Supplementary information

p-Coumaric Acid Enhances Hypothalamic Leptin Signaling and Glucose Homeostasis in Mice via Differential Effects on AMPK Activation

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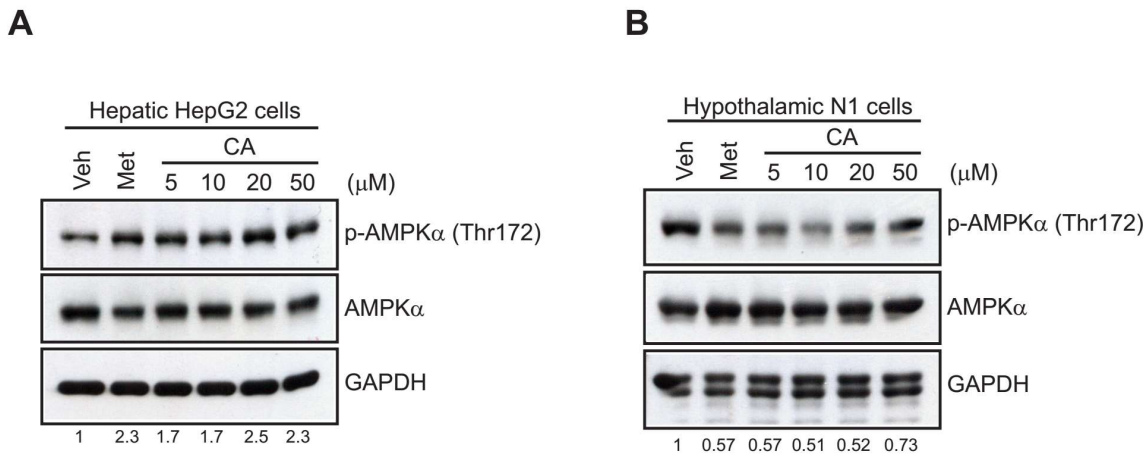

Figure S1. Dose-dependent *in vitro* effects of *p*-coumaric acid (CA) treatment on AMPK activation. (**A**) Immunoblots showing dose-dependent effect of CA treatment on AMPK activation in HepG2 cells. (**B**) Immunoblots showing dose-dependent effect of CA treatment on AMPK activation in N1 cells. The digitals at the bottom indicated p-AMPK/AMPK ratios normalized to corresponding GAPDH levels. Veh: vehicle, Met: metformin 2 mM.

