

Berecki et al., <http://www.jgp.org/cgi/content/full/jgp.201311104/DC1>

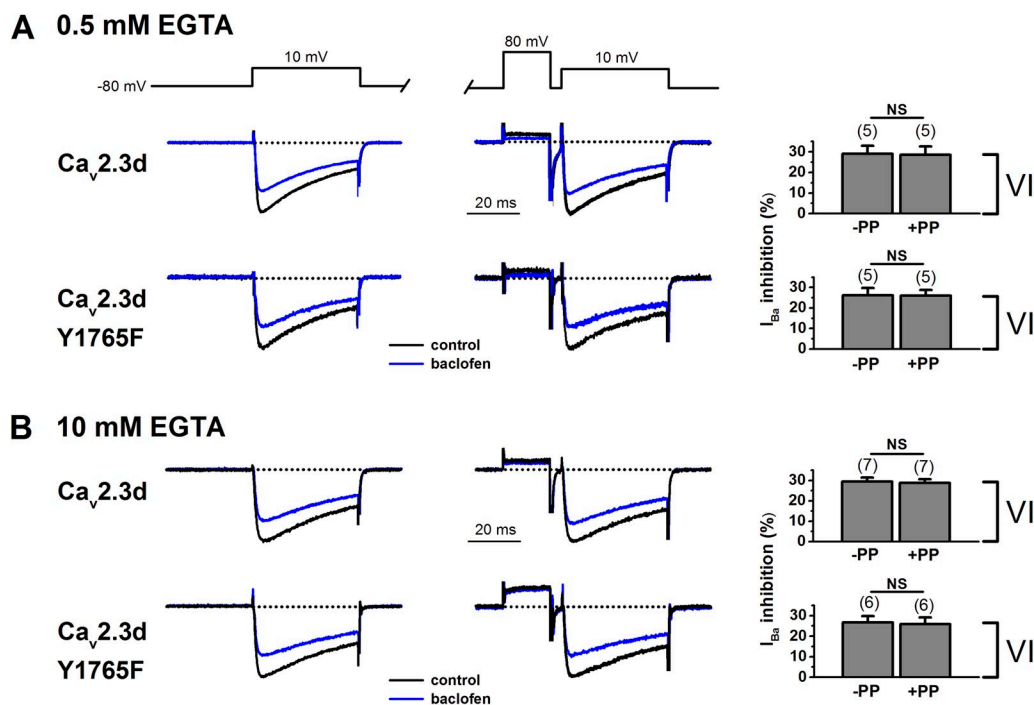


Figure S1. Voltage dependence of baclofen inhibition of human $Ca_v2.3d$ (Y1765F) channel via $GABA_B$ activation. In HEK cells transiently coexpressing $Ca_v2.3d$ or $Ca_v2.3d$ (Y1765F) channels and $GABA_B$ Rs, EGTA does not affect the voltage dependence of inhibition in the absence or presence of 50 μ M baclofen. (A and B) Representative I_{Ba} traces in the absence (control) and presence of baclofen before (left) and after (middle) a depolarizing prepulse to +80 mV (inset protocols), with intracellular solution containing 0.5 or 10 mM EGTA. Currents were normalized to peak I_{Ba} amplitude obtained with a prepulse in the absence of baclofen; dotted lines represent zero-current level. (Right) Summary of I_{Ba} inhibition in the absence and presence of a prepulse, -PP and +PP, respectively. Data are mean \pm SEM; the number of experiments is in parentheses. NS, +PP inhibition not significantly different from -PP inhibition. VI, voltage-independent fraction.

Table S1

Parameters derived from Boltzmann fits to I-V and G-V curves in $Ca_v2.1/GABA_B$ cells in the presence of 0.5 or 10 mM EGTA in the intracellular recording solution

EGTA	Condition	$V_{0.5, act}^a$	k^a	$V_{0.5, act}^b$	k^b
mM		mV	mV	mV	mV
0.5	Control (5)	6.50 ± 0.9	4.4 ± 0.6	7.68 ± 0.4	5.0 ± 0.2
	Baclofen (5)	7.97 ± 0.8	4.6 ± 0.3	8.91 ± 0.3	5.4 ± 0.1
10	Control (6)	6.47 ± 0.6	4.3 ± 0.2	6.79 ± 0.3	4.8 ± 0.1
	Baclofen (6)	7.67 ± 0.9	4.4 ± 0.4	8.37 ± 0.4	5.1 ± 0.2

The number of experiments is in parentheses. Values represent mean \pm SEM.

^aThese parameters were obtained from Boltzmann fits of I-V relations.

^bThese parameters were obtained from Boltzmann fits of G-V relations.