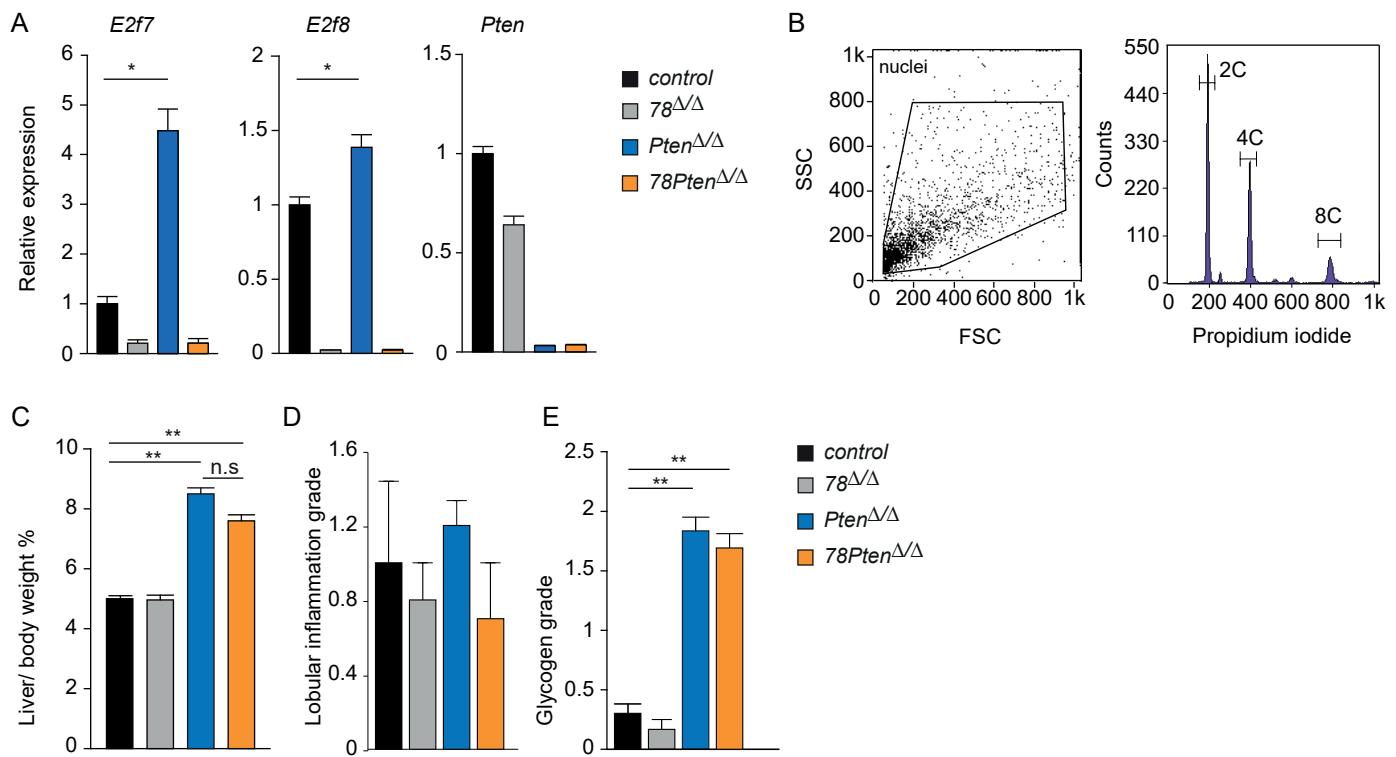
