**Supplementary Figure 1 SAL upgraded SIRT1 expression in HG-administrated ARPE-19 cells**

ARPE-19 cells were dealt with HG (50 mM) alone or co-administrated with SAL (3 μM). (A) The mRNA expression of SIRT1 was evaluated by RT-qPCR assay; (B) the protein level of SIRT1 was estimated by western blot assay. \*, *P* < 0.05, \*\*, *P* < 0.01.

**Supplementary Figure 2 Overexpressed miR-138 exerted the same impacts of HG on ARPE-19 cells**

ARPE-19 cells were managed with SAL alone or accompanied by miR-138 mimic and its correlative control (NC) transfection. (A) cell viability, (B) cell apoptosis, (C and D) apoptosis-associated factors, (E and F) the pro-inflammatory cytokines of TNF-α and IL-6, and (G) the level of ROS in HG and SAL co-treated cells were determined by CCK-8, flow cytometry, western blot and DCFH-DA molecular probe assays. \*, *P* < 0.05, \*\*, *P* < 0.01, \*\*\*, *P* < 0.001; ns, no significant difference.