Figure S1. Binding assay of anti-CD22 antibodies. (A) Binding assay was performed. (B) Flow cytometry was performed using 0.5 μM each scFv, APC-conjugated anti-C κ secondary antibody, and Raji cells. scFv, single chain variable fragment; MFI, mean fluorescence intensity.

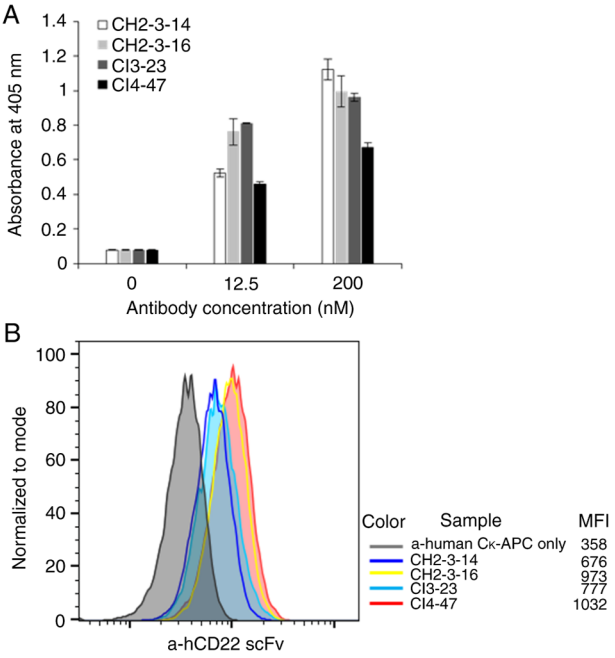

Figure S2. Myc+ CAR-NK-92 cells after thawing. All the CAR-NK-92 cells expressed high levels of Myc. The horizontal lines indicate the gated cell populations, and the values of the Myc+ cell population are displayed (%). Blue, isotype control; red, CAR-NK-92 cells; NK-92, untransfected NK-92 cells. CAR, chimeric antigen receptor; NK, natural killer.

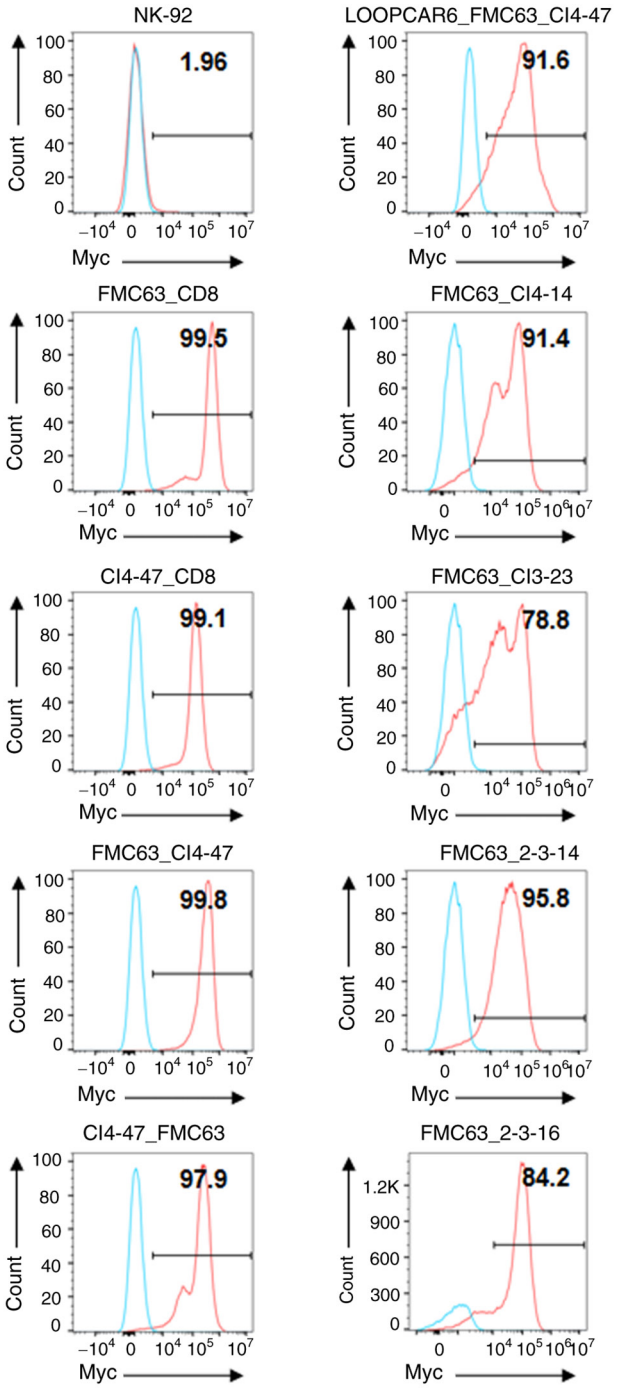

Figure S3. Flow cytometric gating strategies for *in vitro* and *in vivo* analysis. The horizontal lines indicate the gated cell populations; values represent gated cell populations (%). CFSE, carboxyfluorescein diacetate succinimidyl ester; FSC, forward scatter; SSC, side scatter.

