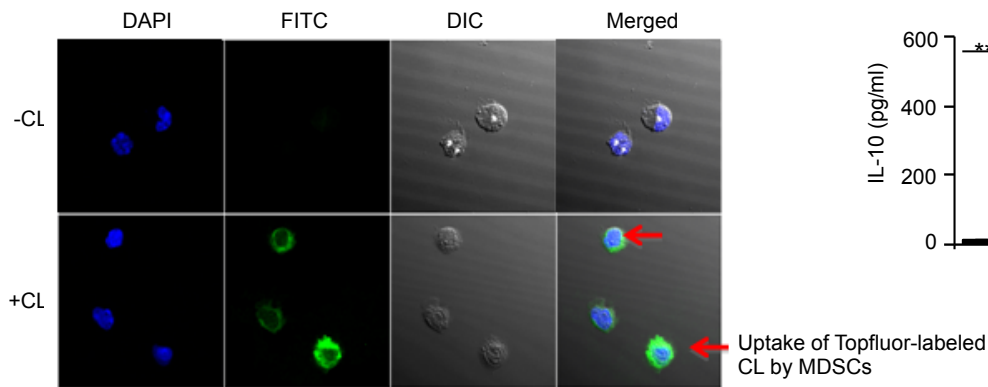
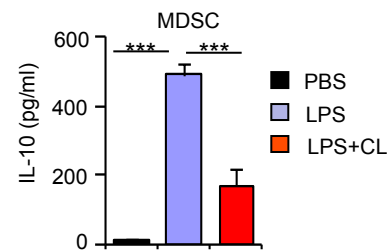


Gated on IL-10 producing cells

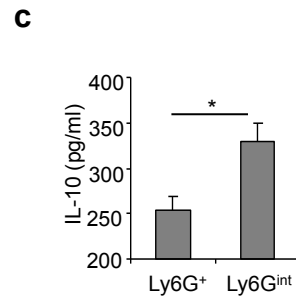
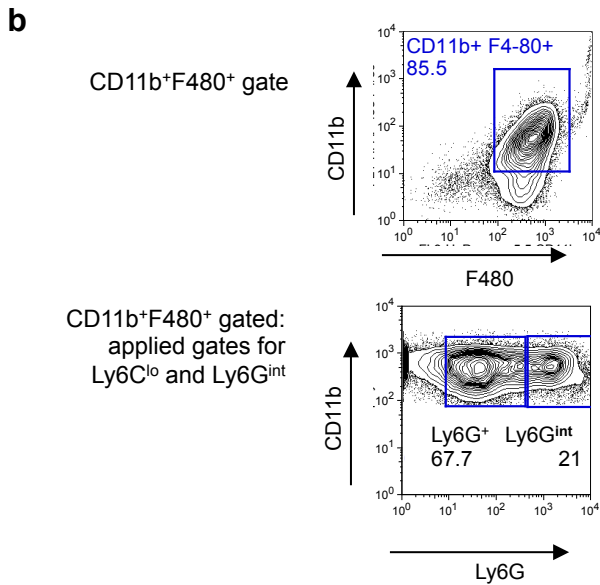
Gated on IL-10-producing CD11b+ cells

**Supplementary Figure 1.** Identification of IL-10-producing cells in the lungs of mice after LPS treatment. LPS (15  $\mu$ g/dose) or PBS was instilled intratracheally into mice once for three consecutive days. 24 h post-treatment, IL-10 producing cells in the lung were analyzed by flow cytometry using gating strategies shown. Data shown are representative of two independent experiments (n=3 mice per group).

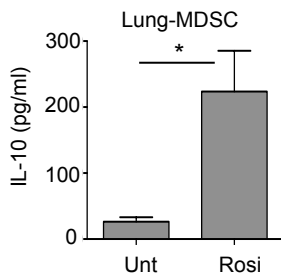
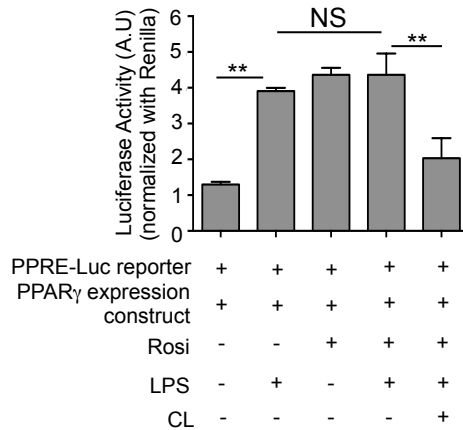
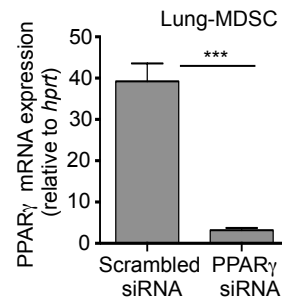
**a****b**

