Figure Legends

Figure 1. Comparison of receptor-mediated uptake of acetylated LDL and fluid-phase-mediated uptake of LDL

M-CSF-differentiated human monocyte-derived macrophages were incubated with increasing concentrations of either fluorescent DiI-labeled acetylated LDL, which binds the scavenger receptor, or DiI-LDL for 5 hours. Then, macrophage uptake of the fluorescent lipoproteins was determined. DiI-acetylated LDL uptake shows saturation at a lipoprotein concentration of 80 nM (i.e., 44 ug/ml) consistent with receptor-mediated endocytosis, while DiI-LDL uptake does not show saturation, consistent with fluid-phase pinocytosis. Data adapted from [17●●].

Figure 2. Micropinocytosis and macropinocytosis mediate fluid-phase pinocytosis of LDL

Micropinocytosis includes uptake of fluid into small vesicles by clathrin-mediated, caveolae-mediated, and clathrin and caveolae-independent pinocytosis. Micropinocytosis may be actin-dependent or independent. Macropinocytosis is an actin-dependent pinocytic pathway by which macrophages can engulf droplets of extracellular fluid within large vacuoles formed by fusion of a plasma membrane extension with non-extended plasma membrane (pm) as shown.

Supplemental Online Material

Figure S1. Movie of constitutive macropinocytosis in M-CSF differentiated human monocyte-derived macrophages (from [18●])

Supplemental Video File

Click here to download Supplemental Video File: MOL 22502 Kruth supplim fig 1.mp4