

# Biochemical, immunological, and biological characterization of trypanosoma cruzi populations of the andean North of Chile

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Twenty-one *Trypanosoma cruzi* stocks isolated from *Triatoma infestans* and humans of the Chilean Andean highlands were studied at the genotypic level by schizodeme and molecular karyotype analyses, which allowed a clear distinction of the parasites from those hosts. A phenotypical characterization was performed by proteolytic activity after electrophoretic fractionation without discrimination among the stocks. Metacyclic trypomastigotes obtained in vitro proved to be infective to Swiss mice and the study of immune response and biological behavior was assessed. Of a total of 21 *T. cruzi* stocks, only 11 proved to be infective in mice due to difficulties in obtaining metacyclic trypomastigotes with the parasite populations isolated from humans. Western blot analysis revealed a complex immune response even in the first days postinfection with each *T. cruzi* strain studied. Antigenic recognition by each immune serum is characteristic, although several major and common antigens were detected. L