```
logo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
NTDB id 358 SMU RS01425 WP 002263523.1      MKQVIYVVLIVIAVNILLEIIKRVTKRGGTVSSSNPLPDGQSKLFWRRHYKLVPQIDTRDCGPAVLASVAKHYGSNYSIAYLREL   85
NTDB id 421 SGO RS10260 WP 012131060.1      ..........................................MKFRKQHY..RAQVDTRDCGVAALAMIFGYYGSYFSLATLREK   41
NTDB id 483 SM12261 RS00275 WP 000668315.1  ..........................................MKFGKRHY..RPQVDQMDCGVASLAMVFGYYGSYYSLAHLREL   41
NTDB id 511 SMSK321 RS10730 WP 000668322.1  ..........................................MKFGKRHY..RPQVDQMDCGVASLAMVFGYYGSYYSLAHLREL   41
NTDB id 131 SP RS00255 WP 000668284.1       ..........................................MKFGKRHY..RPQVDQMDCGVASLAMVFGYYGSYYFLAHLREL   41
NTDB id 95410 QMM27 RS00225 WP 000668287.1  ..........................................MKFGKRHY..RPQVDQMDCGVASLAMVFGYYGSYYFLAHLREL   41
NTDB id 247 KZH43 RS00220 WP 000668290.1    ..........................................MKFGKRHY..RPQVDQMDCGVASLAMVFGYYGSYYFLAHLREL   41
NTDB id 206 SPD RS00235 WP 000668290.1      ..........................................MKFGKRHY..RPQVDQMDCGVASLAMVFGYYGSYYFLAHLREL   41
NTDB id 171 SPR RS00230 WP 000668290.1      ..........................................MKFGKRHY..RPQVDQMDCGVASLAMVFGYYGSYYFLAHLREL   41
consensus                                                                               **!***!!  **!*!**!!!*!*!!*****!!!*****!*!!!*

logo

NTDB id 358 SMU RS01425 WP 002263523.1      SKTNKQGTTALGIVEAAKKLGFETRSIKADMTLFDYNDLTYPFIVHVIKGKRLQHYYVVYGSQNNQLIIGDPDPSVKVTRMSKER  170
NTDB id 421 SGO RS10260 WP 012131060.1      AKTTNDGTTALGLVKVAEGLNFETRAFKADMSLFDLEEVSYPFIAHILKDGKLLHYYVVTGQDKHTIHIADPDPQVKMTKISRER  126
NTDB id 483 SM12261 RS00275 WP 000668315.1  AKTTMDGTTALGLVKVAEEIGFETRAIKADMTLFDLPDLTFPFVAHVLKEGKLLHYYVVTGQDKDSIHIADPDPGVKLTKLPRER  126
NTDB id 511 SMSK321 RS10730 WP 000668322.1  AKTTMDGTTALGLVKVAEEIGFETRAIKADMTLFDLPDLTFPFVAHVLKEGKLLHYYVVTGQDKGSIHIADPDPGVKLTKLPRER  126
NTDB id 131 SP RS00255 WP 000668284.1       AKTTMDGTTALGLVKVAEEIGFETRAIKADMTLFDLPDLTFPFVAHVLKEGKLLHYYVVTGQDKDSIHIADPDPGVKLTKLPRER  126
NTDB id 95410 QMM27 RS00225 WP 000668287.1  AKTTMDGTTALGLVKVAEEIGFETRAIKADMTLFDLPDLTFPFVAHVLKEGKLLHYYVVTGQDKDSIHIADPDPGVKLTKLPRER  126
NTDB id 247 KZH43 RS00220 WP 000668290.1    AKTTMDGTTALGLVKVAEEIGFETRAIKADMTLFDLPDLTFPFVAHVLKEGKLLHYYVVTGQDKDSIHIADPDPGVKLTKLPRER  126
NTDB id 206 SPD RS00235 WP 000668290.1      AKTTMDGTTALGLVKVAEEIGFETRAIKADMTLFDLPDLTFPFVAHVLKEGKLLHYYVVTGQDKDSIHIADPDPGVKLTKLPRER  126
NTDB id 171 SPR RS00230 WP 000668290.1      AKTTMDGTTALGLVKVAEEIGFETRAIKADMTLFDLPDLTFPFVAHVLKEGKLLHYYVVTGQDKDSIHIADPDPGVKLTKLPRER  126
consensus                                   *!!***!!!!!!*!**!****!!!!**!!!!*!!!******!!**!**!***!*!!!!!*!*******!*!!!!*!!*!****!!

