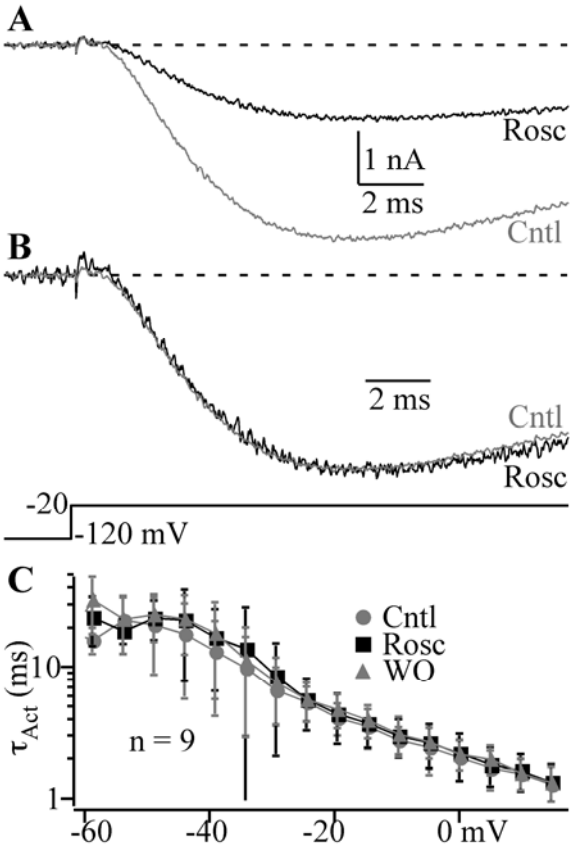
Roscovitine inhibits CaV3.1 (T-type) channels by preferentially affecting close-state inactivation.

Viktor Yarotskyy and Keith S. Elmslie

Journal of Pharmacology and Experimental Therapeutics



Supplemental Figure 1 – Roscovitine fails to affect CaV3.1 activation kinetics. A, CaV3.1 currents activated by a step to -20 mV are shown in control (Cntl, gray trace) and 45 µM roscovitine (Rosc, black trace). **B,** The traces in panel A were normalized to peak to highlight the absence of an effect of roscovitine on activation kinetics. **C,** CaV3.1 current activation was fit using a single exponential equation to determine the activation

τ (τ_{Act}). The fit was constrained to the activating portion of the current that was 0.3 ms following the onset of the voltage step to the peak. Data are mean ± SD from control (gray circle), 45 μM roscovitine (black square) and washout (gray triangle). There were no significant differences between roscovitine and control (average of Cntl and WO data).