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Supporting Information

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Cytoplasmic Escape of Mitochondrial DNA Mediated by Mfn2 Downregulation Promotes Microglial Activation via cGas-Sting Axis in Spinal Cord Injury

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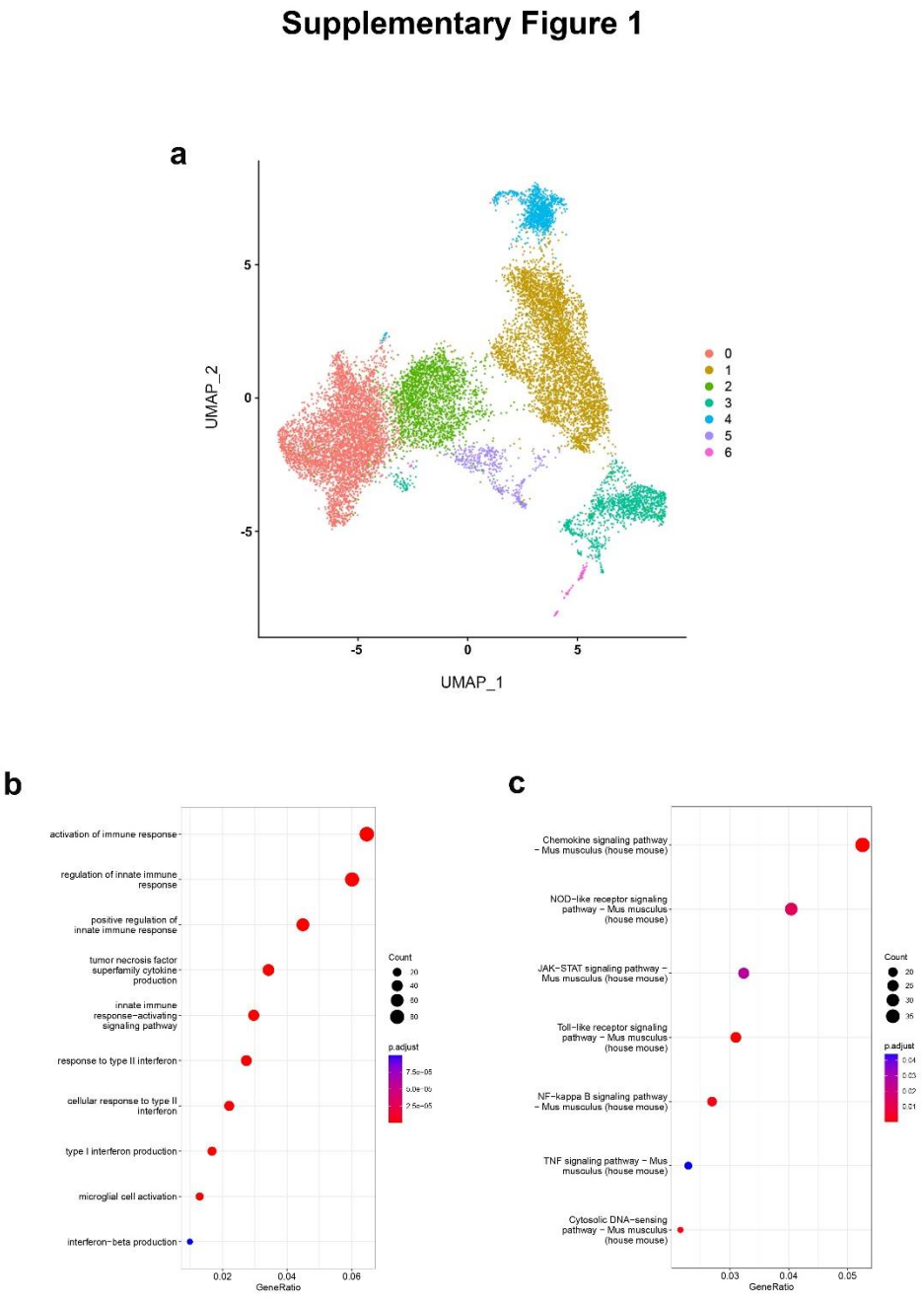
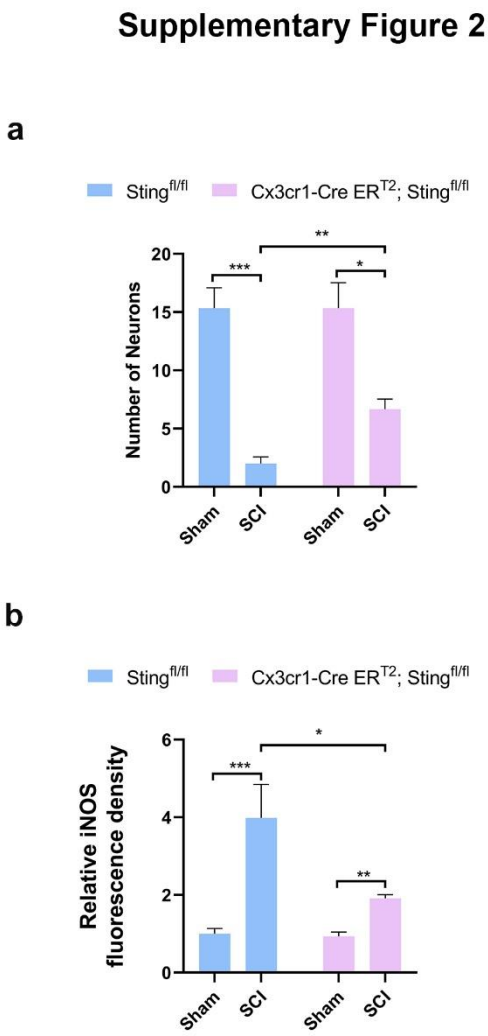
Supplementary Figure 1. Cluster 1 microglia was a pro-inflammatory cluster.

