```
logo
NTDB id 1152578 NBW44 RS01075 WP 250306842.1  MKFSKVMALAGVTLLASGVLAACSGSGSSAKGEKTFSYVYETDPDSLNYLTTGKAAVANITSNVVDGLMENDRYGNFVPS   80
NTDB id 475 HSISS4 RS07005 WP 021143809.1     MKKSKWLALAGVALLSVGALAACSSKSS..TSGTTYGYVYNSDPESLDYITSNTGPTKTAVTNGVDGLMEADKYGNLVPS   78
NTDB id 324 STU RS16140 WP 011226306.1        MKKSKWLALAGVALLGVGVLAACSSKSN..TSGTTYGYVYSSDPETLDYITSNTGPTKSVVTNGVDGLMEADKYGNLVPS   78
NTDB id 292 STER RS06940 WP 011681419.1       MKKSKWLALAGVALLGVGVLAACSSKSN..TSGTTYGYVYSSDPETLDYITSNTGPTKSVVTNGVDGLMEADKYGNLVPS   78
consensus                                     !!*!!**!!!!!*!!**!*!!!!!***   ****!**!!!**!!**!*!*!***********!*!!!!!!*!*!!!*!!!

logo
NTDB id 1152578 NBW44 RS01075 WP 250306842.1  MAENWSVSQDGLTYTYTIRKDAKWYTSEGEEYAPVKAQDFVTGLKYAADNKSEALYLVQESIKGLDAYVKGEVKDFSEVG  160
NTDB id 475 HSISS4 RS07005 WP 021143809.1     VAEDWSVSQDGLTYTYKIRKGVKWYTSDGEEYADVTAKDFVTGLKHAADGKAGALYLVQDSIAGLSDYLSGANKDFSNVG  158
NTDB id 324 STU RS16140 WP 011226306.1        VAEDWSVSKDGLTYTYKIRKGIKWYTSEGEEYANVTAKDFVTGLKHAADSKAGGIYLVQDSIAGLSDYLSGTNKDFSNVG  158
NTDB id 292 STER RS06940 WP 011681419.1       VAEDWSVSKDGLTYTYKIRKGIKWYTSEGEEYANVTAKDFVTGLKHAADSKAGGIYLVQDSIAGLSDYLSGTNKDFSNVG  158
consensus                                     *!!*!!!!  !!!!!!!*!!!**!!!!!*!!!!!*!*!*!!!!!!!*!!!*!****!!!!*!!*!!**!**!**!!!!*!!

logo
NTDB id 1152578 NBW44 RS01075 WP 250306842.1  IKAIDDQTVQYTLNKPESFWNSKTTMGILAPVNEEFLTSKGSDFAKATDPSSILYNGPFLLKSLVAKSSVEFEKNPNYWD  240
NTDB id 475 HSISS4 RS07005 WP 021143809.1     VKAIDDYTLQYTLKKPEPYWNSKTTYGLLSPVNEDFLKNKGKDFGKSTDPTSILYNGPFLLKSLTAKSSIELTKNENYWD  238
NTDB id 324 STU RS16140 WP 011226306.1        VKAIDEYTLQYTLKQPEPYWNSKTTYSLLFPVNEDFLKNKGKDFGKSTDPTSILYNGPFLLKSLTAKSSIELVKNEHYWD  238
NTDB id 292 STER RS06940 WP 011681419.1       VKAIDDYTLQYTLKQPEPYWNSKTTYSLLFPVNEDFLKNKGKDFGKSTDPTSILYNGPFLLKSLTAKSSIELVKNEHYWD  238
consensus                                     *!!!!**!*!!!!* !!**!!!!!!* *!*!!!!*!!**!!*!!*!*!!!*!!!!!!!!!!!!!!*!!!!*!**!!**!!!

logo
NTDB id 1152578 NBW44 RS01075 WP 250306842.1  KDNVHIDKVKLSFWDGQDTGKLADTFKDGGFSMARLFPTSAGYPELEKEFKDNIVYTPQDSATFLVGTNIDRQSYKYTSK  320
NTDB id 475 HSISS4 RS07005 WP 021143809.1     KKNVHFDAIKLSYYDGSDQEALERGFTDGAYSLARVYPTSSNYSSVEKKYKDNIYYTAPGASTSAIGVNIDRQSYKFSAK  318
NTDB id 324 STU RS16140 WP 011226306.1        KKNVHFDAIKFSYYDGSDQDALVRGFTDGAYNFARVFPTSSNYASVEKKYKDNIYYTAPGASTSAIGINLDRQSYKYTAK  318
NTDB id 292 STER RS06940 WP 011681419.1       KKNVHFDAIKFSYYDGSDQDALVRGFTDGAYNFARVFPTSSNYASVEKKYKDNIFYTAPGASTSAIGINIDRQSYKYTAK  318
consensus                                     !*!!!*!**!  !**!!*!***!***!*!!** *!!**!!!**!***!!**!!!!*!!*****!***!*!*!!!!!!***!

logo
NTDB id 1152578 NBW44 RS01075 WP 250306842.1  TTDEQKTSTKKALLNKDFRQAINFAIDRTAYQSQINGKDGATLAYRNLFVPSDFVSAGDKTFGDLVTEKMSSYGDEWSGV  400
NTDB id 475 HSISS4 RS07005 WP 021143809.1     KTDAEKTSTKKALLNKDFRQSINFAIDRTAYQSQMNGKDGAALALRNLFVPSDFVSAGDKTFGDLVTEKMSSYGDEWSGV  398
