

IDENTIFICATION AND CHARACTERIZATION OF ABC TRANSPORTER
HOMOLOGOS TO PDR5P IN *PARACOCCIDIOIDES BRASILIENSIS*

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The resistance phenomenon to multiple drugs (MDR) it is great problem to solve in relation to treatment of infectious diseases and cancer. One of the mechanisms responsible for this phenotype is the expression of transmembrane proteins, like ABC transporters super family, that force the efflux of drugs out the cell, impeding the action of drugs, as Glycoprotein-P (PgP) of mammals or Pdr5p of *S.cerevisiae*. Genomic analyses of others pathogenic fungus demonstrate the existence of sequences that are similar one of those transporters, among them, *Paracoccidioides brasiliensis*, etiological agent of Paracoccidioidomycosis. Paracoccidioidomycosis is a systemic and endemic mycosis among the populations of rural area, especially man on work age. The treatment is made with ketoconazole and amphotericin B, however, the patients are never totally cured, because the fungus could be stay commensally in the organism. In this study, we used a preparation of plasmatic membranes of *P.brasiliensis* in order to check the presence of ABC transporters like PgP or Pdr5p. The first results show that one band around 160 kDa was identified by antibodies against PgP and Pdr5p. This data could be a very important tool to elucidate the problem of resistance of *P.brasiliensis*, since we intent to identify and characterize biochemical and structurally this protein in plasma membrane preparation and after purification.