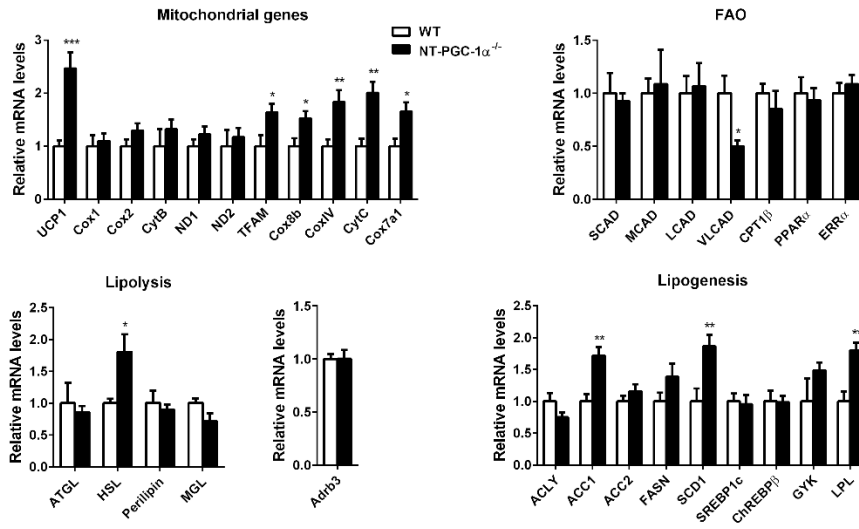
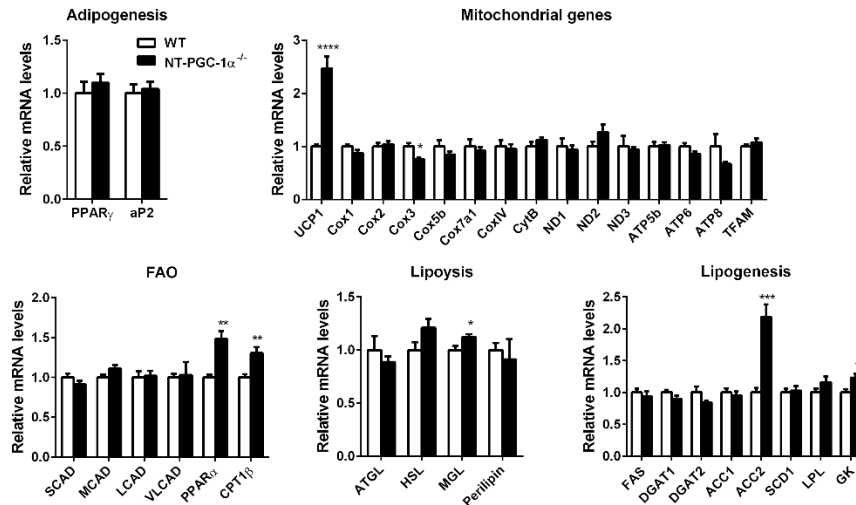


A BAT (22°C)

