

Supplementary figure legend

Figure S1: Insulin signaling is attenuated in livers of *Cyp2c44*^{-/-} mice

5 hour fasted WT and *Cyp2c44*^{-/-} mice were injected with insulin (5U) or vehicle (PBS) into the inferior vena cava under anesthesia. 15 minutes after, the mice were sacrificed, and livers were harvested to assess hepatic insulin signaling. **(A, C, E, G)** equal amount of liver homogenates were analyzed by Western blot for levels of total and phosphorylated IR β , AKT, FOXO1, and GSK3 β . **(B, D, F, H)** bands were quantified as described in Methods and values are expressed as phospho protein/total protein ratio. Values are the mean \pm SD and symbols represent individual mice. **(I)** Membrane rich (MRF) and cytosol rich (CRF) fractions were isolated from livers of 5 hour fasted WT and *Cyp2c44*^{-/-} mice injected with PBS as described above. Fractions (20 μ g/lane) were analyzed by Western blot for levels and distribution of Na/K ATPase (a plasma membrane marker), Calnexin (an ER marker), α -tubulin (a cytosol marker), and Syntaxin 6 (a Golgi marker). The Ponceau staining shows equal loading. **(J)** Protein bands in MRF were quantified as described in Methods and values are expressed as protein band/ponceau ratio. Values are the mean \pm SD and symbols represent individual mice.

Figure S2: Muscles from *Cyp2c44*^{-/-} mice are not insulin resistant

5 hour fasted WT and *Cyp2c44*^{-/-} mice untreated or treated with EET-A were injected with insulin (5U) or vehicle (PBS) into the inferior vena cava under anesthesia. 15 minutes after, the mice were sacrificed, and muscles were harvested to assess muscle insulin signaling. **(A, C, E, G)** Equal amount of muscle homogenates were analyzed by Western blot for levels of total and phosphorylated IR β , AKT, FOXO1, and GSK3 β . **(B, D, F, H)** Bands were quantified as described in Methods and values are expressed as phosphor protein/total protein ratio. Values are the mean \pm SD and symbols represent individual mice.