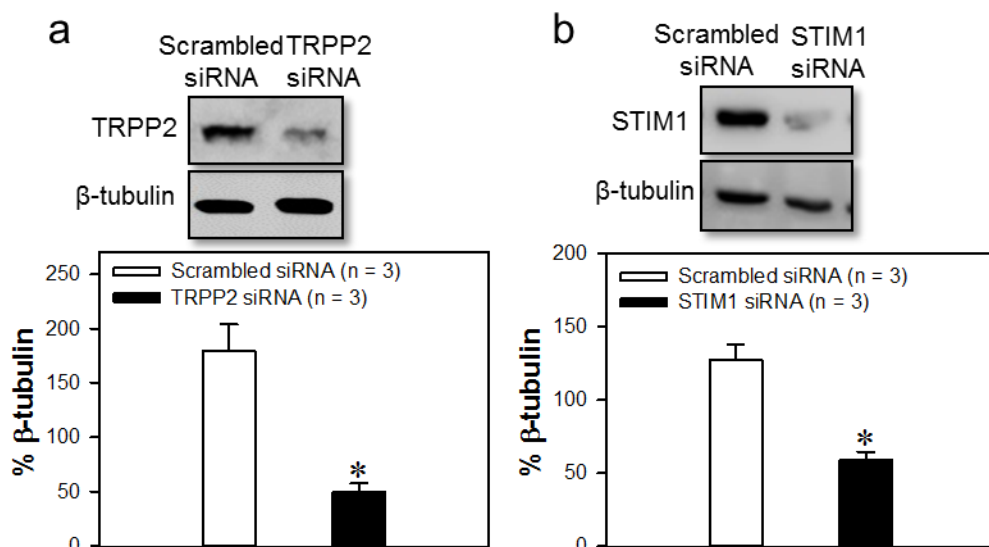
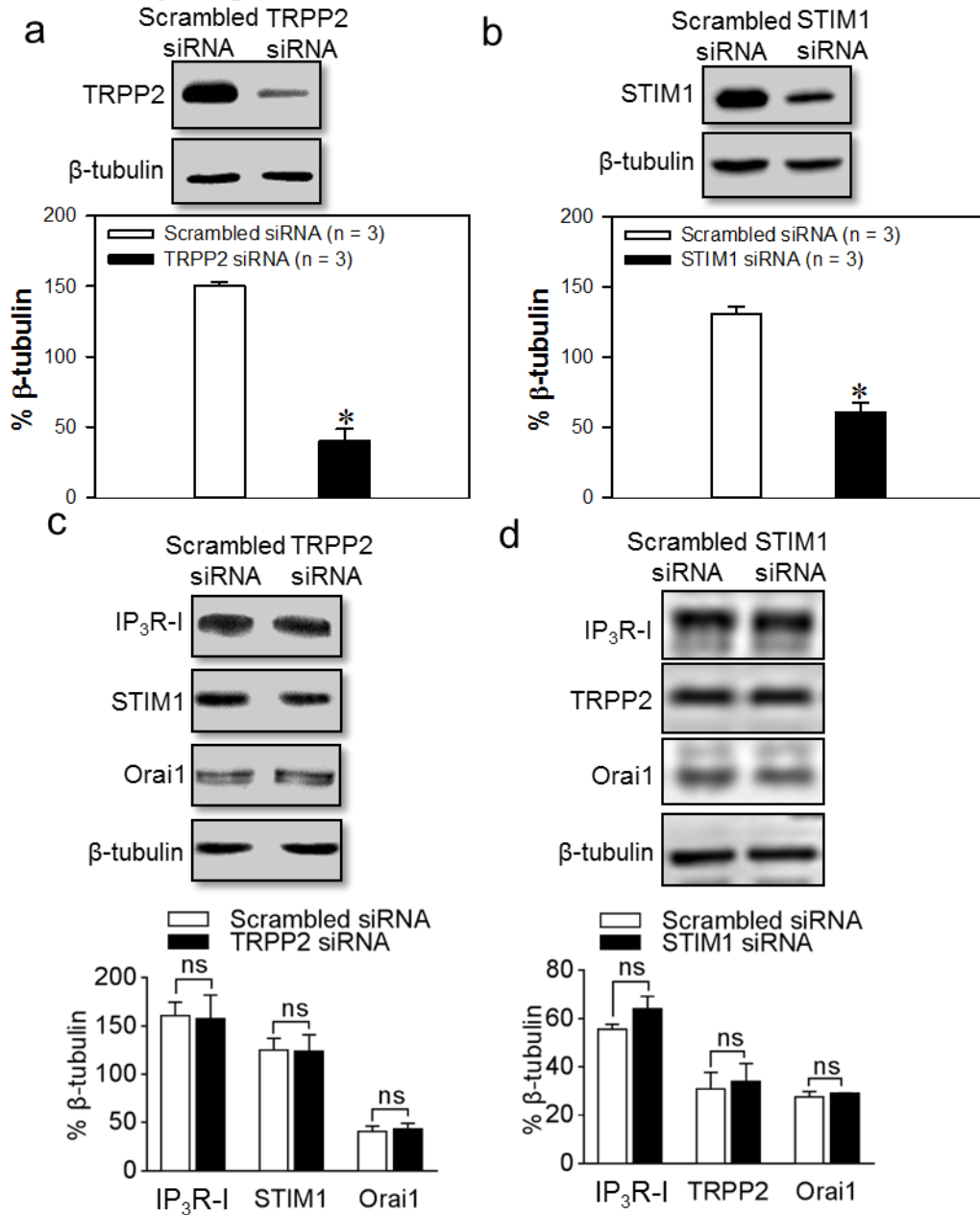


