

Supplementary Figure 1: T-cell proliferative and homing responses measured by RT-Rack are antigen dependent and can be evoked by small tumors. Groups of C57BL/6 mice were injected s.c. with 9.27P at 14 (big, (\blacklozenge)), 6 (medium, (-)) or 3 (small, (\diamondsuit))) days before receiving T cell injection. (A) Tumor mean diameter ± standard deviation from the 3 different groups at the day of T cell injection. (B) Mice from (A) were injected with R-TCRI T cells and imaged for T cell signal over time (n=3-4 mice per group). The background signal for RLuc is set as abscissa. (C) T cell signal from a representative mouse from each group imaged at day 7 after T cell injection is shown. Images were acquired for 1 min. using medium binning. The signal intensity is shown as p/s/cm²/sr and depicted by a pseudocolor scale.

Suppl Figure 2



Days post T cell injection

50 µm

Suppl Figure 3



Supplementary Figure 3: MCA205-TagLuc metastases in the lung of Rag-/- mice express Tag and FLuc. Rag^{-/-} mice were injected with MCA205-TagLuc cells i.v. Eleven days later, sections of lungs from tumor challenged mice were stained for H&E, Tag and FLuc.

Suppl Figure 4



Supplementary Figure 4: T cells from tumor-bearing mice predominantly have effector memory phenotype. Two weeks after s.c. challenge of Rag^{-/-} (\blacksquare), LTL (\blacksquare) and C57BL/6 (\square) mice with 9.27P tumors, mice were injected with R-TCRI T cells. Cells were collected 7 days following adoptive transfer and analyzed for the expression of CD44 and CD62L following gating on CD8⁺ V β 7⁺ markers. Shown are bar graphs summarizing the percentage TILs (A) and splenocytes (B) with a naïve (CD44⁻ CD62L⁺), effector (CD44⁻ CD62L⁻), effector memory (CD44⁺ CD62L⁻) and central memory (CD44⁺ CD62L⁺) phenotypes. Splenocytes from tumor-free littermates are shown as controls (C). The experiment is representative of 2 independently performed experiments.