

Supplementary Materials

Table S1. List of proteins detected by the Proteome Profiler™ Mouse Adipokine Array Kit.

Adipokine	Alternative Name	Entrez Gene ID
Adiponectin	Acrp30/AidipoQ	11450
AgRP	ART	11604
ANGPT-L3	---	30924
C-reactive Protein	CRP	12944
DPPIV	CD26/DPP4	13482
Endocan	ESM-1	71690
Fetuin A	AHSG	11625
FGF acidic	FGF-1	14164
FGF-21	---	56636
HGF	---	15234
ICAM-1	CD54	15894
IGF-I	Somatomedin C	16000
IGF-II	Somatomedin A	16002
IGFBP-1	---	16006
IGFBP-2	---	16008
IGFBP-3	---	16009
IGFBP-5	---	16011
IGFBP-6	---	16012
IL-6	---	16193
IL-10	---	16153
IL-11	---	16156
Leptin	OB	16846
LIF	---	16878
Lipocalin-2	NGAL	16819
MCP-1	CCL2/JE	20296
M-CSF	CSF-1	12977
Oncostatin M	OSM	18413
Pentraxin 2	PTX2/SAP	20219
Pentraxin 3	PTX3/TSG-14	19288
Pref-1	DLK-1/FA1	13386
RAGE	---	11596
RANTES	CCL5	20304
RBP4	---	19662
Resistin	ADSF/FIZZ3	57264
Serpin E1	PAI-1	18787
TIMP-1	---	21857
TNF- α	TNFSF1A	21926
VEGF	VEGF-A	22339

Figure S1.

Graphical summary of serum parameters. Symbols over columns indicate statistical differences between groups at the $p<0.05$ level.

