SUPPLEMENTAL TABLES

Supplemental Table 1. Cytokine secretion into the media from WT and $\beta 1^{-/-}$ BMDM treated with 0.5 mM palmitate for 12 h.

	WT	$\beta 1^{-/-}$
IL-10 (pg/ml)	93.1 ± 19	53 ± 12*
TNFα (pg/ml)	18.2 ± 2.6	26.7 ± 0.39*
IL-6 (pg/ml)	11.9± 2.2	19.2 ± 2.1*

Data are presented as mean ± SEM of n=3 independent experiments *p<0.05

Supplemental Table 2. IL-1β is elevated in obese but not lean $\beta 1^{-/-\ BMT}$ livers

IL-1β (ng/mg tissue)	**WT** ^{BMT}	$\beta 1^{-/-}$ ^{BMT}
Chow	2.43 ± 0.1	2.28 ± 0.1
HFD	5.21 ± 0.32$^{\#}$	6.52 ± 0.2*$^{\#}$

Data are presented as mean ± SEM of n=6. * represents p<0.05 compared to WT ^{BMT} controls and $^{\#}$ represents p<0.01 compared to chow.

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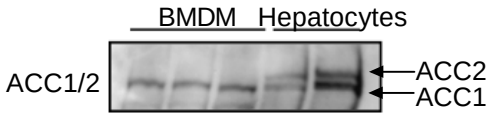
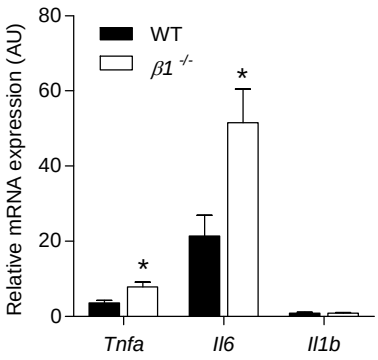
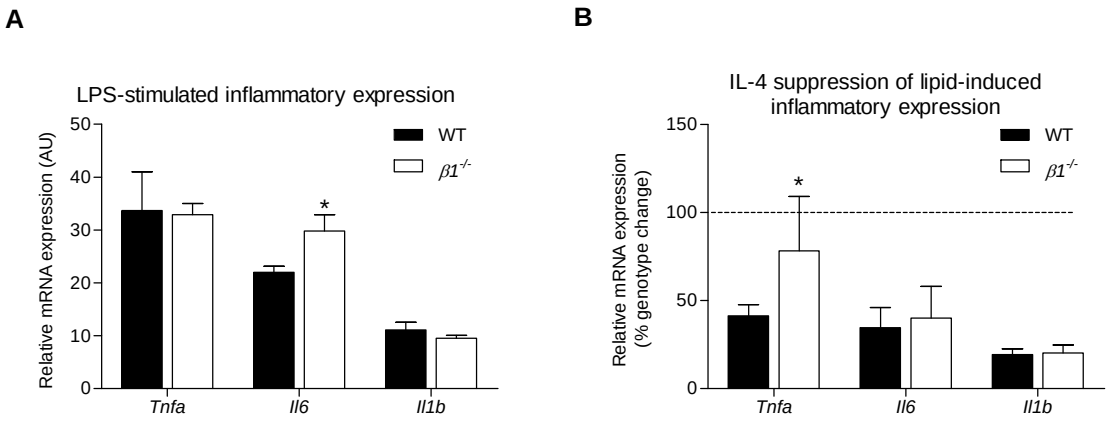


