

Table S1 Primers for qPCR analysis

Gene	Direction	Primer (5'-3')
β -actin	F (forward)	CCTCTATGCCAACACAGTGC
211bp	R (reverse)	GTACTCCTGCTTGCTGATCC
TNF- α	F	GAGTCCGGGCAGGTCTACTTT
235bp	R	CAGGTCACGTGTCCCAGCATCT
IL-6	F	TCCAGAAACCGCTATGAAGTTC
72bp	R	CACCAGCATCAGTCCCAAGA

Table S2. List of flow cytometry antibody details

Antibody	Fluorochrome	Clone	Host species	Source
CD45	BUV395	30-F11	Rat	BD Biosciences
CD3	BV510	145-2C11	Hamster	BD Biosciences
CD11c	BB700	HL3	Hamster	BD Biosciences
CD4	Pe-Cy7	RM4-5	Rat	BD Biosciences
CD8	APC-Cy7	53-6.7	Rat	BD Biosciences
CD11b	BV786	M1/70	Rat	BD Biosciences
Ly6G	BV711	1A8	Rat	BD Biosciences
Ly6C	BV605	AL-21	Rat	BD Biosciences
F4/80	BUV737	T45-2342	Rat	BD Biosciences
CD64	PE	X54-5/7.1	Mouse	BD Biosciences
MHC II	I-A/I-E BB515	2G9	Rat	BD Biosciences
α 7nAChR	AF-647	/	Rabbit	Abcam
P-JAK	AF-647	/	Rabbit	Abcam

