Supplemental figures

В



Figure S1



Figure S2





D







г т<u>с</u> ISO

wт

WT TG WT TG WT TG Saline Ang II Saline

Supplemental Figure Legend

Supplemental Figure 1. The effects of RALT on cardiac hypertrophy in vivo

(A) Gross hearts and H&E staining of 4 weeks of Ang II-infused mice. (B) Gross hearts and H&E staining of 4 weeks of ISO-infused mice.

Supplemental Figure 2. The effect of RALT on EGFR signaling pathway

(A) The effect of RALT on the autophosphorylation of EGFR in Thr 1068 and Thr 1173 sites in response to chronic Ang II or ISO stimulation in TG and WT mice (n=5). Upper, Statistical result; bottom, representative Western blots. *P<0.01 vs WT/saline. §P<0.01 vs WT after Ang II or ISO infusion. (B) The effect of RALT on the autophosphorylation of EGFR in Tyr 1086, Tyr 1148 and Tyr 992 sites in response to chronic Ang II or ISO stimulation in TG and WT mice (n=5). (C) The effect of RALT on p38 and JNK phosphorylation in response to chronic Ang II or ISO infusion in TG and WT mice (n=5). (D) The effect of RALT on GSK3 β , mTOR and FOXO1 as well as ELK, p90RSK (n=5). The results were reproducible in three separate experiments. (E) The statistical results for GSK3 β , mTOR and FOXO1 as well as ELK, p90RSK phosphorylation. The results were reproducible in three separate experiments. *P<0.01 vs WT/saline. §P<0.01 vs WT after Ang II or ISO infusion.

Supplemental Figure 3. The effects of RALT on inflammation

(A) TNF- α , IL-1 β and MCP-1 protein expression in response to chronic infusion of Ang II and ISO (n=4). Upper, Statistical result; bottom, representative Western blots. **P*<0.01 *vs* WT/saline. **§***P*<0.01 *vs* WT after Ang II or ISO infusion. (**B**) The effects of AG1478 on TNF- α and IL-1 β protein levels in cultured cardiac myocytes from indicated groups (n=4). The results were reproducible in three separate experiments. **P*<0.01 *vs* control/Ang II+PBS.

Supplemental Figure 4. The effects of RALT on apoptosis

(A) Representative images of TUNEL staining from indicated groups. (B) TUNEL positive cells from histological sections were quantified (n=5). *P<0.01 vs WT/saline. (C) Western blot analysis of cleaved caspase-3 and caspase-8, Bcl-2 and Bax protein expression in response to chronic infusion of Ang II and ISO (n=5).