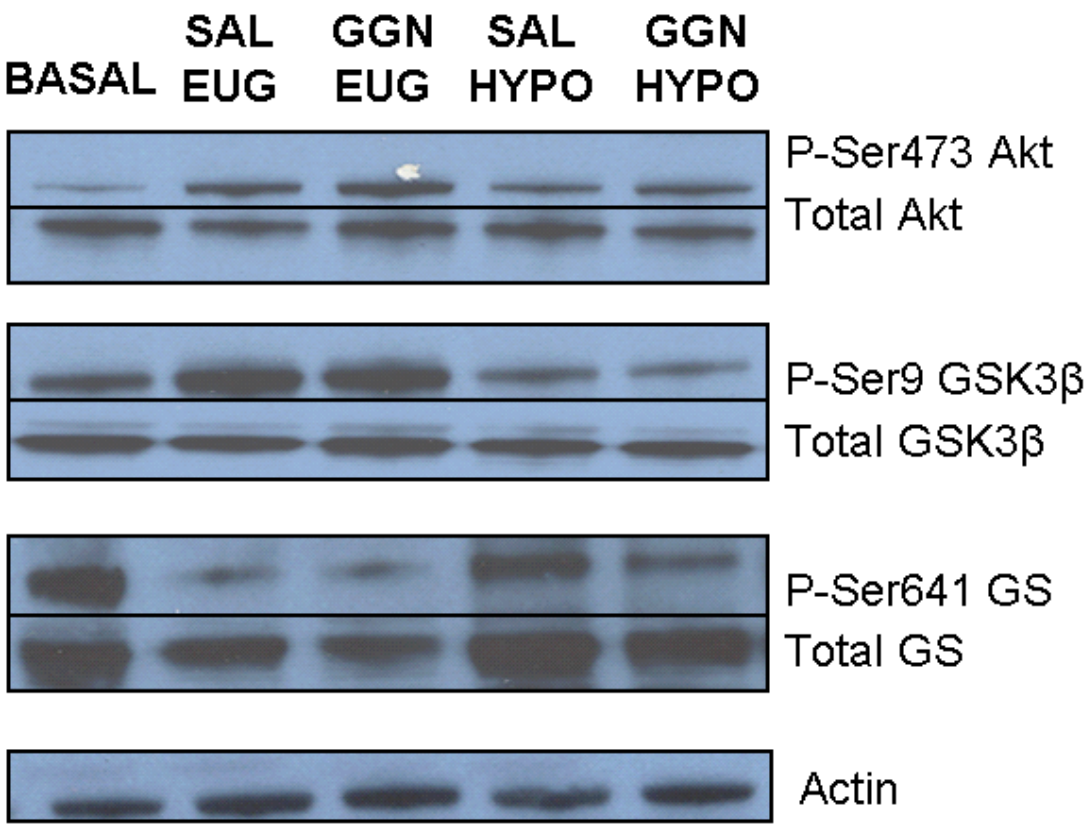
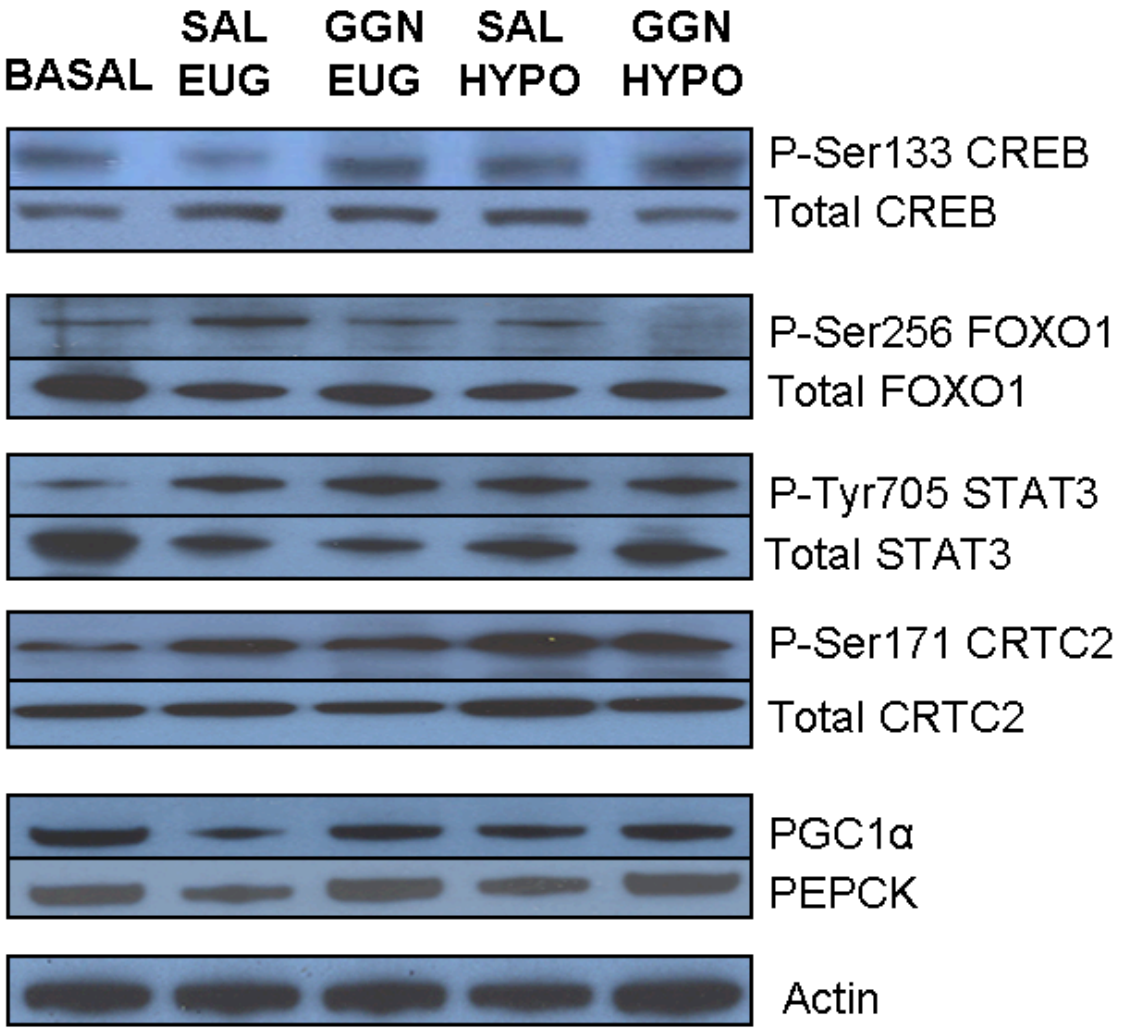
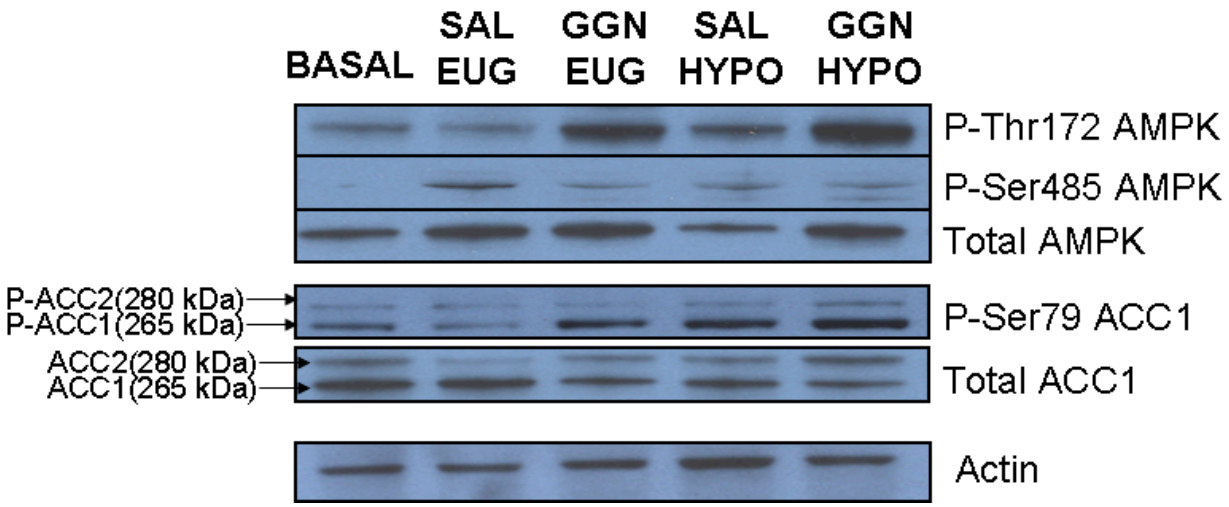


