```
logo
NTDB id 349104 EZZ79 RS21465 WP 024664007.1   MAKAKRLYGCTECGATFPKWAGQCGECGAWNTLVETMIESGAAAPPTGRTGWTGSQAQIRTLAEVSVEEIPRFSTNSTEL   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 349104 EZZ79 RS21465 WP 024664007.1   DRVLGGGLVDGSVVLIGGDPGIGKSTILLQTLCNIAQR.MPALYVTGEESQQQVAMRARRLGLPQDKLRVMTETCIETII   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 349104 EZZ79 RS21465 WP 024664007.1   ATAKVEKPKVMVIDSIQTIFTEQLQSAPGGVSQVRESAALLVRYAKQSGTAIFLVGHVTKEGALAGPRVLEHMVDTVLYF   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 349104 EZZ79 RS21465 WP 024664007.1   EGESDGRLRLLRAVKNRFGAVNELGVFGMTDKGLKEVSNPSAIFLTRAQEEVPGSVVMATWEGTRPMLVEVQALVDDSHM   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 349104 EZZ79 RS21465 WP 024664007.1  SNPRRVTLGLDQNRLAMLLAVLHRHGGIPTHDQDVFLNVVGGVKVLETASDLALMAAVMSSLRNRPLPHDLLVFGEVGLS  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 349104 EZZ79 RS21465 WP 024664007.1  GEVRPVPSGQERLKEAAKHGFKRAIVPKGNAPK.EAPPGLQIIAVTRLEQALDALFE.  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