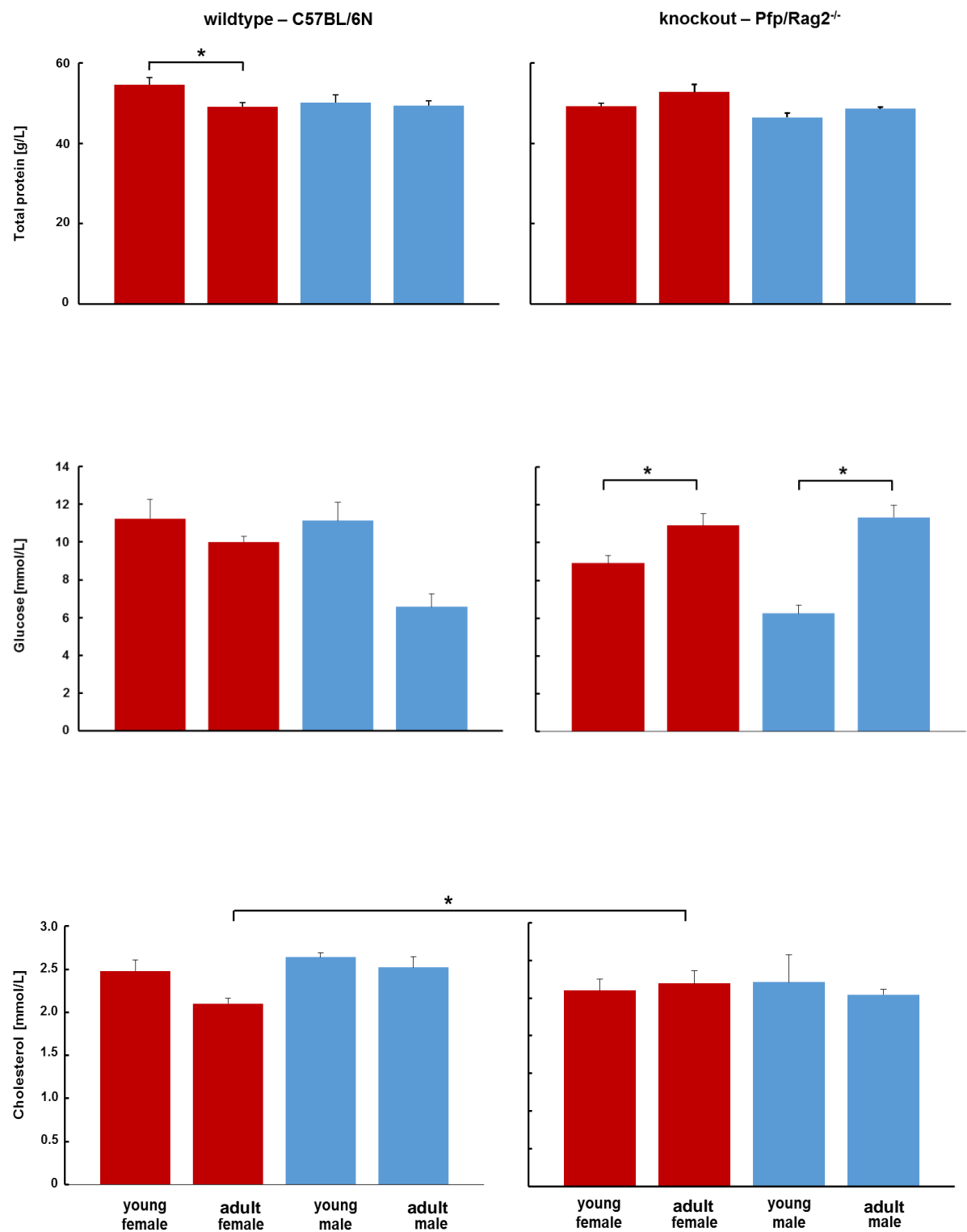


Figure S1, cont.

