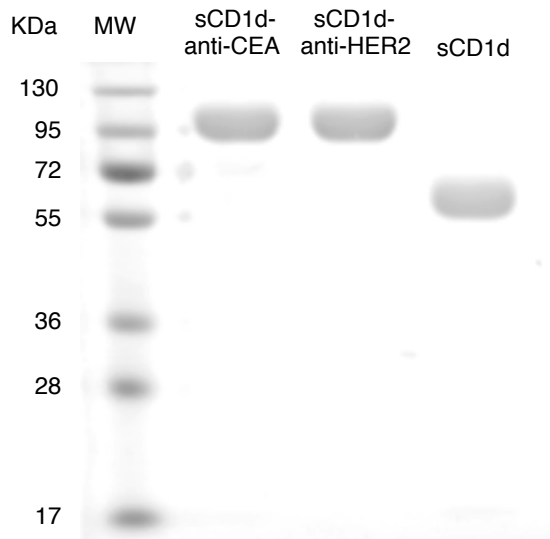
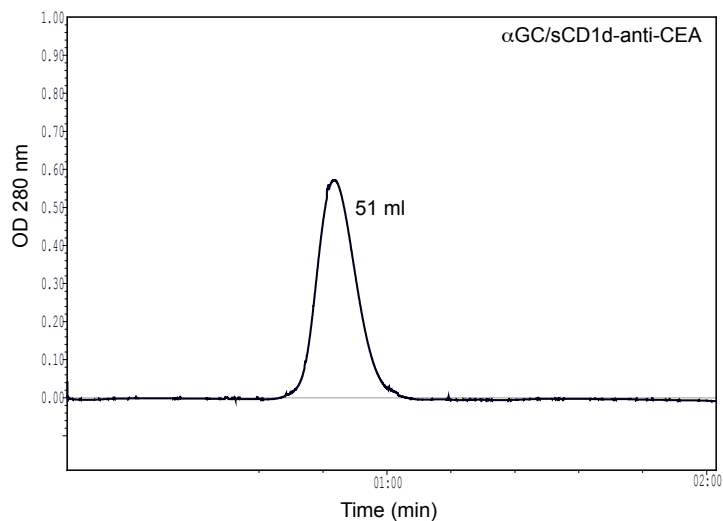


