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ACCEPTED MANUSCRIPT

Saliva proteins from the hematophagous T. pallidipennis

Proteomic and transcriptomic analysis of saliva components from the hematophagous reduviid *Triatoma pallidipennis*

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[§]Departamento de Medicina Molecular y Bioprocesos, Instituto de Biotecnología, Universidad Nacional Autónoma de México, UNAM. Apartado Postal 510-3, Cuernavaca Morelos, 61500, MEXICO. [¶]Centro de Ciencias Genómicas - UNAM, Cuernavaca, Morelos, 62210, México.

*Corresponding author: Institute of Biotechnology-UNAM, Av. Universidad 2001, Cuernavaca, Morelos, 62210, Mexico. Tel. +52-777-317-1209; FAX +52-777-317-2388; Email: corzo@ibt.unam.mx **Running title:** Saliva proteins from the hematophagous *T. pallidipennis*.

The abbreviations used are: LC-MS/MS, liquid chromatography tandem mass spectrometry; MS, mass spectrometry; RNA-seq, next generation RNA sequencing; PHRED, a measure of the quality of the identification of the nucleobases generated by automated DNA sequencing; CHAPS, 3-[(3-Cholamidopropyl) dimethyl ammonium]-1-propane sulphonate, a zwitterionic detergent; DTT, 1,4-dithiothreitol; CAP, Cysteine-rich secretory protein, Antigen 5, and Pathogenesis-related 1 protein; INPP5, inositol-polyphosphate 5-phosphatases; PAF, platelet activation factor; IGFBP, Insulin growth factor binding protein.

Abstract

Species belonging to the Triatominae subfamily are commonly associated with Chagas disease, as they are potential vectors of the parasite *Trypanosoma cruzi*. However, their saliva contains a cocktail of diverse anti-hemostatic proteins that prevent blood coagulation, vasodilation and platelet aggregation of blood; components with indisputable therapeutic potential. We performed a transcriptomic and proteomic analyses of salivary glands and protein spots from 2DE gels of milked saliva, respectively, from the Mexican

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