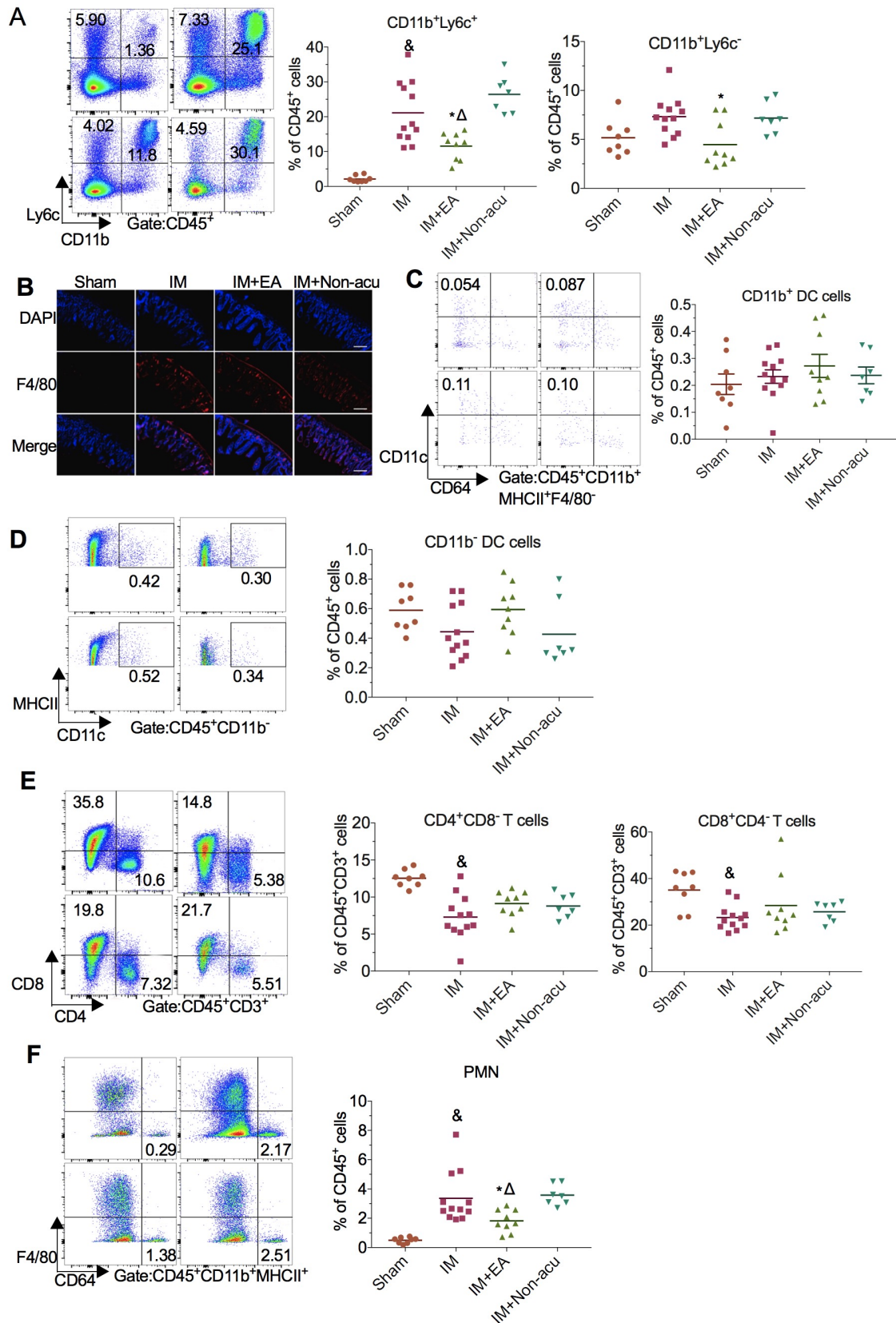


Figure S1 The frequencies of myeloid cells and T cells in four groups by flow cytometry. The frequencies of CD45⁺CD11b⁺ myeloid cells including CD45⁺CD11b⁺Ly6c⁺ circulating

inflammatory myeloid cells (A), CD11b⁺ DCs (C), CD11b⁻ DCs (D), T cells (E) and CD45⁺CD11b⁺MHCII⁺Ly6G⁺ PMN cells (F) among CD45⁺ cells by flow cytometry. The active level of macrophages (B) was evaluated by immunofluorescence staining. × 100 magnification. & $p < 0.05$ versus Sham group, * $p < 0.05$ versus IM group, Δ $p < 0.05$ versus IM + Non-acu group. DC, dendritic cells; PMN, polymorphonuclear.

