

Human Cav1.2 Channel Cell Line ($\alpha 1C$, $\alpha 2\delta 1$, $\beta 2$)

Host cell:	Chinese hamster ovary (CHO)
Gene name:	CACNA1C, CACNA2D1, CACNB2
Growth media:	DMEM, 10% FBS
Storage:	Frozen under liquid nitrogen
Functional characteristics:	Mean current amplitude \pm SE = 1.1 ± 0.1 nA (n=43)
Assay Platform:	Manual or automated patch clamp
Note:	Cav1.2 is the protein mediating the L-type cardiac calcium current (I_{Ca}).

Data:

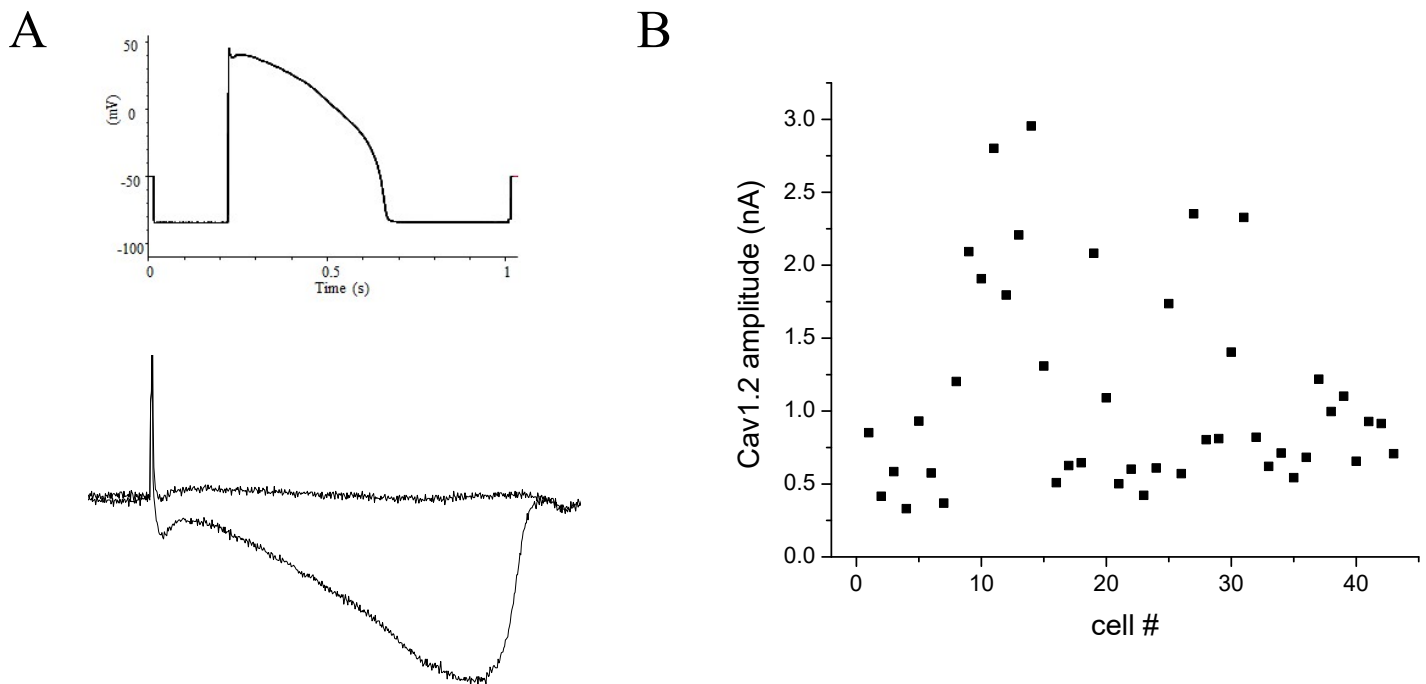


Figure: A. Recording of Cav1.2 current elicited by a ventricular action potential waveform in the absence and presence of 3 μ M nitrendipine. B. Current amplitude plot taken from 43 cells. All recordings were performed at 37°C using manual patch clamp.

See: Crumb WJ Jr, Vicente J, Johannesen L, Strauss DG. An evaluation of 30 clinical drugs against the comprehensive in vitro proarrhythmia assay (CiPA) proposed ion channel panel. *J Pharmacol Toxicol Methods*. 2016 Apr 6. pii: S1056-8719(16)30017.