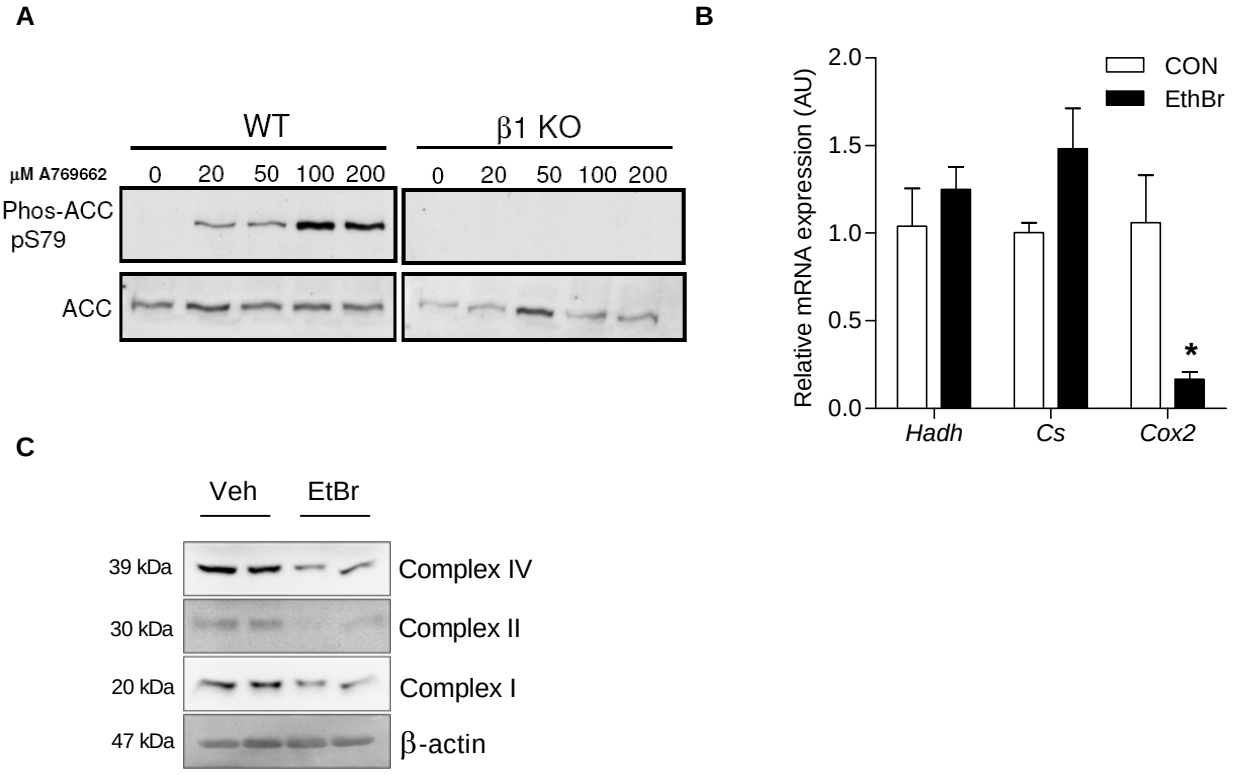
Supplementary figure S1. BMDM express exclusively ACC1. BMDM and hepatocytes isolated from WT mice were lysed and ACC1 and ACC2 isoforms detected using streptavidin-horseradish peroxidase.



