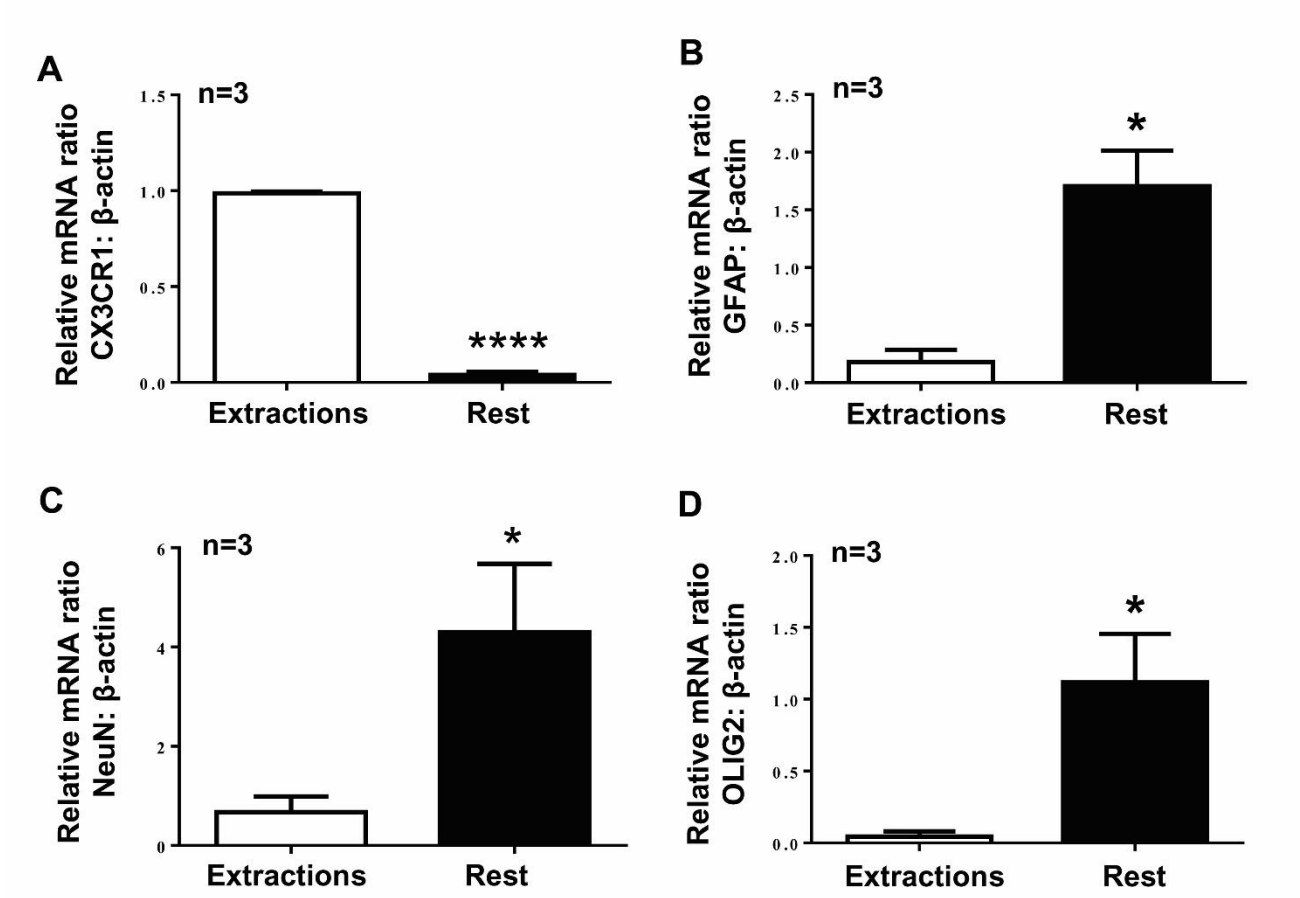
SUPPLEMENTARY DATA

Disease Progression-Dependent Expression of CD200R1 and CX3CR1 in Mouse Models of Parkinson's Disease

Le Wang[1], Yang Liu[1], Shuxin Yan[1], Tianshu Du[1], Xia Fu[1], Xiaoli Gong[2], Xinyu Zhou[1], Ting Zhang[1], Xiaomin Wang[1,2,*]