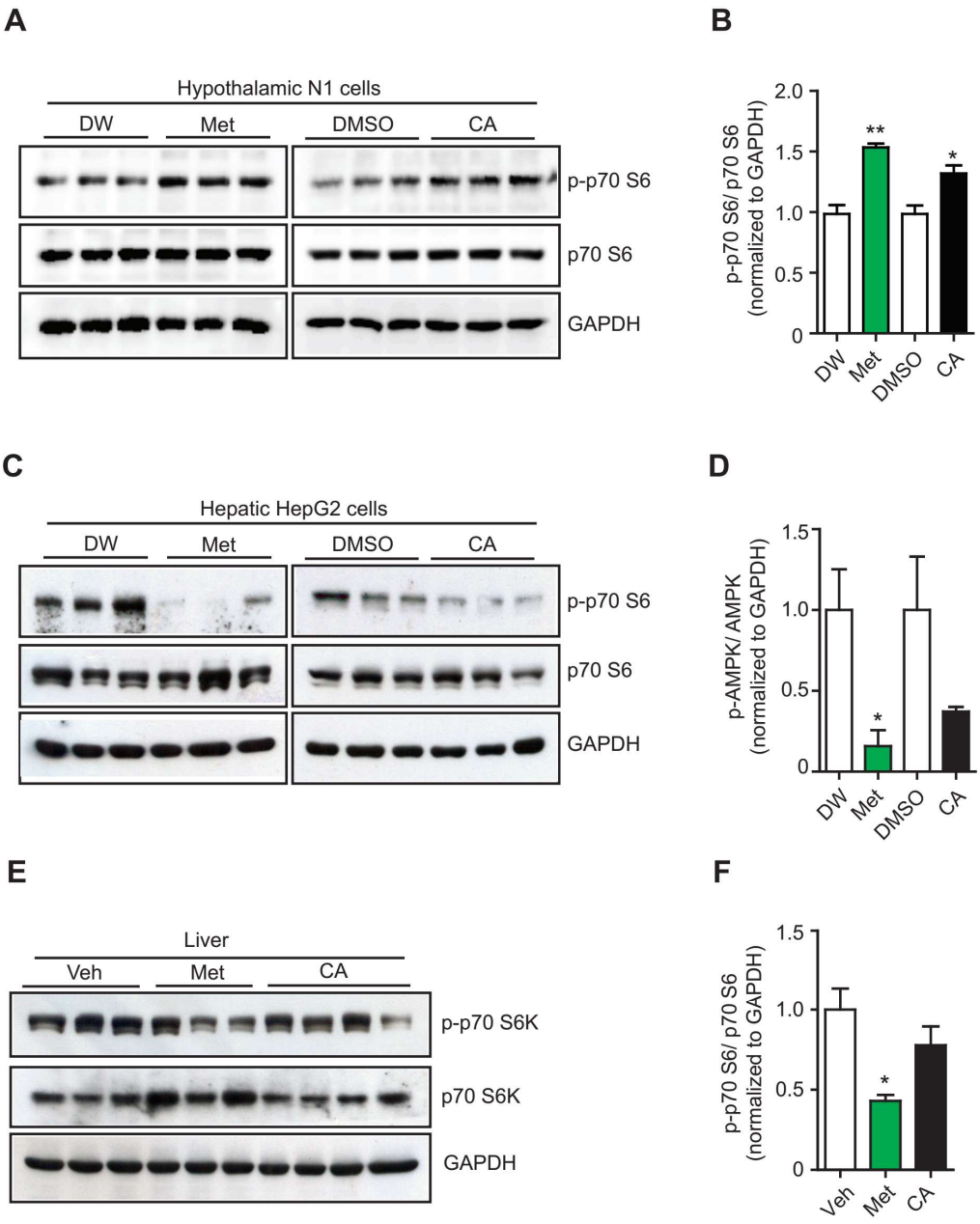

Figure S2. Effects of *p*-coumaric acid (CA) treatment on S6 kinase activity. Immunoblots (**A**) and graph (**B**) showing levels of p-p70S6 and p70S6 in hypothalamic N1 cells treated with metformin (2 mM) and CA (10 µM). Immunoblots (**C**) and graph (**D**) showing levels of p-p70S6 and p70S6 in hepatic HepG2 cells treated with metformin (2 mM) and CA (20 µM). Immunoblots (**E**) and graph (**F**) showing levels of p-p70S6 and p70S6 in livers of mice orally treated with 200 mg/kg of metformin and CA. The results are expressed as mean ± SEM. One-way ANOVA with Tukey's post-hoc tests for comparison of multiple groups or Student's t-test. *$P < 0.05$, **$P < 0.01$.

