



Supporting information for

Alumina Ceramic Exacerbates the Inflammatory Disease by Activation of Macrophages and T cells

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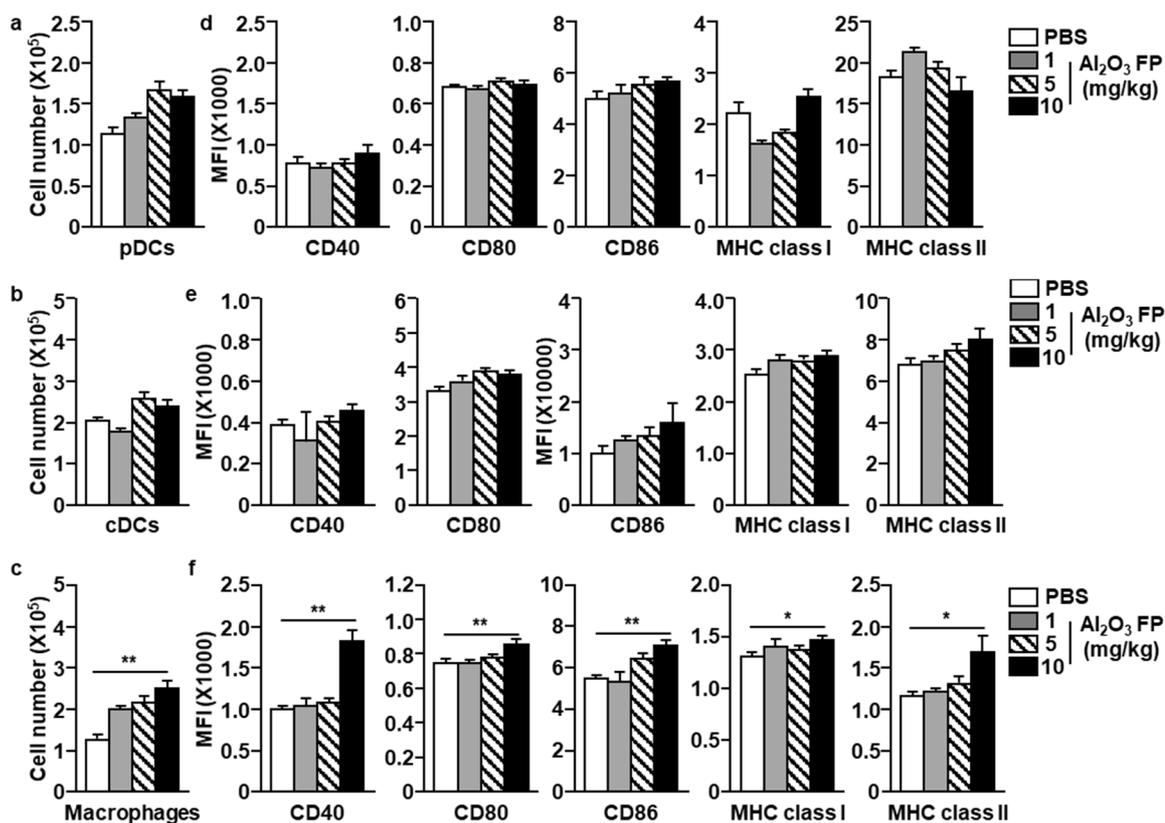


Figure S1. Dose dependent effect of Al₂O₃ FPs in the activation of innate immune cells. C57BL/6 mice were *i.p.* injected with 1, 5 and 10 mg/kg of Al₂O₃ FPs. Six hours after injection of Al₂O₃ FPs, spleen was harvested and analyzed co-stimulators and MHC class I and II expression. The absolute numbers of (a) pDCs, (b) cDCs and (c) macrophages in the spleen. The expression levels of co-stimulator and MHC class I and II were shown in (d) pDCs, (e) cDCs and (f) macrophages.

