



**Supplementary Fig. 1.** A schematic diagram of the timeline of the experiments. LFD, low-fat diet; HFD, high-fat diet; FBG, fasting blood glucose; WB, Western blot; qPCR, quantitative polymerase chain reaction; HE, hematoxylin-eosin; IHC, immunohistochemistry; TUNEL, deoxynucleotidyl transferase-mediated dUTP-biotin nick-end labeling; FINS, fasting insulin; OGTT, oral glucose tolerance test; NP, nanoparticle.