

Figure S1. Purity and molecular weight analysis of expressed and labeled proteins. Proteins used in this study were expressed in expi293 cells and purified with a MabSelect SuRe purification column. The proteins were labeled with IRDye680RD or IRDye800CW and analysed for (a) purity and (b) molecular weight.

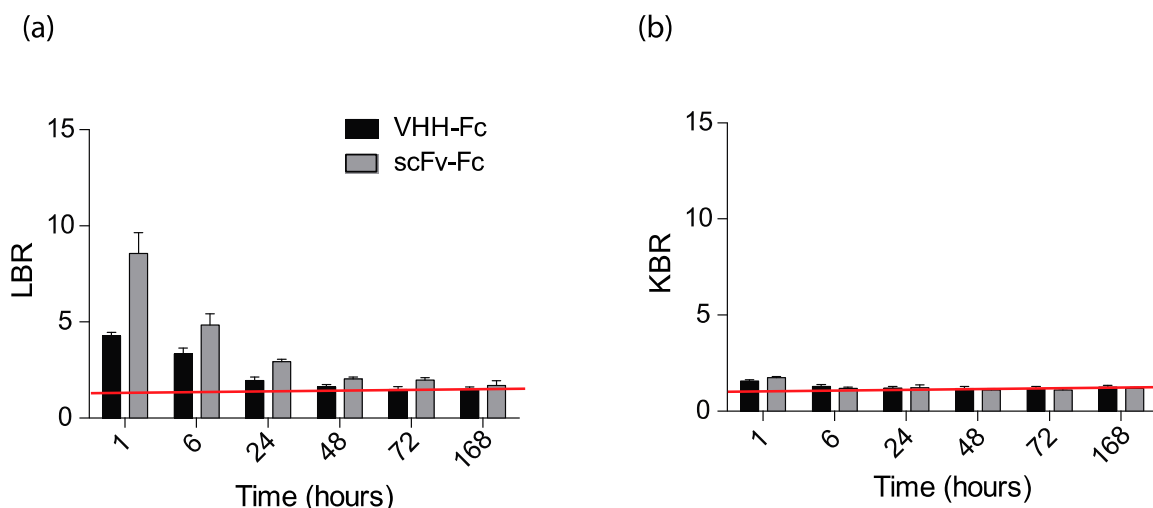


Figure S2. Liver-to-background and kidney-to-background ratios for VHH-Fc and scFv-Fc. CD-1 nude mice bearing FaDu xenografts were injected with targeted VHH-Fc or scFv-Fc and imaged over time. The (a) liver-to-background ratio (LBR) and (b) kidney-to-background ratio (KBR) were quantitated. Red line drawn at a TBR of 1. Error bars show the standard error of mean and representative of at least three mice.

