```
logo
NTDB id 48717 STND RS06830 WP 014608542.1  MKLKKILGITGVALLSVGVLAACSSKSSTSGTTYSNIYGSDPETLDYITSIMGGTKAVLTNGVDGLMEADKYGNLVPSVAEDWSV   85
NTDB id 475 HSISS4 RS07005 WP 021143809.1  MKKSKWLALAGVALLSVGALAACSSKSSTSGTTYGYVYNSDPESLDYITSNTGPTKTAVTNGVDGLMEADKYGNLVPSVAEDWSV   85
NTDB id 324 STU RS16140 WP 011226306.1     MKKSKWLALAGVALLGVGVLAACSSKSNTSGTTYGYVYSSDPETLDYITSNTGPTKSVVTNGVDGLMEADKYGNLVPSVAEDWSV   85
NTDB id 292 STER RS06940 WP 011681419.1    MKKSKWLALAGVALLGVGVLAACSSKSNTSGTTYGYVYSSDPETLDYITSNTGPTKSVVTNGVDGLMEADKYGNLVPSVAEDWSV   85
consensus                                  !!**!*!***!!!!! !!*!!!!!!!! !!!!!!***!*!!!!*!!!!!!**!*!!***!!!!!!!!!!!!!!!!!!!!!!!!!!!!

logo
NTDB id 48717 STND RS06830 WP 014608542.1  SKDGLTYTYKIRKGIKWYTSEGEEYANVTAKDFVTGLKHAADAKSGALYLVQDSIAGLSDYLSGANKDFSNVGVKAIDDYTLQYT   170
NTDB id 475 HSISS4 RS07005 WP 021143809.1  SQDGLTYTYKIRKGVKWYTSDGEEYADVTAKDFVTGLKHAADGKAGALYLVQDSIAGLSDYLSGANKDFSNVGVKAIDDYTLQYT   170
NTDB id 324 STU RS16140 WP 011226306.1     SKDGLTYTYKIRKGIKWYTSEGEEYANVTAKDFVTGLKHAADSKAGGIYLVQDSIAGLSDYLSGTNKDFSNVGVKAIDEYTLQYT   170
NTDB id 292 STER RS06940 WP 011681419.1    SKDGLTYTYKIRKGIKWYTSEGEEYANVTAKDFVTGLKHAADSKAGGIYLVQDSIAGLSDYLSGTNKDFSNVGVKAIDDYTLQYT   170
consensus                                  !*!!!!!!!!!!!!*!!!!!*!!!!!*!!!!!!!!!!!!!!!!*!*!**!!!!!!!!!!!!!!!! !!!!!!!!!!!!!*!!!!!!

logo
NTDB id 48717 STND RS06830 WP 014608542.1  LKKQEPYWNSKTTYGVLFPVNEDFLKNKGKDFGKSTDPTSILYNGPFLLKSLTAKSSIELTKNENYWDKKNVHFDSIKFSYSDGS   255
NTDB id 475 HSISS4 RS07005 WP 021143809.1  LKKPEPYWNSKTTYGLLSPVNEDFLKNKGKDFGKSTDPTSILYNGPFLLKSLTAKSSIELTKNENYWDKKNVHFDAIKLSYYDGS   255
NTDB id 324 STU RS16140 WP 011226306.1     LKQPEPYWNSKTTYSLLFPVNEDFLKNKGKDFGKSTDPTSILYNGPFLLKSLTAKSSIELVKNEHYWDKKNVHFDAIKFSYYDGS   255
NTDB id 292 STER RS06940 WP 011681419.1    LKQPEPYWNSKTTYSLLFPVNEDFLKNKGKDFGKSTDPTSILYNGPFLLKSLTAKSSIELVKNEHYWDKKNVHFDAIKFSYYDGS   255
consensus                                  !! *!!!!!!!!!!! *!*!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!! !!!*!!!!!!!!!!*!!*!*!!!

logo
NTDB id 48717 STND RS06830 WP 014608542.1  DLESIERSFSDGALSIARVFPTSSNYASVEKKYKDNIFYTEPGASTSVIGVNIDRQSYKFSAKKTDAEKTSTKKALLNKDFRQSI   340
NTDB id 475 HSISS4 RS07005 WP 021143809.1  DQEALERGFTDGAYSLARVYPTSSNYSSVEKKYKDNIYYTAPGASTSAIGVNIDRQSYKFSAKKTDAEKTSTKKALLNKDFRQSI   340
NTDB id 324 STU RS16140 WP 011226306.1     DQDALVRGFTDGAYNFARVFPTSSNYASVEKKYKDNIYYTAPGASTSAIGINLDRQSYKYTAKKTDSEKSSTKKALLNKDFRQAI   340
NTDB id 292 STER RS06940 WP 011681419.1    DQDALVRGFTDGAYNFARVFPTSSNYASVEKKYKDNIFYTAPGASTSAIGINIDRQSYKYTAKKTDSEKSSTKKALLNKDFRQAI   340
consensus                                  !**** !*!*!!!* *!!!*!!!!!!*!!!!!!!!!!!*!!*!!!!!!*!!*!*!!!!!!**!!!!! !!*!!!!!!!!!!!!! !