logo

NTDB id 358 SMU RS01425 WP 002263523.1      FQSEWTGLAIFLAPQPNYKPHKGEKNGLSNFFPLIFKQKALMTYIIIASLIVTLIDIVGSYYLQGILDEYIPDQLISTLGMITIG  255
NTDB id 421 SGO RS10260 WP 012131060.1      FEQEWTGITIFLAPSPAYKPSQEKKNGLLDFIPLLIKQKGLITNIVLATLLVTLINIVGSYYLQSIIDTYVPDHMKTTLGMISIG  211
NTDB id 483 SM12261 RS00275 WP 000668315.1  FAEEWTGVTLFMAPSPDYKPHKDQKNGLLSFIPILVKQRGLIANIVLATLLVTLINIVGSYYLQSIIDTYVPDQMRSTLGIISIG  211
NTDB id 511 SMSK321 RS10730 WP 000668322.1  FAEEWTGVTLFMAPSPDYKPHKDQKNGLLSFIPILVKQRGLIANIVLATLLVTVINIVGSYYLQSIIDTYVPDQMRSTLGIISIG  211
NTDB id 131 SP RS00255 WP 000668284.1       FEEEWTGVTLFMAPSPDYKPHKEQKNGLLSFIPILVKQRGLIANIVLATLLVTVINIVGSYYLQSIIDTYVPDQMRSTLGIISIG  211
NTDB id 95410 QMM27 RS00225 WP 000668287.1  FEEEWTGVTLFMAPSPDYKPHKEQKNGLLSFIPILVKQRGLIANIVLATLLVTVINIVGSYYLQSIIDTYVPDQMRSTLGIISIG  211
NTDB id 247 KZH43 RS00220 WP 000668290.1    FEEEWTGVTLFMAPSPDYKPHKEQKNGLLSFIPILVKQRGLIANIVLATLLVTVINIVGSYYLQSIIDTYVPDQMRSTLGIISIG  211
NTDB id 206 SPD RS00235 WP 000668290.1      FEEEWTGVTLFMAPSPDYKPHKEQKNGLLSFIPILVKQRGLIANIVLATLLVTVINIVGSYYLQSIIDTYVPDQMRSTLGIISIG  211
NTDB id 171 SPR RS00230 WP 000668290.1      FEEEWTGVTLFMAPSPDYKPHKEQKNGLLSFIPILVKQRGLIANIVLATLLVTVINIVGSYYLQSIIDTYVPDQMRSTLGIISIG  211
consensus                                   !**!!!!***!*!!*!*!!!****!!!!**!*!***!!**!***!**!*!*!!*!*!!!!!!!!*!*!*!*!!****!!!*!*!!

logo

NTDB id 358 SMU RS01425 WP 002263523.1      LIITYIIQQVMAFAKEYLLAVLSLRLVIDVILSYIKHIFTLPMSFFATRRTGEITSRFTDANQIIDAVASTIFSIFLDMTMVILV  340
NTDB id 421 SGO RS10260 WP 012131060.1      LIIVYILQQFLSYAQEYLLLVLGQRLSIDVILSYIKHVFQLPMSFFATRRTGEIVSRFTDANRIIDALASTILSIFLDVSIVSII  296
NTDB id 483 SM12261 RS00275 WP 000668315.1  LVIVYILQQILSYAQEYLLLVLGQRLSIDVILSYIKHVFHLPMSFFATRRTGEIVSRFTDANSIIDALASTILSIFLDVSTVVII  296
NTDB id 511 SMSK321 RS10730 WP 000668322.1  LVIVYILQQILSYAQEYLLLVLGQRLSIDVILSYIKHVFHLPMSFFATRRTGEIVSRFTDANSIIDALASTILSIFLDVSTVVII  296
NTDB id 131 SP RS00255 WP 000668284.1       LVIVYIFQQILSYAQEYLLLVLGQRLSIDVILSYIKHVFHLPMSFFATRRTGEIVSRFTDANSIIDALASTILSIFLDVSTVVII  296
NTDB id 95410 QMM27 RS00225 WP 000668287.1  LVIVYILQQILSYAQEYLLLVLGQRLSIDVILSYIKHVFHLPMSFFATRRTGEIVSRFTDANSIIDALASTILSIFLDVSTVVII  296
NTDB id 247 KZH43 RS00220 WP 000668290.1    LVIVYILQQILSYAQEYLLLVLGQRLSIDVILSYIKHVFHLPMSFFATRRTGEIVSRFTDANSIIDALASTILSIFLDVSTVVII  296
NTDB id 206 SPD RS00235 WP 000668290.1      LVIVYILQQILSYAQEYLLLVLGQRLSIDVILSYIKHVFHLPMSFFATRRTGEIVSRFTDANSIIDALASTILSIFLDVSTVVII  296
NTDB id 171 SPR RS00230 WP 000668290.1      LVIVYILQQILSYAQEYLLLVLGQRLSIDVILSYIKHVFHLPMSFFATRRTGEIVSRFTDANSIIDALASTILSIFLDVSTVVII  296
consensus                                   !*!*!!*!!****!*!!!!*!**!!*!!!!!!!!!!*!*!!!!!!!!!!!!!!!!*!!!!!!!*!!!!*!!!!*!!!!!***!***
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logo

