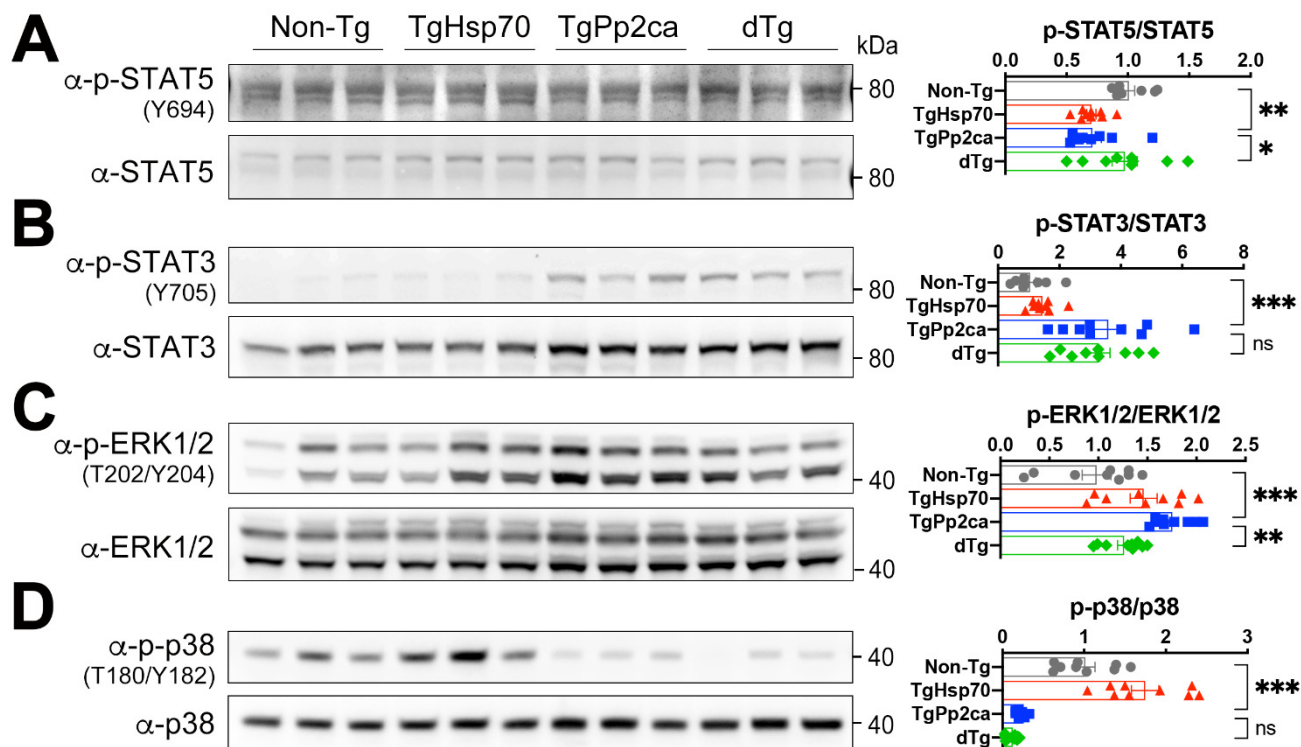
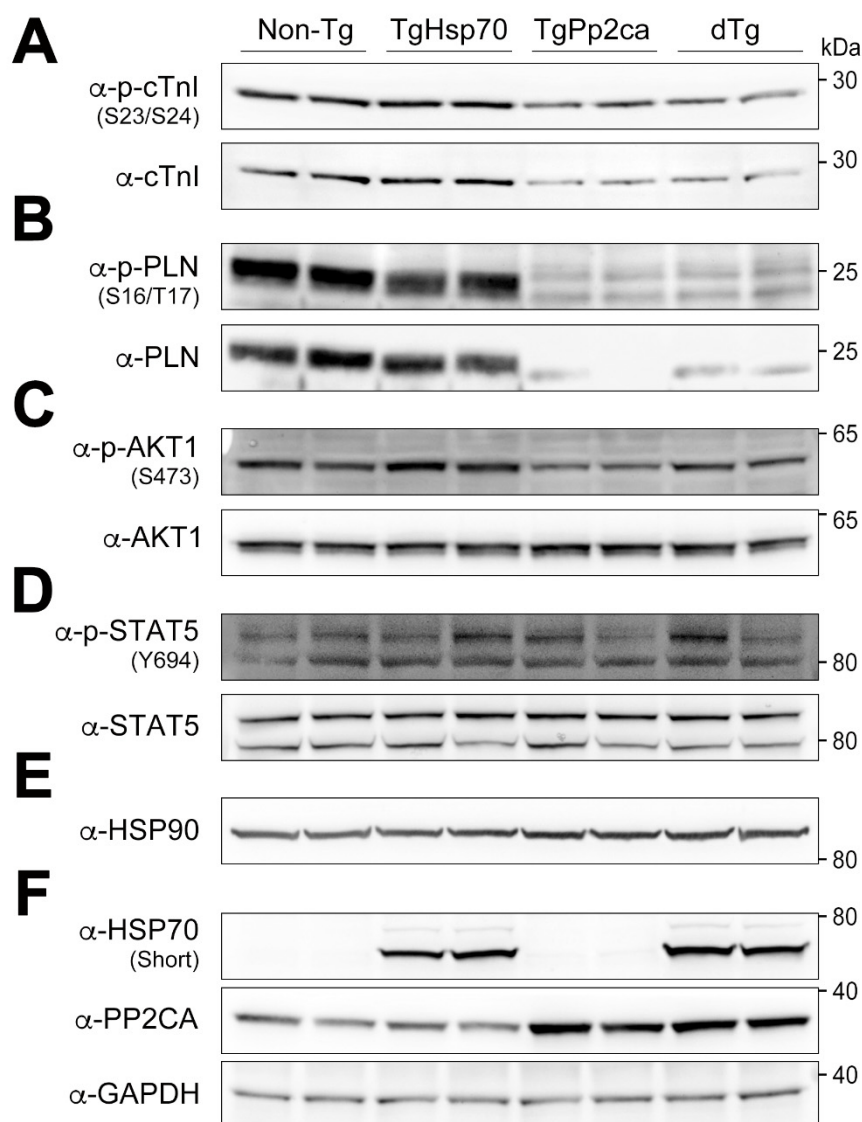


