



Figure S1, related to Figure 1.

(A) Comparative assessment of expression of HER2 CAR according to the anti-4D5 epitope idiotype antibody recognizing HER2 directly compared to the detection of the tNGFR tag. The latter is a preferred method for sorting and phenotyping of cells since it has no direct biological effect on T cell activation/function.

(B) Kinetics of expression of dCas9 and Q8 by qPCR. **(C) CAR-T manufacture process** – CD3⁺ T cells are negatively selected from peripheral blood monocytes and stimulated with OKT3/CD28. LdCK is added for transduction a day later followed on the second day by HER2-TEV. Five days after the original stimulation the activation is removed and on the following day cells are sorted to enrich the tNGFR⁺/Q8⁺ population. The expansion is then continued till time of release between day 14 of production. Cells are also tested at that point for permanence of transduction as shown in **Figure 1A**.