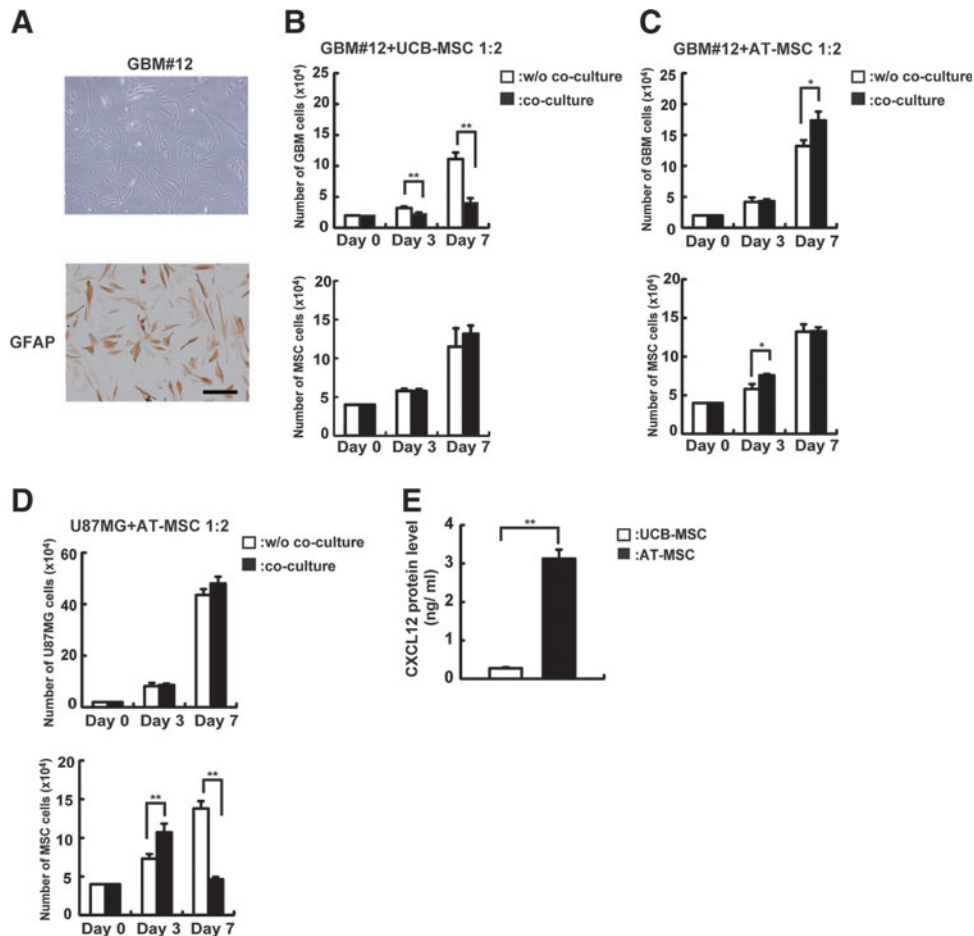


## Supplementary Data



**SUPPLEMENTARY FIG. S1.** Analysis of glioblastoma multiforme (GBM)-derived GBM#12. **(A)** Histological analysis was performed for GBM tissues by immunostaining. Specimens were stained with glial fibrillary acidic protein (GFAP): astrocyte markers. Scale bar indicates 100  $\mu\text{m}$ . **(B)** GBM#12 ( $2 \times 10^4$  cells/well) were cocultured with umbilical cord blood-derived MSCs (UCB-MSCs) ( $4 \times 10^4$  cells/well). After culture for 3 and 7 days, the number and frequency of GBM cells and GFP-labeled UCB-MSCs were measured by a hemocytometer and fluorescence activated cell sorting (FACS). GBM#12 were cocultured with UCB-MSCs at a ratio of 1:2. The *top panel* represents number of GBM, and the *bottom panel* represents number of UCB-MSCs in each time point. *White bar*: w/o coculture; *black bar*: coculture with UCB-MSCs (\*\* $P < 0.01$ ). **(C)** GBM#12 ( $2 \times 10^4$  cells/well) were cocultured with adipose-tissue-derived MSCs (AT-MSCs) ( $4 \times 10^4$  cells/well). After culture for 3 and 7 days, the number and frequency of GBM cells and GFP-labeled AT-MSCs were measured by a hemocytometer and FACS. GBM#12 were cocultured with AT-MSCs at a ratio of 1:2. The *top panel* represents the number of GBM, and the *bottom panel* represents the number of AT-MSCs in each time point. *White bar*: w/o coculture; *black bar*: coculture with AT-MSCs (\* $P < 0.05$ ). **(D)** U87MG was cocultured with AT-MSCs at a ratio 1:2. The *top panel* represents the number of U87MG, and the *bottom panel* represents the number of AT-MSCs in each time point. *White bar*: w/o coculture; *black bar*: coculture with AT-MSCs (\*\* $P < 0.01$ ). **(E)** CXCL12 protein expression was analyzed in the supernatant of UCB-MSCs (*white bar*) and AT-MSCs (*black bar*) by enzyme-linked immunosorbent assay (\*\* $P < 0.01$ ).