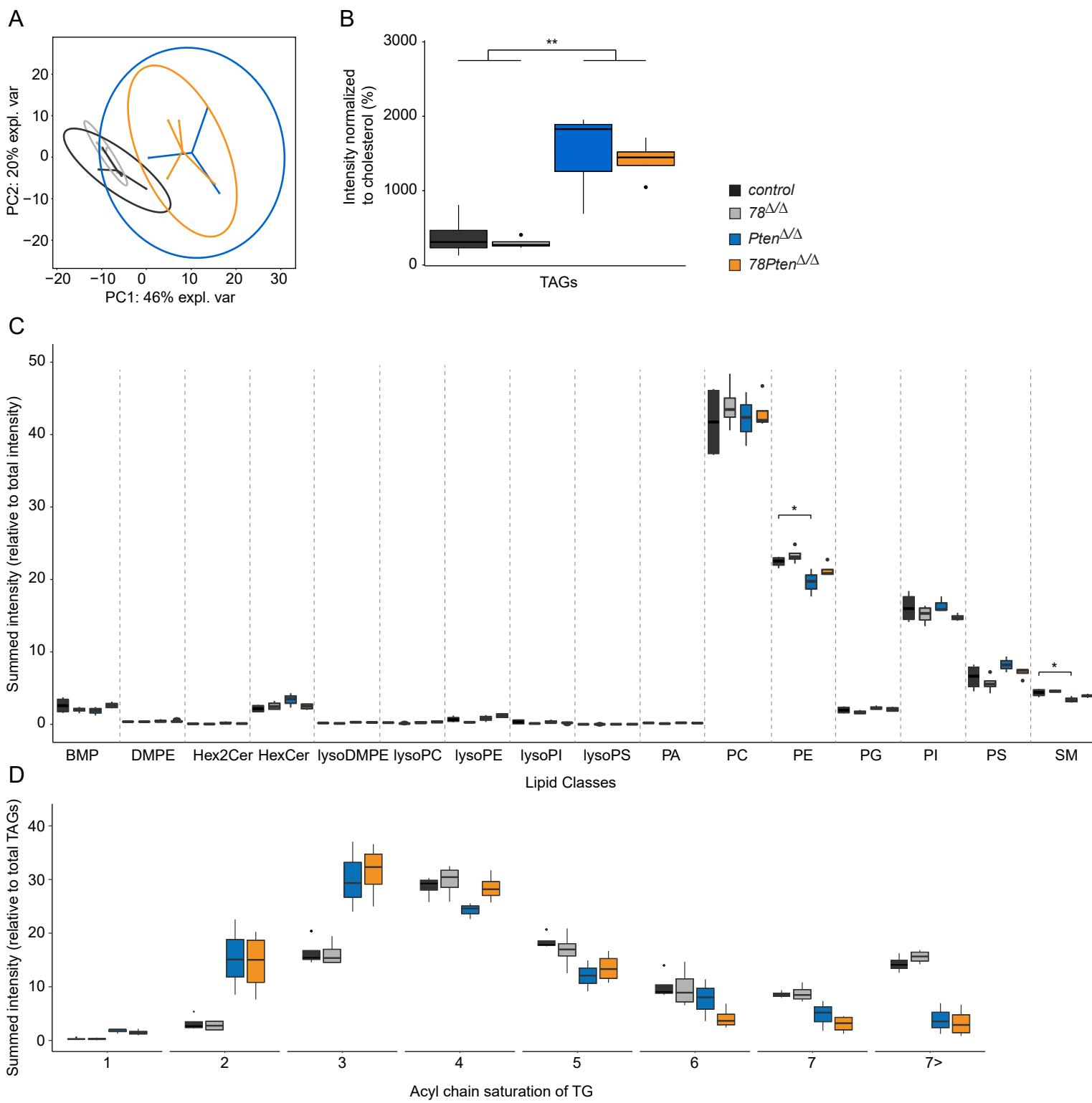


