Nanoparticle-mediated IgE-Receptor Aggregation and Signaling in RBL Mast Cells

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Supplementary information

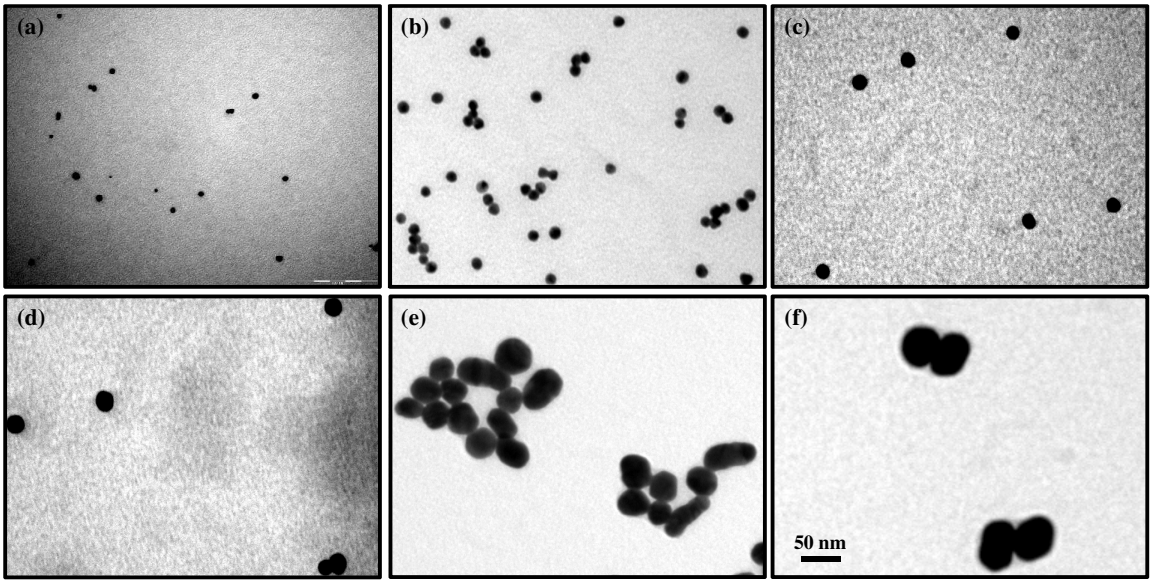

Figure S1. TEM images of AuNPs with (a) 7.5 ± 1.1, (b) 15.4 ± 1.5, (c) 19.8 ± 2.0, (d) 25.8 ± 3.5, (e) 39.1 ± 4.3, and (f) 50.0 ± 7.8-nm sizes.