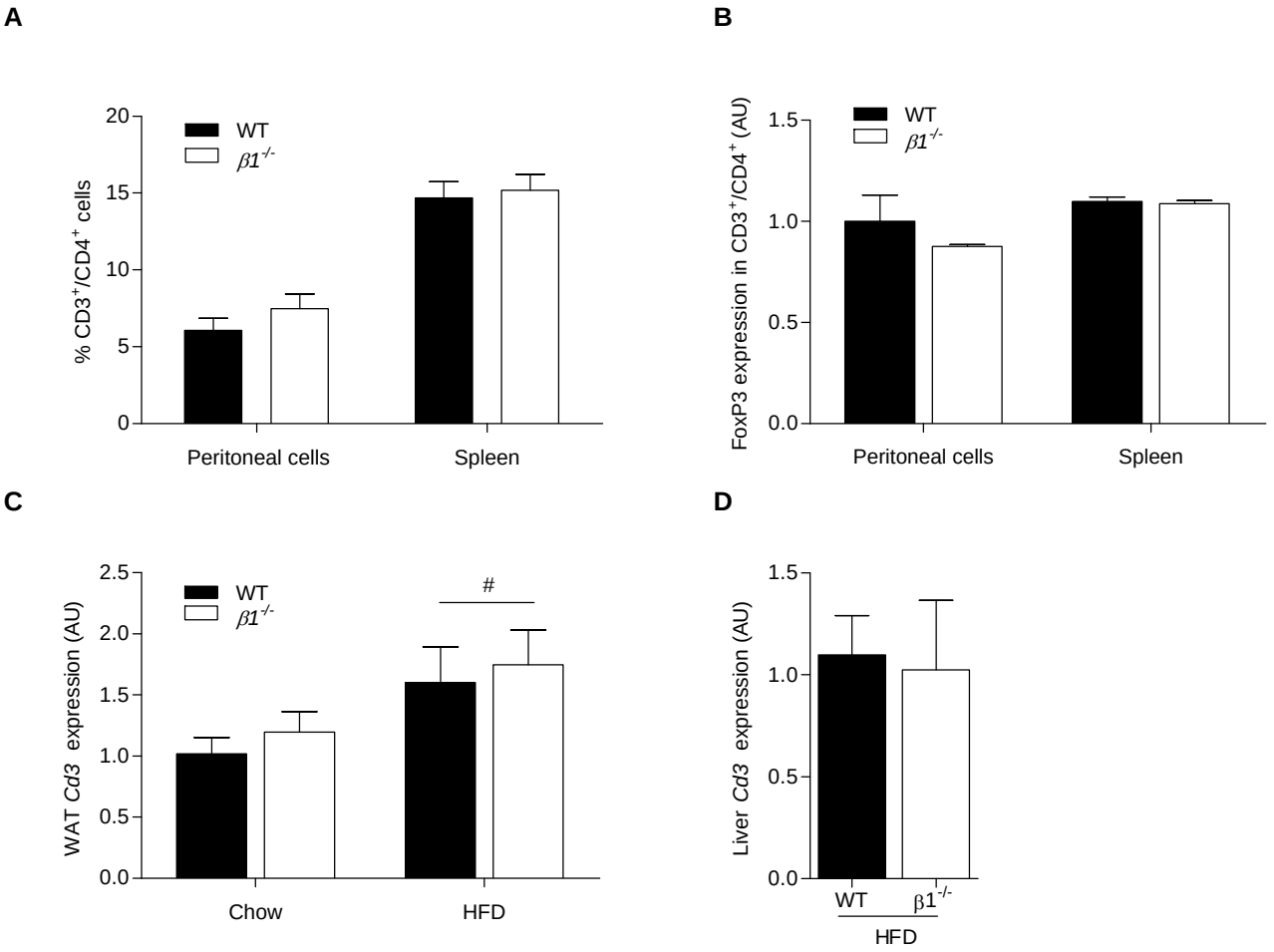
Supplementary figure S2. Inflammatory response of WT and *β1*$^{-/-}$ BMDM to stearic acid. mRNA expression of *Tnfα*, *Il6* and *Il1b* from WT and *β1*$^{-/-}$ BMDM treated with stearate (0.5 mM) for 24 h. Data are expressed as means ± SEM, n=3, from at least two independent experiments, * $p<0.05$ compared to WT. Relative expression was normalized to *Actb*.