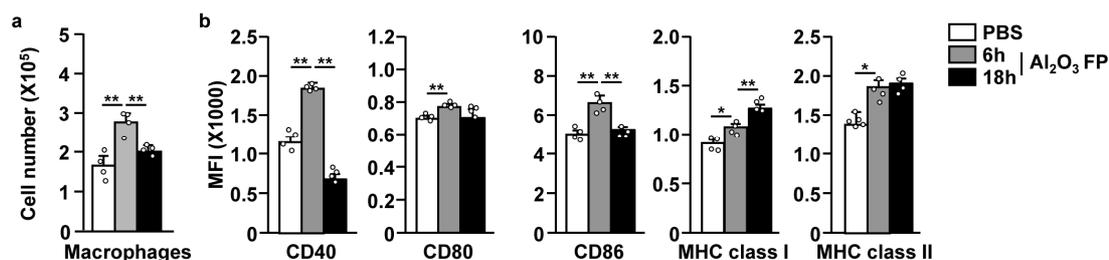


Figure S2. Time-dependent effect of Al₂O₃ FPs in macrophage activation. C57BL/6 mice were *i.p.* injected with 10 mg/kg of Al₂O₃ FPs. Six and eighteen hours after injection, the macrophage activation was analyzed. (a) The absolute number of macrophages analyzed in the spleen. (b) The expression levels of co-stimulator and MHC class I and II were shown in macrophages. The data are averages of four independent samples (2 mice for two experiments, two-way ANOVA, mean ± SEM).

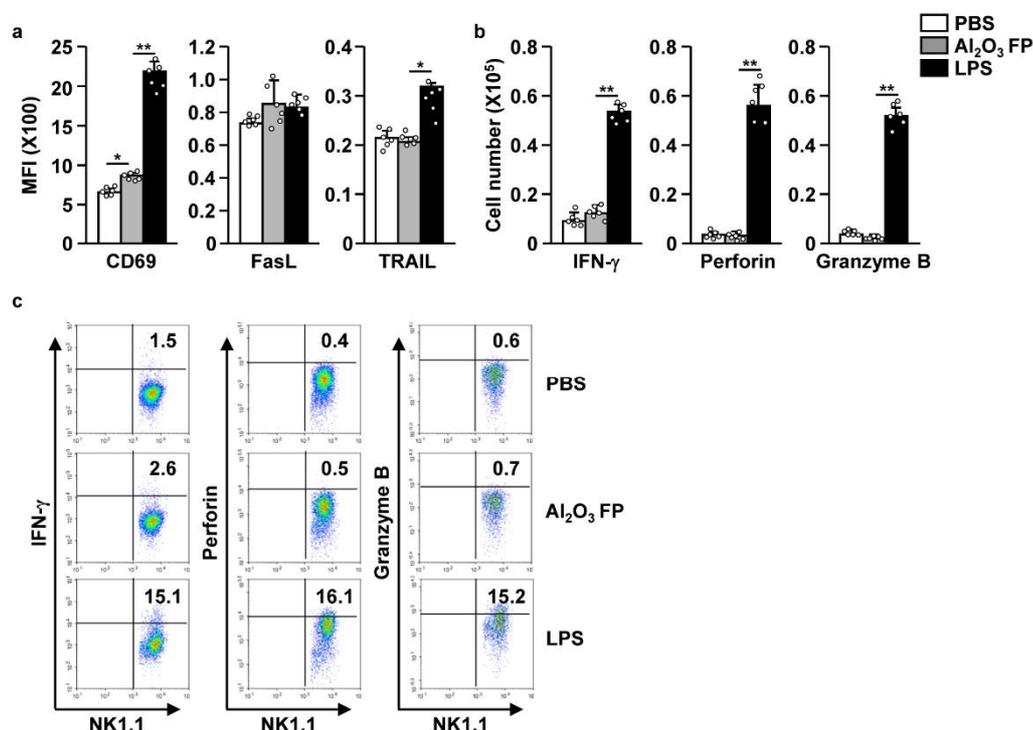


Figure S3. Al₂O₃ FPs did not induce the activation of NK cells in the mice. C57BL/6 mice were *i.p.* injected with 10 mg/kg of Al₂O₃ FPs for 6 h. The NK cells were defined as CD3-NK1.1⁺ cells in live leukocytes as shown in figure 2b. (a) The expression levels of CD69, Fas ligand (FasL), and TNF-related apoptosis-inducing ligand (TRAIL) are shown in NK cells as mean fluorescence intensity (MFI). (2 mice pre 3 experiments, n = 6). (b) The number of IFN- γ -, Perforin-, and Granzyme B-producing NK cells. (c) The percentages of IFN- γ -, Perforin-, and Granzyme B-producing NK cells (2 mice per 3 experiments, n = 6).

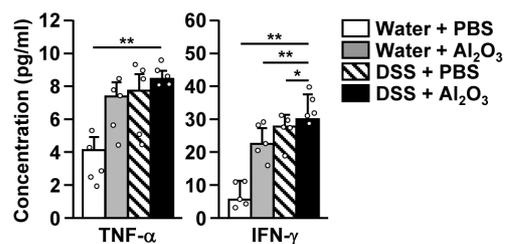


Figure S4. The serum concentrations of TNF- α and IFN- γ . The mice were treated as indicated in figure 5. The serum concentrations of TNF- α and IFN- γ were measured in triplicates by ELISA.