

Polyadenine-mediated aptamer conjugated gold nanoparticles for detection of interleukin-6

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Table S1 Resonance wavelength of AuNPs prepared at five batches

Batch number	Resonance wavelength before functionalization (nm)	Resonance wavelength after functionalization (nm)
1	521.05	527.15
2	518.85	523.65
3	521.23	527.73
4	523.52	530.73
5	519.65	523.47
mean	520.86	526.54
sd	1.78	3.04
CV%	0.34%	0.58%

sd : Standard deviation; CV%: Coefficient of variation

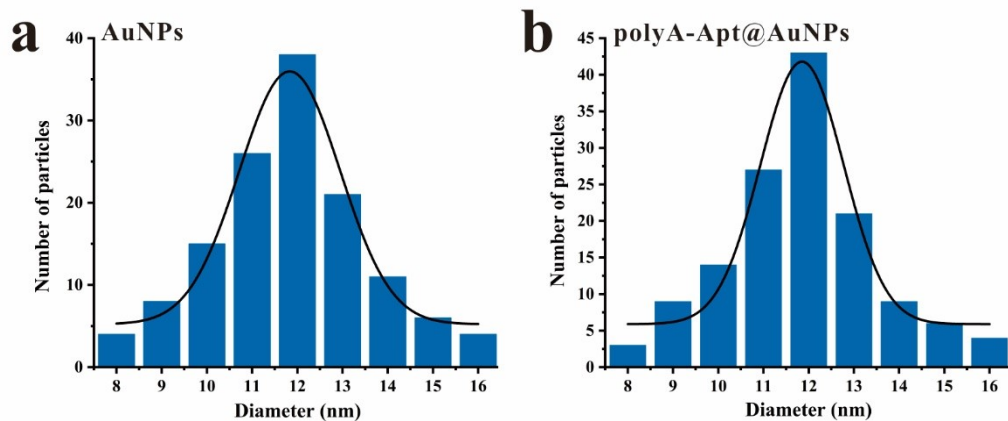


Fig. S1. Size distribution of (a) AuNPs and (b) polyA-Apt@AuNPs

Table S2 Specificity test results for 4 proteins and their mixture

Number	A_{650}/A_{520} for IL- 4(a.u.)	A_{650}/A_{520} for IL- 8(a.u.)	A_{650}/A_{520} for IL- 10(a.u.)	A_{650}/A_{520} for IL- 6(a.u.)	A_{650}/A_{520} for Mixture(a.u.)
1	1.326	1.289	1.258	0.458	0.526
2	1.458	1.268	1.396	0.536	0.415
3	1.526	1.402	1.355	0.562	0.436
4	1.352	1.354	1.205	0.478	0.562
5	1.402	1.315	1.342	0.496	0.496
mean	1.412	1.326	1.311	0.506	0.487
sd	0.081	0.053	0.077	0.043	0.061
RSD(%)	5.7	4.0	5.8	8.3	12.5

sd : Standard deviation; RSD: Relative standard deviation