PPARß/δ-dependent MSC metabolism determines their immunoregulatory properties

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Keywords: *Mesenchymal Stem Cell, Metabolism, reprogramming, glycolytic, immunoregulation*

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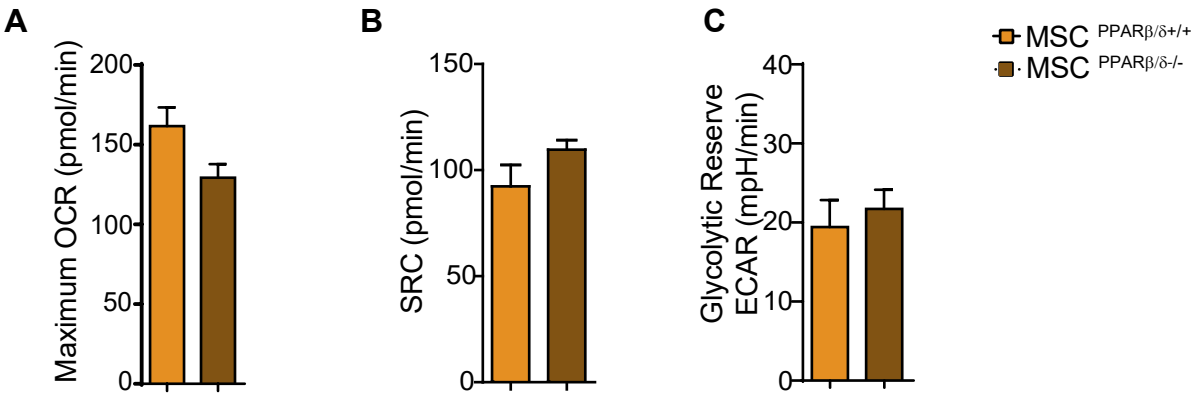
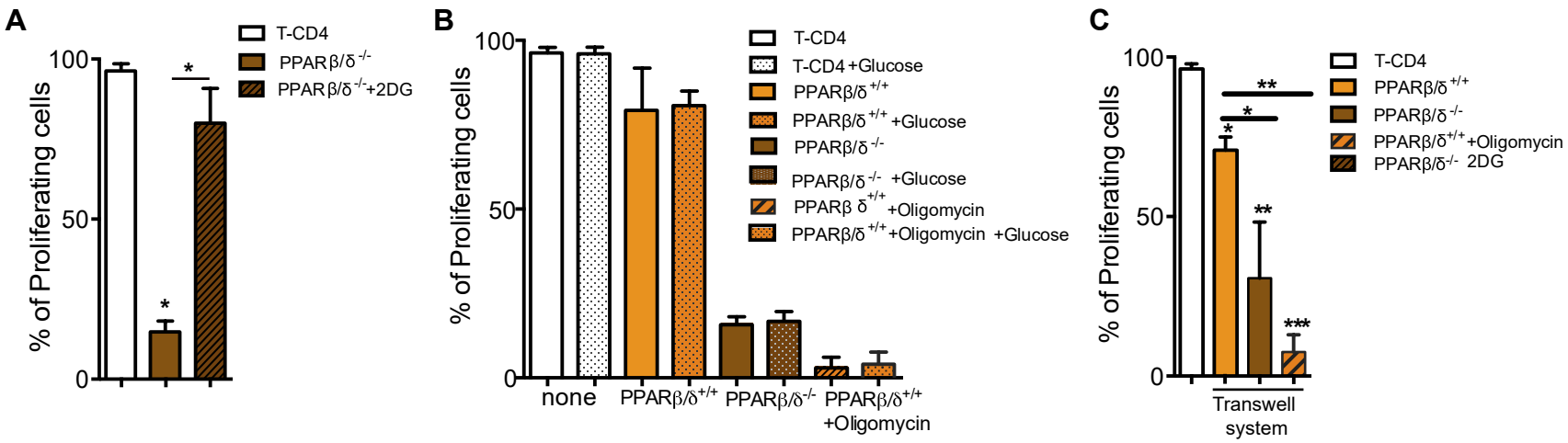
Supplementary 1



Supplementary Figure 1. PPARβ/δ expression induces an OXPHOS dependent metabolism on murine MSC. (A-C) The metabolic status of PPARβ/$\delta^{+/+}$ or PPARβ/$\delta^{-/-}$ MSC was determined by analyzing the maximum oxygen consumption rates (OCR) **(A)**, the spare respiratory capacity (SRC) **(B)** and the glycolytic reserve **(C)** using the Agilent Seahorse XF technology**.** Results are represented as mean ± SD of at least 4 independent experiments.

Supplementary 2



Supplementary Figure 2. Glucose addition in the culture media do not modify MSC immunosuppressive properties. **(A)** Naïve T-CD4 murine cells labelled with Cell Trace Violet (CTV) were cultured with MSC PPARβ/$\delta^{-/-}$ pre-treated (brown bars) or not (lined brown bars) with 2DG. **(B)** Naïve T-CD4 murine cells were labelled with Cell Trace Violet (CTV) prior to be activated. Then, the cells were cultured alone (white bars) or with either MSC PPARβ/$\delta^{+/+}$ pre-treated (lined yellow bars) or not (yellow bars) with oligomycin or MSC PPARβ/$\delta^{-/-}$ (brown bars). Glucose was added when indicated in the culture media at 25mM (white and colored bars with dot). **(C)** Naïve T-CD4 murine cells labelled with Cell Trace Violet (CTV) were cultured alone (white bars) or with MSC PPARβ/$\delta^{+/+}$ pre-treated (lined yellow bars) or not (yellow bars) with oligomycin or MSC PPARβ/$\delta^{-/-}$ (brown bars) using a transwell system. Proliferation, was evaluated by FACS. Statistics: non-paired Kruskal-Wallis test.