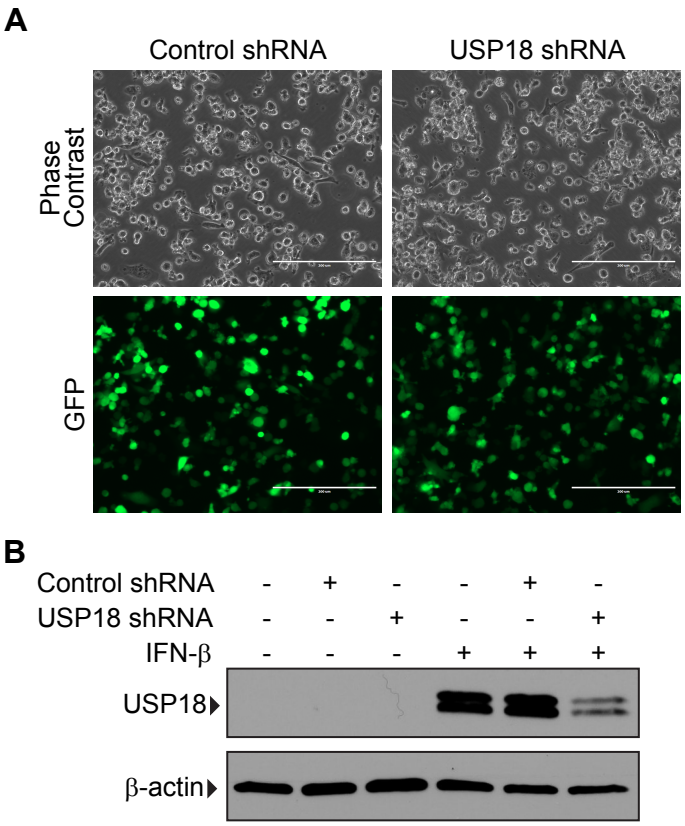
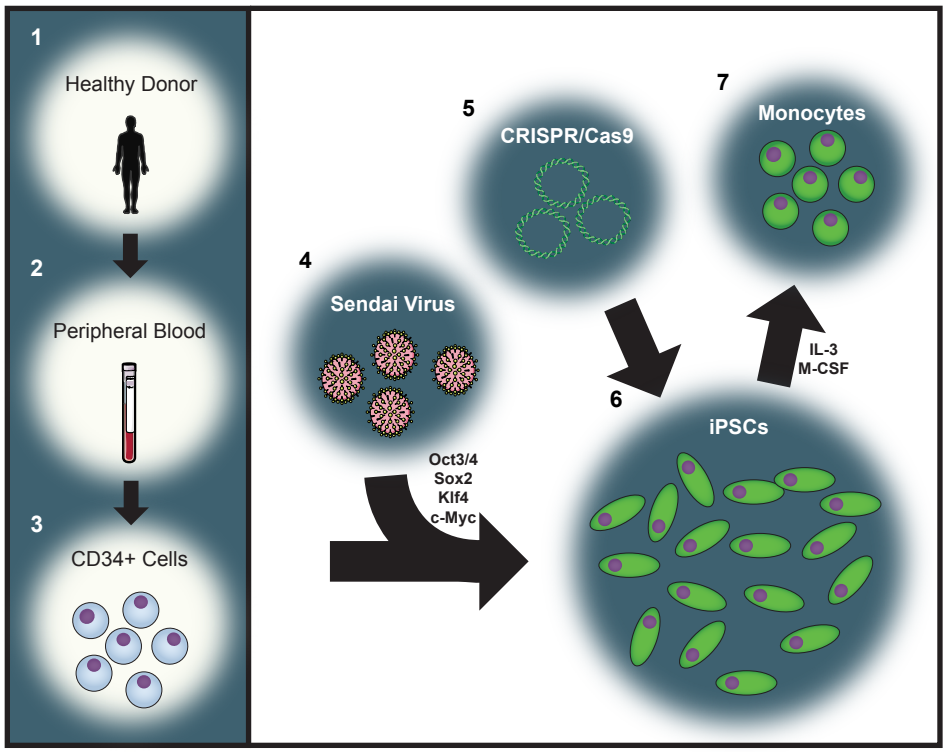
Supplemental Figure 1