**Supplementary Figure 2.** CL uptake by lung MDSC cells and inhibition by cardiolipin (CL) of LPS-induced IL-10 production from the MDSCs. **(a)** Uptake of Topfluor-labeled cardiolipin by lung MDSCs as assessed by confocal microscopy. Cell nuclei were stained with DAPI. **(b)** CD11b<sup>+</sup>Ly6G<sup>int</sup>F4/80<sup>+</sup> lung MDSCs were flow-sorted and cultured *ex vivo* for 6 h with LPS (1 µg/ml) either alone or in combination with cardiolipin (10 µg/ml). Secreted IL-10 in the culture supernatant was measured by ELISA. Data presented are mean ± s.d. \*\*\*  $P < 0.001$ .

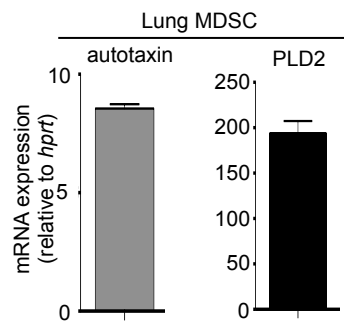
**a** Bone marrow cells  $\xrightarrow{\text{Cultured for 9 days with LPS (1 }\mu\text{g/ml) and GM-CSF (10 ng/ml)}}$  MDSC-like cells (CD11b<sup>+</sup>F480<sup>+</sup>Ly6G<sup>++/int</sup>)



**Supplementary Figure 3.** Generation of bone-marrow-derived MDSCs for adoptive transfer into mice. **(a)** Schematic of generation of bone marrow-derived MDSCs. **(b)** Flow cytometric analysis of bone marrow-derived MDSC-like cells. **(c)** Secreted IL-10 from bone marrow-derived MDSC-like cells following 6 h LPS (1  $\mu\text{g/ml}$ ) stimulation as measured by ELISA. Data presented are mean  $\pm$  s.d. \*  $P < 0.01$ .

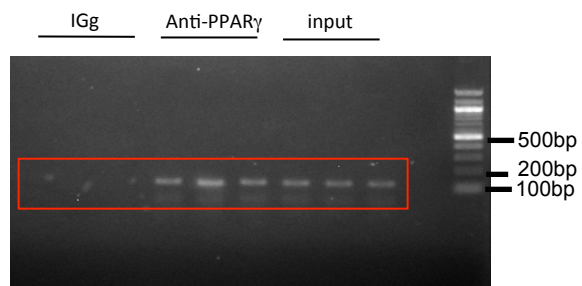
**a****b****c**

**Supplementary Figure 4.** PPAR $\gamma$  regulates IL-10 gene expression in lung MDSCs. **(a)** Lung MDSCs were treated *ex vivo* with or without Rosiglitazone (Rosi-10  $\mu$ M) for 6 h. Secreted IL-10 in the culture supernatant was measured by ELISA. **(b)** RAW 264.7 cells were transfected with both PPRE-Luciferase reporter construct and PPAR $\gamma$  expression vector. 24 h post-transfection, cells were stimulated with Rosi or LPS, either alone or in combinations with cardiolipin. 2 h post-stimulation, reporter activity was measured. **(c)** Lung MDSCs were isolated from LPS-treated mice and transfected ( $1 \times 10^6$  cells /condition) with scrambled or *pparg*-targeted siRNA (10 nM). *pparg*-gene expression was studied by qRT-PCR. Data shown are mean  $\pm$  s.d. and all data are representative of two independent experiments. \*P $\leq$ 0.05, \*\*P $\leq$ 0.01, \*\*\*P $\leq$ 0.001.

