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Analysis of peptidases in non-infected and *Trypanosoma cruzi*-infected mouse embryo hepatocyte cells

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Cellular peptidase profiles from non-infected and *Trypanosoma cruzi*-infected hepatocyte cell cultures were characterized by substrate-SDS-PAGE containing different copolymerized proteins. A 100-kDa metallopeptidase had the ability to degrade exclusively gelatin. In the non-infected and in the infected hepatocytes, a cysteine peptidase migrating in gelatin-SDS-PAGE at 60 kDa presented the broadest specificity, since it was also able to hydrolyze casein and hemoglobin. The 100 kDa component was only detected at alkaline pH and predominantly expressed in non-infected hepatocytes. Conversely, the 60 kDa cysteine peptidase was only observed in acidic condition and its production was robustly augmented in *T. cruzi*-infected cells, probably due to the cysteine peptidase synthesized by the parasites, as corroborated by immunoblotting assay using anti-cruzipain antibody. Collectively, these results suggest that peptidases may be involved in the interaction process between *T. cruzi* and hepatocytes in vitro.