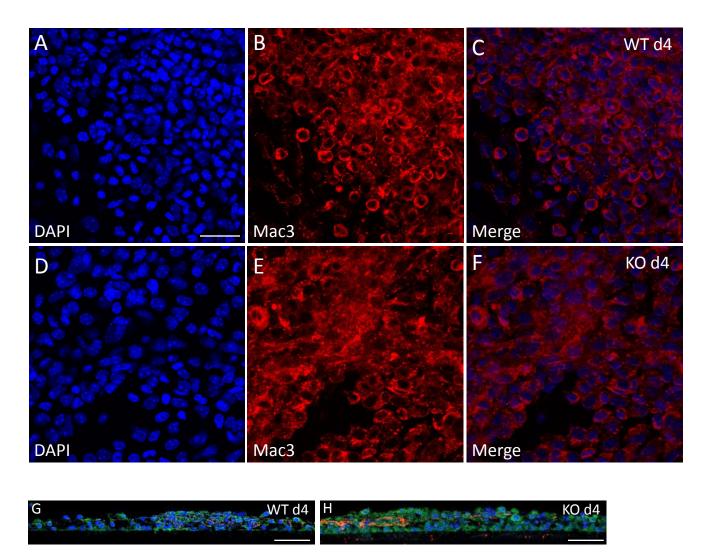
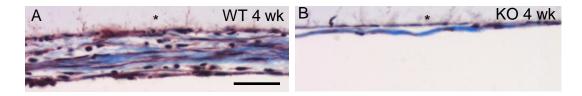


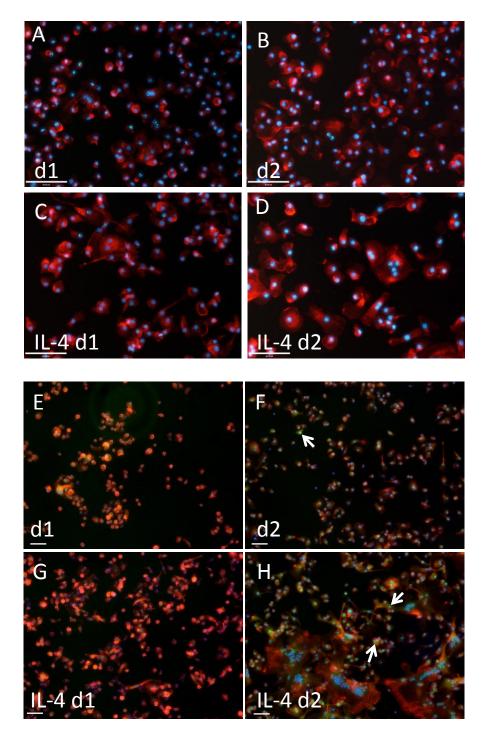
Supplemental Figure 1. Macrophage recruitment and activation following biomaterial implantation. (A) Lavage fluid from the peritoneal cavity of mice implanted with Millipore filters for 2, 4, and 7 d was isolated and analyzed by flow cytometry for the presence of macrophages with the F4/80 antibody. (B) Cells recovered at d2 from WT (top) and MCP1-null (bottom) mice were treated with IL-4 for 24 hr and analyzed by FACS for expression of CD36.



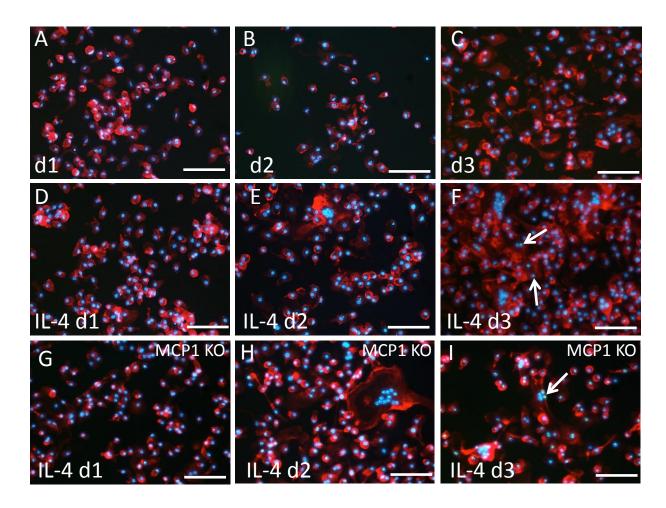
**Supplemental Figure 2.** Analysis of macrophage deposition and expession of iNOS and Arg1. (A-F) Representative confocal images of d 4 Millipore filter implants from WT (A-C) and MCP1 KO (D-F) mice stained with DAPI (A, D), and Mac3 Ab (B, E). Mac3 was detected with a TRITC-conjugated secondary Ab. Merged images are also shown (C, F). (G, H) Representative confocal images of WT (G) and MCP1 KO (H) d 4 implants stained with Arg1 and iNOS Abs. Arg1 and iNOS were detected with a FITC- and TRITC-conjugated secondary Ab, respectively. Nuclei were stained with DAPI. Scale bar =  $50 \mu m$ .



Supplemental Figure 3. (**A-B**) Representative images of 4 wk peritoneal implants from WT (A) and MCP-1 KO (B) mice stained with Masson's Trichrome showing reduced accumulation of collagen fibers (blue) in the latter. Scale bar =  $50 \mu m$ .



**Figure 4.** IL-4-induced activation of NFkB. Representative images of untreated bone marrow derived macrophages (A, B, E, F) or treated with IL-4 (C, D, G, H) for 1 or 2 d and stained with anti p50 (A-D) or anti-p65 (E-H) are shown. Immunoreactivity was detected with FITC-conjugated secondary Ab. Cytoskeleton and nuclei were stained with rhodamine-phalloidin and DAPI, respectively. Arrows indicate nuclear translocation. Scale bar =  $50 \mu m$  (A-H).



**Supplemental Figure 5.** Induction and nuclear translocation of p50 is fusion-dependent. Representative images of untreated WT bone marrow derived macrophages (A, B, C), WT treated with IL-4 (D, E, F), and MCP1 KO treated with IL-4 (G, H, I) for 1, 2, or 3 d and stained with anti p50 are shown. Wt macrophages (A-F) were grown on non-fusion permissive tissue culture plastic. KO macrophages were grown on polystyrene (G-I). Immunoreactivity was detected with FITC-conjugated secondary Ab. Cytoskeleton and nuclei were stained with rhodamine-phalloidin and DAPI, respectively. Scale bar =  $50 \mu m$ .