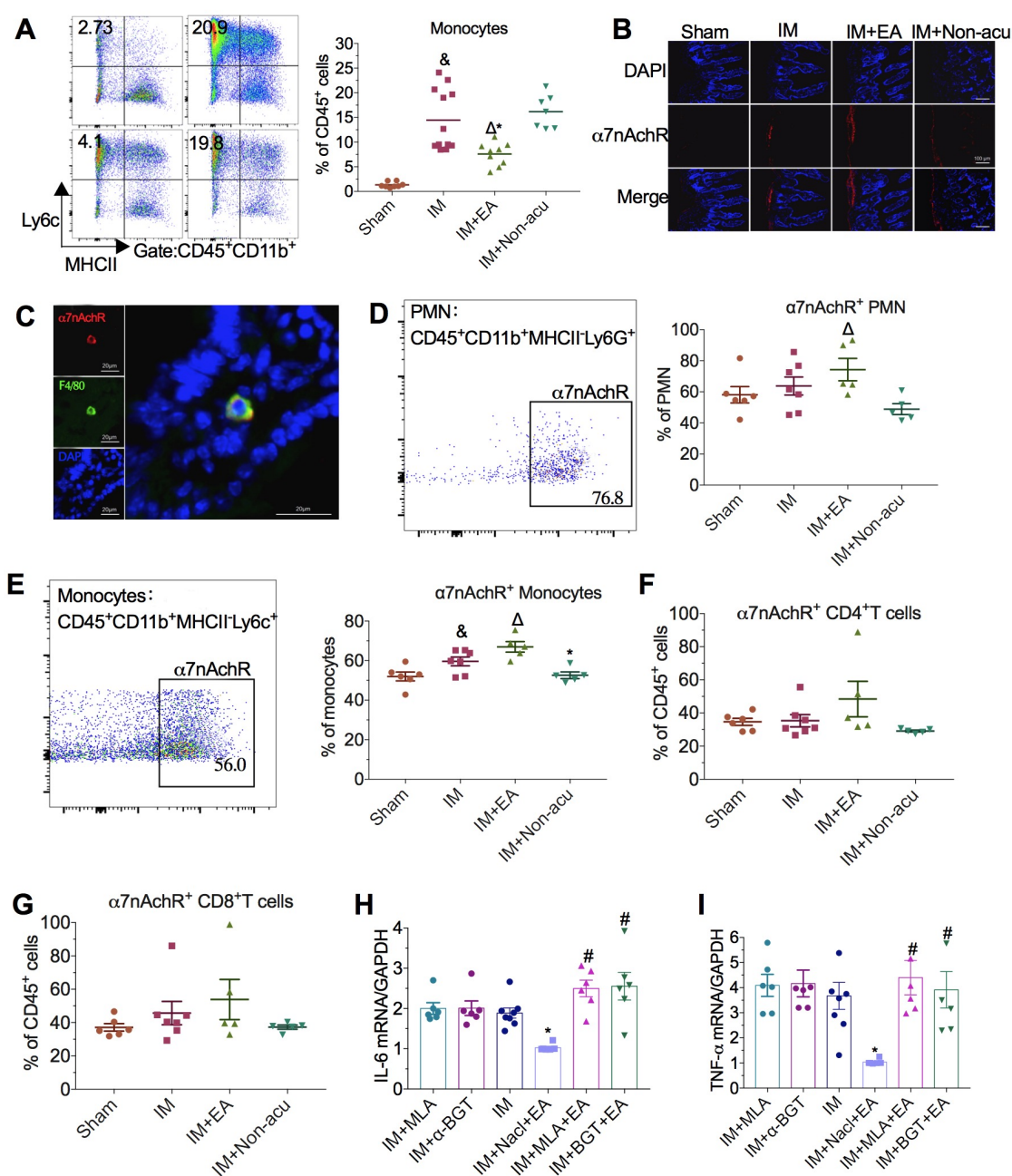


Figure S2 The expression of $\alpha 7$ nAChR in PMN and monocytes. The frequencies of $CD45^+CD11b^+MHCII^+Ly6C^+$ monocytes (A) among $CD45^+$ cells by flow cytometry. The active level of $\alpha 7$ nAChR (B) and co-location (C) was evaluated by immunofluorescence staining. $\times 100$ magnification. The frequencies of $\alpha 7$ nAChR $^+$ in PMN (D), monocytes (E) or T cells (F and G). The expression of IL-6 (H) and TNF- α (I) was analyzed by qPCR. * $p < 0.05$ versus IM group, # $p < 0.05$ versus IM + Nacl + EA group. PMN, polymorphonuclear.

