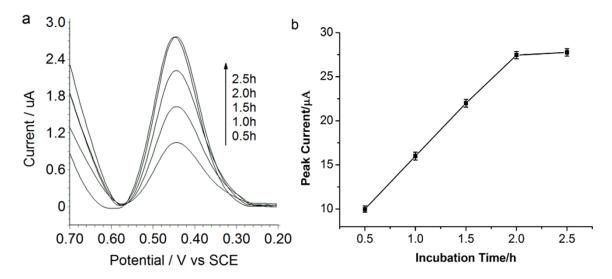
## Supporting Information for A Sensitive Method for Protein Assay Using Peptide-based Nano-label: Human Glypican-3 Detection for Hepatocellular Carcinomas Diagnosis

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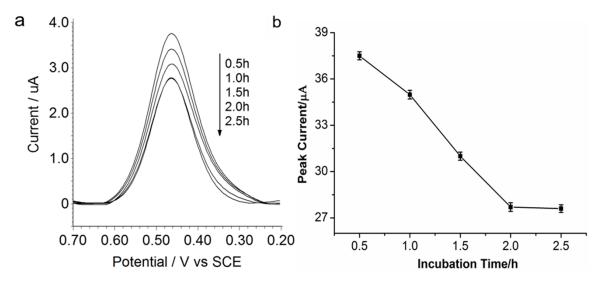
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**Fig. S1** Optimization of GPC3 incubation time. (a) Square wave voltammograms obtained at the capture probe modified electrode after incubation with GPC3 for different time. Concentration of GPC3 is  $34.50 \text{ ng ml}^{-1}$ . (b) Relationship between the peak current and the incubation time. The error bars represent the standard deviation from average (n=3).



**Fig. S2** Optimization of cleavage time of thermolysin. (a) Square wave voltammograms obtained at the capture probe modified electrode after incubation with thermolysin for different time. Concentration of GPC3 is 34.50 ng ml<sup>-1</sup>. (b) Relationship between the peak current and the incubation time. The error bars represent the standard deviation from average (n=3).