Electronic Supplementary Material (ESI) for Analytical Methods.

Visual assay of *Escherichia coli* O157:H7 based on isothermal strand displacement and hybrid chain reaction amplification strategy

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Fig S1

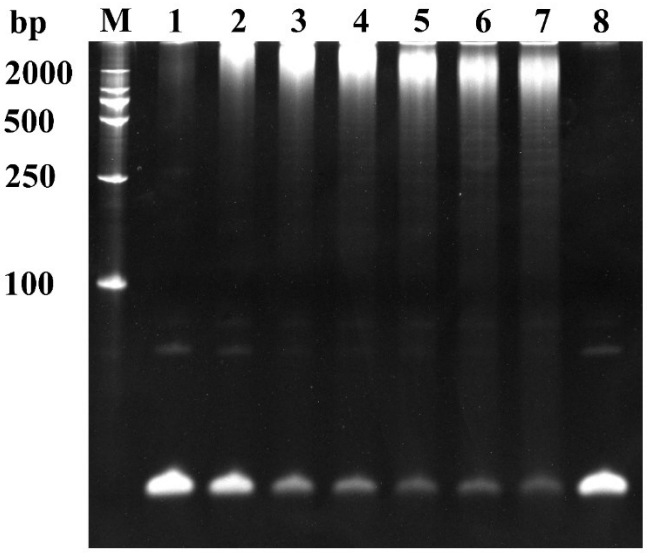

Fig. S1. PAGE results (M: marker; lanes 1-7: the ratios of RP and H1-biotin/H2-biotin were 1:1, 1:2, 1:4, 1:5, 1:6, 1:8, and 1:10, respectively). Lane 8 represents the mixture of H1-biotin/H2-biotin without RP. The concentration of H1-biotin/H2-biotin was 2 μM.

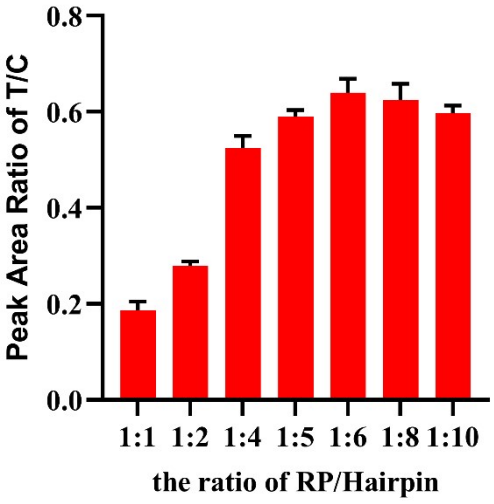

Fig. S2. The graph of the ratio of RP and H1-biotin/H2-biotin (1:1, 1:2, 1:4, 1:5, 1:6, 1:8, and 1:10). The concentration of H1-biotin/H2-biotin was 2 μM.

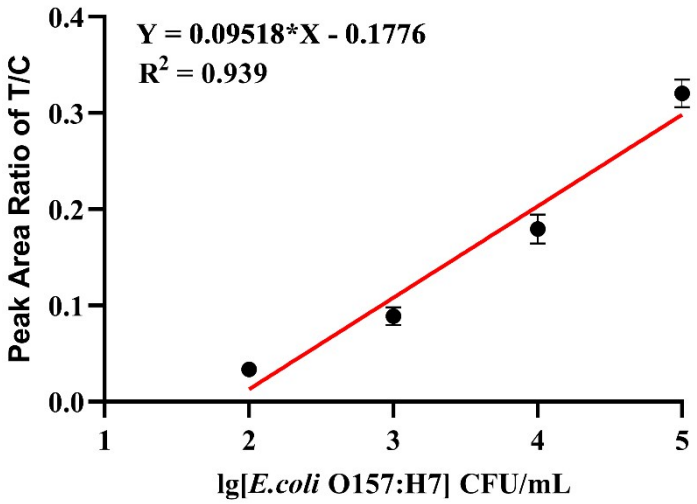

Fig. S3. Linear analysis of the proposed assay to detect *E. coli* O157:H7 with HCR signal amplification.

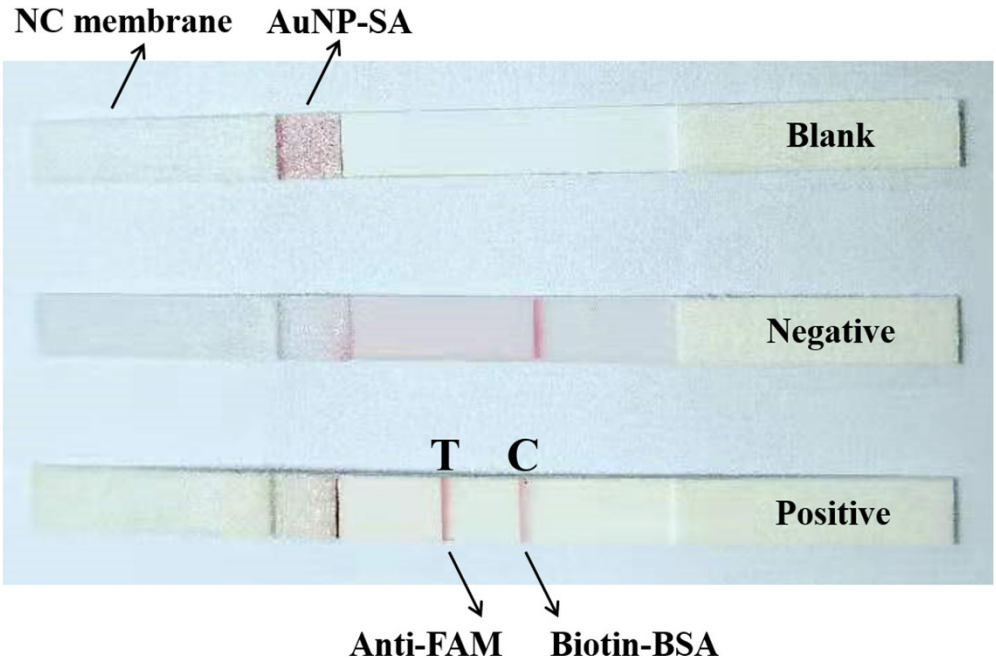

Fig. S4. The photograph of the text strip.

Table S1. Sequence of nucleic acids used in this study

Name	Abbreviation	Sequence (5'-3')
Target	Target	**AGTACTTTCAGCGGGGAGGAAGGGAGTAAAGTTAATACCTTTGCTCATTGACGTTACC**
Linker	L	GGTAACGTCAATGAGCAAAGGTATTAACTTTACTCCCTTCCTCCCCGCTG
Capture probe	CP	(FITC)TTAATACCTTTGCTCATTGACGTTACCTTT
Report probe	RP	GGTAACGTCAATAGTCTAGGATTCGGCGTGGGTTAA
Hairpin 1-biotin	H1-bio	(Biotin)TTTGGGTAGGGCGGGTTGGGATGGGTAACGTCAATGAGCAAAGCATCCCAACCCATA
Hairpin 2-biotin	H2-bio	TATGGGTTGGGATGCTTTGCTCATTGACGTTAGCATCCCAACTTT(Biotin)
Helper 1	Helper 1	GTACTTTACAACCCGAAGGCCTTCTTCATACACGC
Helper 2	Helper 2	CGGCTGCTGGCACGGAGTTAGCCGGTGCTTCTTCT

The bold sequence represents the RNA sequence, and the remaining sequences are the DNA sequence.