logo

```
NTDB id 35876 LEPTO7376 RS14945 WP 015135001.1  MTQSPLSKRKKALALRNDFSPFGNKLIQSGVVDHQQMEKALVETRKSGRPLTSVIEELTGKALSPELVRQYKKHHLFELK  80
NTDB id 1410 SGL RS13950 WP 010873519.1         MTSSSSSKKSRAVALRNYFSPFGNKLVAGGHVDAEQLRQALVQVKKTGRSLPEELKAVTGRELSPELLRQYKKNQLFELK  80
consensus                                       !! !* !!* *!*!!!! !!!!!!!!* !*!!* !* !!! *!*!!*!* * *!!* !!!!!*!!!!!**!!!!!
```

logo

```
NTDB id 35876 LEPTO7376 RS14945 WP 015135001.1  ILYGVDSIDPEIQDIDSSQMGELINSLIPIELCRRHKILPLRRIEIDEAIEVIVAMVDPDNLAAQDDINRLFRLQNIKMQ  160
NTDB id 1410 SGL RS13950 WP 010873519.1         VLYGVDSVDPEVAPIATQQMAELIGRFFPLDTCRRFKFLPLAQQEGD.PPSVLVAMVDPDNLAAQDELNRILRVKGFELR  159
consensus                                       *!!!!!!*!!!* *! * !!*!!!    !** !!!*! !!!   ! !*** !*!!!!!!!!!!!!!**!!* !*    *
```

logo

```
NTDB id 35876 LEPTO7376 RS14945 WP 015135001.1  RIVITDEDYRRILDEYLEVQVQQQADEK.EEAERAA.EADEMRKAVELDDLDLGDDEGLDEAADESADLMSENQASSAPV  238
NTDB id 1410 SGL RS13950 WP 010873519.1         RLVVTQDDFNQLLEQYYAIREEWEAAQEKRDQERALDKLNDLTDIVGSIDMNLG......EDKEDVDNALDSNDANQAPV  233
consensus                                       !*!*! *!*  *!* !  *     !  * * !!! *  **   !  !* !!******!  **    *  ! !  !!!
```

logo

```
NTDB id 35876 LEPTO7376 RS14945 WP 015135001.1  IKLVNKVLLKALQEGVSDIHIEPQEKDLRIRFRKDGVLQYAFEPLPKKIIPAVSARFKIMAELDIAERRLPQDGRIRRVF  318
NTDB id 1410 SGL RS13950 WP 010873519.1         INLVNKILAKALQEGTSDIHVEPQEETLRIRFRKDGVLNQAFDPLPRKITPAVVARFKIMADMDIAERRSPQDGKIRRIY  313
consensus                                       ! !!!!*! !!!!!! !!!!*!!!!  !!!!!!!!!!!* !!*!!!*!! !!! !!!!!!!**!!!!!! !!!!*!!!**
```

logo

```
NTDB id 35876 LEPTO7376 RS14945 WP 015135001.1  KGRKVDFRVNSLPSRYGEKICLRILDNSSTQLGLDILITNPDILEQVREMAQRPFGLILVTGPTGSGKSTTLYSILAERN  398
NTDB id 1410 SGL RS13950 WP 010873519.1         QGRKVDFRVNTLPSRYGEKVCLRILDNSATQLGLDFLITNPETLQTVRELAARPYGLMLVTGPTGSGKSTTLYSVLAERN  393
consensus                                        !!!!!!!!!*!!!!!!!!*!!!!!!!! !!!!!! !!!!!* !  !!!*! !!*!!*!!!!!!!!!!!!!!!*!!!!!
```

logo

```
NTDB id 35876 LEPTO7376 RS14945 WP 015135001.1  HPGVNISTAEDPIEYSLPGITQVQVIREKGMDFASILRAFMRQDPDVILVGETRDKETAKTAIEAALTGHLVLTTLHTND  478
NTDB id 1410 SGL RS13950 WP 010873519.1         SPEVNINTAEDPIEYALPGITQVQVIREKGMDFSNILRAFMRQDPDVILVGETRDKETAKTAIEAALTGHLVLTTLHTND  473
consensus                                       *! !!! !!!!!!!! !!!!!!!!!!!!!!!!!  !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
```

logo

```
NTDB id 35876 LEPTO7376 RS14945 WP 015135001.1  APRAIARLDEMGVEPFMISGSLLGVLAQRLMRRVCSECRVPYQPTADELGRFGLAASQDGELTIYKANTLSADQIQTARS  558
NTDB id 1410 SGL RS13950 WP 010873519.1         AAGAIARLDEMGVEPFMVSGSLLGVLAQRLMRKVCTECRIAYHPSKEELSRFGLSASGDEVVTFYKANSLSPDEIHLARQ  553
consensus                                       !* !!!!!!!!!!!!!!*!!!!!!!!!!!!!!!*!!*!!!**!*!* *!! !!!! !! !  *! !!!!*!!*! !* !!
```

X non conserved
X similar
X ≥ 50% conserved