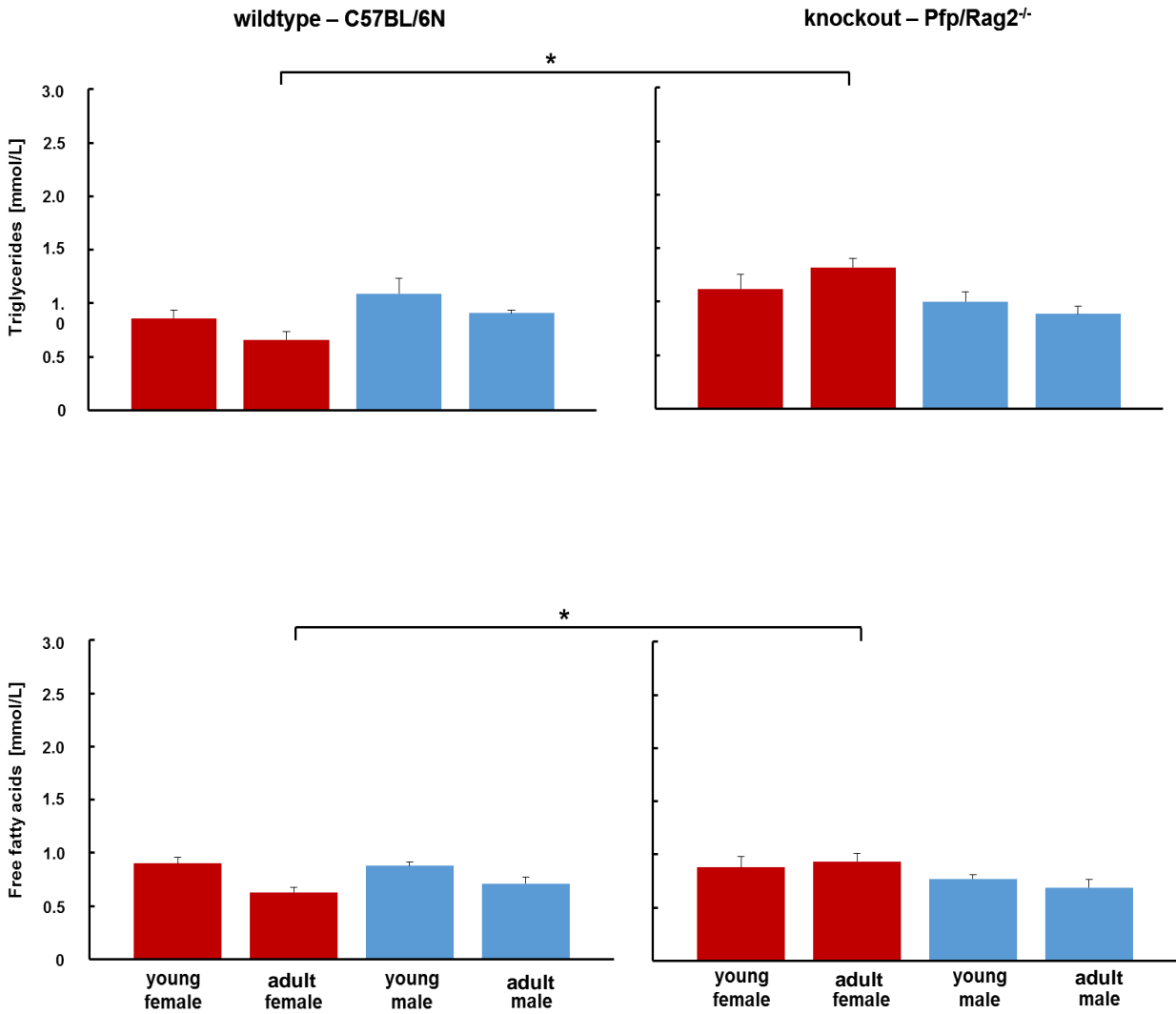


Figure S2. Zonal expression of periportal E-cadherin (E-cad) and of perivenous glutamine synthase (GS) and Cytochrome P450 2E1 (CYP2E1) in livers from wildtype and knockout female and male mice. In (a), a comprehensive scheme for the expression of the markers is given showing periportal E-cadherin and perivenous CYP2E1 as well as GS. (b) Immunofluorescent co-staining of E-cad (red) and GS (green) in the upper panels, and of E-cad (red) and CYP2E1 (green) in the lower panels of wildtype (left) and of knockout (right) female and male mice. Pictures are representative out of 3 different animals in each group. PV – portal vein; CV – central vein.

