```
logo
NTDB id 422 SGO RS10255 WP 012131059.1          MNEQFLESAEFYQKRYHNFASCLIVPSLILLVFLVGFSMLAKKEITISSRASVEASRVLAQIQSTSNGPIIANHLAENKE   80
NTDB id 484 SM12261 RS00280 WP 000801588.1      MKPEFLESAEFYNRRYHNFSSRVIVPMFLLLVFLLGFATLAEKEMSMSTRATVEPSRILANIQSTSNNRILVNHLEESKL   80
NTDB id 512 SMSK321 RS10735 WP 000801634.1      MKPEFLESAEFYNRRYHTFSSRVIVPMSLLLVFLLGFATFAEKEMSLSTRATVEPSRILANIQSTSNNRILVNHLEENKL   80
NTDB id 1154302 AD178 RS00520 WP 000801591.1    MKPEFLESAEFYNRRYHNFSSRVIVPMSLLLVFLLGFATFAEKEISLSTRATVEPSRILANIQSTSNNRILVNHLEENKL   80
NTDB id 248 KZH43 RS00225 WP 000801613.1        MKPEFLESAEFYNRRYHNFSSSVIVPMALLLVFLLGFATVAEKEMSLSTRATVEPSRILANIQSTSNNRILVNHLEENKL   80
NTDB id 207 SPD RS00240 WP 000801613.1          MKPEFLESAEFYNRRYHNFSSSVIVPMALLLVFLLGFATVAEKEMSLSTRATVEPSRILANIQSTSNNRILVNHLEENKL   80
NTDB id 172 SPR RS00235 WP 000801613.1          MKPEFLESAEFYNRRYHNFSSSVIVPMALLLVFLLGFATVAEKEMSLSTRATVEPSRILANIQSTSNNRILVNHLEENKL   80
NTDB id 132 SP RS00260 WP 000801611.1           MKPEFLESAEFYNRRYHNFSSSVIVPMALLLVFLLGFATVAEKEMSLSTRATVEPSRILANIQSTSNNRILVNHLEENKL   80
consensus                                       !***!!!!!!!!!**!!!*!*! *!!!* *!!!!!*!!***!*!!***!*!!*!!*!!*!!*!!!!!!!**!**!!!*!*!*

logo
NTDB id 422 SGO RS10255 WP 012131059.1          VKKGELLIQYAVEGEGAQEQKFSSQLDLLKDQKGKLETLRSSLESGRNQFTEPDSYGYEQSFKDYQNQVESMTSSVNQQN  160
NTDB id 484 SM12261 RS00280 WP 000801588.1      VKKGELLVQYQEGAEGVQAEAYASQLDMLKDQKKQLEYLQKSLQEGENHFPEEDKFGYQATFRDYISQAGSLRASTSQQN  160
NTDB id 512 SMSK321 RS10735 WP 000801634.1      VKKGELLVQYQEGAEGVQAEAYASQLDMLKDQKKQLEYLQKSLQEGENHFPEEDKFGYQATFRDYISQAGSLRASTSQQN  160
NTDB id 1154302 AD178 RS00520 WP 000801591.1    VKKGDLLVQYQEGAEGVQAESYASQLDMLKDQKKQLEYLQKSLQEGENHFPEEDKFGYQATFRDYISQAGSLRASTSQQN  160
NTDB id 248 KZH43 RS00225 WP 000801613.1        VKKGDLLVQYQEGAEGVQAESYASQLDMLKDQKKQLEYLQKSLQEGENHFPEEDKFGYQATFRDYISQAGSLRASTSQQN  160
NTDB id 207 SPD RS00240 WP 000801613.1          VKKGDLLVQYQEGAEGVQAESYASQLDMLKDQKKQLEYLQKSLQEGENHFPEEDKFGYQATFRDYISQAGSLRASTSQQN  160
NTDB id 172 SPR RS00235 WP 000801613.1          VKKGDLLVQYQEGAEGVQAESYASQLDMLKDQKKQLEYLQKSLQEGENHFPEEDKFGYQATFRDYISQAGSLRASTSQQN  160
NTDB id 132 SP RS00260 WP 000801611.1           VKKGDLLVQYQEGAEGVQAESYASQLDMLKDQKKQLEYLQKSLQEGENHFPEEDKFGYQATFRDYISQAGSLRASTSQQN  160
consensus                                       !!!!*!!*!!****!!*!***********!!!!!*!!!!!**!!*!**!!**!*!*!*!*!**!!***!*!!**!**!***!**!!!

