SUPPLEMENTAL DATA

SIRT3 blocks cardiac hypertrophic response by augmenting the Foxo3a-dependent antioxidant defense mechanism of the cells.

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Figure S1: SIRT3 transgenic mice are protected from ISO-mediated cardiac hypertrophy. **(A)** Analysis of SIRT3 levels in nuclear fraction of SIRT3-Tg mice subjected to ISO-mediated

cardiac hypertrophy (8.7 mg/kg/day for 7 days). Note that the nuclear expression of short form (28 kD) of SIRT3 was elevated after ISO-treatment of mice. **(B)** Change in heart weight (HW) and body weight (BW) of N-Tg and SIRT3-Tg mice subjected to chronic infusion of isoproterenol (ISO). **(C)** Representative hearts of N-Tg and SIRT3-Tg mice subjected to ISO-mediated cardiac hypertrophy showing increased heart size of N-Tg, but not of SIRT3-g mice. **(D)** Hearts sections stained with wheat germ aggulatin to show increased myocyte size in N-Tg compared to SIRT3-Tg mice subjected to ISO-mediated hypertrophy.