



*In vivo* study using glioblastoma cells (T98G) treated with miR-520d-5p (520d/T98G) was performed (n=6). Three survived mice were examined the human-derived gene expression in murine brain tissue after 3 month later than intracranial injection. (A) KSN/Slc were anesthetized with sodium pentobarbital (50 mg/kg, i.p.) and placed in a stereotaxic apparatus. During surgery, animal's body temperature was kept at 37° C using a heating pad. The skull was exposed and a small craniotomy was made over the left striatum. A 30G injection needle connected to a 10  $\mu$ l Hamilton syringe through polyethylene tubing was used for 520d/T98G cell transplantation. Injection needle was inserted stereotaxically into the left striatum (A 2.0 mm, L 0.5 mm, D 1.2 mm from bregma) (left) and 1  $\mu$ l of cell suspension ( $1 \times 10^8$  cells/ $\mu$ l) was pressure-injected (right). After injection, the needle was slowly withdrawn and the skull hole was covered with dental cement. The incision was sutured with 6-0 Prolene. After recovery from surgery, animals were returned to their home cage. (B) Immunohistochemistry was performed using anti-hGFAP antibody, resulting that human-derived GFAP protein expression was confirmed as a part of glial cells and vascular endothelial cells in murine thalamus (left to right; x40, x200, x400).