

ISOLATION AND CHARACTERIZATION OF *Rhinella schneideri* POISON AND ITS ACTION ON RATS BRAIN AND ON Na⁺K⁺ ATPase ACTIVITY.

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Toads (order: Anura; family, Bufonidae; genus: *Rhinella*) are distributed throughout the world, but are found mainly in areas of tropical and humid temperate climates. The skin glands are found on the back as large parotoid glands that contain cardiac glycoside, alkaloids, peptides and other structures that can cause a large array of effects. *Rhinella schneideri* poison was initially submitted to a dialysis using a Fisherbrand MWCO membrane with 6000-8000 kDa pores. The low molecular weight fraction (LMWF, pass through the pores of the membrane) was lyophilized and submitted to a RP-HPLC on C2-C18 column. Seven main subfractions were obtained and named Rs1 to Rs7. The Na⁺K⁺-ATPase was obtained from rabbit kidney and the enzymatic activity was assayed by quantification of phosphate release as described by Santos et al. (Braz. J. Med. Biol. Res. 35, 277-288, 2002). For these assays, Na⁺K⁺-ATPase was incubated with 5 mM ATP and 10 mM MgCl₂ for 30 minutes, at 37°C. The reaction was stopped with 0.5 mL cold 30% TCA and centrifuged at 4000xg immediately prior to phosphate determination. The LMWF causes status epilepticus when injected (ip) in mouse. LMWF and the subfractions Rs5 induced a concentration-dependent reduction in the Na⁺K⁺-ATPase activity, showing 50% of inhibition using 3.2 ug and 0,13 ug respectively.

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