



Figure S1. DK1 mice display no differences in liver *Prkab1* or muscle *Prkab2* gene expression versus WT, and DK1 adipose tissue displays reduced AMPK content. Gene expression was assessed in DK1 and WT liver and skeletal muscle using qPCR. (a) Relative *Prkab1* (AMPK $\beta 1$) gene expression in WT and DK1 liver and (b) relative *Prkab2* (AMPK $\beta 2$) gene expression in WT and DK1 skeletal muscle. Overnight fasted (~14 h), male mice, $n = 7-8$, 20-32 wk. AMPK subunit protein content was assessed in epididymal adipose tissue. (c) Representative immunoblots and stain free images collected from fed DK1 and WT mice. Quantified (d) AMPK α , (e) AMPK $\beta 1$, and (f) AMPK $\beta 2$. Male mice, $n = 8$, 17-20 wk. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, **** $p < 0.0001$.