Figure S1. Expression of miR-135a-5p is upregulated and correlates with SIRT1 in renal tissues of DN patients. Reverse transcription-quantitative PCR detected expression level of (A) miR-135a-5p and (B) SIRT1 mRNA in 10 renal biopsy specimens of DN and 10 adjacent normal renal tissues of renal carcinoma patients. (C) Spearman's rank correlation analysis confirmed the association between miR-135a-5p and SIRT1 expression. Data are plotted as the mean ± standard error of the mean and performed in triplicate. *P<0.05 vs. normal tissues. DN, diabetic nephropathy; SIRT1, sirtuin1; miR, microRNA.

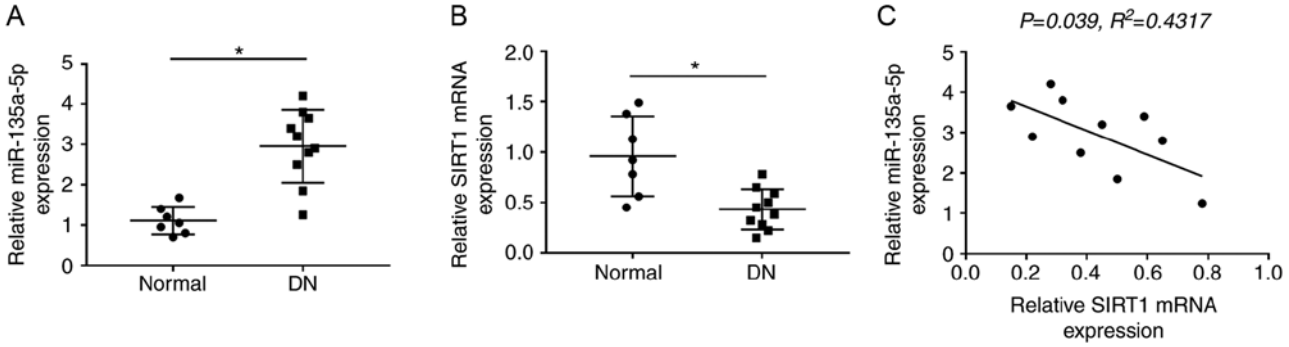

Figure S2. miR-135a-5p is upregulated in HMC and HK-2 cells under high glucose conditions. Reverse transcription-quantitative PCR examined miR-135a-5p levels in (A) HMC and (B) HK-2 cells after treated with 5-50 mmol/l of D-glucose for 48 h. *P<0.05 vs. control cells (without D-glucose treatment). HMC, human mesangial cells; miR, microRNA.

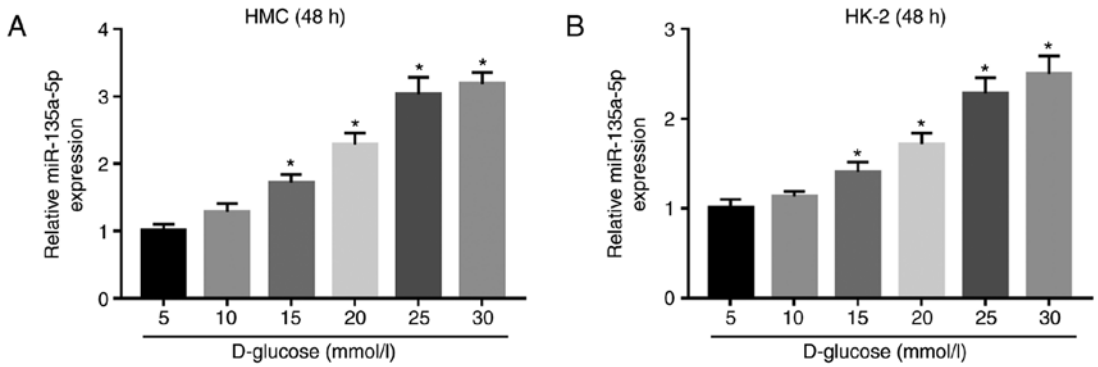

Figure S3. Identification of transfection efficiency of miR-135a-5p mimic and siSIRT1. (A) Reverse transcription-quantitative PCR detected miR-135a-5p level in HMC and HK-2 cells transfected with miR-135a-5p mimic or miR-NC mimic. (B) Western blotting measured the SIRT1 protein level in HMC and HK-2 cells transfected with siRNA against SIRT1 (siSIRT1) or its negative control (Scramble). *P<0.05 vs. miR-NC or siNC cells. siRNA, small interfering; miR, microRNA; SIRT1, sirtuin 1; HMC, human mesangial cells.