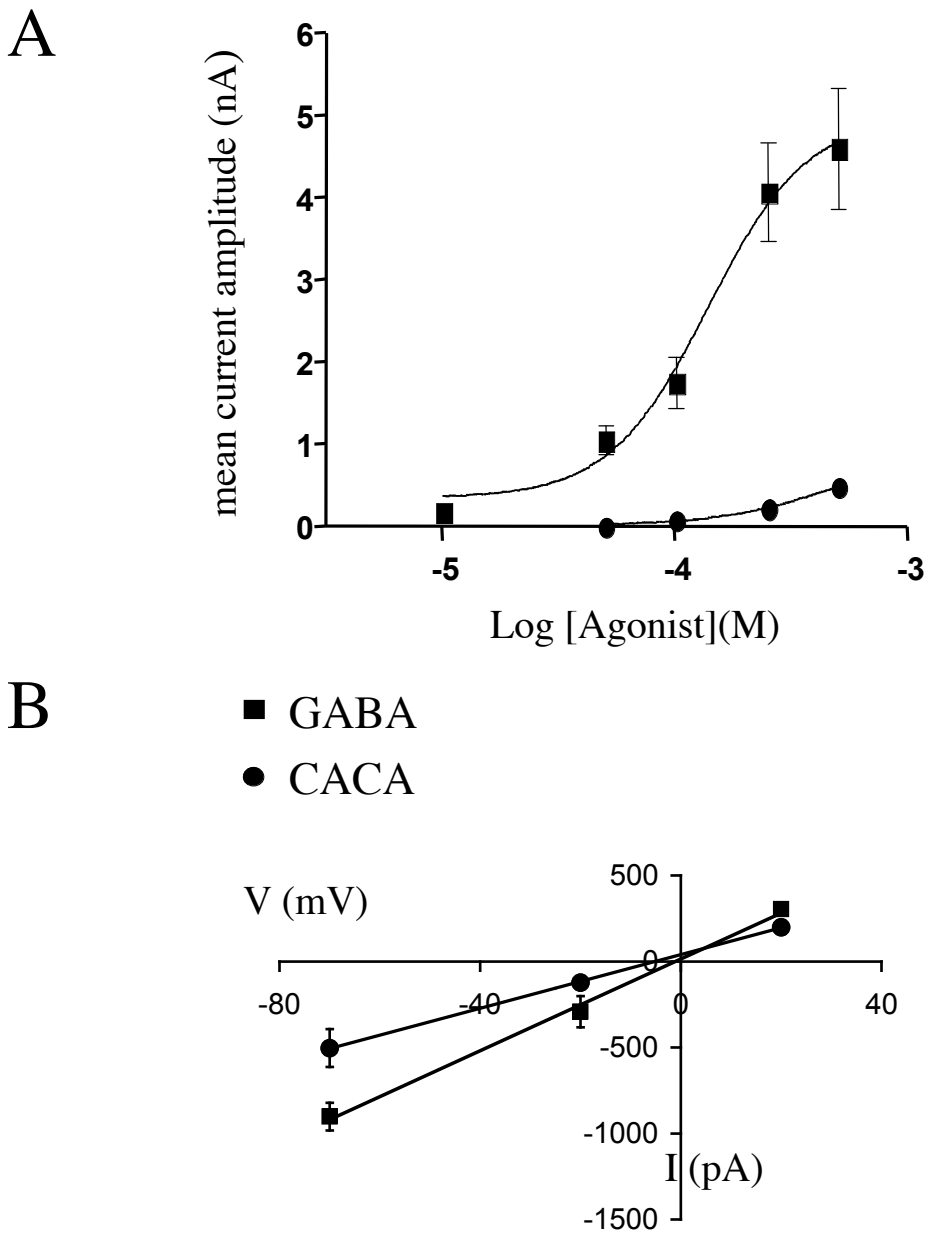
Supplemental Material Figure 1. Harvey, Duguid Krasel & Stephens



Supplementary Material Figure 1.
Ionotropic GABA receptor agonists evoke membrane currents in Purkinje cells
A) Log dose-response relationship for agonist-evoked current, V_H = -70 mV. Points are means ± S.E.M. Data were fitted to the Hill equation: $I = I_{max}/(1 + (EC_{50}/C)^n)$, where I represents the normalized current, I_{max} the maximal normalized current, C the agonist concentration, EC_{50} the agonist concentration that produced half-maximal responses, and *n* the Hill coefficient. For the GABA data, the Hill coefficient was 2.52 and the EC_{50} was 142 μM. The CACA dose-response relationship was constrained with a Hill slope co-efficient equivalent to that for GABA and assumed to be an agonist with a maximum activity less than that of GABA. CACA may be contaminated by up to 0.1 % by the *trans* enantiomer, which can act more potently than CACA on both $GABA_A$ and $GABA_C$ receptors; therefore, the maximum concentration of CACA used was 500 μM. B) Voltage dependence of agonist-induced current. Agonist-evoked currents were linear over the voltage range tested. Currents reversed direction close to 0 mV for both GABA (-0.1 ± 2.2 mV, *n*=5) and CACA (-5.7 ± 4.3 mV, *n*=5), consistent with the activation of a Cl^-/HCO_3^- anionic conductance for the solutions used here.