Electronic Supplementary Material (ESI) for New Journal of Chemistry.

Supplementary Information

Sensitive detection of dengue virus NS1 by highly stable affibody-functionalized gold nanoparticles

Jinho Bang [ab], Heesun Park [a], Won Il Choi [a], Daekyung Sung [a], Jin Hyung Lee [a], Kuen Yong Lee[b], Sunghyun Kim [*a]

[a] Korea Institute of Ceramic Engineering and Technology, Center for Convergence Bioceramic Materials, 202 Osongsaengmyeong 1-ro, Cheongjusi, Chungcheongbuk-do, South Korea

[b] Department of Bioengineering, Hanyang University, Seoul, 133-791, South Korea

*Correspondence:

Tel: +82-43-913-1512; Fax: +82-43-913-1598; E-mail: shkim0519@kiect.re.kr (S. Kim)

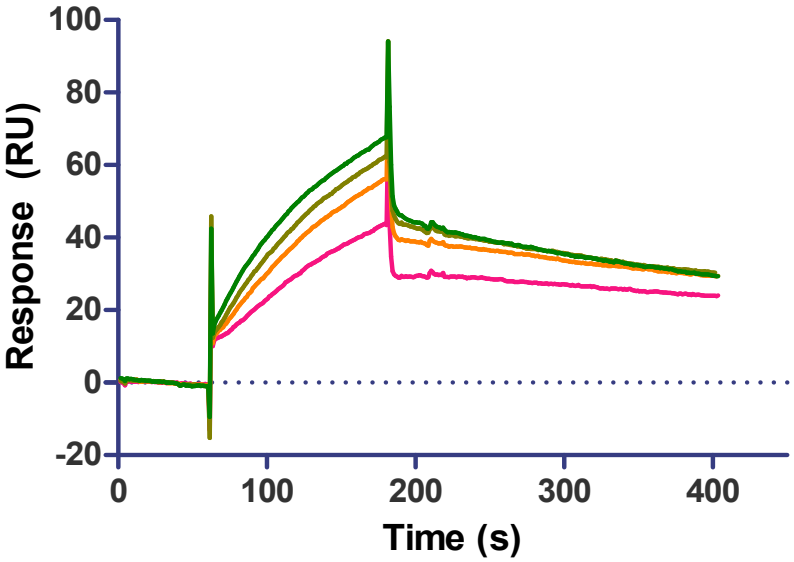

Figure S1. Affinity analysis of $Z_{NS1}16$. Different concentrations of $Z_{NS1}16$ (2, 3, 4, and 5 μM) were applied to an NS1-immobilized chip.

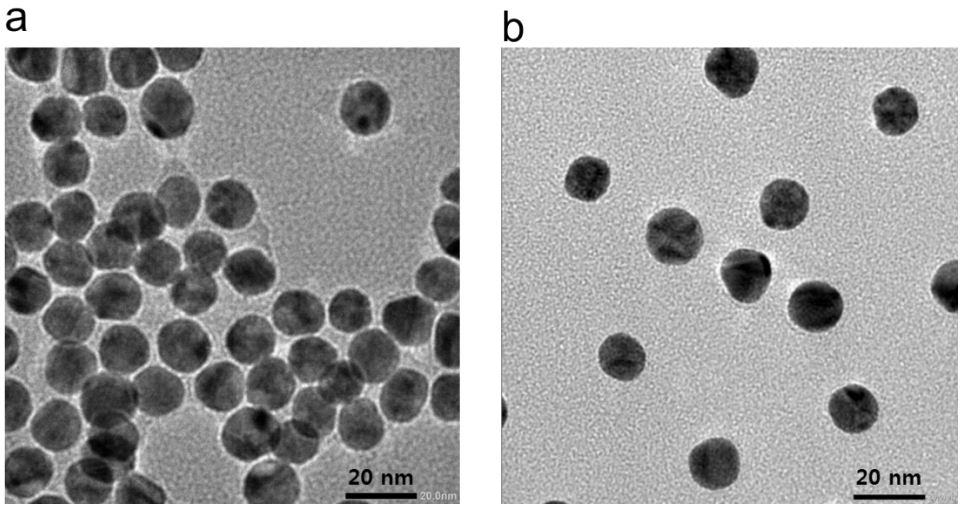

Figure S2. Transmission electron microscopy (TEM) analysis of (a) AuNPs and (b) $(Z_{NS1}12)_2$-AuNPs.

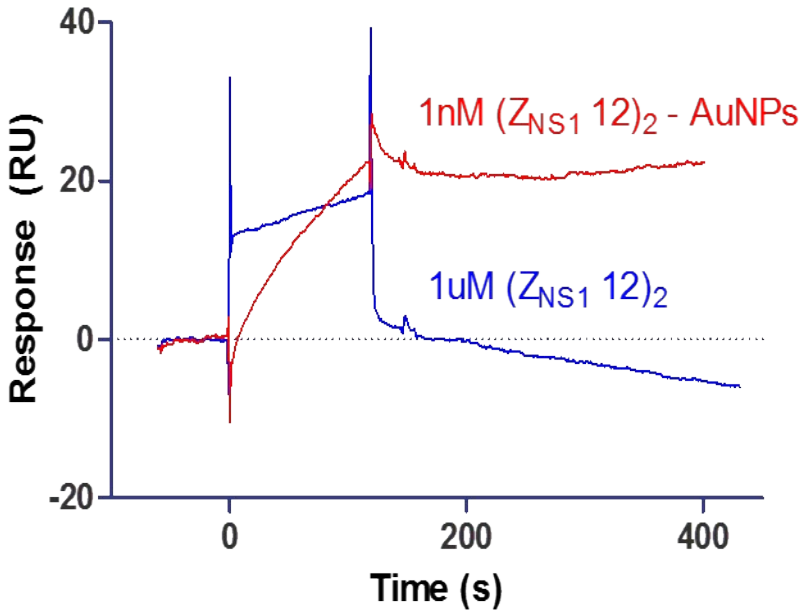

Figure S3. Binding ability comparison of 1 μM $(Z_{NS1}12)_2$ and 1 nM $(Z_{NS1}12)_2$-AuNPs using surface resonance plasmon (SPR) analysis.