logo

```
NTDB id 1169 A1552VC RS11075 WP 000648511.1     .MKATQ......TLPLKNYRWKGINSNG.KKVSGQMLAISEIEVRDKLKDQHIQIKKLKKGSVSLLAR.LTHRVKSKDIT   71
NTDB id 1402 DSB67 RS12670 WP 010643257.1       ..MKTI......APQLKNYRWKGINSSG.KKTSGNVLAMTEIEVRERLDAQHIKIKKLKKGSISFITK.ISHRVKGKDIT   70
NTDB id 1113 AAA85695.1 219..1451( )            ..MAKNGGFSLFAKKEKRFIFEGRHSASDKLVNGEVSAFTEEEARKKLAKRGIRPLQITRVK.....TSSKRKITQEDIT   73
NTDB id 1112 NGFG RS09215 WP 003689811.1        ..MAKNGGFSLFAKKEKRFIFEGRHSASDKLVNGEVSAFTEEEARKKLAKRGIRPLQITRVK.....TSSKRKITQEDIT   73
NTDB id 1252 GCO85 RS07730 WP 011213805.1       ..MDKN......SPPLLTFHYQGINKAG.QKMEGDIQARSLAIAKADLRKQGIVTNKVVKKRKPLFDR.KNKKITQADIT   70
NTDB id 1016 ACIAD RS01680 WP 004920476.1       .MAAKK......TQVMPVFAYEGVDRKG.IKLKGELPARNMALAKVTLRKQGITIRTIREKRKNIFEGLLKKKVKPLDIA   72
NTDB id 1059 ABD1 RS01610 WP 000279215.1        .MAVKK......AQMMPTFAYEGVDRKG.VKIKGELPAKNMALAKVTLRKQGVTVRNIREKRKNILEGLFKKKVTTLDIT   72
NTDB id 1080171 ACJ3W8 RS13525 WP 409423955.1   MAKKQE......DRGLDTFQWVGVSARG.KKLEGELSGSSIALVKAQLRKQGITPSKVKRKAKPLFGLQSVKKITPKDIA   73
NTDB id 1198 PSJM300 03950 AFN76868.1           ..MAQK......AIKNSVFTWEGLDRQG.AKIKGELSGVSPALVKAQLRKQGINPQKVRKKSISLFS..AGKKIKPMDIA   69
consensus                                         ***         *  *  *  **!*   * *** !** * * ****  !*****   ******  *      ****  !!*
```

logo

```
NTDB id 1169 A1552VC RS11075 WP 000648511.1     ILTRQLATMLTTGVPIVQALKLVGDNHRKAEMKSILAQITKSVEAGTPLSKAMRTASAHFDTLYVDLVETGEMSGNLPEV   151
NTDB id 1402 DSB67 RS12670 WP 010643257.1       IFTRQIATMLMTGVPIVQALKLVSENHKKAEMKSILMSVTRAVEAGTPMSKAMRTASTHFDPLYTDLIATGEQSGNLSQV   150
NTDB id 1113 AAA85695.1 219..1451( )            VFTRQLSTMINAGLPLMQAFEIVARGHGNPSMTEMLMEIRGQVEQGSSLSRAFSNHPKYFDRFYCNLVAAGETGGVLESL   153
NTDB id 1112 NGFG RS09215 WP 003689811.1        VFTRQLSTMIKAGLPLMQAFEIVARGHGNPSMTEMLMEIRGQVEQGSSLSRAFSNHPKYFDRFYCNLVAAGETGGVLESL   153
NTDB id 1252 GCO85 RS07730 WP 011213805.1       VFSRQLATMIESGIPLVQAFDIVAKGQSNKRLKDLIETIKHDIETGLTLAESLIKHPLYFNELFCNLVDAGEKSGSLDIM   150
NTDB id 1016 ACIAD RS01680 WP 004920476.1       IFTRQLATMMKAGVPLVQAFEIVAEGLENPAMRDVVLGLKNEVEQGNTFAGALRKYPQYFDNLFCSLIESGEQSGSLEIM   152
NTDB id 1059 ABD1 RS01610 WP 000279215.1        IFTRQLATMMKAGVPLVQGFEIVAEGLENPAMREVVLGIKGEVEQGSTFASALRKYPQHFDNLFCSLVESGEQSGALETM   152
NTDB id 1080171 ACJ3W8 RS13525 WP 409423955.1   LVTRQIATMLMAGVPLIQSIEMIGSGSTNKSVSKLMSAIGDEVKAGLPLSNALRKHPRYFDDLYCDLVASGEQSGALDRI   153
NTDB id 1198 PSJM300 03950 AFN76868.1           LFTRQMATMMKAGVPLLQSFDIIGEGFDNPNMRKLVDDLKQEVAAGNSFASSLRKKPQYFDDLYCNLVDSGEQSGSLETL   149
consensus                                       ***!!**!!* *!*!**!********  **  ****** **  ****!**** **** *  *!* ***  !***!!**!  !* *
```

