```
logo
NTDB id 1015 ACIAD RS12005 WP 004928865.1   MFKIILLGWIAGIAMMGRTLECIEPFTCITGILTFLIWAIYFYKKRKHQIGSGLRALVILISASFLFGIGAQYADSALEERLYYK   85
NTDB id 1083 HON27 RS04190 WP 168726476.1   MFKIILLGWIGGIALMGIDFPLIMQYEKVGEALLLLAFIFYLYKRPMFVDRPFLKAVFCLLCTTSLFMVGYHYAEKALIERLEQR   85
NTDB id 253484 A388 RS05250 WP 059262790.1 MFKIILLGWIGGIALMGIDFPLIMQYEKVGEALLLLAFIFYLYKRPMFVDRPFLKAVFCLLCTTSLFMVGYHYAEKALIERLEQR   85
NTDB id 1070 ABD1 RS13145 WP 000472713.1   MFKIILLGWIGGIALMGIDFPLIMQYEKVGEALLLLAFIFYLYKRPMFVDRPFLKAVFCLLCTTSLFMVGYHYAEKALIERLEQR   85
consensus                                  !!!!!!!!!!*!!!*!!*****!*********!**!****!*!!*********!*!***!*****!!**!**!!**!!*!!!***

logo
NTDB id 1015 ACIAD RS12005 WP 004928865.1   IMHSDTHEVIIYVHQMGESSDKGIKQVAEVLNIHPDVVNWVFYIDQSLLGA.EKSSSLELGQYYRITAKTKPIHSYALEGAFDVE   169
NTDB id 1083 HON27 RS04190 WP 168726476.1   ETDTRNLDIIVYINRLSEEKDNKVQQTAQVLNLSKEPVNWLLYLKSNNQNLLKNNQNLELGHYYRISGKTRPAHSYATPGSFDQE   170
NTDB id 253484 A388 RS05250 WP 059262790.1 ETDTRNLDIIVYINRLSEEKDNKVQQTAQVLNLSKEPANWLLYLKSNNQNLLKNNQYLELGHYYRISGKTRPAHSYATPGAFDQE   170
NTDB id 1070 ABD1 RS13145 WP 000472713.1   ETDTRNLDIIVYINRLSEEKDNKVQQTAQVLNLSKEPVNWLLYLKSNNQNLLKNNQNLELGHYYRISGKTRPAHSYATPGAFDQE   170
consensus                                  *********!*!*****!**!****!*!*!!!******!!**!**************!!!!*!!!!**!!*!*!!!!**!*!!*!

logo
NTDB id 1015 ACIAD RS12005 WP 004928865.1   KWFVQQNWQATAQVYRIQTLSKQEVMSAGFYLHVKQQQTWRAQFLQSVEKLRLKFRNYFIDSSLSHHALLLALLTGDRSLLNPEL   254
NTDB id 1083 HON27 RS04190 WP 168726476.1   KWFIQRNIMSGFNVRYIEPLSLDEIYRLGYQQHLKEQQSFSSSFRLNIEKLRLTFRQILNSSSLQQKGLILALLTGDESLLSDET   255
NTDB id 253484 A388 RS05250 WP 059262790.1 KWFIQRNIMSGFNVRYIEPLSLDEIYRLGYQQHLKEQQSFSSSFRLNIEKLRLTFRQILNSSSLQQKGLILALLTGDESLLSDET   255
NTDB id 1070 ABD1 RS13145 WP 000472713.1   KWFIQRNIMSGFNVRYIEPLSLDEIYRLGYQQHLKEQQSFSNSFRLNIEKLRLTFRQILNSSSLQQKGLILALLTGDESLLSDET   255
consensus                                  !!!*!*!******!**!**!!**!****!***!*!*!!*****!****!!!!!*!!*****!!!****!*!!!!!!!*!!!**!*

logo
NTDB id 1015 ACIAD RS12005 WP 004928865.1   EQQFQRFGISHLLAISGPHVLIFAAMVSWIFTRLIHRFKPEIYLSIPRQKLVLLPFLMCVILYCAFVGFEIPALRTLFTVMLGSI   339
NTDB id 1083 HON27 RS04190 WP 168726476.1   QLQFKQLGISHLLAISGPHVFIFAIMLSWACHQFISRYYPKIYLWKPKQILMAVPCCLGVLIYTAFVGFEIPALRTLLSTLIFIG   340
NTDB id 253484 A388 RS05250 WP 059262790.1 QLQFKQLGISHLLAISGPHVLIFAIMLSWACHQFISRYYPQIYLWKPKQVLMAVPCCLGVLIYTAFVGFEIPALRTLLSALIFIG   340