Supplemental Figure 1

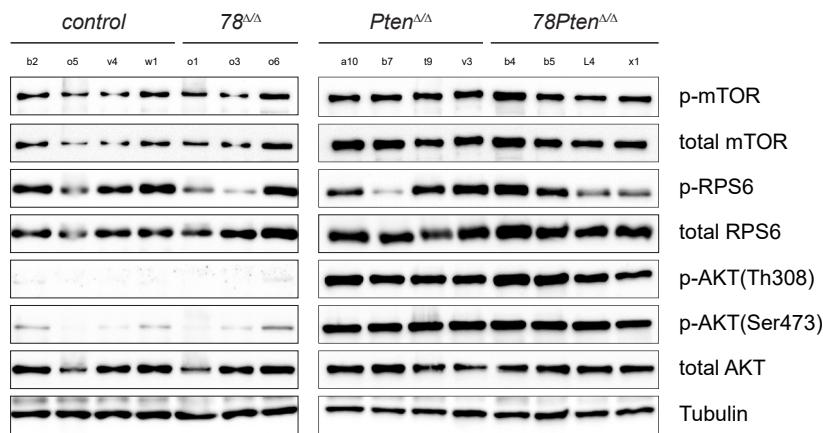


Supplemental Figure 2

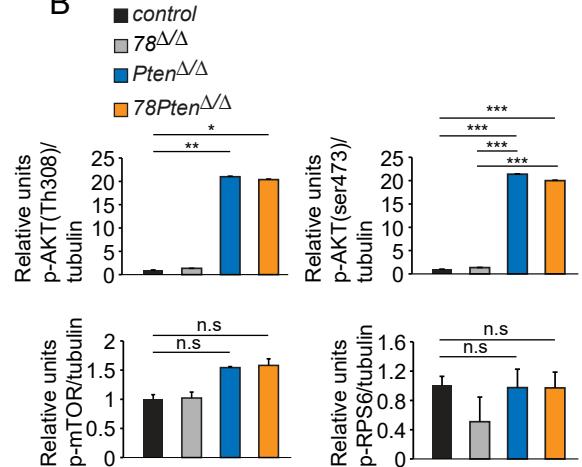


Supplemental Figure 3

A



B



C

KEGG pathway

UP Pten^{Δ/Δ} versus control

- PPAR signaling pathway
- Aa and nucleotide sugar metabolism
- Lysosome
- Pyrimidine metabolism
- Starch and sucrose metabolism

UP Pten^{Δ/Δ}; rescue downwards 78Pten^{Δ/Δ}

- Aa and nucleotide sugar metabolism
- Gastric acid secretion
- Pentose and glucuronide interconversions
- Fructose and mannose metabolism
- Chemokine signaling pathway

DOWN Pten^{Δ/Δ} versus control

- Hippo signaling pathway
- Pathways in cancer
- Wnt signaling pathway
- Hepatocellular carcinoma
- Retinol metabolism

DOWN Pten^{Δ/Δ}; rescue upwards 78Pten^{Δ/Δ}

- Ribosome
- Inflammatory mediator regulation of TRP
- Hippo signaling pathway
- Bile secretion
- Pathways in cancer

UP 78Pten^{Δ/Δ} versus control

- PPAR signaling pathway
- Progesterone-mediated oocyte maturation
- Thyroid cancer
- AMPK signaling
- ECM-receptor interaction

DOWN 78Pten^{Δ/Δ} versus control

- Protein processing in ER
- Protein export
- Steroid biosynthesis
- Prostate cancer
- Thyroid hormone synthesis

D

GO Molecular Process

- TG metabolic process
- Acylglycerol biosynthetic process
- TG biosynthetic process
- Neutrophil degranulation
- Neutrophil activation involve in immune response

- Membrane raft assembly
- Heart trabecula formation
- Positive regulation of TG catabolic process
- Lipid particle organization
- Positive regulation of lipoprotein lipase activity

- β-catenin-TCF complex assembly
- Regulation of transcription
- Negative regulation of transcription
- Viral process
- Positive regulation of transcription from RNA polII

- Peptide biosynthetic process
- Translation
- Viral gene expression
- Viral process
- Negative regulation of RNA metabolic process