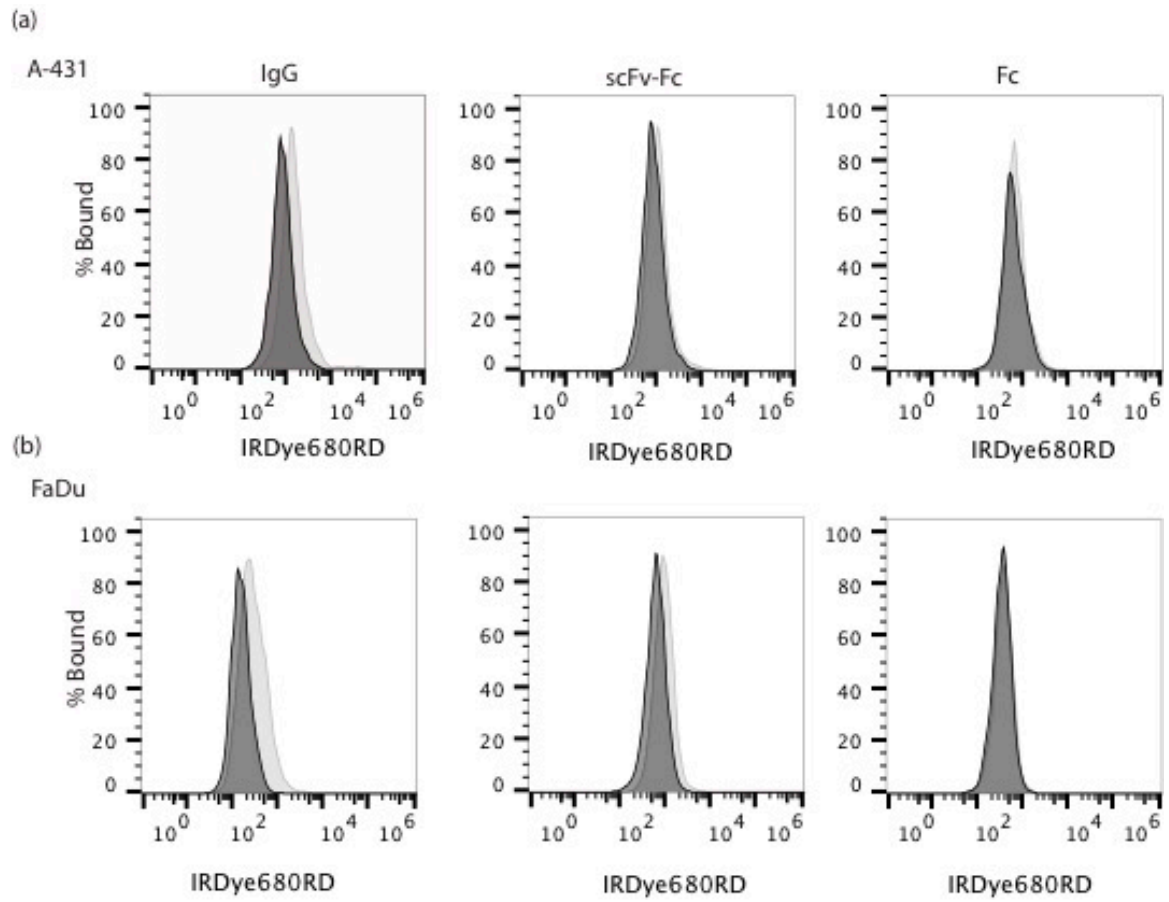


Figure S3. IgG, scFv-Fc and Fc do not bind to FaDu or A-431 cells. **IRDye680RD-labeled** IgG, scFv-Fc or Fc were mixed at a concentration of 100 nM with (a) A-431 or (b) FaDu cells and analyzed by flow cytometry.

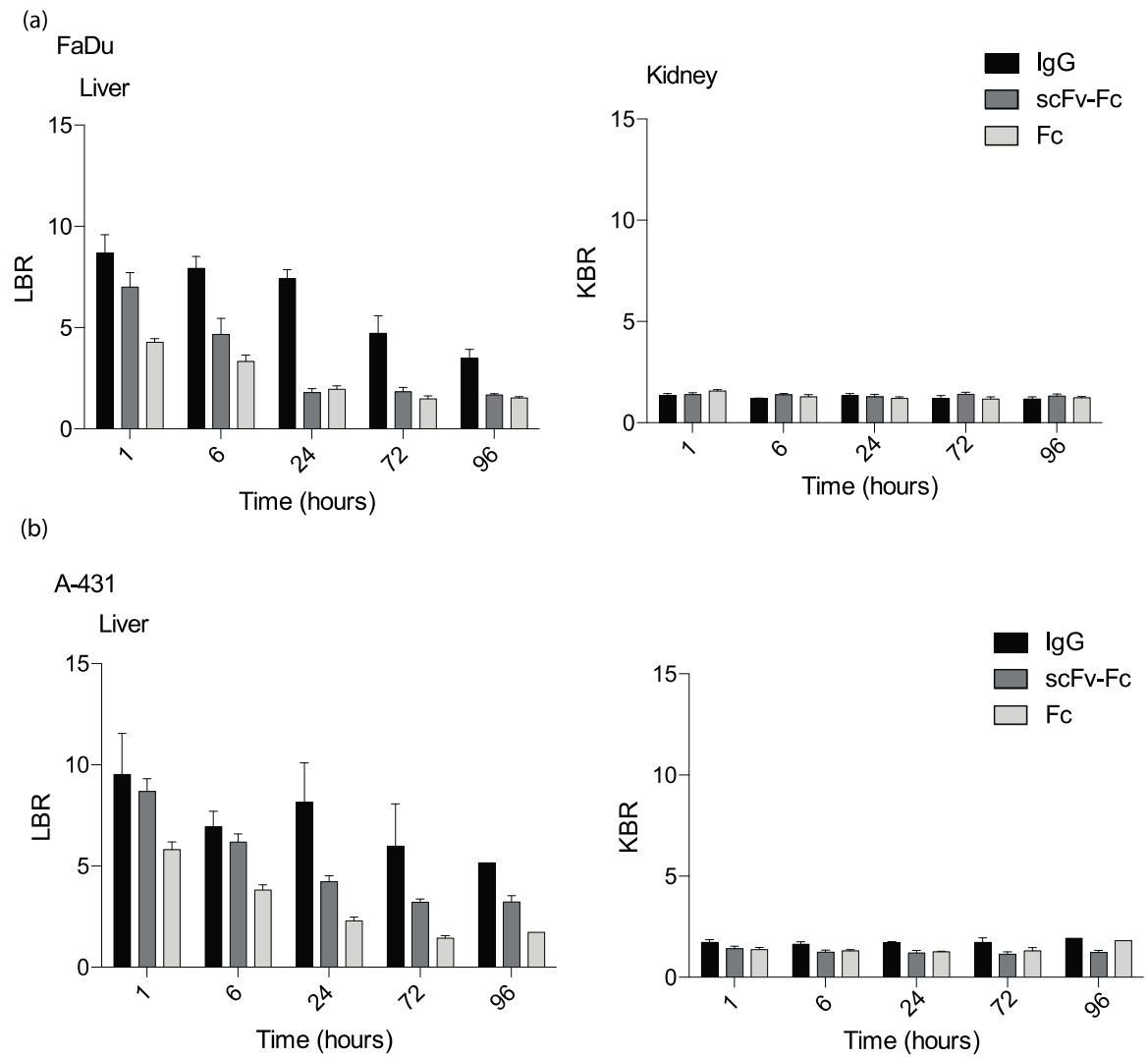


Figure S4. Liver-to-background and kidney-to-background ratios for IgG, scFv-Fc, and Fc. CD-1 nude mice were injected with IgG, scFv-Fc or Fc1 in mice bearing (a) FaDu or (b) A-431 xenografts and imaged over time. The liver-to-background ratio (LBR) and kidney-to-background ratio (KBR) were quantitated. Error bars show the standard error of mean and representative of at least three mice.