```
logo
NTDB id 617 LCA RS06480 WP 011375001.1        .MSTEEKLTTLLKHCAKQRVQDLYFTPTIGGWRLTERRQSDLVTNQELDKPTGTRYLNRLKYMAGMDISETRRAQTGRSE   79
NTDB id 586 KW2 RS10855 WP 011836048.1        ..MVQKKAQELIQKAIEMEASDIYLIASGNLYKIYIRQQLGRTLIEEVNQEIGLALLTHFKFLAGMNTGERRRVQLGACW   78
NTDB id 584 DLJ51 RS00890 WP 019777327.1      MVEVQELGKELIRQAVEEQAQDIYLLPKPAVYKIYLRFGEKRHLIQTCPPEQAAGLISHFKFLAGMNVGEKRRAQLGACD   80
NTDB id 385 SMU RS09035 WP 002263435.1        ..MVQKLGRKIIAEAVQNKAQDIYIIPKKESYELYMRIGNERRFIDVYDHHFMANLISHFKFVAGMNVGEKRRSQLGSCD   78
NTDB id 394 FSA28 RS09405 WP 002291652.1      ..MVQKLGRKIIAEAVQNKAQDIYIIPKKESYELYMRIGNERRFIDVYDHHFMANLISHFKFVAGMNVGEKRRSQLGSCD   78
NTDB id 429 SGO RS09420 WP 012130942.1        ..MVQKIAQAIVRQAKEECAQDIYFVPKDDCYELYMRIGDERRFIQTYDFDQLAAVISHFKFLAGMNVGEKRRSQLGSCD   78
NTDB id 500 SM12261 RS00945 WP 000249545.1    ..MVQEIAQEIIRSARKKGAQDIYFVPKLDAYELHMRVGDERCKIGCYDFEKFAAVISHFKFVAGMNVGEKRRSQLGSCD   78
NTDB id 1140910 DQN54 RS10160 WP 000249555.1  ..MVQEIAQEIIRSARKKGAQDIYFVPKLDAYELHMRVGDERCKIGSYDFEKFAAVISHFKFVAGMNVGEKRRSQLGSCD   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
consensus                                       ********** ***  **!*!********** *!*****  * *****  *******!**!!!***!*!!*!*!***

logo
NTDB id 617 LCA RS06480 WP 011375001.1        LQLAD.QTIYLRLATVGDFLNRESLVIRFIYPIGAIYHCDDQQILAQLTQMSRQSGLILFAGPTGSGKTTSLYHLAQQSM  158
NTDB id 586 KW2 RS10855 WP 011836048.1        YELEGSSAKRLRLSTVGDFEGNESLVIRLLHDQKQELEFWFD.DK..LQDFRCKRGLYLFAGPVGSGKTSLMFDLAHRHF  155
NTDB id 584 DLJ51 RS00890 WP 019777327.1      YAFADGETAALRLSTVGDYQGRESLVIRLLFDRKRELKFWFD.GLNALLPKIIGRGLYLFSGPVGSGKTTLMYELVSRKY  159
NTDB id 385 SMU RS09035 WP 002263435.1        YSYDEGKVISLRLSSVGDYRGYESLVIRLLFSGRHDLKFWFN.SMDLILNEIKGRGLYLFSGPVGSGKTSLMYQLVKLRF  157
NTDB id 394 FSA28 RS09405 WP 002291652.1      YSYDEGKVISLRLSSVGDYRGYESLVIRLLFSGRHDLKFWFN.SMDLILNEIKGRGLYLFSGPVGSGKTSLMYQLVKLRF  157
NTDB id 429 SGO RS09420 WP 012130942.1        YRYDD.KETSIRLSTVGDYRGYESLVIRLLHDEETELKFWFT.HFPELREKFKDRGLYLFSGPVGSGKTTLMHQLAQLKF  156
NTDB id 500 SM12261 RS00945 WP 000249545.1    YEYDQ.KMASLRLSTVGDYRGHESLVIRLLHDEEQDLHFWFQ.DIEELGKQYRQRGLYLFAGPVGSGKTTLMHELAKSLF  156
NTDB id 1140910 DQN54 RS10160 WP 000249555.1  YAYDQ.KMASLRLSTVGDYRGHESLVIRLLHDEEQDLHFWFQ.DIEELGKQYRQRGLYLFAGPVGSGKTTLMHELSKSLF  156
