Supplementary Materials: A MoS₂ Nanosheet-Based Fluorescence Biosensor for Simple and Quantitative Analysis of DNA Methylation

Le Xiao, Li Xu, Chuan Gao, Yulin Zhang, Qunfeng Yao and Guo-Jun Zhang

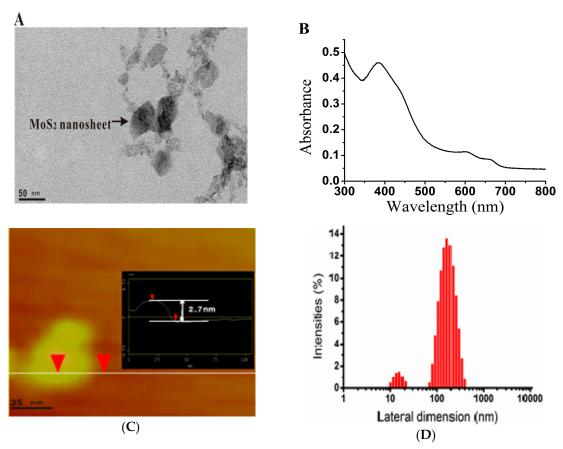


Figure. S1. Characterization of the MoS₂ nanosheets. **(A)** TEM image of MoS₂; **(B)** UV-visible absorption spectrum of MoS₂; **(C)** AFM image and height profile (inset) of MoS₂; **(D)** The lateral dimension distribution of MoS₂.

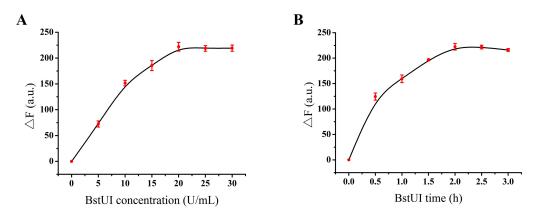


Figure. S2. Effect of different BstUI endonuclease concentrations (**A**) and cleavage reaction time (**B**) on ΔF . Error bars show the standard deviation of three experiments.

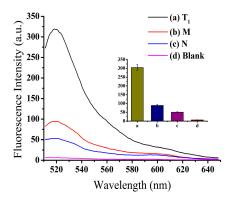


Figure. S3. The specificity of detection of target DNA. Fluorescence emission spectra in the presence of (a) complementary unmethylated target DNA (T_1); (b) one-base mismatched DNA (M); (c) noncomplementary DNA (N) and (d) blank. The inset shows the histogram corresponds to the fluorescence spectra in fluorescence emission spectra. Error bars represent the standard deviation of three experiments.