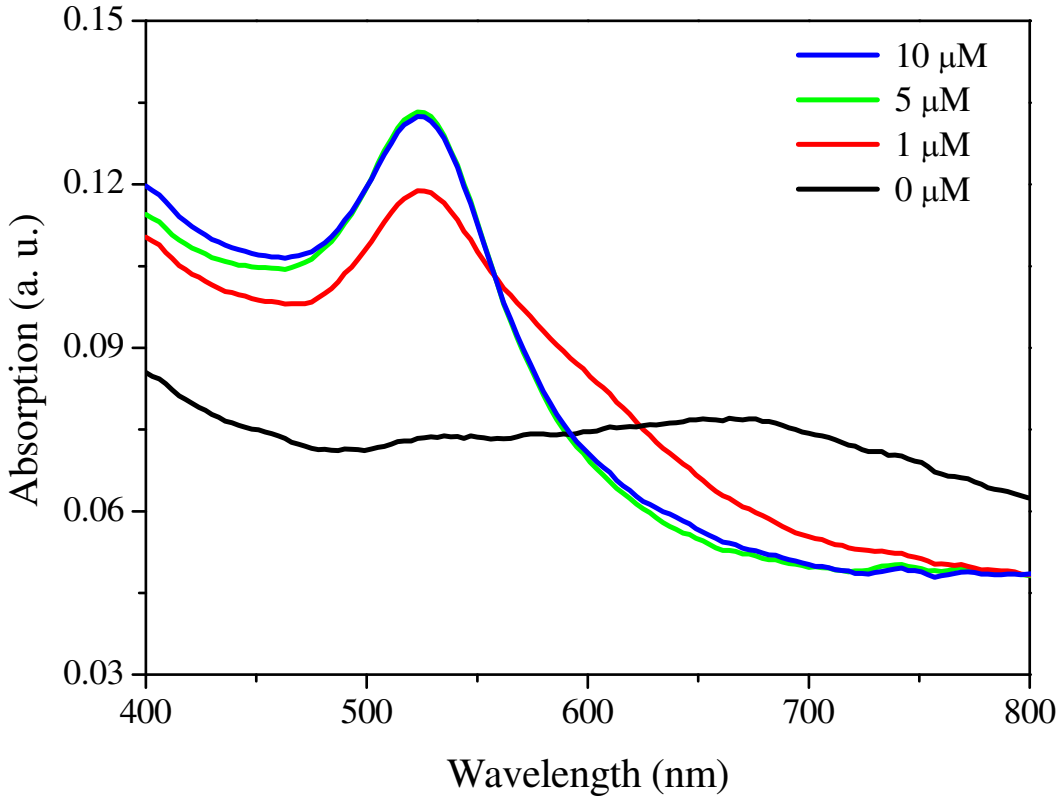

Figure S2. UV-Vis absorption measurements of AuNPs conjugated with different amounts of thiolated DNP. After overnight incubation, nanoparticles were subjected to two centrifugation cycles to remove excess DNP, and the pellets were then resuspended in 5 mM sodium tetraborate (pH 9.0).

