## **Electronic Supplementary Information (ESI)**

## A scanometric antibody probe for facile and sensitive immunoassays

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**Fig. S1** Characterization of Protein G-GBP-Au probe. (a) SDS-PAGE analysis of expressed and purified protein G-GBP, (b) TEM images of a bare gold nanoparticle (Au) and protein G-GBP-Au probe, and (c) UV-visible absorption spectra for Au and protein G-GBP-Au.



**Fig. S2** Analysis of binding interaction between protein G-GBP-Au probe and human IgG. In the presence of reducing reagents Au, Au-IgG, protein G-GBP-Au probe or protein G-GBP-Au-IgG mixtures were analysed by (a) SDS-PAGE or (b) Western blotting using goat anti-human IgG-HRP.



**Fig. S3** SDS-PAGE analysis of IgGs bound to protein G-GBP-Au probe. Human, rabbit, and mouse IgGs were incubated with protein G-GBP-Au probe and bound IgGs were applied to a 10% SDS polyacrylamide gel.