

Supporting Information

Inflammatory Properties of Iron-containing Carbon Nanoparticles

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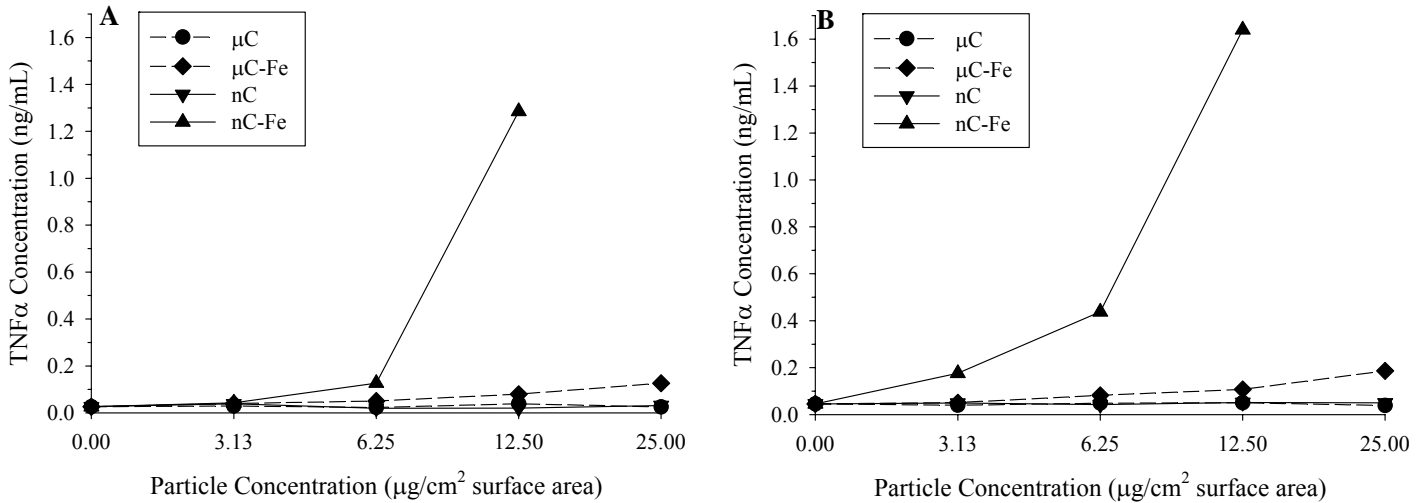


Figure 1. Particulate-mediated induction of TNF α in macrophages. MDM isolated from donor 2 (A) or donor 3 (B) were treated with various concentrations of nC, nC-Fe, μC , or $\mu\text{C-Fe}$. Culture supernatants were recovered 24 hours post-exposure, clarified by centrifugation, and assayed for TNF α concentration by ELISA. Data points represent mean values calculated from duplicate microtiter wells. Note: concentration of TNF α generated by 25 $\mu\text{g}/\text{cm}^2$ of nC-Fe exceeded the upper measurable limit of the assay.

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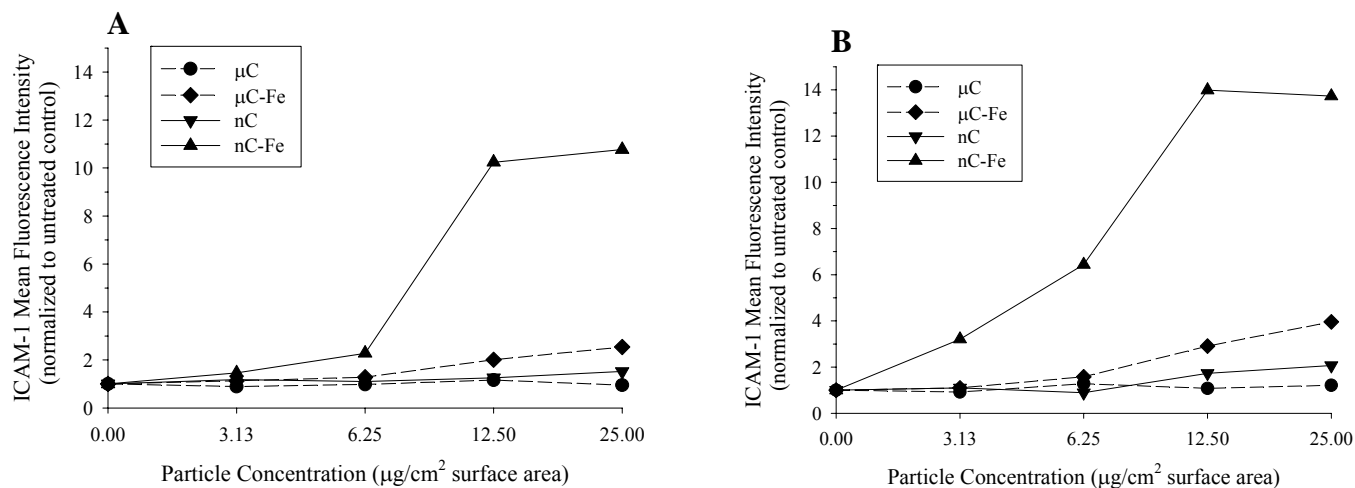


Figure 2. Macrophage-mediated endothelial ICAM-1 induction by particulates. Human umbilical vein endothelial cells (HUVEC) or human pulmonary microvascular EC (HPMVEC) were incubated for 24 hours with supernatants recovered from particulate-treated MDM isolated from donor 2 (A) or donor 3 (B). EC were then harvested, stained with FITC-conjugated antibody specific for ICAM-1, and analyzed by fluorescence flow cytometry (5000 cells/sample).