Supplementary Information

Synthesis of Hydrophilic poly-L-lysine/Graphene hybrid through Multiple Non-Covalent Interactions for Biosensors

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Fig. S1 SEM (a) and TEM (b) images of the chemically converted graphene with storage of 10 h. Scale bar in (b): 100 nm.

Fig. S2 TGA (black curve) and DSC (red curve) plots of PLL at a scan rate of 10 °C per minute in N₂ atmosphere.
**Fig. S3** Cyclic voltammograms of the modified electrodes in PBS (20 mM pH=7.0, scan rate 100 mV/s). Hb-PLL-G/GC and Hb+Nafion/GC electrodes in N₂-saturated PBS before (solid curves) and after (dashed curves) adding 2 mM H₂O₂.

**Fig. S4** Three repeated current responses of the Hb-PLL-G/GC electrode at -0.35 V (vs. SCE) with injecting 10 μM H₂O₂ into 10 mL N₂-saturated PBS (20 mM, pH=7.0). Inset shows the corresponding standard deviation.