

## **Immunoprecipitation studies with biotinylated *Entamoeba histolytica* antigens**

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### **Immunoprecipitation studies with biotinylated *Entamoeba histolytica* antigens**

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### **Abstract**

The biotinylation of protein antigens for use in immunoprecipitation studies with parasite antigens is described. This technique was standardized to produce maximal labelling without compromising either the viability of the parasite or the antigenicity of labelled proteins. Live axenic *Entamoeba histolytica* trophozoites were optimally labelled by incubation of 10(7) parasites in 1 ml phosphate-buffered saline for 20 min at 37 degrees C with a final concentration of 10 mM N-hydroxy succinimido-biotin (NHS-B). Examination of antigens recognized by immunoglobulin from convalescent amoebic liver abscess patients and precipitated by protein A-Sepharose showed a general increase in immune response to amoebic antigens with time following treatment. Mass ratio mol. wts of immunoprecipitated antigens concur with those presented by other authors using alternate technology, in addition to recognizing antigens previously not identified by human sera. We therefore recommend biotinylation as a viable alternative to radiolabelling techniques for the study of parasite antigens and the humoral immune responses raised against them.

### **Reference**

Gandhi, B.M., Irshad, M., Acharya, S.K. and Tandon, B.N.: The immunofluorescent detection of *Entamoeba histolytica* in pus using avidin-biotin system. *Journal of Microbiological Methods* 7: 169-177, 1987