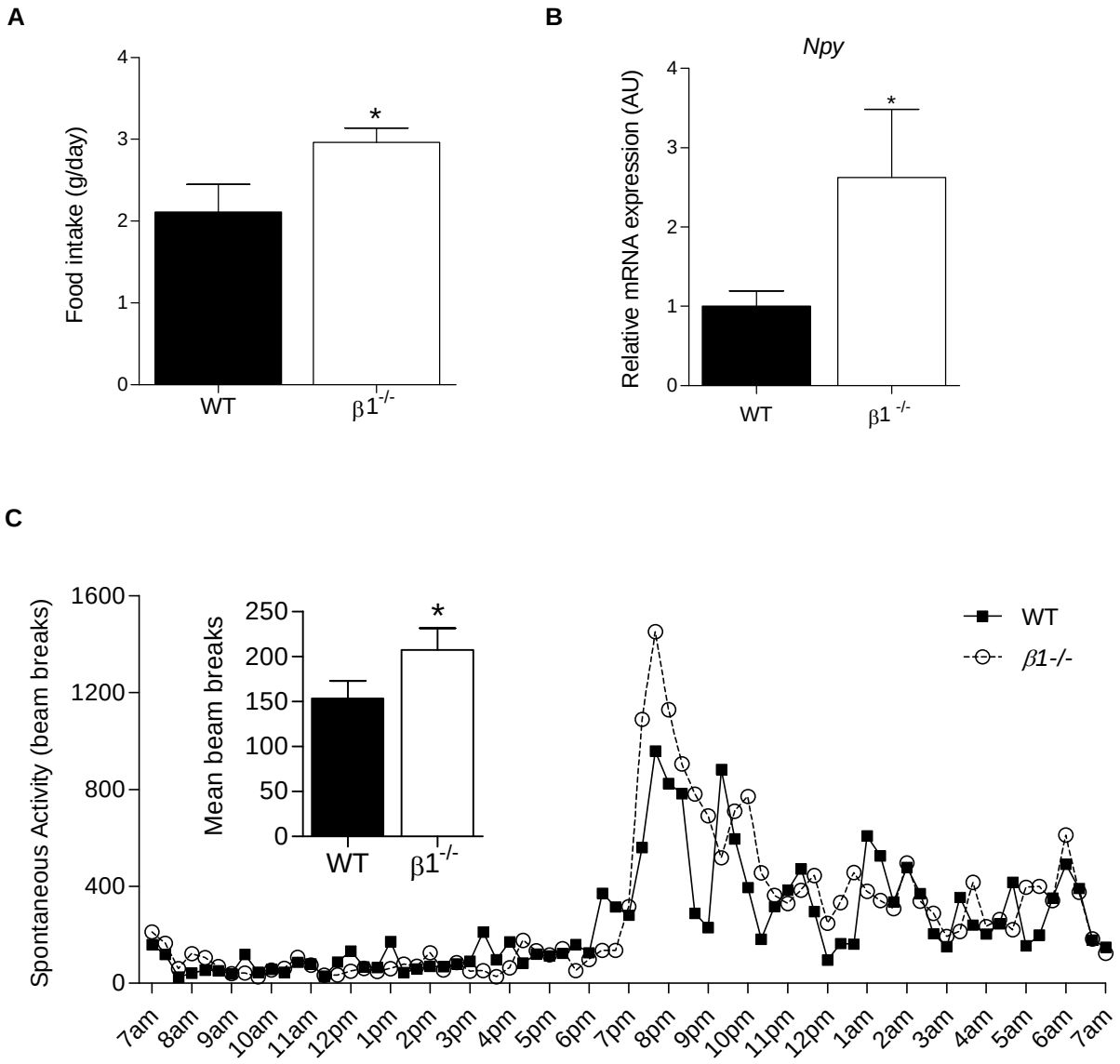
Supplementary figure S3. *β1*$^{-/-}$ BMDM response to canonical inflammatory and anti-inflammatory stimuli. WT and *β1*$^{-/-}$ BMDM were incubated with 100 ng/ml LPS for 6 h, and mRNA expression of *Tnfα*, *Il6* and *Il1b* was determined. (B) Cells were treated with palmitate (0.5 mM) to induce inflammation for 4 h. Media was then supplemented with IL-4 (50 ng/ml) for a further 4 h and mRNA expression of *Tnfα*, *Il6*, and *Il1b* was determined. Data are expressed as means ± SEM, n=3, from at least two independent experiments, * $p<0.05$ compared to WT. Relative expression was normalized to *Actb*.



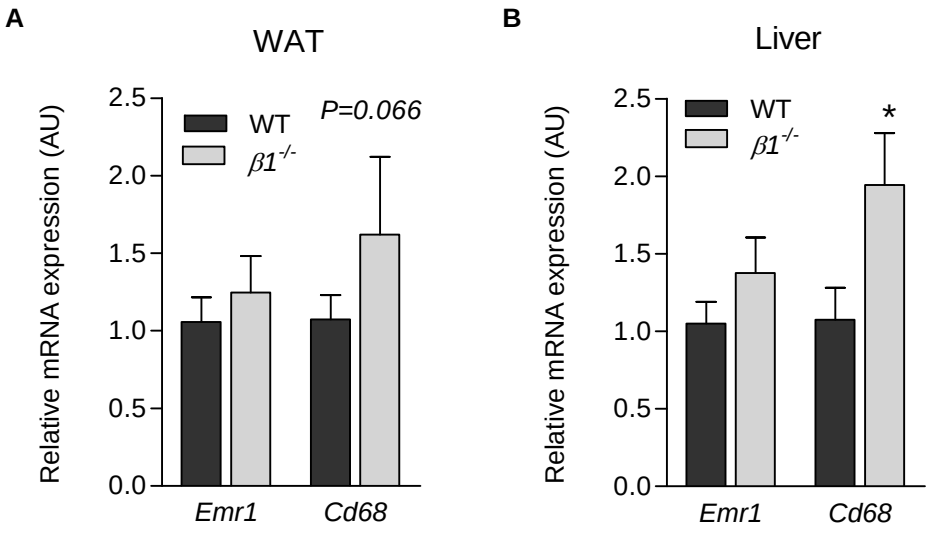
Supplementary figure S4. Activation of β1 specific complexes and mitochondrial depletion with ethidium bromide. (A) A769662 dose dependently increases ACC phosphorylation in WT, but not *β1*$^{-/-}$ BMDM. WT BMDM were treated with ethidium bromide (EthBr-0.4 μg/ml) for 48 h and (B) mRNA for *Cs*, *Bhad* (nuclear encoded mitochondrial enzymes) or *Cox2* (mitochondrial encoded) were analyzed using RT-qPCR relative to *Actb* or (C) mitochondrial protein expression of Complex I, II and IV were determined using immunoblot.