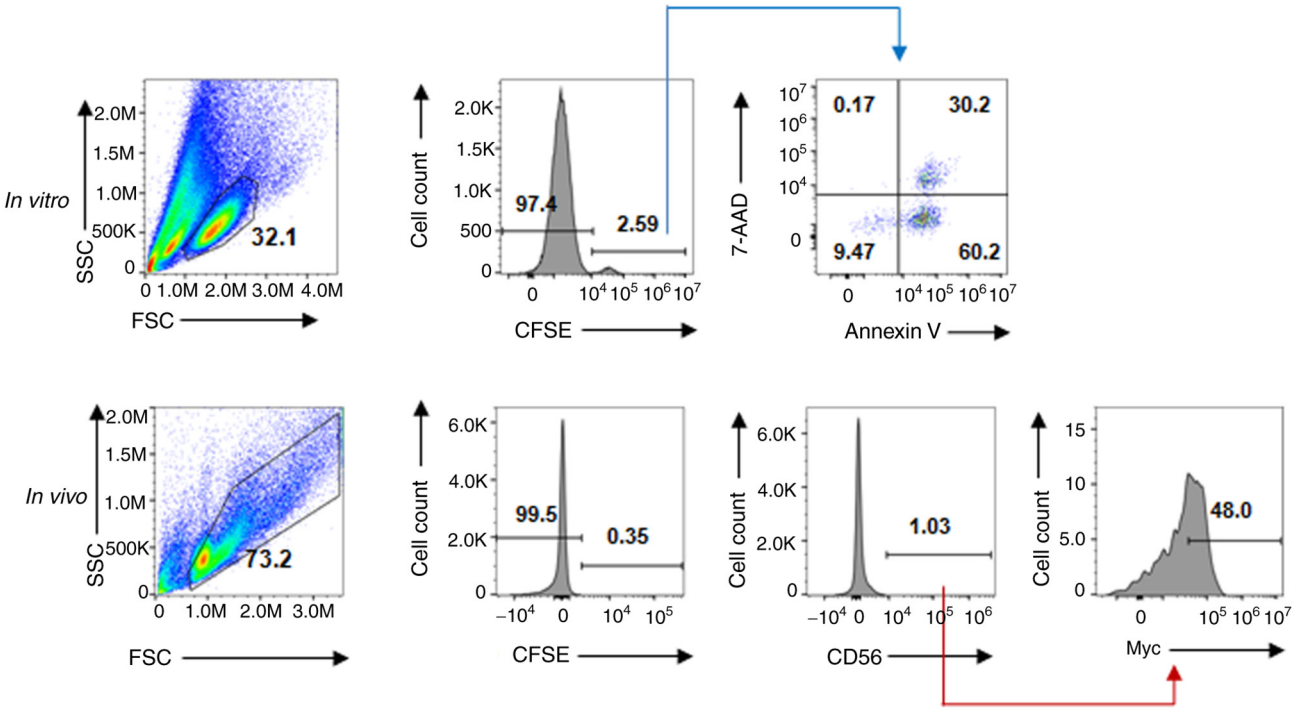

Figure S4. Expression of CD19 and CD22 in OCI-Ly7 cells. Blue, isotype control; red, CD19 or CD22.

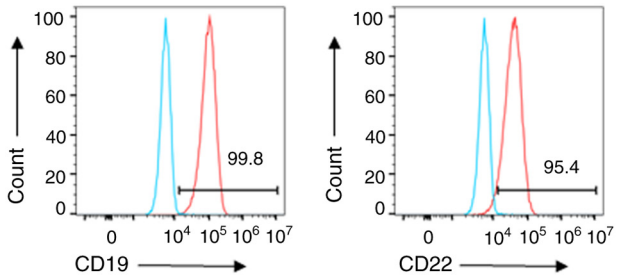

Figure S5. NV control does not change the viability of OCI-Ly7 cells. (A) NV control containing a GFP gene was transfected into NK-92 cells and sorted by flow cytometry. (B) OCI-Ly7 cells were labeled with EF670, and co-incubated with NK-92 cells or NK-92 cells transfected with NV for 4 h and stained with 7-AAD and Annexin V. Representative flow cytometric plots are displayed. Summary of OCI-Ly7 cell death (C) and numbers of live OCI-Ly7 cells (D). Mean ± SD are displayed (n=2). NV, naked vector control; GFP, green fluorescent protein; NK, natural killer.