Supplementary Materials:



**Figure S1.** Phosphorylation changes in hearts from mice at 6 months of age. (A) Phosphorylated signal transducer and activator of transcription (STAT) 5 (Tyr694) (B) Phosphorylation of STAT3 (Tyr705) (C) Phosphorylation of extracellular signal-regulated kinase 1/2 (Thr202/Tyr204) (ERK1/2) (D) Phosphorylated p38 (Thr180/Tyr182). Dot blot in the right side of the western blot mean densitometer analysis. One way ANOVA and LSD post hoc was applied. \*,  $p < 0.05$ ; \*\*,  $p < 0.01$ ; \*\*\*,  $p < 0.001$ ; NS, not significant.



**Figure S2.** Phosphorylation profiles in hearts from younger mice. Phosphorylation changes in hearts of 7-week-old mice were assessed. Phosphorylation of cardiac troponin I (Ser23/24) (**A**), phospholamban (Ser16/Thr17) (**B**), and phosphorylation levels of protein kinase B (Ser473) (AKT1, **C**). Phosphorylation of AKT was reduced in TgPp2ca mice, and expression of HSP70 ameliorated Pp2ca-mediated dephosphorylation of AKT. (**D**) Phosphorylation of STAT5 (Tyr694). (**E**) HSP90 expression was not affected. (**F**) Expression of each protein represents transgenic overexpression of each protein. .