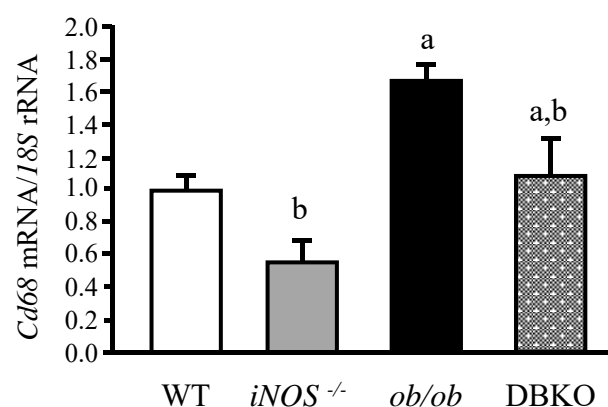
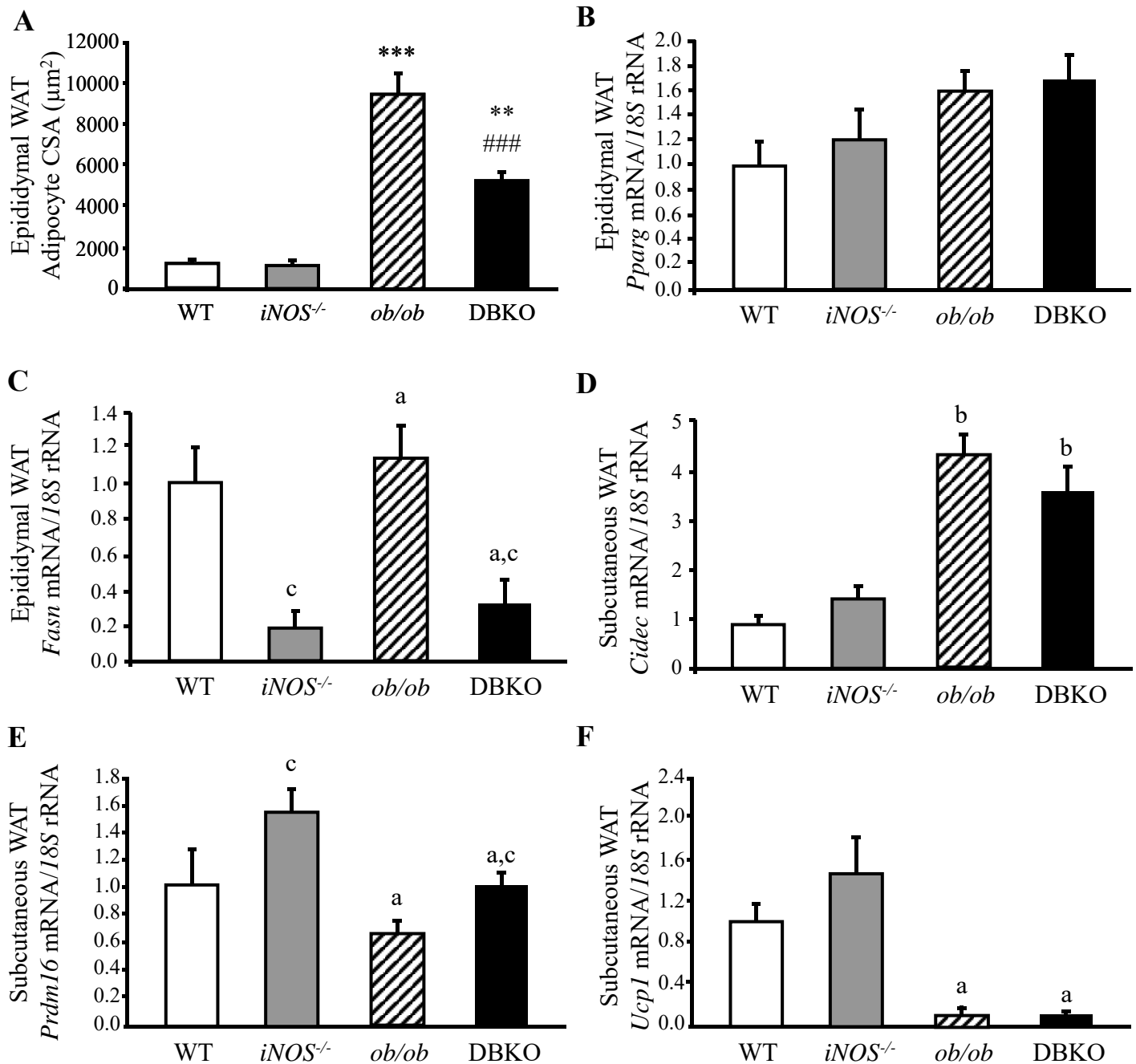