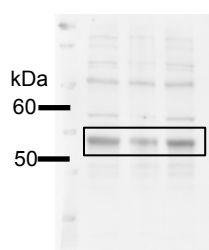
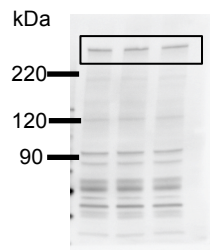


**Supplementary Figure 5.** Relative mRNA expression of autotaxin and PLD2 in lung MDSCs. Data shown are mean  $\pm$  s.d. and representative of two independent experiments.

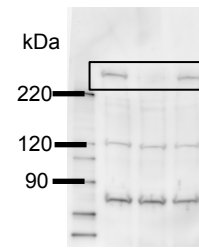
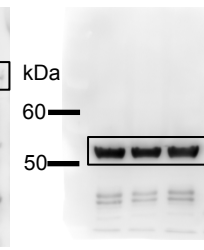
4a

PPAR $\gamma$  ChIP on IL-10 promoter

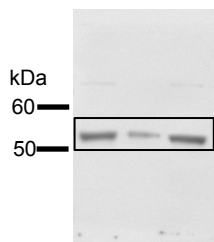
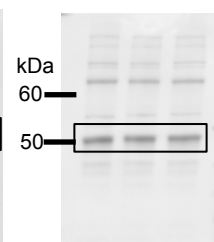
4c (left)

IP : NCOR  
IB: PPAR $\gamma$ 

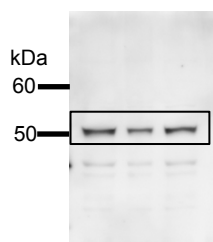
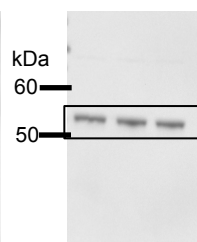
IB : NCOR

IP : PPAR $\gamma$   
IB: NCORIB: PPAR $\gamma$ 

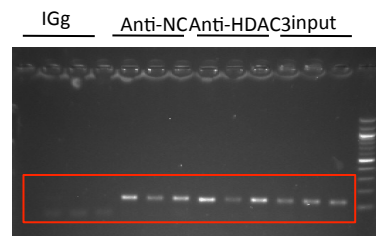
4c (right)

IP: HDAC3  
IB: PPAR $\gamma$ 

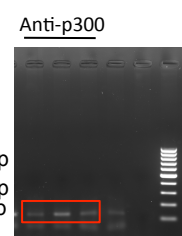
IB: HDAC3

IP : PPAR $\gamma$   
IB: HDAC3IB: PPAR $\gamma$ 

4d



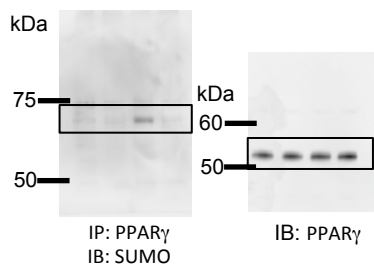
HDAC3, and NCOR ChIP on IL-10 promoter



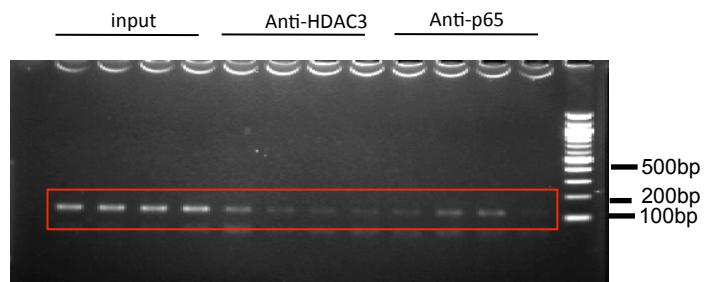
p300 ChIP on IL-10 promoter

Supplementary Figure 6. Complete scan of Western blot data shown in Figure 4.

