```
logo

NTDB id 1475 Cj0275 YP 002343717.1                MEFLSIGVKIMPRKCSFCNEVENPQRRILANENDDAFICEYCVEGAYSIIYGEEKEFKEPKQSHNTEFKDITPKE   75
NTDB id 1111690 HMPREF9319 RS05585 WP 003065195.1 ..MVGNRTNDVKVYCSFCGKSQDEVKKIIAG..NNVFICNECVALSQEIIKEELAEEVL.....ADLAEVPKPKE   66
NTDB id 379 SMU RS04375 WP 002262816.1            ..MAGNRTNDVTVHCSFCGKNQDEVKKIIAG..NGVFICNECVELSQEIIREELAEEVL.....ADLSEVPKPKE   66
consensus                                           ********* * !!!!** ******!*!*   * *!!!**!!*****!!**!**!***     *** ****!!!

logo

NTDB id 1475 Cj0275 YP 002343717.1                LKAYLDRYVIGQDRAKKVFSVGVYNHYKRLFKAEL.QDDDTELFKSNILLVGPTGSGKTLLAQTLAKFLDVPIAI   149
NTDB id 1111690 HMPREF9319 RS05585 WP 003065195.1 LLATLDEYVVGQDRAKRALAVAVYNHYKRVSFAESRNEEDVDLQKSNILMIGPTGSGKTFLAQTLAKTLNVPFAI   141
NTDB id 379 SMU RS04375 WP 002262816.1            LLAILDSYVIGQDRAKRALAVAVYNHYKRISFTESQDDQDVDLQKSNILMIGPTGSGKTFLAQTLAKSLNVPFAI   141
consensus                                         !*! !! !!*!!!!!!****!*!!!!!!!****!* ***!**!*!!!!!**!!!!!!!!*!!!!!!!*!*!!*!!

logo

NTDB id 1475 Cj0275 YP 002343717.1                CDATSLTEAGYVGEDVENILTRLLQAADGDVQRAQKGIVFIDEIDKIARMSENRSITRDVSGEGVQQALLKIIEG   224
NTDB id 1111690 HMPREF9319 RS05585 WP 003065195.1 ADATSLTEAGYVGEDVENILLKLIQAADFNIERAERGIIYVDEIDKIAKKGENVSITRDVSGEGVQQALLKIIEG   216
NTDB id 379 SMU RS04375 WP 002262816.1            ADATALTEAGYVGEDVENILLKLIQAADYNVERAERGIIYVDEIDKIAKKGENVSITRDVSGEGVQQALLKIIEG   216
consensus                                         *!!!*!!!!!!!!!!!!!!!!**!*!!!!*****!!**!!***!!!!!!!***!!*!!!!!!!!!!!!!!!!!!!!

logo

NTDB id 1475 Cj0275 YP 002343717.1                SLVNIPPRGGRKHPNQEFIQIDTSNILFVCGGAFDGLETILKRKLGDKVVGFFDDAK..EENKALLEKIEPDDLV   297
NTDB id 1111690 HMPREF9319 RS05585 WP 003065195.1 TVASVPPQGGRKHPNQEMIQIDTKNILFIVGGAFDGIEDIVKQRLGEKVIGFGQNNRKIDENASYMQEIISEDIQ   291
NTDB id 379 SMU RS04375 WP 002262816.1            TVASVPPQGGRKHPQQEMIQIDTKNILFIVGGAFDGIEDIVKQRLGEKIIGFGQNNKKIDDQSSYMQEIISEDIQ   291
consensus                                         *****!!*!!!!!!*!!*!!!!!*!!!!**!!!!!!*!*!*!**!!*!**!!********** *****!***!**

logo

NTDB id 1475 Cj0275 YP 002343717.1                HFGLIPELIGRLHVIASLNELNEEDMVRILTEPKNAIIKQYQKLFAIDGVNLKFEEDALRAIAQLALERKTGARG   372
NTDB id 1111690 HMPREF9319 RS05585 WP 003065195.1 KFGLIPEFIGRLPVVAALEQLTADDLVRILTEPRNALVKQYQTLLSYDGVELEFDKDALQAIANKAIERKTGARG   366
NTDB id 379 SMU RS04375 WP 002262816.1            KFGLIPEFIGRLPVLAALEQLTVDDLVKILTEPKNALVKQYQTLLSYDGVELEFDQEALQAIAQKAIERKTGARG   366
consensus                                         *!!!!!!*!!!!*!*!*!**!* *!*!*!!!!!*!!**!!!!*!***!!!*!*!* *!!*!!!**!*!!!!!!!!

logo

NTDB id 1475 Cj0275 YP 002343717.1                LRSIIEEMMVDLMFELPEYKDYDIVI.TKEVVKDNAKALLIKRKIS   417
NTDB id 1111690 HMPREF9319 RS05585 WP 003065195.1 LRSIIEETMMDIMFEIPSQEEVTKVRVTKAAVEGKDKPILEIA...   409
NTDB id 379 SMU RS04375 WP 002262816.1            LRSIIEETMLDLMFEIPSQEDVTCVRITKKAVEGTDKPILETAS..   410
consensus                                         !!!!!!!*!*!*!!!*!****** !**!! *!** *!**!* *
```

X non conserved

X similar

X ≥ 50% conserved