



**SUPPLEMENTARY FIG. S2.** Activity of EGFRvIII CAR-transduced healthy donor and glioblastoma (GBM) patient PBLs. PBLs from healthy donor (donor 6) and two GBM patients (GBM-1, GBM-2), which had been stimulated with 50 ng/mL OKT3 on day 0 plus 300 IU of IL-2 and transduced on days 2 and 3, were rapidly expanded (REP) on day 14 with a second OKT3 stimulation plus IL-2 and 100 $\times$  excess 5,000 Rad irradiated PBMC feeders. **(Left)** Flow cytometry of Stim 1 (*top*) and post-REP (*bottom*) UT (red line) and CAR-transduced (blue line) PBLs stained with Ab recognizing the human 139 EGFRvIII CAR scFv. **(Right)** IFN- $\gamma$  production by 18-hr coculture ( $10^5$ : $10^5$  E:T) of untransduced (UT) and human 139 EGFRvIII CAR-transduced (CAR) PBLs with human (U87) gliomas, with (solid black) or without (white) EGFRvIII. IFN- $\gamma$   $\geq 5,000$  pg/mL is off scale.