Study of the Alternative Splicing of a gene coding for a Secreted Protein from *Schistosoma mansoni*

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Schistosomes are blood dwelling trematode parasites and causative agents of Schistosomiasis, a tropical disease affecting 200 million individuals worldwide. Despite intensive studies of the host-parasite interaction, it is not totally understood how the parasite succeed in escape the host immune system, ensuing chronic infections that may persist for decades. Recently, we have detected a family of secreted proteins that are coded by genes with micro-exons that were named MEGs (Micro-Exon Genes). Due to their peculiar gene structure, it was hypothesized that several isoforms of proteins from this family could be produced by alternate splicing. We performed a study of the transcripts from one of the members of this family, MEG-14, using RT-PCR, cloning and sequencing. We obtained an amplification profile that indicated amplification of several different transcripts and sequencing confirmed that they were splicing variants derived from MEG-14 gene. These results provide further support to our hypothesis that MEG structure is designed to promote protein variability in Schistosomes.

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