NTDB id 270 KZH43 RS09265 WP 000249564.1      YAYDH.KIASLRLSTVGDYRGHESLVIRLLHDEEQDLHFWFQ.DIEELGKQYRQRGLYLFAGPVGSGKTTLMHELSKSLF  156
NTDB id 229 SPD RS09895 WP 000249564.1        YAYDH.KIASLRLSTVGDYRGHESLVIRLLHDEEQDLHFWFQ.DIEELGKQYRQRGLYLFAGPVGSGKTTLMHELSKSLF  156
NTDB id 195 SPR RS09430 WP 000249564.1        YAYDH.KIASLRLSTVGDYRGHESLVIRLLHDEEQDLHFWFQ.DIEELGKQYRQRGLYLFAGPVGSGKTTLMHELSKSLF  156
NTDB id 160 SP RS10380 WP 000249564.1         YAYDH.KIASLRLSTVGDYRGHESLVIRLLHDEEQDLHFWFQ.DIEELGKQYRQRGLYLFAGPVGSGKTTLMHELSKSLF  156
consensus                                     *  **  *****!!**!!!*** !!!!!!**************  *****   ****!!*!!*!!*!!!!!*****!  *   *

logo
NTDB id 617 LCA RS06480 WP 011375001.1        SAKMVVAIEDPIEIVAPEFLQLQVNDNAGLSYAELLKISLRLRPDTLIIGEIRDLETAQYVVSAALSGHLVLSTIHARST  238
NTDB id 586 KW2 RS10855 WP 011836048.1        SNAQVITIEEPVELIDSDFIQLQVNDVIGNSYDELIKLSLRHRPDLLIVGEIRDQQTARAVLRASLTGYTVFSTIHAASV  235
NTDB id 584 DLJ51 RS00890 WP 019777327.1      PDSQIITIEDPVEIKQDNMLQLQLNPSIGMTYDHLIKLSLRHRPDVLIIGEIRDRETAQAVIRASLTGIRVFSTVHAKSI  239
NTDB id 385 SMU RS09035 WP 002263435.1        ETKQVITIEDPVEIKQDNMLQLQLNESIDMTYDNLIKLSLRHRPDILIIGEIRDKETARAVIRASLTGAMVFSTIHAKSI  237
NTDB id 394 FSA28 RS09405 WP 002291652.1      ETKQVITIEDPVEIKQDNMLQLQLNESIDMTYDNLIKLSLRHRPDILIIGEIRDKETARAVIRASLTGAMVFSTIHAKSI  237
NTDB id 429 SGO RS09420 WP 012130942.1        KGQQVMSIEDPVEIKQEDMLQLQLNETIGLTYESLIKLSLRHRPDLLIIGEIRDSETARAVVRASLTGATVFSTIHAKSI  236
NTDB id 500 SM12261 RS00945 WP 000249545.1    KGQQVMSIEDPVEIKQDNMLQLQLNEAIGLTYENLIKLSLRHRPDLLIIGEIRDSETARAVVRASLTGATVFSTIHAKSI  236
NTDB id 1140910 DQN54 RS10160 WP 000249555.1  KGQQVMSIEDPVEIKQDDMLQLQLNEAIGLTYENLIKLSLRHRPDLLIIGEIRDSETARAVVRASLTGATVFSTIHAKSI  236
NTDB id 270 KZH43 RS09265 WP 000249564.1      KGQQVMSIEDPVEIKQDDMLQLQLNEAIGLTYENLIKLSLRHRPDLLIIGEIRDSETARAVVRASLTGATVFSTIHAKSI  236
NTDB id 229 SPD RS09895 WP 000249564.1        KGQQVMSIEDPVEIKQDDMLQLQLNEAIGLTYENLIKLSLRHRPDLLIIGEIRDSETARAVVRASLTGATVFSTIHAKSI  236
NTDB id 195 SPR RS09430 WP 000249564.1        KGQQVMSIEDPVEIKQDDMLQLQLNEAIGLTYENLIKLSLRHRPDLLIIGEIRDSETARAVVRASLTGATVFSTIHAKSI  236
NTDB id 160 SP RS10380 WP 000249564.1         KGQQVMSIEDPVEIKQDDMLQLQLNEAIGLTYENLIKLSLRHRPDLLIIGEIRDSETARAVVRASLTGATVFSTIHAKSI  236
consensus                                     *******!!*!*!*******!!!*!* ****!**!*!*!!!*!!!!*!!*!!!!!!**!!**!**!*!*!**!*!!*!!*!*
```

```
logo

