```
logo
NTDB id 279 KZH43 RS00140 WP 074017595.1      MAKKKATFVCQNCGYNSPKYLGRCPNCGSWSSFVEEVEVAEVKNARVSLTGE...KTKPMKLAEVTSINVNRTKTEMEEF   77
NTDB id 238 SPD RS00140 WP 074017595.1        MAKKKATFVCQNCGYNSPKYLGRCPNCGSWSSFVEEVEVAEVKNARVSLTGE...KTKPMKLAEVTSINVNRTKTEMEEF   77
NTDB id 204 SPR RS00140 WP 074017595.1        MAKKKATFVCQNCGYNSPKYLGRCPNCGSWSSFVEEVEVAEVKNARVSLTGE...KTKPMKLAEVTSINVNRTKTEMEEF   77
NTDB id 169 SP RS00155 WP 074017595.1         MAKKKATFVCQNCGYNSPKYLGRCPNCGSWSSFVEEVEVAEVKNARVSLTGE...KTKPMKLAEVTSINVNRTKTEMEEF   77
NTDB id 509 SM12261 RS00130 WP 078228442.1   MAKKKATFVCQNCGYNSPKYLGRCPNCGSWSSFVEEVEVAEVKNARVSLTGE...KTKPMKLAEVTSINVNRTKTEMEEF   77
NTDB id 537 SMSK321 RS07120 WP 080550752.1   MAKKKATFVCQNCGYNSPKYLGRCPNCGSWSSFVEEVEVAEVKNARVSLTGE...KTKPMKLAEVTSINVNRTKTEMEEF   77
NTDB id 292779 DKG78 RS00585 WP 015239037.1  MAKSKTKFICHSCGYESAKWMGKCPGCGAWNTMVEETIKKAPANRRAAFSHSVQTVQKPSPISSIETSEEPRVQTKLEEF   80
NTDB id 125 BSU 00870 NP 387968.1             MAKTKSKFICQSCGYESPKWMGKCPGCGAWNTMVEEMIKKAPANRRAAFSHSVQTVQKPSPITSIETSEEPRVKTQLGEF   80
consensus                                     !!!*!**!*!**!!!*!*!**!*!!*!!*!***!!!*******!*!******    **!!************!**!***!!

logo
NTDB id 279 KZH43 RS00140 WP 074017595.1      NRVLGGGVVPGSLVLIGGDPGIGKSTLLLQVSTQLSQ.VGTVLYVSGEESAQQIKLRAERLGDIDSEFYLYAETNMQSVR   156
NTDB id 238 SPD RS00140 WP 074017595.1        NRVLGGGVVPGSLVLIGGDPGIGKSTLLLQVSTQLSQ.VGTVLYVSGEESAQQIKLRAERLGDIDSEFYLYAETNMQSVR   156
NTDB id 204 SPR RS00140 WP 074017595.1        NRVLGGGVVPGSLVLIGGDPGIGKSTLLLQVSTQLSQ.VGTVLYVSGEESAQQIKLRAERLGDIDSEFYLYAETNMQSVR   156
NTDB id 169 SP RS00155 WP 074017595.1         NRVLGGGVVPGSLVLIGGDPGIGKSTLLLQVSTQLSQ.VGTVLYVSGEESAQQIKLRAERLGDIDSEFYLYAETNMQSVR   156
NTDB id 509 SM12261 RS00130 WP 078228442.1   NRVLGGGVVPGSLVLIGGDPGIGKSTLLLQVSTQLSQ.VGTVLYVSGEESAQQIKLRAERLGDIDSEFYLYAETNMQSVR   156
NTDB id 537 SMSK321 RS07120 WP 080550752.1   NRVLGGGVVPGSLVLIGGDPGIGKSTLLLQVSTQLSQ.VGTVLYVSGEESAQQIKLRAERLGDIDSEFYLYAETNMQSVR   156
NTDB id 292779 DKG78 RS00585 WP 015239037.1  NRVLGGGVVKGSLVLIGGDPGIGKSTLLLQVSAQLADTAGSVLYISGEESVKQTKLRADRLGINSQMLHVLSETDMEYIS   160
NTDB id 125 BSU 00870 NP 387968.1             NRVLGGGVVKGSLVLIGGDPGIGKSTLLLQVSAQLSGSSNSVLYISGEESVKQTKLRADRLGINNPSLHVLSETDMEYIS   160
consensus                                     !!!!!!!!!*!!!!!!!!!!!!!!!!!!!!!!!!*!!** **!!!!*!!!!!!**!*!!!!*!!!*********!!*!****

