```
logo

NTDB id 586 KW2 RS10855 WP 011836048.1          ..MVQKKAQELIQKAIEMEASDIYLIASGNLYKIYIRQQLGRTLIEEVNQEIGLALLTHFKFLAGMNTGERRRVQLGACW   78
NTDB id 429 SGO RS09420 WP 012130942.1          ..MVQKIAQAIVRQAKEECAQDIYFVPKDDCYELYMRIGDERRFIQTYDFDQLAAVISHFKFLAGMNVGEKRRSQLGSCD   78
NTDB id 500 SM12261 RS00945 WP 000249545.1      ..MVQEIAQEIIRSARKKGAQDIYFVPKLDAYELHMRVGDERCKIGCYDFEKFAAVISHFKFVAGMNVGEKRRSQLGSCD   78
NTDB id 270 KZH43 RS09265 WP 000249564.1        ..MVQEIAQEIIRSARKKGTQDIYFVPKLDAYELHMRVGDERCKIGSYDFEKFAAVISHFKFVAGMNVGEKRRSQLGSCD   78
NTDB id 229 SPD RS09895 WP 000249564.1          ..MVQEIAQEIIRSARKKGTQDIYFVPKLDAYELHMRVGDERCKIGSYDFEKFAAVISHFKFVAGMNVGEKRRSQLGSCD   78
NTDB id 195 SPR RS09430 WP 000249564.1          ..MVQEIAQEIIRSARKKGTQDIYFVPKLDAYELHMRVGDERCKIGSYDFEKFAAVISHFKFVAGMNVGEKRRSQLGSCD   78
NTDB id 160 SP RS10380 WP 000249564.1           ..MVQEIAQEIIRSARKKGTQDIYFVPKLDAYELHMRVGDERCKIGSYDFEKFAAVISHFKFVAGMNVGEKRRSQLGSCD   78
NTDB id 584 DLJ51 RS00890 WP 019777327.1        MVEVQELGKELIRQAVEEQAQDIYLLPKPAVYKIYLRFGEKRHLIQTCPPEQAAGLISHFKFLAGMNVGEKRRAQLGACD   80
NTDB id 1171292 DYB47 RS01340 WP 003079951.1    ..MVQKLGKEIISKAVKEKVQDIYIVPKKDLYELYMRIGNERKFIDVYDHHLMVNLISHFKFVAGMNVGEKRRSQLGSCD   78
NTDB id 394 FSA28 RS09405 WP 002291652.1        ..MVQKLGRKIIAEAVQNKAQDIYIIPKKESYELYMRIGNERRFIDVYDHHFMANLISHFKFVAGMNVGEKRRSQLGSCD   78
NTDB id 385 SMU RS09035 WP 002263435.1          ..MVQKLGRKIIAEAVQNKAQDIYIIPKKESYELYMRIGNERRFIDVYDHHFMANLISHFKFVAGMNVGEKRRSQLGSCD   78
consensus                                         *!!********* !**  **!!!**** * !****!****!  ! *****  *****!!!!*!!!!*!!*!!*!!!*!*

logo

NTDB id 586 KW2 RS10855 WP 011836048.1          YELEGSSAKRLRLSTVGDFEGNESLVIRLLHDQKQELEFWFDDKL..QDFRCKRGLYLFAGPVGSGKTSLMFDLAHRHFS   156
NTDB id 429 SGO RS09420 WP 012130942.1          YRYDD.KETSIRLSTVGDYRGYESLVIRLLHDEETELKFWFTHFPELREKFKDRGLYLFSGPVGSGKTTLMHQLAQLKFK   157
NTDB id 500 SM12261 RS00945 WP 000249545.1      YEYDQ.KMASLRLSTVGDYRGHESLVIRLLHDEEQDLHFWFQDIEELGKQYRQRGLYLFAGPVGSGKTTLMHELAKSLFK   157
NTDB id 270 KZH43 RS09265 WP 000249564.1        YAYDH.KIASLRLSTVGDYRGHESLVIRLLHDEEQDLHFWFQDIEELGKQYRQRGLYLFAGPVGSGKTTLMHELSKSLFK   157
NTDB id 229 SPD RS09895 WP 000249564.1          YAYDH.KIASLRLSTVGDYRGHESLVIRLLHDEEQDLHFWFQDIEELGKQYRQRGLYLFAGPVGSGKTTLMHELSKSLFK   157
NTDB id 195 SPR RS09430 WP 000249564.1          YAYDH.KIASLRLSTVGDYRGHESLVIRLLHDEEQDLHFWFQDIEELGKQYRQRGLYLFAGPVGSGKTTLMHELSKSLFK   157
