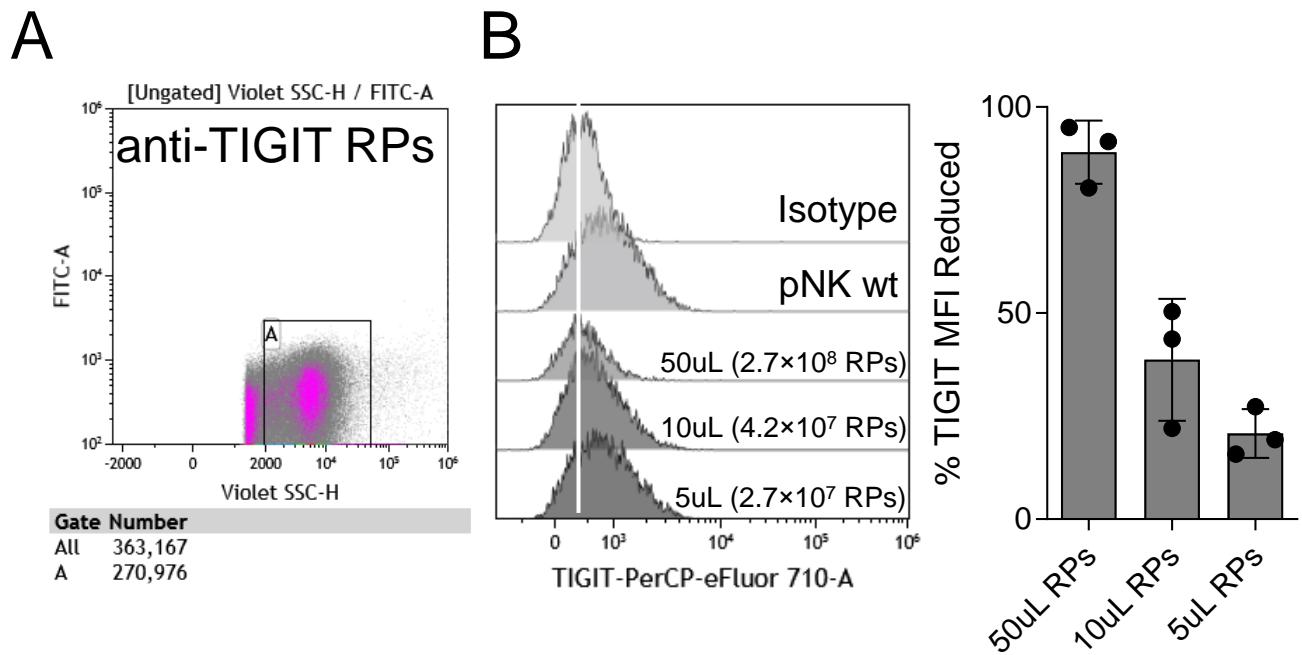


**Supplemental information**

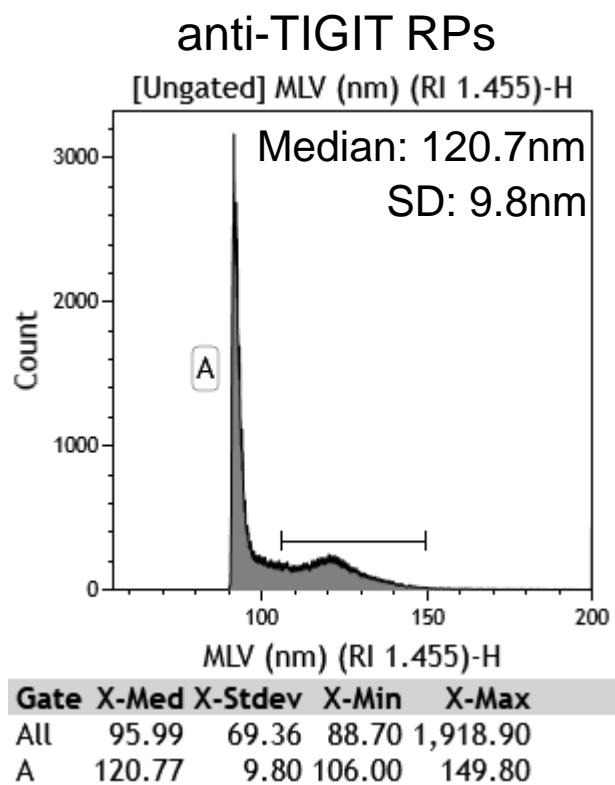
**Simultaneous engineering of natural killer  
cells for CAR transgenesis and CRISPR-Cas9  
knockout using retroviral particles**

**Dong-Hyeon Jo, Shelby Kaczmarek, Oksu Shin, Lisheng Wang, Juthaporn Cowan, Scott  
McComb, and Seung-Hwan Lee**

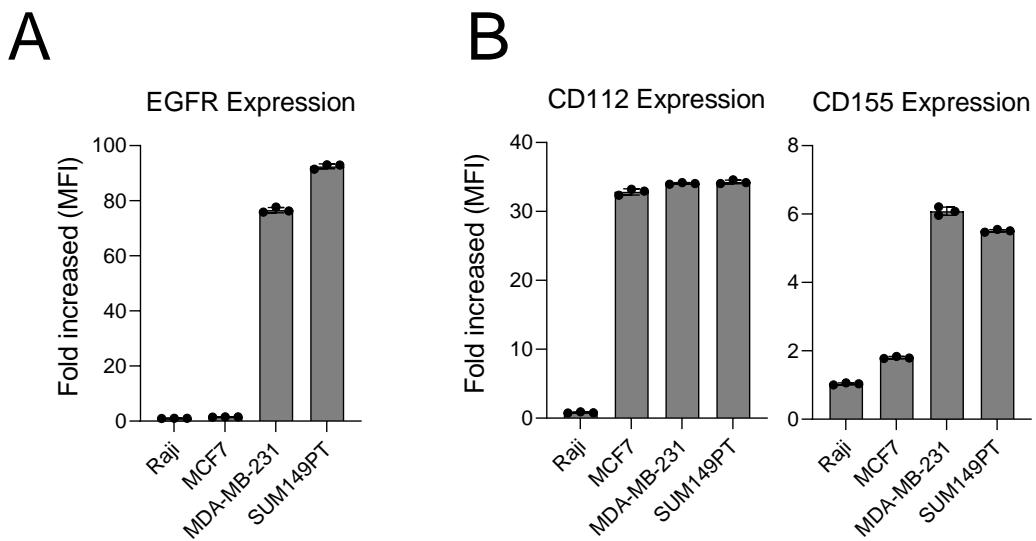


**Figure S1. The number of retroviral particles (RPs) for human primary NK cell TIGIT knockout**

**(A)** Representative dot-plot to gate RPs **(B)** Volume-based TIGIT knockout in NK cells and the number of particles in each volume.



**Figure S2.** Size of the RPs calculated by FCMPASS based on polystyrene standard beads and MLV refractive index, 1.455. X-Med; Median, X-Stdev (SD); Standard deviation, X-Min; Minimum, X-Max, Maximum.



**Figure S3. Determination of EGFR and TIGIT-ligand expression, CD112 and CD155, on various cancer cells. (A)** Surface EGFR expression on the B cell, estrogen receptor-positive, and triple-negative breast cancer cell lines. **(B)** Surface expression of TIGIT ligand, CD112 and CD155, on the cancer cell lines.