logo
NTDB id 422 SGO RS10255 WP 012131059.1          ATIASQNAAASQSQAELGGVISDVDSKLNDHRNLKNAIQSGVGIDASHPLHSLYQSYRDQLSLAEDKATAQSQIVAQLDG  240
NTDB id 484 SM12261 RS00280 WP 000801588.1      ETIASQNAAASQTQAEIGTLISQTEAKIRDYQTAKSAIETGASLASQNLAYSLYQSYKSQ...GEENPQSKAQAVVQLEA  237
NTDB id 512 SMSK321 RS10735 WP 000801634.1      ETIASQNAAASQTQAEIGNLISQTEAKIRDYQTAKSAIETGASLASQNLAYSLYQSYKSQ...GEENPQAKAQAVAQVEA  237
NTDB id 1154302 AD178 RS00520 WP 000801591.1    ETIASQNAAASQTQAEIGNLISQTEAKIRDYQTAKSAIETGASLAGQNLAYSLYQSYKSQ...GEENPQIKVQAVAQVEA  237
NTDB id 248 KZH43 RS00225 WP 000801613.1        ETIASQNAAASQTQAEIGNLISQTEAKIRDYQTAKSAIETGTSLAGQNLAYSLYQSYKSQ...GEENPQTKVQAVAQVEA  237
NTDB id 207 SPD RS00240 WP 000801613.1          ETIASQNAAASQTQAEIGNLISQTEAKIRDYQTAKSAIETGTSLAGQNLAYSLYQSYKSQ...GEENPQTKVQAVAQVEA  237
NTDB id 172 SPR RS00235 WP 000801613.1          ETIASQNAAASQTQAEIGNLISQTEAKIRDYQTAKSAIETGTSLAGQNLAYSLYQSYKSQ...GEENPQTKVQAVAQVEA  237
NTDB id 132 SP RS00260 WP 000801611.1           ETIASQNAAASQTQAEIGNLISQTEAKIRDYQTAKSAIETGASLAGQNLAYSLYQSYKSQ...GEENPQTKVQAVAQVEA  237
consensus                                       *!!!!!!!!!!!!*!!!*!**!!****!**!****!*!!**! ***********!!!!!!**!    *!*******!*!*!***

logo
NTDB id 422 SGO RS10255 WP 012131059.1          QISQLEATAATYRVQYAGAGAQQAYASNLSSQLASLKAQYLVKVGQELTTLTQQILEAESNLKLQETVSKRGQILAEMDG  320
NTDB id 484 SM12261 RS00280 WP 000801588.1      QLSQLESSLATYRVQYAGSGTQQAYASGLSSQLESLKSQHLAKVGQELTLLDQKILEAESGRKVQGNLLDKGKITASEDG  317
NTDB id 512 SMSK321 RS10735 WP 000801634.1      QLSQLESSLTTYRVQYAGSGIQQAYASGLSSQLESLKSQHLAKVSQELTLLDQKILEVESGKKVQGNLLDKGKITASEDG  317
NTDB id 1154302 AD178 RS00520 WP 000801591.1    QISQLESSLATYRVQYAGSGTQQAYASGLSSQLESLKSQHLAKVGQELTLLAQKILEAESGKKVQGNLLDKGKITASEDG  317
NTDB id 248 KZH43 RS00225 WP 000801613.1        QISQLESSLATYRVQYAGSGTQQAYASGLSSQLESLKSQHLAKVGQELSLLAQKILEAESGKKVQGNLLDKGKITASEDG  317
NTDB id 207 SPD RS00240 WP 000801613.1          QISQLESSLATYRVQYAGSGTQQAYASGLSSQLESLKSQHLAKVGQELSLLAQKILEAESGKKVQGNLLDKGKITASEDG  317
NTDB id 172 SPR RS00235 WP 000801613.1          QISQLESSLATYRVQYAGSGTQQAYASGLSSQLESLKSQHLAKVGQELSLLAQKILEAESGKKVQGNLLDKGKITASEDG  317
NTDB id 132 SP RS00260 WP 000801611.1           QISQLESSLATYRVQYAGSGTQQAYASGLSSQLESLKSQHLAKVGQELTLLAQKILEAESGKKVQGNLLDKGKVTASEDG  317
consensus                                       !*!!!!****!!!!!!!!!*!*!!!!!!*!!!!!*!!!*!*!*!!*!!!**!*!*!!!*!!**!*!*!!!!!!*!***!**!!
