logo

```
NTDB id 35873 LEPTO7376 RS01705 WP 015132569.1  MAIKRSQGNTPPKQEKTTRSSGRDPLTNSQALPN....ETDHSTSEDRIRPQTLADYLGQKDLKEVLGIAIAAAKSRQEP   76
NTDB id 1421 SGL RS14255 WP 010873577.1         MAIKRSGNNNLSPNVKS.......DLLSPEVIPQERSTSPELEQQEASLRPQRLADYIGQRDLKEVLRIAIQAAQGRQEA   73
consensus                                       !!!!!!  ! **** !*********!  *  *!***** ***   !  *!!! !!!!*!!*!!!!!! !!! !!  !!!*
```

logo

```
NTDB id 35873 LEPTO7376 RS01705 WP 015132569.1  LDHMLLYGPPGLGKTTMSLILAAEMGVKCKITAAPALERPRDISGLLVGLEAGDILFIDEIHRLNRMAEELLYPAMEDSR  156
NTDB id 1421 SGL RS14255 WP 010873577.1         IDHLLLYGPPGLGKTTLALILAEEMQVRCKITAAPALERPRDITGLLLALQPGDILFIDEIHRLNRLTEELLYPAMEDFR  153
consensus                                       *!!*!!!!!!!!!!!!* !!!! !! !*!!!!!!!!!!!!!!!*!!!**! *!!!!!!!!!!!!!!* !!!!!!!!!! !
```

logo

```
NTDB id 35873 LEPTO7376 RS01705 WP 015132569.1  LDITIGKGVSARTRSIPLKPFTLIGATTKVGSLTSPLRDRFGLIQRLRFYEVDELVAIVHRSSKILGQPVTEEGAIAIAR  236
NTDB id 1421 SGL RS14255 WP 010873577.1         LDITMGKGQSAKVRSLKLAHFTLVGATTKVGSLTSPLRDRFGLIQRLRFYEVDELQQIILRTAGILSVSISPTGAEAIAM  233
consensus                                       !!!!*!!! !!* !!**!  !!!*!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!  !**!*  !!  **** !! !!!
```

logo

```
NTDB id 35873 LEPTO7376 RS01705 WP 015132569.1  RARGTPRIANRLLRRIRDYAQVKGFDEINQEVAATAMDLYNVDPLGLDWTDRLILETMVSHFGGGPVGVEAIAAATGEDS  316
NTDB id 1421 SGL RS14255 WP 010873577.1         RARGTPRIANRLLKRVRDYAQVKQQPEIDPALASEALDLYQVDKRGLDWTDRLVLQTLIEQFQGGPTGLEAIAAATGEDA  313
consensus                                       !!!!!!!!!!!!!!*!*!!!!!!!  *!! * *!  !*!!!*!!* !!!!!!!!!*! !** *! !!! !*!!!!!!!!!!
```

logo

```
NTDB id 35873 LEPTO7376 RS01705 WP 015132569.1  KTIEEVYEPYLLQIGFLNRTPRGRVVTVNARKHLGLIDGVKPQTTQLDLLLSD   368
NTDB id 1421 SGL RS14255 WP 010873577.1         KTIEEVYEPYLLQIGYLARTSRGRIATTAAYEHLGLTPPTPLL....PWKES   361
consensus                                       !!!!!!!!!!!!!!!*! !!*!!!* !  !  !!!! ** ** *****
```

X non conserved
X similar
X ≥ 50% conserved