NTDB id 160 SP RS10380 WP 000249564.1           YAYDH.KIASLRLSTVGDYRGHESLVIRLLHDEEQDLHFWFQDIEELGKQYRQRGLYLFAGPVGSGKTTLMHELSKSLFK   157
NTDB id 584 DLJ51 RS00890 WP 019777327.1        YAFADGETAALRLSTVGDYQGRESLVIRLLFDRKRELKFWFDGLNALLPKIIGRGLYLFSGPVGSGKTTLMYELVSRKYP   160
NTDB id 1171292 DYB47 RS01340 WP 003079951.1    YYYNETNMVSLRLSTVGDYRGYESLVIRLLFDGRQDLHFWFNGVHQVLNAIRGRGLYLFSGPVGSGKTTLMYQIAREKFF   158
NTDB id 394 FSA28 RS09405 WP 002291652.1        YSYDEGKVISLRLSSVGDYRGYESLVIRLLFSGRHDLKFWFNSMDLILNEIKGRGLYLFSGPVGSGKTSLMYQLVKLRFE   158
NTDB id 385 SMU RS09035 WP 002263435.1          YSYDEGKVISLRLSSVGDYRGYESLVIRLLFSGRHDLKFWFNSMDLILNEIKGRGLYLFSGPVGSGKTSLMYQLVKLRFE   158
consensus                                        ! **  *****!!!*!!!**! !!!!!!!!******!*!!!******   ** !!!!!!*!!!!!!!!*!!*** *  **

logo

NTDB id 586 KW2 RS10855 WP 011836048.1          NAQVITIEEPVELIDSDFIQLQVNDVIGNSYDELIKLSLRHRPDLLIVGEIRDQQTARAVLRASLTGYTVFSTIHAASVK   236
NTDB id 429 SGO RS09420 WP 012130942.1          GQQVMSIEDPVEIKQEDMLQLQLNETIGLTYESLIKLSLRHRPDLLIIGEIRDSETARAVVRASLTGATVFSTIHAKSIP   237
NTDB id 500 SM12261 RS00945 WP 000249545.1      GQQVMSIEDPVEIKQDNMLQLQLNEAIGLTYENLIKLSLRHRPDLLIIGEIRDSETARAVVRASLTGATVFSTIHAKSIR   237
NTDB id 270 KZH43 RS09265 WP 000249564.1        GQQVMSIEDPVEIKQDDMLQLQLNEAIGLTYENLIKLSLRHRPDLLIIGEIRDSETARAVVRASLTGATVFSTIHAKSIR   237
NTDB id 229 SPD RS09895 WP 000249564.1          GQQVMSIEDPVEIKQDDMLQLQLNEAIGLTYENLIKLSLRHRPDLLIIGEIRDSETARAVVRASLTGATVFSTIHAKSIR   237
NTDB id 195 SPR RS09430 WP 000249564.1          GQQVMSIEDPVEIKQDDMLQLQLNEAIGLTYENLIKLSLRHRPDLLIIGEIRDSETARAVVRASLTGATVFSTIHAKSIR   237
NTDB id 160 SP RS10380 WP 000249564.1           GQQVMSIEDPVEIKQDDMLQLQLNEAIGLTYENLIKLSLRHRPDLLIIGEIRDSETARAVVRASLTGATVFSTIHAKSIR   237
NTDB id 584 DLJ51 RS00890 WP 019777327.1        DSQIITIEDPVEIKQDNMLQLQLNPSIGMTYDHLIKLSLRHRPDVLIIGEIRDRETAQAVIRASLTGIRVFSTVHAKSIP   240
NTDB id 1171292 DYB47 RS01340 WP 003079951.1    NKQIITIEDPVEIKEANMLQLQLNENIGMTYDSLIKLSLRHRPDILIIGEIRDRETARAVIRASLTGVLVMSTVHAKSIP   238
NTDB id 394 FSA28 RS09405 WP 002291652.1        TKQVITIEDPVEIKQDNMLQLQLNESIDMTYDNLIKLSLRHRPDILIIGEIRDKETARAVIRASLTGAMVFSTIHAKSIP   238
NTDB id 385 SMU RS09035 WP 002263435.1          TKQVITIEDPVEIKQDNMLQLQLNESIDMTYDNLIKLSLRHRPDILIIGEIRDKETARAVIRASLTGAMVFSTIHAKSIP   238
consensus                                        **!***!!*!!!*******!!!*!* !***!**!!!!!!!!!!!*!!*!!!!!**!!*!!*!!!!!!**!*!!*!!*!**
