# SUPPLEMENTAL MATERIAL



**Supplemental Figure 1: Primary hepatocytes from *Dpp4*-Liv-Tg mice show increased cellular and extracellular DPP4 activity.** (A-D) Analysis of primary hepatocytes isolated from 12-week-old standard diet fed wild-type (WT, open circles) and *Dpp4*-transgenic (*Dpp4*-Liv-Tg, black circles) mice for DPP4 protein content (A), DPP4 activity in cell homogenates (B) and cell supernatants (SN) (C), and supernatant DPP4 concentration measured by ELISA (D). All data are represented as mean ± SEM from 3 independent experiments. \*p<0.05, \*\*p<0.01**.**



**Supplemental Figure 2. Livers of WT and *Dpp4*-Liv-Tg mice on a high-fat diet show no indication for inflammation and fibrosis.** (A) Gene expression of markers for inflammation and fibrosis in livers of 30-week-old wild-type (WT, white bars) and *Dpp4*-transgenic (*Dpp4*-Liv-Tg, black bars) mice (n=7-9). (B, C) Sirius Red (B) and Trichrome (C) staining of liver sections. Scale bar, 100 µm. All data are represented as mean ± SEM.



**Supplemental Figure 3. Microarray analysis of livers from high-fat diet fed WT and *Dpp4*-Liv-Tg mice at 30 weeks of age.** Genes related to lipid metabolism are depicted as fold change of wild-type (WT) controls (upregulated genes are above, downregulated genes are below the dotted line). FAox, fatty acid oxidation; TGhydr, triglyceride hydrolysis; VLDLsyn, very low density lipoprotein synthesis; DNL, *de novo* lipogenesis; TGsyn, triglyceride synthesis. All data are represented as mean ± SEM (n=4). \*p<0.05, #0.1>p>0.05.

**Supplemental Table 1. List of antibodies.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Antibody** | **Company** | **Cat.No.** | | **WB-Dilution** | | **IHC-Dilution** | |
| ***Primary antibodies*** | | | | | | | | |
| DPP4 | Abcam | | ab129060 | | 1:2,000 | | 1:200 | |
| Akt | Cell Signaling | | 9272 | | 1:1,000 | |  | |
| Phospho-Akt | Cell Signaling | | 9271 | | 1:1,000 | |  | |
| PPARγ | Santa Cruz | | Sc-7196 | | 1:1,000 | |  | |
| CD36 | R&D Systems | | MAB2519 | | 1:1,000 | |  | |
| PLIN2 | Progen | | GP40 | |  | | 1:500 | |
| E-cadherine | BD Transduction | | 610181 | |  | | 1:200 | |
| F4/80 | Abcam | | Ab6640 | |  | | 1:2,500 | |
| ***Secondary antibodies*** | | | | | | | | |
| Anti-rabbit  Alexa-488 | Thermo Fisher | | A-11070 | |  | | 1:400 | |
| Anti-guinea pig Alexa-488 | Thermo Fisher | | A11073 | |  | | 1:400 | |
| Anti-mouse Alexa-546 | Thermo Fisher | | A-11018 | |  | | 1:200 | |
| Anti-rat biotinylated | DakoCytomation | | E0468 | |  | | 1:50 | |
| Anti-mouse-POD | Dianova | | 315-035-008 | | 1:10,000 | |  | |
| Anti-rabbit-POD | Dianova | | 111-035-003 | | 1:10,000 | |  | |
| Anti-rat-POD | Pierce | | 31470 | | 1:10,000 | |  | |

WB, Wetsern blot; IHC, Immunohistochemistry; POD, peroxidase