Supporting Information

SPR analysis of BsAb-lysozyme interaction

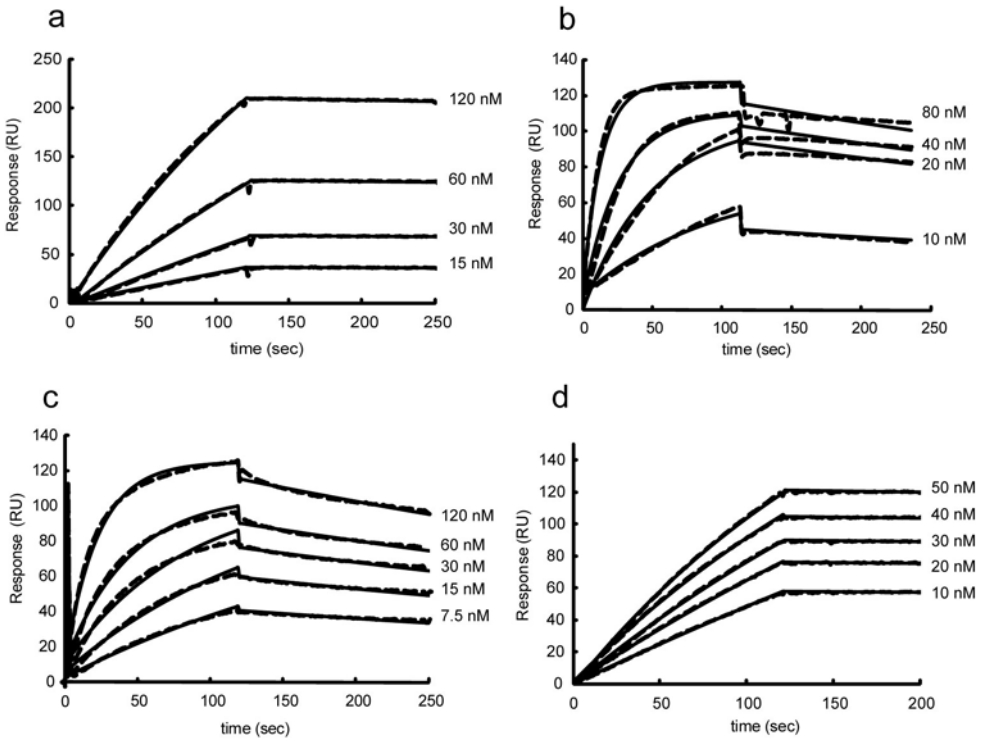

Figure S1. SPR sensorgrams of PT21 (a), GR31 (b), diabody (c), and HyHEL10 scFv (d) were shown as dashed lines. The solid lines show the binding curves fitted globally to a 1:1 interaction model. All experiments were performed in the presence of surfactant (0.1% Tween20).

Metal Specificity of an anti-gold BsAb

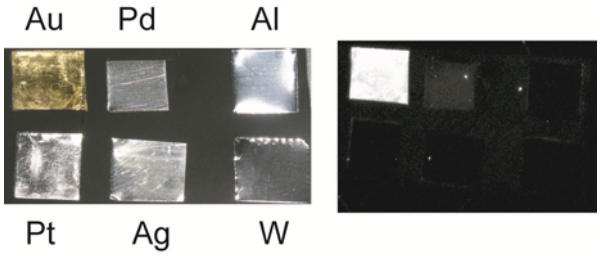

Figure S2. Gold, platinum, palladium, silver, aluminum, and tungsten plates were attached to a polypropylene plate. The plate was soaked for 1 hour in PBS-T (0.1% Tween 20) with BsAb GR31 fused with a c-myc tag and then washed four times with PBS-T. Binding to the metals was detected by using anti c-myc antibody conjugated with horseradish peroxidase and ECL Western blotting detection reagent (GE Healthcare).

Adsorption experiments

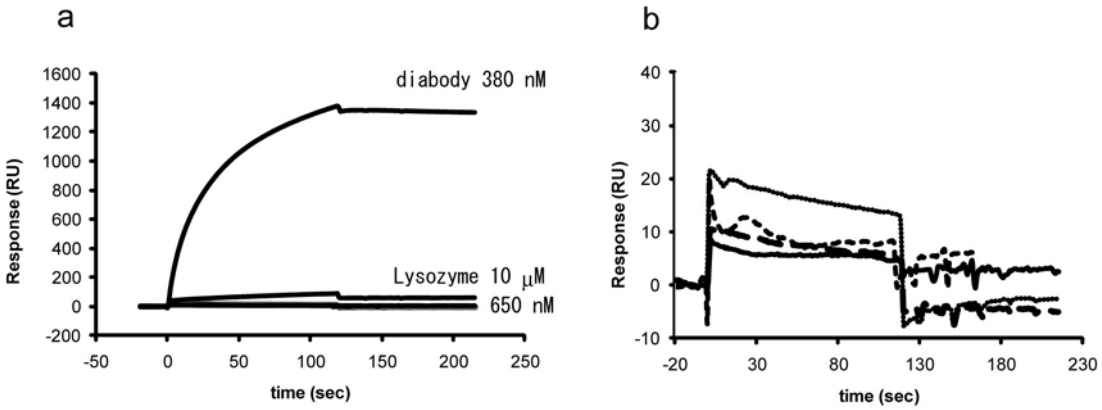

Figure S3. (a) Adsorption of proteins was assayed with Biacore 2000 (GE Healthcare). Diabody (380 nM) and lysozyme (10 μM or 650 nM) were injected to gold surface. The running buffer to be used in the experiment was PBS containing 0.1% Tween20. In the presence of the surfactant, injections of 650 nM lysozyme resulted in negligible responces. (b) A magnified figure of four independent injections of 650 nM lysozyme.