

Supplementary information

Highly sensitive detection of circulating tumor cells based on ASV/CV
dual-signal electrochemical strategy

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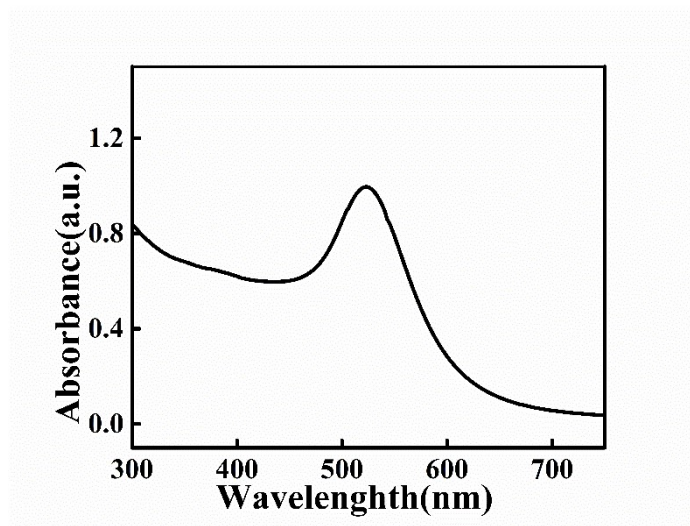


Fig S1 The UV-vis absorption of Au NPs

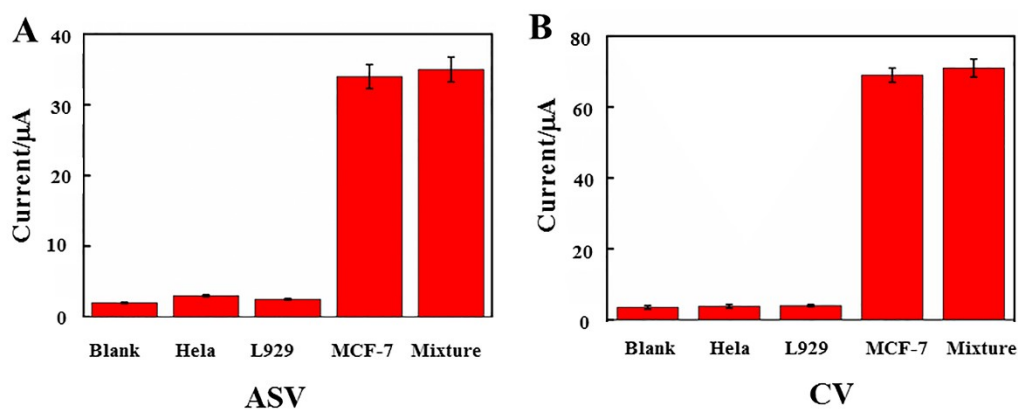


Fig S2 The effect for detection of different cells (HeLa, L929, MCF-7 and mixture) in (A)ASV and (B)CV

Table S1 The reproducibility of this dual-signal electrochemical biosensor (n=5; CTCs concentration, 10^3 cells mL^{-1})

	No. 1	No. 2	No. 3	No. 4	No. 5	RSD (%)
ASV (μA)	22.19	20.85	21.10	20.76	21.20	2.7
CV (μA)	64.77	62.85	63.76	65.02	63.84	0.84

Table S2 The stability of this dual-signal electrochemical biosensor (CTCs concentration, 10^3 cells mL^{-1})

	Initial value	Five days		Eight days		Ten days		Twenty days	
	I_0	I_1	$I_1/I_0, \%$	I_2	$I_2/I_0, \%$	I_3	$I_3/I_0, \%$	I_4	$I_4/I_0, \%$
ASV (μA)	22.20	21.75	98.0	21.20	95.50	20.76	93.50	19.98	90.0
CV (μA)	64.80	62.53	96.5	61.75	95.30	59.75	92.20	57.64	89.0