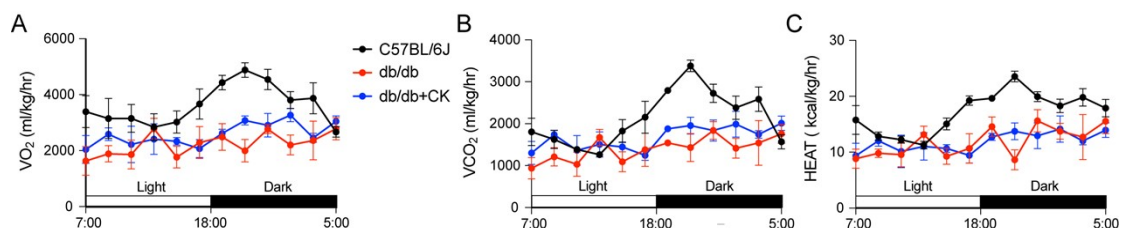
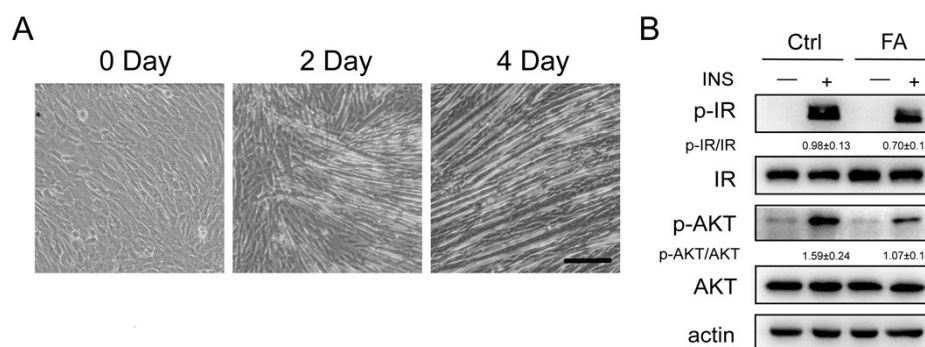


## Supplementary Figures



**Supplementary Figure 1. Ginsenoside CK did not affect oxygen consumption, carbon dioxide production and the whole-body energy expenditure.** The db/db mice were intraperitoneal injected ginsenoside CK (10 mg/kg/d) for 4 weeks (n=3). (a) Oxygen consumption. (b) Carbon dioxide. (c) Heat production. Results are presented as mean±SD. #  $p<0.05$ , ##  $p<0.01$ , ###  $p<0.001$  compared with C57BL/6J group; \*  $p<0.05$ , \*\*  $p<0.01$ , \*\*\*  $p<0.001$  compared with db/db group.



**Supplementary Figure 2. Differentiated C2C12 muscle cells and insulin resistance model of C2C12 cells treated with FA.** (a) Differentiation process morphology of skeletal muscle cell from C2C12 cells was observed under microscope. Scale bar, 200  $\mu\text{m}$ . (b) p-IR/IR and p-AKT/AKT level analyzed using western blotting of muscle cells. The cells were cultured in differentiation medium or 0.25 mM FA medium. Results are presented as mean  $\pm$  SD. \*  $p<0.05$ , \*\*  $p<0.01$ , \*\*\*  $p<0.001$ .