

## Figure Legends of Supplementary Information

Figure S1. Inhibition of IP<sub>3</sub>-mediated transient Ca<sup>2+</sup> increases by xestospongine C and IP<sub>3</sub>-sponge, and involvement of DAG in Ang II-induced sustained Ca<sup>2+</sup> responses in cardiomyocytes.

(A-D) Effects of xestospongine C (XestC), IP<sub>3</sub>-sponge and DGKβ on Ang II-induced transient increases in [Ca<sup>2+</sup>]<sub>i</sub>. (A) Typical traces for Ca<sup>2+</sup> responses upon Ang receptor stimulation with Ang II (100 nM) in Ca<sup>2+</sup>-free Tyrode solution. (B) Peak changes of increase in [Ca<sup>2+</sup>]<sub>i</sub>. Cells were treated with XestC (20 μM) for 30 min before the addition of Ang II. (C) Representative time courses of the spontaneous Ca<sup>2+</sup> responses ((-) Ang II) and Ang II-induced increases in the frequency of Ca<sup>2+</sup> oscillations ((+) Ang II) in Control and DGKβ-expressing cells. The digital images were obtained every 1 sec during 3 min before Ang II stimulation ((-) Ang II) and 25-28 min after Ang II stimulation ((+) Ang II). (D) Effects of DGKβ on the increase in the frequency of Ca<sup>2+</sup> oscillations by Ang II stimulation. Number of Ca<sup>2+</sup> spikes per minute was calculated by counting the number of spikes during 3 min measurement. \*\*\*; *P* < 0.001 vs Ang II stimulation of control cells. \*; *P* < 0.05 vs Control. NS, no significance from Control.