Supplementary Figure 1. Representative Western blots (of n=3-4) for markers of insulin signaling and glycogen metabolism as shown in Figures 5. 18h fasted conscious dogs subjected to a physiologic rise in glucagon during hyperinsulinemic euglycemic and hyperinsulinemic hypoglycemic conditions. Animals were compared to a basal group (overnight fasted animals maintained at euglycemia during a pancreatic clamp with portal replacement of basal insulin and basal glucagon).



Supplementary Figure 2. Representative Western blots (of n=3-4) for markers of glucagon signaling and the regulation of gluconeogenesis as shown in Figures 5 and 6. 18h fasted conscious dogs subjected to a physiologic rise in glucagon during hyperinsulinemic euglycemic and hyperinsulinemic hypoglycemic conditions. Animals were compared to a basal group (overnight fasted animals maintained at euglycemia during a pancreatic clamp with portal replacement of basal insulin and basal glucagon).



Supplementary Figure 3. Representative Western blots (of n=3-4) for AMPK phosphorylation as shown in Figures 7. 18h fasted conscious dogs subjected to a physiologic rise in glucagon during hyperinsulinemic euglycemic and hyperinsulinemic hypoglycemic conditions. Animals were compared to a basal group (overnight fasted animals maintained at euglycemia during a pancreatic clamp with portal replacement of basal insulin and basal glucagon).