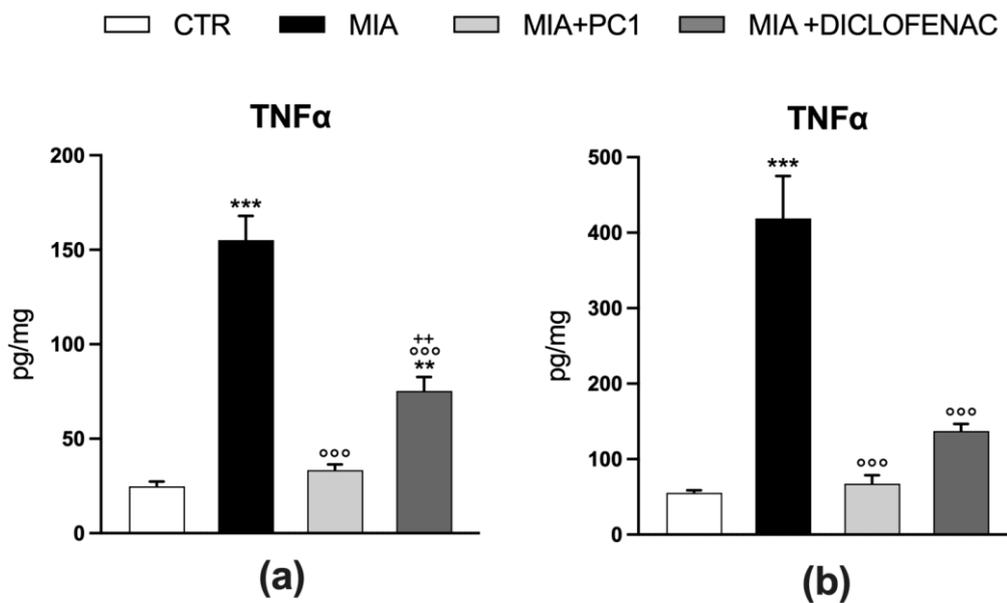


**Supplementary Figure S1 | Immunostaining negative control.** Pictures show immunostaining negative control in the hippocampus (a) and prefrontal cortex (b), where primary antibodies (anti-Iba1 and anti-GFAP) were omitted and sections were incubated with secondary antibody (AlexaFluor® 488-conjugated goat anti-rabbit) only. Nuclei were labeled with the Hoechst33258 dye (blue). Scale bars: 20 mM.



**Supplementary Figure S2 | Effect of PC1 and diclofenac on TNF alpha protein content in the hippocampus and prefrontal cortex of OA mice.** Protein expression levels of TNF $\alpha$  were evaluated (ELISA method) in the hippocampus (a) and prefrontal cortex (b) (day 28 post OA). Results are expressed as mean  $\pm$  SEM of 5 animals/group. Statistical analyses were performed by One-way ANOVA followed by Tukey's post-hoc test. \*\*p < 0.01, \*\*\*p < 0.001 vs CTR; ooo p < 0.001 vs MIA; ++ p < 0.01 vs MIA+PC1. Treatments: (a) F(3, 16) = 60.70, p < 0.0001; (b) F(3, 16) = 34.01, p < 0.0001.