Supplemental data

Oxidative metabolism and PGC-1β attenuate macrophage-mediated inflammation

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Supplemental Figures

Figure 1S. Alternative, but not classical, activation of macrophage induces the expression of genes important in oxidative metabolism. Average fold induction is indicated below the respective bands. A representative experiment (n=3) is shown.

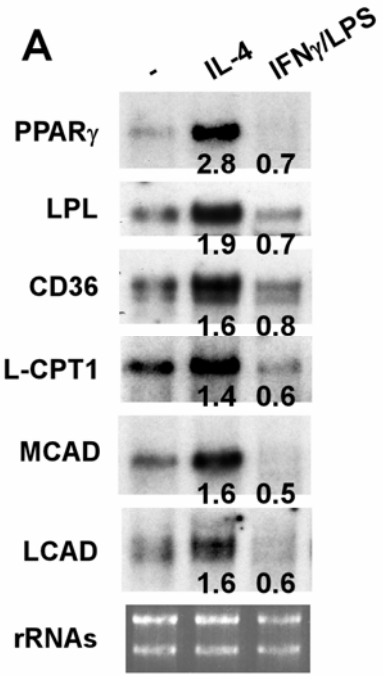
Figure 2S. Requirement for oxidative metabolism in expression of alternatively activated markers. **(A-C).** Cell surface expression of dectin-1, mannose receptor and PD-L2 was quantified by flow cytometry. **(D).** Treatment of macrophages with metabolic inhibitors does not significantly alter calcium flux. **(E).** Maintenance of ATP homeostasis during treatment of macrophages with inhibitors of oxidative metabolism. A representative experiment (n=3) is shown.

Figure 3S. (A). Alternative (IL-4), but not classical (IFNγ/LPS), activation induces mitochondrial biogenesis, as assessed by cellular staining of MitoFluor green. **(B).** Northern blot analysis for transcriptional regulators of mitochondrial biogenesis in

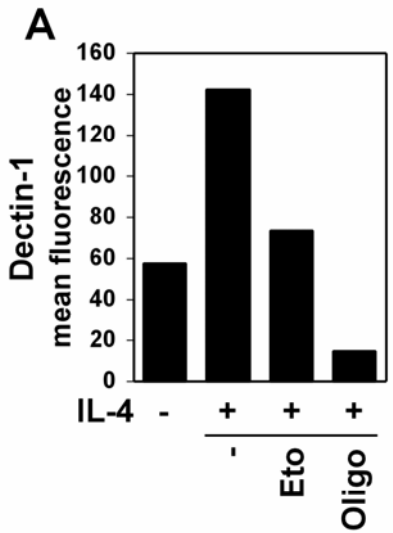
wild type and STAT6 -/- macrophages. PGC-1α mRNA was not detectable in wild type or STAT6 null macrophages by Northern blots or quantitative RT-PCR (data not shown).

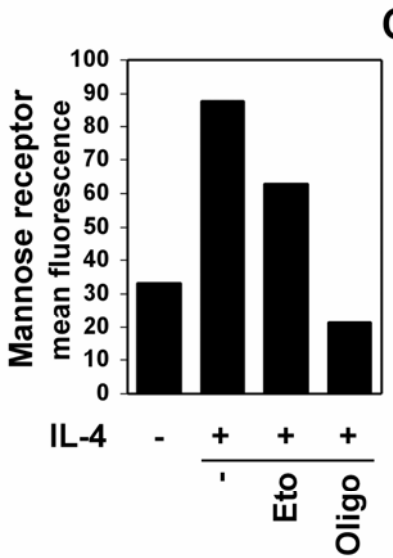
Figure 4S. Constitutive expression of PGC-1β in macrophages. **(A).** Immunblotting for f-PGC-1β in wild type macrophages. **(B).** Constitutive expression of f-PGC-1β enhances fatty acid oxidation in macrophages. **(C).** Levels of total and phospho STAT6 in vector and PGC-1β infected macrophages. **(D).** PGC-1β expression enhances IL-4 induced cell surface expression of dectin-1. *P<0.05.

