Supporting Information

Zwitterionic Polydopamine/Protein G Coating for Antibody Immobilization: Toward Suppression of Nonspecific Binding in Immunoassays

Jihyun Byun,† Soojeong Cho,‡ Jeong Moon,†§ Hongki Kim,† Hyunju Kang,† Juyeon Jung,†,& Eun-Kyung Lim,†,& Jinyoung Jeong,‖& Hyun Gyu Park,§ Woo Kyung Cho,*,‡

and Taejoon Kang*,†,&

†Bionanotechnology Research Center, KRBIB, Daejeon 34141, Korea
‡Department of Chemistry, Chungnam National University, Daejeon 34134, Korea
§Department of Chemical and Biomolecular Engineering, KAIST, Daejeon 34141, Korea
*Department of Nanobiotechnology, KRBIB School of Biotechnology, UST, Daejeon 34113, Korea
‖Environmental Disease Research Center, KRBIB, Daejeon 34141, Korea

*E-mail: kangtaejoon@kribb.re.kr (T.K.); wkcho@cnu.ac.kr (W.K.C.)
Figure S1. Fluorescence images of *E. coli* O157:H7 attached to bare, ZW-DOPA-coated, and ZW-DOPA/Protein G-coated glass substrates. Scale bar denotes 50 μm.
Figure S2. (a) Fluorescence images of ZW-DOPA/Protein G-coated glass substrates after Alexa647-conjugated antibody immobilization. The concentration of protein G was varied from 0.5 to 25 mg/mL. (b) Corresponding plots of fluorescence intensity on ZW-DOPA/Protein G-coated glass substrates after Alexa647-conjugated antibody immobilization.
Figure S3. Plot of 8-bit grayscale values on ZW-DOPA/Protein G-coated PET, PS, and PTFE substrates after pH1N1 detection with the naked eye.
Figure S4. Absorbance spectrum of urchin Au NPs. The inset is a TEM image of an urchin Au NP.
Figure S5. Plot of $1615 \text{ cm}^{-1}$ band intensity as a function of pH1N1 concentration.