



Figure S1. Biological characterization of functionalized graphene nanostars.

(A) Cell viability in human umbilical vein endothelial cells incubated with Phosphate-Buffered Saline (PBS), or plasmid-dendrimer graphene nanostars (pDNA-DGNS) at concentrations ranging 5 to 500 µg/mL for 24 h using the MTS assay (B) Uptake experiment using RAW 264.7 macrophages incubated with pDNA-DGNS for 3 hours in the presence or absence of TNF-α (5 ng/mL) (C) Intracellular localization experiment in RAW 264.7 macrophages incubated with FITC-DGNS for 24 hours in the presence of TNF-α (5 ng/mL). DAPI was used to stain nuclei in blue. Merge corresponds to DAPI + FITC-GNS merged images. Values are mean ± S.E.M. *** indicates $P \leq 0.001$ using a Student's t-test.