## **Supplemental Information**

**Transplantation of M2-Deviated Microglia** 

**Promotes Recovery of Motor Function** 

after Spinal Cord Injury in Mice

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## Figure S1

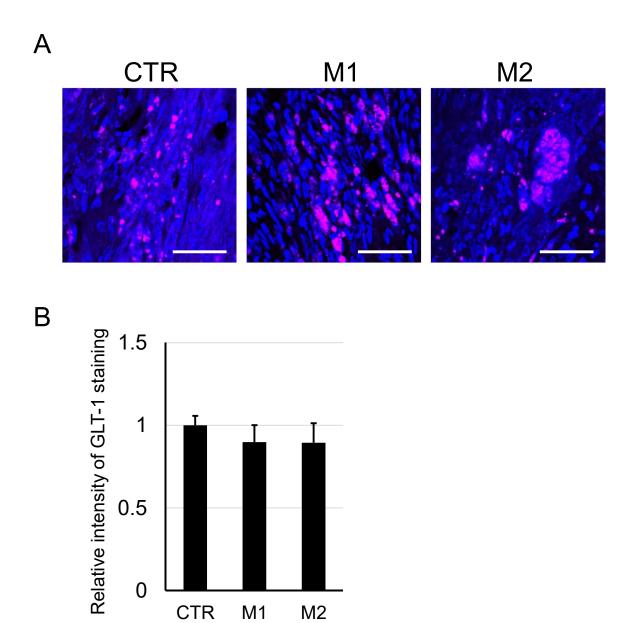
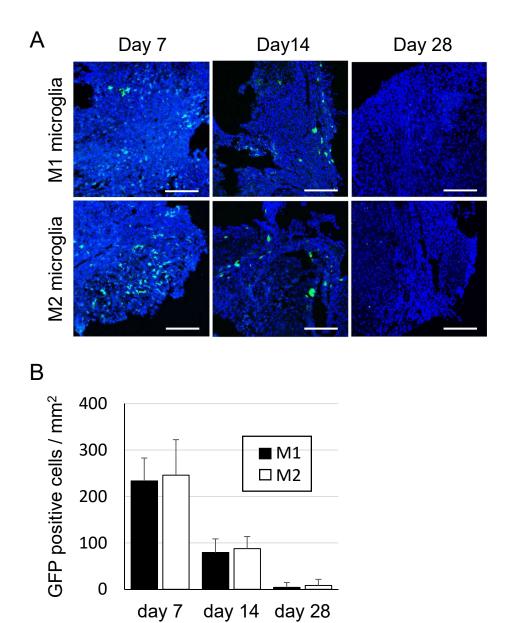


Figure S1 Histological analysis of spinal cords after injury and cell transplantation in SCI mice. (A) Immunohistochemistry of spinal cord with GLT-1 (as an astrocyte marker: red) was shown in Matrigel only (CTR), M1 or M2 microglia with Matrigel group 4weeks after SCI and cell transplantation therapy. Blue showed DAPI stain in nuclei. Scale Bar =  $100\mu m$ . (B) Graph showed the number of GLT-1 positive cells in spinal cord 4weeks after spinal cord injury and transplantation. Bars showed means + or – SD.

Figure S2



**Figure S2** Analysis of engraftment of GFP positive microglia transplanted to SCI mice. **(A)** Pictures of spinal cord on day 7, 14, or 28 after injury and cell transplantation of M1 or M2 microglia. GFP positive cells show transplanted microglia. Scale Bar =  $200 \, \mu m$ . **(B)** Graph showed the number of GFP positive cells in spinal cord on day 7, 14, or 28 after spinal cord injury and transplantation. Bars showed means + or – SD.

## Video S1-S3

The movies show the free movement of the treatment mice 4weeks after SCI at the open field. Video S1, S2 and S3 indicate the movies of CTR, M1 and M2 mice, respectively. CTR: one of the no cell administered mice (Matrigel only), M1: one of the transplanted mice with M1 microglia and Matrigel, M2: one of the transplanted with M2 microglia and Matrigel.