```
logo
NTDB id 392802 FD951 RS22790 WP 023969442.1  MAKAKRMYGCTECGATFPKWAGQCGECGAWNTLTETMVESGGAAPPSGRTGWAGQQAQIKTLAEVSVEEIPRFSTASGEL   80
NTDB id 125 BSU 00870 NP 387968.1            MAKTKSKFICQSCGYESPKWMGKCPGCGAWNTMVEEMIKKAPANRRAAFSHSVQTVQKPSPITSIETSEEPRVKTQLGEF   80
NTDB id 537 SMSK321 RS07120 WP 080550752.1   MAKKKATFVCQNCGYNSPKYLGRCPNCGSWSSFVEEVEVAEVKNARVSLTGE...KTKPMKLAEVTSINVNRTKTEMEEF   77
NTDB id 509 SM12261 RS00130 WP 078228442.1   MAKKKATFVCQNCGYNSPKYLGRCPNCGSWSSFVEEVEVAEVKNARVSLTGE...KTKPMKLAEVTSINVNRTKTEMEEF   77
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
consensus                                    !!!*!****!**!!***!!**!*!**!!*!****!*****************   ****************!**!***!*

logo
NTDB id 392802 FD951 RS22790 WP 023969442.1  DRVLGGGLVDGSVVLIGGDPGIGKSTILLQTLCNIATR.MAALYVTGEESQQQVAMRARRLGLPQDQLRVMTETCIETII  159
NTDB id 125 BSU 00870 NP 387968.1            NRVLGGGVVKGSLVLIGGDPGIGKSTLLLQVSAQLSGSSNSVLYISGEESVKQTKLRADRLGINNPSLHVLSETDMEYIS  160
NTDB id 537 SMSK321 RS07120 WP 080550752.1   NRVLGGGVVPGSLVLIGGDPGIGKSTLLLQVSTQLSQV.GTVLYVSGEESAQQIKLRAERLGDIDSEFYLYAETNMQSVR  156
NTDB id 509 SM12261 RS00130 WP 078228442.1   NRVLGGGVVPGSLVLIGGDPGIGKSTLLLQVSTQLSQV.GTVLYVSGEESAQQIKLRAERLGDIDSEFYLYAETNMQSVR  156
NTDB id 279 KZH43 RS00140 WP 074017595.1     NRVLGGGVVPGSLVLIGGDPGIGKSTLLLQVSTQLSQV.GTVLYVSGEESAQQIKLRAERLGDIDSEFYLYAETNMQSVR  156
NTDB id 238 SPD RS00140 WP 074017595.1       NRVLGGGVVPGSLVLIGGDPGIGKSTLLLQVSTQLSQV.GTVLYVSGEESAQQIKLRAERLGDIDSEFYLYAETNMQSVR  156
NTDB id 204 SPR RS00140 WP 074017595.1       NRVLGGGVVPGSLVLIGGDPGIGKSTLLLQVSTQLSQV.GTVLYVSGEESAQQIKLRAERLGDIDSEFYLYAETNMQSVR  156
NTDB id 169 SP RS00155 WP 074017595.1        NRVLGGGVVPGSLVLIGGDPGIGKSTLLLQVSTQLSQV.GTVLYVSGEESAQQIKLRAERLGDIDSEFYLYAETNMQSVR  156
consensus                                    *!!!!!!*!*!!*!!!!!!!!!!!!!!*!!!********  ***!!**!!!!!**!***!!*!!!**********!!******

logo
NTDB id 392802 FD951 RS22790 WP 023969442.1  ATARLEKPKVMVIDSIQTIFTEQLQSAPGGVSQVRESAALLVRYAKQSGTAIFLVGHVTKEGALAGPRVLEHMVDTVLYF  239
NTDB id 125 BSU 00870 NP 387968.1            SAIQEMNPSFVVVDSIQTVYQSDITSAPGSVSQVRECTAELMKIAKTKGIPIFIVGHVTKEGSIAGPRLLEHMVDTVLYF  240
NTDB id 537 SMSK321 RS07120 WP 080550752.1   AEVERIQPDFLIIDSIQTIMSPEISGVQGSVSQVREVTAELMQLAKTNNIAIFIVGHVTKEGTLAGPRMLEHMVDTVLYF  236
