

**Figure S1.** Validation of G0S2 knockdown in skeletal muscle *in vivo*. (A) G0S2 mRNA and (B) protein levels in control (shNT) and G0S2 knockdown (shG0S2) mouse *tibialis anterior* (n=4-7). (C) ATGL mRNA and (D) protein levels in control (shNT) and G0S2 knockdown (shG0S2) mouse *tibialis anterior* (n=7). \*p<0.05, \*\* p<0.01 versus shNT.

**Figure S2.** Effect of high fat feeding on skeletal muscle G0S2 protein expression *in vivo*. (A) body weight, (B) insulin-stimulated glucose uptake and (C) G0S2 protein content in *tibialis anterior* muscle of mice fed normal chow diet (NCD) or high fat diet 60% fat (HFD) for 12 weeks (n=7). \*p<0.05, \*\*\* p<0.001 versus NCD.

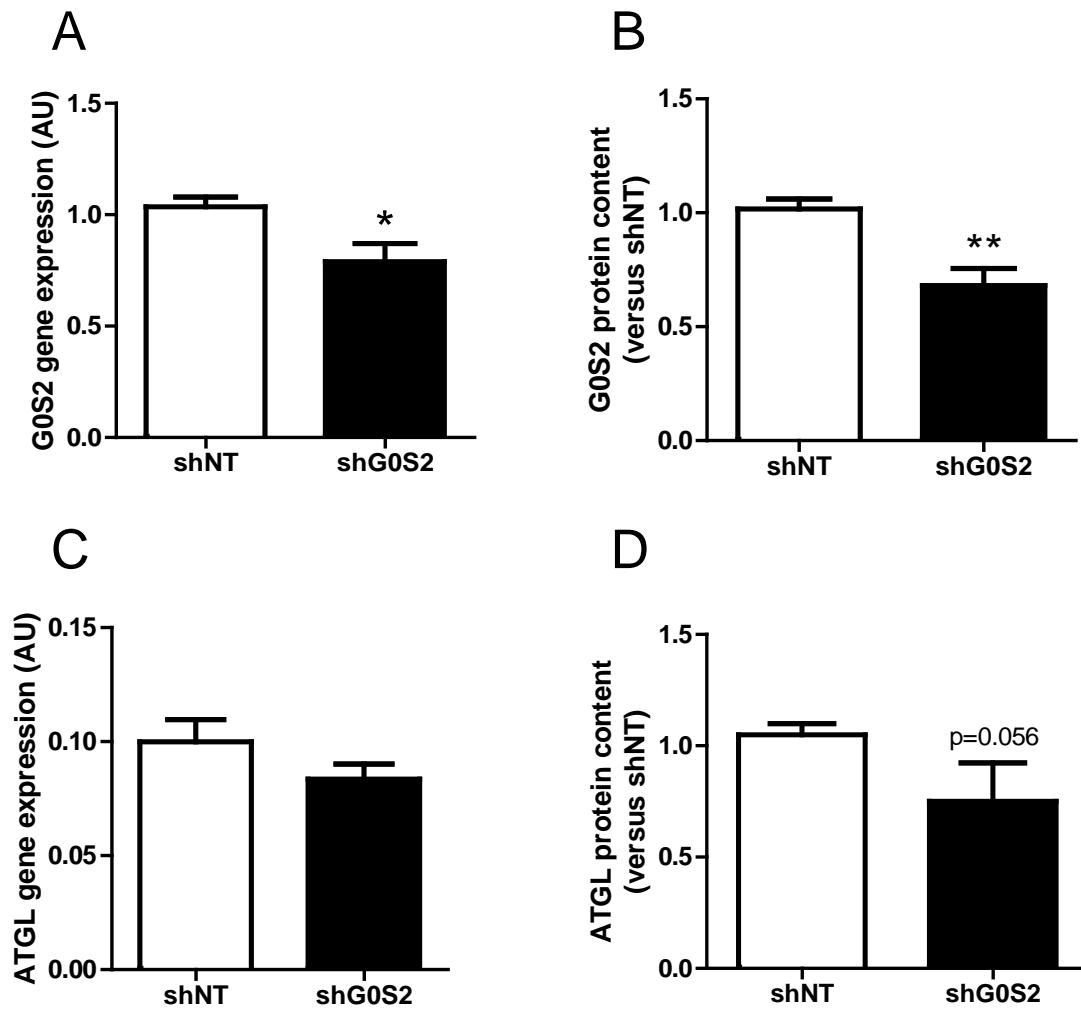


Figure S1

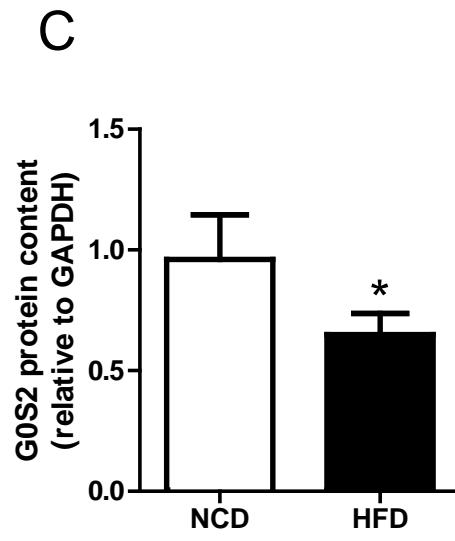
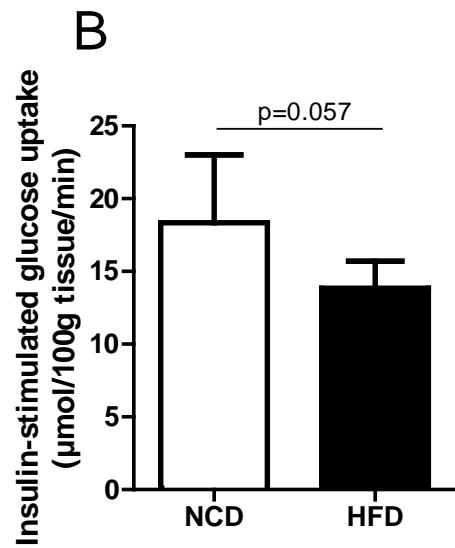
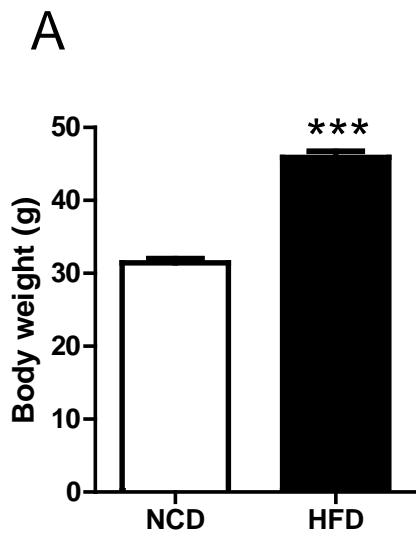


Figure S2