Supplemental Figure 1



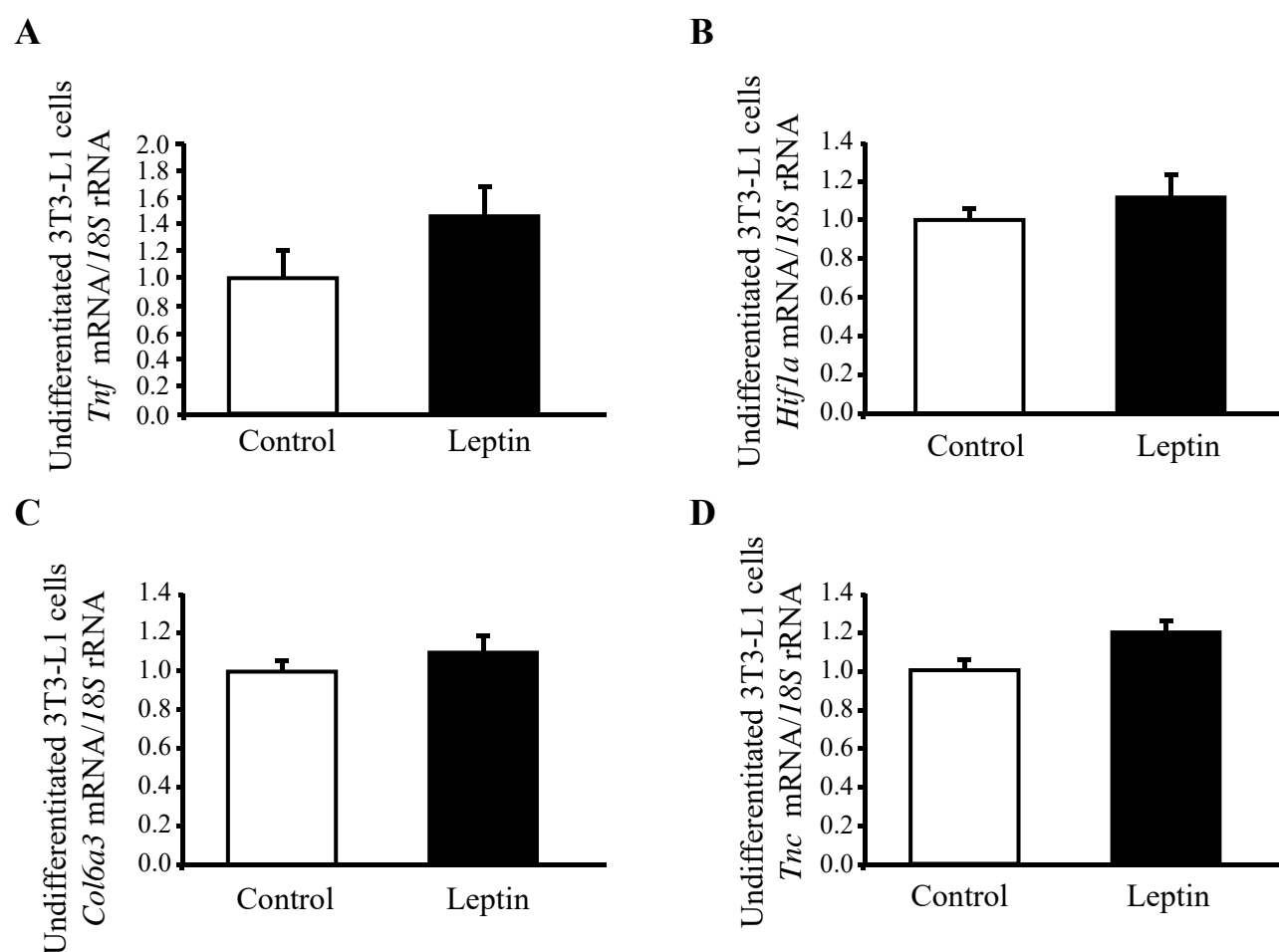
Supplemental Figure 1. Gene expression levels of *Cd68* in the liver. Leptin-deficient *ob/ob* mice exhibited a significantly increase in *Cd68* mRNA levels compared to wild type mice, with *iNOS* disruption reducing *Cd68* transcripts levels. Values are mean \pm SEM (n=5 per group). The gene expression in WT mice was assumed to be 1. Differences between groups were analyzed by two-way ANOVA. ^a $P < 0.05$ effect of the absence of the *ob* gene. ^b $P < 0.05$ effect of the absence of the *iNOS* gene.