logo

```
NTDB id 1169 A1552VC RS11075 WP 000648511.1     FERLATYREKSEQLRAKVIKALIYPSMVVLVALGVSYLMLTMVIPEFESMFKGFGAELPWFTQQVLKLSHWVQAYSLWAF   231
NTDB id 1402 DSB67 RS12670 WP 010643257.1       FERLATYREKSEQLRAKVIKALIYPAMVVLVALGVSYLMLTRVIPEFEKMFTGFGADLPAFTQMVLNLSAWTQNWGPFIG   230
NTDB id 1113 AAA85695.1 219..1451( )            LDKLAIYKEKTQAIRKKVKTALTYPVSVIAVAIGLVFVMMIFVLPAFKEVYANMGAELPALTQTVMDMSDFFVSYGWMVL   233
NTDB id 1112 NGFG RS09215 WP 003689811.1        LDKLAIYKEKTQAIRKKVKTALTYPVSVIAVAIGLVFVMMIFVLPAFKEVYANMGAELPPLTQTVMDMSDFFVSYGWMVL   233
NTDB id 1252 GCO85 RS07730 WP 011213805.1       LDKVATYKEKIEIIKKKIKKALTYPIAVMVVALLVTAGLLIYVVPQFESLFKGFGADLPAMTRAVITMSEFMQAYWYIIF   230
NTDB id 1016 ACIAD RS01680 WP 004920476.1       LDRVAVYKEKSEVLKQKIKKAMKYPATVIVVAIVVTIILMVKVVPVFKDLFTSFGADLPAFTQLVVNMSNWMQDYWFILI   232
NTDB id 1059 ABD1 RS01610 WP 000279215.1        LDRVAIYKEKSELLKQKIKKAMKYPATVIVVAIVVTIILMVKVVPVFQDLFASFGADLPAFTQMVVNMSKWMQEYWFIMI   232
NTDB id 1080171 ACJ3W8 RS13525 WP 409423955.1   FDRVAIYKEKSEALKSKIKKAMFYPAAVLVVAFVVTSILLIFVVPQFQDIFNGFGAELPAFTLFVIGISEFMQEYWWIAL   233
NTDB id 1198 PSJM300 03950 AFN76868.1           LDRVATYKEKTEALKAKIKKAMNYPIAVVLVAVIVTAILLIKVVPQFQDVFANFGAELPAFTLMVIGLSEALQAWWYVVL   229
consensus                                       ****!*!*!!** ** !***!* !!  !**!!**** **** !*! ! ***  *!!*!!**!* !* *!**** ******
```