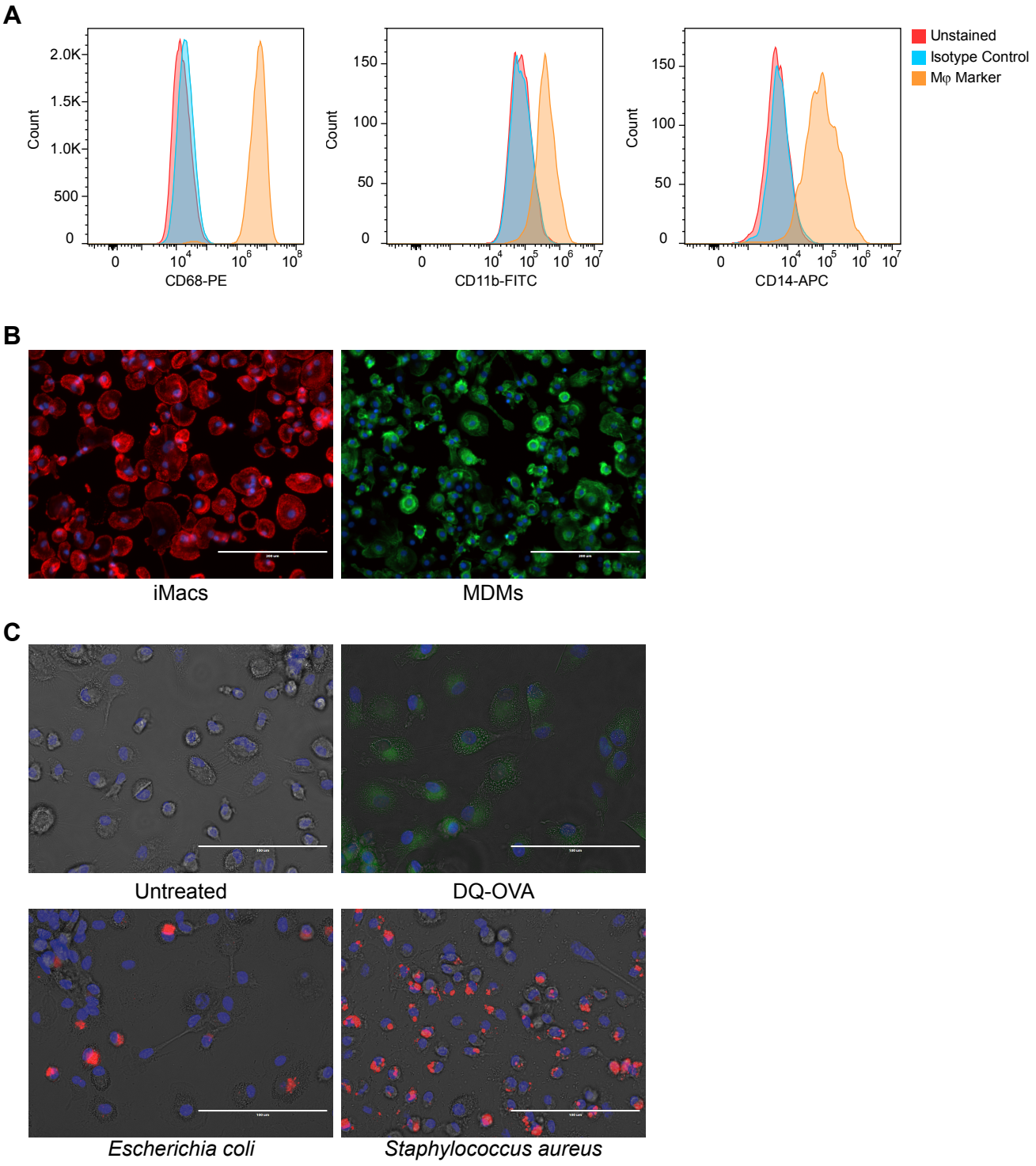
Supplemental Figure 1. USP18 knockdown by shRNA in THP-1 cells. THP-1 cells were transduced with GIPZ lentiviral vectors that express shRNA and GFP from the same transcript. **(A)** After PMA activation, the CMV promoter becomes very active and GFP is readily detectable by epifluorescence microscopy. **(B)** USP18 expression was measured by Western blot to confirm successful knockdown by shRNA.

Supplemental Figure 2



Supplemental Figure 2. Workflow for generating iPSC-derived monocytes. $CD34^+$ cells are isolated from the peripheral blood of healthy human donors (1-3). The $CD34^+$ cells are expanded in vitro and transduced with a Sendai virus that delivers Oct3/4, Sox2, Klf4, and c-Myc (4). These factors induce the $CD34^+$ cells to become pluripotent stem cells (6). These cells can now be modified by CRISPR/Cas9 gene editing or the colonies are scraped from the plate and form embryoid bodies. The embryoid bodies are cultured in the presence of IL-3 and M-CSF and will begin to produce $CD14^+$ monocytes (7). The monocytes are then cultured in M-CSF alone and will differentiate into macrophages. Some images were adapted from Servier Medical Art under a creative commons attribution 3.0 unported license.

Supplemental Figure 3



Supplemental Figure 3. Characterization of iMacs. (A) iMacs are $CD14^+$, $CD11b^+$ and $CD68^+$ as measured by flow cytometry. **(B)** The nuclei (Blue) and actin (red or green) of iMacs and MDMs were stained showing similar morphology. **(C)** iMacs fed DQ-OVA were able to take up the protein and digest the protein with acidic proteases as indicated by GFP fluorescence (top right panel). iMacs were also fed heat-killed pHrodo red-labelled *Escherichia coli* and *Staphylococcus aureus*. The pH sensitive dye fluoresces red when the phagosome acidifies (bottom panels).