```
logo
NTDB id 25062 SYNPCC7942 RS10500 WP 011378301.1  MPDQPI.SPRYALIALNQFSSFGNKLVQAGFVDPEQLQTALVESRRSGQSLPQVISALTGQSLPPELMQQYRRQQLFELK   79
NTDB id 1410 SGL RS13950 WP 010873519.1          MTSSSSSSKKSRAVALRNYFSPFGNKLVAGGHVDAEQLRQALVQVKKTGRSLPEELKAVTGRELSPELLRQYKKNQLFELK   80
consensus                                        !*  * * *  !*   ! !!*!!!!!! *!*!!*!!!  !!!  ***! !!!  * !*!!  !*!!!* !!***!!!!!!

logo
NTDB id 25062 SYNPCC7942 RS10500 WP 011378301.1  ILHGVESLNPDQGQYSEEVIHELIADLVPIETCRRHQLVPLERHE.APPRAVVAMVDPNNLDALDELNRLLRPRGYTLQR  158
NTDB id 1410 SGL RS13950 WP 010873519.1          VLYGVDSVDPEVAPIATQQMAELIGRFFPLDTCRRFKFLPLAQQEGDPPSVLVAMVDPDNLAAQDELNRILRVKGFELRR  160
consensus                                        *!*!!*!* !* **     **!!!*   !**!!!!*  *!!  *!* !!  *!!!!!! !! ! !!!!!*!!**!* ! !

logo
NTDB id 25062 SYNPCC7942 RS10500 WP 011378301.1  LVITLEDYERLIAGYLDQQLERQQAMQAK.......QLGDFSEELANLDNLELTEISVQEEDLA..KALQEADDAPIVSL  229
NTDB id 1410 SGL RS13950 WP 010873519.1          LVVTQDDFNQLLEQYYAIREEWEAAQEKRDQERALDKLNDLTDIVGSID....MNLGEDKEDVDNALDSNDANQAPVINL  236
consensus                                        !!*! *!*  !*  !     !   !   ******** ! ! ** ** *!****  *    !!* **   **!  !!** !

logo
NTDB id 25062 SYNPCC7942 RS10500 WP 011378301.1  ANKILLKALTEGASDIHVEPQEDGLRVRLRRDGVLHQEFGTLPKKIQPALISRLKIMANLDIAERRVPQDGRIRRMFQGR  309
NTDB id 1410 SGL RS13950 WP 010873519.1          VNKILAKALQEGTSDIHVEPQEETLRIRFRKDGVLNQAFDPLPRKITPAVVARFKIMADMDIAERRSPQDGKIRRIYQGR  316
consensus                                         !!!! !!! !! !!!!!!!!!* !!*! !*!!!!*! ! *!!*!! !!** ! !!!! *!!!!!! !!!!*!!!**!!!

logo
NTDB id 25062 SYNPCC7942 RS10500 WP 011378301.1  KIDFRVNSLPSHFGEKICMRLLDNSATQLGLDQLITDEEALALVRDMGSRPYGLILVTGPTGSGKSTSLYSLLAERNDPA  389
NTDB id 1410 SGL RS13950 WP 010873519.1          KVDFRVNTLPSRYGEKVCLRILDNSATQLGLDFLITNPETLQTVRELAARPYGLMLVTGPTGSGKSTTLYSVLAERNSPE  396
consensus                                        !*!!!!!*!!!**!!!*!*!*!!!!!!!!!! !!! *! !  !!*** !!!!!*!!!!!!!!!!!!*!!!*!!!!! !

logo
NTDB id 25062 SYNPCC7942 RS10500 WP 011378301.1  ININTAEDPIEYTLPGLTQVQVLREKGMNFASILRAFMRQDPDVILVGETRDLETARTAIEAALTGHLVLTTLHANDAPS  469
NTDB id 1410 SGL RS13950 WP 010873519.1          VNINTAEDPIEYALPGITQVQVIREKGMDFSNILRAFMRQDPDVILVGETRDKETAKTAIEAALTGHLVLTTLHTNDAAG  476
consensus                                        *!!!!!!!!!!! !!!*!!!!!*!!!!! !  !!!!!!!!!!!!!!!!!!! !!!*!!!!!!!!!!!!!!!! !!!*

logo
NTDB id 25062 SYNPCC7942 RS10500 WP 011378301.1  AIARLSEMGVEPYLVSGSLIGVVSQRLMRRVCPDCRVPYTPNPEELGRYGLSASQELDVTFYKAKTLTSDSLAQARSQGQ  549
NTDB id 1410 SGL RS13950 WP 010873519.1          AIARLDEMGVEPFMVSGSLLGVLAQRLMRKVCTECRIAYHPSKEELSRFGLSASGDEVVTFYKANSLSPDETHLARQKGN  556
consensus                                        !!!!! !!!!!!**!!!!!*!!* !!!!!*!!**!!**!*! *!!! !*!!!!! *  !!!!!! *!**! ** !!  !*
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logo
NTDB id 25062 SYNPCC7942 RS10500 WP 011378301.1  VCRTCRGTGYKGRVGVYEVMRVNEVLQVAINQGLPTERLKEIAVEQGMKTLLSYSLELVRQGYTTFEEVDRVTFTDSGVE   629
NTDB id 1410 SGL RS13950 WP 010873519.1          LCQKCSGSGYKGRVGVYEVMRNSERIAELINQGATTDRIKDCAVEEGMITLLAYSLNLVQEGYTTLEEVERVTFTDTGLE   636
consensus                                        *!  ! !*!!!!!!!!!!!!!  ! *   !!!! *!*!*!**!!! !! !!! !!! !!  !!!! !!!*!!!!!!*!*!
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logo
NTDB id 25062 SYNPCC7942 RS10500 WP 011378301.1  AELKAKRKLGLTCNTCGAGLQPEWLDCPYCLTPRFGN   666
NTDB id 1410 SGL RS13950 WP 010873519.1          SEMRAKRKSALTCRTCAAELQQEWLDCPYCMTSRFS.   672
consensus                                         !**!!!! *!!! !!*! !!*!!!!!!!!*!*!! *
```

X non conserved

X similar

X $\geq$ 50% conserved