

## **Deletion of Lkb1 in adult mice results in body weight reduction and lethality**

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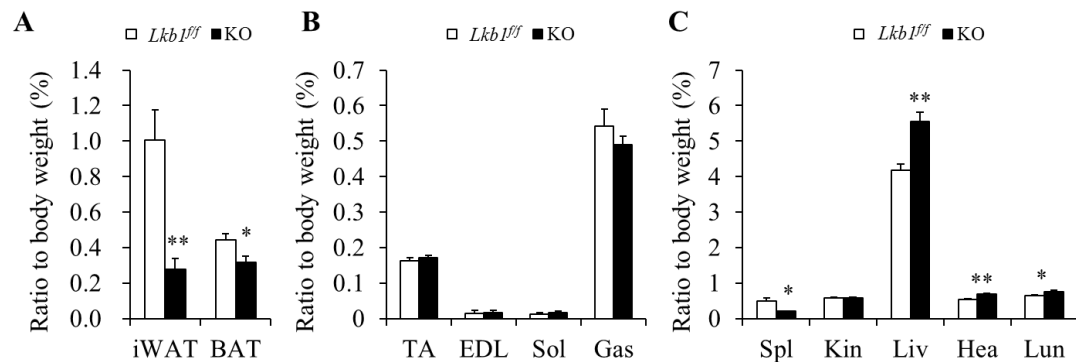
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**Running title:** Global Lkb1 knockout in adult mice

