

## Electrochemical signal-amplified detection of 5-methylcytosine and 5-hydroxymethylcytosine in DNA using glucose modification coupled with restriction endonucleases

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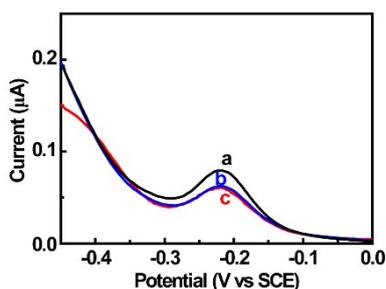


Fig. S1 DPV responses of the (a) MCH/dsDNA (S1&S21) modified gold electrode; MCH/dsDNA (S1&S21) modified gold electrode was treated with (b) MspJI (100 U/mL) and (c) then followed by S3/S4.

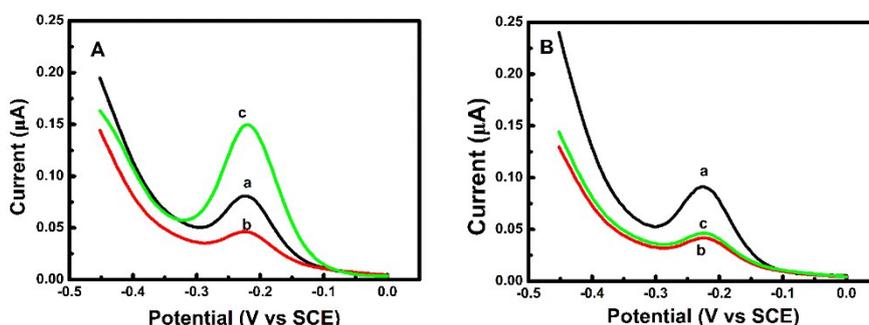


Fig. S2 (A) DPV responses of the (a) MCH/S1-S1&S21 modified gold electrode; (b) treated with T4 β-GT (200 U/mL) and MspJI (100 U/mL) (c) then followed by S3/S4. (B) DPV responses of (a) the gold electrode was modified in the S1 and S21 solution after the solution was treated by the S5-MBs, followed by MCH blocking; (b) the modified gold electrode was treated by T4 β-GT (200

U/mL) and MspJI (100 U/mL) (c) then followed by S3/S4.

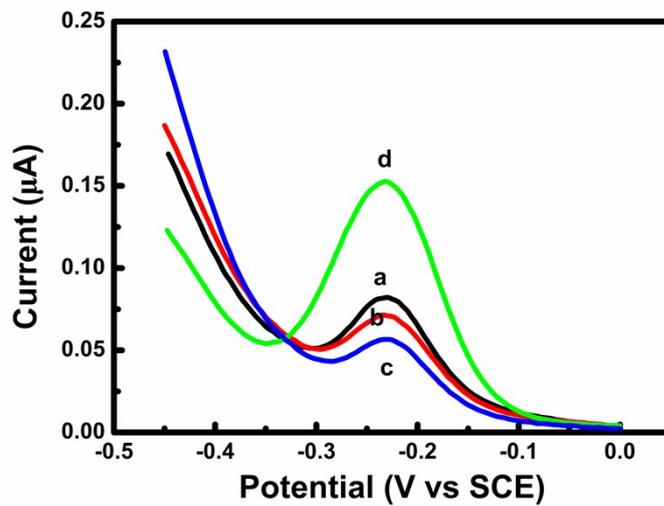


Fig. S3 DPV responses of the (a) MCH/dsDNA (S1&S20: S1&S21:S1&S22=10:45:45) modified gold electrode; (b) incubation with HpaII (10 U/mL); (c) further incubation with T4-βGT (200 U/mL) and MspJI (100 μM) (d) then followed by S3&S4 (2 μM).