

Supplemental information

**Yin and yang of cannabinoid CB1 receptor: CB1
deletion in immune cells causes exacerbation while
deletion in non-immune cells attenuates obesity**

Kathryn Miranda, William Becker, Philip B. Busbee, Nicholas Dopkins, Osama A. Abdulla, Yin Zhong, Jiajia Zhang, Mitzi Nagarkatti, and Prakash S. Nagarkatti

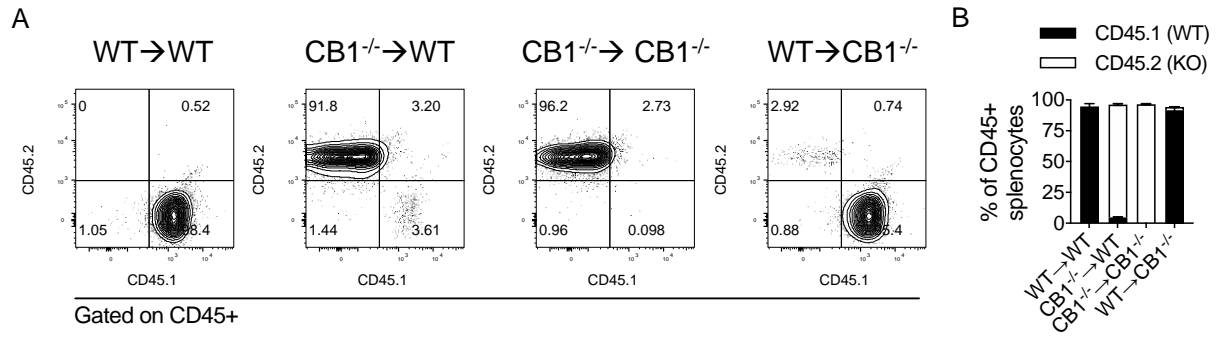


Figure S1. Validation of bone marrow reconstitution in chimeric mice. Chimeric mice were generated by bone marrow transplantation as described in Figure 4 legend. After 16 weeks of HFD, spleens were harvested and stained for CD45, CD45.1, and CD45.2 to confirm immune system reconstitution by donor cells. See also Figure 4.

- A) Representative flow cytometry contour plots of CD45⁺ gated splenocytes.
- B) Percentages of CD45⁺ splenocytes expressing CD45.1 (CB1 WT) and CD45.2 (CB1 KO).