## Supplemental figures

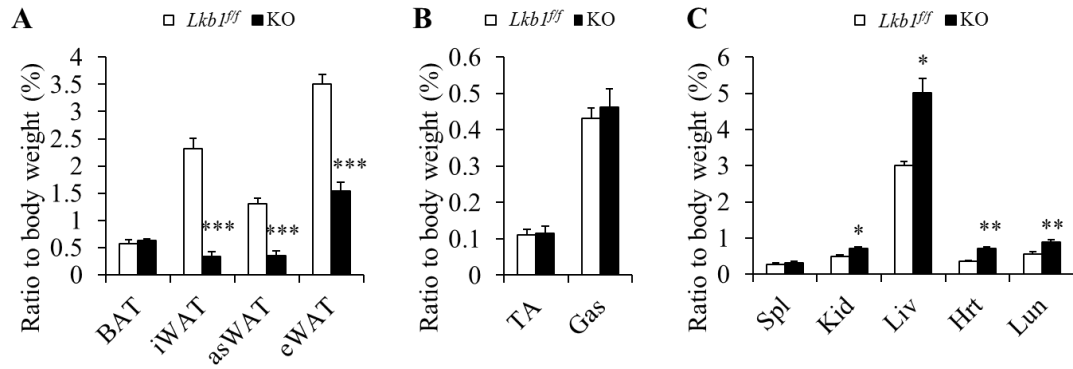


### Supplemental Figure 1: The effect of global deletion of *Lkb1* on the ratios of

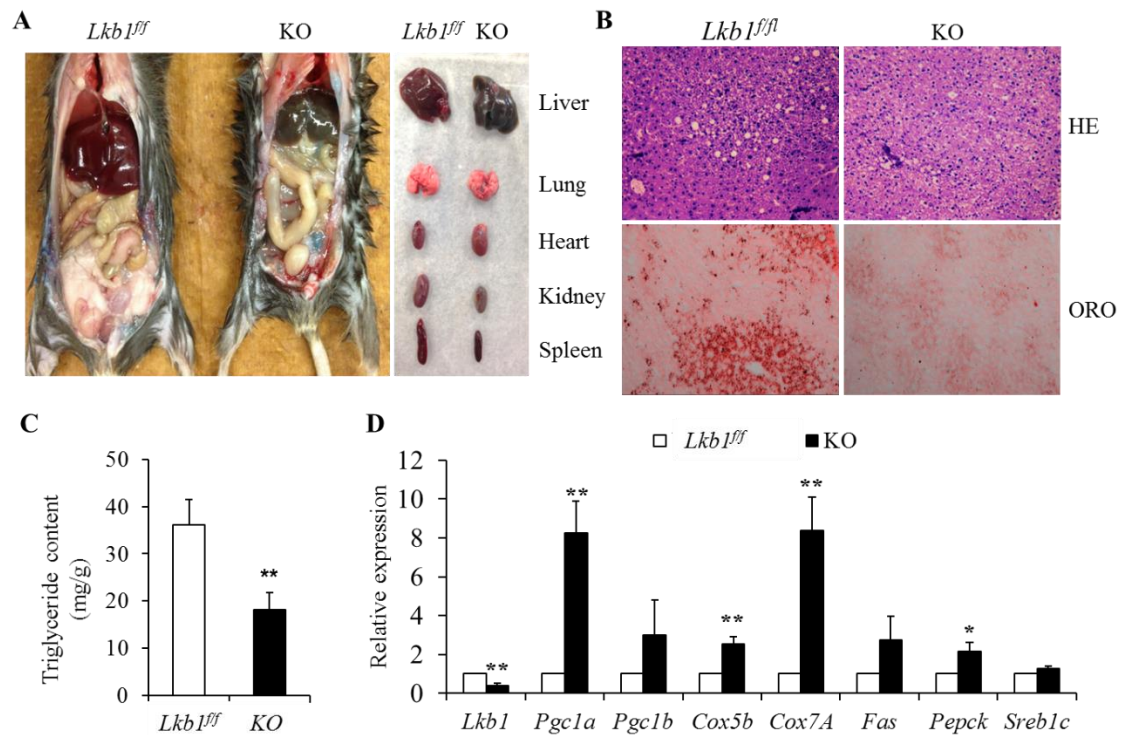
**different tissues to body weight. (A-C)** The ratios of adipose (A), muscle (B) and

organs (C) to body weight of normal diet fed *Lkb1<sup>flox/flox</sup>* (*Lkb1<sup>flox/flox</sup>*, n=6) and *Rosa-Lkb1* (KO, n=9) mice at 3 weeks after tamoxifen (TMX) induction. Error bars:

S.E.M., \*  $P < 0.05$ , \*\*  $P < 0.01$ . BAT, Brown adipose tissue; iWAT, inguinal white adipose tissue; TA, tibialis anterior muscle; EDL, extensor digitorum longus muscle; Sol, soleus muscle; Gas, gastrocnemius muscle; Spl, spleen; Kid, kidney; Liv, liver; Hrt, heart; Lung, Lun.



**Supplemental Figure 2: The ratios of different tissues to body weight of HFD-induced *Lkb1<sup>flox/flox</sup>* (*Lkb1<sup>ff</sup>*) and *Rosa-Lkb1* (KO) mice at 3 weeks after TMX induction.** (A-C) The ratios of adipose (A), muscle (B) and organs (C) to body weight. Error bars: S.E.M., \*  $P < 0.05$ , \*\*  $P < 0.01$ . BAT, Brown adipose tissue; iWAT, inguinal white adipose tissue; asWAT, anterior subcutaneous WAT; eWAT, epididymal WAT; TA, tibialis anterior muscle; Gas, gastrocnemius muscle; Spl, spleen; Kid, kidney; Liv, liver; Hrt, heart; Lung, Lun.



**Supplemental Figure 3: Global deletion of Lkb1 affects glycogen and lipid**

**deposition and gene expression in liver. (A)** Representatives of liver tissues from

*Lkb1<sup>flox/flox</sup>* (*Lkb1<sup>ff</sup>*) and *Rosa-Lkb1* (KO) mice at 3 weeks after tamoxifen (TMX)

induction. **(B)** Representatives images of liver sections after HE and oil red O (ORO)

staining. **(C)** The triglyceride content in liver tissues (n=4). **(D)** The mRNA levels

related genes in liver tissues from *Lkb1<sup>ff</sup>* and KO mice 3 weeks after TMX induction

(n=5). Error bars: S.E.M., \*  $P < 0.05$ , \*\*  $P < 0.01$ .