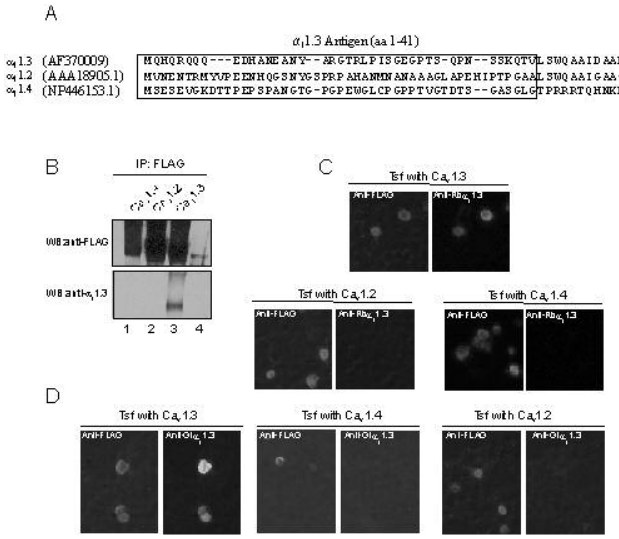
Supplementary Fig.1



$\alpha_1$1.3 antibodies recognize $\alpha_1$1.3 but not other L-type channel α_1 subunits.
(A) The rabbit $\alpha_1$1.3 antibody (Anti-Rb$\alpha_1$1.3) was targeted against an epitope in the cytoplasmic N-terminal domain of $\alpha_1$1.3 (amino acids 1-41) that is poorly conserved in other L-type channel α_1 subunits. **(B)** Cells were transfected with Ca_v1.4 ($\alpha_1$1.4-FLAG, β_{1b}, $\alpha_2\delta$; lane 1), Ca_v1.2 ($\alpha_1$1.2-FLAG, β_{1b}, $\alpha_2\delta$; lane 2), or Ca_v1.3 ($\alpha_1$1.3-FLAG, β_{1b}, $\alpha_2\delta$; lane 3) and subject to lysis and immunoprecipitation using anti-FLAG antibodies. Immunoprecipitated proteins were detected by Western blotting with antibodies recognizing FLAG- (top blot) or $\alpha_1$1.3 (bottom blot). Of the FLAG-immunoprecipitated α_1 subunits (top), the $\alpha_1$1.3 antibody detected only $\alpha_1$1.3 (bottom). **(C)** HEK293T cells were transfected Ca_v1.3 ($\alpha_1$1.3-FLAG, β_{1b}, $\alpha_2\delta$; top), with Ca_v1.2 ($\alpha_1$1.2-FLAG, β_{1b}, $\alpha_2\delta$; bottom) or Ca_v1.4 ($\alpha_1$1.4-FLAG, β_{1b}, $\alpha_2\delta$; bottom) and immunolabeled with anti-Rb$\alpha_1$1.3 (right) or anti-FLAG (left) antibodies and FITC or rhodamine-labeled secondary antibodies. Although FLAG-labeling (left) confirmed expression of Ca_v1.2, Ca_v1.4 Ca_v1.3, Rb$\alpha_1$1.3 staining was only observed in cell transfected with Ca_v1.3 (top right). **(D)** The goat $\alpha_1$1.3 antibody (Anti-Gto$\alpha_1$1.3) was targeted against an epitope in the cytoplasmic N-terminal domain of $\alpha_1$1.3 (aa 24-37) and a cytoplasmic loop linking domains II and III of $\alpha_1$1.3 (aa 810-827). HEK293T cells were transfected with Ca_v1.3 ($\alpha_1$1.3-FLAG, β_{1b}, $\alpha_2\delta$; left), Ca_v1.4 ($\alpha_1$1.4-FLAG, β_{1b}, $\alpha_2\delta$; center), or Ca_v1.2 ($\alpha_1$1.2-FLAG, β_{1b}, $\alpha_2\delta$; far right) and immunolabeled with anti-Gto$\alpha_1$1.3 (right panel) or anti-FLAG (left panel) antibodies and FITC or rhodamine-labeled secondary antibodies. Although FLAG-labeling (left) confirmed expression of Ca_v1.3, Ca_v1.4 and Ca_v1.2, staining with Gto$\alpha_1$1.3 was only observed in cell transfected with Ca_v1.3 (left, right panel).