Supplementary Figure 1



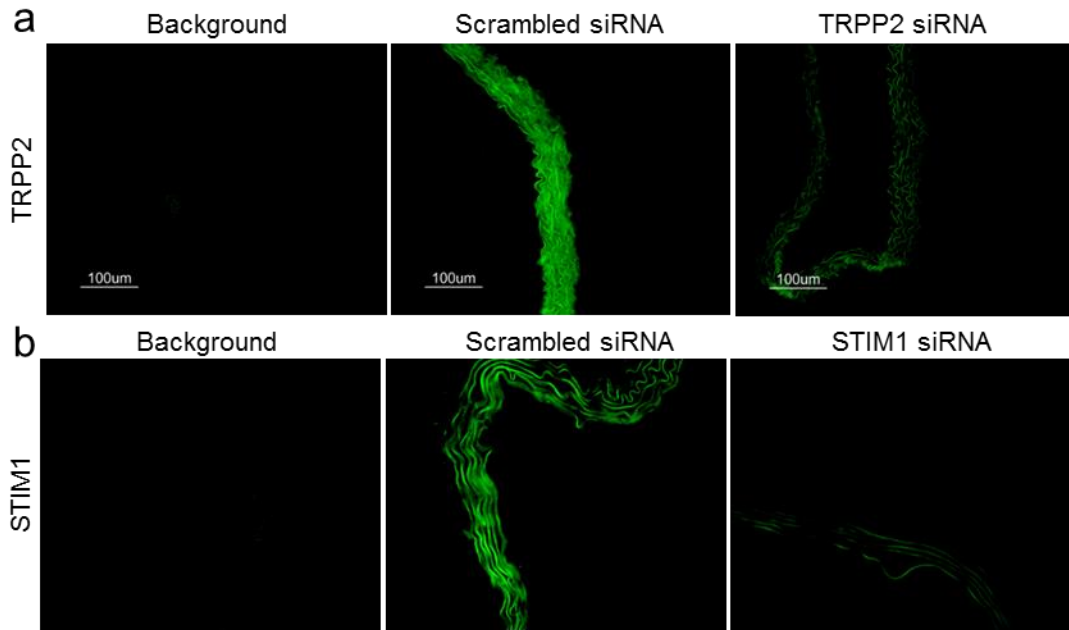
Supplementary Figure 1. Effects of TRPP2 siRNA and STIM1 siRNAs on TRPP2 and STIM1 protein expression levels in HEK293 cells. (a) Representative images (upper) and summarized data (lower) of TRPP2 siRNA effect on TRPP2 protein expression in HEK293 cells. **(b)** Representative images (upper) and summarized data (lower) of STIM1 siRNA effect on STIM1 protein expression in HEK293 cells. Values are shown as the mean $\pm$ SEM (n = 3). * $P < 0.05$ for TRPP2 or STIM1 siRNA vs. scrambled siRNA.

Supplementary Figure 2



Supplementary Figure 2. Effects of TRPP2 siRNA and STIM1 siRNAs on TRPP2, STIM1, Orai1 and IP₃R-I protein expression levels in primary cultured vascular smooth muscle cells (VSMCs). (a) Representative images (upper) and summarized data (lower) of TRPP2 siRNA effect on TRPP2 protein expression in VSMCs. (b) Representative images (upper) and summarized data (lower) of STIM1 siRNA effect on STIM1 protein expression in VSMCs. Protein expressions were normalized to β -tubulin. Values are shown as the mean $\pm$ SEM (n = 3). * P < 0.05 for TRPP2 siRNA or STIM1 siRNA vs. scrambled siRNA. (c) Representative images (upper) and summarized data (lower) of TRPP2 siRNA effect on IP₃R-I, STIM1 and Orai1 protein expression levels in VSMCs. (d) Representative images (upper) and summarized data (lower) of STIM1 siRNA effect on IP₃R-I, TRPP2 and Orai1 protein expression levels in VSMCs. Protein expressions were normalized to β -tubulin. Values are shown as the mean $\pm$ SEM (n = 3).

Supplementary Figure 3



Supplementary Figure 3. Effects of TRPP2 siRNA and STIM1 siRNAs on TRPP2 and STIM1 protein expression levels in mice aortae. (a,b) Representative immunofluorescence images showing TRPP2 (a) and STIM1 (b) protein expression in the mice aortae with or without TRPP2 or STIM1 siRNA treatment. Background images were no primary antibody incubation.