```
logo

NTDB id 54731 LEPTO7376 RS19530 WP 015135789.1  MLDFLKNILKPKNNGIGIEISAERLNIVQLKKQGQIYKLVNCISEEIPEGIFEEGKIVDSPALAELIQDTLAAHNITTKK   80
NTDB id 1411 SGL RS10685 WP 010872897.1         MFSRFTSLFGRKSSGVGLEITPERVNVAQLTSQGQSYKLRKFGHASIPEGIFEEGKIVDSPALAEIIQELLSENGINTKQ   80
consensus                                       !      *  *!  !*!*!!**!!*!* !!  !!! !!!  * *  !!!!!!!!!!!!!!!!!!!!*!!* !  * ! !!

logo

NTDB id 54731 LEPTO7376 RS19530 WP 015135789.1  VAAAVPMREAIIRLIPIPAELDDAELRDMVLNHEAGLYLPYPREEVDLDYQKLGFFQDEDGIDKVQVLLVATRQEVTDSY  160
NTDB id 1411 SGL RS10685 WP 010872897.1         VATAVPMREAIIRMLPVPAELDENELRDMVLNHEAALYLPYPREEVDLDYQKLGLFEDEDGIEKVQVLLVATRREVTDSY  160
consensus                                       !! !!!!!!!!!!**!*!!!!!* !!!!!!!!!!!*!!!!!!!!!!!!!!!!!! ! !!!!!*!!!!!!!!!! !!!!!!

logo

NTDB id 54731 LEPTO7376 RS19530 WP 015135789.1  YDTFYQAGLQIDVLEINSFSLIRTIREQLRQFSSQEAVVLVDVEFDCTEIAIVVDGVPQFSRTVPIGTFQLQSALSRAMN  240
NTDB id 1411 SGL RS10685 WP 010872897.1         LDTFQQAGLQVDVLEINSFALIRTIREQLRQFGSREAAVLVDIEFDSTEIAIIVDGVPQFSRTVPIGTYQMQNALSRAMN  240
consensus                                        !!! !!!!!*!!!!!!!! !!!!!!!!!!!! ! !! !!!!*!!!*!!!!!*!!!!!!!!!!!!!!!!*!*! !!!!!!!

logo

NTDB id 54731 LEPTO7376 RS19530 WP 015135789.1  LPASRNIELLQGMTIPNTPVEGVRTGATGINPGMAALLRVLGELADELRRSIDFYLNQSAELEVAQLLLAGPGGGIGQLD  320
NTDB id 1411 SGL RS10685 WP 010872897.1         LPPSRNPEILQGMTIPVTQFDTMSTQGTAVNPGMNALMRVMGELTDELRRSINFYLNQSEELELVQLLLAGPGGGLIQLD  320
consensus                                       !!*!!!*!*!!!!!!! !* * *  ! *!**!!!! !!*!!*!!! !!!!!!! !!!!!! !!!* !!!!!!!!!!* !!!

logo

NTDB id 54731 LEPTO7376 RS19530 WP 015135789.1  EFFTQRLSIPTLQIDPFDALSIETEDDIPQVQKPSLGTALGLGLREV   367
NTDB id 1411 SGL RS10685 WP 010872897.1         EYFTQRLSIPTVKIDPFEALAIDTDQNFSDIERPSLATVLGLGIREA   367
consensus                                       !*!!!!!!!!!!* !!!!*!! !*!*   * * *!!!*! !!!!*!!
```

X non conserved

X similar

X $\geq$ 50% conserved