```
logo

NTDB id 1475 Cj0275 YP 002343717.1          MEFLSIGVKIMPRKCSFCNEVENPQRRILANENDDAFICEYCVEGAYSIIYGEEKEFKEPKQSHNTEFKDITPKELKAYL   80
NTDB id 49792 SSUD12 RS04865 WP 002934974.1 ...MAVKHTHELIYCSFCGKNQEEVKKIIAG..NNVFICNECVELAQEIIREELAEEVLT.....DLADTPKPQELLNIL   70
NTDB id 379 SMU RS04375 WP 002262816.1      ..MAGNRTNDVTVHCSFCGKNQDEVKKIIAG..NGVFICNECVELSQEIIREELAEEVLA.....DLSEVPKPKELLAIL   71
consensus                                      ****    * * !!!!*****!*!*   * *!!!**!!!****!!**!**!***       ** * **!*!!***!

logo

NTDB id 1475 Cj0275 YP 002343717.1          DRYVIGQDRAKKVFSVGVYNHYKRLFKAEL.QDDDTELFKSNILLVGPTGSGKTLLAQTLAKFLDVPIAICDATSLTEAG   159
NTDB id 49792 SSUD12 RS04865 WP 002934974.1 NNYVIGQDRAKRALAVAVYNHYKRINFQDSRDENDVDLQKSNILMIGPTGSGKTFLAQTLAKSLNVPFAIADATALTEAG   150
NTDB id 379 SMU RS04375 WP 002262816.1      DSYVIGQDRAKRALAVAVYNHYKRISFTESQDDQDVDLQKSNILMIGPTGSGKTFLAQTLAKSLNVPFAIADATALTEAG   151
consensus                                   * !!!!!!!!!****!*!!!!!!!* * ** ***!**!*!!!!!**!!!!!!!*!!!!!!!*!*!!*!!*!!!*!!!!!

logo

NTDB id 1475 Cj0275 YP 002343717.1          YVGEDVENILTRLLQAADGDVQRAQKGIVFIDEIDKIARMSENRSITRDVSGEGVQQALLKIIEGSLVNIPPRGGRKHPN   239
NTDB id 49792 SSUD12 RS04865 WP 002934974.1 YVGEDVENILLKLLQAADFNIDRAERGIIYVDEIDKIAKKGENVSITRDVSGEGVQQALLKIIEGTVASVPPQGGRKHPN   230
NTDB id 379 SMU RS04375 WP 002262816.1      YVGEDVENILLKLIQAADYNVERAERGIIYVDEIDKIAKKGENVSITRDVSGEGVQQALLKIIEGTVASVPPQGGRKHPQ   231
consensus                                   !!!!!!!!!!**!*!!!!***!!**!!***!!!!!!***!!*!!!!!!!!!!!!!!!!!!!!!*****!!*!!!!!!*

logo

NTDB id 1475 Cj0275 YP 002343717.1          QEFIQIDTSNILFVCGGAFDGLETILKRKLGDKVVGFFDDAK..EENKALLEKIEPDDLVHFGLIPELIGRLHVIASLNE   317
NTDB id 49792 SSUD12 RS04865 WP 002934974.1 QEMIHVDTKNILFIVGGAFDGIEEIVKQRLGEKIIGFGHNNRAIDEKESYMQHIIADDIQKFGIIPELIGRLPVFAALDQ   310
NTDB id 379 SMU RS04375 WP 002262816.1      QEMIQIDTKNILFIVGGAFDGIEDIVKQRLGEKIIGFGQNNKKIDDQSSYMQEIISEDIQKFGLIPEFIGRLPVLAALEQ   311
consensus                                   !!*!**!!*!!!!**!!!!!!*!*!*!**!!*!**!!* *** **** **** !* *!***!!*!!!*!!!!*!*!*!**

logo

NTDB id 1475 Cj0275 YP 002343717.1          LNEEDMVRILTEPKNAIIKQYQKLFAIDGVNLKFEEDALRAIAQLALERKTGARGLRSIIEEMMVDLMFELPEYKDYDIV   397
NTDB id 49792 SSUD12 RS04865 WP 002934974.1 LTTEDLVRILTEPKNALVKQYQTLLSYDDVELDFDEDALLAIAEKAIERKTGARGLRSIIEETMLDVMFEVPGQDNVKRV   390
NTDB id 379 SMU RS04375 WP 002262816.1      LTVDDLVKILTEPKNALVKQYQTLLSYDGVELEFDQEALQAIAQKAIERKTGARGLRSIIEETMLDLMFEIPSQEDVTCV   391
consensus                                   !* *!*!*!!!!!!!!!**!!!!*!***!*!*!*!***!! !!!**!*!!!!!!!!!!!!!!!!*!*!*!!!*! ****  !

logo

NTDB id 1475 Cj0275 YP 002343717.1          I.TKEVVKDNAKALLIKRKIS   417
NTDB id 49792 SSUD12 RS04865 WP 002934974.1 RVTKAAVDGKEKPLLETA...   408
NTDB id 379 SMU RS04375 WP 002262816.1      RITKKAVEGTDKPILETAS..   410
consensus                                   **!! *!** *!**!***
```

X non conserved

X similar

X ≥ 50% conserved