NTDB id 1070 ABD1 RS13145 WP 000472713.1   QLQFKQLGISHLLAISGPHVLIFAIMLSWAYHQFISRYYPQIYLWKPKQVLIAVPCCLGVLIYTAFVGFEIPALRTFLSVLIFIG   340
consensus                                  **!!***!!!!!!!!!!!!!!*!!!*!*!!*****!*!**!*!!!**!*!*!***!****!**!*!!!!!!!!!!!!*********

logo
NTDB id 1015 ACIAD RS12005 WP 004928865.1   LLLIRHHLSAFSLLVLSASLLLWMDPFSILSAAFWLSYGACFILIRIYQDMTQAQQFHQTRFTRGM.QILKALVRSQWKIFVALM   423
NTDB id 1083 HON27 RS04190 WP 168726476.1   FLLLKQPIKPFTLLVYSASLLLLMDPFSVLSAGFWLSYGACFILIRIYQTIAQLPEQHFLSLSSKMIFMSKVLIESQGKIFIALS   425
NTDB id 253484 A388 RS05250 WP 059262790.1 FLLLKQPIKPFTLLVYSASLLLLMDPFSVLSAGFWLSYGACFILIRIYQTIAQLPEQHFLSLSSKMIFMSKVLIESQGKIFIALS   425
NTDB id 1070 ABD1 RS13145 WP 000472713.1   FLLLKQPIKPFTLLVYSASLLLLMDPFSVLSAGFWLSYGACFILLRIYQTIAQLPEQHFLSLSSKMIFMSKVLIESQGKIFIALS   425
consensus                                  *!!*******!*!!!*!!!!!!*!!!!!*!!!!*!!!!!!!!!!!*!!!!***!****!*******!****!*!**!!*!!!*!!*

logo
NTDB id 1015 ACIAD RS12005 WP 004928865.1   PLTLIIFKQISWIAPLSNLIAIPILGGIIVPLDIMAGCLWLFIPSLGNLLFYLNNSLLELFIGILKGLDHLFNPQLQYYAFTPLL   508
NTDB id 1083 HON27 RS04190 WP 168726476.1   PLTLLFFQRISWVAPLTNIIAVPIVGSVIVPLNIIAACAWFVVKPFGNMLFHFNDMLLSILLSCLGLLEKL.SLPLQGISLTPLS   509
NTDB id 253484 A388 RS05250 WP 059262790.1 PLTLLFFQQISWVAPLTNIIAVPIVGSVIVPLNIMAACAWFVIKPFGNMLFHFNDMLLSILLSYLGLLEKL.SLTLQGISLTPLS   509
NTDB id 1070 ABD1 RS13145 WP 000472713.1   PLTLLFFQQISWVAPLTNIIAVPIVGSVIVPLNIMAACAWFVIKPFGNMLFHFNDMLLSILLSCLGLLEKL.SLTLQGISLTPLS   509
consensus                                  !!!!!**!**!!!*!!!!*!*!!*!!*!**!!!!!*!*!*!*!******!!*!!**!**!!******!**!**!  ***!!****!!!*
```

```
logo
NTDB id 1015 ACIAD RS12005 WP 004928865.1   LICLTLAIVILFLPKGVVPKFWSVLCFVPLLIPSKMIRPTQISILDVGQGQSIFIQDQTQRILLDTGGYYDESKFSIGKQVVVPF   593
NTDB id 1083 HON27 RS04190 WP 168726476.1   LLAISCAIIILFLPKGILPKTWGILCCLPLVMMNKTSQQIQLNILDVGQGQAIFLQHPQQNWLIDTGGSYDEKIFSIGQNVVVPF   594
NTDB id 253484 A388 RS05250 WP 059262790.1 LLAISCAIIILFLPKGILPKTWGILCCLPLVIMNKTSQQIQLNILDVGQGQAIFLQHPQQNWLIDTGGSYDEKIFSIGQNVVVPF   594
NTDB id 1070 ABD1 RS13145 WP 000472713.1   LLAISCAIIILFLPKGILPKTWGILCCLPLVIMNKTSQQIQLNILDVGQGQAIFLQHPEQNWLIDTGGSYDEKIFSIGQNVVVPF   594
consensus                                  !*****!!*!!!!!!!**!!*!**!!**!!****!*****!**!!!!!!!!*!!*!***!**!*!!!!*!!!**!!!!**!!!!!

