logo

```
NTDB id 279 KZH43 RS00140 WP 074017595.1       MAKKKATFVCQNCGYNSPKYLGRCPNCGSWSSFVEEVEVAEVKNARVSLTG...EKTKPMKLAEVTSINVNRTKTEMEEF   77
NTDB id 238 SPD RS00140 WP 074017595.1         MAKKKATFVCQNCGYNSPKYLGRCPNCGSWSSFVEEVEVAEVKNARVSLTG...EKTKPMKLAEVTSINVNRTKTEMEEF   77
NTDB id 204 SPR RS00140 WP 074017595.1         MAKKKATFVCQNCGYNSPKYLGRCPNCGSWSSFVEEVEVAEVKNARVSLTG...EKTKPMKLAEVTSINVNRTKTEMEEF   77
NTDB id 169 SP RS00155 WP 074017595.1          MAKKKATFVCQNCGYNSPKYLGRCPNCGSWSSFVEEVEVAEVKNARVSLTG...EKTKPMKLAEVTSINVNRTKTEMEEF   77
NTDB id 509 SM12261 RS00130 WP 078228442.1     MAKKKATFVCQNCGYNSPKYLGRCPNCGSWSSFVEEVEVAEVKNARVSLTG...EKTKPMKLAEVTSINVNRTKTEMEEF   77
NTDB id 537 SMSK321 RS07120 WP 080550752.1     MAKKKATFVCQNCGYNSPKYLGRCPNCGSWSSFVEEVEVAEVKNARVSLTG...EKTKPMKLAEVTSINVNRTKTEMEEF   77
NTDB id 964451 NSU02 RS00640 WP 339193812.1    MSKIKSKFICQSCGYESQKWMGKCPGCGEWNSMVEEVIKPKGKHRIAFSHSESSTVSKPSPIHQIQAAQEPRMLTGLHEF   80
NTDB id 125 BSU 00870 NP 387968.1              MAKTKSKFICQSCGYESPKWMGKCPGCGAWNTMVEEMIKKAPANRRAAFSHSVQTVQKPSPITSIETSEEPRVKTQLGEF   80
consensus                                      !*!*!**!*!!*!!!*!*!**!*!!*!!*!***!!!***************   ***!!************!**!***!!
```

logo

```
NTDB id 279 KZH43 RS00140 WP 074017595.1       NRVLGGGVVPGSLVLIGGDPGIGKSTLLLQVSTQLSQVG.TVLYVSGEESAQQIKLRAERLGDIDSEFYLYAETNMQSVR   156
NTDB id 238 SPD RS00140 WP 074017595.1         NRVLGGGVVPGSLVLIGGDPGIGKSTLLLQVSTQLSQVG.TVLYVSGEESAQQIKLRAERLGDIDSEFYLYAETNMQSVR   156
NTDB id 204 SPR RS00140 WP 074017595.1         NRVLGGGVVPGSLVLIGGDPGIGKSTLLLQVSTQLSQVG.TVLYVSGEESAQQIKLRAERLGDIDSEFYLYAETNMQSVR   156
NTDB id 169 SP RS00155 WP 074017595.1          NRVLGGGVVPGSLVLIGGDPGIGKSTLLLQVSTQLSQVG.TVLYVSGEESAQQIKLRAERLGDIDSEFYLYAETNMQSVR   156
NTDB id 509 SM12261 RS00130 WP 078228442.1     NRVLGGGVVPGSLVLIGGDPGIGKSTLLLQVSTQLSQVG.TVLYVSGEESAQQIKLRAERLGDIDSEFYLYAETNMQSVR   156
NTDB id 537 SMSK321 RS07120 WP 080550752.1     NRVLGGGVVPGSLVLIGGDPGIGKSTLLLQVSTQLSQVG.TVLYVSGEESAQQIKLRAERLGDIDSEFYLYAETNMQSVR   156
NTDB id 964451 NSU02 RS00640 WP 339193812.1    NRVLGGGIVKGSLVLIGGDPGIGKSTLLLQVSSQLAERGNDVLYISGEESLKQTKLRSDRLGVKGERLFVLSETDLEIII   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 964451 NSU02 RS00640 WP 339193812.1    QSIMETEPAFVIIDSIQTIYNSEIASAPGSVSQVRECTAELMRLAKTKGIPIFIVGHVTKDGTIAGPRILEHMVDTVLYF   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 964451 NSU02 RS00640 WP 339193812.1    EGDRHHTYRILRAVKNRFGSTNEIGIFEMKEAGLKEVLNPSEVFLEERAKGASGSTVVASMEGTRPVLVEIQALITPTSF   320
NTDB id 125 BSU 00870 NP 387968.1              EGERHHTFRILRAVKNRFGSTNEMGIFEMREEGLTEVLNPSEIFLEERSAGSAGSSITASMEGTRPILVEIQALISPTSF   320
consensus                                      !!*!!!!*!!!!!!!!!!!!!!!*!!!!!***!!*!!!!!!**!!!!!**!**!!*****!!!!!!*!*!*!!!**!!*!
```

```
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 964451 NSU02 RS00640 WP 339193812.1 GNPRRMANGIDHNRVSLLMAVLEKRVGLLLQNQDAYLKVAGGVKLDEPSIDLAICISIASSFKDVPTNIYDVFVGEVGLT  400
NTDB id 125 BSU 00870 NP 387968.1           GNPRRMATGIDHNRVSLLMAVLEKRVGLLLQNQDAYLKVAGGVKLDEPAIDLAIVISIASSFRDTPPNPADCFIGEVGLT  400
consensus                                   !!**!***!*!*!!*!!*!!!!!!!*!!!!!!!!!!!!!!*!!!!!!!!!!*!!!!****!!!!**!*!*!****!*!!*!!!
```

```
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 964451 NSU02 RS00640 WP 339193812.1 GEIRRVSRIEQRVQEAAKLGFKRIFLPKANLGGWKWPEDIEIVGVQNISEALELAIGG  458
NTDB id 125 BSU 00870 NP 387968.1           GEVRRVSRIEQRVKEAAKLGFKRMIIPAANLDGWTKPKGIEVIGVANVAEALRTSLGG  458
consensus                                   !!*!!!*!!!!!!**!!!!!!!!******!***!*!** !**!***!!****!*!*****
```

X non conserved
X similar
X ≥ 50% conserved