logo

```
NTDB id 1044409 ACEN9X RS13625 WP 413670880.1  MAKSKIAYFCQSCGFESPKWLGKCPSCQQWNTFVEEVIEKGNASVPAWKPASTSQQRANKPVPVTEITYTEEHRVPTPDK  80
NTDB id 125 BSU 00870 NP 387968.1              MAKTKSKFTCQSCGYESPKWMGKCPGCGAWNTMVEEMIKKAPANRR..AAFSHSVQTVQKPSPITSIETSEEPRVKTQLG  78
NTDB id 279 KZH43 RS00140 WP 074017595.1       MAKKKATFVCQNCGYNSPKYLGRCPNCGSWSSFVEEVEVAEVKNAR..VSLTGE...KTKPMKLAEVTSINVNRTKTEME  75
NTDB id 238 SPD RS00140 WP 074017595.1         MAKKKATFVCQNCGYNSPKYLGRCPNCGSWSSFVEEVEVAEVKNAR..VSLTGE...KTKPMKLAEVTSINVNRTKTEME  75
NTDB id 204 SPR RS00140 WP 074017595.1         MAKKKATFVCQNCGYNSPKYLGRCPNCGSWSSFVEEVEVAEVKNAR..VSLTGE...KTKPMKLAEVTSINVNRTKTEME  75
NTDB id 169 SP RS00155 WP 074017595.1          MAKKKATFVCQNCGYNSPKYLGRCPNCGSWSSFVEEVEVAEVKNAR..VSLTGE...KTKPMKLAEVTSINVNRTKTEME  75
NTDB id 509 SM12261 RS00130 WP 078228442.1     MAKKKATFVCQNCGYNSPKYLGRCPNCGSWSSFVEEVEVAEVKNAR..VSLTGE...KTKPMKLAEVTSINVNRTKTEME  75
NTDB id 537 SMSK321 RS07120 WP 080550752.1     MAKKKATFVCQNCGYNSPKYLGRCPNCGSWSSFVEEVEVAEVKNAR..VSLTGE...KTKPMKLAEVTSINVNRTKTEME  75
consensus                                      !!!*!****!!*!!**!!!**!*!!*!**!***!!!*********   ******   **!!*************!**!***
```

logo

```
NTDB id 1044409 ACEN9X RS13625 WP 413670880.1  EFNRVLGGGIVPGSLVLIGGEPGIGKSTLMLQLALNMP..NQKVLYVSGEESERQIKMRAERLAPQPPKGGAIGEGAYIL  158
NTDB id 125 BSU 00870 NP 387968.1              EFNRVLGGGVVKGSLVLIGGDPGIGKSTLLLQVSAQLSGSSNSVLYISGEESVKQTKLRADRLGIN.......NPSLHVL  151
NTDB id 279 KZH43 RS00140 WP 074017595.1       EFNRVLGGGVVPGSLVLIGGDPGIGKSTLLLQVSTQLSQV.GTVLYVSGEESAQQIKLRAERLGDI.......DSEFYLY  147
NTDB id 238 SPD RS00140 WP 074017595.1         EFNRVLGGGVVPGSLVLIGGDPGIGKSTLLLQVSTQLSQV.GTVLYVSGEESAQQIKLRAERLGDI.......DSEFYLY  147
NTDB id 204 SPR RS00140 WP 074017595.1         EFNRVLGGGVVPGSLVLIGGDPGIGKSTLLLQVSTQLSQV.GTVLYVSGEESAQQIKLRAERLGDI.......DSEFYLY  147
NTDB id 169 SP RS00155 WP 074017595.1          EFNRVLGGGVVPGSLVLIGGDPGIGKSTLLLQVSTQLSQV.GTVLYVSGEESAQQIKLRAERLGDI.......DSEFYLY  147
NTDB id 509 SM12261 RS00130 WP 078228442.1     EFNRVLGGGVVPGSLVLIGGDPGIGKSTLLLQVSTQLSQV.GTVLYVSGEESAQQIKLRAERLGDI.......DSEFYLY  147
NTDB id 537 SMSK321 RS07120 WP 080550752.1     EFNRVLGGGVVPGSLVLIGGDPGIGKSTLLLQVSTQLSQV.GTVLYVSGEESAQQIKLRAERLGDI.......DSEFYLY  147
consensus                                      !!!!!!!!!!*!*!!!!!!!!!!*!!!!!!!!!*!!********* **!!!*!!!!!**!*!*!!*!!***       *******
```

