



Figure S4. Generation of *SIRT2tg* mice and weight analysis of *SIRT2tg/BubR1^{HHH}* cohort. (A) Schematic diagram of SIRT2 transgenic with Stop cassette flanked by *loxP* sites localized between the CAGGS promoter and SIRT2 cDNA. (B) Ubiquitous overexpression of SIRT2 in transgenic mice. Extracts were prepared from non-transgenic and SIRT2 transgenic and western blotted for SIRT2 and Actin. (C) *SIRT2tg* does not rescue small size phenotype of *BubR1^{HHH}* mice. Weights of animals ($n = 6$ each group) at 6 weeks of age. Body weights of (D) male and (E) female *BubR1^{HHH}* and *SIRT2tg/BubR1^{HHH}* mice from weaning to 250 days of age from longevity cohort. (F) MEFs from wild-type and *BubR1^{HHH}* embryos infected with control virus or virus expressing wild-type or catalytically inactive SIRT2 were western blotted for BubR1, SIRT2, and Tubulin. Error bars represent SEM. P values calculated using Student's t -test ($n = 3$), * $P < 0.05$, ** $P < 0.005$.