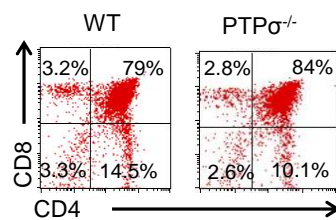


Protein tyrosine phosphatase σ regulates immune cell functions and autoimmune encephalomyelitis development

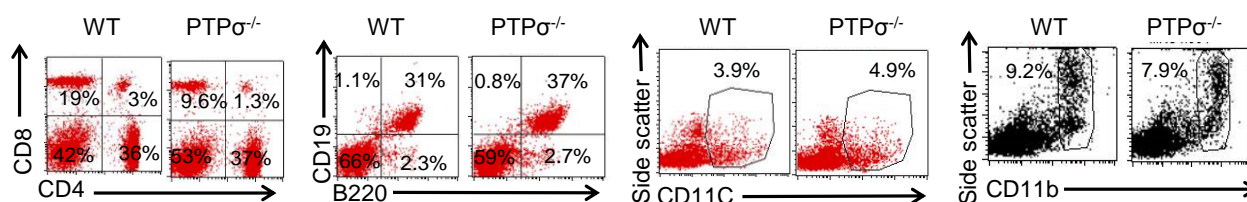
Yosuke Ohtake, Weimin Kong, Rashad Hussain, Makoto Horiuchi, Michel L. Tremblay, Doina Ganea and Shuxin Li

A. Thymus



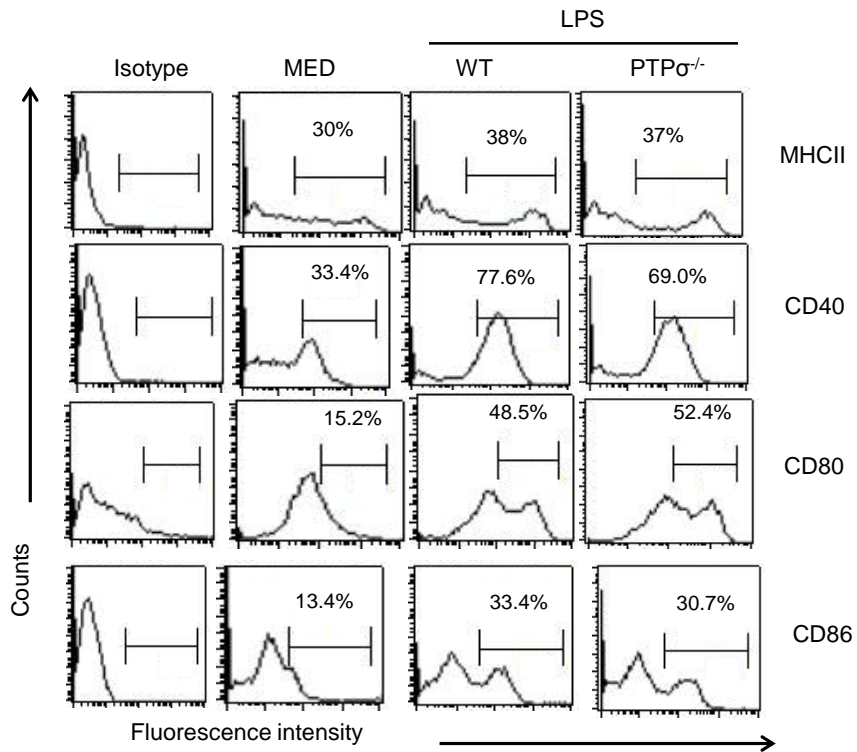
	CD4+	CD8+	Double negative	Double positive
WT	13.4±1.8%	4.2±1.1%	3.6±0.3%	79.0±1.0%
PTPσ ^{-/-}	9.8±0.3%*	2.5±0.3%*	2.5±0.5%*	84.9±1.0%*