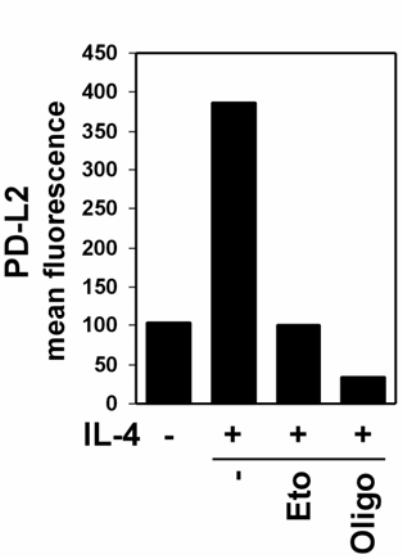
Figure 5S. (A-B). Knockdown of PGC-1β by RNAi does not significantly alter classical activation of macrophages. Secretion of IL-6 (A) and IL-12 p40 subunit (B) by macrophages retrovirally infected with GFP or PGC-1β RNAi. **(C-D)** Expression of GFP RNAi does not lead to inflammatory activation of macrophages, as assessed by secretion of IL-6 (C) and IL-12 p40 subunit (D).



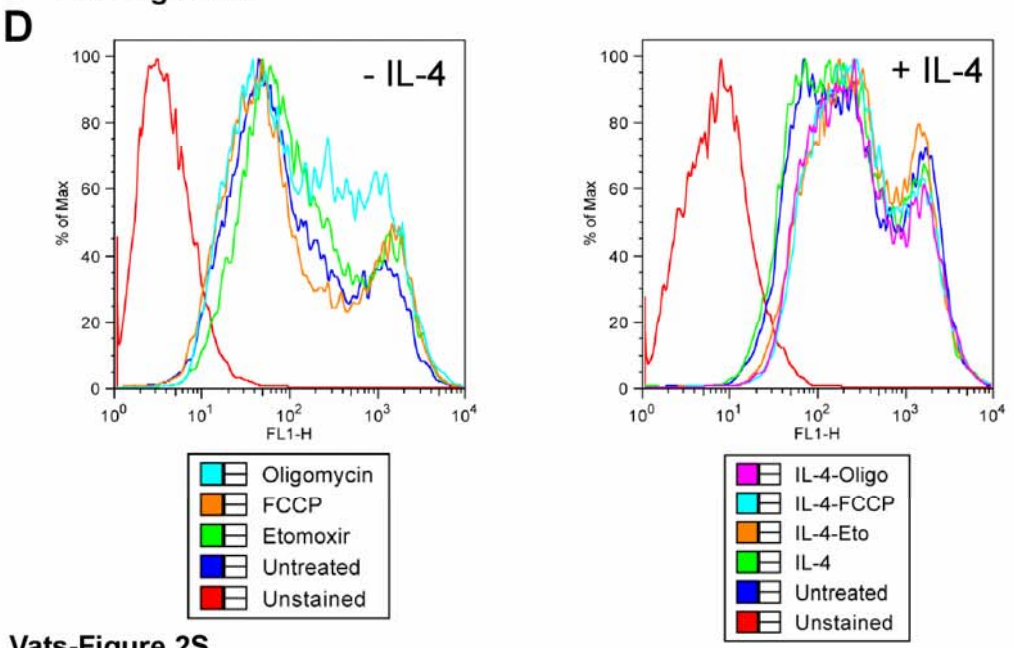
Vats-Figure 1S







Vats-Figure 2S