logo
NTDB id 279 KZH43 RS00140 WP 074017595.1      AEVERIQPDFLIIDSIQTIMSPEISGVQGSVSQVREVTAELMQLAKTNNIAIFIVGHVTKEGTLAGPRMLEHMVDTVLYF   236
NTDB id 238 SPD RS00140 WP 074017595.1        AEVERIQPDFLIIDSIQTIMSPEISGVQGSVSQVREVTAELMQLAKTNNIAIFIVGHVTKEGTLAGPRMLEHMVDTVLYF   236
NTDB id 204 SPR RS00140 WP 074017595.1        AEVERIQPDFLIIDSIQTIMSPEISGVQGSVSQVREVTAELMQLAKTNNIAIFIVGHVTKEGTLAGPRMLEHMVDTVLYF   236
NTDB id 169 SP RS00155 WP 074017595.1         AEVERIQPDFLIIDSIQTIMSPEISGVQGSVSQVREVTAELMQLAKTNNIAIFIVGHVTKEGTLAGPRMLEHMVDTVLYF   236
NTDB id 509 SM12261 RS00130 WP 078228442.1   TEVERIQPDFLIIDSIQTIMSPEISGVQGSVSQVREVTAELMQLAKTNNIAIFIVGHVTKEGTLAGPRMLEHMVDTVLYF   236
NTDB id 537 SMSK321 RS07120 WP 080550752.1   AEVERIQPDFLIIDSIQTIMSPEISGVQGSVSQVREVTAELMQLAKTNNIAIFIVGHVTKEGTLAGPRMLEHMVDTVLYF   236
NTDB id 292779 DKG78 RS00585 WP 015239037.1  SAIQEMKPAFVVVDSIQTVYQSDITSAPGSVSQVRECTAELMKIAKTNGIPIFIVGHVTKEGSIAGPRLLEHMVDTVLYF   240
NTDB id 125 BSU 00870 NP 387968.1             SAIQEMNPSFVVVDSIQTVYQSDITSAPGSVSQVRECTAELMKIAKTKGIPIFIVGHVTKEGSIAGPRLLEHMVDTVLYF   240
consensus                                     *******!*!***!!!!!*****!****!!!!!!!!*!!!!!**!!!**!*!!!!!!!!!!!**!!!!*!!!!!!!!!!!

logo
NTDB id 279 KZH43 RS00140 WP 074017595.1      EGERHHTFRILRAVKNRFGSTNEIGIFEMQSGGLVEVLNPSQVFLEERLDGATGSSIVVTMEGTRPILAEVQALVTPTMF   316
NTDB id 238 SPD RS00140 WP 074017595.1        EGERHHTFRILRAVKNRFGSTNEIGIFEMQSGGLVEVLNPSQVFLEERLDGATGSSIVVTMEGTRPILAEVQALVTPTMF   316
NTDB id 204 SPR RS00140 WP 074017595.1        EGERHHTFRILRAVKNRFGSTNEIGIFEMQSGGLVEVLNPSQVFLEERLDGATGSSIVVTMEGTRPILAEVQALVTPTMF   316
NTDB id 169 SP RS00155 WP 074017595.1         EGERHHTFRILRAVKNRFGSTNEIGIFEMQSGGLVEVLNPSQVFLEERLDGATGSSIVVTMEGTRPILAEVQALVTPTMF   316
NTDB id 509 SM12261 RS00130 WP 078228442.1   EGERHHTFRILRAVKNRFGSTNEIGIFEMQSGGLVEVLNPSQVFLEERLDGATGSSIVVTMEGTRPILAEVQALVTPTMF   316
NTDB id 537 SMSK321 RS07120 WP 080550752.1   EGERHHTFRILRAVKNRFGSTNEIGIFEMQSGGLVEVLNPSQVFLEERLDGATGSSIVVTMEGTRPILAEVQALVTPTMF   316
NTDB id 292779 DKG78 RS00585 WP 015239037.1  EGERHHTFRILRAVKNRFGSTNEMGIFEMREEGLTEVLNPSEIFLEERSAGASGSSIVASMEGTRPILVEIQALISPTSF   320
NTDB id 125 BSU 00870 NP 387968.1             EGERHHTFRILRAVKNRFGSTNEMGIFEMREEGLTEVLNPSEIFLEERSAGSAGSSITASMEGTRPILVEIQALISPTSF   320
consensus                                     !!!!!!!!!!!!!!!!!!!!!!!!!*!!!!!***!!*!!!!!!**!!!!!**!**!!!!***!!!!!!!!!*!*!!!**!!*!
