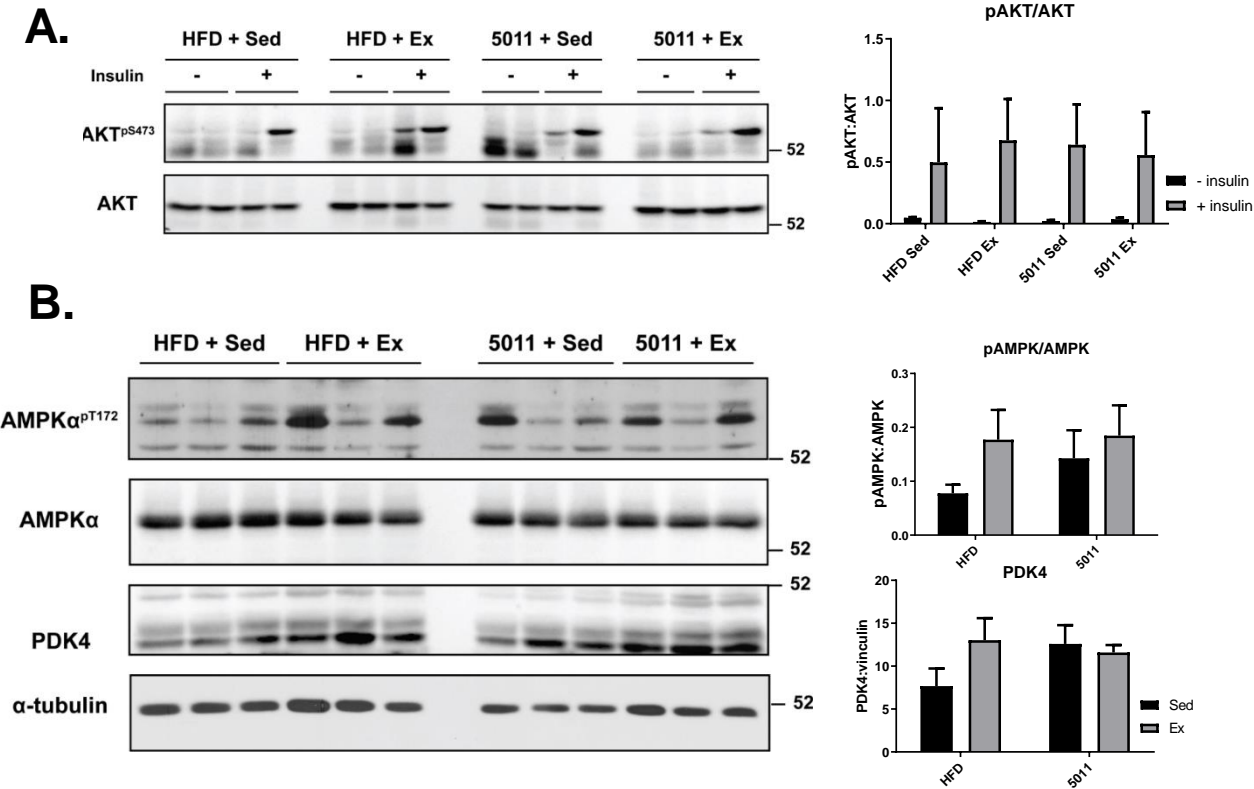


Muscle



Liver

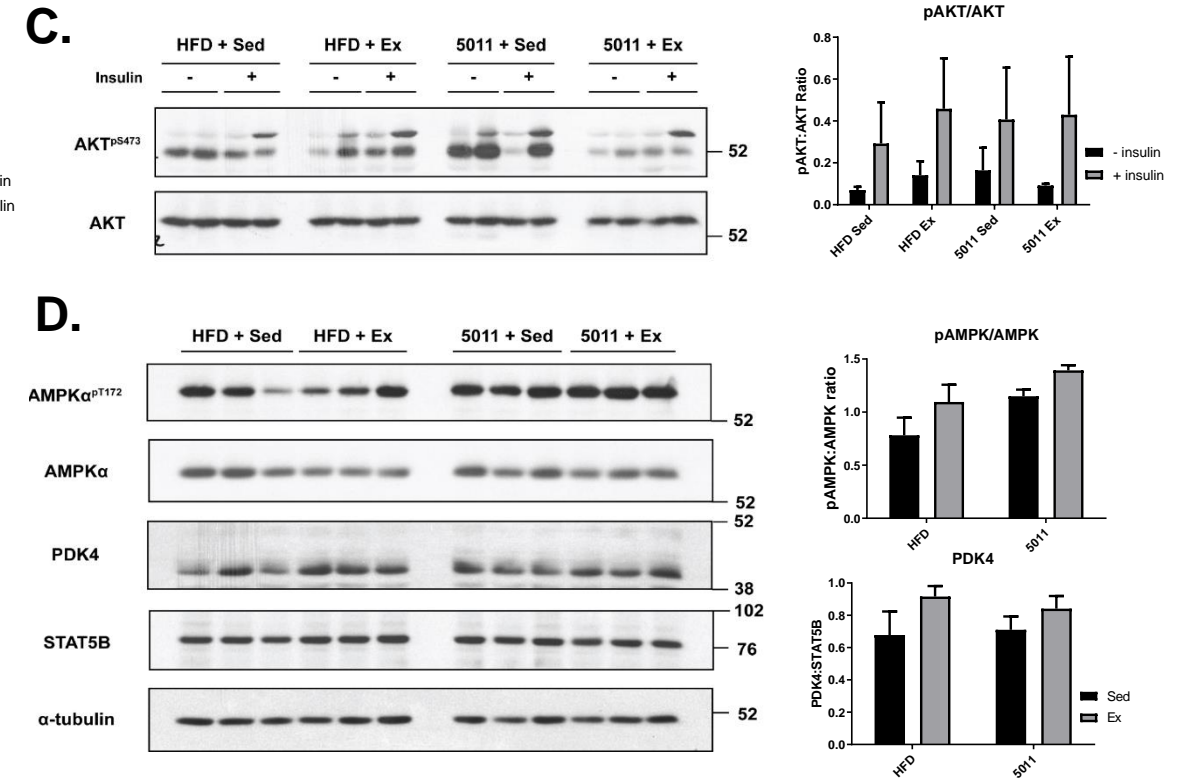


Figure 2. The effect of exercise, 5011, and 5011 with exercise on expression of insulin signaling proteins in skeletal muscle and liver. Muscle (mixed gastroc) and liver were harvested during the time of necropsy to perform analysis of proteins associated with the metabolic benefits of exercise training. Whole tissue extracts were subjected to immunoblotting (mixed gastrocnemius and liver) to detect changes in total levels of PDK4 and in the ratio of phosphorylated AKT to AKT (pAKT/AKT; +/- insulin injection) and AMPK phosphorylated at threonine 172 to total AMPK (pAMPK/AMPK). Two to three samples per group are shown in representative images, while n = 4 per group for pAKT/AKT/ and n=3 per group for pAMPK/AMPK/ and PDK4 were used for quantification of band intensity shown in the graphs to the right of blot images. STAT5B and α -tubulin were used as loading controls. HFD, high fat diet; 5011, HFD+5011; Ex, exercise, Sed, sedentary.