logo
NTDB id 1015 ACIAD RS12005 WP 004928865.1   LKSQGVHQLDRVILTHLDQDHSGGLPAVLQLIPTRMIQANEE.IKDLSIPFSLCHSGQTWETSELKIQILSPKLENLQSTVFNRN   677
NTDB id 1083 HON27 RS04190 WP 168726476.1   LRQQGVRQLDHVVLSHLDQDHSGAFPIIQQEIPVKQLISNEQLPNDLKQPFQYCHQGQQWHYSELDIQILWPKEKDLAFVASNQN   679
NTDB id 253484 A388 RS05250 WP 059262790.1 LRQQGVRQLDHVVLSHLDQDHSGAFPIIQQEIPVKQLISNEQLPNDLKQPFQYCHQGQQWHYPELDIQILWPKEKDLAFVASNQN   679
NTDB id 1070 ABD1 RS13145 WP 000472713.1   LRQQGVRQLDHVVLSHLDQDHSGAFPLIQQEIPVKQLISNEQLPNDLKQPFQYCHQGQQWHYPELDIQILWPKEKDLAFVTSNQN   679
consensus                                  !**!!!*!!!*!*!*!!!!!!!!**!***!*!!******!!****!!**!!**!!*!!*!***!!*!!!!*!!***!*****!*!

logo
NTDB id 1015 ACIAD RS12005 WP 004928865.1   EASCVMYLQLKQASDLKYFLMMGDAGWETEYQLLQQYPDLKVDVLILGHHGSQHSSSYDFLKRYHPKIAIASAGFENGYGHPSAE   762
NTDB id 1083 HON27 RS04190 WP 168726476.1   QYSCVVYLQFKKVGGYQNFLIMGDAGWEAEYELLKDYPNLKIDVLVLGHHGSKHSSAYDFLATLKPKLAIASAGFDNRYGHPSQQ   764
NTDB id 253484 A388 RS05250 WP 059262790.1 QYSCVVYLQFKKVDGYRNFLIMGDAGWEAEYELLKDYPNLKIDVLVLGHHGSKHSSAYDFLATLKPKLAIASAGFDNRYGHPSQQ   764
NTDB id 1070 ABD1 RS13145 WP 000472713.1   QYSCVVYLQFKKVGGYQNFLIMGDAGWEAEYELLKDYPNLKIDVLVLGHHGSKHSSAYDFLATLKPKLAIASAGFDNRYGHPSQQ   764
consensus                                  **!!!*!!!*!*******!!*!!!!!!!*!!*!!**!!*!!*!!!*!!!!!!*!!!*!!!!****!!*!!!!!!!*!*!!!!!**

logo
NTDB id 1015 ACIAD RS12005 WP 004928865.1   VSNRLQDLNIPLLSTTDKCAIHFKFDSGNEQTEFYRQSYKWLQR..   806
NTDB id 1083 HON27 RS04190 WP 168726476.1   VIARLKALHIPLKSTLEQGTLSFVLENHKLVLHDRRLDRLWLSRGF   810
NTDB id 253484 A388 RS05250 WP 059262790.1 VIARLKALHIPLKSTVEQGTLSFVLENHKIVLHERRLDRLWLSRGF   810
NTDB id 1070 ABD1 RS13145 WP 000472713.1   VIARLKALHIPLKSTVEQGTLSFVLENHKIVLHDRRLDRLWLSRGF   810
consensus                                  !**!!**!*!!!*!!***!***!************!****!!*!**
```

X non conserved

X similar

X ≥ 50% conserved