

**Supplementary Fig. 1.** TRPV4 involved in HG-induced HEI-OC1 cell proliferation and apoptosis. (A) The relative expression of TRPV4 mRNA in HG cultured HEI-OC1 cells after transfection with pcDNA3.1 empty vector, pcDNA3.1-TRPV4 vector, TRPV4-siRNA, or scrambled siRNA control was determined by qRT-PCR. (B) Western blotting was used to analyze the expression of TRPV4 protein. (C) The effect of TRPV4 on cell proliferation of HEI-OC1 cells was detected using the MTT assay. (D) The effect of TRPV4 on cell apoptosis of HEI-OC1 cells was detected using the cell death detection ELI-SA-Plus apoptosis assay. Data are representative of three experiments. \*Indicates differences from controls at *p*<0.05. TRPV4, transient receptor potential vanilloid sub type 4; HG, high glucose.