## Electrochemiluminescence assay for sensitive detection of methyltransferase activity in different cancer cells by hybridization chain reaction coupled with G-quadruplex/hemin DNAzyme biosensing strategy

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Fig. S1 (A) TEM image of MPA-CdS:Eu NCs and (B) ECL-potential curves of (a) MPA-CdS:Eu NCs and (b) MPA-CdS NC-modified GCE in 0.1M PBS (pH 8.5).



Fig. S2 (A) Fluorescence spectrum of MPA-CdS:Eu NCs and (B) UV-vis absorption spectrum of Au NPs.



Fig. S3 Native polyacrylamide gel electrophoresis (PAGE) of different samples. Lane 1: the standard DNA marker of 10, 15, 20, 25, 35, 50, 75, 100, 150, 200 and 300 bp of DNA sequence;
Lane 2: 5 μM Prime DNA; Lane 3: 5 μM Helper 1 DNA; Lane 4: 5 μM Helper 2 DNA; Lane 4: 5 μM Prime DNA , 5 μM Helper 1 DNA, 5 μM Helper 2 DNA, 0.15 mM hemin, 0.1 M K+ formed G-quadruplex/hemin DNAzymes in 37 °C for 2 h.