Supplementary Information

A Site-Specific DNA Methylation Biosensor for Both Visual and Magnetic Determination Based on Lateral Flow Assay

Jiaxing Zhang,‡a Xiaonan Liu,‡a Sinong Zhang, a Yu Cai, a Kang Ma, a Kai Hua, a Yali Cui,*a

^{a.} College of Life Sciences, Northwest University, Xi'an, 710069, China.

E-mail: yalicui@nwu.edu.cn.

‡ Contributed equally.

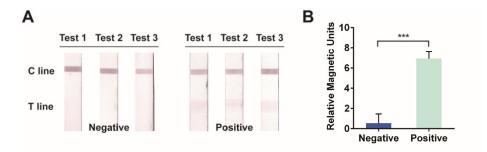


Fig. S1. (A) The optical signal intensity of negative result and the lowest signal intensity observed by naked eyes for positive result. (B) Magnetic signal value on T line of negative and positive result interpretation, respectively (t-test with one-tailed distribution was adopted for statistical analysis. P value of less than 0.05 was considered as statistically significant.

***P=0.000355<0.001).

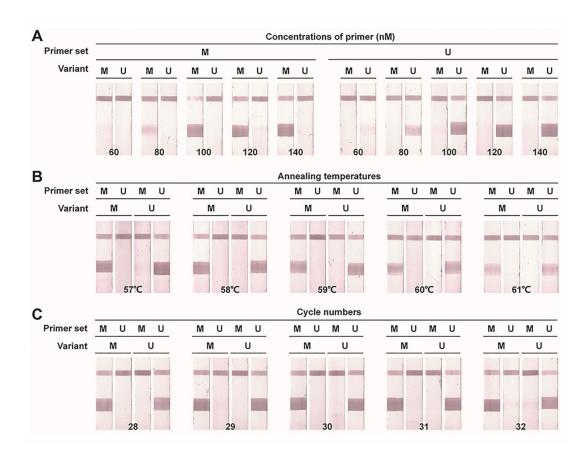


Fig. S2. The signal intensity of MS-LFA with different (A) concentrations of primer, (B)

annealing temperatures and (C) amplification cycle numbers.

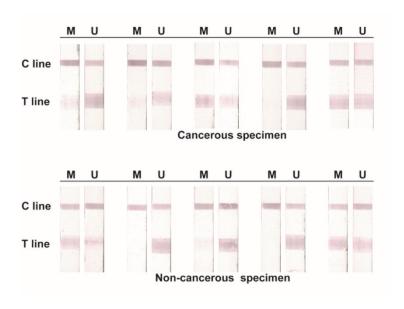


Fig. S3. Methylation status identification result provide by MS-LFA with clinical samples.