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Supplemental Figures



Figure S1. Size distribution of PLGA dissolved in either dimethyl carbonate (DMC) or dichloromethane (DCM). For both cases, 1% PLGA was dissolved in either solvent and the single emulsion was formed in 1% PVA at constant stirring condition (1000 rpm). Particles were collected for microscopic size analysis.



Figure S2. Bright field and fluorescent images of PLGA microparticles. Plain PLGA exhibit no autofluorescence in the PE channel (top). PE-streptavidin exhibits moderate non-specific adsorption to PLGA surfaces (middle). PE-streptavidin conjugates efficiently to PLGA surfaces through covalent amide bond (bottom). Scale bar: 30μm.



Figure S3. Effect of PLGA microparticles on TNF- α secretion by BMDM. Levels of TNF- α secreted by BMDM cultured with 28µm PLGA microparticles at the indicated surface coverage percentage, and stimulated with 0.3 ng/mL LPS and 1 ng/ mL IFN γ or without stimulation. Data represents mean ± SEM of the averages of duplicate samples from n≥3 independent experiments. * denotes *p*<0.05.



Figure S4. CD200 modulates macrophage cytokine secretion in response to modified polystyrene (i) and glass surfaces (ii). BMDM were further stimulated with 0.3 ng/mL LPS and 1 ng/mL IFN γ , or 0.3ng/mL LPS, 20 ng/mL IL-4 and 20 ng/mL IL-13, or left unstimulated as a control. Relative levels of TNF- α (A) and IL-10 (B) secretion by BMDM are presented. Experiments were performed in duplicate. Data represents mean \pm SEM of the averages of duplicates from independent experiments n \geq 3. * denotes p<0.05



Figure S5. Particles internalization. (A) Representative bright field and fluorescent images of BMDM with phagocytosed PLGA microparticles. (B) Confocal images of phagocytic BMDM. Cells were stained with red cell tracker. Particles containing fluorescein are depicted as green, and cell nuclei stained with DAPI as blue.