logo

```
NTDB id 1044409 ACEN9X RS13625 WP 413670880.1  TETSTQNIFKQIEALEPDMVVIDSIQTLHSAHIESTPGSVSQVRECTAELLRFAKETSTPVFLIGHITKDGMIAGPKILE  238
NTDB id 125 BSU 00870 NP 387968.1              SETDMEYISSAIQEMNPSFVVVDSIQTVYQSDITSAPGSVSQVRECTAELMKIAKTKGIPIFIVGHVTKEGSIAGPRLLE  231
NTDB id 279 KZH43 RS00140 WP 074017595.1       AETNMQSVRAEVERIQPDFLIIDSIQTIMSPEISGVQGSVSQVREVTAELMQLAKTNNIAIFIVGHVTKEGTLAGPRMLE  227
NTDB id 238 SPD RS00140 WP 074017595.1         AETNMQSVRAEVERIQPDFLIIDSIQTIMSPEISGVQGSVSQVREVTAELMQLAKTNNIAIFIVGHVTKEGTLAGPRMLE  227
NTDB id 204 SPR RS00140 WP 074017595.1         AETNMQSVRAEVERIQPDFLIIDSIQTIMSPEISGVQGSVSQVREVTAELMQLAKTNNIAIFIVGHVTKEGTLAGPRMLE  227
NTDB id 169 SP RS00155 WP 074017595.1          AETNMQSVRAEVERIQPDFLIIDSIQTIMSPEISGVQGSVSQVREVTAELMQLAKTNNIAIFIVGHVTKEGTLAGPRMLE  227
NTDB id 509 SM12261 RS00130 WP 078228442.1     AETNMQSVRTEVERIQPDFLIIDSIQTIMSPEISGVQGSVSQVREVTAELMQLAKTNNIAIFIVGHVTKEGTLAGPRMLE  227
NTDB id 537 SMSK321 RS07120 WP 080550752.1     AETNMQSVRAEVERIQPDFLIIDSIQTIMSPEISGVQGSVSQVREVTAELMQLAKTNNIAIFIVGHVTKEGTLAGPRMLE  227
consensus                                      *!!*************!*****!!!!!*****!****!!!!!!!!*!!!!***!!*******!**!!*!!*!**!!!**!!
```

logo

```
NTDB id 1044409 ACEN9X RS13625 WP 413670880.1  HMVDTVLQFEGDRHHVYRILRTIKNRFGSASELGIYEMMGEGLREVSNPSEILLSHREAPLSGITISATLEGMRPMLIET  318
NTDB id 125 BSU 00870 NP 387968.1              HMVDTVLYFEGERHHTFRILRAVKNRFGSTNEMGIFEMREEGLTEVLNPSEIFLEERSAGSAGSSITASMEGTRPILVEI  311
NTDB id 279 KZH43 RS00140 WP 074017595.1       HMVDTVLYFEGERHHTFRILRAVKNRFGSTNEIGIFEMQSGGLVEVLNPSQVFLEERLDGATGSSIVVTMEGTRPILAEV  307
NTDB id 238 SPD RS00140 WP 074017595.1         HMVDTVLYFEGERHHTFRILRAVKNRFGSTNEIGIFEMQSGGLVEVLNPSQVFLEERLDGATGSSIVVTMEGTRPILAEV  307
NTDB id 204 SPR RS00140 WP 074017595.1         HMVDTVLYFEGERHHTFRILRAVKNRFGSTNEIGIFEMQSGGLVEVLNPSQVFLEERLDGATGSSIVVTMEGTRPILAEV  307
NTDB id 169 SP RS00155 WP 074017595.1          HMVDTVLYFEGERHHTFRILRAVKNRFGSTNEIGIFEMQSGGLVEVLNPSQVFLEERLDGATGSSIVVTMEGTRPILAEV  307
NTDB id 509 SM12261 RS00130 WP 078228442.1     HMVDTVLYFEGERHHTFRILRAVKNRFGSTNEIGIFEMQSGGLVEVLNPSQVFLEERLDGATGSSIVVTMEGTRPILAEV  307
NTDB id 537 SMSK321 RS07120 WP 080550752.1     HMVDTVLYFEGERHHTFRILRAVKNRFGSTNEIGIFEMQSGGLVEVLNPSQVFLEERLDGATGSSIVVTMEGTRPILAEV  307
consensus                                      !!!!!!!*!!!*!!!**!!!!**!!!!!!**!*!!*!!***!!*!!*!!!***!**!*****!**!****!!*!!*!*!*
```

