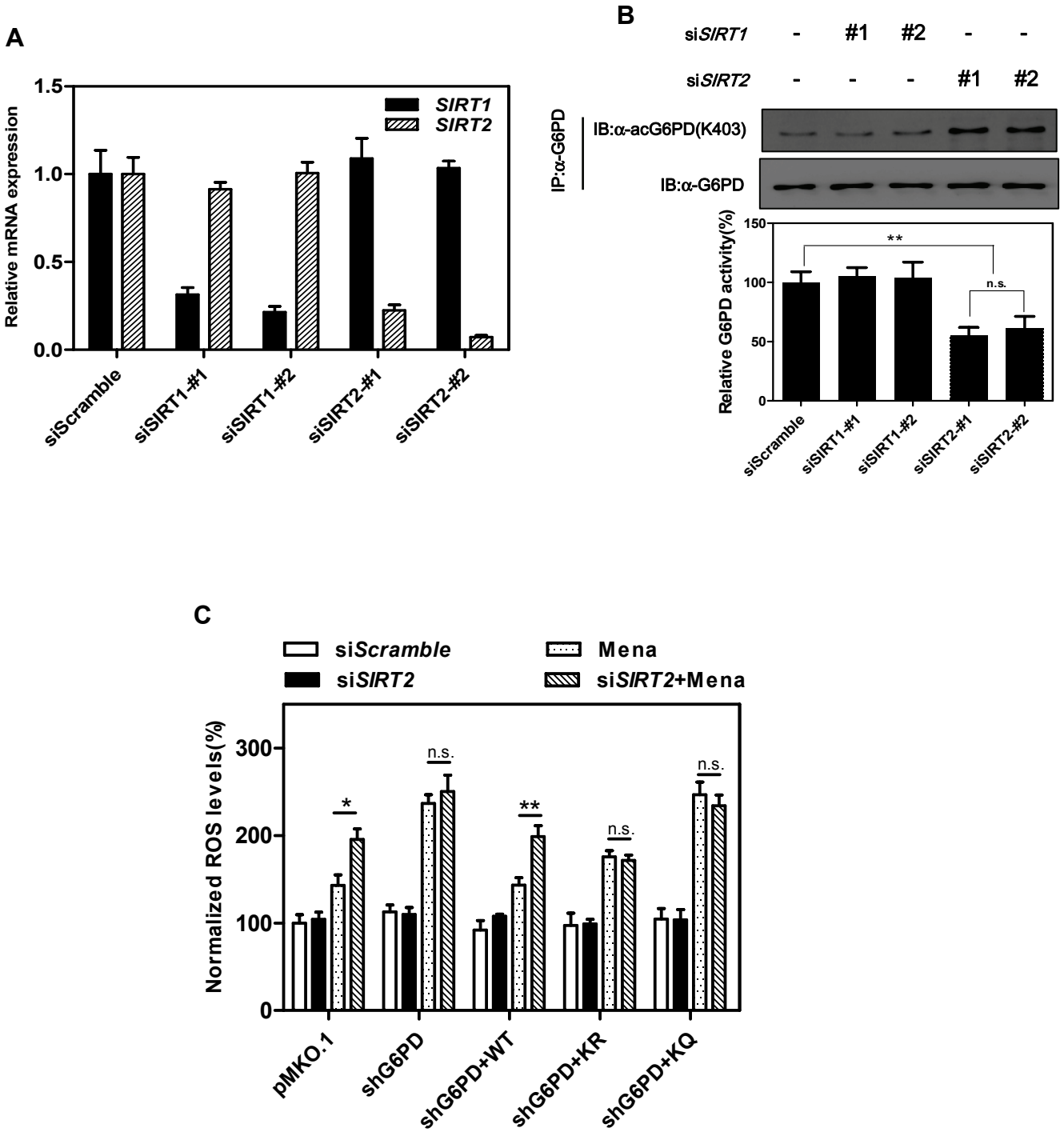
Wang et al. Supplementary Fig.12



Supplementary Fig.12 *SIRT2* knockdown increases G6PD K403 acetylation and inhibits G6PD activity

(A) Verification of the knocking-down efficiency of *SIRT1* or *SIRT2* gene. HEK293T cells were transiently transfected with either control (siScramble) or siRNAs against *SIRT1* or *SIRT2*. At 48 hrs post transfection, the mRNA expression of *SIRT1* and *SIRT2* genes was determined by quantitative real-time PCR.

(B) Transient knocking-down *SIRT2*, but not *SIRT1*, increases G6PD K403 acetylation and inhibits G6PD activity. HEK293T cells were transfected with siRNAs as indicated. At 48 hrs post transfection, the K403 acetylation levels and enzyme activity of endogenous G6PD were determined.

(C) *G6PD* knocking-down and rescued cells were transfected with either control (siScramble) or siRNA against *SIRT2* (siRNA oligo #1 in (B)]. These transfected cells were treated with menadione (50 μM for 30 min), and ROS accumulation was determined by using a fluorescent dye as described in "Method". Shown are average values with standard deviation (S.D.) of triplicated experiments. *denotes the $p < 0.05$, and **denotes the $p < 0.01$ for the indicated comparison; n.s.=not significant.