Electronic Supplementary Material (ESI) for Analyst.
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Supporting Information (SI)

for

Colorimetric and electrochemical quantification of global DNA methylation using methyl cytosine-specific antibody

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Optimization of the HRP-conjugated mC antibody concentration

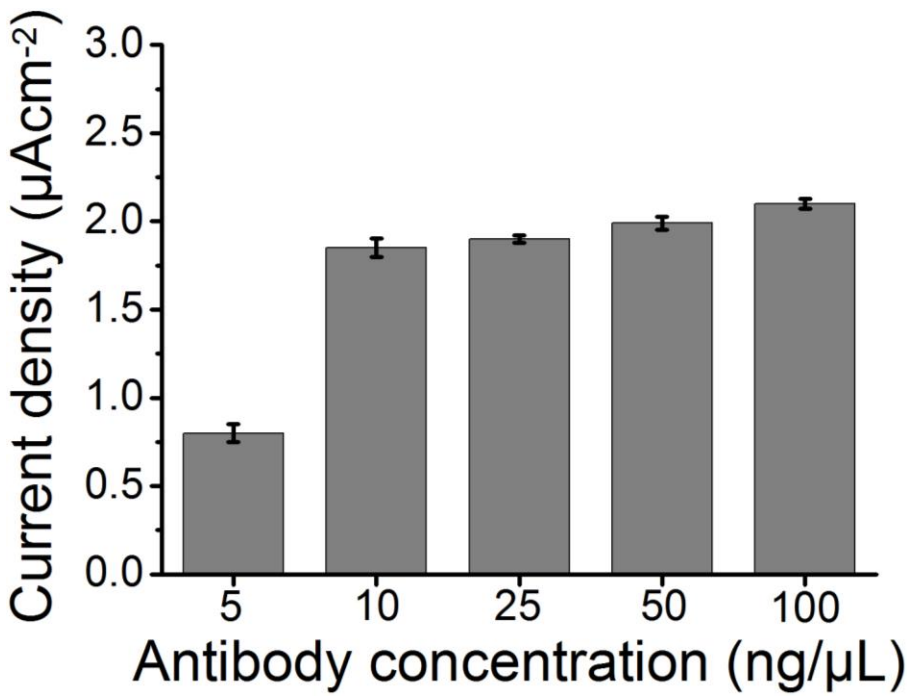

Fig. S1. Optimisation of antibody concentration. Mean values chronoamperometric current density for 25 ng Jurkat DNA using different the amount of HRP-conjugated mC antibody. Each data point represent the average of three repeat trails, and error bars represent the standard deviation of measurements (%RSD = <5%, for n = 3).

Nonspecific adsorption of the HRP-conjugated mC antibody onto the unmodified SPE-Au electrode

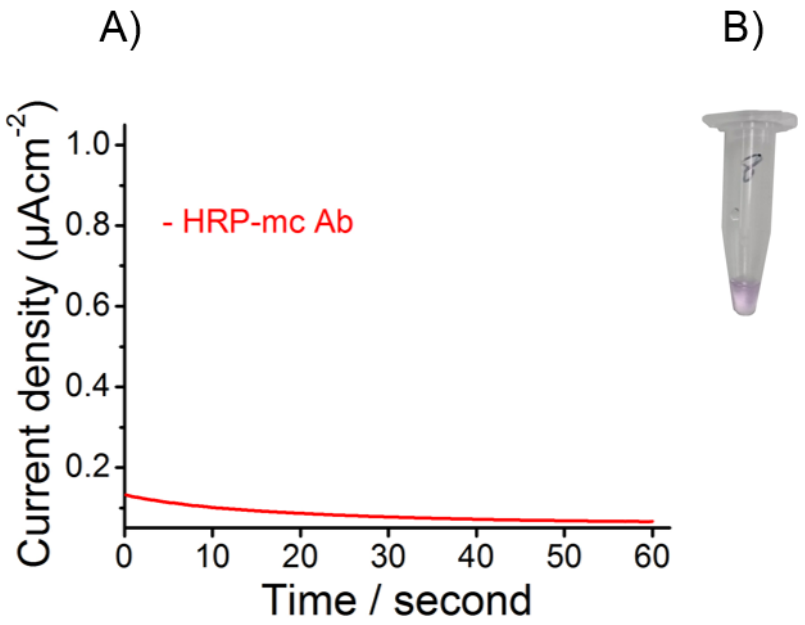

Fig. S2. (A) Chronoamperometric current response obtained for the unmodified SPE-Au electrode (without presence of the surface-confined bisulfite-treated and denatured ssDNA). SPCEfor the HRP-5mC antibody. (B) Shows representative photos for the naked-eye detection. This experiment clearly shows that the nonspecific adsorption of the HRP-conjugated mC antibody onto the SPE-Au electrode surface is negligible.