



**Fig. S1** Construction of the HFD-induced obesity mouse model. (A) Scheme of the treatments of C57BL/6J mice. (B) The body weights of mice after fed with a high-fat (HF) diet for eight weeks. (C) GTT of mice after fed with HF diet for eight weeks. (D) The area under the curve in GTT. Data are the mean  $\pm$  SEM of all mice in each group (n=13-15). “\*” ( $P \leq 0.05$ ), “\*\*” ( $P \leq 0.01$ ), and “\*\*\*” ( $P \leq 0.001$ ) compared with the RC group.