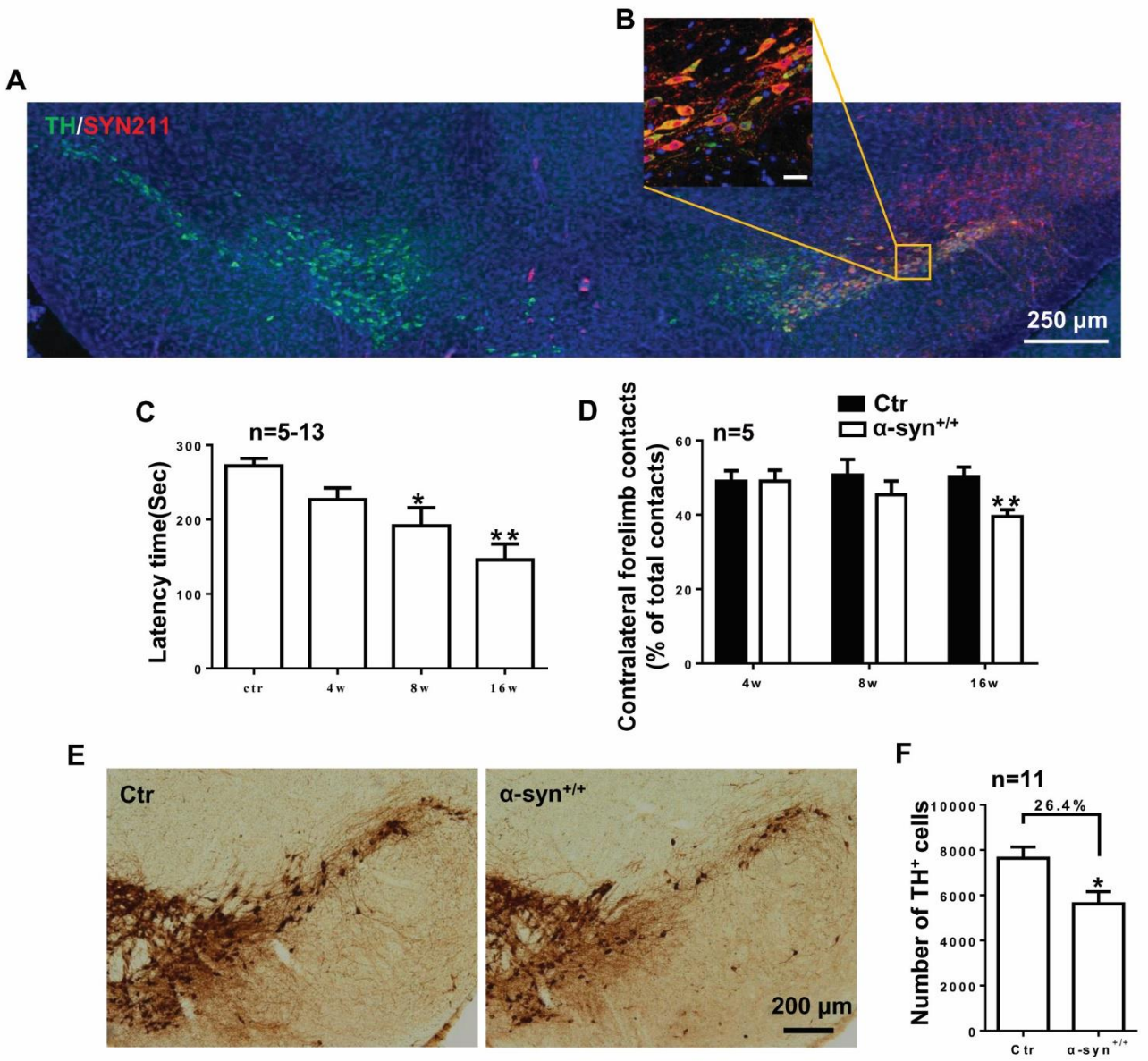
[1]Department of Neurobiology, Center of Parkinson Disease Beijing Institute for Brain Disorders, Beijing Key Laboratory on Parkinson Disease, Key Laboratory for Neurodegenerative Disease of the Ministry of Education, Beijing Key Laboratory of Neural Regeneration and Repair, Capital Medical University, Beijing, China.
[2]Department of Physiology and Pathophysiology, Capital Medical University, Beijing, China.