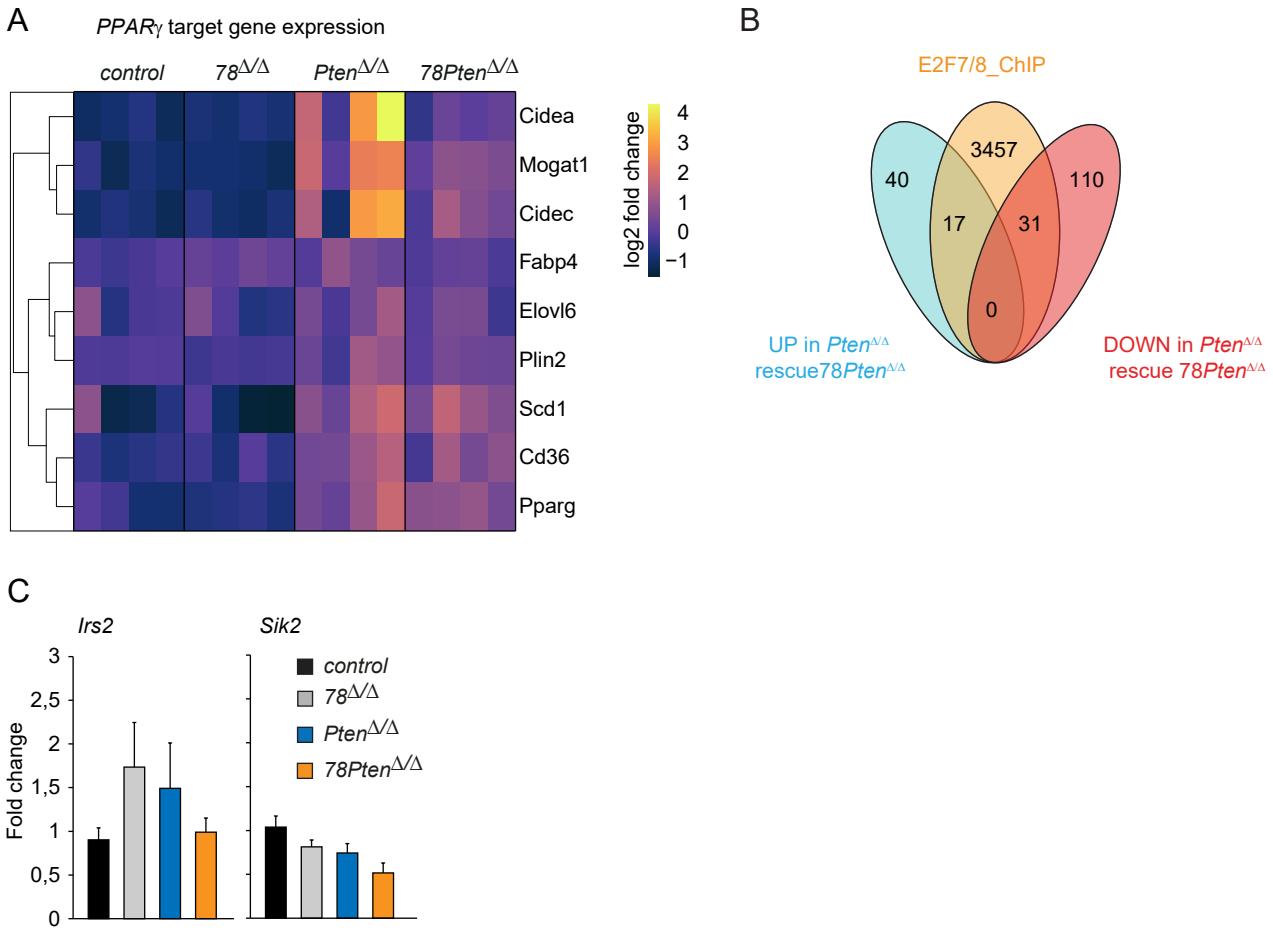
- Response to insulin
- Cellular response to peptide hormone stimulus
- Sulfur compound catabolic process
- Cellular response to insulin stimulus
- Positive regulation of protein localization

- IRE-1-mediated unfolded protein response
- response to ER stress
- Retrograde vesicle-mediated transport
- Protein N-linked glycosylation
- Golgi vesicle transport

-log10 adjusted p value

-log10 adjusted p value

Supplemental Figure 4



Supplemental Figure 5

