Supporting information

Label-free kit test for D-amino acid analysis by 1, 4-Benzenediboronic-Acid-Induced Aggregation of Gold Nanoparticles

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Figure S1

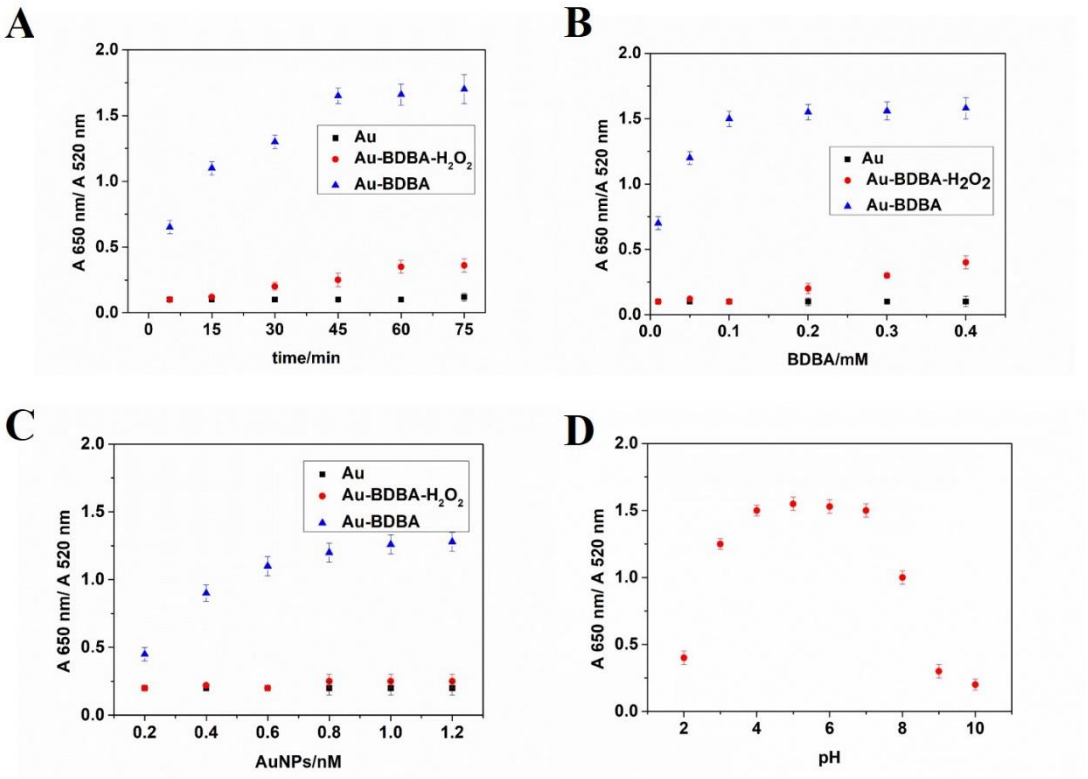

Figure S1 Effect of the reaction time between DAAs and DAAO (A); concentration of BDBA reacted with AuNPs (B); concentration of citrate-capped AuNPs for aggregation (C); and buffer pH for H_2O_2 · BDBA reaction (D) Black square: citrate-capped AuNPs. Red circle: citrate-capped AuNPs and BDBA. Blue triangle: citrate-capped AuNPs, BDBA, and H_2O_2. The error bars represent standard deviation based on three independent measurements. The optimized experimental conditions are: concentrations of AuNPs and BDBA are 1.0 nM and 0.1 mM, respectively. DAAs oxidation products would react with BDBA at room temperature for 45 min under phosphate buffer (pH 4.0)

Table S1 Kit for DAAs test in S. aureus bacteria by using BDBA-induced Aggregation of Au NPs system (n=6)

sample	Added (D-Leu)	found	rate of recovery (%)	RSD (%)
1	5.0 mM	4.95 mM	99.0	4.2
2	10.0 mM	10.25 mM	102.5	3.1
3	0	1.0 mM	-	_