Original blots

Figure 1A

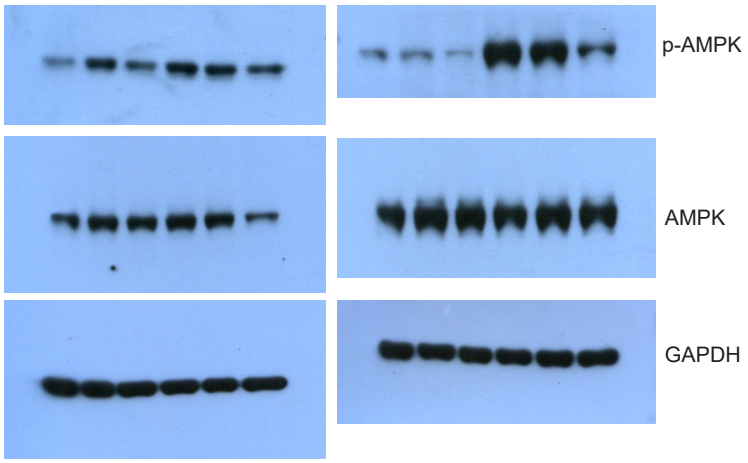

Figure 1C

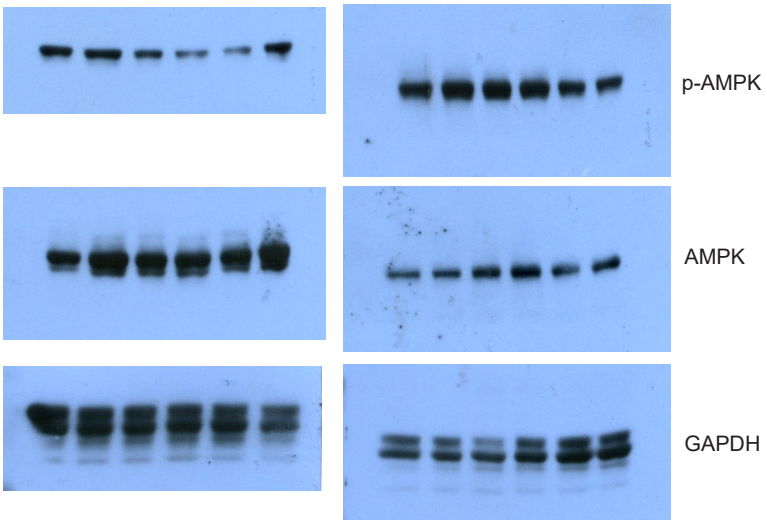

Figure 2A

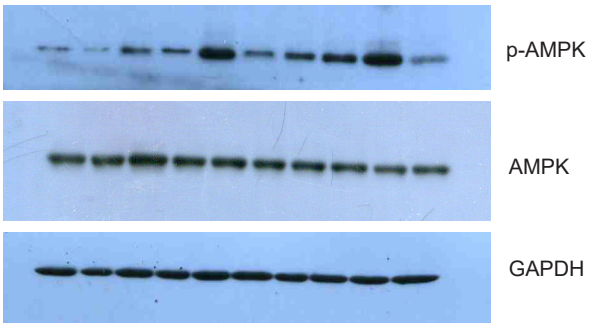

Figure 2C

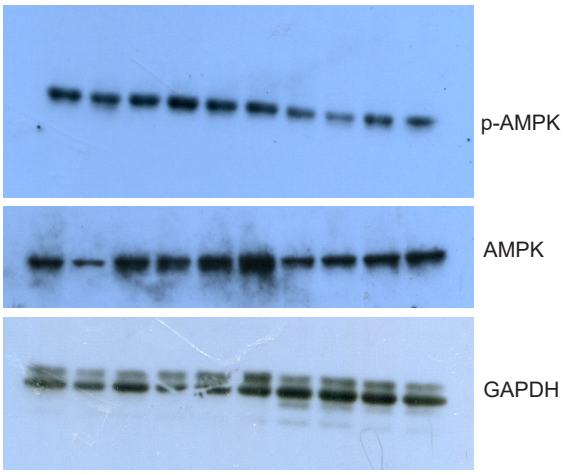

Figure 2E

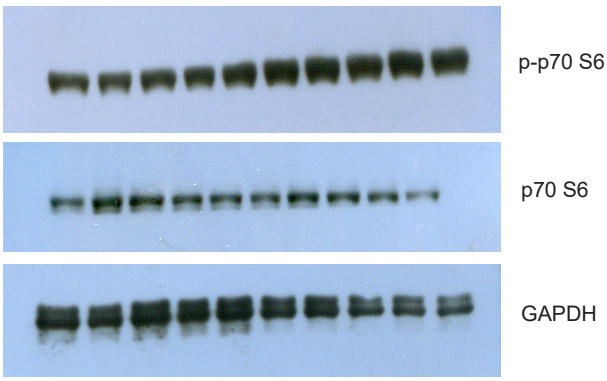

