

IDENTIFICATION, SEQUENCING, AND EXPRESSION ANALYSIS OF POMP GENE FROM SCHISTOSOMA MANSONI

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Schistosomiasis is one of the most prevalent parasitic diseases in humans. Recently, it was reported for the first time biochemical evidence for the existence of an ubiquitin–proteasome proteolytic pathway in *Schistosoma mansoni*. This system is involved in several mechanisms and thought to contribute to the regulation of cellular homeostasis. The 26S proteasome is composed of two types of complexes, the 20S proteolytically active core particle and the flanking two 19S regulatory particles. Eukaryotic proteasome biogenesis requires accessory proteins to promote its assembly and final maturation steps. A protein directly associated with proteasome precursor complexes is proteasome maturation protein (POMP). In this study, we have identified and sequenced POMP gene from *S. mansoni* and analyzed its expression during its life cycle. Our data showed that POMP has a differential RNA expression in the stages studied. Taken together, these results will contribute for understanding the ubiquitin- proteasome pathway in this parasite.

Key words: POMP, *S. mansoni*, proteasome

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