NTDB id 324 STU RS16140 WP 011226306.1        KTDSEKSSTKKALLNKDFRQAINFAIDRKAYQSQINGKDGATLAVRNLFVPSDFVSAGDKTFGDLVTEKMSSYGDEWSGV  398
NTDB id 292 STER RS06940 WP 011681419.1       KTDSEKSSTKKALLNKDFRQAINFAIDRKAYQSQINGKDGATLGVRNLFVPSDFVSAGDKTFGDLVTEKMSSYGDEWSGV  398
consensus                                     *!!**!*!!!!!!!!!!!!!!!*!*!**!!  !!*!!*!!**!!****!!!!!!**!!*!**!*!!*!!*!!***!!!!!**!

logo
NTDB id 1152578 NBW44 RS01075 WP 250306842.1  NLDDAQDGLYNPEKAKAEFAKAKTALQAEGVQFPIHLDMPVDQTNTTKVQRVQSLKQSLEATLGTDNVVIDIQQLQKDEV  480
NTDB id 475 HSISS4 RS07005 WP 021143809.1     NFTDGQDGLYNAEKAKTEFAKAKETLQADGVQFPIHLDLPVDQSSKINVAQAQSLKQTIEQSLGSDNVVIDVNQLSSDDI  478
NTDB id 324 STU RS16140 WP 011226306.1        NFADSQDGLYNAEKAKTEFAKAKDALQADGVQFPIHLDLPVDQSSKLNVAQAQSLKQTIEKSLGSENVVIDINQLSSDDL  478
NTDB id 292 STER RS06940 WP 011681419.1       NLADSQDGLYNAEKAKTEFAKAKDALQADGVQFPIHLDLPVNQSSKLNVAQVQSLKQTIEKSLGSENVVIDINQLSSDDL  478
consensus                                     ! *!*!!!!!!*!!!!*!!!!!!**!!!*!!!!!!!!!!*!!*!*****!** !!!!!**!**!!**!!!!!**!!**!**
```

```
logo
NTDB id 1152578 NBW44 RS01075 WP 250306842.1  LNVTYFAETAAGEDWDLSDNVGWSPDYIDPSTYLDIIKPSVGENTKTYLGFDSGTNNAAAKQVGLEDYEKMVVEADNEVT  560
NTDB id 475 HSISS4 RS07005 WP 021143809.1     QNATLNAANAAAEDWDISNGVIWGPDYQDPSTYLDIFKTTSSENTKTFMGYDDP.NNAAAAQVGLKDYDALLDSAASETT  557
NTDB id 324 STU RS16140 WP 011226306.1        ENVTLNAANAAAEDWDISNSVAWAPDYQDPSTYLDIFKTTSSENTKAFMGYDDP.NNAAAAQVGLKDYDALLNSAASETS  557
NTDB id 292 STER RS06940 WP 011681419.1       ENATLNAANAAAEDWDISNSVGWAPDYQDPSTYLDIFKTTSSENTKAFMGYDDP.NNAAAAQVGLKDYDALLNSAASETS  557
consensus                                     *! !**!**!!*!!!!*!**!*!*!!!*!!!!!!!!*!****!!!! **!*!** !!!!!*!!!!*!!******!**!**

logo
NTDB id 1152578 NBW44 RS01075 WP 250306842.1  DVSKRYDKYAAAQAWLTDSALIIPTTSQTG.RPMLSKMVPFTLPFAYSGNKGMSEALLYKYLELQDKPVTADEYQKAQDK  639
NTDB id 475 HSISS4 RS07005 WP 021143809.1     DLNARYDRYAQAQAWLEDSSLVIPLTVGNGAAPVISRLTPFTGASMQVGDKNS..SDYFKYVKPQEKVVTKKEYEQSREK  635
NTDB id 324 STU RS16140 WP 011226306.1        DLNVRYDRYAQAQAWLEDSSLVIPLTVGNGAAPAISRLTPFTGASLQVGDKNSS.NDYIKYVKPQEKVVTKKEYEQSREK  636
NTDB id 292 STER RS06940 WP 011681419.1       DLNVRYDRYAQAQAWLEDSSLVIPLTVGNGAAPVISRLTPFTGASLQVGDKNSS.NDYIKYVKPQEKVVTKKEYEQSREK  636
consensus                                     !***!!!*!!*!!!!!*!!*!*!!*!***!**!**!***!!!******!*!*** ****!!***!*!*!!**!!*****!

logo
NTDB id 1152578 NBW44 RS01075 WP 250306842.1  WKKEKEESNKKAQEELASHVK  660
NTDB id 475 HSISS4 RS07005 WP 021143809.1     WLKEKKASNEKAQKDLEKHVK  656
NTDB id 324 STU RS16140 WP 011226306.1        WLKEKKESNEKAQKDLEKHVK  657
NTDB id 292 STER RS06940 WP 011681419.1       WLKEKKESNEKAQKDLEKHVK  657
consensus                                     !*!!!**!!*!!!**!**!!!
```

X non conserved

X similar

X $\geq$ 50% conserved