```
logo
NTDB id 1169 A1552VC RS11075 WP 000648511.1    ............MKATQTLPLKNYRWKGINSNGKK.VSGQMLAISEIEVRDKLKDQHIQIKKLKKGSVSLLAR.LTHRVK   66
NTDB id 1402 DSB67 RS12670 WP 010643257.1      ............MKTIAPQLKNYRWKGINSSGKK.TSGNVLAMTEIEVRERLDAQHIKIKKLKKGSISFITK.ISHRVK   65
NTDB id 1112 NGFG RS09215 WP 003689811.1       ......MAKNGG.FSLFAKKEKRFIFEGRHSASDKLVNGEVSAFTEEEARKKLAKRGIRPLQITRVK.....TSSKRKIT   68
NTDB id 1113 AAA85695.1 219..1451( )           ......MAKNGG.FSLFAKKEKRFIFEGRHSASDKLVNGEVSAFTEEEARKKLAKRGIRPLQITRVK.....TSSKRKIT   68
NTDB id 1042346 ABQG35 RS05100 WP 104570928.1 MSAVRSTTKNKPASISAEQQMSPFVWEGTDKRGVK.MKGEQVARNANMLRAELRRQGITPSVVKAKPKPLFGA.AGKKIT   78
NTDB id 1252 GC085 RS07730 WP 011213805.1      ............MDKNSPPLLTFHYQGINKAGQK.MEGDIQARSLAIAKADLRKQGIVTNKVVKKRKPLFDR.KNKKIT   65
NTDB id 1198 PSJM300 03950 AFN76868.1          ............MAQKAIKNSVFTWEGLDRQGAK.IKGELSGVSPALVKAQLRKQGINPQKVRKKSISLFS..AGKKIK   64
NTDB id 1016 ACIAD RS01680 WP 004920476.1      ............MAAKKTQVMPVFAYEGVDRKGIK.LKGELPARNMALAKVTLRKQGITIRTIREKRKNIFEGLLKKKVK   67
NTDB id 1059 ABD1 RS01610 WP 000279215.1       ............MAVKKAQMMPTFAYEGVDRKGVK.IKGELPAKNMALAKVTLRKQGVTVRNIREKRKNILEGLFKKKVT   67
consensus                                                   *  *  * **!* * * ! * !** * *  ***  !*****   *****  *      ****

logo
NTDB id 1169 A1552VC RS11075 WP 000648511.1    SKDITILTRQLATMLTTGVPIVQALKLVGDNHRKAEMKSILAQITKSVEAGTPLSKAMRTASAHFDTLYVDLVETGEMSG   146
NTDB id 1402 DSB67 RS12670 WP 010643257.1      GKDITIFTRQIATMLMTGVPIVQALKLVSENHKKAEMKSILMSVTRAVEAGTPMSKAMRTASTHFDPLYTDLIATGEQSG   145
NTDB id 1112 NGFG RS09215 WP 003689811.1       QEDITVFTRQLSTMIKAGLPLMQAFEIVARGHGNPSMTEMLMEIRGQVEQGSSLSRAFSNHPKYFDRFYCNLVAAGETGG   148
NTDB id 1113 AAA85695.1 219..1451( )           QEDITVFTRQLSTMINAGLPLMQAFEIVARGHGNPSMTEMLMEIRGQVEQGSSLSRAFSNHPKYFDRFYCNLVAAGETGG   148
NTDB id 1042346 ABQG35 RS05100 WP 104570928.1 PKEIAFFSRQMATMMKSGVPIVGSLEIIGNGHKNPRMKQMVGQIRTDIEGGSSLHEAVSKHPVQFDELYRNLIKAGEGAG   158
NTDB id 1252 GC085 RS07730 WP 011213805.1      QADITVFSRQLATMIESGIPLVQAFDIVAKGQSNKRLKDLIETIKHDIETGLTLAESLIKHPLYFNELFCNLVDAGEKSG   145
NTDB id 1198 PSJM300 03950 AFN76868.1          PMDIALFTRQMATMMKAGVPLLQSFDIIGEGFDNPNMRKLVDDLKQEVAAGNSFASSLRKKPQYFDDLYCNLVDSGEQSG   144
NTDB id 1016 ACIAD RS01680 WP 004920476.1      PLDIAIFTRQLATMMKAGVPLVQAFEIVAEGLENPAMRDVVLGLKNEVEGCNTFAGALRKYPQYFDNLFCSLIESGEQSG   147
NTDB id 1059 ABD1 RS01610 WP 000279215.1       TLDITIFTRQLATMMKAGVPLVQGFEIVAEGLENPAMREVVLGIKGEVEGCSTFASALRKYPQHFDNLFCSLVESGEQSG   147
consensus                                       *!****!!**!!***!*!************ ** ****** ** ****!***  **** * *!* ****!***!! *!