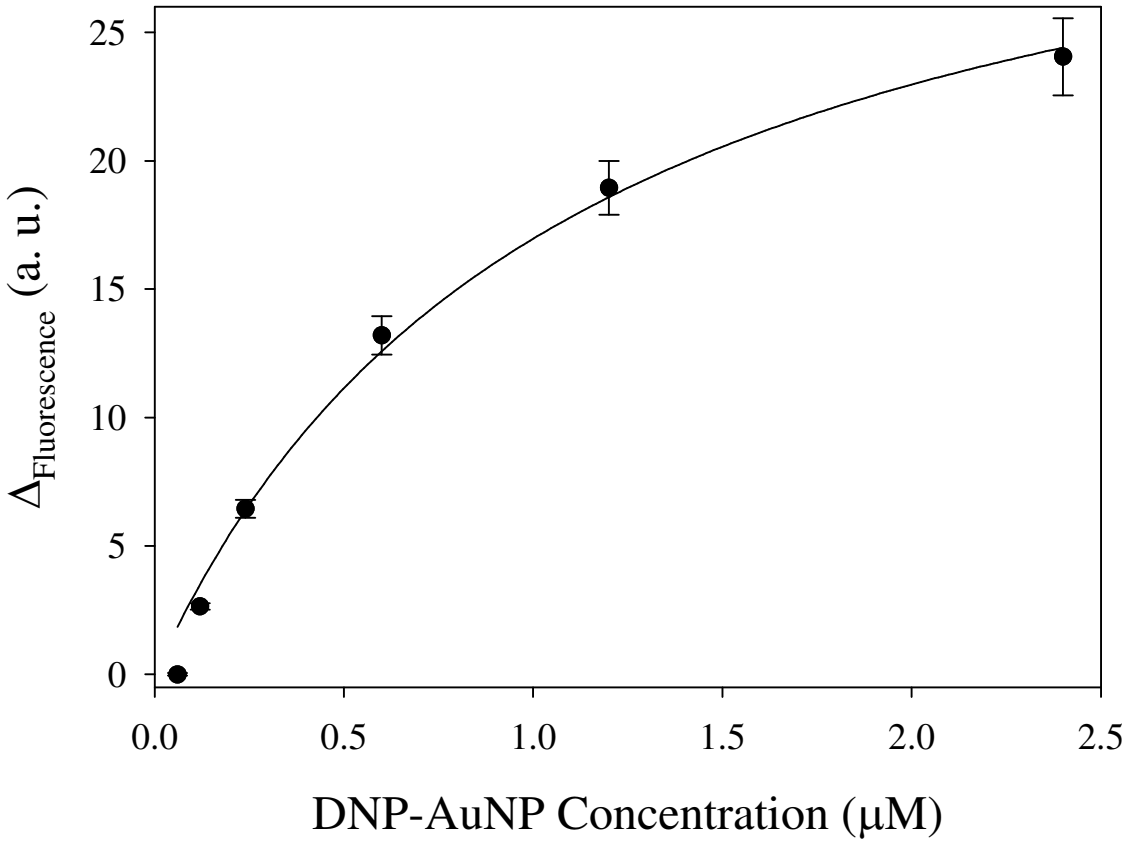

Figure S3. Binding assay of the DNP-AuNPs toward IgE-FcεRI on RBL-2H3 mast cells. Flow cytometry was performed to determine the fluorescence quenching of Alexa488-IgE on the cell membrane surfaces after the specific interaction with DNP-AuNPs (25.8-nm).

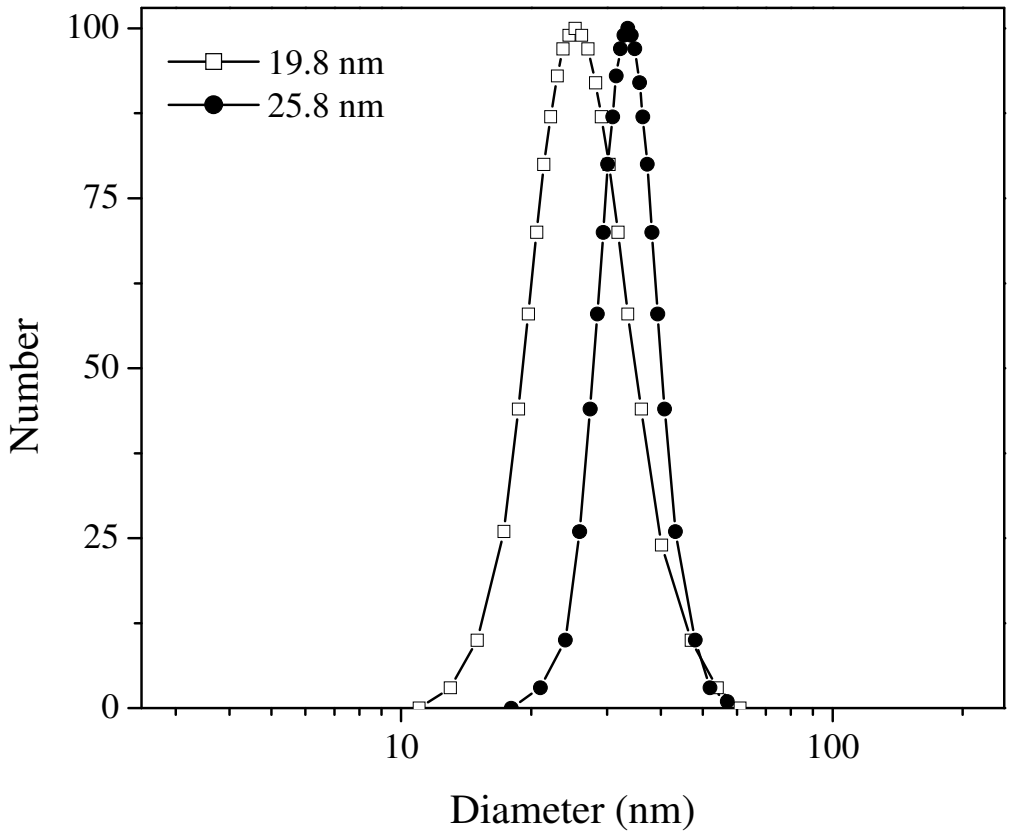

Figure S4. Hydrodynamic diameter measurement of DNP-AuNPs 19.8- and 25.8-nm in size, using dynamic light scattering (ZetaPlus, Brookhaven Instruments Corp., Holtsville, NY).