NTDB id 509 SM12261 RS00130 WP 078228442.1   TEVERIQPDFLIIDSIQTIMSPEISGVQGSVSQVREVTAELMQLAKTNNIAIFIVGHVTKEGTLAGPRMLEHMVDTVLYF  236
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
consensus                                    *******!*****!!!!!**********!*!!!!!!**!*!***!!*****!!*!!!!!!!!**!!!!*!!!!!!!!!!!

logo
NTDB id 392802 FD951 RS22790 WP 023969442.1  EGESDGRLRLLRAVKNRFGAVNELGVFGMTDRGLKEVSNPSAIFLSRAQEEVPGSVVMATWEGTRPMLVEVQALVDDSHL  319
NTDB id 125 BSU 00870 NP 387968.1            EGERHHTFRILRAVKNRFGSTNEMGIFEMREEGLTEVLNPSEIFLEERSAGSAGSSITASMEGTRPILVEIQALISPTSF  320
NTDB id 537 SMSK321 RS07120 WP 080550752.1   EGERHHTFRILRAVKNRFGSTNEIGIFEMQSGGLVEVLNPSQVFLEERLDGATGSSIVVTMEGTRPILAEVQALVTPTMF  316
NTDB id 509 SM12261 RS00130 WP 078228442.1   EGERHHTFRILRAVKNRFGSTNEIGIFEMQSGGLVEVLNPSQVFLEERLDGATGSSIVVTMEGTRPILAEVQALVTPTMF  316
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
consensus                                    !!!*****!*!!!!!!!!!**!!*!*!*!***!!*!!*!!!**!!********!!******!!!!!*!*!*!!!******
```

```
logo
NTDB id 392802 FD951 RS22790 WP 023969442.1  ANPRRVTLGLDQNRLAMLLAVLHRHGGIPTHDQDVFLNVVGGVKVLETASDLALMAAVMSSLRNRPLPHDLLVFGEVGLS  399
NTDB id 125 BSU 00870 NP 387968.1            GNPRRMATGIDHNRVSLLMAVLEKRVGLLLQNQDAYLKVAGGVKLDEPAIDLAIVISIASSFRDTPPNPADCFIGEVGLT  400
NTDB id 537 SMSK321 RS07120 WP 080550752.1   GNAKRTTTGLDFNRASLIMAVLEKRAGLLLQNQDAYLKSAGGVKLDEPAIDLAVAVAIASSYKDKPTNPQECFVGELGLT  396
NTDB id 509 SM12261 RS00130 WP 078228442.1   GNAKRTTTGLDFNRASLIMAVLEKRAGLLLQNQDAYLKSAGGVKLDEPAIDLAVAVAIASSYKDKPTNPQECFVGELGLT  396
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
consensus                                    *!**!***!*!*!!*****!!!****!*****!!**!**!!!!**!*!*!!!******!!****!********!!*!!*

logo
NTDB id 392802 FD951 RS22790 WP 023969442.1  GEVRPVPSGQERLKEAAKHGFKRAIVPKGNAPK.EPPPGLRIIAVTRLEQALDALFE.  455
NTDB id 125 BSU 00870 NP 387968.1            GEVRRVSRIEQRVKEAAKLGFKRMIIPAANLDGWTKPKGIEVIGVANVAEALRTSLGG  458
NTDB id 537 SMSK321 RS07120 WP 080550752.1   GEIRRVNRIEQRINEAAKLGFTKIYVPKNSLTGITPPMEIQVIGVTTIQEVLKKVFA.  453
NTDB id 509 SM12261 RS00130 WP 078228442.1   GEIRRVNRIEQRINEAAKLGFTKIYVPKNSLTGITPPKEIQVIGVTTIQEVLKKVFA.  453
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
consensus                                    !!*!*!*****!**!!!!*!!*****!********  !*****!*!******!*****
```

X non conserved

X similar

X $\geq$ 50% conserved