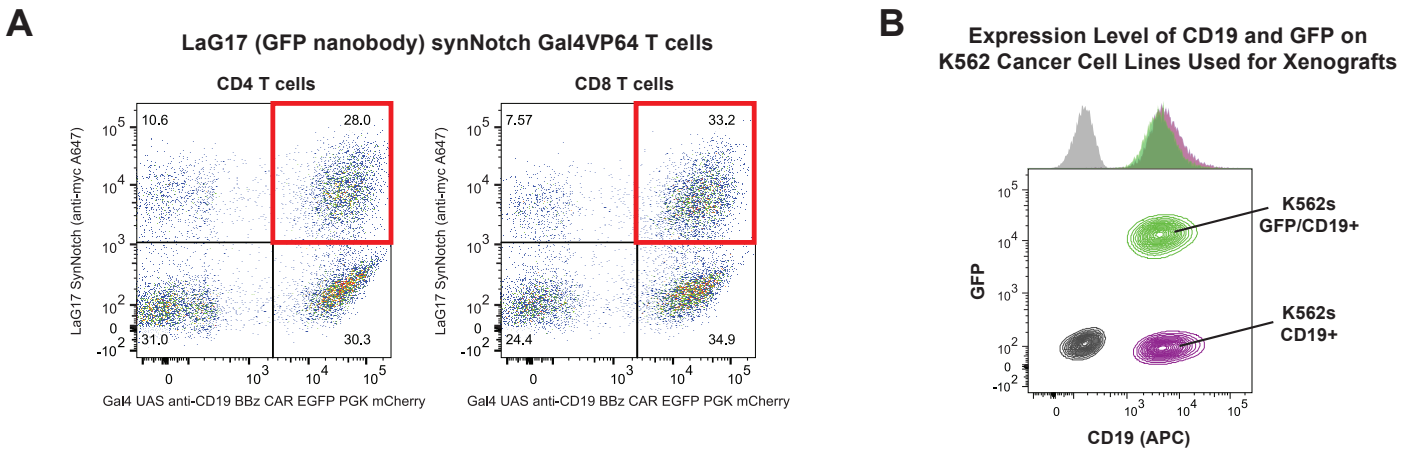
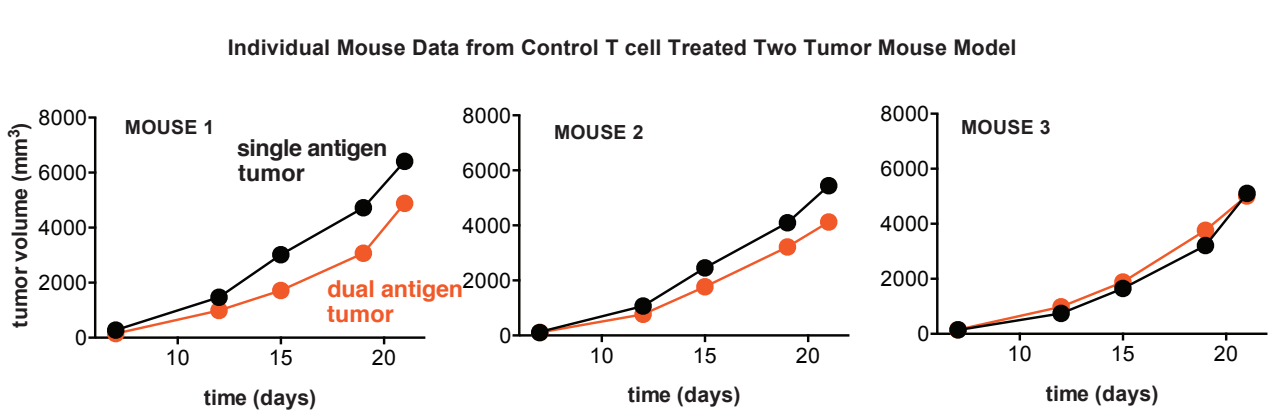
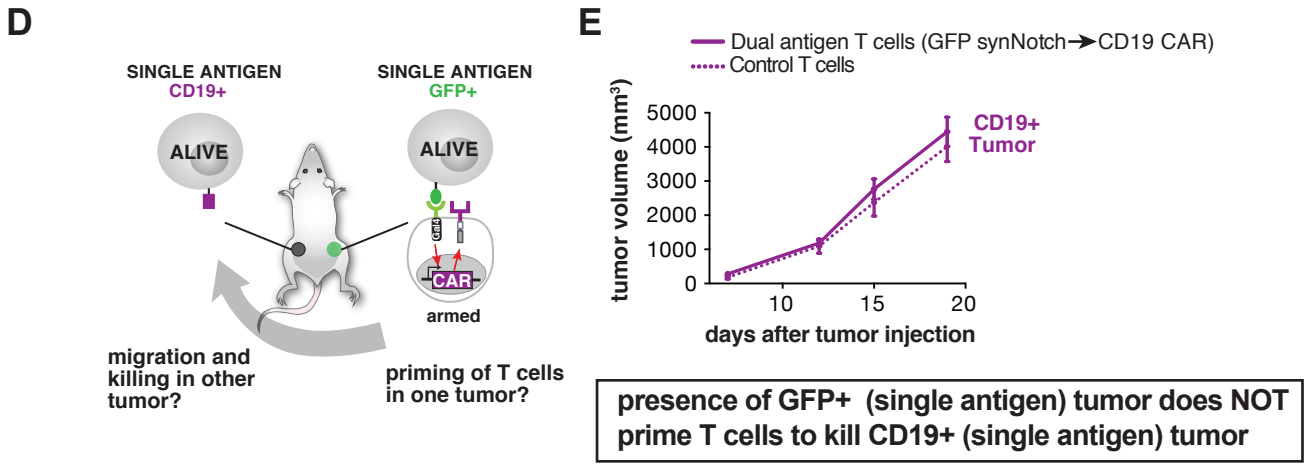

A
LaG17 (GFP nanobody) synNotch Gal4VP64 T cells
CD4 T cells
CD8 T cells
10.6
28.0
31.0
30.3
7.57
33.2
24.4
34.9
LaG17 SynNotch (anti-myc A647)
Gal4 UAS anti-CD19 BBz CAR EGFP PGK mCherry
B
Expression Level of CD19 and GFP on
K562 Cancer Cell Lines Used for Xenografts
K562s
GFP/CD19+
K562s
CD19+
GFP
CD19 (APC)


C
Individual Mouse Data from Control T cell Treated Two Tumor Mouse Model
MOUSE 1
MOUSE 2
MOUSE 3
single antigen
tumor
dual antigen
tumor
tumor volume (mm³)
time (days)


D
SINGLE ANTIGEN
CD19+
SINGLE ANTIGEN
GFP+
ALIVE
ALIVE
CAR
armed
migration and
killing in other
tumor?
priming of T cells
in one tumor?
E
Dual antigen T cells (GFP synNotch→CD19 CAR)
Control T cells
CD19+
Tumor
tumor volume (mm³)
days after tumor injection
presence of GFP+ (single antigen) tumor does NOT
prime T cells to kill CD19+ (single antigen) tumor