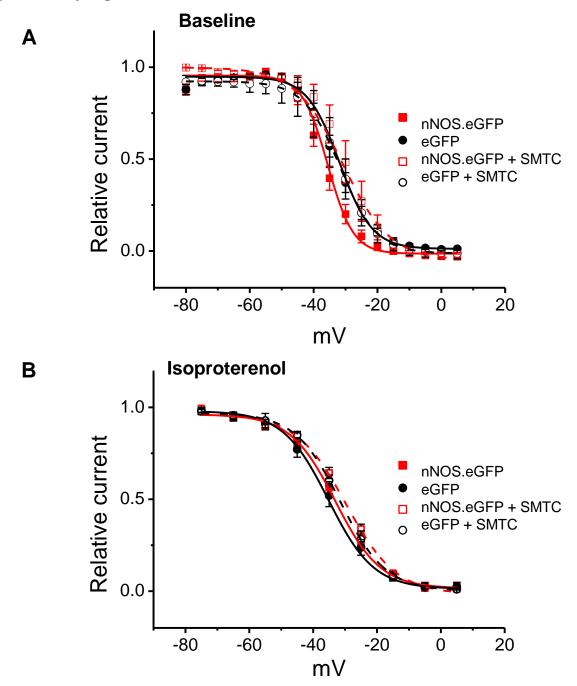


## Supplementary Figure 1.

(A) Immunoprecipitations of RyR2 and caveolin-3 (Cav-3) followed by immunoblotting with an anti-nNOS antibody demonstrate predominant localization of native nNOS (WT, wild type) to the sarcoplasmic reticulum and of nNOS.eGFP to the sarcolemmal membrane (n=4 hearts). IgG: negative control.

- (B) In WT LV homogenates, a small amount of caveolin-3 is immunoprecipitated with nNOS (n=3).
- (C) Steady-state activation curves showed that the voltage at which  $I_{Ca}$  was half-maximally activated was not significantly different between groups (-15.6±0.6 mV in eGFP vs. -18.9±0.9 mV in nNOS.eGFP, n=14-18 cells from 4 hearts and -15.8±0.6 in eGFP vs. -16.1±0.6 mV in nNOS.eGFP in the presence of SMTC, n=6-10 cells from 4 hearts; ANOVA, P=NS).

## **Supplementary Figure 2**



**Supplementary Figure 2.** (**A**) Under basal conditions, the voltage of half–maximal inactivation of  $I_{\text{Ca}}$  in nNOS.eGFP transduced myocytes was shifted to the left. This difference was abolished after nNOS inhibition with SMTC (P=NS, n=5 and 6 cells from 3 hearts). (**B**) In the presence of isoproterenol (100 nmol/L), inactivation curves did not differ between nNOS.eGFP (n=8 cells from 8 hearts) and eGFP expressing myocytes (n=7 cells from 7 hearts) in the presence and absence of SMTC. Under these conditions, the voltage at which  $I_{Ca}$  was half-maximally inactivated was -34.5±2.1mV in eGFP vs. -33.6±1.4 mV in nNOS.eGFP and -31.1±1.2 in eGFP vs. -29.9±1.2 mV in nNOS.eGFP in the presence of SMTC; ANOVA with Bonferroni's correction, P=NS).