Supplemental Figure 2



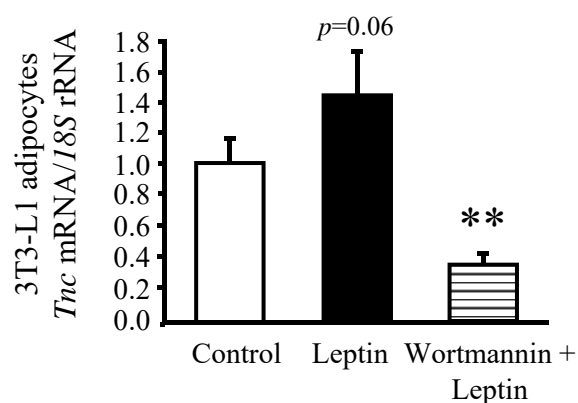
Supplemental Figure 2. Impact of iNOS deletion on markers of adipogenesis and fat browning in the context of leptin deficiency. (A) Adipocyte cell surface area in epididymal WAT (n=4-5 per group). Gene expression levels of markers of adipogenesis *Pparg* (B) and *Fasn* (C) in epididymal WAT and *Cidec* (D) in subcutaneous WAT as well as markers of fat browning *Prdm16* (E) and *Ucp1* (F) in subcutaneous WAT of experimental animals (n=6 per group). The gene expression levels in wild type was assumed to be 1. Differences between groups were analyzed by two-way ANOVA or one-way ANOVA followed by Tukey's *post hoc* test when an interaction between factors was detected. ^a*p*<0.05, ^b*p*<0.001 effect of the absence of *ob* gene, ^c*p*<0.01 effect of the absence of the *iNOS* gene. ****p*<0.001 vs WT mice; ###*p*<0.01 vs *ob/ob* mice.

Supplemental Figure 3



Supplemental Figure 3. Effect of leptin treatment on the expression of markers of inflammation and fibrosis in undifferentiated 3T3-L1 cells. mRNA expression levels of *Tnf* (A), *Hif1a* (B), *Col6a3* (C) and *Tnc* (D) in undifferentiated 3T3-L1 preadipocytes under basal conditions and after leptin (10 nmol L⁻¹) treatment for 24 h. The gene expression levels in unstimulated cells was assumed to be 1. Values are the mean \pm SEM (n=6 per group). Differences between groups were analyzed by unpaired two-tailed Student's *t* tests.

Supplemental Figure 4



Supplemental Figure 4. Effect of leptin on *Tnc* gene expression in the presence of a PI3K inhibitor.

Tnc transcript levels in 3T3-L1 adipocytes stimulated with leptin (10 nmol L⁻¹) in the absence or presence of PI3K inhibitor wortmannin (10 mmol L⁻¹) for 24 h. Gene expression levels in the unstimulated cells were assumed to be 1. Values are the mean \pm SEM (n=5 per group). Differences between groups were analyzed by unpaired two-tailed Student's *t* tests. ** $p<0.01$ vs unstimulated cells.