



**Additional file 4** - Alignment of nucleotide sequences of parts of the non-coding regions upstream (A) and downstream (B) of the coding regions of the 11 mitochondrial minichromosomes of *Polyplax spinulosa*, the louse of the Asian house rat, *Rattus tanezumi*. 301F and 301R are the primers used to amplify the coding regions of all mitochondrial minichromosomes of *Polyplax spinulosa*.