```

```
logo
NTDB id 279 KZH43 RS00140 WP 074017595.1      GNAKRTTTGLDFNRASLIMAVLEKRAGLLLQNQDAYLKSAGGVKLDEPAIDLAVAVAIASSYKDKPTNPQECFVGELGLT   396
NTDB id 238 SPD RS00140 WP 074017595.1        GNAKRTTTGLDFNRASLIMAVLEKRAGLLLQNQDAYLKSAGGVKLDEPAIDLAVAVAIASSYKDKPTNPQECFVGELGLT   396
NTDB id 204 SPR RS00140 WP 074017595.1        GNAKRTTTGLDFNRASLIMAVLEKRAGLLLQNQDAYLKSAGGVKLDEPAIDLAVAVAIASSYKDKPTNPQECFVGELGLT   396
NTDB id 169 SP RS00155 WP 074017595.1         GNAKRTTTGLDFNRASLIMAVLEKRAGLLLQNQDAYLKSAGGVKLDEPAIDLAVAVAIASSYKDKPTNPQECFVGELGLT   396
NTDB id 509 SM12261 RS00130 WP 078228442.1    GNAKRTTTGLDFNRASLIMAVLEKRAGLLLQNQDAYLKSAGGVKLDEPAIDLAVAVAIASSYKDKPTNPQECFVGELGLT   396
NTDB id 537 SMSK321 RS07120 WP 080550752.1    GNAKRTTTGLDFNRASLIMAVLEKRAGLLLQNQDAYLKSAGGVKLDEPAIDLAVAVAIASSYKDKPTNPQECFVGELGLT   396
NTDB id 292779 DKG78 RS00585 WP 015239037.1   GNPRRMATGIDHNRVSLIMAVLEKRVGLLLQNQDAYLKVAGGVKLDEPAIDLAVAVSIASSFRDTPPNPADCFIGEVGLT   400
NTDB id 125 BSU 00870 NP 387968.1             GNPRRMATGIDHNRVSLLMAVLEKRVGLLLQNQDAYLKVAGGVKLDEPAIDLAIVISIASSFRDTPPNPADCFIGEVGLT   400
consensus                                     !!**!**!!*!*!!*!!*!!!!!!!*!!!!!!!!!!!!!*!!!!!!!!!!!!!!!****!!!!**!*!*!!**!!*!!*!!!
```

```
logo
NTDB id 279 KZH43 RS00140 WP 074017595.1      GEIRRVNRIEQRINEAAKLGFTKIYVPKNSLTGITLPKEIQVIGVTTIQEVLKKVFA..   453
NTDB id 238 SPD RS00140 WP 074017595.1        GEIRRVNRIEQRINEAAKLGFTKIYVPKNSLTGITLPKEIQVIGVTTIQEVLKKVFA..   453
NTDB id 204 SPR RS00140 WP 074017595.1        GEIRRVNRIEQRINEAAKLGFTKIYVPKNSLTGITLPKEIQVIGVTTIQEVLKKVFA..   453
NTDB id 169 SP RS00155 WP 074017595.1         GEIRRVNRIEQRINEAAKLGFTKIYVPKNSLTGITLPKEIQVIGVTTIQEVLKKVFA..   453
NTDB id 509 SM12261 RS00130 WP 078228442.1    GEIRRVNRIEQRINEAAKLGFTKIYVPKNSLTGITPPKEIQVIGVTTIQEVLKKVFA..   453
NTDB id 537 SMSK321 RS07120 WP 080550752.1    GEIRRVNRIEQRINEAAKLGFTKIYVPKNSLTGITPPMEIQVIGVTTIQEVLKKVFA..   453
NTDB id 292779 DKG78 RS00585 WP 015239037.1   GEVRRVSRIEQRVKEAAKLGFKRMIIPEANADGWTIPKGIEVVGVANVAEALRTSLGGS   459
NTDB id 125 BSU 00870 NP 387968.1             GEVRRVSRIEQRVKEAAKLGFKRMIIPAANLDGWTKPKGIEVIGVANVAEALRTSLGG.   458
consensus                                     !!*!!!*!!!!!**!!!!!!!*****!*****!*!*!**!*!*!!****!*!*****
```

X non conserved

X similar

X ≥ 50% conserved