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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 60468 R8522 RS00330 WP 050123218.1   ..........................................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                                    **!***!!  **!*!**!!!*!*!!*****!!!*****!*!!!*
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NTDB id 358 SMU RS01425 WP 002263523.1       SKTNKQGTTALGIVEAAKKLGFETRSIKADMTLFDYNDLIYPFIVHVIKGKRLQHYYVVYGSQNNQLIIGDPDPSVKVTRMSKER   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 60468 R8522 RS00330 WP 050123218.1   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                                    *!!***!!!!!!*!**!****!!!!**!!!!*!!!******!!**!**!***!*!!!!!*!********!*!!!!*!!*!****!!
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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 60468 R8522 RS00330 WP 050123218.1   FEEEWTGVTLFMAPSPDYKPYKEQKNGLLSFIPILVKQRGLIANIVLATLLVTGINIVGSYYLQSIIDTYVPDQMRSTLGIISIG   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                                    !**!!!!***!*!!*!*!!!****!!!!**!*!***!!**!***!**!*!*!!*!*!!!!!!!!!*!*!*!*!!***!!!*!*!!
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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 60468 R8522 RS00330 WP 050123218.1   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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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 60468 R8522 RS00330 WP 050123218.1  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                                   **!!**!!**!!!*!!!**!*!**!!!*!*!!!!!!!!***!!*!***!!!!!!!!!!*!!!!!!!!!!**!!!*!!*!!!*!!*!*
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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 60468 R8522 RS00330 WP 050123218.1  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 60468 R8522 RS00330 WP 050123218.1  EFEEKKTVEDLSLMKGEMTFKQVHYKYGYGRDVLSDINLTVPQGSKVAFVGISGSGKTTLAKMMVNFYDPSQGEISLGGVNLNQI  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                                   !!!*********!********!****!!!!*!***!**!*!****!!!***!!*!!!!!!!!!!**!*!!*!**!*********!***
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NTDB id 358 SMU RS01425 WP 002263523.1      DKTALRRHISYLPQQAYVFSGSIMDNLVLGAKEGTSQEDIIRACEIAEIRSDIEQMPQGYQTEL.SDGAGISGGQKQRIALARAL  679
NTDB id 421 SGO RS10260 WP 012131060.1      DKQALRQYINYLPQQPYVFNGTILENLLLGARKEGTTQEDILRAVELAEIRSDIERMPLNYQTELSADGAGISGGQRQRIALARAL  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 60468 R8522 RS00330 WP 050123218.1  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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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 60468 R8522 RS00330 WP 050123218.1 LTDAPVLILDEATSSLDILTEKRIVDNLIAL.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
non conserved
similar
≥ 50% conserved