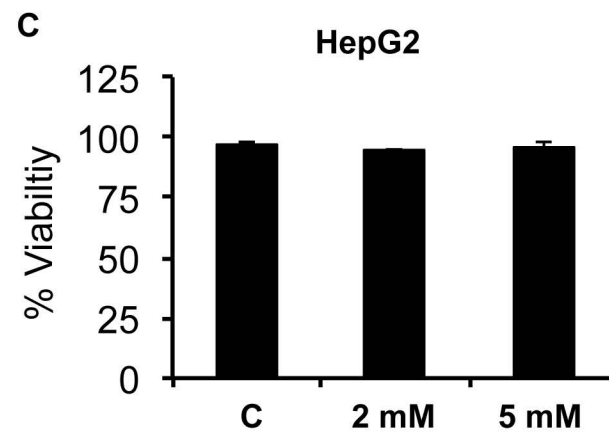
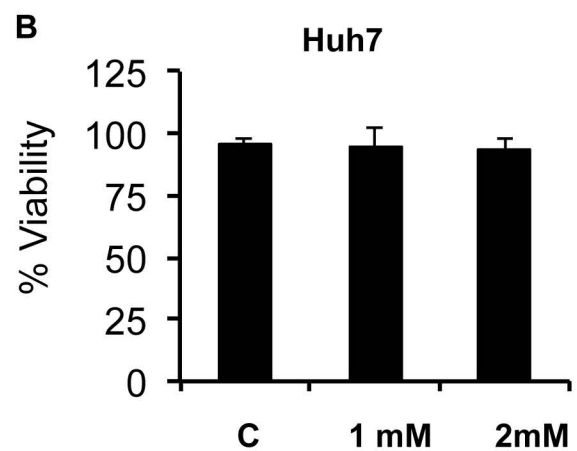
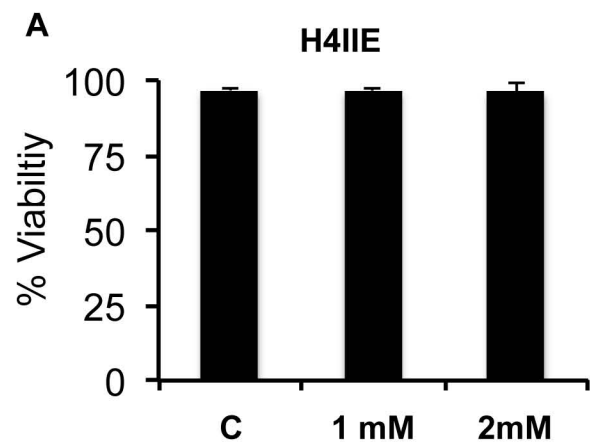


