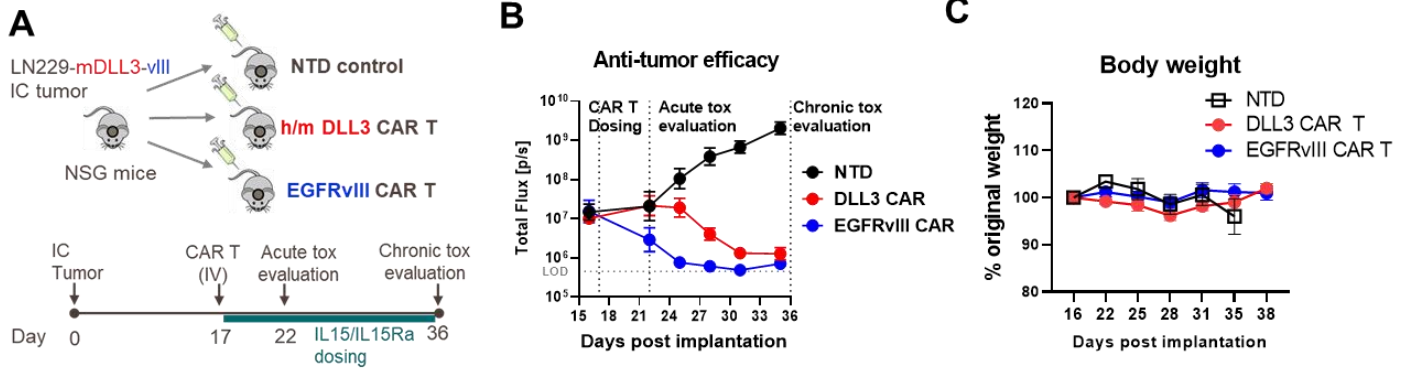


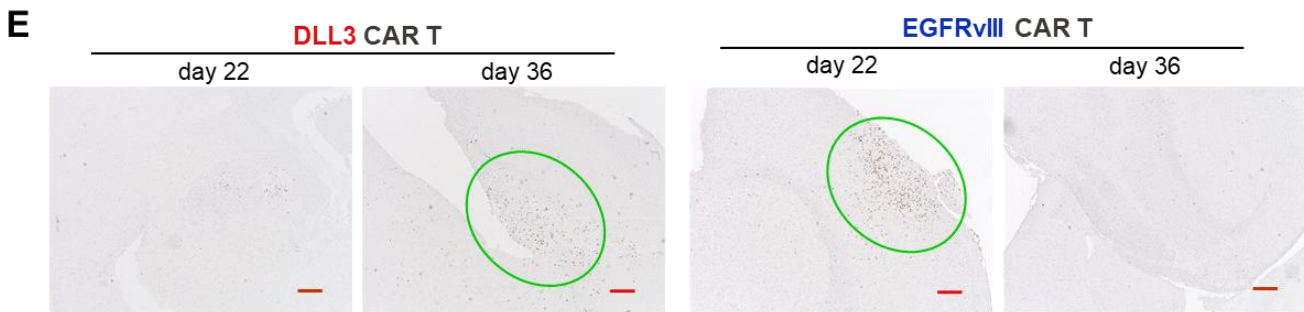
Fig. S7



D **Histopathology Analysis**

| Group | Acute tox evaluation (day 22) | | | Chronic tox evaluation (day 36) | | |
|----------------|--------------------------------|---|-------------|----------------------------------|-------------|--|
| | Animal | Brain | Pituitary | Animal | Brain | Pituitary |
| NTD | #1 | Tumor | No findings | #3 | No findings | No findings |
| | #2 | No findings | No findings | #4 | Tumor | No findings |
| | #5 | No findings | No findings | #7 | Tumor | No findings |
| | #6 | No findings | No findings | #8 | Tumor | No findings |
| | #10 | No findings | No findings | #9 | Tumor | No findings |
| DLL3 CAR T | #12 | Tumor | No findings | #11 | Tumor | Infiltrate, mononuclear cell (Grade 2) |
| | #14 | Tumor | No findings | #13 | Tumor | Infiltrate, mononuclear cell (Grade 2) |
| | #15 | Tumor | No findings | #16 | Tumor | Infiltrate, mononuclear cell (Grade 1) |
| | #19 | No findings | No findings | #17 | No findings | Infiltrate, mononuclear cell (Grade 2) |
| | #20 | Tumor | No findings | #18 | No findings | Infiltrate, mononuclear cell (Grade 2) |
| EGFRvIII CAR T | #22 | No findings | No findings | #21 | No findings | No findings |
| | #25 | Infiltrate/gliosis, cortical, focal (Grade 2) | No findings | #27 | No findings | No findings |
| | #26 | Infiltrate, meninges, focal (Grade 1) | No findings | #29 | No findings | No findings |
| | #31 | Infiltrate/gliosis, cortical, focal (Grade 2) | No findings | #30 | No findings | No findings |
| | #32 | Gliosis/infiltrate, cortical, focal (Grade 1) | NA | #35 | No findings | No findings |

**Severity: Grade 1=Minimal; Grade 2=Mild; Grade 3=Moderate



F **Staining of pituitary hormones (day 36)**

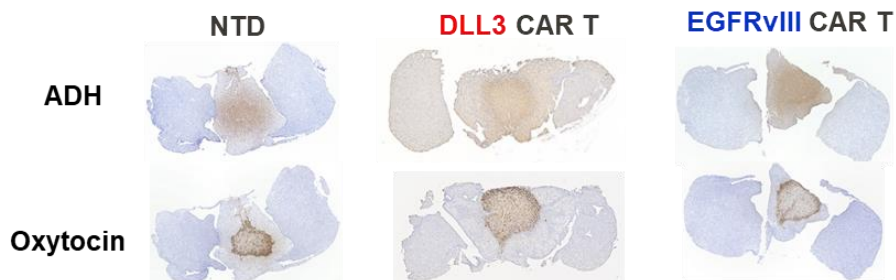


Fig. S7. DLL3 CAR T cells demonstrate activity in intracranial tumor model without causing toxicity. (A) & (B) Design and anti-tumor efficacy of in vivo study with intracranial tumor expressing DLL3 and EGFRvIII to understand tox liabilities. LOD, limit of detection. Plots represent only the animals remaining on D36 (n=5). Error bars represent SEM. (C) DLL3 CAR T cells or EGFRvIII CAR T cells did not induce obvious changes of body weight throughout the study. Plots represent only the animals remaining on D36 (n=5). Error bars represent SEM. (D) Histopathology analysis showed mild infiltration/inflammation in pituitary of DLL3 CAR-treated animals. No findings for brain samples. (E) Infiltration of DLL3 CAR T and EGFRvIII CAR T cells in the area of glioma in the brain. Green circles show the area of infiltration. (F) Hormone secreting cells were not ablated despite T cell infiltration.