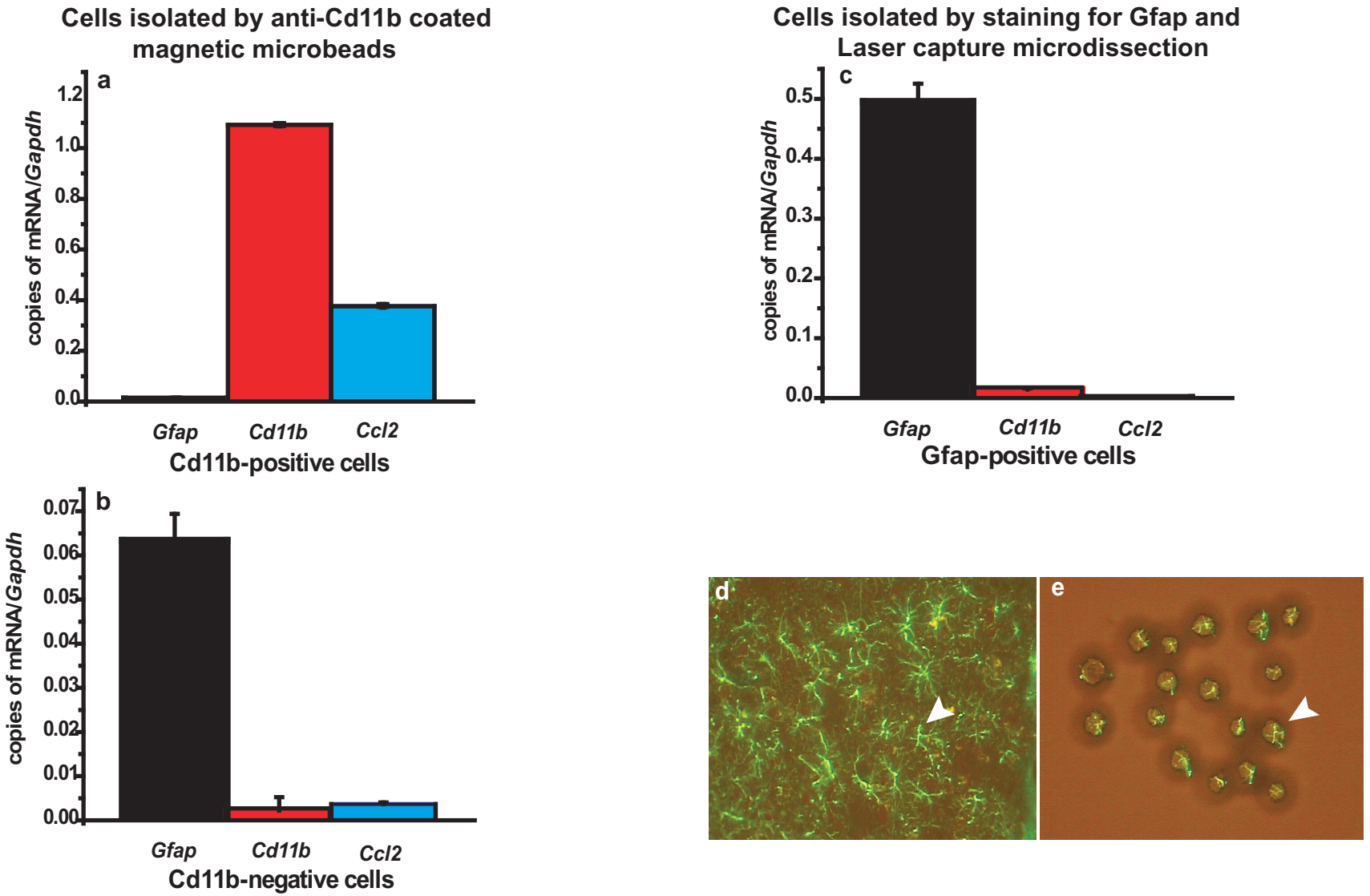

Supplementary Figure 2: *Ccl2* is produced in Cd11b-positive cells in *APP* mice but not in Gfap-positive cells. Fresh mixed brain cells from ***APP*** mice were collected and incubated with anti-mouse Cd11b-coated magnetic beads (Miltenyi Biotec, Auburn, CA). Cd11b-positive cells (i.e. cells that bound the beads-microglia/mononuclear phagocytes) were separated from Cd11b-negative cells (i.e. cells that did not bind the beads-astrocytes and neurons) using a magnet. mRNA was isolated from Cd11b-positive and Cd11b-negative cells and used for measurement of *Gfap*, *Cd11b* and *Ccl2* expression by Q-PCR. **a.** Cd11b-positive cells expressed high levels of *Ccl2* and *Cd11b*, but low levels of *Gfap*. **b.** Cd11b-negative cells expressed low levels of *Ccl2* and *Cd11b*, but high levels of *Gfap*. These data indicate that microglia/mononuclear phagocytes but not astrocytes are the likely source of *Ccl2* in this *APP* mouse model of AD.
To further confirm that astrocytes from *APP* mice do not express *Ccl2*, we stained fresh sections of *APP* brains with anti-Gfap antibodies and isolated Gfap-positive cells (astrocytes) by laser capture microdissection (LCM), using a Veritas (Arcturus) LCM apparatus. **c.** Gfap-positive cells did not express *Ccl2* or *Cd11b*, but expressed high levels of *Gfap*, as expected. **d.** Astrocytes stained brightly with anti-Gfap antibodies in *APP* brain slices. **e.** Individual astrocytes harvested on an LCM cap. The arrowhead points to the same cell in situ (d) and after capture (e). The data shown are from representative experiments, each experiment was repeated twice with similar results.