

Fig.S1 Cyclic voltammograms of (a) $3.5 \mu\text{g mL}^{-1}$ xanthine in pH 7.4 PBS (b) $5.0 \mu\text{g mL}^{-1}$ guanine in pH 7.4 PBS, (c) the mixture of $3.5 \mu\text{g mL}^{-1}$ xanthine and $5.0 \mu\text{g mL}^{-1}$ guanine in pH 7.4 PBS, (d) the fragmented MCF-7 cell suspension. Cell concentration, 3.5×10^6 cells mL^{-1}

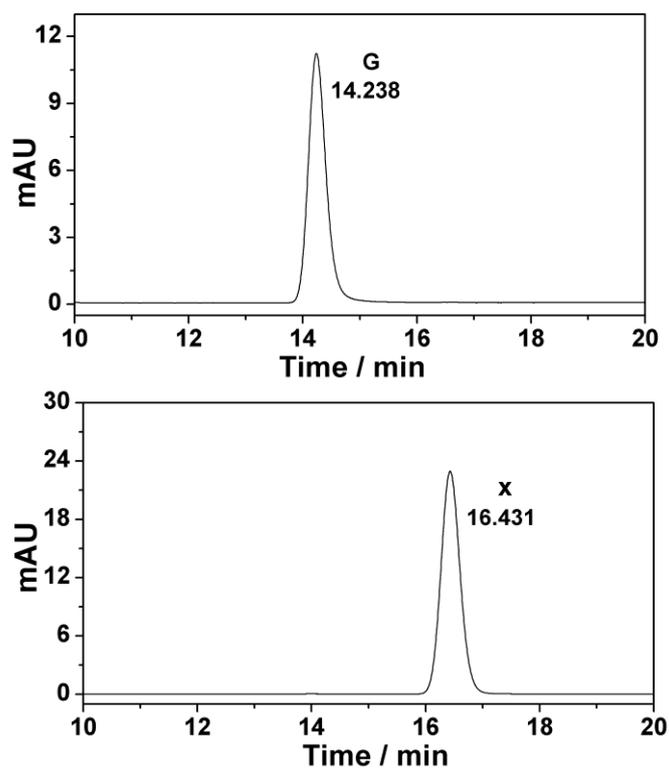


Fig.S2 Chromatograms of $25 \mu\text{g mL}^{-1}$ guanine and Chromatograms of $27 \mu\text{g mL}^{-1}$ xanthine.

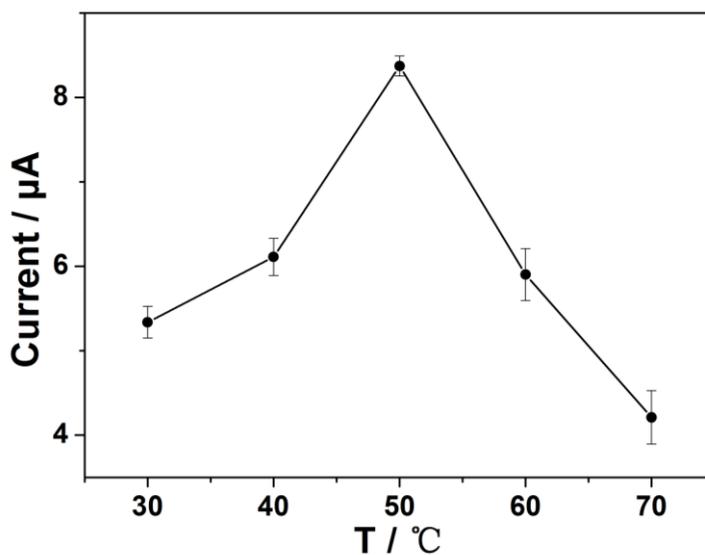


Fig.S3 Influence of heat-treating temperature on the peak current value of the in-situ fragmented MCF-7 cell suspension. Cell concentration, 2.5×10^6 cells mL⁻¹; heating time, 30 min.

