```
logo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
NTDB id 20 SA RS08005 WP 001802022.1          MVLLYQFLLRYKDFLTQWKLYIISAVVLIMVLIGFIFWRQDDYTSRNFENKDTALKQSTSENNSLSKLEDVQVKDGDNSK   80
NTDB id 36 MW RS08230 WP 001793467.1          MVLLYQFLLRYKDFLTQWKLYIISAVVLIMVLIGFIFWRQDDYTSRNFENKDNALKQSTSENSSLSKVEDVQVKDGDNSK   80
NTDB id 1242 Cj0011c YP 002343483.1           ..................................................................................    0
NTDB id 247028 CGZ65 RS10815 WP 096296184.1   ..................................................................................    0
NTDB id 1127 NGFG RS10560 WP 003703428.1      ..................................................................................    0
NTDB id 1126 NGFG RS09375 WP 003703428.1      ..................................................................................    0
NTDB id 1125 NGFG RS07215 WP 003703428.1      ..................................................................................    0
NTDB id 1108 NGFG RS06525 WP 003703428.1      ..................................................................................    0
consensus

logo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
NTDB id 20 SA RS08005 WP 001802022.1          NKGPVYVDVKGAVKHPNVYKMTSKDRVVDLLDKAQLLDDADVSRINLSEKLTDQKMIFIPHKGQKNVEPQIEVNSVHVKN  160
NTDB id 36 MW RS08230 WP 001793467.1          NKGPVYVDVKGAVKHPNVYKMTSKDRVVDLLDKAQLLEDADVSQINLSEKLTDQKMIFIPHKGQKNVEPQIGVNSVHVKN  160
NTDB id 1242 Cj0011c YP 002343483.1           ..................................................................MK..KLLFLFFA..L   11
NTDB id 247028 CGZ65 RS10815 WP 096296184.1   ..................................................................MK..KIIFYALTTLV   13
NTDB id 1127 NGFG RS10560 WP 003703428.1      ......MSRGGA..TP..YRFL.......................LIRHIVARCGLLFATLKGKTMK..KMFVLFCMLFS   45
NTDB id 1126 NGFG RS09375 WP 003703428.1      ......MSRGGA..TP..YRFL.......................LIRHIVARCGLLFATLKGKTMK..KMFVLFCMLFS   45
NTDB id 1125 NGFG RS07215 WP 003703428.1      ......MSRGGA..TP..YRFL.......................LIRHIVARCGLLFATLKGKTMK..KMFVLFCMLFS   45
NTDB id 1108 NGFG RS06525 WP 003703428.1      ......MSRGGA..TP..YRFL.......................LIRHIVARCGLLFATLKGKTMK..KMFVLFCMLFS   45
consensus                                           *   **   *  **                          *   *    ***   **  **  ** ***  *

logo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
NTDB id 20 SA RS08005 WP 001802022.1          GNTNNTKVNLNTASVSELMSVPGVGQAKANAIVEYRNQQGAFQEIDDLKKVKGFGSKTFDKLKSYFTI............  228
NTDB id 36 MW RS08230 WP 001793467.1          GNTNNTKVNLNTASVSELMSVPGVGQAKANAIVEYRNQQGAFQEIDDLKKVKGFGSKTFDKLKSYFTI............  228
NTDB id 1242 Cj0011c YP 002343483.1           TAFLFGAVNINTATLKELKSLNGIGEAKAKAILEYRKE.ANFTSIDDLKKVKGIGDKLFEKIKNDITIE...........   79
NTDB id 247028 CGZ65 RS10815 WP 096296184.1   ASVSAAAVNVNTASESELTALPGVGPAKAKAIVEYRKQHGNFKTLDELKNVKGIGEGIFSKLKNEATVAAPAKKTAQTAV   93
NTDB id 1127 NGFG RS10560 WP 003703428.1      CAFSLAAVNINAASQQELEALPGIGPAKAKAIAEYRAQNGAFKSVDDLIKVKGIGPAVLAKLKDQASVGAPAPKGPAKPV  125
NTDB id 1126 NGFG RS09375 WP 003703428.1      CAFSLAAVNINAASQQELEALPGIGPAKAKAIAEYRAQNGAFKSVDDLIKVKGIGPAVLAKLKDQASVGAPAPKGPAKPV  125
NTDB id 1125 NGFG RS07215 WP 003703428.1      CAFSLAAVNINAASQQELEALPGIGPAKAKAIAEYRAQNGAFKSVDDLIKVKGIGPAVLAKLKDQASVGAPAPKGPAKPV  125
NTDB id 1108 NGFG RS06525 WP 003703428.1      CAFSLAAVNINAASQQELEALPGIGPAKAKAIAEYRAQNGAFKSVDDLIKVKGIGPAVLAKLKDQASVGAPAPKGPAKPV  125
consensus                                      *** **!!*! !*  !! ***!*!*!!!*!! !!! ****!***!*! *!!!*! **  !*!  ******* *     *

logo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
NTDB id 20 SA RS08005 WP 001802022.1          ......   228
NTDB id 36 MW RS08230 WP 001793467.1          ......   228
NTDB id 1242 Cj0011c YP 002343483.1           ......    79
NTDB id 247028 CGZ65 RS10815 WP 096296184.1   KK....    95
NTDB id 1127 NGFG RS10560 WP 003703428.1      LPAVKK   131
NTDB id 1126 NGFG RS09375 WP 003703428.1      LPAVKK   131
NTDB id 1125 NGFG RS07215 WP 003703428.1      LPAVKK   131
NTDB id 1108 NGFG RS06525 WP 003703428.1      LPAVKK   131
consensus
```

X non conserved
X similar
X $\geq$ 50% conserved