EXPRESSION ANALYSIS OF THE MASP GENE FAMILY OF TRYPANOSOMA CRUZI

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MASP is a large multigene family of surface proteins identified by the T. cruzi sequencing consortium (El-Sayed et al., 2005). MASP family contains 1377 members corresponding to ~6% of the *T.cruzi* diploid genome and is characterized by conserved N- and C-terminal domains and a central highly variable and repetitive region. To initiate the functional characterization of MASP, peptides derived from the family were selected for synthesis and generation of the corresponding antibodies. The following selection criteria was used: 1) the most conserved motifs found in the mature protein; 2) the peptides should be immunogenic; 3) peptides should be MASP-specific and 4) peptides should represent different MASP sub-groups to allow co-expression studies. The anti-MASP affinity-purified antibodies have been used in immunofluoresence assays and in experiments of Western blot using extracts from epimastigote, tripomastigote and amastigote forms. Our results indicate that MASP is expressed on the trypomastigote surface. Northern blot, RT-PCR and screening of a trypomastigote cDNA library suggest a limited set of MASP genes is expressed at a given time.