*Supporting information*

# A Hemin–Graphene Nanocomposite-Based Aptasensor for Ultrasensitive Colorimetric Quantification of Leukaemia Cells Using Magnetic Enrichment

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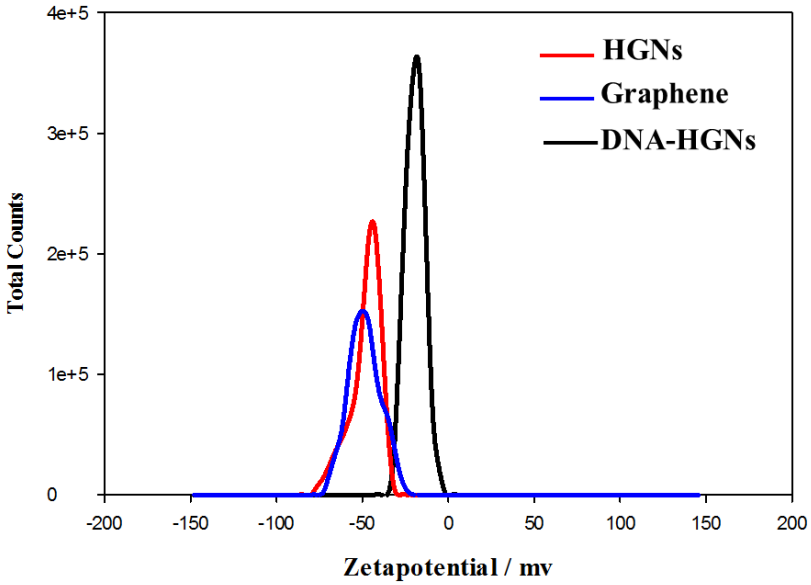


**Figure S1.** Zeta potential of HGNs, Graphene and DNA-HGNs.

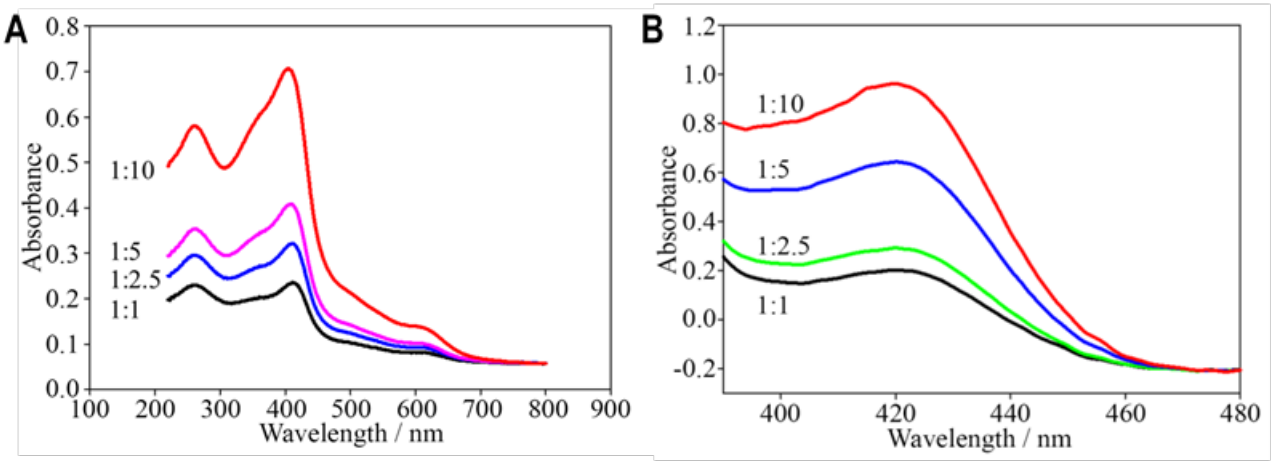


**Figure S2.** UV spectroscopy characterization and activity test of HGNs prepared with various weight ratios of GO to hemin. Graphene oxide/hemin ratios from 1:1 to 1:10 were tested in the preparation of HGNs, and the products were analyzed by UV spectroscopy (**A**) and for their peroxidase activities using ABTS as a substrate (**B**).

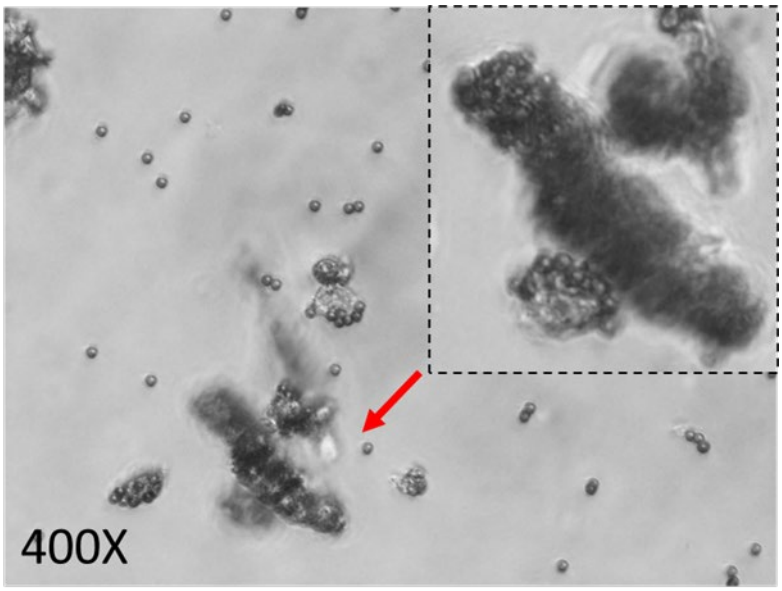


**Figure S3.** Microscope image of capture probes modified magnetic beads for capturing CEM cells.

$$\text{modified ratio} = \frac{A_0 - A_1}{A_0} \times 100\%$$

$A_0$ was the UV absorption at 260 nm before modification,
$A_1$ was the UV absorption at 260 nm after modification.