Figure 3B

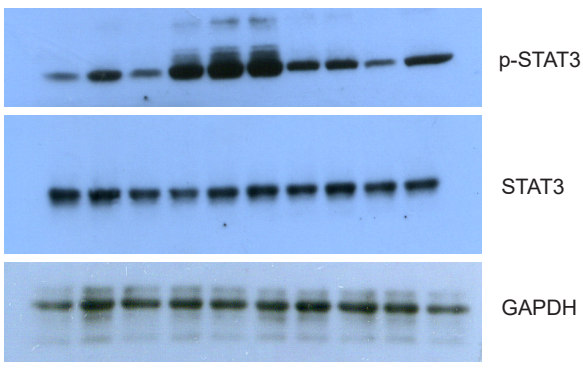

Figure S1A

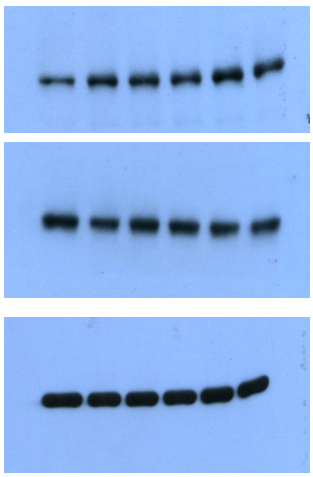

Figure S1B

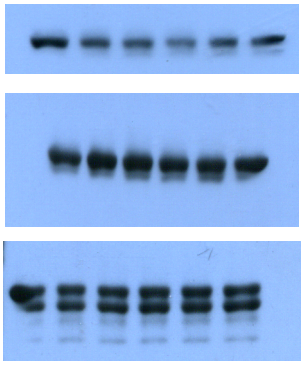

Figure S2A

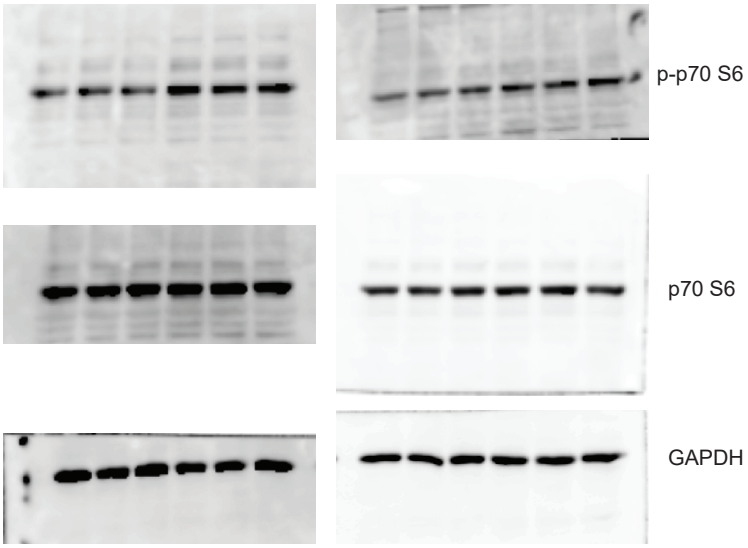

Figure S2E

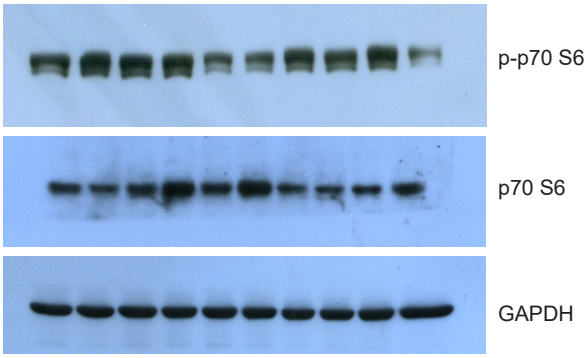

Figure S2C