logo
NTDB id 1169 A1552VC RS11075 WP 000648511.1    NLPEVFERLATYREKSEQLRAKVIKALIYPSMVVLVALGVSYLMLTMVIPEFESMFKGFGAELPWFTQQVLKLSHWVQAY   226
NTDB id 1402 DSB67 RS12670 WP 010643257.1      NLSQVFERLATYREKSEQLRAKVIKALIYPAMVVLVALGVSYLMLTRVIPEFEKMFTGFGADLPAFTQMVLNLSAWTQNW   225
NTDB id 1112 NGFG RS09215 WP 003689811.1       VLESLLDKLAIYKEKTQAIRKKVKTALTYPVSVIAVAIGLVFVMMIFVLPAFKEVYANMGAELPPLTQTVMDMSDFFVSY   228
NTDB id 1113 AAA85695.1 219..1451( )           VLESLLDKLAIYKEKTQAIRKKVKTALTYPVSVIAVAIGLVFVMMIFVLPAFKEVYANMGAELPALTQTVMDMSDFFVSY   228
NTDB id 1042346 ABQG35 RS05100 WP 104570928.1 VLETVLDTTASYKENLEALKGKIKKALFYPAMVVAVALLVSSILLIWVVPQFEDVFKGFGAELPAFTQLIVNASRFMVSY   238
NTDB id 1252 GC085 RS07730 WP 011213805.1      SLDIMLDKVATYKEKIEIIKKKIKKALTYPIAVMVVALLVTAGLLIYVVPQFESLFKGFGADLPAMTRAVITMSEFMQAY   225
NTDB id 1198 PSJM300 03950 AFN76868.1          SLETLLDRVATYKEKTEALKAKIKKAMNYPIAVVLVAVIVTAILLIKVVPQFQDVFANFGAELPAFTLMVIGLSEALQAW   224
NTDB id 1016 ACIAD RS01680 WP 004920476.1      SLEIMLDRVAVYKEKSEVLKQKIKKAMKYPATVIVVAIVVTIILMVKVVPVFKDLFTSFGADLPAFTQLVVNMSNWMQDY   227
NTDB id 1059 ABD1 RS01610 WP 000279215.1       ALETMLDRVAIYKEKSELLKQKIKKAMKYPATVIVVAIVVTIILMVKVVPVFQDLFASFGADLPAFTQMVVNMSKWMQEY   227
consensus                                       !*******!*!*!*** ** !***!* !!  !**!!**** **** !*! ! ***  *!!*!!**!**** *! *** *

logo
NTDB id 1169 A1552VC RS11075 WP 000648511.1    SLWAFIAIAAAIFGLKALRKNSFQIRLKTSRLGLKFPIIGNVLAKASIAKFSRTLATSFAAGIPILASLKTTAKTSGNVH   306
NTDB id 1402 DSB67 RS12670 WP 010643257.1      GPFIGLSFVSLLISGKIMSQRSDSFRLLAARSSLRVPILGPVLSKAAIAKFSRTLATSFSAGIPILTALKTTSKTSGNMH   305
NTDB id 1112 NGFG RS09215 WP 003689811.1       GWMVLIALGFAIYGFLKLKARSIKIQRRMDAILLRMPIFGDIVRKGTIARWGRTTATLFAAGVPLVDVLDSTAGAAGNLI   308
NTDB id 1113 AAA85695.1 219..1451( )           GWMVLIALGFAIYRFLKLKARSIKIQRRMDAILLRMPIFGDIVRKGTIARWGRTTATLFAAGVPLVDVLDSTAGAAGNLI   308
NTDB id 1042346 ABQG35 RS05100 WP 104570928.1 WWLMLLVIVGSLVGFIFAYKRSLAMQHGMDRLVLKVPIIGQIMHNSSIARFARTTAVTFKAGVPLVEALGIVAGATGNSV   318
NTDB id 1252 GC085 RS07730 WP 011213805.1      WYIIFGALGGVVYSFFYAKNHSLEFAQTIDRVMLKLPVIGPILEKAAIARFARTLSITFAAGLPLVEALKSVAGATGNII   305
NTDB id 1198 PSJM300 03950 AFN76868.1          WYVVLAGFVGAAYAFKQAHTRSEKFRNWFDRLMLKVPVVGDILYKSSVARFARTLSTTFAAGVPLVDALDSVAGATGNVV   304
NTDB id 1016 ACIAD RS01680 WP 004920476.1      WFILILVIGAAIAGFLEARKRSKRFRDQLDRLVLRLPIVGDLVYKAIIARYSRTLATTFAAGVPLIDALASTAGATNNTV   307