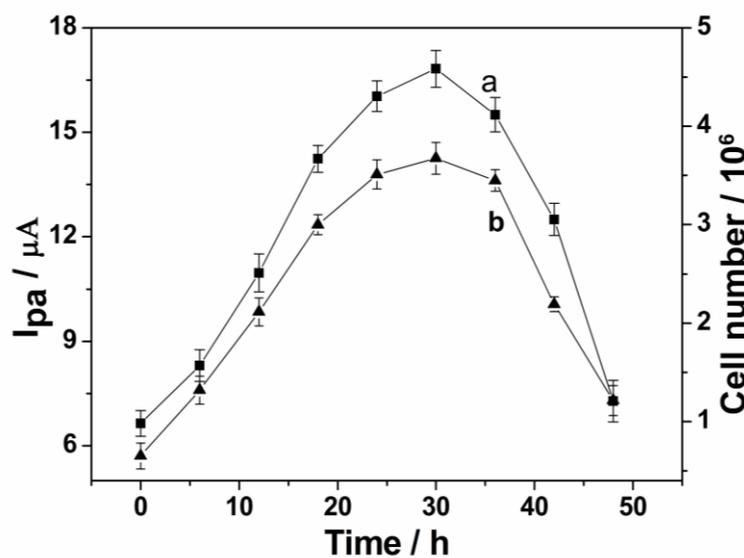


Fig.S4 Cell growth curves described by (a) the electrochemical method, (b) the cell counting method. Cell inoculation concentration, 6.5×10^5 cells mL⁻¹.

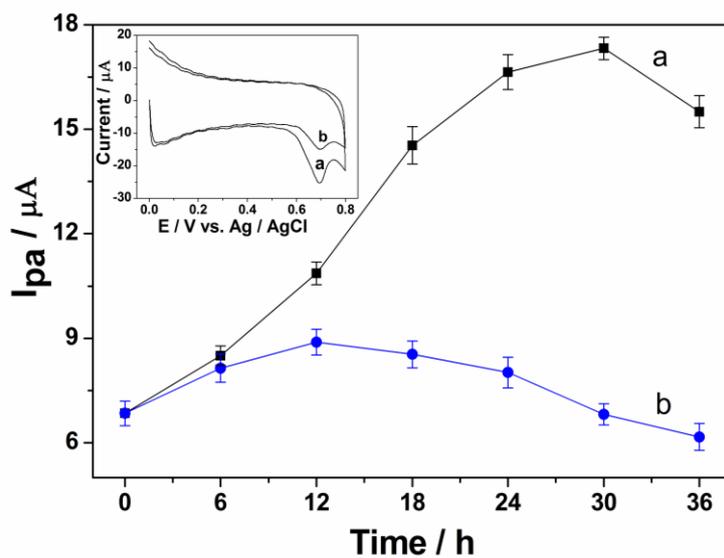


Fig.S5 Dependence of the peak current of the in-situ fragmented MCF-7 cell suspension on the culture time in the (a) absence and (b) presence of 300 nM cyclophosphamide monohydrate. Inset: cyclic voltammograms of the fragmented MCF-7 cell suspension cultured for 30 h in the (a) absence and (b) presence of 300 nM cyclophosphamide monohydrate. Cell inoculation concentration, 6.5×10^5 cells mL^{-1} .

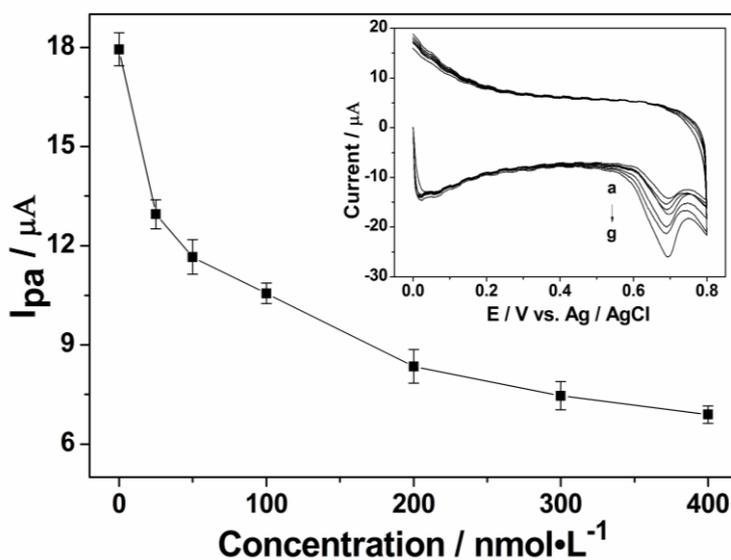


Fig.S6 Dosage-dependent curve of cyclophosphamide monohydrate obtained by the in-situ electrochemical method. Inset: the cyclic voltammograms of the MCF-7 cell suspension treated with (a) 400 nM, (b) 300 nM, (c) 200 nM, (d) 100 nM, (e) 50 nM, (f) 25 nM, (g) 0 nM cyclophosphamide monohydrate. Cell inoculation concentration, 6.5×10^5 cells mL^{-1} . Drug-treated time, 30 h.