```

```
logo

NTDB id 422 SGO RS10255 WP 012131059.1          LLHLNPEVQGSTLVAEGTALAQIYPKITNERKIKIVTYVSSKDVSTIKNGDKVREITADDANKQMILTSQISSIDANATQ   400
NTDB id 484 SM12261 RS00280 WP 000801588.1      VLHLNPETSDSTMVAEGALLAQLYPSLEKEGKVKLTAYLSSKDVARIKVGDSVRYTTTHDAKNQLFLDSTITSIDATATK   397
NTDB id 512 SMSK321 RS10735 WP 000801634.1      VLHLNPETSDSTMVAEGTLLAQLYPSLEKEGKAKLTAYLSSKDVARIKVGDSVRYTTTHDAKNQIFLDSTITSIDATATK   397
NTDB id 1154302 AD178 RS00520 WP 000801591.1    VLHLNPETSDSSMVAEGALLAQLYPSLEREGKAKLTAYLSSKDVARIKVGDSVRYTTTHDAGNQLFLDSTITSIDATATK   397
NTDB id 248 KZH43 RS00225 WP 000801613.1        VLHLNPETSDSSMVAEGTLLAQLYPSLEREGKAKLTAYLSSKDVARIKVGDSVRYTTTHDAGNQLFLDSTITSIDATATK   397
NTDB id 207 SPD RS00240 WP 000801613.1          VLHLNPETSDSSMVAEGTLLAQLYPSLEREGKAKLTAYLSSKDVARIKVGDSVRYTTTHDAGNQLFLDSTITSIDATATK   397
NTDB id 172 SPR RS00235 WP 000801613.1          VLHLNPETSDSSMVAEGTLLAQLYPSLEREGKAKLTAYLSSKDVARIKVGDSVRYTTTHDAGNQLFLDSTITSIDATATK   397
NTDB id 132 SP RS00260 WP 000801611.1           VLHLNPETSDSSMVAEGALLAQLYPSLEREGKAKLTAYLSSKYVARIKVGDSVRYTTTHDAGNQLFLDSTITSIDATATK   397
consensus                                       *!!!!!!***!**!!!!**!!!*!!****!*!*!***!*!!!*!**!!*!!*!!**!**!!*!*!**!*!*!*!!!!*!!*

logo

NTDB id 422 SGO RS10255 WP 012131059.1          TKQGNFFKVECEMAVSKDQAKKLRYGLEGKFVMVTGEKTYFSYYMEKFFNLG   452
NTDB id 484 SM12261 RS00280 WP 000801588.1      TETGNFFKIEAETNLTSKQAAKLRYGVEGRLQMITGRKSYLRYYLDQFLNKE   449
NTDB id 512 SMSK321 RS10735 WP 000801634.1      TEKGNFFKIEAETNLTSEQTEKLRYGVEGRLQMITGRKSYLRYYLDQFLNKE   449
NTDB id 1154302 AD178 RS00520 WP 000801591.1    TEKGNFFKIEAETNLTSEQAEKLRYGVEGRLQMITGKKSYLRYYLDQFLNKE   449
NTDB id 248 KZH43 RS00225 WP 000801613.1        TEKGNFFKIEAETNLTSEQAEKLRYGVEGRLQMITGKKSYLRYYLDQFLNKE   449
NTDB id 207 SPD RS00240 WP 000801613.1          TEKGNFFKIEAETNLTSEQAEKLRYGVEGRLQMITGKKSYLRYYLDQFLNKE   449
NTDB id 172 SPR RS00235 WP 000801613.1          TEKGNFFKIEAETNLTSEQAEKLRYGVEGRLQMITGKKSYLRYYLDQFLNKE   449
NTDB id 132 SP RS00260 WP 000801611.1           TEKGNFFKIEAETNLTSEQAEKLRYGVEGRLQMITGKKSYLRYYLDQFLNKE   449
consensus                                       !**!!!!!*!*!*****!**!!!!!*!!***!*!!*!*!**!!***!*!**
```

X non conserved

X similar

X $\geq$ 50% conserved