NTDB id 358 SMU RS01425 WP 002263523.1        GGVLLAQNNNLFFLTLLSIPIYAIIIFAFLKPFEKMNHEVMESNAVVSSSIIEDINGMETIKSLTSESARYQNIDSEFVDYLEKN   425
NTDB id 421 SGO RS10260 WP 012131060.1        AIVLFSQNSSLFFLTLLGIPVYALIIFLFMKPFEKMNHETMEANSLLSSSIIEDINGIETIKSLTSEKQRYQKIDKEFVTYLKKS   381
NTDB id 483 SM12261 RS00275 WP 000668315.1    SLVLFSQNTNLFFITLLALPIYTVIIFAFMKPFEKMNRDTMEANAVLSSSIIEDINGIETIKSLTSESQRYQKIDKEFVDYLKKS   381
NTDB id 511 SMSK321 RS10730 WP 000668322.1    SLVLFSQNTNLFFMTLLALPIYTVIIFAFMKPFEKMNRDTMEANAVLSSSIIEDINGIETIKSLTSESQRYQKIDKEFVDYLKKS   381
NTDB id 131 SP RS00255 WP 000668284.1         SLVLFSQNTNLFFMTLLALPIYTVIIFAFMKPFEKMNRDTMEANAVLSSSIIEDINGIETIKSLTSESQRYQKIDKEFVDYLKKS   381
NTDB id 95410 QMM27 RS00225 WP 000668287.1   SLVLFSQNTNLFFMTLLALPIYTVIIFAFMKPFEKMNRDTMEANAVLSSSIIEDINGIETIKSLTSESQRYQKIDKEFVDYLKKS   381
NTDB id 247 KZH43 RS00220 WP 000668290.1     SLVLFSQNTNLFFMTLLALPIYTVIIFAFMKPFEKMNRDTMEANAVLSSSIIEDINGIETIKSLTSESQRYQKIDKEFVDYLKKS   381
NTDB id 206 SPD RS00235 WP 000668290.1       SLVLFSQNTNLFFMTLLALPIYTVIIFAFMKPFEKMNRDTMEANAVLSSSIIEDINGIETIKSLTSESQRYQKIDKEFVDYLKKS   381
NTDB id 171 SPR RS00230 WP 000668290.1       SLVLFSQNTNLFFMTLLALPIYTVIIFAFMKPFEKMNRDTMEANAVLSSSIIEDINGIETIKSLTSESQRYQKIDKEFVDYLKKS   381
consensus                                    **!!**!!**!!!*!!!**!*!**!!!*!*!!!!!!!***!!*!***!!!!!!!!!!*!!!!!!!!!!**!!!*!!*!!!*!!*!*

logo

NTDB id 358 SMU RS01425 WP 002263523.1        FKLHKYSAIQTALKSGAKLILNVVILWYGSRLVMDNKISVGQLITRNALLSYFSNPIENIINLQSKLQSARVANTRLNEVYLVES   510
NTDB id 421 SGO RS10260 WP 012131060.1        FAYGRSESLQKVLKAAARLILNVLILWLGATLVMDQKISLGQLITYNTLLVYFTNPLENIINLQTKLQSARVANERLNEVYLVKS   466
NTDB id 483 SM12261 RS00275 WP 000668315.1    FTYSRAESQQKALKKVAHLLLNVGILWMGAVLVMDGKMSLGQLITYNTLLVYFTNPLENIINLQTKLQTAQVANNRLNEVYLVAS   466
NTDB id 511 SMSK321 RS10730 WP 000668322.1    FTYSRAESQQKALKKVAHLLLNVGILWMGAVLVMDGKMSLGQLITYNTLLVYFTNPLENIINLQTKLQTAQVANNRLNEVYLVTS   466
NTDB id 131 SP RS00255 WP 000668284.1         FTYSRAESQQKALKKVAHLLLNVGILWMGAVLVMDGKMSLGQLITYNTLLVYFTNPLENIINLQTKLQTAQVANNRLNEVYLVAS   466
NTDB id 95410 QMM27 RS00225 WP 000668287.1   FTYSRAESQQKALKKVAHLLLNVGILWMGAVLVMDGKMSLGQLITYNTLLVYFTNPLENIINLQTKLQTAQVANNRLNEVYLVAS   466
NTDB id 247 KZH43 RS00220 WP 000668290.1     FTYSRAESQQKALKKVAHLLLNVGILWMGAVLVMDGKMSLGQLITYNTLLVYFTNPLENIINLQTKLQTAQVANNRLNEVYLVAS   466
NTDB id 206 SPD RS00235 WP 000668290.1       FTYSRAESQQKALKKVAHLLLNVGILWMGAVLVMDGKMSLGQLITYNTLLVYFTNPLENIINLQTKLQTAQVANNRLNEVYLVAS   466
NTDB id 171 SPR RS00230 WP 000668290.1       FTYSRAESQQKALKKVAHLLLNVGILWMGAVLVMDGKMSLGQLITYNTLLVYFTNPLENIINLQTKLQTAQVANNRLNEVYLVAS   466
consensus                                    !********!**!!**!*!*!!!*!!!*!**!!!!*!*!*!!!!!*!*!!*!!*!!*!!!!!!!*!!!*!*!!!*!!!!!!!!*!

