

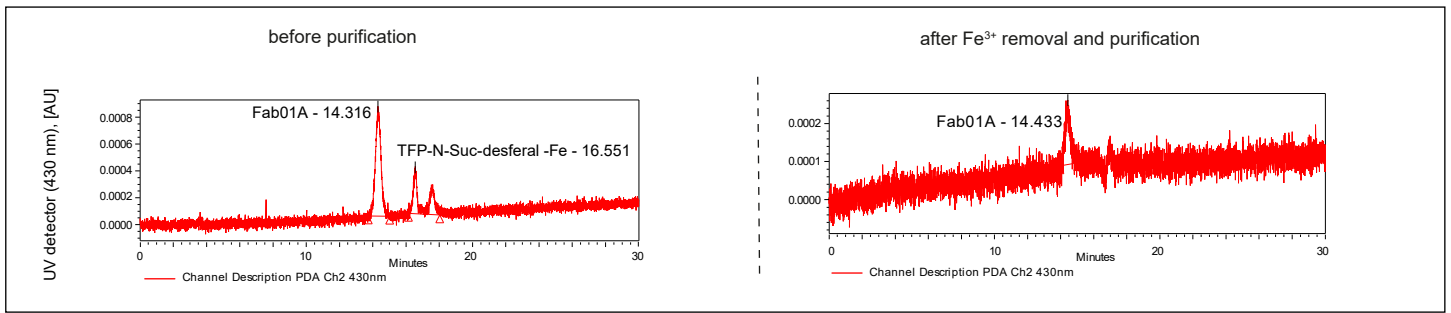
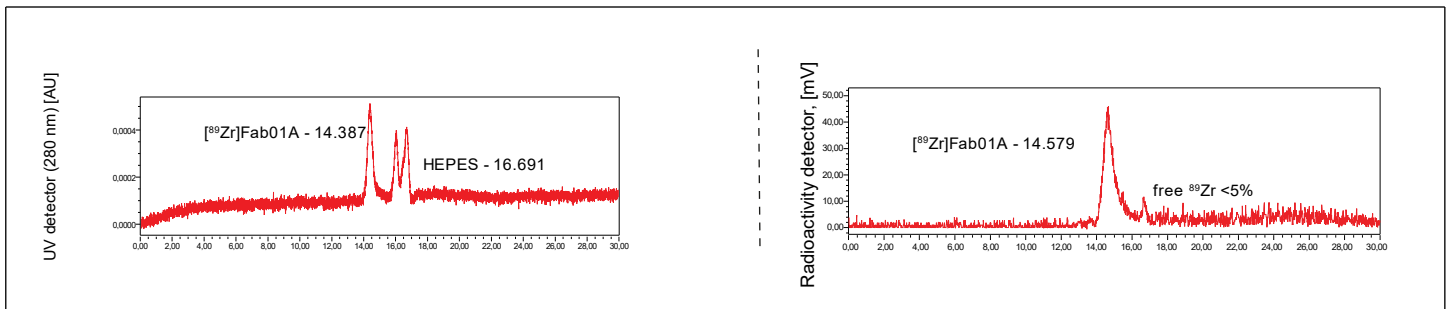
Supplementary Figure 1. Tracer labeling

A) Optimization with different time points was assessed by instant thin-layer chromatography, where retardation factor of radiolabeled Fab fragment is 0.0 and complexed 68Ga is 1.0

B) In the same manner was assessed amount of activity needed to achieve RCP >90%.

C-D) Purity and characterization of radiolabeled Fab fragment was done with SE-UPLC chromatograms using UV detection at 280 nm (protein) and radioactivity detector

Left panel shows chromatograms of unpurified reaction mixtures (Fab, 68GaCl and HEPES) and right panel – purified Fab by miniPD10 desalting column

E**F**

Supplementary Figure 1. Tracer labeling

E) SE-UPLC chromatograms of hCD103.Fab01A conjugated with the chelator TFP-N-Suc-desferal-Fe using UV detection at 430 nm (Fe^{3+}).

F) SE-UPLC chromatograms of [^{89}Zr]Zr-hCD103.Fab01A using UV detection at 280 nm (protein) at 280 nm and radioactivity detector