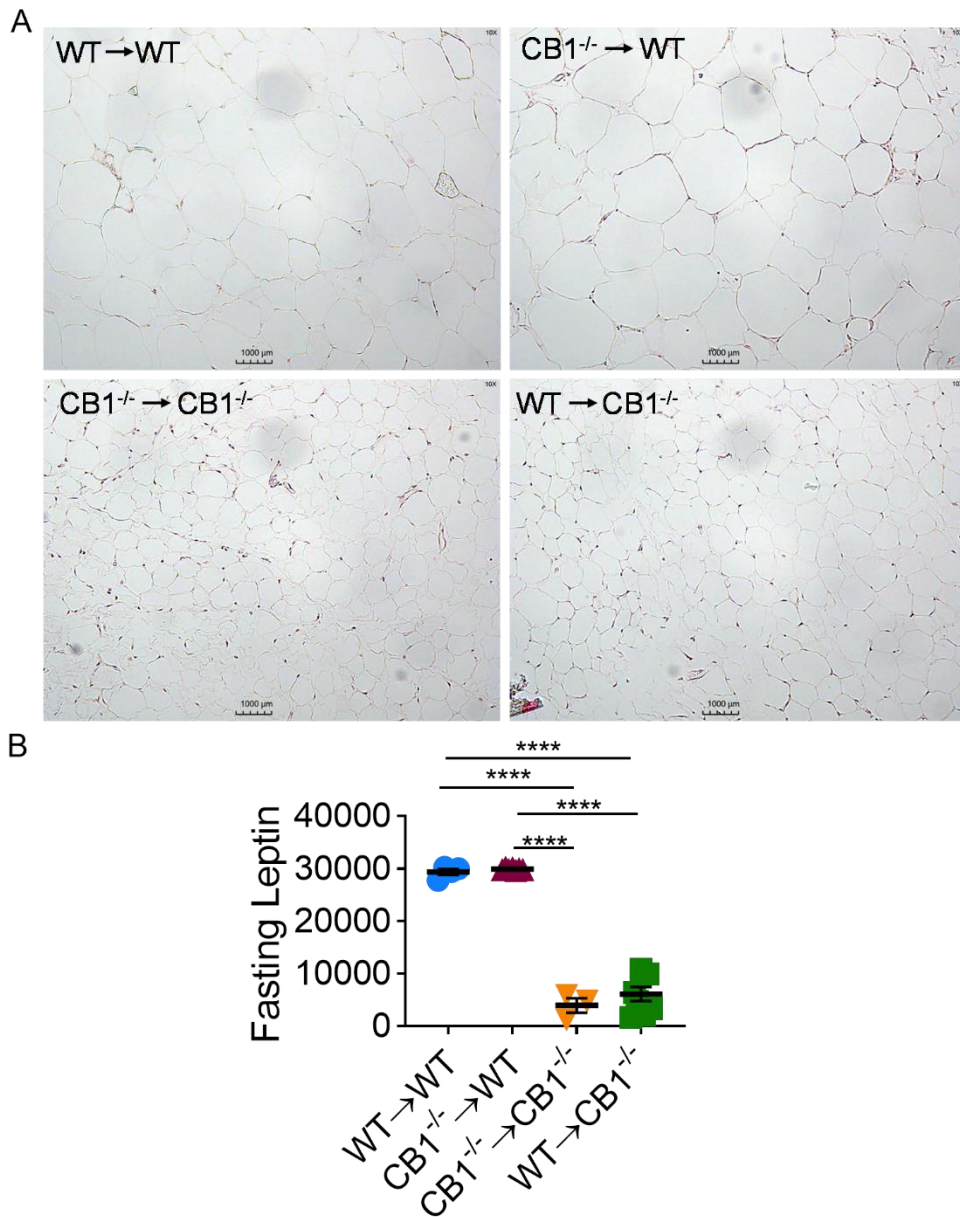


Figure S2. Representative epididymal fat pad histology and serological HOMA-IR and leptin data from chimeric experiments. Chimeric mice were generated by bone marrow transplantation as described in Figure 4 legend. After 16 weeks of HFD, epididymal fat pads and serum were isolated.

A) Representative histology of sectioned epididymal fat from chimeric experimental groups stained with H&E. Imaged using 10x objective lens with scale bar (1000 μ M).

B) Fasting Leptin concentrations (pg/ml) from serum evaluated using ELISA kit. Data are mean \pm SEM with individual points representing biological replicates. N=8 mice/chimeric group or 4 mice/syngeneic control group. ****p<0.0001. See also Figure 4.

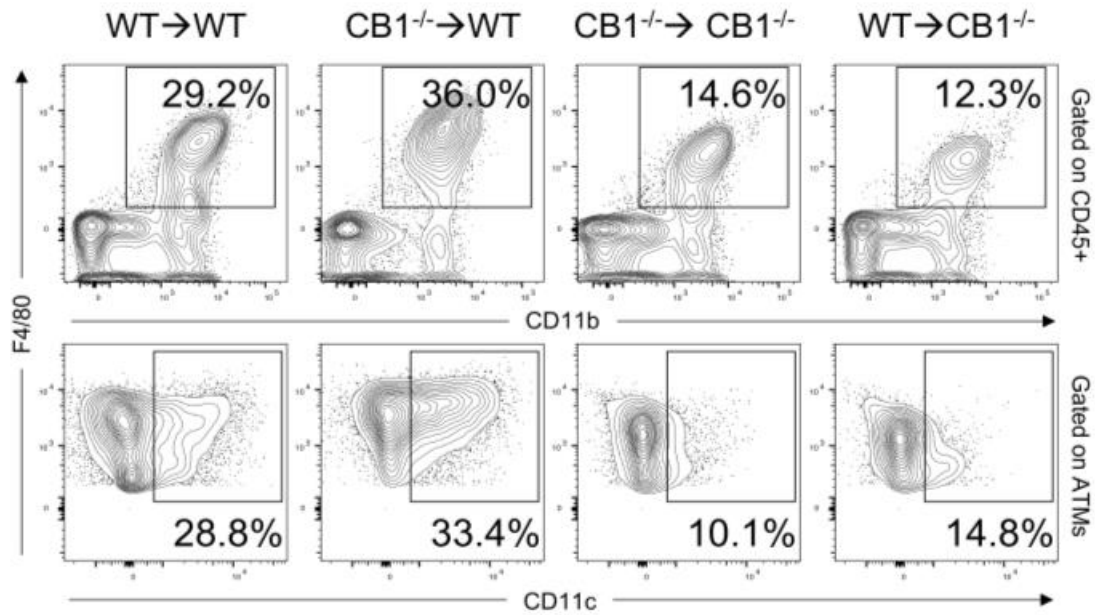


Figure S3. Representative flow cytometry contour plots of epididymal ATMs from chimeric experiment. Chimeric mice were generated by bone marrow transplantation as described in Figure 4 legend. After 16 weeks of HFD, cells were collected from epididymal fat and stained for CD11b+F4/80+ ATMs and ATM-gated CD11c+ M1 ATMs. See also Figure 4.