

Supplementary Table S1. The information of primers used in qualitative PCR.

Primer	Sequence(5'-3')	Amplification length/bp
Cas12-F1	TACCAGCAGGGCGACATTC	263
Cas12-R1	CAGAGCACTTTCCTGGCGATA	
Cas12-F2	AGAACAACCACGGGCAAATC	
Cas12-R2	CCTTCCCATCCACGACCAC	354
Cas12-F3	GCGACAATTCTCCGCTATG	
Cas12-R3	TGTGGCAGTCGTTGAGGTTA	271

Supplementary Table S2. The information of primers and probes used in Qpcr.

Primer	Sequence(5'-3')	Amplification length/bp
Cas12-real-F1	TTCGCGCCCTCCTCTGT	95
Cas12-real-R1	TGTGATGCTATTCCTCATTTGGA	
Cas12-real-P1	FAM-CGTTTTACTCCAGCTTCATGGCCCTCA-BHQ1	
Cas12-real-F2	ACCCAGAACGGGTTTATTTTCTACA	97
Cas12-real-R2	AGGTATACTTTGTCTTCAGGAGGTTCA	
Cas12-real-P2	FAM-CTCACCTCCAAGATTGACCCGAGCAC-BHQ1	
Cas12-real-F3	CACAGAAGCCGTACTCCAAA	96
Cas12-real-R3	CGCGGTAGTCTGTCTCTTTATC	
Cas12-real-P3	FAM-AAGCTGTACTTCCAGAACCCGCAA-BHQ1	