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NTDB id 358 SMU RS01425 WP 002263523.1        EFEKDGDLSENSFLDGDISFENLSYKYGFGRDTLSDINLSIKKGSKVSLVGASGSGKTTLAKLIVNFYEPNKGIVRINGNDLKVI   595
NTDB id 421 SGO RS10260 WP 012131060.1        EFEEKKLIKDLSHFQADIDFRGVSYKYGYGANVLSEIDLHIPAGSKTSFVGVSGSGKTTLAKMMVHFYAPNQGDICLGGVNLNQL   551
NTDB id 483 SM12261 RS00275 WP 000668315.1    EFEEKKTVEDLSLMKGDMTFKQVSYKYGYGRDVLLDINLTIPQGSKVAFVGISGSGKTTLAKMMVNFYDPSQGEISLGGVNLNQI   551
NTDB id 511 SMSK321 RS10730 WP 000668322.1    EFEEKKTVEDLSLMKGEMTFKQVYYKYGYGRDVLSDINLTIPQGSKVAFVGISGSGKTTLAKMMVNFYDPSQGEISLGGVNLNQI   551
NTDB id 131 SP RS00255 WP 000668284.1         EFEEKKTVEDLSLMKGDMTFKQVHYKYGYGRDVLSDINLTVPQGSKVAFVGISGSGKTTLAKMMVNFYDPSQGEISLGSVNLNQI   551
NTDB id 95410 QMM27 RS00225 WP 000668287.1   EFEEKKTVEDLSLMKGDMAFKQVHYKYGYGRDVLSDINLTVPQGSKVAFVGISGSGKTTLAKMMVNFYDPSQGEISLGSVNLNQI   551
NTDB id 247 KZH43 RS00220 WP 000668290.1     EFEEKKTVEDLSLMKGDMTFKQVHYKYGYGRDVLSDINLTVPQGSKVAFVGISGSGKTTLAKMMVNFYDPSQGEISLGGVNLNQI   551
NTDB id 206 SPD RS00235 WP 000668290.1       EFEEKKTVEDLSLMKGDMTFKQVHYKYGYGRDVLSDINLTVPQGSKVAFVGISGSGKTTLAKMMVNFYDPSQGEISLGGVNLNQI   551
NTDB id 171 SPR RS00230 WP 000668290.1       EFEEKKTVEDLSLMKGDMTFKQVHYKYGYGRDVLSDINLTVPQGSKVAFVGISGSGKTTLAKMMVNFYDPSQGEISLGGVNLNQI   551
consensus                                    !!!********!*******!****!!!!*!***!**!*!****!!!***!!*!!!!!!!!!!**!*!!*!**!********!***

logo

NTDB id 358 SMU RS01425 WP 002263523.1        DKTALRRHISYLPQQAYVFSGSIMDNLVLGAKEGTSQEDIIRACEIAEIRSDIEQMPQGYQTEL.SDGAGISGGQKQRIALARAL   679
NTDB id 421 SGO RS10260 WP 012131060.1        DKQALRQYINYLPQQPYVFNGTILENLLLGAREGTTQEDILRAVELAEIRSDIERMPLNYQTELSADGAGISGGQRQRIALARAL   636
NTDB id 483 SM12261 RS00275 WP 000668315.1    DKKALRQYINYLPQQPYVFNGTILDNLLLGAKEGTTQEDILRAVELAEIREDIERMPLNYQTELTSDGAGISGGQRQRIALARAL   636
NTDB id 511 SMSK321 RS10730 WP 000668322.1    DKKALRQYINYLPQQPYVFNGTILENLLLGAKEGTTQEDILRAVELAEIREDIERMPLNYQTELTSDGAGISGGQRQRIALARAL   636
NTDB id 131 SP RS00255 WP 000668284.1         DKKALRQYINYLSQQPYVFNGTILENLLLGAKEGTTQEDILRAVELAEIREDIERMPLNYQTELTSDGAGISGGQRQRIALARAL   636
