NEW STRATEGIES FOR VACCINES DEVELOPMENT FOR LEISHMANIASIS

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L. chagasi causes visceral leishmaniasis in Latin America. There is a need for vaccine development against all forms of leishmaniasis, but particularly against the potentially fatal visceral disease. It seems likely that a successful vaccine against this complex organism will require a mixture of antigens. Many antigenic proteins of *Leishmania* sp. have already been discovered. During the present study we systematically screened an *L. chagasi* amastigote cDNA library for antigens that could potentially be included in a cocktail vaccine. We designed a two-step screen in which the library was first immunoscreened using pooled serum from eleven Brazilians with documented visceral leishmaniasis. Positive clones underwent a second screen with a proliferation assay using T cells from infected mice that were resistant to *L. chagasi* and non-responsive to LPS. Six unique clones encoding non-heat shock proteins of significant size were identified. We report herein the characteristics of these cloned protein antigens.