

Supplemental Figure 1. The characteristics of monocyte-derived macrophages or GBM-educated macrophages. Typical flow-cytometry results of CD80 (upper) and CD206 (lower) surface expression on monocyte-derived M0, M1, M2 cells in vitro, or GBM-educated macrophages (GEMs).



Supplemental Figure 2. The effects of IFN- γ and VEGFR on PD-L1 expression on GBM-educated microglia. a. Typical flow-cytometry results of PD-L1 surface expression on BV-2 cells or GL261-educated BV-2 cells. b. Positive percentage of PD-L1 on the surface of BV-2 cells or GL261-educated BV-2 cells (n=4). ** P<0.01. c. Typical flow-cytometry results of VEGFR1 surface expression on BV-2 cells or GL261-educated BV-2 cells (n=4). d. PD-L1 positive percentage on GL261-educated BV-2 cells (n=4), treated with VEGFR1 NAb and/or rmIFN- γ . * P<0.05, ** P<0.01. e. sVEGFR1 levels in the supernatant of Δ MFI values of BV-2 cells and GL261-educated BV-2 cells (n=4). * P<0.05. P values are achieved by t-test. MG, BV-2 cells; GBM-educated MG, GL261-educated BV-2 cells.



Supplemental Figure 3. The regulation of IFN- γ and VEGFR on VEGF production of GBM-educated macrophages. a. VEGF concentration in the conditioned medium of circulating monocytes, GBM-educated macrophages and macrophages co-cultured with syngeneic T cells (n=5). ** P<0.01. b. VEGF concentration in the conditioned medium of GBM-educated macrophages with or without rhIFN- γ (n=5). * P<0.05. c. VEGF concentration in the conditioned medium of GBM-educated macrophages co-cultured with syngeneic T cells, and treated with VEGFR1 NAb and/or IFN- γ NAb (n=5). * P<0.05. P values are achieved by t-test. GEMs, GBM-educated macrophages.