NTDB id 95410 QMM27 RS00225 WP 000668287.1   DKKALRQYINYLPQQPYVFNGTILENLLLGAKEGTTQEDILRAVELAEIREDIERMPLNYQTELTSDGAGISGGQRQRIALARAL   636
NTDB id 247 KZH43 RS00220 WP 000668290.1     DKKALRQYINYLPQQPYVFNGTILENLLLGAKEGTTQEDILRAVELAEIREDIERMPLNYQTELTSDGAGISGGQRQRIALARAL   636
NTDB id 206 SPD RS00235 WP 000668290.1       DKKALRQYINYLPQQPYVFNGTILENLLLGAKEGTTQEDILRAVELAEIREDIERMPLNYQTELTSDGAGISGGQRQRIALARAL   636
NTDB id 171 SPR RS00230 WP 000668290.1       DKKALRQYINYLPQQPYVFNGTILENLLLGAKEGTTQEDILRAVELAEIREDIERMPLNYQTELTSDGAGISGGQRQRIALARAL   636
consensus                                    !!*!!!**!*!!*!!*!!!!*!*!**!!*!!!!*!!*!!!!!*!!*!*!!!!*!!!*!!**!!!!!**!!!!!!!!!*!!!!!!!!!
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logo
NTDB id 358 SMU RS01425 WP 002263523.1      LTQAPVLILDEATSSLDILTEKKIISNLLQMTEKTIIFVAHRLSISQRTDEVIVMDQGKIVEQGTHKELLAKQGFYYNLFN.   760
NTDB id 421 SGO RS10260 WP 012131060.1      LTDAPVLILDEATSSLDILTEKRIIDNLMVL.DKTIIFIAHRLTIAERSEQVVVLDQGRIVESGSHKELIEREGFYHHLVNS   717
NTDB id 483 SM12261 RS00275 WP 000668315.1  LTDAPVLILDEATSSLDILTEKRIVDNLMAL.DKTLIFIAHRLTIAERTEKVVVLDQGKIVEEGNHADLLAQGGFYAHLVNS   717
NTDB id 511 SMSK321 RS10730 WP 000668322.1  LTDAPILILDEATSSLDILTEKRIVDNLMAL.DKTLIFIAHRLTIAERTEKVVVLNQGKIVEEGKHADLLAQGGFYAHLVNS   717
NTDB id 131 SP RS00255 WP 000668284.1       LTDAPVLILDEATSSLDILTEKRIVDNLIAL.DKTLIFIAHRLTIAERTEKVVVLDQGKIVEEGKHADLLAQGGFYAHLVNS   717
NTDB id 95410 QMM27 RS00225 WP 000668287.1  LTDAPVLILDEATSSLDILTEKRIVDNLMAL.DKTLIFIAHRLTIAERTEKVVVLDQGKIVEEGKHADLLAQGGFYAHLVNS   717
NTDB id 247 KZH43 RS00220 WP 000668290.1    LTDAPVLILDEATSSLDILTEKRIVDNLIAL.DKTLIFIAHRLTIAERTEKVVVLDQGKIVEEGKHADLLAQGGFYAHLVNS   717
NTDB id 206 SPD RS00235 WP 000668290.1      LTDAPVLILDEATSSLDILTEKRIVDNLIAL.DKTLIFIAHRLTIAERTEKVVVLDQGKIVEEGKHADLLAQGGFYAHLVNS   717
NTDB id 171 SPR RS00230 WP 000668290.1      LTDAPVLILDEATSSLDILTEKRIVDNLIAL.DKTLIFIAHRLTIAERTEKVVVLDQGKIVEEGKHADLLAQGGFYAHLVNS   717
consensus                                   !!*!!*!!!!!!!!!!!!!!!!*!**!!*** *!!*!!*!!!!*!**!***!*!**!!*!!!*!*!**!****!!!**!*!*
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X non conserved

X similar

X $\geq$ 50% conserved