

## Supporting information

### Portable Label-Free Electrochemical DNA Biosensor for Rapid Detection of *Salmonella* Typhi

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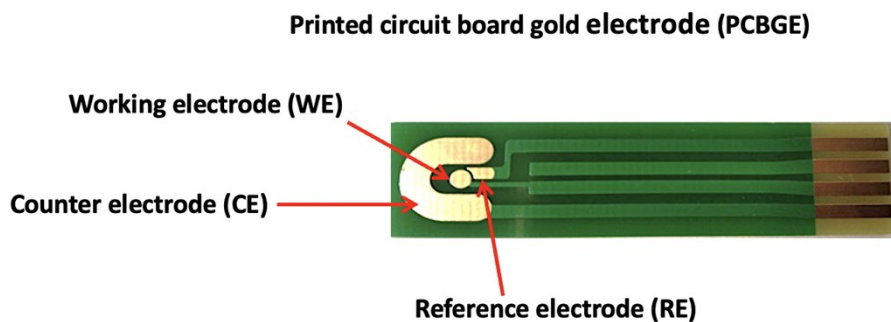
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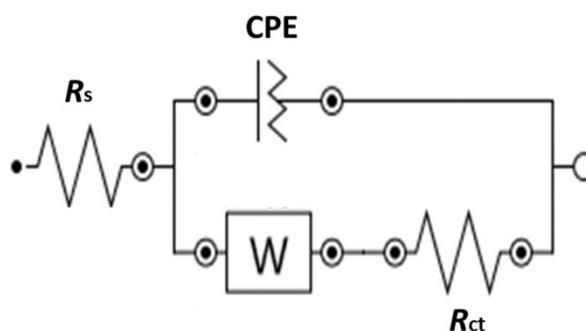
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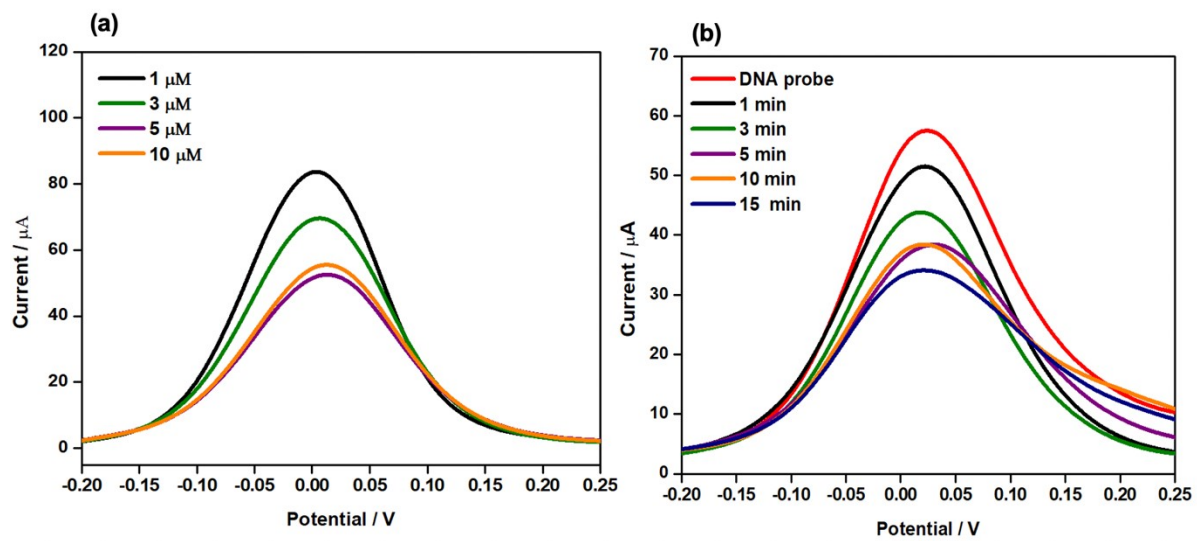
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**Fig. S1.** The in-house design printed circuit board gold (Au) electrode (PCBGE) with a three-electrode system used in this study. The data supporting this article have been included as part of the Supplementary Information. (Data for this article are available at <https://doi.org/10.1039/d2lc01159j>).



**Fig. S2.** Suggested an equivalent circuit model utilized in convergently fitting the Nyquist plots from EIS measurements.  $R_s$  is the solution resistance,  $W$  is the Warburg constant, CPE is the constant phase element, and  $R_{ct}$  is the charge transfer resistance. The data supporting this article have been included as part of the Supplementary Information. (Data for this article are available at <https://doi.org/10.1039/d2lc01159j>).



**Fig. S3.** DPV responses of developed biosensor using different (a) ssDNA probe concentrations, and (b) incubation time of target ssDNA.