Supplementary figure 1

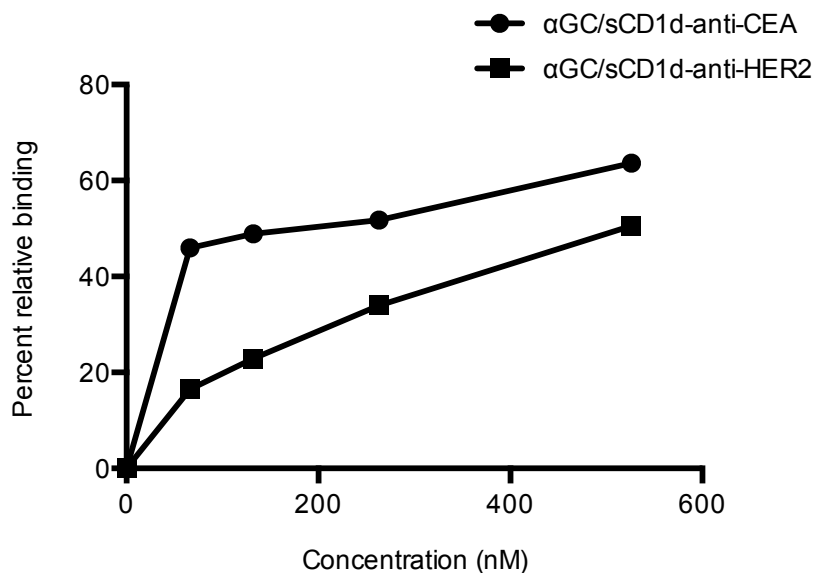
A



B

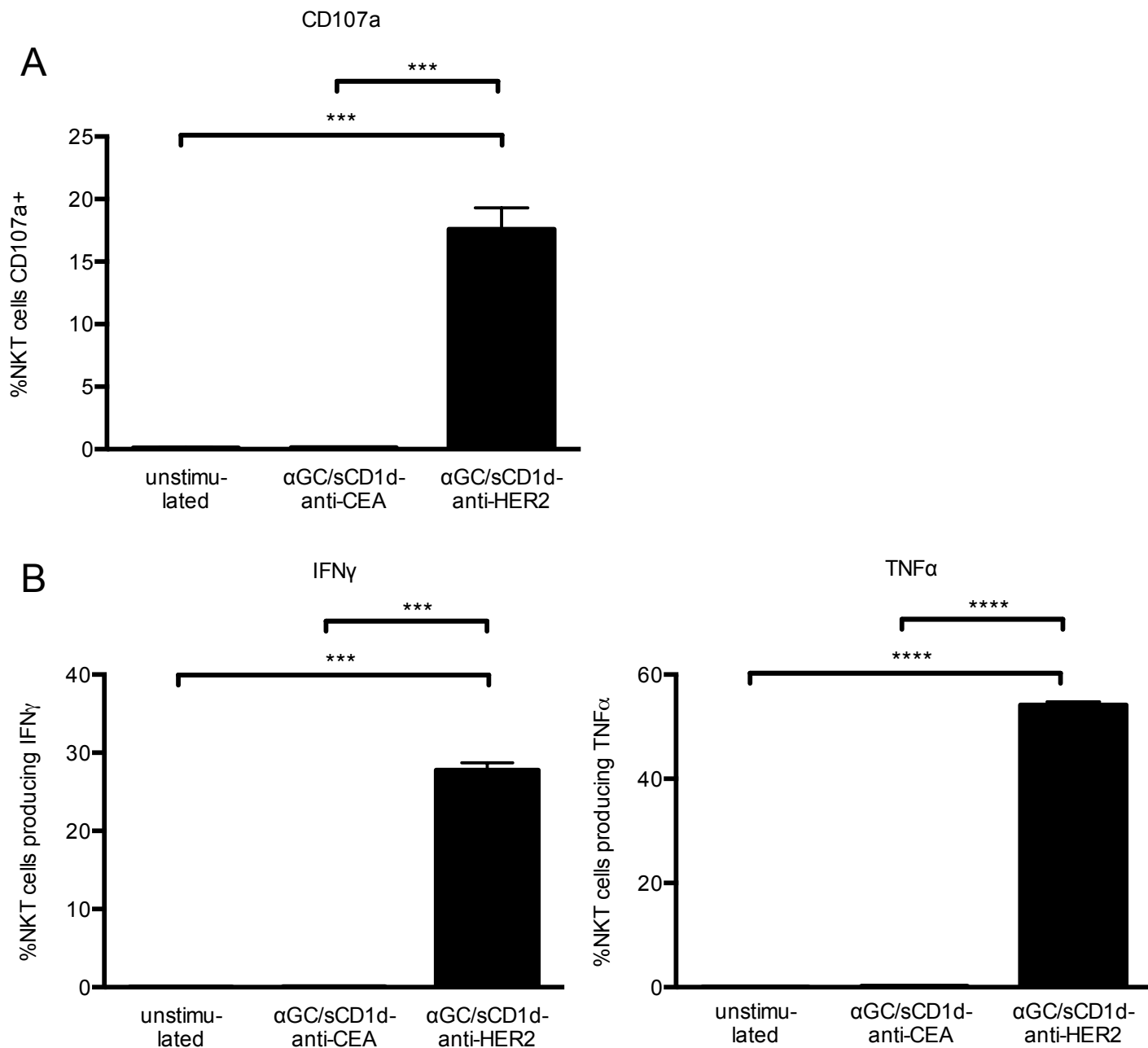


C



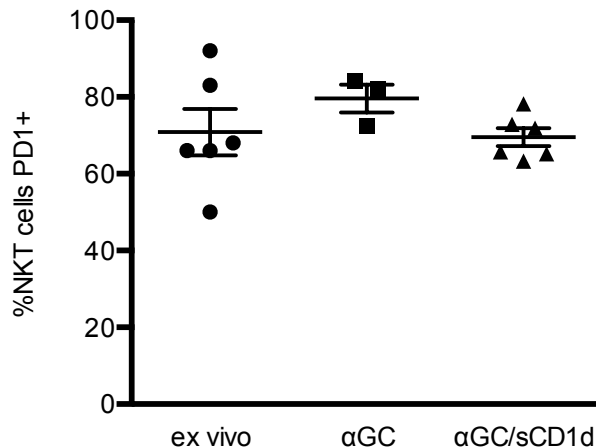
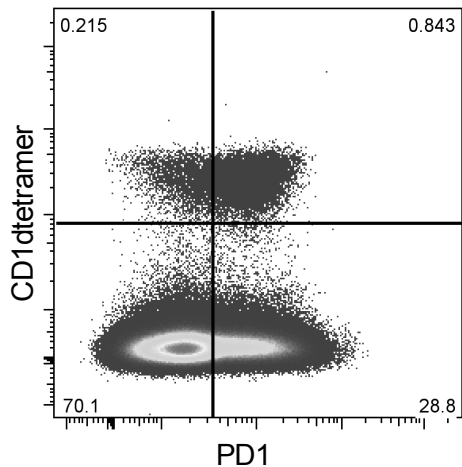
Supplementary Fig 1. Characterization of the CD1d-anti-CEA fusion protein. **A** The purities of sCD1d fusion proteins are shown in a 10% SDS-PAGE after purification by Ni-NTA chromatography and **B** FPLC Sephacryl S100 profile after loading with αGC. **C** Titration of the binding of the sCD1d-anti-HER2 or sCD1d-anti-CEA on B16-HER2 or B16-CEA cells. Data are displayed as the relative percentage of the binding of the respective full anti-HER2 Herceptin or anti-CEA antibodies. Detection was performed using anti-CD1d-FITC and anti-human IgG FITC, respectively. For detail methods see Stirnemann et al, JCI, 2008 (Reference 19).

Supplementary figure 2



Supplementary Fig 2. The activation state of iNKT cells with either targeted or non-targeted fusion proteins. iNKT cell clones were incubated for four hours with SKBR3 tumor cells alone or in the presence of α GC/sCD1d-CEA or α GC/sCD1d-HER2. Results are shown as percentages of CD3⁺CD1d-tetramer⁺ effector cells expressing CD107a (A), IFN γ and TNF α (B). *** P <0.001, **** P <0.0001. A detail description can be found in the materials and methods section.

Supplementary figure 3



Supplementary Fig 3. Expression of PD1 on human iNKT cell lines. Human PBMCs were stimulated as described in Fig 1. iNKT cells were labeled with human anti-PD1 antibody and analyzed with a LSRII (BD Biosciences) and the acquired data were processed using FlowJo software (Tree Star Inc.).