logo
NTDB id 48717 STND RS06830 WP 014608542.1  NFAIDRTAYQSQVNGKDGAALALRNLFVPYDFVSAGDKTFGDLVTEKMSSYGDEWSGVNFADGQEGLYNAEKAKTEFAKAKEALQ   425
NTDB id 475 HSISS4 RS07005 WP 021143809.1  NFAIDRTAYQSQMNGKDGAALALRNLFVPSDFVSAGDKTFGDLVTEKMSSYGDEWSGVNFTDGQDGLYNAEKAKTEFAKAKETLQ   425
NTDB id 324 STU RS16140 WP 011226306.1     NFAIDRKAYQSQINGKDGATLAVRNLFVPSDFVSAGDKTFGDLVTEKMSSYGDEWSGVNFADSQDGLYNAEKAKTEFAKAKDALQ   425
NTDB id 292 STER RS06940 WP 011681419.1    NFAIDRKAYQSQINGKDGATLGVRNLFVPSDFVSAGDKTFGDLVTEKMSSYGDEWSGVNLADSQDGLYNAEKAKTEFAKAKDALQ   425
consensus                                  !!!!!! !!!!!*!!!!!! !**!!!!!!*!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!**! !*!!!!!!!!!!!!!!!!**!!

logo
NTDB id 48717 STND RS06830 WP 014608542.1  GEGVQFPVHLDLPVDQSSKLNVAQAQSLKQTIEKSLGSENVVIDINQMSSDDMQNATSNAANAAAEDWDISNGVGWGPDYQDPST   510
NTDB id 475 HSISS4 RS07005 WP 021143809.1  ADGVQFPIHLDLPVDQSSKINVAQAQSLKQTIEQSLGSDNVVIDVNQLSSDDIQNATLNAANAAAEDWDISNGVIWGPDYQDPST   510
NTDB id 324 STU RS16140 WP 011226306.1     ADGVQFPIHLDLPVDQSSKLNVAQAQSLKQTIEKSLGSENVVIDINQLSSDDLENVTLNAANAAAEDWDISNSVAWAPDYQDPST   510
NTDB id 292 STER RS06940 WP 011681419.1    ADGVQFPIHLDLPVNQSSKLNVAQVQSLKQTIEKSLGSENVVIDINQLSSDDLENATLNAANAAAEDWDISNSVGWAPDYQDPST   510
consensus                                  **!!!!!*!!!!!!*!!!!*!!!!*!!!!!!!!!*!!!!*!!!!!*!!*!!!!* !*!*!!!!!!!!!!!!!! !*!*!!!!!!!!
```

```
logo
```

```
NTDB id 48717 STND RS06830 WP 014608542.1   YLDILKTTSSENTKAFNGYDDPNNAAAAQVGLKDYDALIDSAASETTDLNARYDRYAQAQAWLEDSSLVIPLTVSNGAAPIISRL   595
NTDB id 475 HSISS4 RS07005 WP 021143809.1   YLDIFKTTSSENTKTFMGYDDPNNAAAAQVGLKDYDALLDSAASETTDLNARYDRYAQAQAWLEDSSLVIPLTVGNGAAPVISRL   595
NTDB id 324 STU RS16140 WP 011226306.1      YLDIFKTTSSENTKAFMGYDDPNNAAAAQVGLKDYDALLNSAASETSDLNVRYDRYAQAQAWLEDSSLVIPLTVGNGAAPAISRL   595
NTDB id 292 STER RS06940 WP 011681419.1    YLDIFKTTSSENTKAFMGYDDPNNAAAAQVGLKDYDALLNSAASETSDLNVRYDRYAQAQAWLEDSSLVIPLTVGNGAAPVISRL   595
consensus                                   !!!!*!!!!!!!!!*!*!!!!!!!!!!!!!!!!!!!!* !!!!!!*!!! !!!!!!!!!!!!!!!!!!!!!!!!*!!!!!*!!!!
```

```
logo
```

```
NTDB id 48717 STND RS06830 WP 014608542.1   TPFTGASIQVGDKG..SSYLKYVKSQEKVVTKKEYEQSREKWLKERKASNEKAQKDLEKHIK   655
NTDB id 475 HSISS4 RS07005 WP 021143809.1   TPFTGASMQVGDKNS.SDYFKYVKPQEKVVTKKEYEQSREKWLKEKKASNEKAQKDLEKHVK   656
NTDB id 324 STU RS16140 WP 011226306.1      TPFTGASLQVGDKNSSNDYIKYVKPQEKVVTKKEYEQSREKWLKEKKESNEKAQKDLEKHVK   657
NTDB id 292 STER RS06940 WP 011681419.1    TPFTGASLQVGDKNSSNDYIKYVKPQEKVVTKKEYEQSREKWLKEKKESNEKAQKDLEKHVK   657
consensus                                   !!!!!!!*!!!!!*** *!*!!!!*!!!!!!!!!!!!!!!!!!!!!*! !!!!!!!!!!!!*!
```

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