Table 1: Sequence for primers used in the study

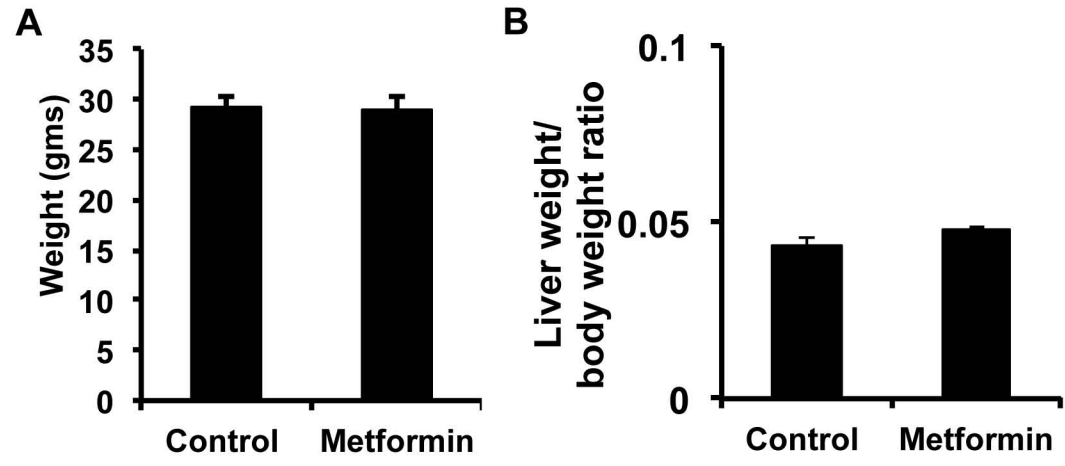
Name	Forward (5' seq 3')	Reverse (5'seq3')
hFASN	agg ttt gat gcc tcc ttc ttc gga	tgg ctt cat agg tga ctt cca gca
hACC	tcg ctt tgg ggg aaa taa agt g	gtg tga cca tga caa cga ata ta
hACLY	aag atc tcg tgg cca atg gag tca	agg ttt gcg gat caa acc aag ctc
hSREBP1c	gga ggg gta ggg cca acg gcc	cat ctc ttc gaa agt gca atc c
hActin	gcc cgc gag cac aga	cca gga tgg agg gga aga c
mAcly	aag cct ttg aca gcg gca tca ttc	ttg agg atc tgc act cgc atg tct
mAcc:	gtc ccc agg gat gaa cca ata	gcc atg ctc aac caa agt agc
mFas	gga ggt ggt gat agc cgg tat	tgg gta atc cat aga gcc cag
mSrebp1c	atc ggc gcg gaa gct gtc ggg	gtt gtt gat gag ctg gag ca
mActin	gag acc ttc aac acc cc	gtg gtg gtg aag ctg tag cc
rSrebp1c	atc agc gcg gac gct gta gg	gtt gtt gat gag ctga agc a
rAcly	aag cct ttg aca gcg gca tt attc	ttg agg atc tgc act cgc atg tct
rAcc	tac aac gca ggc atc aga ag	tgt gct gca gga aga ttg ac
rFas	tcg aga cac atc gtt tga gc	tca aaa agt gca tcc agc ag

