

Figure 1 Supplemental - Block properties of T-type calcium currents. A Nifedipine (1  $\mu$ M) does not block the currents evoked by a depolarizing pulse to -20 mV, from a holding of -80 mV. B T-type calcium currents require high concentrations of Cd²+ for efficient blocking. Current responses measured as above. Labels on each trace indicate: a - control; b - 50  $\mu$ M Cd²+; c - 70  $\mu$ M Cd²+; d - 100  $\mu$ M Cd²+ and e - wash out. In both A and B the capacitance transients were digitally deleted from the traces C Concentration-response relationship for the blocking effect of Ni²+. Each point represents the percent inhibition of peak current in response to a -20 mV pulse from a holding potential of -80 mV measured in the presence of several Ni²+ concentrations in the external solution. Percent inhibition is expressed as [(I<sub>c</sub> - I<sub>Ni</sub>)/I<sub>Ni</sub>]x100, where I<sub>c</sub> is the current in control solution and I<sub>Ni</sub> in the presence of Ni²+. Points are mean  $\pm$  se. Numbers in parentheses indicate the number of cells analyzed in each situation. The solid line represents the best fit of the Hill equation to the experimental points (n=0.79 and K<sub>i</sub>=2.6  $\mu$ M).