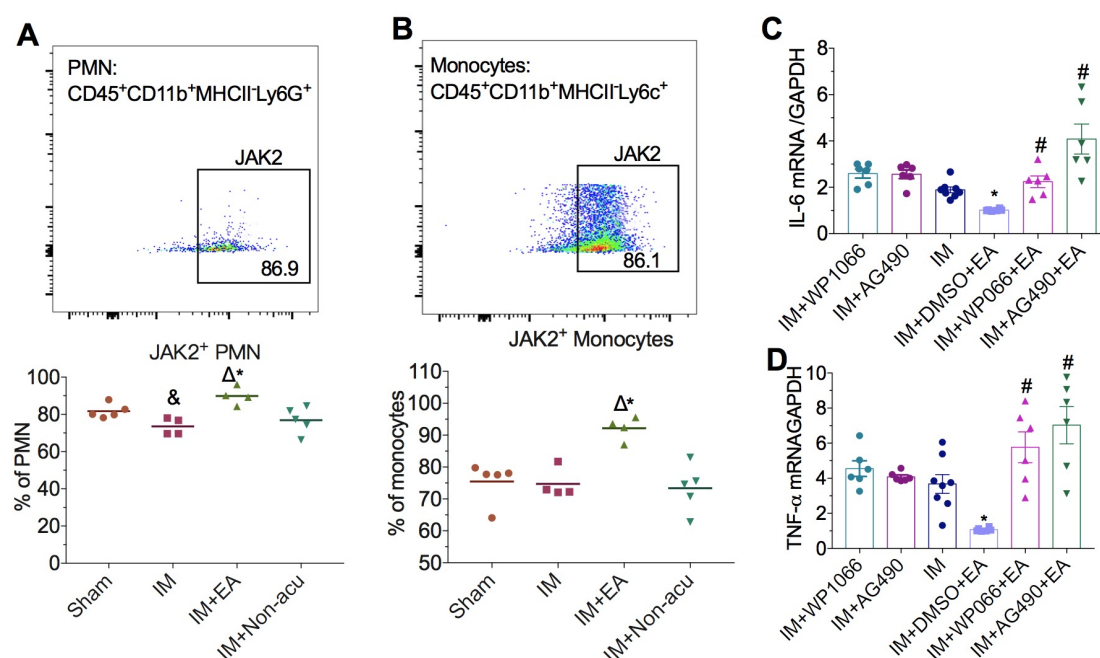


Figure S3 The expression of JAK2 in PMN and monocytes. The frequencies of JAK2 $^+$ in PMN (A) and monocytes (B). The expression of IL-6 (C) and TNF- α (D) in intestinal muscularis was analyzed by qPCR. & $p < 0.05$ versus Sham group, * $p < 0.05$ versus IM group, $\Delta p < 0.05$ versus IM + Non-acu group, # $p < 0.05$ versus IM + DMSO + EA group. PMN, polymorphonuclear.

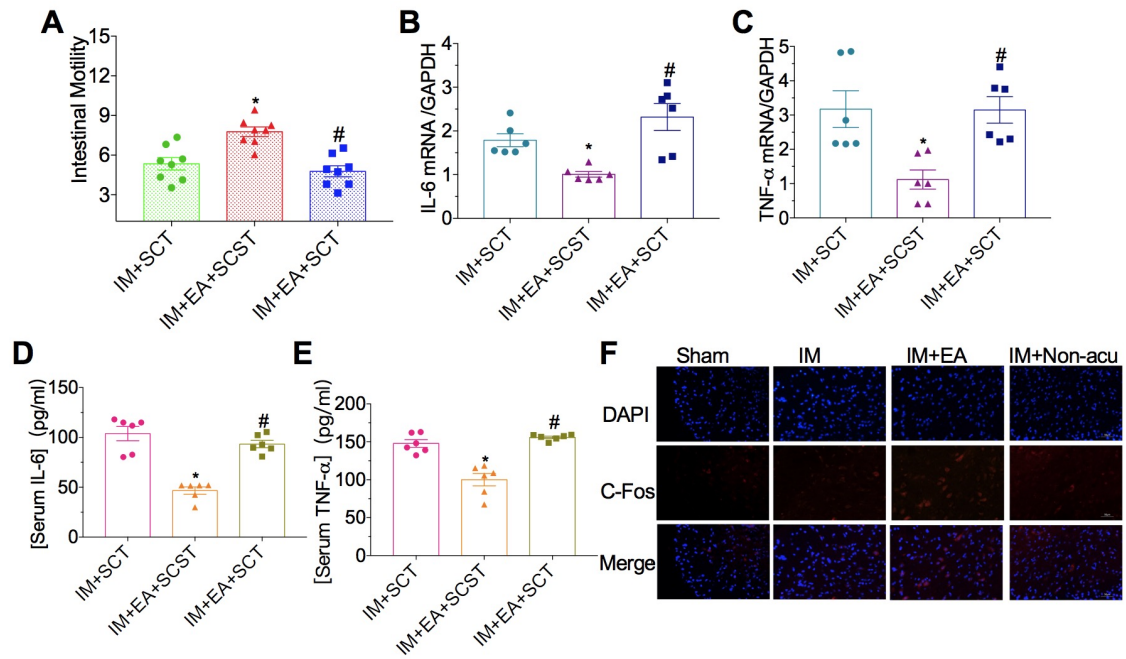


Figure S4 Sciatric nerve takes part in the protective function of EA in POI. (A) The gastrointestinal transit was measured in each SCT groups. The expression of IL-6 (B) and TNF- α (C) in intestinal muscularis was analyzed by qPCR. The expression of serum IL-6 (D) and TNF- α (E) was analyzed by ELISA. (F) The level of C-Fos was evaluated by immunofluorescence staining in spinal cord. $\times 100$ magnification. * $p < 0.05$ versus IM + SCT group, # $p < 0.05$ versus IM + EA + SCST group. SCT, sciatic neurectomy; SCST, sciatic sham neurectomy.