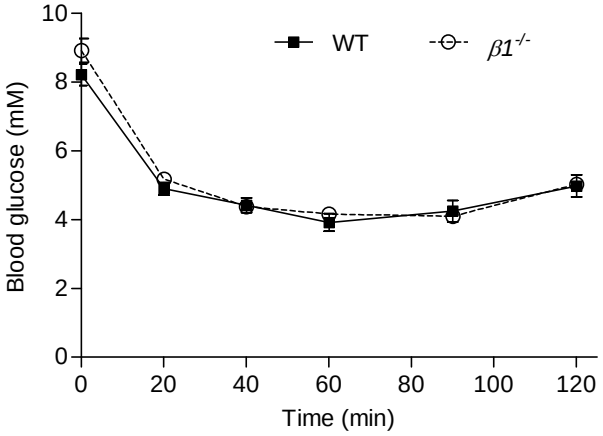
Supplementary figure S5. T-cell activation and T-cell infiltration into adipose and liver is not affected by AMPK β1 deletion. Peritoneal cells and splenocytes from *β1*$^{-/-}$ and WT littermates were stained with antibodies for CD3, CD4 and Foxp3 and analyzed by flow cytometry. (A) The percentage of CD3+/CD4+ cells in the peritoneal cell and splenocyte population and (B) Foxp3 expression in the CD3+/CD4+ population were not different between genotypes. (C) Adipose tissue of chow and HFD-fed WT ^{BMT} and *β1*$^{-/-\ BMT}$ mice or (D) livers of HFD-fed WT ^{BMT} and *β1*$^{-/-\ BMT}$ mice was analyzed for *Cd3* mRNA expression by qRT-PCR as a marker of T-cell infiltration, where the expression of genes was normalized to *Actb*. Data shown are mean ± SEM.



Supplementary figure S6. *β1*$^{-/-}$ BMT mice have increased food intake and activity. Metabolic parameters were measured with the Columbus Laboratory Animals Monitoring System. *β1*$^{-/-\ BMT}$ mice had (A) increased food intake and (B) elevated hypothalamic *Npy* mRNA when normalized to *18s*, but did not have higher body mass potentially due an increase in (C) physical activity levels. Data are expressed as mean ± SEM, n=8-10, * $p<0.05$ compared to WT ^{BMT}.



Supplementary figure S7. Adipose and liver markers of macrophage infiltration in mice fed a chow diet. (A) Adipose tissue and (B) liver from WT ^{BMT} and *β1*$^{-/-\ BMT}$ mice on a chow diet were analyzed for mRNA expression of *Emr1* (F4/80) and *Cd68* by qRT-PCR. Relative expression was normalized to *Actb*, * $p<0.05$ compared to WT ^{BMT}. Data shown are, mean ± SEM, n=8-10.



Supplementary figure S8. Insulin sensitivity is maintained in $\beta 1^{-/-\ BMT}$ mice fed a chow diet. WT ^{BMT} and $\beta 1^{-/-\ BMT}$ mice fed a chow diet were fasted for 6 h and an insulin tolerance test was performed after an intraperitoneal injection of 0.5 U/kg of insulin. Data shown are mean ± SEM, n=8-10.