5a

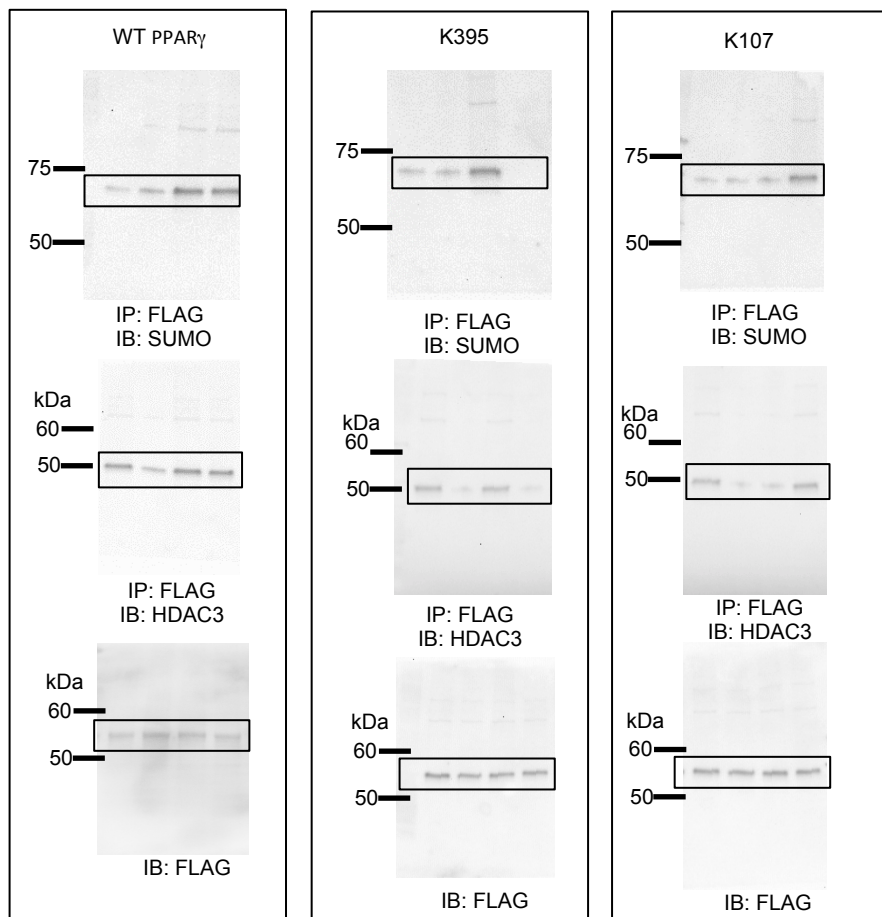


5b

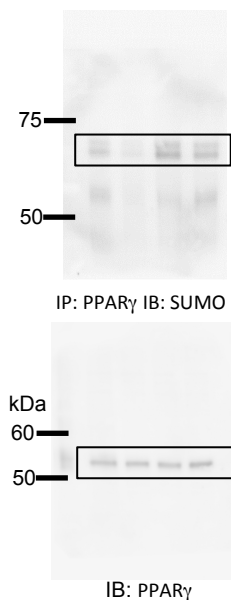


HDAC3, and p65 ChIP on TNF promoter

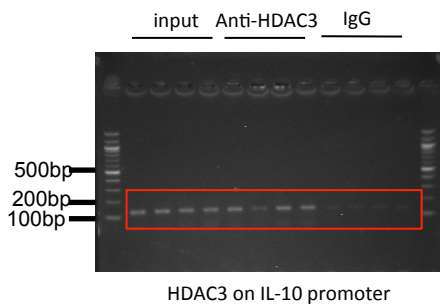
5c



6b

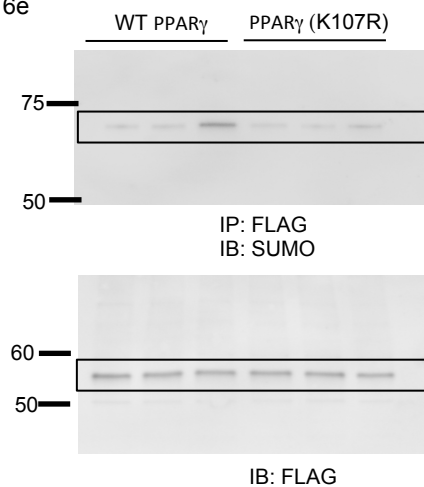


6c



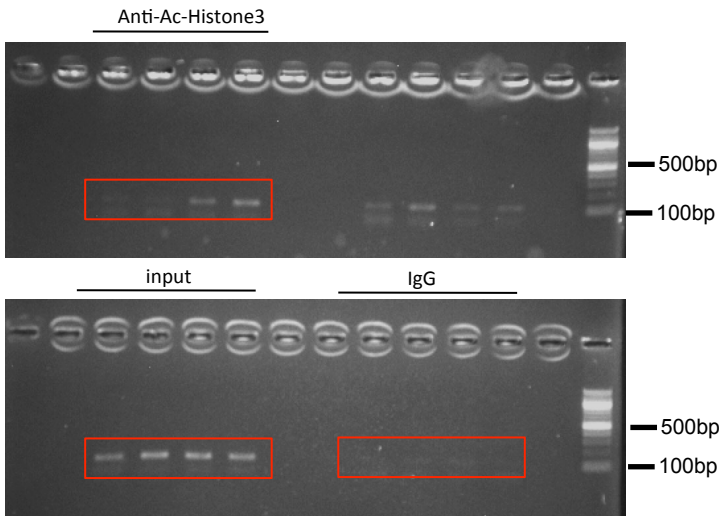
HDAC3 on IL-10 promoter

