



**Supplementary Figure 2:** Example immunoblot of skeletal muscle total AMPK $\alpha$  (panel A) and Thr<sup>172</sup>AMPK $\alpha$  (panel B). EX CTRL = exercised muscle as a positive control; ND = normal diet fed; HFD = high fat diet fed; HFD+MF = HFD+metformin; SAL = saline; INS = insulin.