```
logo

NTDB id 1158962 QOR45 RS01045 WP 000138506.1  MTENRKKLVEVKNVSLTFNKGKANEVRAIDNVSFDIYEGEVFGLVGESGSGKTTVGRSILKLYDISDGEITFNGEVIS.H   79
NTDB id 479 HSISS4 RS06980 WP 021143812.1     ...MPEKLVEVKDVEISFGEGSKK.FVAVHNANFFINKGETFSLVGESGSGKTTIGRAIIGLNDTSNGEIIFDGKKINGH   76
NTDB id 296 STER RS06910 WP 011681415.1       ...MPEKLVEVKNVEISFGEGRKK.FVAVHNANFFINKGETFSLVGESGSGKTTIGRAIIGLNDTSNGEIIFDGKKINGY   76
NTDB id 328 STU RS16110 WP 002951426.1        ...MPEKLVEVKDVEISFGEGRKK.FVAVHNANFFINKGETFSLVGESGSGKTTIGRAIIGLNDTSNGEIIFDGKKINGY   76
consensus                                        ***!!!!!! !***!**!*** **!**!**!*!**!!*!*!!!!!!!!!!!!*!!*!**!*!*!*!!!*!*!**!***

logo

NTDB id 1158962 QOR45 RS01045 WP 000138506.1  LKGKALHSFRKDAQMIFQDPQASLNGRMKIRDIVAEGLDIHKLAKSKSDRDSKVQALLDLVGLNKDHLTRYPHEFSGGQR   159
NTDB id 479 HSISS4 RS06980 WP 021143812.1     LSHSEKNDLIRRIQMIFQDPAASLNERATVDYILSEGLHNFHLYKDEEDRKAKIKKIIKEVGLLEEHLTRYPHEFSGGQR   156
NTDB id 296 STER RS06910 WP 011681415.1       LSHSEKNDLIRRIQMIFQDPAASLNERATVDYILSEGLYNFHLYKDEEERKAKIKEIIKEVGLLEEHLTRYPHEFSGGQR   156
NTDB id 328 STU RS16110 WP 002951426.1        LSHSEKNDLIRRIQMIFQDPAASLNERATVDYILSEGLYNFHLYKDEEERKAKIKEIIKEVGLLEEHLTRYPHEFSGGQR   156
consensus                                     !************!!!!!!!*!!!!*!*****!**!!!****!*!****!**!*******!!!***!!!!!!!!!!!!!!

logo

NTDB id 1158962 QOR45 RS01045 WP 000138506.1  QRIGIARALAVEPKFIIADEPISALDVSIQAQVVNLMQKLQREQGLTYLFIAHDLSMVKYISDRIGVMHWGKLLEVGTSD   239
NTDB id 479 HSISS4 RS06980 WP 021143812.1     QRIGIARSLVMQPDLVIADEPISALDVSVRAQVLNLLKKFQKELGLTYLFIAHDLSVVRFISDRIAVIYKGTIVEVAETE   236
NTDB id 296 STER RS06910 WP 011681415.1       QRIGIARSLVMQPDLVIADEPISALDVSVRAQVLNLLKKFQKELGLTYLFIAHDLSVVRFISDRIAVIYKGTIVEVAETE   236
NTDB id 328 STU RS16110 WP 002951426.1        QRIGIARSLVMQPDLVIADEPISALDVSVRAQVLNLLKKFQKELGLTYLFIAHDLSVVRFISDRIAVIYKGTIVEVAETE   236
consensus                                     !!!!!!!*!***!***!!!!!!!!!!!!!**!!!*!!**!*!*!*!!!!!!!!!!!!!*!**!!!!!*!***!***!!****

logo

NTDB id 1158962 QOR45 RS01045 WP 000138506.1  DVYNNPIHPYTKSLLSAIPEPDPESERQRVHQPYNPAIEQDG.QERQMHEITPGHFVLSTPQEAEEYKKQIL.   310
NTDB id 479 HSISS4 RS06980 WP 021143812.1     ELYNNPIHPYTKSLLSAVPIPDPILERKKVLKVYDPNQHDYSVDKPEMVEVRPGHFVWGNKAEIETYRKEQSK   309
NTDB id 296 STER RS06910 WP 011681415.1       ELYNNPIHPYTKSLLSAVPIPDPILERKKVLKVYDPNQHDYSVDKPEMVEVRPGHFVWGNKTEIETYRKEQSK   309
NTDB id 328 STU RS16110 WP 002951426.1        ELYNNPIHPYTKSLLSAVPIPDPILERKKVLKVYDPNQHDYSVDKPEMVEVRPGHFVWGNKTEIETYRKEQSK   309
consensus                                     **!!!!!!!!!!!!!!!!!*!*!!!**!!**!***!*!***********!*!**!!!!!*****!*!*!*!****
```

X non conserved

X similar

X $\geq$ 50% conserved