```
logo

NTDB id 155 SP RS04850 WP 000495909.1          MFVARDARGELVNVLEDKL..EKQAYTCPACGGQLHLRQGPSVRTHFAHKSLKDCDFFFENESPEHLANKESLYHWLKKE   78
NTDB id 265 KZH43 RS04315 WP 000495911.1       MFVARDARGELVNVLEDKL..EKQAYTCPACGGQLHLRQGPSVRTHFAHKSLKDCDFFFENESPEHLANKESLYHWLKKE   78
NTDB id 224 SPD RS04655 WP 000495911.1         MFVARDARGELVNVLEDKL..EKQAYTCPACGGQLHLRQGPSVRTHFAHKSLKDCDFFFENESPEHLANKESLYHWLKKE   78
NTDB id 190 SPR RS04415 WP 000495911.1         MFVARDARGELVNVLEDKL..EKQAYTCPACGGQLHLRQGPSVRTHFAHKSLKDCDFFFENESPEHLANKESLYHWLKKE   78
NTDB id 495 SM12261 RS04415 WP 000495920.1     MFVARDSRGELVNVLEDKL..EKQAYTCPACGGQLRLRQGPSVRIHFAHKTLKDCDFSSENESPEHLENKEVLYHWLKKE   78
NTDB id 1113272 V4T04 RS04450 WP 349651741.1  MLTAIDENGQVVNLLEIEVKELTGKYFCPSCKSELFIKNGEIKMPHFAHKSLKACDLWLENESEQHLGLKKALYQWFKKT   80
NTDB id 598 KW2 RS08500 WP 021037660.1        MRTAIDENNKIINLLELDRKELTGKFYCPSCHSELLIKNGQIKVLHFAHKSLKSCNLWLENESEQHLGLKKILYQWFKRT   80
consensus                                      !**!*!******!*!!***  ******!!*!***!****!*****!!!!!*!!*!****!!!!**!!**!**!!*!*!**
```

```
logo

NTDB id 155 SP RS04850 WP 000495909.1          TKVQLEYPLSELKQIADVFVNGNLALEVQCSPLPQKVLKERSEGYRSQGYQVLWLLGQKLWLKERLTRLQQGFLYFSQNM   158
NTDB id 265 KZH43 RS04315 WP 000495911.1       TKVQLEYPLSELKQIADVFVNGNLALEVQCSPLPQKVLKERSEGYRSQGYQVLWLLGQKLWLKERLTRLQQGFLYFSQNM   158
NTDB id 224 SPD RS04655 WP 000495911.1         TKVQLEYPLSELKQIADVFVNGNLALEVQCSPLPQKVLKERSEGYRSQGYQVLWLLGQKLWLKERLTRLQQGFLYFSQNM   158
NTDB id 190 SPR RS04415 WP 000495911.1         TKVQLEYPLSELKQIADVFVNGNLALEVQCSPLPQKVLKERSEGYRSQGYQVLWLLGQKLWLKERLTRLQQGFLYFSQNM   158
NTDB id 495 SM12261 RS04415 WP 000495920.1     AEVQLEYLLPELKQIADVFVNGNLALEVQCSPLPQKVLKERSEGYRSQGYQVLWLLGKKLWLKERLTRLQQGFLYFSQNM   158
NTDB id 1113272 V4T04 RS04450 WP 349651741.1  DKVEIEAYIPEFKQRPDLLVNDKIAIEIQCSHLSIKRLKERTENYQVHGFKVLWLMGQDLWLKDQITELQKNLVYFSENR   160
NTDB id 598 KW2 RS08500 WP 021037660.1         DKVEIERYLPELNQRPDLLVNDKIAIEIQCSHLSIKRLKERTENYKTHGFKVLWLMGKDLWLAEQVTELQKNLVYFSENR   160
consensus                                      **!**!****!**!**!**!!***!*!*!!!*!**!*!!!!*!*!***!**!!!!*!**!!!****!*!!****!!!*!*
```

```
logo

NTDB id 155 SP RS04850 WP 000495909.1          GFYVWELDKEKQVLRLKYLIYQDLRGKLHYQIKEFSYGQGSLLEILRLPYKRQKISHFTVSEDKDICRYIRQQLYYQNLF   238
NTDB id 265 KZH43 RS04315 WP 000495911.1       GFYVWELDKGKQVLRLKYLIYQDLRGKLHYQIKEFSYGQGSLLEILRLPYKKQKISHFTVSEDKDICRYIRQQLYYQNLF   238
NTDB id 224 SPD RS04655 WP 000495911.1         GFYVWELDKGKQVLRLKYLIYQDLRGKLHYQIKEFSYGQGSLLEILRLPYKKQKISHFTVSEDKDICRYIRQQLYYQNLF   238