```

```
logo

NTDB id 586 KW2 RS10855 WP 011836048.1          GVVQRLLELGLSDWELKNGLEAVVYQRLIAGKGVLDIAKSKFDTWSPKKWNEKIENLYANGHLTAIEAEREKISINQASK   316
NTDB id 429 SGO RS09420 WP 012130942.1          GVYERLLELGVSEEELKIVLQGICYQRLIGGGGVIDFASDNYQEHEPTVWNQQIDQLLAAGHIHPEQAEAEKIRNQQAKT   317
NTDB id 500 SM12261 RS00945 WP 000249545.1      GVYERLLELGVSEEELAVVLQGVCYQRLIGGGGIVDFANKDYQEHQSTSWNAQIDQLLKDGHITSLQAETEKISYS....   313
NTDB id 270 KZH43 RS09265 WP 000249564.1        GVYERLLELGVSEEELAVVLQGVCYQRLIGGGGIVDFASRDYQEHQAAKWNEQIDQLLKDGHITSLQAETEKISYS....   313
NTDB id 229 SPD RS09895 WP 000249564.1          GVYERLLELGVSEEELAVVLQGVCYQRLIGGGGIVDFASRDYQEHQAAKWNEQIDQLLKDGHITSLQAETEKISYS....   313
NTDB id 195 SPR RS09430 WP 000249564.1          GVYERLLELGVSEEELAVVLQGVCYQRLIGGGGIVDFASRDYQEHQAAKWNEQIDQLLKDGHITSLQAETEKISYS....   313
NTDB id 160 SP RS10380 WP 000249564.1           GVYERLLELGVSEEELAVVLQGVCYQRLIGGGGIVDFASRDYQEHQAAKWNEQIDQLLKDGHITSLQAETEKISYS....   313
NTDB id 584 DLJ51 RS00890 WP 019777327.1        GVYARILELGVSQDELDNCLAGIAYQRLIGGGGLIDFAQDHFQNHQAECWNEKIDQLLAAGHLTEEEAAAEKIKD.....   315
NTDB id 1171292 DYB47 RS01340 WP 003079951.1    GVYARLLELGVNPKELENTLGGIIYQRLISGGGVLDFAKDKFQEHSAQKWNAQINRLFTEGYITEEEAEIEKIKN.....   313
NTDB id 394 FSA28 RS09405 WP 002291652.1        GVYARMLELGTSSEELQNALCGIVYQRLIGGGGIIDFAKGDYQNHSAKKWNKQIYDLFTAGYITEGEAQAEEIED.....   313
NTDB id 385 SMU RS09035 WP 002263435.1          GVYARMLELGTSSEELQNALRGIVYQRLIGGGGIIDFAKGDYQNHSAKKWNKQIYDLFTAGYITEGEAQAEEIED.....   313
consensus                                        !!**!*!!!!****!! **!*****!!!!!*!*!**!*!  ******* *!!**!**!* *!*** **!* !*!*

logo

NTDB id 586 KW2 RS10855 WP 011836048.1          IDTTDGESFE   326
NTDB id 429 SGO RS09420 WP 012130942.1          SY........   319
NTDB id 500 SM12261 RS00945 WP 000249545.1      ..........   313
NTDB id 270 KZH43 RS09265 WP 000249564.1        ..........   313
NTDB id 229 SPD RS09895 WP 000249564.1          ..........   313
NTDB id 195 SPR RS09430 WP 000249564.1          ..........   313
NTDB id 160 SP RS10380 WP 000249564.1           ..........   313
NTDB id 584 DLJ51 RS00890 WP 019777327.1        ..........   315
NTDB id 1171292 DYB47 RS01340 WP 003079951.1    ..........   313
NTDB id 394 FSA28 RS09405 WP 002291652.1        ..........   313
NTDB id 385 SMU RS09035 WP 002263435.1          ..........   313
consensus
```

X non conserved
X similar
X ≥ 50% conserved