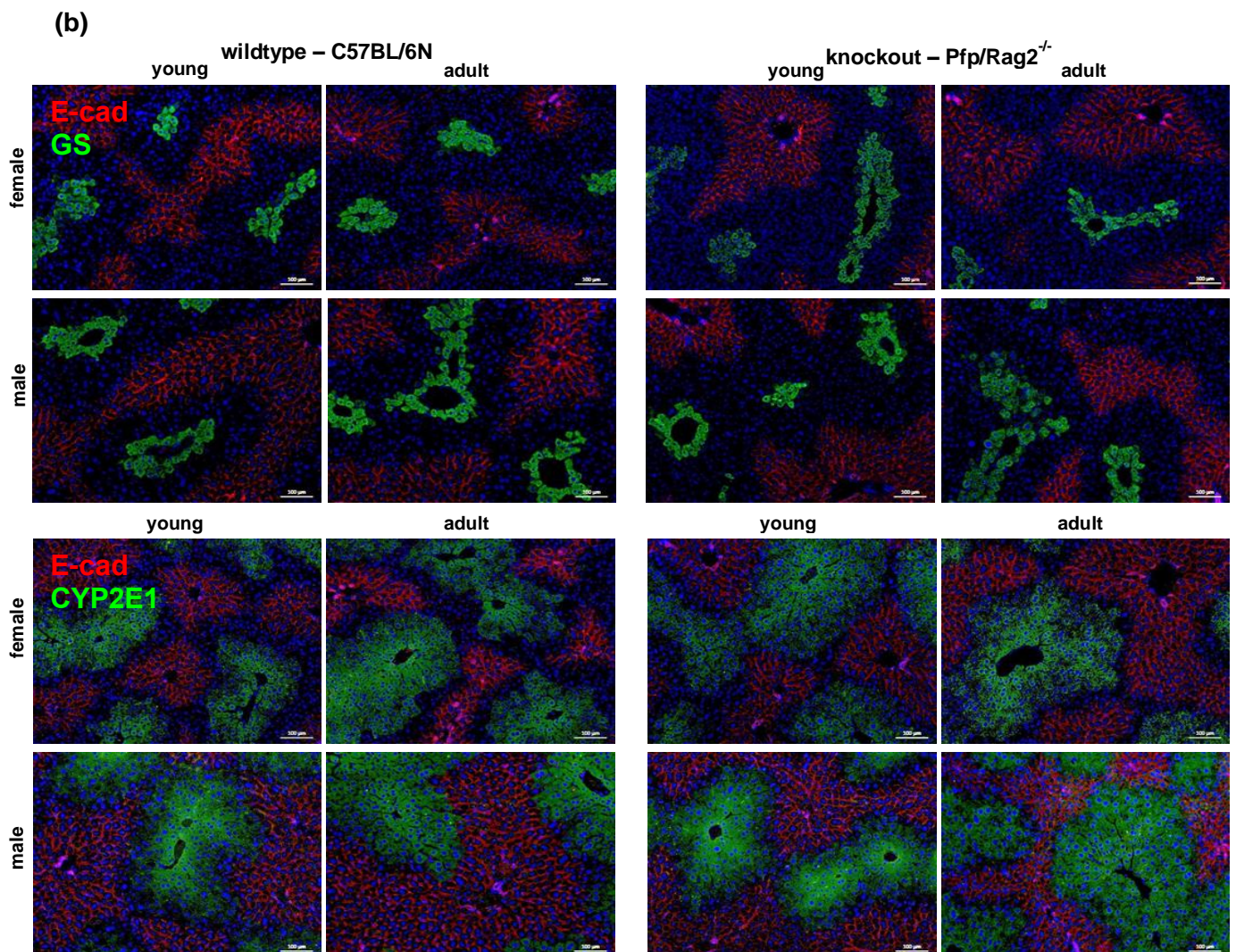
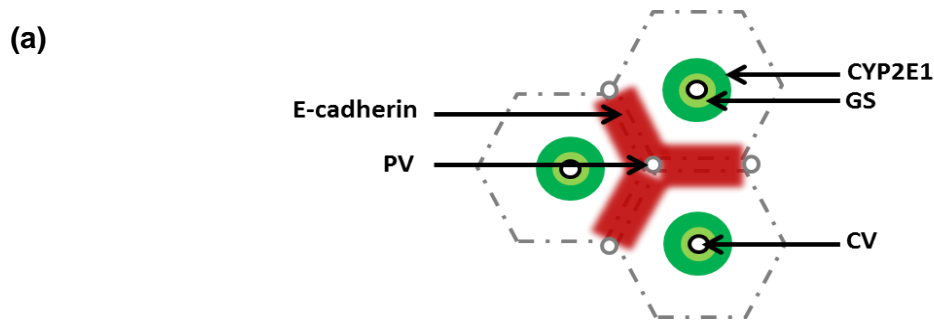
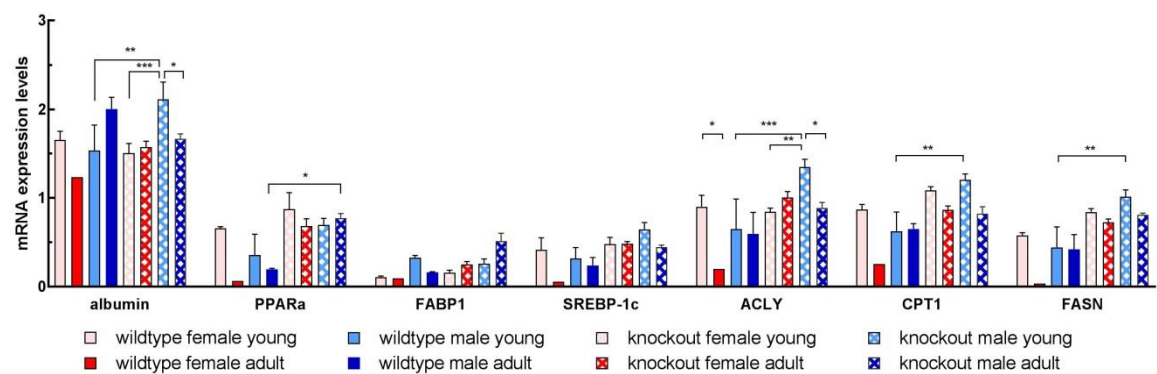


Figure S3. Expression levels of mRNA coding for proteins involved in lipid metabolism and function in isolated hepatocytes of wildtype and knockout female and male mice after 3 and 5 days of culture. Expression was quantified by semi-quantitative analysis of PCR products and the signals were normalized to the reference genes. Differences between groups were considered significant, if the p-value was ≤ 0.05 (denoted '*'); whereas $p \leq 0.01$, 0.001 and 0.0001 are denoted as '**', '***', and '****', respectively).

3 days of culture



5 days of culture