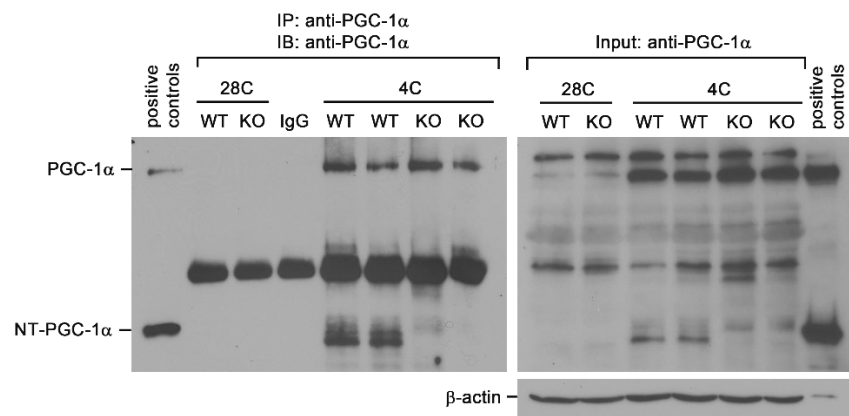


B Brown adipocytes



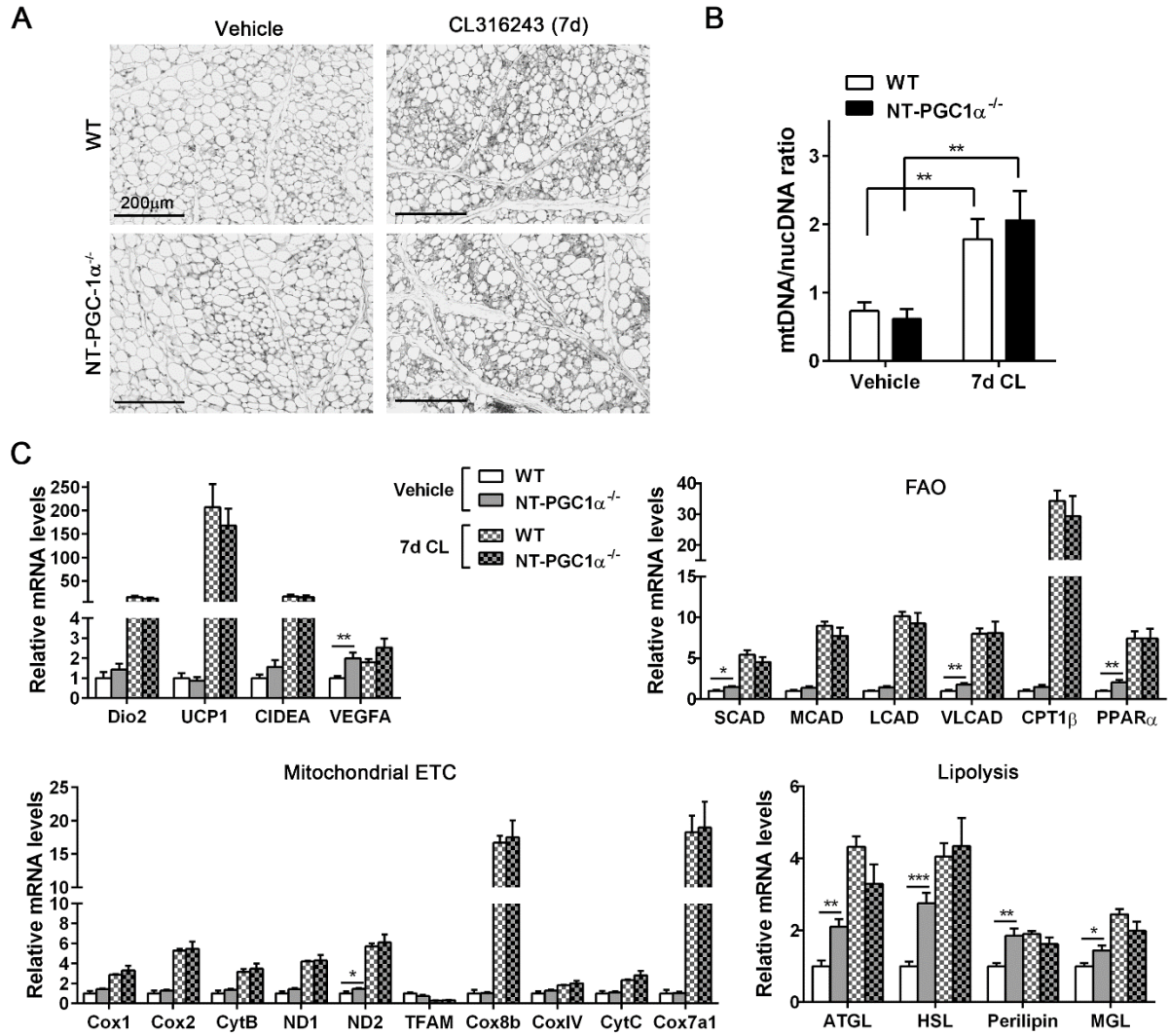
Supplemental Figure S1. Gene expression profiles of NT-PGC-1 $\alpha^{-/-}$ BAT at 22°C and cultured NT-PGC-1 $\alpha^{-/-}$ brown adipocytes

(A) qPCR analysis of BAT gene expression (n=7-8 per group). BAT was isolated from 8-week-old WT and NT-PGC-1 $\alpha^{-/-}$ mice housed at 22°C. (B) qPCR analysis of brown adipocyte gene expression (n=6 per group). Brown preadipocytes were isolated from interscapular BAT of newborn WT and NT-PGC-1 $\alpha^{-/-}$ mice by collagenase digestion, immortalized, and differentiated for 7 days. All data are presented as mean \pm SEM. * P < 0.05, ** P < 0.01 determined by Student's t test.



Supplemental Figure S2. Western blot analysis of PGC-1 α and NT-PGC-1 α proteins in BAT

8-week-old WT and NT-PGC-1 α ^{-/-} mice were housed at 28°C or exposed to 4°C for 5h. PGC-1 α and NT-PGC-1 α proteins in BAT were analyzed by immunoprecipitation (left panel) and in whole cell lysates (right panel).



Supplemental Figure S3. NT-PGC-1 α deficiency does not alter CL316243-induced remodeling of white adipose tissue

(A) Representative H&E images of inguinal white adipose tissue from WT and NT-PGC-1 α ^{-/-} mice. Mice (n=7-8 per group) housed at 28°C for 3 weeks were injected with vehicle or CL316243 for 7 days. Scale car, 200 µm. (B) qPCR analysis of mitochondrial biogenesis. The relative ratio of mitochondrial DNA (mtDNA) to nuclear DNA (nucDNA) was analyzed (n=7-8 per group). (C) qPCR analysis of WAT gene expression (n=7-8 per group). All data are presented as mean \pm SEM. **P* < 0.05, ***P* < 0.01, ****P* < 0.001 determined by Student's *t* test.