B. Spleen

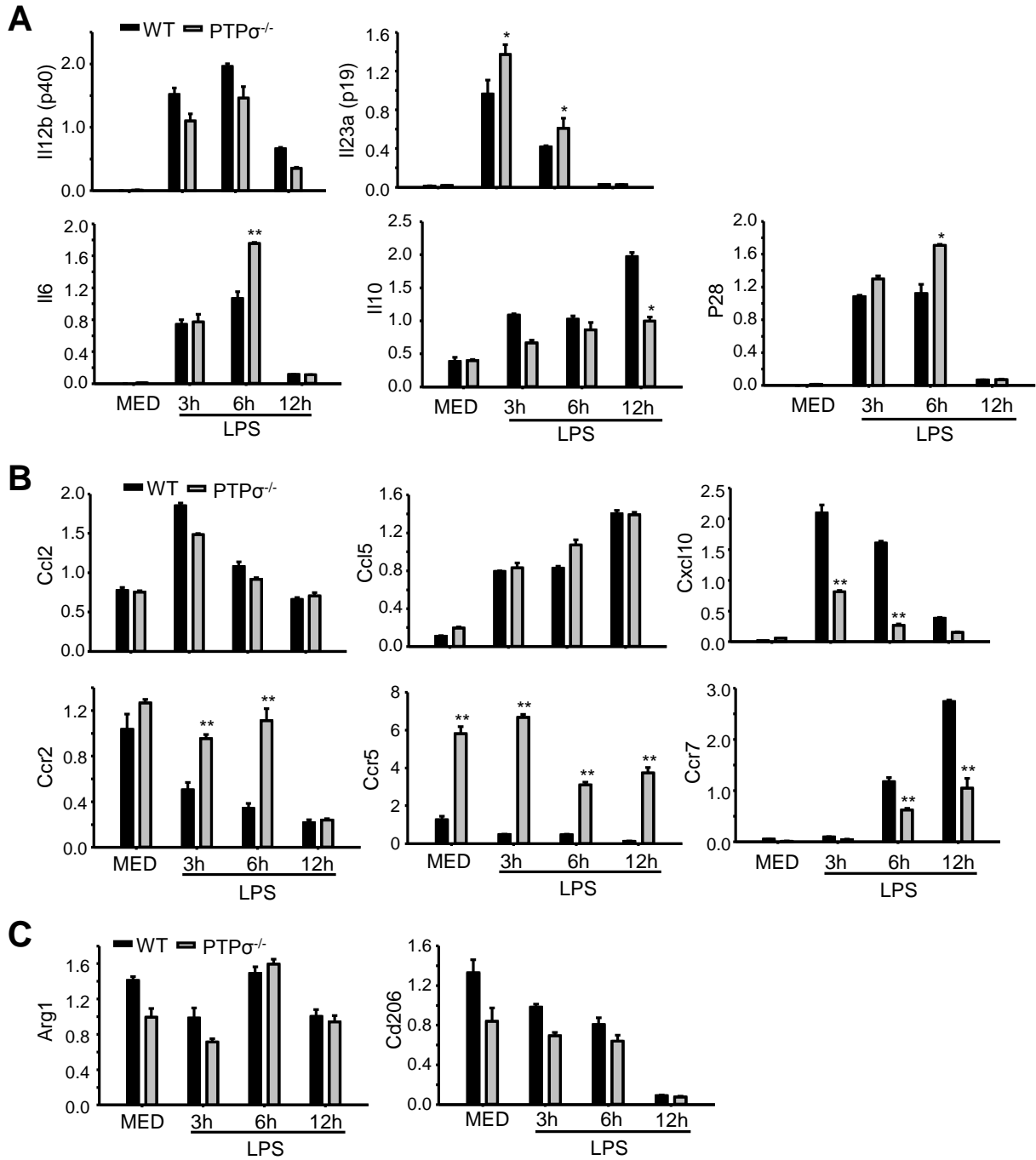


	CD4+	CD8+	B cell	CD11b	CD11c
WT	32.6±2.9%	16.2±2.5%	31.4±1.1%	7.1±1.8%	3.8±1.0%
PTPσ ^{-/-}	32.6±4.0%	9.8±0.3%*	39.0±2.8%	6.7±1.1%	4.5±1.1%

Supplemental figure 1: Characterization by flow cytometry of cell profiles in thymuses (A) and spleens (B) of WT and PTPσ^{-/-} mice (n=4 mice/group).



Supplemental figure 2: Comparison by flow cytometry of surface marker expression in dendritic cells (DCs). Bone marrow from WT and PTP $\sigma^{-/-}$ mice was cultured in the presence of GM-CSF for 7 days to generate DCs. DCs were treated with medium (MED, as a negative control) or LPS for 24 hours, then stained with fluorescence conjugated anti MHCII, CD40, CD80, and CD86. ISO: isotype antibody as a negative staining control.



Supplemental figure 3: RT-PCR assays show expression levels of cytokines (A), chemokines and their receptors (B), and M1/M2 markers (C) in bone marrow derived macrophages treated with LPS for 3, 6 or 12 hours.