An immunodominant and immunogenetically defined polypeptide present in T. cruzi

R. Ramos¹, M.A. Juri², A. Ramos², G. Hoecker², and A. Ferreira¹,².¹ Department of Biochemistry and Molecular Biology, Faculty of Chemical and Pharmaceutical Sciences; ² Department of Cellular Biology and Genetics, Faculty of Medicine, University of Chile.

By using immuno western blotting we have detected a 45 Kd polypeptide (provisionally designed as T.c.45), recognized by sera from A.SW (H-2⁵) mice, immunized with trypomastigotes of the Tulahuen strain of T. cruzi. This polypeptide, present in trypo and epimastigotes, is not recognized by A.CA (H-2⁵) mice, the H-2 congenic counterpart of A.SW. Therefore, the recognition of T.c. 45 seems to be controlled by the H-2 complex and correlates with the resistance of A.SW mice to the acute infection produced by the inoculation of 10⁴ trypomastigotes. The same inoculum induces an acute infection in A.CA mice, all of them dying around 15 days post infection. If this correlation is causal rather than spurious, T.c. 45 would be a good candidate to study its experimental immunogenic protective value as well as its recognition by seropositive human sera and its eventual control by the HLA system.

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