

TcRRM IS DIFFERENTIALLY EXPRESSED IN *Trypanosoma cruzi* LIFE CYCLE
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Trypanosomes are a group of eukaryotic organisms with many unusual characteristics in their molecular biology; so the identification and characterization of RNA binding proteins in *T. cruzi* is particularly relevant as they play key roles in the regulatory mechanisms of gene expression. We have identified two genes coding for TcRRM1 and TcRRM2 which contain two RNA binding domains (RRM) each and are very similar to two *T. brucei* RNA binding proteins previously reported, Tbp34 and Tbp37, and to an annotated ORF in *Leishmania major* genome project. The *T. cruzi* RRM genes are organized in a tandem of at least 8 copies, alternating with copies of TcP28, a gene of yet unknown function. However, TcRRM transcripts accumulation is higher in the spheromastigote stage, while for TcP28 this accumulation is higher in the trypomastigote stage. The untranslated regions of both TcRRM and TcP28 genes have been mapped and are being analysed in order to identify possible cis elements involved in this developmental regulation. Immunofluorescence assays indicate that TcRRM have cytoplasmic localization in the three different cell stages. Functional binding assays are being performed in order to verify the specificity of the ligation to ribonucleotides. Supported by FAPERJ and CNPq.