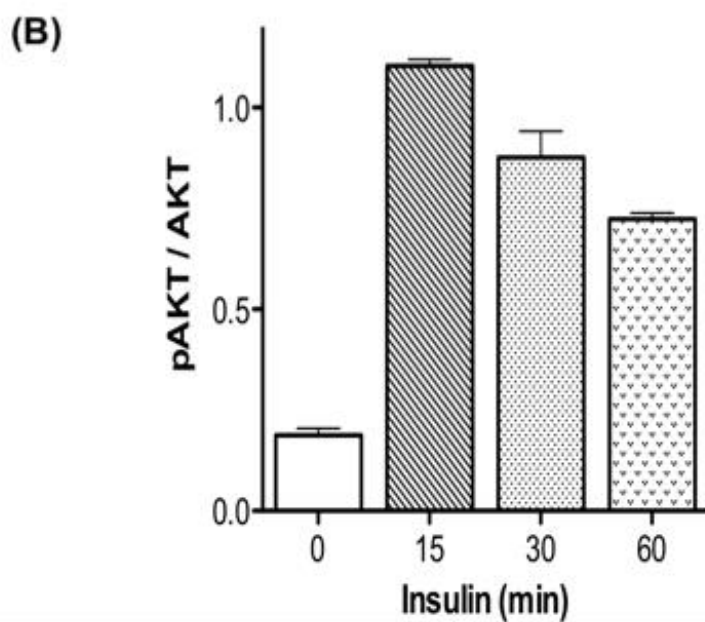
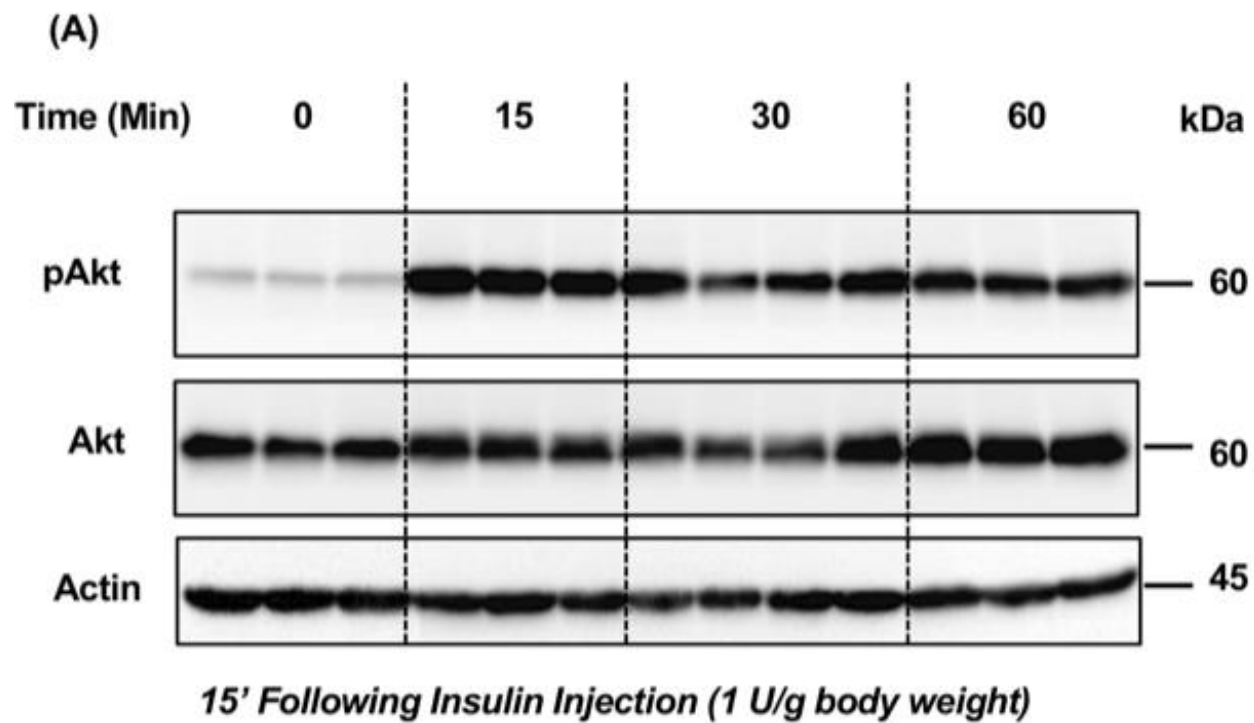
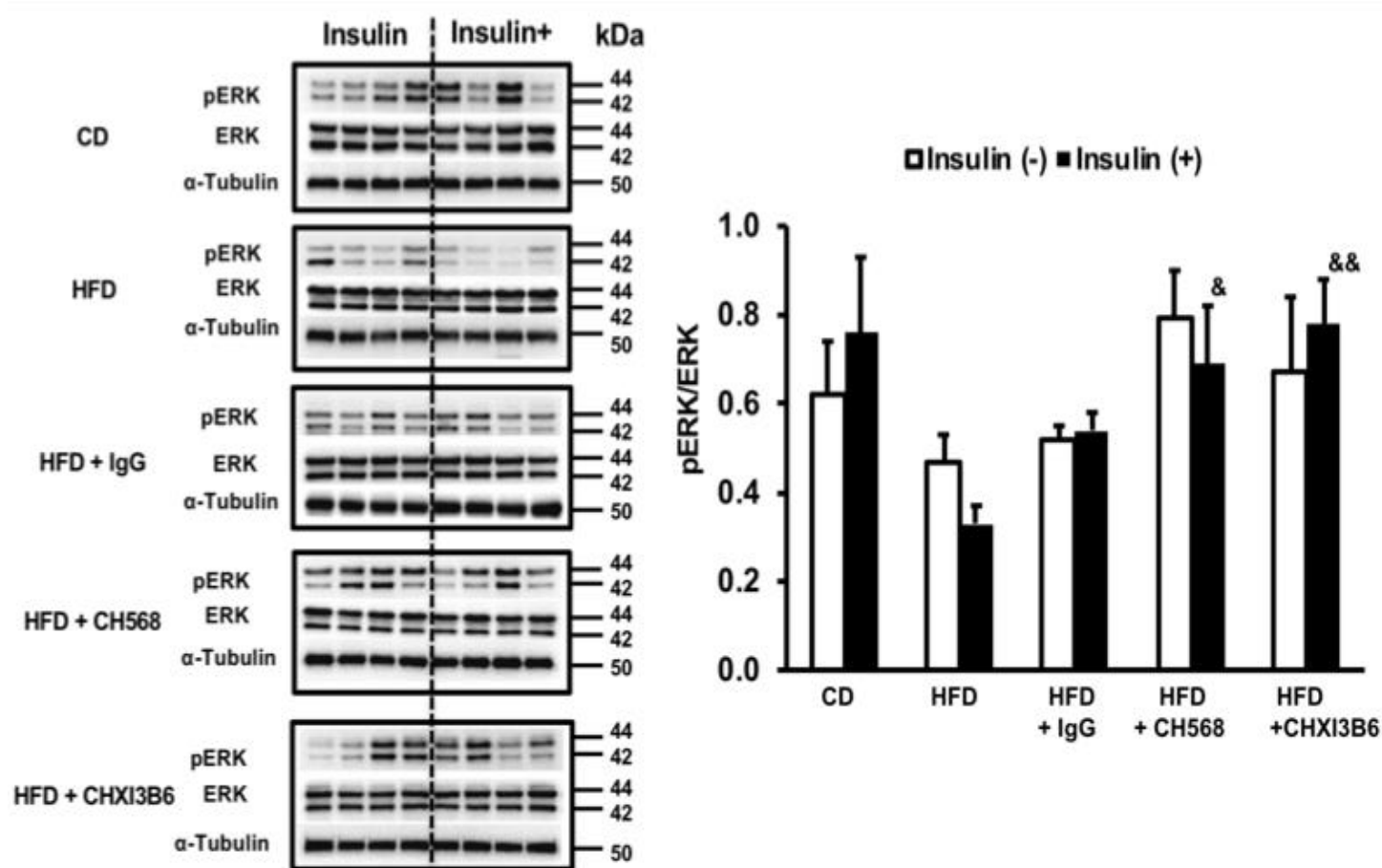


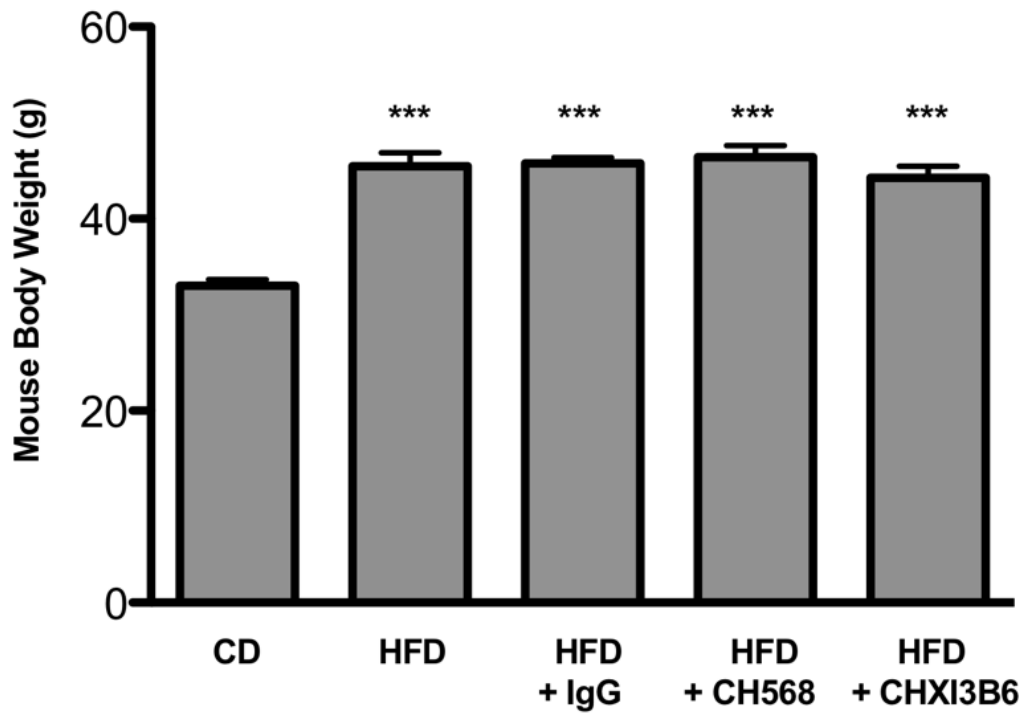
**Supplemental Figure 1.** Characterization of monoclonal anti-Chi3L1 antibodies. Purified antibodies were denatured and separated on a precast 4-20% SDS-PAGE gel. Two single bands at 50 kD (heavy chain) and 25 kD (light chain) in each lane are shown for each anti-Chi3L1 mAb, CH568 and CHXI3B6.



**Supplemental Figure 2.** Time course of insulin stimulation of murine liver. **(A)** pAKT expression measured by Western blot. **(B)** Quantification of the Western blot results.



**Supplemental Figure 3.** Effect of anti-Chi3L1 mAbs on the phosphorylation of extracellular signal-regulated kinases (ERK) in the mouse liver. The expression of  $\alpha$ -Tubulin was used as a loading control for comparison. There was no effect of these two anti-Chi3L1 mAb treatment on generation of pERK by insulin stimulation.



**Supplemental Figure 4.** High fat diet significantly increased mouse body weight. The y-axis is the average body weight measured across eight mice in each group. Data are expressed as Mean  $\pm$  Standard Error of Mean (SEM), \*\*\*  $p < 0.0001$  vs CD, N=8.