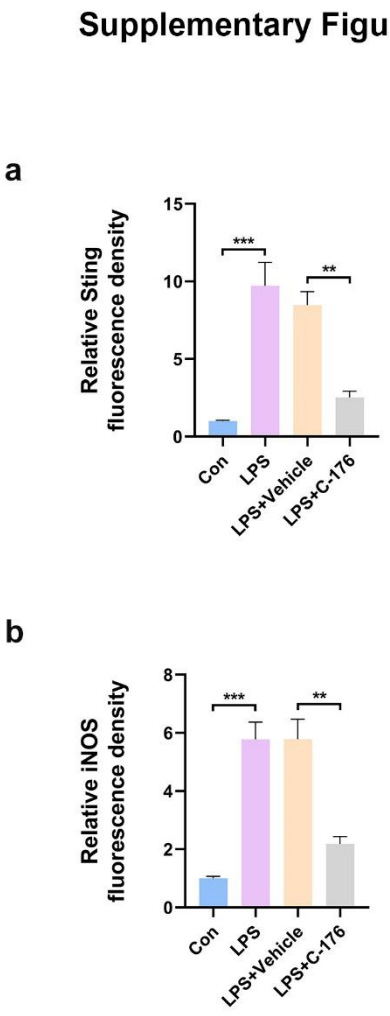
a UMAP plot showing seven microglia clusters (subtypes). **b** GO enrichment analysis showing hallmark pathways associated with the differentially expressed genes upregulated in cluster 0 microglia compared to cluster 1 microglia samples. **c** KEGG enrichment analysis showing hallmark pathways associated with the differentially expressed genes upregulated in cluster 0 microglia compared to cluster 1 microglia samples.



Supplementary Figure 2. a Number of positive Nissl staining cells. **b** Relative iNOS fluorescence density of microglia.



Supplementary Figure 3. a Relative Sting fluorescence density of microglia. **b** Relative iNOS fluorescence density of microglia.



Supplementary Figure 4. a The pore volume of silica nanoparticles. **b** The surface area and pore volume of MSNs. **c** The pore size (adsorption average pore diameter) of SiO_2 nanoparticles. **d** the stability of MSNs-MASM7@MI. **e** Hematoxylin and eosin staining and histological analysis of main organs from MSNs-MASM7@MI-treated mice. **f** Fluorescence signals observed in the brain and spine tissue of mouse 6 h after intraperitoneal injection of MSNs-MASM7@MI.

Supplementary Figure 4