CONSERVATION OF REPEATED ELEMENTS WITHIN NON-CODING SEQUENCES OF *LEISHMANIA* SPP.

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Gene amplification is a common phenomenon observed in *Leishmania* cell lines subjected to drug pressure. In this study we investigated the level of conservation across the H locus between *Leishmania (Viannia) braziliensis* and *Leishmania (Leishmania) major.* In *L. major* and other species the H locus is amplified in cell lines selected in unrelated drugs. Despite of being 3 Kb shorter, the *L. braziliensis* H locus, presented an overall sequence identity of 79% with a strong conservation of gene synteny, when compared to *L. major*. The typical intergenic repeats that are believed to mediate the amplification of the H locus in species of the *Leishmania* subgenus are partially conserved in the *Viannia* species. Although these repeated elements presented a low nucleotide identity (23.9%), their position across the H locus is equivalent in both species. Also, among each species, the repeated elements are highly conserved, presenting a sequence identity of up to 95%. This finding demonstrates the relevance of these repetitive elements and underlines the occurrence of positive selection, which has guaranteed their preservation in the genome. Supported by CAPES, FAPESP and CNPq.