NTDB id 190 SPR RS04415 WP 000495911.1         GFYVWELDKGKQVLRLKYLIYQDLRGKLHYQIKEFSYGQGSLLEILRLPYKKQKISHFTVSEDKDICRYIRQQLYYQNLF   238
NTDB id 495 SM12261 RS04415 WP 000495920.1     GFYVWELDSEKQVLRLKYLIHQDLRGKLHYQIKEFPYGHGSLLEILRFPYKKQKISHFTVSQDKDICRYIRQQLYYQNPI   238
NTDB id 1113272 V4T04 RS04450 WP 349651741.1  GFYYWELDFKAQKMRLKSLIHEDLRGKIIYLQEEIPFGEGRLIEQLRLPFLSQKLLTIPLIVDLKLAEFIRRQLYYCSPK   240
NTDB id 598 KW2 RS08500 WP 021037660.1         GFFYWELDFQRKKLRLKSLIHEDLRGRIICLQEEIPFGKGRLIAHLRLPYLAQKLVKIPTFKDSKLSSFIRQQLYYQSPK   240
consensus                                      !!**!!!!* ****!!!*!!**!!!!*******!***!*!*!***!!*!***!!********!******!!*!!!!****
```

```
logo

NTDB id 155 SP RS04850 WP 000495909.1          WMKEQAEAYQKGENILTYGLKEWYPQI...........RPIVGKFFQIEQDLTSYYQHFYTYYQKNPQNDWQKLYPPAFY   307
NTDB id 265 KZH43 RS04315 WP 000495911.1       WMKEQAEAYQKGENILTYGLKEWYPQI...........RPIVGKFFQIEQDLTSYYQHFYTYYQKNPQNDWQKLYPPAFY   307
NTDB id 224 SPD RS04655 WP 000495911.1         WMKEQAEAYQKGENILTYGLKEWYPQI...........RPIVGKFFQIEQDLTSYYQHFYTYYQKNPQNDWQKLYPPAFY   307
NTDB id 190 SPR RS04415 WP 000495911.1         WMKEQAEAYQKGENILTYGLKEWYPQI...........RPIVGKFFQIEQDLTSYYQHFYTYYQKNPQNDWQKLYPPAFY   307
NTDB id 495 SM12261 RS04415 WP 000495920.1     WMKEQAEAYKKGENLLTYGLKEWYPQI...........RPLVGNFCQIEQDLIRYYLYFQTYYQENPQNDWQMLYPPAFY   307
NTDB id 1113272 V4T04 RS04450 WP 349651741.1  WLKLQEKYYQRGENLLNLTFERSFIAPLGLNLLEVFDDKIPLHKFTQIKHNINLYYENFLINFQ...QNSFKEVYPPRFY   317
NTDB id 598 KW2 RS08500 WP 021037660.1         WMKIQEKYYQKGENLLTKKFEGPYIAPLGLNLLENFTDEMTITTFTQIDQNVKLYYENFLINFQ...RNSLEMLYPPRSY   317
consensus                                      !*!*!***!**!!!*!**********           ******!*!!******!!**!****!****!*****!!!**!
```

```
logo                                          QQYFLKNM..VE
                                              AIMGKQKKEMKNE
NTDB id 155 SP RS04850 WP 000495909.1         QQYFLKNM..VE   317
NTDB id 265 KZH43 RS04315 WP 000495911.1      QQYFLKNM..VE   317
NTDB id 224 SPD RS04655 WP 000495911.1        QQYFLKNM..VE   317
NTDB id 190 SPR RS04415 WP 000495911.1        QQYFLKNM..VE   317
NTDB id 495 SM12261 RS04415 WP 000495920.1    QQYFLKNM..VE   317
NTDB id 1113272 V4T04 RS04450 WP 349651741.1  AIMKKQKKDMNE   329
NTDB id 598 KW2 RS08500 WP 021037660.1        AIMGKQKKEK..   327
consensus                                     ********  **
```

X non conserved

X similar

X $\geq$ 50% conserved