NTDB id 617 LCA RS06480 WP 011375001.1        QGVVARLLDLGISELQLRACLTGIAYQSLVTKDDVVQAH...YELLTGSDYFSKKE............GGCDV.......   296
NTDB id 586 KW2 RS10855 WP 011836048.1        KGVVQRLLELGLSDWELKNGLEAVVYQRLIAGKGVLDIAKSKFDTWSPKKWNEKIENLYANGHLTAIEAEREKISINQAS   315
NTDB id 584 DLJ51 RS00890 WP 019777327.1      PGVYARILELGVSQDELDNCLAGIAYQRLIGGGGLIDFAQDHFQNHQAECWNEKIDQLLAAGHLTEEEAAAEKIKD....   315
NTDB id 385 SMU RS09035 WP 002263435.1        PGVYARMLELGTSSEELQNALRGIVYQRLIGGGGIIDFAKGDYQNHSAKKWNKQIYDLFTAGYITEGEAQAEEIED....   313
NTDB id 394 FSA28 RS09405 WP 002291652.1      PGVYARMLELGTSSEELQNALCGIVYQRLIGGGGIIDFAKGDYQNHSAKKWNKQIYDLFTAGYITEGEAQAEEIED....   313
NTDB id 429 SGO RS09420 WP 012130942.1        PGVYERLLELGVSEEELKIVLQGICYQRLIGGGGVIDFASDNYQEHEPTVWNQQIDQLLAAGHIHPEQAEAEKIRNQQAK   316
NTDB id 500 SM12261 RS00945 WP 000249545.1    RGVYERLLELGVSEEELAVVLQGVCYQRLIGGGGIVDFANKDYQEHQSTSWNAQIDQLLKDGHITSLQAETEKISYS...   313
NTDB id 1140910 DQN54 RS10160 WP 000249555.1  RGVYERLLELGVSEEELAVVLQGVCYQRLIGGGGIVDFANRDYQEHQAAKWNEQIDQLLKDGHITSLQAETEKISYS...   313
NTDB id 270 KZH43 RS09265 WP 000249564.1      RGVYERLLELGVSEEELAVVLQGVCYQRLIGGGGIVDFASRDYQEHQAAKWNEQIDQLLKDGHITSLQAETEKISYS...   313
NTDB id 229 SPD RS09895 WP 000249564.1        RGVYERLLELGVSEEELAVVLQGVCYQRLIGGGGIVDFASRDYQEHQAAKWNEQIDQLLKDGHITSLQAETEKISYS...   313
NTDB id 195 SPR RS09430 WP 000249564.1        RGVYERLLELGVSEEELAVVLQGVCYQRLIGGGGIVDFASRDYQEHQAAKWNEQIDQLLKDGHITSLQAETEKISYS...   313
NTDB id 160 SP RS10380 WP 000249564.1         RGVYERLLELGVSEEELAVVLQGVCYQRLIGGGGIVDFASRDYQEHQAAKWNEQIDQLLKDGHITSLQAETEKISYS...   313
consensus                                     *!!**!*!*!!*!***! **!****!!*!**********  ******* **********  **** **** ****


logo

NTDB id 617 LCA RS06480 WP 011375001.1        ...........   296
NTDB id 586 KW2 RS10855 WP 011836048.1        KIDTTDGESFE   326
NTDB id 584 DLJ51 RS00890 WP 019777327.1      ...........   315
NTDB id 385 SMU RS09035 WP 002263435.1        ...........   313
NTDB id 394 FSA28 RS09405 WP 002291652.1      ...........   313
NTDB id 429 SGO RS09420 WP 012130942.1        TSY........   319
NTDB id 500 SM12261 RS00945 WP 000249545.1    ...........   313
NTDB id 1140910 DQN54 RS10160 WP 000249555.1  ...........   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
consensus
```

X non conserved
X similar
X ≥ 50% conserved