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Analyst

Electronic Supplementary Information (ESI)

Cost-effective and sensitive colorimetric immunosensing using an iron oxide-to-Prussian blue nanoparticles conversion strategy

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1. Cost Calculation and Comparison

Table S1. Cost calculation and comparison of the new colorimetric method with the traditional Au NPs-based colorimetric assay.

Chemical	Vendor	Cat #	Price ($)	Mass (mg)	Cost per mg ($/mg)
20 nm Au NPs	Sigma	753610-25 mL	107.5	1.5	71.6667
Prussian blue	Sigma	03899-25G	37.40	25000	0.0015
Iron oxide NPs	Sigma	637106-25G	41.00	25000	0.0016

Note: The mass of Au NPs is calculated according to the provided nanoparticle concentration (7.2×10^{11} particles/mL), nanoparticle size and material density.

2. References

Au NPs:
http://www.sigmaaldrich.com/catalog/product/aldrich/753610?lang=en&region=US

Prussian blue:

http://www.sigmaaldrich.com/catalog/product/sigma/03899?lang=en&region=US

Iron oxide NPs:

http://www.sigmaaldrich.com/catalog/product/aldrich/637106?lang=en&region=US