



Supplemental Figure S1. Generation and characterization of mice with liver-specific *Them1* expression.

(A) Schematic diagram of the transgenic DNA construct for *Them1*, as well as the configuration following cre-mediated recombination. The locations of PCR primers used to confirm recombination are indicated. To confirm genotypes, transgene expression and activity, mice were fed a chow diet and sacrificed at age 18 w. Analyses included (B) PCR using genomic DNA from Mice (n = 2/group) not expressing (-) and expressing (+) cre recombinase to confirm liver specific recombination. (C) Relative mRNA expression of *Them1* in chow and high fat fed animals (n = 4/group). (D) Immunoblot analysis of liver cytosol from chow fed (top) and high fat fed (bottom) with GAPDH to control for unequal loading, and (E) ACOT activity in liver homogenates (n = 4/group) using myristoyl-CoA as the exogenous substrate. (F) Relative mRNA expression of *Acot* isoforms in mice fed chow (C) or a high fat (H) diets for 14 w and studied at age 18 w (n = 4/group). * $P < 0.05$