Human primary glioblastoma tissue was dissociated using the Brain Tumor Dissociation Kit (Miltenyi Biotec) based on papain or trypsin treatment, or a protocol based on collagenase D. Flow cytometric analysis shows the distribution of cells and myelin debris, as well as the percentage of dead cells: forward scatter (cell size), side scatter (granularity), and PI fluorescence (dead cells). Use of collagenase D results in higher granularity of cells and lower viability compared to papain and trypsin. The yield of single cells after papain and trypsin treatment ranges from 5×10^6 to 5×10^7. Variability among experiments is in part due to the heterogeneity of the tumor samples.

Microglia were isolated from a single-cell suspension using MACS® Technology. Dissociation of human primary glioblastoma was performed using the Brain Tumor Dissociation Kit (P) and the gentleMACS® Dissociator. Myelin Removal Beads were used to deplete myelin debris. CD11b (Microglial Microbeads) and an LS Column were used to achieve a purity of 67%. Purified microglia proliferated and showed normal morphology in vitro.

**References**