```
logo

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
NTDB id 509 SM12261 RS00130 WP 078228442.1     MAKKKATFVCQNCGYNSPKYLGRCPNCGSWSSFVEEVEVAEVKNARVSLTGE...KTKPMKLAEVTSINVNRTKTEMEEF   77
NTDB id 537 SMSK321 RS07120 WP 080550752.1     MAKKKATFVCQNCGYNSPKYLGRCPNCGSWSSFVEEVEVAEVKNARVSLTGE...KTKPMKLAEVTSINVNRTKTEMEEF   77
NTDB id 1058779 ACFXAC RS00430 WP 014304212.1  MAKSKTKFICHSCGYESAKWMGKCPGCGAWNTMVEETIKKAPANRRAAFSHSVQTVQKPSPITSIETSEEPRVQTKLEEF   80
NTDB id 125 BSU 00870 NP 387968.1               MAKTKSKFICQSCGYESPKWMGKCPGCGAWNTMVEEMIKKAPANRRAAFSHSVQTVQKPSPITSIETSEEPRVKTQLGEF   80
consensus                                       !!!*!**!*!**!!!*!*!**!*!!*!!*!***!!!*******!*!******   **!!************!**!***!!

logo

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 1058779 ACFXAC RS00430 WP 014304212.1  NRVLGGGVVKGSLVLIGGDPGIGKSTLLLQVSAQLADTAGSVLYISGEESVKQTKLRADRLGINSQMLHVLSETDMEYIS   160
NTDB id 125 BSU 00870 NP 387968.1               NRVLGGGVVKGSLVLIGGDPGIGKSTLLLQVSAQLSGSSNSVLYISGEESVKQTKLRADRLGINNPSLHVLSETDMEYIS   160
consensus                                       !!!!!!!!!!*!!!!!!!!!
```

```
logo
```

```
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 1058779 ACFXAC RS00430 WP 014304212.1  GNPRRMATGIDHNRVSLIMAVLEKRVGLLLQNQDAYLKVAGGVKLDEPAIDLAVAVSIASSFRDTPPNPADCFIGEVGLT   400
NTDB id 125 BSU 00870 NP 387968.1               GNPRRMATGIDHNRVSLLMAVLEKRVGLLLQNQDAYLKVAGGVKLDEPAIDLAIVISIASSFRDTPPNPADCFIGEVGLT   400
consensus                                       !!**!**!!*!*!!*!!*!!!!!!!*!!!!!!!!!!!!!*!!!!!!!!!!!!!!!****!!!!**!*!*!!**!!*!!*!!!
```

```
logo
```

```
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 1058779 ACFXAC RS00430 WP 014304212.1  GEVRRVSRIEQRVKEAAKLGFKRMIIPEANADGWTIPKGIEVVGVANVAEALRTSLGGS   459
NTDB id 125 BSU 00870 NP 387968.1               GEVRRVSRIEQRVKEAAKLGFKRMIIPAANLDGWTKPKGIEVIGVANVAEALRTSLGG.   458
consensus                                       !!*!!!*!!!!!**!!!!!!!*****!*****!*!*!**!*!*!!****!*!*****
```

X non conserved

X similar

X $\geq$ 50% conserved