SUPPLEMENTARY DATA



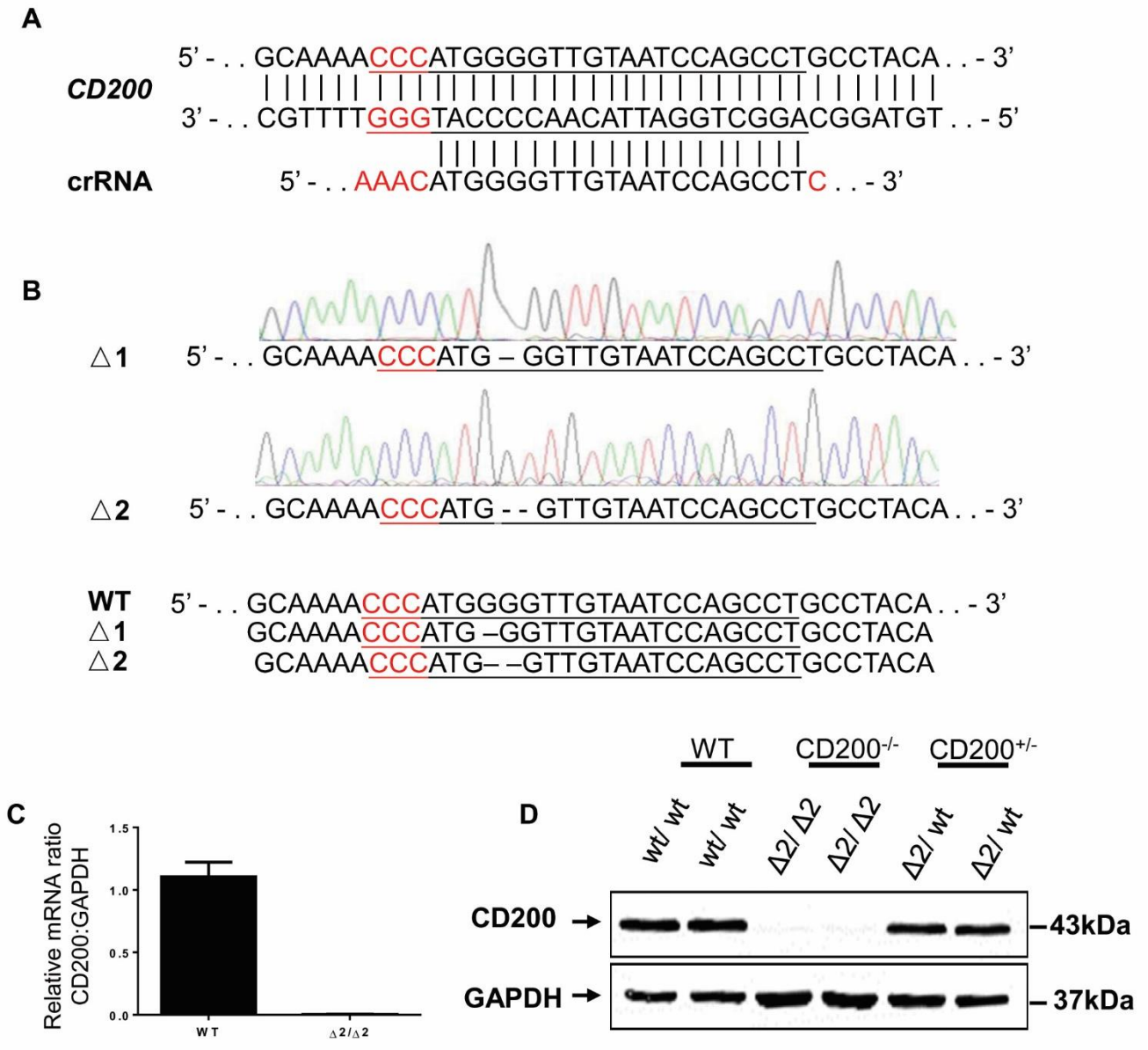
Supplementary Figure 1. **The identification of microglial isolation.** Microglia were isolated from the whole brains without cerebellum by immuno-magnetic separation. (A, B, C and D) The sorted cells and the rest were analyzed by RT-qPCR using the specificity primers. (A) Microglia, CX3CR1. (B) Astrocyte, GFAP. (C) Neuron, NeuN. (D) Oligodendrocyte, Olig2. Data are expressed as mean ± SEM (n = 3 per group). * $p < 0.05$ and *** $p < 0.001$ versus isolation group, Student's t test.

SUPPLEMENTARY DATA



Supplementary Figure 2. The generation and performance of rAAV-hSYN injected PD model. Two months old C57BL/6 mice received a unilateral stereotactic injection of rAAV9-hSYN into the right SNpc to generate PD mice model. 2 weeks post-injection, (A) mice was sacrificed and brain slice were stained with a human-specific α-syn antibody (αsyn211, red). TH, green. Scale bar = 250 μm. (B) Higher magnification image showing TH^+ neuron expressing exogenous α-syn. Scale bar = 25 μm. The rotarod test (C) and cylinder test (D) were performed at 4, 8 and 16 weeks after rAAV-hSYN injection (n = 5-13 per group). Representative immunochemical images (E) and quantification of the number of TH+ neurons (F) in the SNpc (n = 11 per group). Scale bar = 200 μm. Data are expressed as mean ± SEM. * $p < 0.05$ and *** $p < 0.001$ versus ctr group, Student's t test or one-way ANOVA.

SUPPLEMENTARY DATA



Supplementary Figure 3. The generation and identification of CD200$^{-/-}$ mice. (A) Targeting strategy for the generation of CD200$^{-/-}$ mouse by CRISPR/Cas9 system. (B)The PCR products of CD200$^{-/-}$ mice were analyzed by direct sequencing, the wild-type CD200 gene sequence is shown at the top (WT) with the gRNA target sequences(underlined). The PAM sequence is labeled in red, deletions are indicated by dashes. The example chromatogram showing nucleotides deletion (△1 and △2). (C and D) The identification of CD200 knock out in transcriptional and protein levels.