h=human; m= mouse, r=rat

Supplemental figure 1

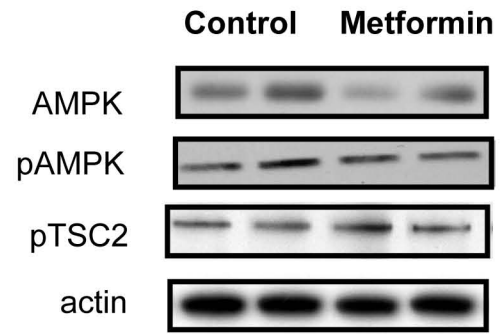


Supplemental figure 2

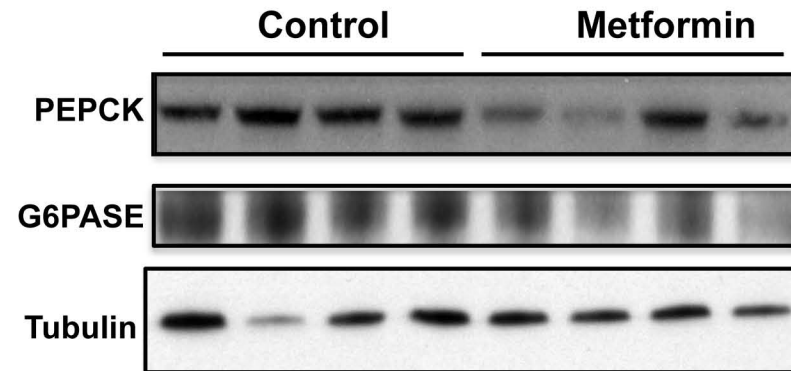


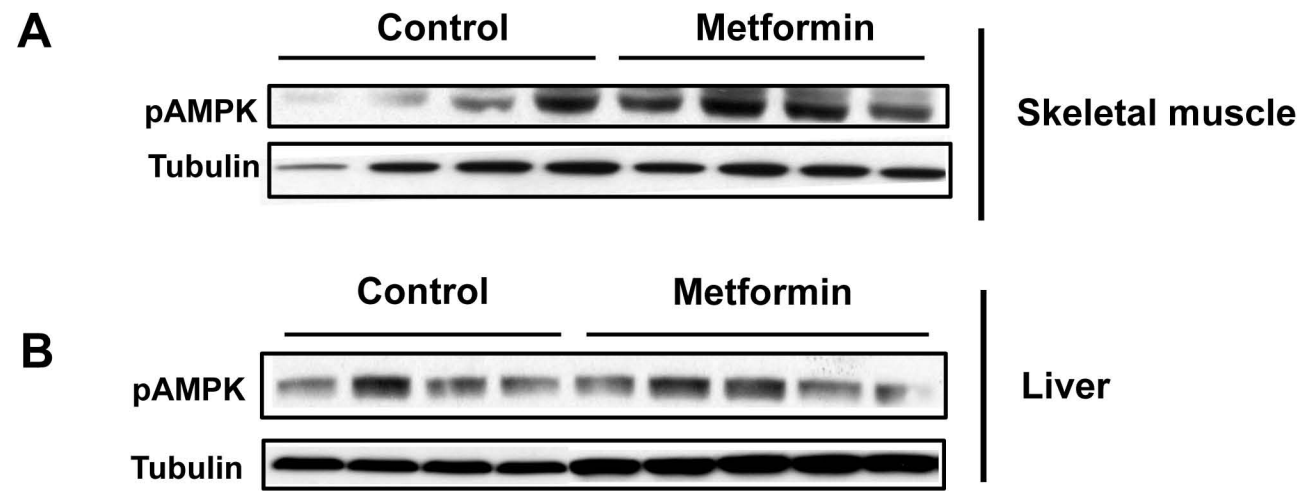
Supplemental figure 3

**A**

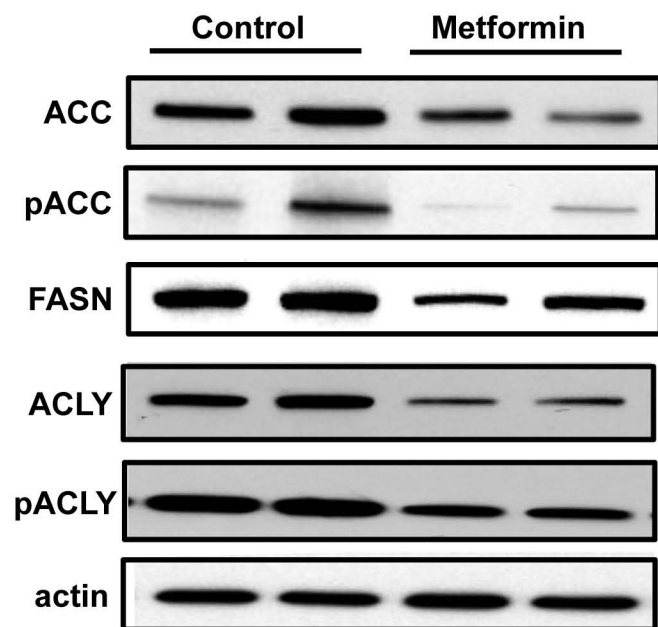


**B**

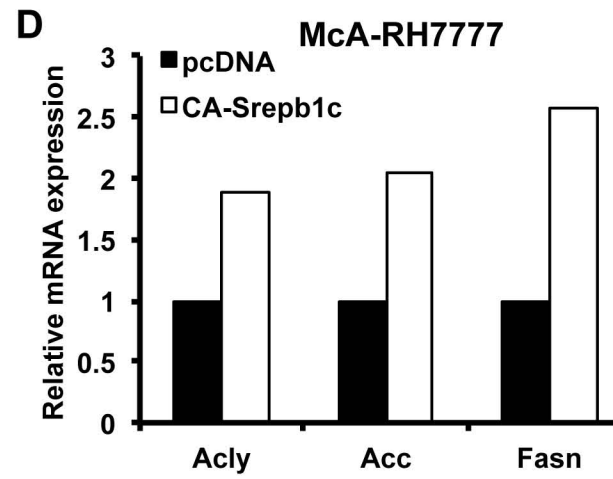
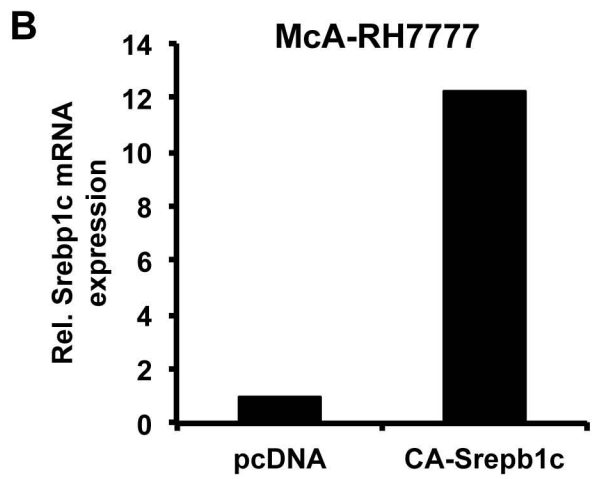
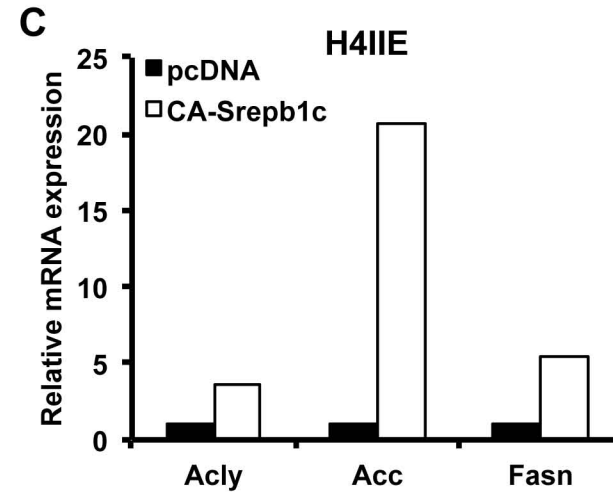
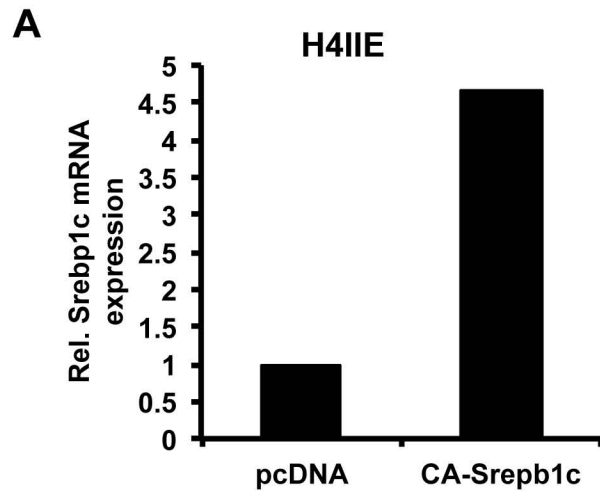




Supplemental figure 5



Supplemental figure 6



### **Supplemental figure legends**

**Supplemental Figure 1.** Metformin does not reduce cell viability. A) H4IIE, B) MCA-RH7777, C) Huh7 and D) HepG2 cells were treated with indicated doses of metformin for 48 hrs. Cell viability was determined using the Countess Automated Cell Counter with trypan blue as described by manufacturer (Invitrogen). N=3 ± SD.

### **Supplemental Figure 2.**

Metformin does not alter A) body weight or B) liver weight/body weight ratio of treated mice. Control fed and metformin fed mice (250 mg/kg) were weighed after 24 weeks following DEN treatment. Livers were removed and weighed and compared to total weight (g). N=4-6 ± SD.

### **Supplemental Figure 3.**

Metformin does not alter AMPK activation in the liver but reduces gluconeogenic enzyme expression. A) Additional samples were examined for AMPK, pAMPK and phosphorylated TSC2. B) Liver lysates from control and metformin treated mice were immunoblotted for PEPCK, G6Pase and tubulin as a loading control.

### **Supplemental figure 4.**

Metformin induces AMPK activation in muscle but not liver. Mice were treated with metformin for two weeks and liver and muscle tissue removed. Protein lysates from A) skeletal muscle and B) liver were immunoblotted for phosphorylated AMPK. Tubulin was used as a loading control.



**Supplemental figure 5.**

Metformin reduces lipogenic enzyme expression and activity. Additional samples of protein lysates from liver of control and metformin treated mice were immunoblotted as indicated and as described in materials and methods.

**Supplemental figure 6.**

Ectopic expression of Srebp1c promotes Acly, ACC and Fasn expression. H4IIE and McA-RH7777 cells stably expressing vector control pcDNA or CA-Srebp1c were established as described in materials and methods. RNA was isolated and RTPCR performed for Srebp1c, ACLY, ACC and FASN.