logo

```
NTDB id 1044409 ACEN9X RS13625 WP 413670880.1  QALVSASAYGTPQRTATGFDTKRMSMLLAVLEKRCGFRLGAKDVFLNITGGIRVEDPAIDLGLAAAIISSHEDMPIPFKT  398
NTDB id 125 BSU 00870 NP 387968.1              QALISPTSFGNPRRMATGIDHNRVSLLMAVLEKRVGLLLQNQDAYLKVAGGVKLDEPAIDLAIVISIASSFRDTPPNPAD  391
NTDB id 279 KZH43 RS00140 WP 074017595.1       QALVTPTMFGNAKRTTTGLDFNRASLIMAVLEKRAGLLLQNQDAYLKSAGGVKLDEPAIDLAVAVAIASSYKDKPTNPQE  387
NTDB id 238 SPD RS00140 WP 074017595.1         QALVTPTMFGNAKRTTTGLDFNRASLIMAVLEKRAGLLLQNQDAYLKSAGGVKLDEPAIDLAVAVAIASSYKDKPTNPQE  387
NTDB id 204 SPR RS00140 WP 074017595.1         QALVTPTMFGNAKRTTTGLDFNRASLIMAVLEKRAGLLLQNQDAYLKSAGGVKLDEPAIDLAVAVAIASSYKDKPTNPQE  387
NTDB id 169 SP RS00155 WP 074017595.1          QALVTPTMFGNAKRTTTGLDFNRASLIMAVLEKRAGLLLQNQDAYLKSAGGVKLDEPAIDLAVAVAIASSYKDKPTNPQE  387
NTDB id 509 SM12261 RS00130 WP 078228442.1     QALVTPTMFGNAKRTTTGLDFNRASLIMAVLEKRAGLLLQNQDAYLKSAGGVKLDEPAIDLAVAVAIASSYKDKPTNPQE  387
NTDB id 537 SMSK321 RS07120 WP 080550752.1     QALVTPTMFGNAKRTTTGLDFNRASLIMAVLEKRAGLLLQNQDAYLKSAGGVKLDEPAIDLAVAVAIASSYKDKPTNPQE  387
consensus                                      !!!******!***!**!!*!**!*!***!!!!!!*!**!***!**!***!!*****!!!!!*****!*!!**!*!*****
```

logo

```
NTDB id 1044409 ACEN9X RS13625 WP 413670880.1  CFAGELGLSGEIRAVNRVEQRIAEAQKLGFNQIFISKYNLPASGQDKKRMDLSRYDIDIKIVSSIEEVFGLLFG.  472
NTDB id 125 BSU 00870 NP 387968.1              CFIGEVGLTGEVRRVSRIEQRVKEAAKLGFKRMIIPAANLDGWTKPKG........IEVIGVANVAEALRTSLGG  458
NTDB id 279 KZH43 RS00140 WP 074017595.1       CFVGELGLTGEIRRVNRIEQRINEAAKLGFTKIYVPKNSLTGITLPKE........IQVIGVTTIQEVLKKVFA.  453
NTDB id 238 SPD RS00140 WP 074017595.1         CFVGELGLTGEIRRVNRIEQRINEAAKLGFTKIYVPKNSLTGITLPKE........IQVIGVTTIQEVLKKVFA.  453
NTDB id 204 SPR RS00140 WP 074017595.1         CFVGELGLTGEIRRVNRIEQRINEAAKLGFTKIYVPKNSLTGITLPKE........IQVIGVTTIQEVLKKVFA.  453
NTDB id 169 SP RS00155 WP 074017595.1          CFVGELGLTGEIRRVNRIEQRINEAAKLGFTKIYVPKNSLTGITLPKE........IQVIGVTTIQEVLKKVFA.  453
NTDB id 509 SM12261 RS00130 WP 078228442.1     CFVGELGLTGEIRRVNRIEQRINEAAKLGFTKIYVPKNSLTGITPPKE........IQVIGVTTIQEVLKKVFA.  453
NTDB id 537 SMSK321 RS07120 WP 080550752.1     CFVGELGLTGEIRRVNRIEQRINEAAKLGFTKIYVPKNSLTGITPPME........IQVIGVTTIQEVLKKVFA.  453
consensus                                      !!*!!*!!*!!*!*!*!*!!!**!!*!!!!*********!**** ***        !****!****!*******
```

X non conserved

X similar

X $\geq$ 50% conserved