

```
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 171263 AYM28 RS02855 WP 001085220.1 MAKKKVIFECMACGYQSPKWMGKCPNCGAWNQMEEIVEKAANPKHGVKTK...ELAGKVQKLNSIKHETTPRVLTDSAEF   77
NTDB id 125 BSU 00870 NP 387968.1           MAKTKSKFICQSCGYESPKWMGKCPGCGAWNTMVEEMIKKAPANRRAAFSHSVQTVQKPSPITSIETSEEPRVKTQLGEF   80
consensus                                   !!!*!**!*!**!!!*!!!**!*!!*!!*!****!**********!*****    ***!*************!**!***!!
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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 171263 AYM28 RS02855 WP 001085220.1 NRVLGGGIVSGSLVLIGGDPGIGKSTLLLQICASLSQ.KKKVLYITGEESLSQTKLRAERLDEDSSELQVLAETDLEVIY   156
NTDB id 125 BSU 00870 NP 387968.1           NRVLGGGVVKGSLVLIGGDPGIGKSTLLLQVSAQLSGSSNSVLYISGEESVKQTKLRADRLGINNPSLHVLSETDMEYIS   160
consensus                                   !!!!!!!*!*!!!!!!!!!!!!!!!!!!!!!!!!!!!!!*****!!* ***!!!**!!!!!**!*!!!!*!!***********!!******
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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 171263 AYM28 RS02855 WP 001085220.1 QTVKEEQPDLLVVDSIQTIYHPEISSAPGSVSQVRESIQSLMNIAKQMNIATFIVGHVTKEGQIAGPRLLEHMVDTVLYF   236
NTDB id 125 BSU 00870 NP 387968.1           SAIQEMNPSFVVVDSIQTVYQSDITSAPGSVSQVRECTAELMKIAKTKGIPIFIVGHVTKEGSIAGPRLLEHMVDTVLYF   240
consensus                                   *******!*****!!!!!*****!****!!!!!!!!!*!**!!**!***!**!!!!!!!!!!**!!!!*!!!!!!!!!!!
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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 171263 AYM28 RS02855 WP 001085220.1 EGDEHHAYRILRAVKNRFGSTNEMGIFEMKQSGLKGVNNPSEMFLEERSTNVPGSTIVATMEGTRPLLIEVQALVTPTTF   316
NTDB id 125 BSU 00870 NP 387968.1           EGERHHTFRILRAVKNRFGSTNEMGIFEMREEGLTEVLNPSEIFLEERSAGSAGSSITASMEGTRPILVEIQALISPTSF   320
consensus                                   !!**!!**!!!!!!!!!!!!!!!!*!!!!***!!**!*!!!**!!!!!*****!!*!***!!!!!!*!*!*!!!**!!*!
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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 171263 AYM28 RS02855 WP 001085220.1   NNPRRMATGIDHNRLSLLMAVLEKKENYLLQQQDAYIKVAGGVKLTEPAVDLSVIVATASSFKDKAVDGLDCYIGEVGLT  396
NTDB id 125 BSU 00870 NP 387968.1             GNPRRMATGIDHNRVSLLMAVLEKRVGLLLQNQDAYLKVAGGVKLDEPAIDLAIVISIASSFRDTPPNPADCFIGEVGLT  400
consensus                                     *!**!**!!*!*!!*!!*!!!!!!*****!!!*!!!!!*!*!!!!!!*!!!*!!*******!!!**!********!**!!*!!!
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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 171263 AYM28 RS02855 WP 001085220.1   GEVRRVSRIEQRVQEAAKLGFKRVIIPKNNIGGWTYPEGIQVIGVTTVHEVLSFALHS   454
NTDB id 125 BSU 00870 NP 387968.1             GEVRRVSRIEQRVKEAAKLGFKRMIIPAANLDGWTKPKGIEVIGVANVAEALRTSLGG   458
consensus                                     !!*!!!*!!!!!!**!!!!!!!!*****!****!*!  !**!*!!!!*****!*!*****
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X non conserved

X similar

X ≥ 50% conserved