

Production and Characterization of Murine Monoclonal Antibodies to *Leishmania* Gp63 Antigen

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ABSTRACT

Background: Production of monoclonal antibodies to *Leishmania* antigens assists the identification and characterization of these organisms. **Objective:** Production of monoclonal antibodies against epitopes on the gp63. **Methods:** Two murine monoclonal antibodies to gp63 were produced and characterized. The reactions of both antibodies with soluble leishmanial antigens, purified gp63 and truncated recombinant gp63 molecules were studied by an ELISA assay. These two antibodies reacted with the crude soluble antigens prepared from 4 reference strains of *Leishmania*, 10 isolates from the patients, purified gp63 and recombinant gp63 molecules. However, no reaction with several non-leishmanial antigens was observed. Reaction of both antibodies with the intact recombinant gp63 and truncated molecules were compared. **Results:** The results indicated that the two antibodies specifically recognize two different epitopes on the gp63 molecule. **Conclusion:** Possible applications of such antibodies in searching for immunogenic epitopes are discussed.

Key words: gp63, *Leishmania*, Monoclonal Antibody