logo

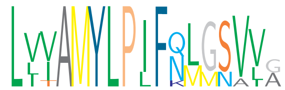
```
NTDB id 1169 A1552VC RS11075 WP 000648511.1     IAIAAAIFGLKALRKNSFQIRLKTSRLGLKFPIIGNVLAKASIAKFSRTLATSFAAGIPILASLKTTAKTSGNVHFETAI   311
NTDB id 1402 DSB67 RS12670 WP 010643257.1       LSFVSLLISGKIMSQRSDSFRLLAARSSLRVPILGPVLSKAAIAKFSRTLATSFSAGIPILTALKITSKTSGNMHYQLAI   310
NTDB id 1113 AAA85695.1 219..1451( )            IALGFAIYRFLKLKARSIKIQRRMDAILLRMPIFGDIVRKGTIARWGRTTATLFAAGVPLVDVLDSTAGAAGNLIYEEAT   313
NTDB id 1112 NGFG RS09215 WP 003689811.1        IALGFAIYCFLKLKARSIKIQRRMDAILLRMPIFGDIVRKGTIARWGRTTATLFAAGVPLVDVLDSTAGAAGNLIYEEAT   313
NTDB id 1252 GCO85 RS07730 WP 011213805.1       GALGGVVYSFFYAKNHSLEFAQTIDRVMLKLPVIGPILEKAAIARFARTLSITFAAGLPLVEALKSVAGATGNIIYAKAT   310
NTDB id 1016 ACIAD RS01680 WP 004920476.1       LVIGAAIAGFLEARKRSKRFRDQLDRLVLRLPIVGDLVYKAIIARYSRTLATTFAAGVPLIDALASTAGATNNTVYEQAV   312
NTDB id 1059 ABD1 RS01610 WP 000279215.1        IAIGAVIAAFLEAKKRSKKFRDGLDKLALKLPIFGDLVYKAIIARYSRTLATTFAAGVPLIDALESTAGATNNVIYEKAV   312
NTDB id 1080171 ACJ3W8 RS13525 WP 409423955.1   IGVVAFGYIFKEAHLRSLKLRDATDRATLKLPVVGMILNKAAVARYARTLSTTFAAGVPLVDALDSAAGASGNAVYRYAI   313
NTDB id 1198 PSJM300 03950 AFN76868.1           AGFVGAAYAFKQAHTRSEKFRNWFDRLMLKVPVVGDILYKSSVARFARTLSTTFAAGVPLVDALDSVAGATGNVVFRSAT   309
consensus                                       **********  ** *! ***  *****!**!**!*** !* *!***!!****!*!!*!****!********!**** !*
```

```
logo
```

```
NTDB id 1169 A1552VC RS11075 WP 000648511.1     NEVYRDTAAGMPMYIAMRNTEAFPEMVLQMVMIGEESGQLDDMLNKVATIYEFEVDNTVDNLGKILEPLIIVFLGTVVGG   391
NTDB id 1402 DSB67 RS12670 WP 010643257.1       EEVYRDTAAGMPMYIAMRHCHVFPELVLQMVMIGEESGRLDDMLNKIAAIYEFEVDNTVDNLSKILEPLIIVFLGVVVGG   390
NTDB id 1113 AAA85695.1 219..1451( )            REIRTRVIQGLSMTSGMRATELFPNMMLQMSSIGEESGSLDDMLNKAAEFYEDEVDNAVGWLSAMMEPIIILILGLVIGT   393
NTDB id 1112 NGFG RS09215 WP 003689811.1        REIRTRVIQGLSMTSGMRATELFPNMMLQMSSIGEESGSLDDMLNKAAEFYEDEVDNAVGRLSAMMEPIIIVILGLVIGT   393
NTDB id 1252 GCO85 RS07730 WP 011213805.1       DKIREEVATGQQMFIAMENTHLFPNMVIQMVAIGEESGALEKMLSKVADFYEEEVNNAVDALSSLLEPIIMSILGILVGG   390
NTDB id 1016 ACIAD RS01680 WP 004920476.1       LKIREDVSTGQQLNFAMRVSNRFPTMAIQMVAIGEESGALDEMLDKVANYYESEVDHAVDGLTSMMEPLIMAILGILVGG   392
NTDB id 1059 ABD1 RS01610 WP 000279215.1        MKIREDVATGQQLQFAMRISNRFPSMAIQMVAIGEESGALDSMLDKVATYYENEVDNAVDGLTSMMEPLIMAILGVLVGG   392
NTDB id 1080171 ACJ3W8 RS13525 WP 409423955.1   LEIKAEVSSGNQMNWAMRNSKIFPDMVIQMVAIGEESGSLDGMLAKVATIYEQEVDDAVDGLSSLLEPLIMAVLGVLVGG   393
NTDB id 1198 PSJM300 03950 AFN76868.1          NKIKSDVSSGMQLNFSMRTTGTFPSMAVQMTAIGEESGALDEMLSKVATFYEDEVDNMVDGLTALMEPMIMAVLGVLVGG   389
consensus                                        *** ** *!***  *!* * * !! ***!!**!!!!!! !**!! !*! *!! !!***!**!* **!!*!* *!!***!*
```

<0

```
logo
```



```
NTDB id 1169 A1552VC RS11075 WP 000648511.1     LVVAMYLPIFNLMSVLG.   408
NTDB id 1402 DSB67 RS12670 WP 010643257.1       LVTAMYLPIFNLMSVLG.   407
NTDB id 1113 AAA85695.1 219..1451( )            LLVAMYLPLFNLGNVVA*   410
NTDB id 1112 NGFG RS09215 WP 003689811.1        LLVAMYLPLFNLGNVVA.   410
NTDB id 1252 GCO85 RS07730 WP 011213805.1       LVVAMYLPIFKLGSAV..   406
NTDB id 1016 ACIAD RS01680 WP 004920476.1       LVIAMYLPIFQMGSVV..   408
NTDB id 1059 ABD1 RS01610 WP 000279215.1        LVIAMYLPIFQMGSVV..   408
NTDB id 1080171 ACJ3W8 RS13525 WP 409423955.1   LIVAMYLPIFQLGSVI..   409
NTDB id 1198 PSJM300 03950 AFN76868.1          LIIAMYLPIFQMGSVV..   405
consensus                                       !**!!!!!*!******
```

- X non conserved
- X similar
- X ≥50% conserved