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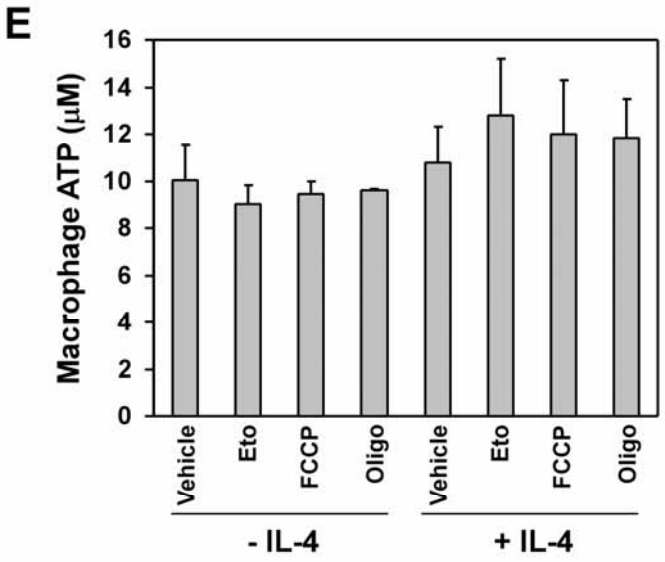
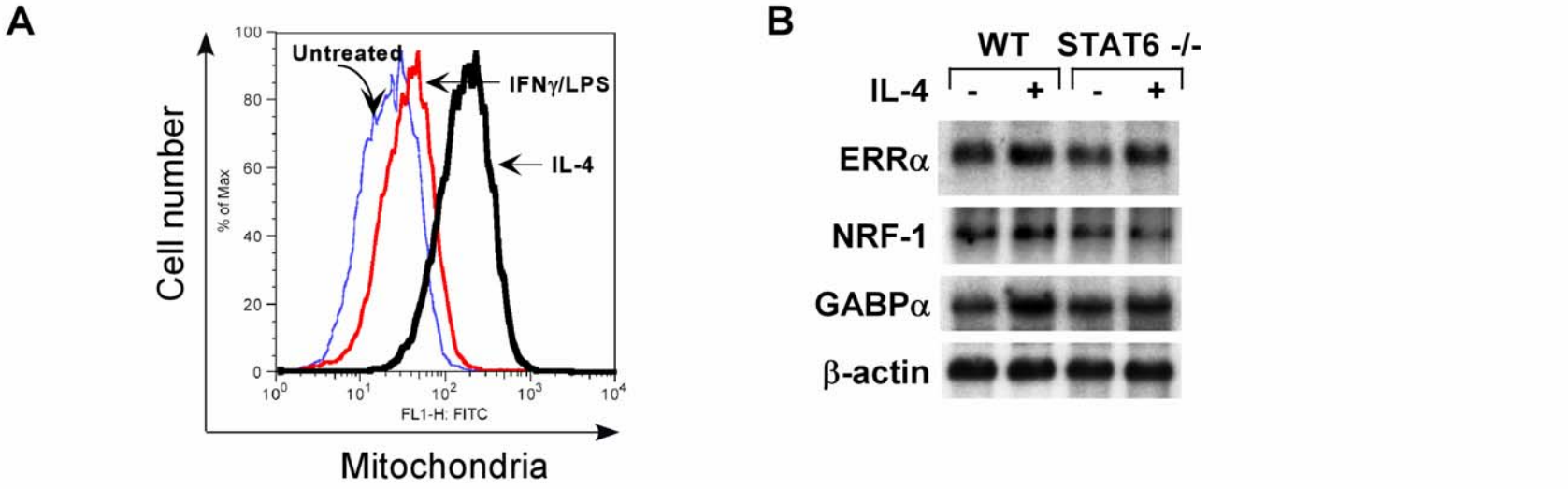
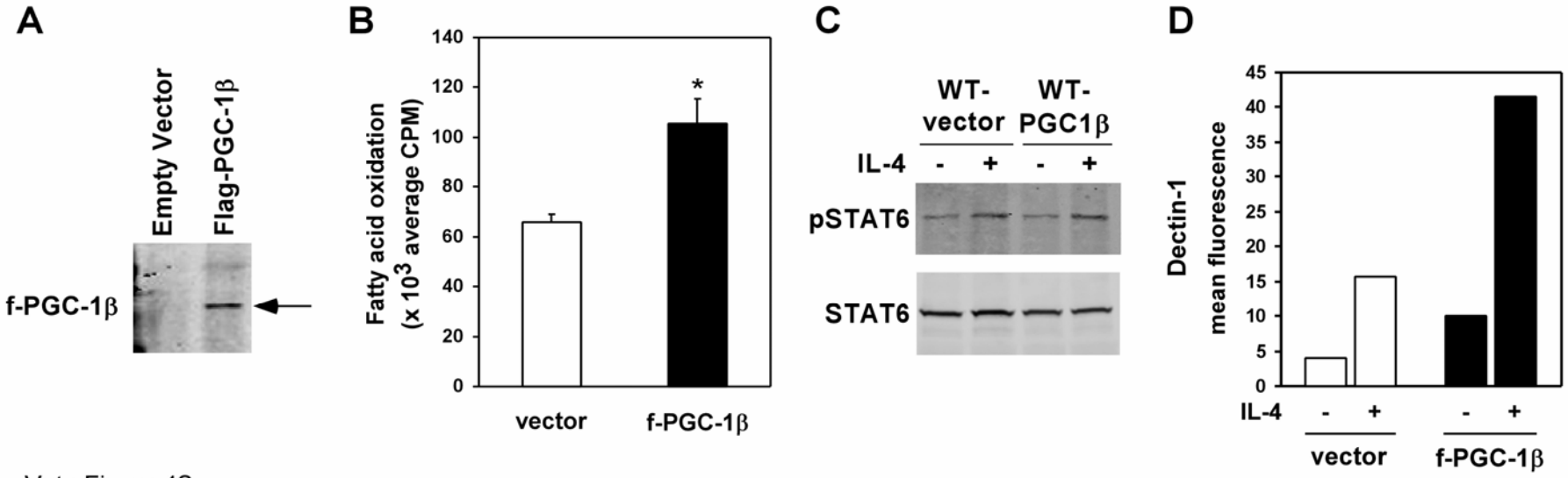
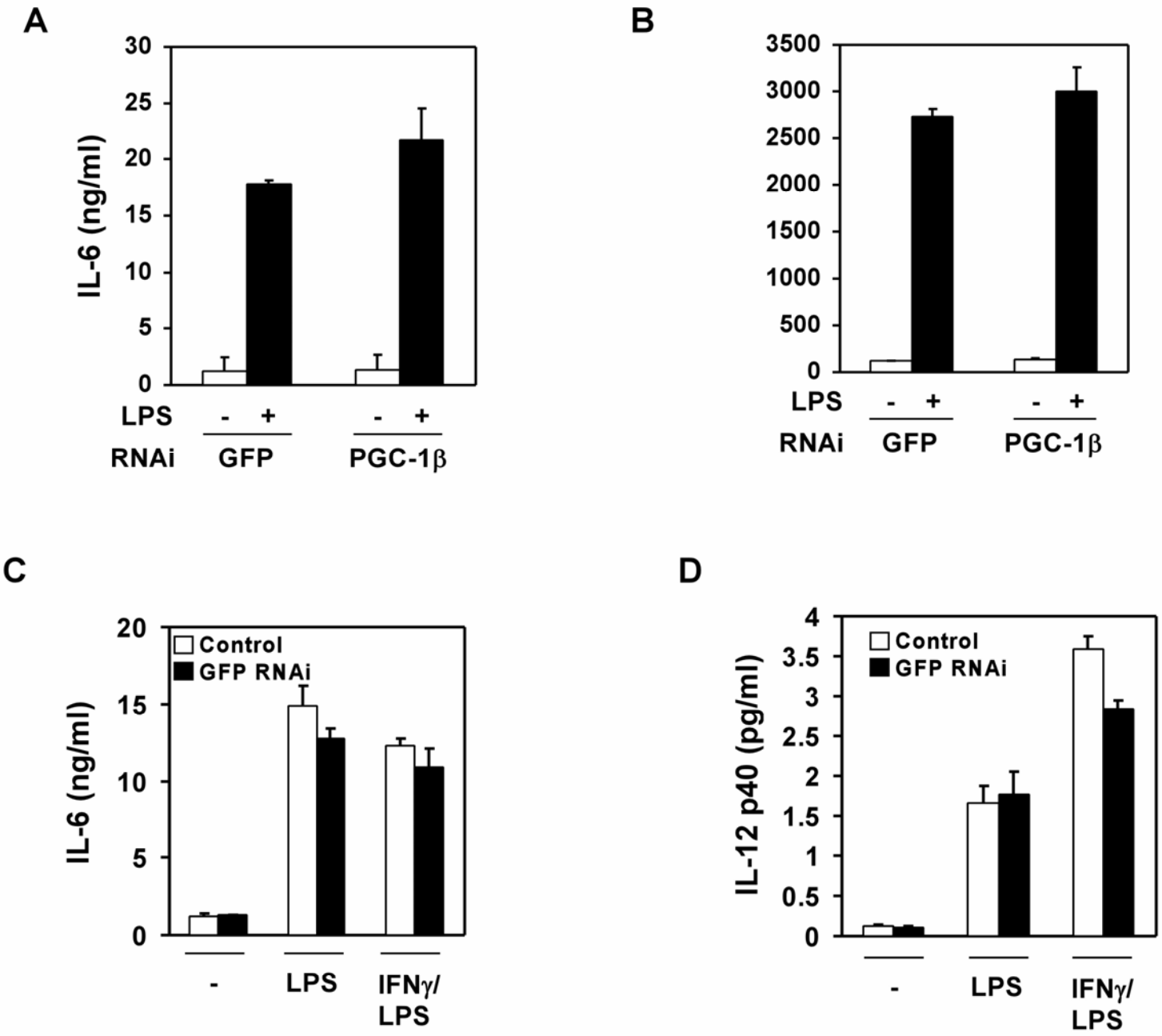




Vats-Figure 3S



Vats-Figure 4S



Vats Figure 5S