```
NTDB id 95065 SanJ4211 RS00590 WP 021001198.1  MKKIGLLVASLLSLFLVACSNQKSANGKLNVVTTFYPVYEFTKQVAGDTANVKLLIGAGTEPHEYEPSAKAVATIQDADT   80
NTDB id 433 SGO RS09480 WP 012130953.1         MKKISLLLVGLLSVFLVACSNQKKADGKLNIVTTFYPVYEFTKQVAGDEANVDLLIGAGTEPHDYEPSAKAVATIQDADA   80
NTDB id 436 SPR RS10070 WP 000724074.1         MKKISLLLASLCALFLVACSNQKQADGKLNIVTTFYPVYEFTKQVAGDTANVELLIGAGTEPHEYEPSAKAVAKIQDADT   80
consensus                                      !!!!*!!***!***!!!!!!!!!! !*!!!!*!!!!!!!!!!!!!!!!!*!!!*!!!!!!!!!!*!!!!!!!!!*!!!!!*
```

```
NTDB id 95065 SanJ4211 RS00590 WP 021001198.1  FVYENENMETWVPKLLKTLKKGKVNVVKATGKMLLLPGIEE.EGDHDHGKEGHHHEYDPHVWLSPKRAIKMVENIRDSLS   159
NTDB id 433 SGO RS09480 WP 012130953.1         FVYENENMETWVPDLLKTLKNKKETVIKATGKMLLLPGGEE.EEDHEHGEEGHHHDYDPHVWLSPKRAIQMVEHIRDSLS   159
NTDB id 436 SPR RS10070 WP 000724074.1         FVYENENMETWVPKLLDTLDKKKVKTIKATGDMLLLPGGEEEEGDHDHGEEGHHHEFDPHVWLSPVRAIKLVEHIRDSLS   160
consensus                                      !!!!!!!!!!!!!*!!*!!***!* **!!!!*!!!!!!*!! !*!!*!!*!!!!!**!!!!!!!!*!!!**!!*!!!!!!
```

```
NTDB id 95065 SanJ4211 RS00590 WP 021001198.1  KSYPDKKTTFQKNAAAYIKKLEALDKEYAAGLANAKQKSFVTQHAAFRYLALDYGLKQVPISGLSPDSEPSAARLAELTK   239
NTDB id 433 SGO RS09480 WP 012130953.1         KAYPEKKAAFEKNAAAYIKKMEALDKEYEAGLANAKQKSFVTQHAAFNYLALDYGLKQVPISGLSPDSEPSASRLAELTE   239
NTDB id 436 SPR RS10070 WP 000724074.1         ADYPDKKETFEKNAAAYIEKLQSLDKAYAEGLSQAKQKSFVTQHAAFNYLALDYGLKQVAISGLSPDAEPSAARLAELTE   240
consensus                                      * !!*!! *!*!!!!!!!*!***!!!*!**!!**!!!!!!!!!!!!!!*!!!!!!!!!!*!!!!!!!*!!!*!!!!!!*
```

```
NTDB id 95065 SanJ4211 RS00590 WP 021001198.1  YIKKNNIKYIYFEENASQALASTLAKETGVKLDVLNPLESLTEKQTKDGADYISIMKSNLKALKKTTDQAGAEISAEKEE   319
NTDB id 433 SGO RS09480 WP 012130953.1         YIKKNKIKYIYFEENASQALASTLAKETGVELDVLNPLESLTEEQTKDGADYISIMQANLKALKKTTDQEGAEIAAEKEE   319
NTDB id 436 SPR RS10070 WP 000724074.1         YVKKNKIAYIYFEENASQALANTLSKEAGVKTDVLNPLESLTEEDTKAGENYISVMEKNLKALKQTTDQEGPAIEPEKAE   320
consensus                                      !*!!!*!*!!!!!!!!!!!!!!*!!*!!*!!**!!!!!!!!!!!**!!*!**!!!*! !!!!!!*!!!!*!**! *!!*!
```

```
NTDB id 95065 SanJ4211 RS00590 WP 021001198.1  NTKTVQNGYFEDSAVKDRTLSDYAGQWQSVYPYLQDGTLDQVFDYKAKLSGKMTAAEYKAYYEKGYKTDVSHINITDKTM   399
NTDB id 433 SGO RS09480 WP 012130953.1         DTKTVQNGYFEDSAVKDRTLSDYAGEWQSVYSYLKDGTLDQVFDYKAKLTGKMTAAEYKDYYDKGYKTDVSNINITDKTM   399
NTDB id 436 SPR RS10070 WP 000724074.1         DTKTVQNGYFEDAAVKDRTLSDYAGNWQSVYPFLEDGTFDQVFDYKAKLTGKMTQAEYKAYYTKGYQTDVTKINITDNTM   400
consensus                                      *!!!!!!!!!!!*!!!!!!!!!!!!!*!!!!!**! !!!*!!!!!!!!!!*!!!!*!!!!*!!*!!!*!!!!* !!!!!*!!
```

```
NTDB id 95065 SanJ4211 RS00590 WP 021001198.1  EFVVNGQKKKYTYKYVGKHTLTYSKGNRGVRFMFEATDPDVGKYKYVQFSDHNIAPTKAAHFHIFYGGESQEALFNELEN   479
NTDB id 433 SGO RS09480 WP 012130953.1         EFVVDGKSKKYTYKYVGKHTLTYSKGNRGVRFMFEATDADAGQYKYVQFSDHNIAPTKAAHFHIFYGGESQEALFNELEN   479
NTDB id 436 SPR RS10070 WP 000724074.1         EFVQGGQSKKYTYKYVGKKILTYKKGNRGVRFLFEATDADAGQFKYVQFSDHNIAPVKAEHFHIFFGGTSQETLFEEMDN   480
consensus                                      !!!* !**!!!!!!!!!!**!!!*!!!!!!!!*!!!!!*!*!**!!!!!!!!!!!!*!!*!!!!!*!!*!!!*!!*!**!
```

logo

```
NTDB id 95065 SanJ4211 RS00590 WP 021001198.1  WPTYYPTKLNGQEIAQEMLAH  500
NTDB id 433 SGO RS09480 WP 012130953.1         WPTYYPSKLTGQEIAQEMLAH  500
NTDB id 436 SPR RS10070 WP 000724074.1         WPTYYPDNLSGQEIAQEMLAH  501
consensus                                      !!!!!!!**!*!!!!!!!!!!  
```

X non conserved

X similar

X ≥ 50% conserved