

**Proteomic Analyses of Tegument/Excreted/Secreted Proteins of Adult
Worms, Male and Female, of *Schistosoma mansoni*
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Proteins excreted/secreted or anchored on the surface of intra-mammalian stages of schistosomes are exposed to host environment, and may represent important antigens during natural infection, being potential candidates for the development of new intervention strategies. Some proteins of *S. mansoni* are recognized only by antiserum from bisexually infected mice, concluding that certain pair-dependent antigens are produced. To identify putative target antigens in *S. mansoni*, tegument and secreted proteins were trypsin digested, and the peptides analyzed by nano LC-MS/MS. The identification of peptides was processed using Mascot and the cluster of peptides to proteins was done by PROVALT. More than 200 proteins total were identified for both samples against the public sequences. Among the proteins observed were, known antigens, proteins involved in glycolysis, signal transduction, immunodefense, or cytoskeleton, being many of them known to be secreted or present in the tegument. Few proteins were gender specific and many were not characterized before. This approach will give us information about the parasite-host interaction and contribute to the identification of new putative vaccine targets.

Key Words: *Schistosoma mansoni*, proteome, antigen, vaccine.