTLLLQVSTQLSQ.VGTVLYVSGEESAQQIKLRAERLGDIDSEFYLYAETNMQSVRTEVERIQPDF  166
NTDB id 537 SMSK321 RS07120 WP 080550752.1 GGVVPGSLVLIGGDPGIGKSTLLLQVSTQLSQ.VGTVLYVSGEESAQQIKLRAERLGDIDSEFYLYAETNMQSVRAEVERIQPDF  166
NTDB id 266793 RK67 RS01585 WP 001085219.1 GGIVSGSLVLIGGDPGIGKSTLLLQICASLSQ.KKKVLYITGEESLSQTKLRAERLDEDSSELQVLAETDLEVIYQTVKEEQPDL  166
NTDB id 125 BSU 00870 NP 387968.1           GGVVKGSLVLIGGDPGIGKSTLLLQVSAQLSGSSNSVLYISGEESVKQTKLRADRLGINNPSLHVLSETDMEYISSAIQEMNPSF  170
consensus                                   !!*!*!!!!!!!!!!!!!!!!!!!!!!!!*****!!*  ***!!!**!!!!**!*!!!!*!!***********!!*************!**

logo
NTDB id 279 KZH43 RS00140 WP 074017595.1    LIIDSIQTIMSPEISGVQGSVSQVREVTAELMQLAKTNNIAIFIVGHVTKEGTLAGPRMLEHMVDTVLYFEGERHHTFRILRAVK  251
NTDB id 238 SPD RS00140 WP 074017595.1      LIIDSIQTIMSPEISGVQGSVSQVREVTAELMQLAKTNNIAIFIVGHVTKEGTLAGPRMLEHMVDTVLYFEGERHHTFRILRAVK  251
NTDB id 204 SPR RS00140 WP 074017595.1      LIIDSIQTIMSPEISGVQGSVSQVREVTAELMQLAKTNNIAIFIVGHVTKEGTLAGPRMLEHMVDTVLYFEGERHHTFRILRAVK  251
NTDB id 169 SP RS00155 WP 074017595.1       LIIDSIQTIMSPEISGVQGSVSQVREVTAELMQLAKTNNIAIFIVGHVTKEGTLAGPRMLEHMVDTVLYFEGERHHTFRILRAVK  251
NTDB id 509 SM12261 RS00130 WP 078228442.1 LIIDSIQTIMSPEISGVQGSVSQVREVTAELMQLAKTNNIAIFIVGHVTKEGTLAGPRMLEHMVDTVLYFEGERHHTFRILRAVK  251
NTDB id 537 SMSK321 RS07120 WP 080550752.1 LIIDSIQTIMSPEISGVQGSVSQVREVTAELMQLAKTNNIAIFIVGHVTKEGTLAGPRMLEHMVDTVLYFEGERHHTFRILRAVK  251
NTDB id 266793 RK67 RS01585 WP 001085219.1 LVVDSIQTIYHPEISSAPGSVSQVRESTQSLMNIAKQMNIATFIVGHVTKEGQIAGPRLLEHMVDTVLYFEGDEHHAYRILRAVK  251
NTDB id 125 BSU 00870 NP 387968.1           VVVDSIQTVYQSDITSAPGSVSQVRECTAELMKIAKTKGIPIFIVGHVTKEGSIAGPRLLEHMVDTVLYFEGERHHTFRILRAVK  255
consensus                                   ***!!!!!*****!****!!!!!!!!*!**!!**!!***!**!!!!!!!!!!**!!!!*!!!!!!!!!!!!!**!!**!!!!!!!

logo
NTDB id 279 KZH43 RS00140 WP 074017595.1    NRFGSTNEIGIFEMQSGGLVEVLNPSQVFLEERLDGATGSSIVVTMEGTRPILAEVQALVTPTMFGNAKRTTTGLDFNRASLIMA  336
NTDB id 238 SPD RS00140 WP 074017595.1      NRFGSTNEIGIFEMQSGGLVEVLNPSQVFLEERLDGATGSSIVVTMEGTRPILAEVQALVTPTMFGNAKRTTTGLDFNRASLIMA  336
NTDB id 204 SPR RS00140 WP 074017595.1      NRFGSTNEIGIFEMQSGGLVEVLNPSQVFLEERLDGATGSSIVVTMEGTRPILAEVQALVTPTMFGNAKRTTTGLDFNRASLIMA  336
NTDB id 169 SP RS00155 WP 074017595.1       NRFGSTNEIGIFEMQSGGLVEVLNPSQVFLEERLDGATGSSIVVTMEGTRPILAEVQALVTPTMFGNAKRTTTGLDFNRASLIMA  336
NTDB id 509 SM12261 RS00130 WP 078228442.1 NRFGSTNEIGIFEMQSGGLVEVLNPSQVFLEERLDGATGSSIVVTMEGTRPILAEVQALVTPTMFGNAKRTTTGLDFNRASLIMA  336
NTDB id 537 SMSK321 RS07120 WP 080550752.1 NRFGSTNEIGIFEMQSGGLVEVLNPSQVFLEERLDGATGSSIVVTMEGTRPILAEVQALVTPTMFGNAKRTTTGLDFNRASLIMA  336
NTDB id 266793 RK67 RS01585 WP 001085219.1 NRFGSTNEMGIFEMKQSGLKGVNNPSEMFLEERSTNVPGSTIVATMEGTRPLLIEVQALVTPTTFNNPRRMATGIDHNRLSLLMA  336
NTDB id 125 BSU 00870 NP 387968.1           NRFGSTNEMGIFEMREEGLTEVLNPSEIFLEERSAGSAGSSITASMEGTRPILVEIQALISPTSFGNPRRMATGIDHNRVSLLMA  340
consensus                                   !!!!!!!!*!!!!!!***!!**!*!!!**!!!!!*****!!*!***!!!!!!*!*!*!!!!**!!*!*!**!**!!*!*!!*!!*!!
```

