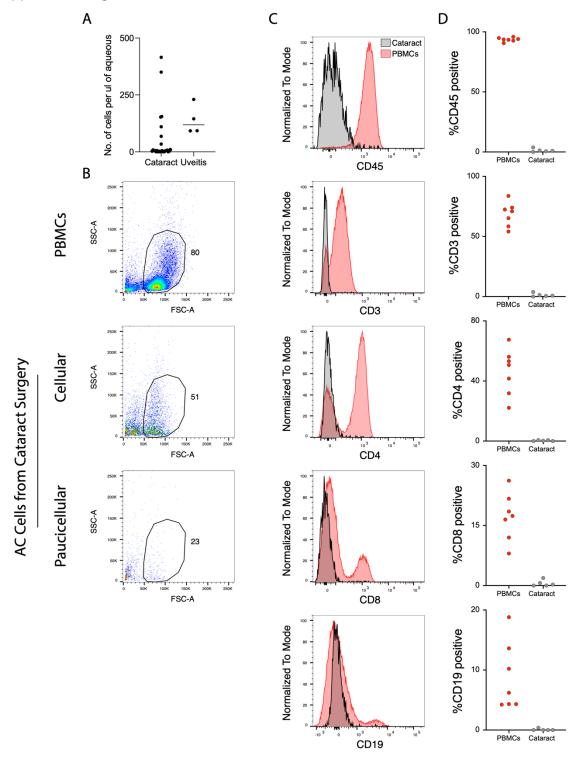
## Supplemental Figure 1



Supplemental Figure 1. Ocular cells isolated from healthy eyes during cataract surgery are non-hematopoietic in origin. Determination of whether hematopoietic cells can be analyzed from the aqueous humor in eyes undergoing cataract surgery. (A) Concentration of anterior chamber (AC) cells extracted through the surgical incision during cataract surgery (n = 26) or through a paracentesis during a uveitis flare (n = 4), as measured by hemocytometer. Analysis was restricted to aqueous samples that lacked contamination of blood from conjunctival vessels into corneal incision. The majority of samples were either completely acellular (23%; no cells) or paucicellular (31%; 5 or less cells per µl of fluid). (B) Flow cytometric analysis of peripheral blood mononuclear cells (PBMCs) or AC cells from cataract surgery. Cellular samples generally contained more than 500 cells. (C, D) Flow cytometry of a subset (n = 5) of aqueous samples with quantifiable cellularity for surface markers of immune cells (gray). Peripheral blood mononuclear cells (PBMCs; red) were a positive control. (C) Representative histograms of indicated hematopoietic lineage marker expression on PBMCs and AC cells isolated during cataract surgery. (D) Quantification of hematopoietic lineage marker expression on PBMCs and AC cells isolated during cataract surgery. The minimal expression of hematopoietic markers, e.g. CD45, CD3, CD4, CD8, or CD19, on cells from the anterior chamber during cataract surgery suggests that the cellularity was non-hematopoietic in origin. These non-hematopoietic cells may therefore be derived from the corneal incision or from the iris, which is medically dilated for surgery.