logo



```
NTDB id 279 KZH43 RS00140 WP 074017595.1  MAKKKATFVCQNCGYNSPKYLGRCPNCGSWSSFVEEVEVAEVKNARVSLTGE...KTKPMKLAEVTSINVNRTKTEMEEFNRVLG  82
NTDB id 238 SPD RS00140 WP 074017595.1    MAKKKATFVCQNCGYNSPKYLGRCPNCGSWSSFVEEVEVAEVKNARVSLTGE...KTKPMKLAEVTSINVNRTKTEMEEFNRVLG  82
NTDB id 204 SPR RS00140 WP 074017595.1    MAKKKATFVCQNCGYNSPKYLGRCPNCGSWSSFVEEVEVAEVKNARVSLTGE...KTKPMKLAEVTSINVNRTKTEMEEFNRVLG  82
NTDB id 169 SP RS00155 WP 074017595.1     MAKKKATFVCQNCGYNSPKYLGRCPNCGSWSSFVEEVEVAEVKNARVSLTGE...KTKPMKLAEVTSINVNRTKTEMEEFNRVLG  82
NTDB id 509 SM12261 RS00130 WP 078228442.1 MAKKKATFVCQNCGYNSPKYLGRCPNCGSWSSFVEEVEVAEVKNARVSLTGE...KTKPMKLAEVTSINVNRTKTEMEEFNRVLG  82
NTDB id 537 SMSK321 RS07120 WP 080550752.1 MAKKKATFVCQNCGYNSPKYLGRCPNCGSWSSFVEEVEVAEVKNARVSLTGE...KTKPMKLAEVTSINVNRTKTEMEEFNRVLG  82
NTDB id 84364 SB24 RS09180 WP 014304212.1  MAKSKTKFICHSCGYESAKWMGKCPGCGAWNTMVEETIKKAPANRRAAFSHSVQTVQKPSPITSIETSEEPRVQTKLEEFNRVLG  85
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 84364 SB24 RS09180 WP 014304212.1  GGVVKGSLVLIGGDPGIGKSTLLLQVSAQLADTAGSVLYISGEESVKQTKLRADRLGINSQMLHVLSETDMEYISSAIQEMKPAF  170
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 84364 SB24 RS09180 WP 014304212.1  VVVDSIQTVYQSDITSAPGSVSQVRECTAELMKIAKTNGIPIFIVGHVTKEGSIAGPRLLEHMVDTVLYFEGERHHTFRILRAVK  255
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 84364 SB24 RS09180 WP 014304212.1  NRFGSTNEMGIFEMREEGLTEVLNPSEIFLEERSAGASGSSIVASMEGTRPILVEIQALISPTSFGNPRRMATGIDHNRVSLIMA  340
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 84364 SB24 RS09180 WP 014304212.1   VLEKRVGLLLQNQDAYLKVAGGVKLDEPAIDLAVAVSIASSFRDTPPNPADCFIGEVGLTGEVRRVSRIEQRVKEAAKLGFKRMI   425
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 84364 SB24 RS09180 WP 014304212.1   IPEANADGWTIPKGIEVVGVANVAEALRTSLGGS   459
NTDB id 125 BSU 00870 NP 387968.1           IPAANLDGWTKPKGIEVIGVANVAEALRTSLGG.   458
consensus                                   *!*****!*!*!**!*!*!!****!*!*****
```

X non conserved

X similar

X ≥ 50% conserved