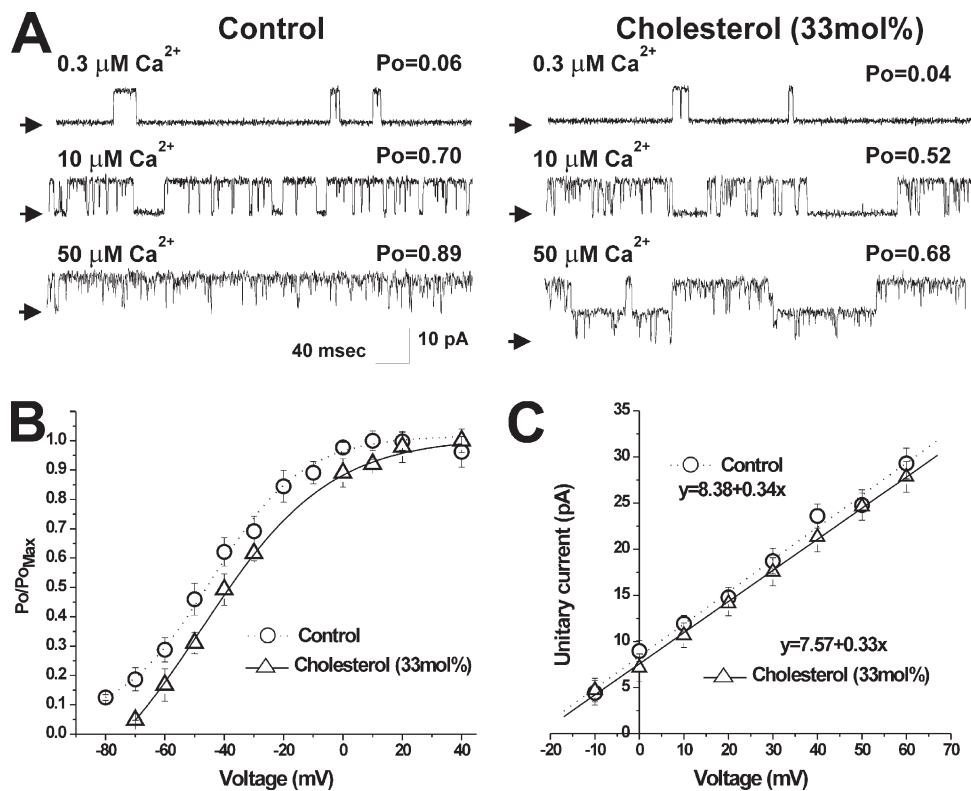


### Specificity of cholesterol and analogs to modulate BK channels points to direct sterol-channel protein interactions

Anna N. Bukiya, Jitendra D. Belani, Scott Rychnovsky, and Alex M. Dopico

Volume 137, No. 1, January 3, 2011. Pages 93–110.

Please note that in the original Fig. S1 B, the y axis was mislabeled. The y axis of the plot should have been  $Po/Po_{Max}$  rather than  $Po$ . The correct figure and legend appear below.



**Figure S1.** Basic properties of BK channels in POPE/POPS 3:1 (wt/wt) bilayers. (A) Original records of cbv1 channel activity obtained at 0.3, 10, and 50  $\mu\text{M}$   $\text{Ca}^{2+}$  at the cytosolic side of the control sterol-free POPE/POPS 3:1 (wt/wt) and 33 mol% cholesterol-containing lipid bilayer. Records show a progressive increase in  $Po$  as  $[\text{Ca}^{2+}]_i$  is increased. Channel openings are shown as upward deflections; arrows indicate the baseline. The membrane potential for each recording was set to 0 mV. (B) A voltage (V)– $Po$  plot obtained after the incorporation of cbv1 protein into control ( $n = 5$ ) versus cholesterol-containing ( $n = 7$ ) bilayers underscores that cholesterol presence does not alter the voltage dependence of cbv1 channel gating.  $Po$  values at each voltage in cholesterol-containing versus cholesterol-free (control) bilayers were normalized to their corresponding maximum ( $Po_{Max}$  in cholesterol-containing bilayer,  $\approx 0.7$ ;  $Po_{Max}$  in control bilayer,  $\approx 0.9$ ). (C) Cbv1 channel unitary current amplitude (i)–voltage (V) relationships from records obtained in 300/30 mM  $\text{K}^+$  render unitary (slope) conductances of  $\approx 340$  and  $\approx 330$  pS for control ( $n = 5$ ) and cholesterol-containing ( $n = 7$ ) bilayers; these values are characteristic of BK channels. For B and C, data were obtained at  $[\text{Ca}^{2+}]_i = 10 \mu\text{M}$ . Curve fitting was performed using Origin7 (OriginLab).