Electronic Supplementary Material (ESI) for Analyst.

Supplementary Information For

Dual-recognition-based determination of ctDNA via the clamping function of peptide nucleic acid and terminal protection of small-molecule-linked DNA

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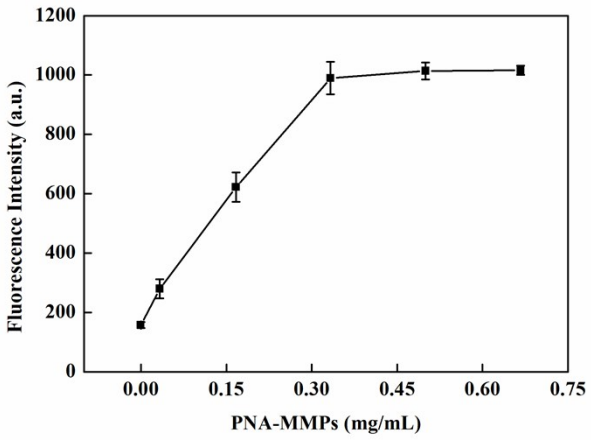

Fig. S1. Effect of PNA-MMPs concentration on fluorescence intensity.

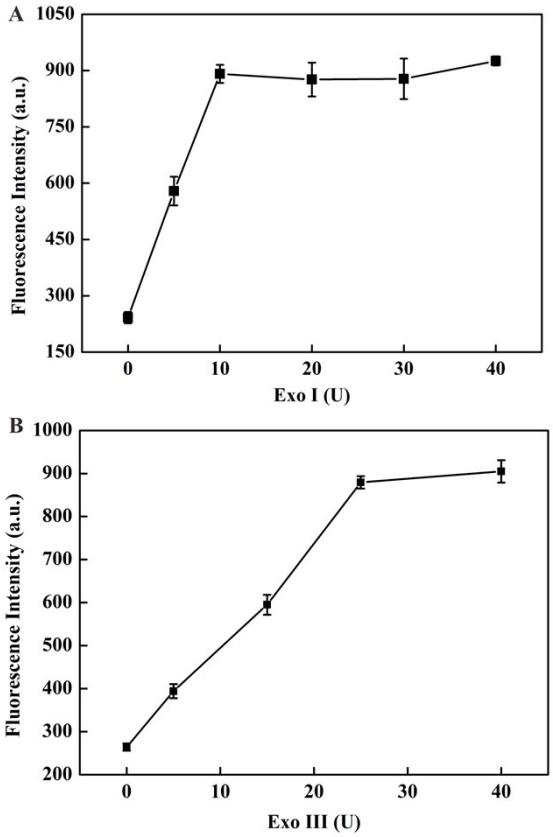

Fig. S2. Effect of the amounts of Exo I and Exo III (in digestion procedures) on fluorescence intensity.

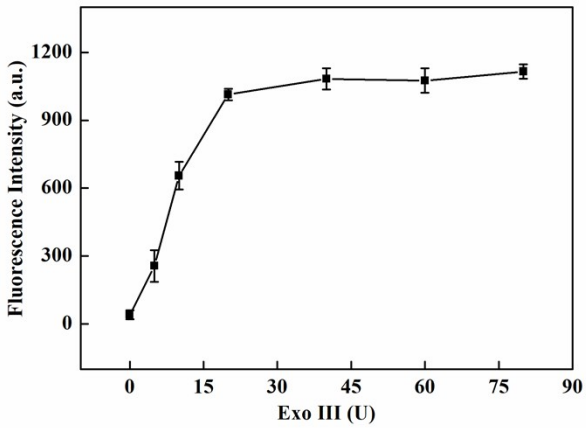

Fig. S3. Effect of the amount of Exo III (in signal amplification step) on fluorescence intensity.

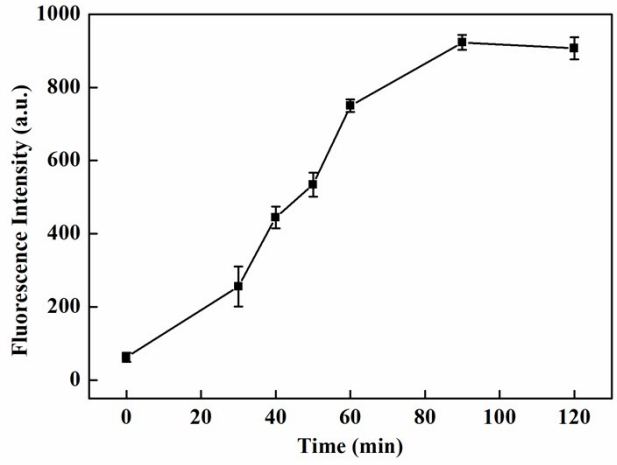

Fig. S4. Effect of the incubation time of Exo III (in signal amplification step) on fluorescence intensity.

Table S1. Determination of E542K-ds-ctDNA in normal human serum with this proposed method.

Sample number	Added (pM)	Found (pM)	Recovery (%)	RSD (%)
1	3	2.776	92.53	5.16
2	10	1.037	103.7	1.84
3	50	53.25	106.5	3.23
4	100	102.8	102.8	4.67