```
logo
```

```
NTDB id 279 KZH43 RS00140 WP 074017595.1     VLEKRAGLLLQNQDAYLKSAGGVKLDEPAIDLAVAVAIASSYKDKPTNPQECFVGELGLTGEIRRVNRIEQRINEAAKLGFTKIY   421
NTDB id 238 SPD RS00140 WP 074017595.1       VLEKRAGLLLQNQDAYLKSAGGVKLDEPAIDLAVAVAIASSYKDKPTNPQECFVGELGLTGEIRRVNRIEQRINEAAKLGFTKIY   421
NTDB id 204 SPR RS00140 WP 074017595.1       VLEKRAGLLLQNQDAYLKSAGGVKLDEPAIDLAVAVAIASSYKDKPTNPQECFVGELGLTGEIRRVNRIEQRINEAAKLGFTKIY   421
NTDB id 169 SP RS00155 WP 074017595.1        VLEKRAGLLLQNQDAYLKSAGGVKLDEPAIDLAVAVAIASSYKDKPTNPQECFVGELGLTGEIRRVNRIEQRINEAAKLGFTKIY   421
NTDB id 509 SM12261 RS00130 WP 078228442.1  VLEKRAGLLLQNQDAYLKSAGGVKLDEPAIDLAVAVAIASSYKDKPTNPQECFVGELGLTGEIRRVNRIEQRINEAAKLGFTKIY   421
NTDB id 537 SMSK321 RS07120 WP 080550752.1  VLEKRAGLLLQNQDAYLKSAGGVKLDEPAIDLAVAVAIASSYKDKPTNPQECFVGELGLTGEIRRVNRIEQRINEAAKLGFTKIY   421
NTDB id 266793 RK67 RS01585 WP 001085219.1  VLEKKENYLLQQQDAYIKVAGGVKLTEPAVDLSVIVATASSFKDKAVDGLDCYIGEVGLTGEVRRVSRIEQRVQEAAKLGFKRVI   421
NTDB id 125 BSU 00870 NP 387968.1            VLEKRVGLLLQNQDAYLKVAGGVKLDEPAIDLAIVISIASSFRDTPPNPADCFIGEVGLTGEVRRVSRIEQRVKEAAKLGFKRMI   425
consensus                                    !!!!*****!!!*!!!!*!*!!!!!!*!!!*!!*******!!!**!*******!**!!*!!!!!*!!!*!!!!!**!!!!!!!****
```

```
logo
```

```
NTDB id 279 KZH43 RS00140 WP 074017595.1     VPKNSLTGITLPKEIQVIGVTTIQEVLKKVFA.   453
NTDB id 238 SPD RS00140 WP 074017595.1       VPKNSLTGITLPKEIQVIGVTTIQEVLKKVFA.   453
NTDB id 204 SPR RS00140 WP 074017595.1       VPKNSLTGITLPKEIQVIGVTTIQEVLKKVFA.   453
NTDB id 169 SP RS00155 WP 074017595.1        VPKNSLTGITLPKEIQVIGVTTIQEVLKKVFA.   453
NTDB id 509 SM12261 RS00130 WP 078228442.1  VPKNSLTGITPPKEIQVIGVTTIQEVLKKVFA.   453
NTDB id 537 SMSK321 RS07120 WP 080550752.1  VPKNSLTGITPPMEIQVIGVTTIQEVLKKVFA.   453
NTDB id 266793 RK67 RS01585 WP 001085219.1  IPKNNIGGWTYPEGIQVIGVTTVHEALSFALHS   454
NTDB id 125 BSU 00870 NP 387968.1            IPAANLDGWTKPKGIEVIGVANVAEALRTSLGG   458
consensus                                    *!*****!*! !**!*!!!!****!*!*****
```

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