Table 1 Pathogens strains used for the LAMP method

Pathogen strain	Source
Mycoplasma gallisepticum	Laboratory stock
Mycoplasma synoviae	Laboratory stock
Escherichia coli	American Type Culture Collection 25922
Campylobacter coli	China Center of Industrial Culture Collection 23925
Salmonella Typhimurium	American Type Culture Collection 14028
Pseudomonas aeruginosa	American Type Culture Collection 27853
Staphylococcus aureus	National Center for Medical Culture Collections 26003
Newcastle disease virus	Laboratory stock
Avian influenza virus	Laboratory stock
Infectious bronchitis virus	Laboratory stock
Infectious laryngotracheitis Virus	Laboratory stock

Table 2 Sequences of primers used for LAMP and PCR

Primer	Sequences (5′-3′)
F3	TGGAGGTCAACCCAATGACA
B3	GCTCCACCTTACGGATTTGC
LF	ATCTCACGACACGAGCTGA
FIP	CGCTCGTTGCGGGACTTAACCGGTGGTGCAT GGTTGTCG
BIP	GTTGGAGGAAGGTGGGGATGACGCCATTGT AGCACGTTTGC
F	TGGAGGTCAACCCAATGACA
R	GCTCCACCTTACGGATTTGC
Probe	AACCCTTATCGTTAGTTACTTT

Table 3 Reproducibility of the LAMP method

Plasmid concentration（copies/μL）	Coefficient of variation for intra-assay	Coefficient of variation for inter-assay
1.07×10^7	1.59%	3.58%
1.07×10^6	3.07%	3.56%
1.07×10^5	2.63%	2.32%
1.07×10^4	0.25%	2.72%
1.07×10^3	1.13%	0.52%
1.07×10^2	1.14%	4.35%

Table 4 Comparison of test results of clinical samples between qPCR method and colorimetric LAMP method

Sample	qPCR（CT value）	This study	Sample	qPCR（CT value）	This study
1	/	-	33	/	-
2	/	-	34	/	-
3	/	-	35	/	-
4	/	-	36	/	-
5	/	-	37	/	-
6	/	-	38	/	-
7	/	-	39	/	-
8	/	-	40	/	-
9	/	-	41	/	-
10	/	-	42	/	-
11	31.85	+	43	/	-
12	/	-	44	/	-
13	/	-	45	31.77	+
14	/	-	46	28.48	+
15	33.35	+	47	34.19	+
16	/	+	48	34.27	+
17	/	-	49	/	-
18	/	-	50	/	-
19	/	-	51	/	-
20	/	-	52	/	-
21	/	-	53	/	-
22	/	-	54	/	-

23	/	-	55	/	-
24	/	-	56	/	-
25	/	-	57	/	-
26	/	-	58	/	-
27	/	-	59	/	-
28	/	-	60	/	-
29	/	-	61	/	-
30	/	-	62	/	-
31	/	-	63	22.29	+
32	/	-	64	/	-