NTDB id 1059 ABD1 RS01610 WP 000279215.1       WFIMIIAIGAVIAAFLEAKKRSKKFRDGLDKLALKLPIFGDLVYKAIIARYSRTLATTFAAGVPLIDALESTAGATNNVI   307
consensus                                      *************** ** *! ***  *****!**!*!*** ****!****!!****!*!!*!****! *******!**
```

```
logo
NTDB id 1169 A1552VC RS11075 WP 000648511.1     FETAINEVYRDTAAGMPMYIAMRNTEAFPEMVLQMVMIGEESGQLDDMLNKVATIYEFEVDNTVDNLGKILEPLIIVFLG   386
NTDB id 1402 DSB67 RS12670 WP 010643257.1       YQLAIEEVYRDTAAGMPMYIAMRHCHVFPELVLQMVMIGEESGRLDDMLNKIAAIYEFEVDNTVDNLSKILEPLIIVFLG   385
NTDB id 1112 NGFG RS09215 WP 003689811.1        YEEATREIRTRVIQGLSMTSGMRATELFPNMMLQMSSIGEESGSLDDMLNKAAEFYEDEVDNAVGRLSAMMEPIIIVILG   388
NTDB id 1113 AAA85695.1 219..1451( )            YEEATREIRTRVIQGLSMTSGMRATELFPNMMLQMSSIGEESGSLDDMLNKAAEFYEDEVDNAVGWLSAMMEPIIILILG   388
NTDB id 1042346 ABQG35 RS05100 WP 104570928.1  YEKAVLRMREDVSVGYPVNVSMKQVNLFPHMVIQMTAIGEEAGALDAMLFKVAEYYEQEVNNAVDALSSLIEPLIMVFIG   398
NTDB id 1252 GCO85 RS07730 WP 011213805.1       YAKATDKIREEVATGQQMFIAMENTHLFPNMVIQMVAIGEESGALEKMLSKVADFYEEEVNNAVDALSSLLEPIIMSILG   385
NTDB id 1198 PSJM300 03950 AFN76868.1           FRSATNKIKSDVSSGMQLNFSMRTTGTFPSMAVQMTAIGEESGALDEMLSKVATFYEDEVDNMVDGLTALMEPMIMAVLG   384
NTDB id 1016 ACIAD RS01680 WP 004920476.1       YEQAVLKIREDVSTGQQLNFAMRVSNRFPTMAIQMVAIGEESGALDEMLDKVANYYESEVDHAVDGLTSMMEPLIMAILG   387
NTDB id 1059 ABD1 RS01610 WP 000279215.1        YEKAVMKIREDVATGQQLQFAMRISNRFPSMAIQMVAIGEESGALDSMLDKVATYYENEVDNAVDGLTSMMEPLIMAILG   387
consensus                                       ** !* *** **  !* *  *!* * *!! ***!!**!!!!*!*!**!! !*! *!! !!***!**!* **!!*!****!
```

```
<0
logo
NTDB id 1169 A1552VC RS11075 WP 000648511.1     TVVGGLVVAMYLPIFNLMSVLG.   408
NTDB id 1402 DSB67 RS12670 WP 010643257.1       VVVGGLVTAMYLPIFNLMSVLG.   407
NTDB id 1112 NGFG RS09215 WP 003689811.1        LVIGTLLVAMYLPLFNLGNVVA.   410
NTDB id 1113 AAA85695.1 219..1451( )            LVIGTLLVAMYLPLFNLGNVVA*   410
NTDB id 1042346 ABQG35 RS05100 WP 104570928.1  TVVGGMVIGMYLPIFKLASVVG.   420
NTDB id 1252 GCO85 RS07730 WP 011213805.1       ILVGGLVVAMYLPIFKLGSAV..   406
NTDB id 1198 PSJM300 03950 AFN76868.1           VLVGGLIIAMYLPIFQMGSVV..   405
NTDB id 1016 ACIAD RS01680 WP 004920476.1       ILVGGLVIAMYLPIFQMGSVV..   408
NTDB id 1059 ABD1 RS01610 WP 000279215.1        VLVGGLVIAMYLPIFQMGSVV..   408
consensus                                       ***!*****!!!!*!******
```

X non conserved
X similar
X ≥50% conserved