6e

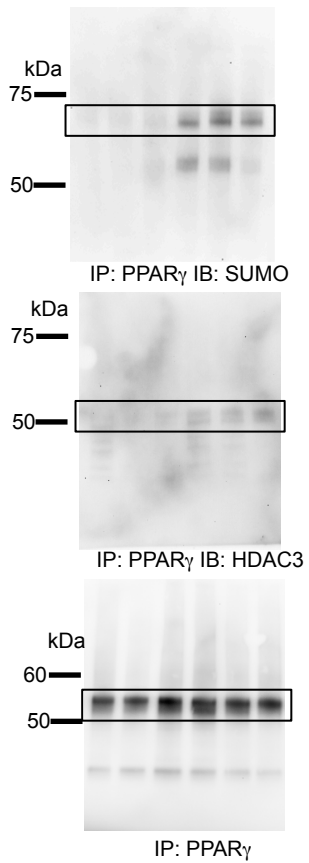


**Supplementary Figure 7. Complete scan of Western blot data shown in Figures 5 and 6.**

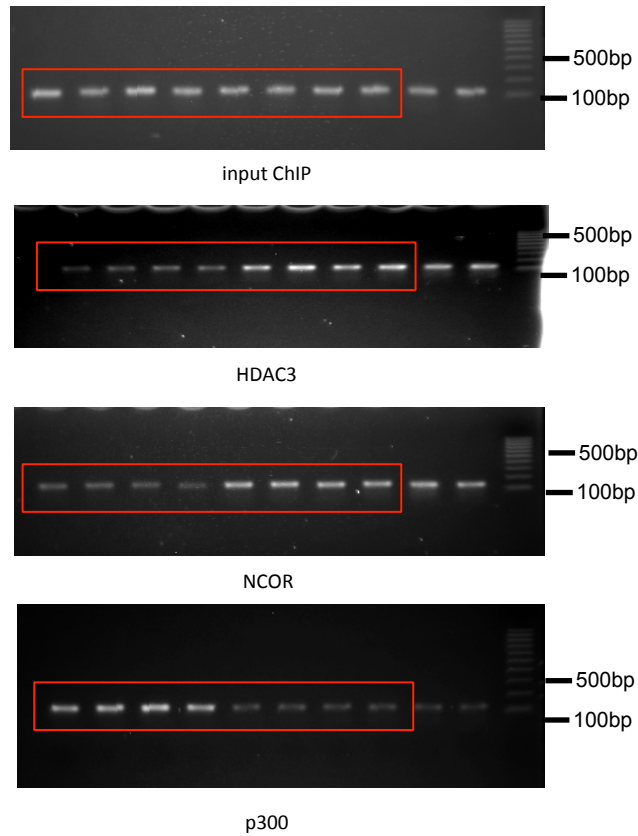
7f



8a



8b



**Supplementary Figure 8. Complete scan of Western blot data shown in Figures 7 and 8.**