

Table S1. RNA purity and concentration.

Samples	purity (A260/A280)	concentration (ng/ μ L)
Ctrl-1	2.02	803
Ctrl-2	1.98	931
Ctrl-3	1.96	1027
Ctrl-4	1.97	1715
Ctrl-5	1.91	1204
LPS-1	1.95	1505
LPS-2	1.93	1565
LPS-3	1.98	1820
LPS-4	1.91	1388
LPS-5	2.08	1362
Rh J1-1	1.97	865
Rh J1-2	1.93	1661
Rh J1-3	2.07	1321
Rh J1-4	1.91	1833
Rh J1-5	1.95	1998
Pa JY062-1	1.89	1011
Pa JY062-2	1.96	1541
Pa JY062-3	1.99	1271
Pa JY062-4	1.92	966
Pa JY062-5	1.93	1931

As demonstrated in Supplementary Figure S1, the RNA purity of all samples ranged from 1.9 to 2.1, indicating the absence of protein and phenolic contamination, thus confirming high purity. The RNA concentration measured exceeded 500 ng/ μ L, signifying a very high concentration that could be appropriately diluted for further use.

cDNA synthesis conditions include two parts: (1) Genomic DNA removal reaction; (2) Reverse transcription reaction.

(1) **Genomic DNA removal reaction.** The reaction mixture was prepared on ice according to the following ingredients. To ensure the accuracy of the reaction mixture preparation, for each reaction, the Master Mix was prepared based on the number of reactions plus two, then vortexed and mixed, dispensed 10 μ L into each reaction tube, and finally, the RNA sample was added. A PCR instrument was used to incubate under the following conditions: 42°C for 2 min, 4°C ∞ .

Table S2. Genomic DNA removal reaction

Reagents	Dosage
5 $\times$ gDNA Eraser Buffer	2.0 μ L
gDNA Eraser	1.0 μ L
Total RNA	*1
RNase Free dH ₂ O	up to 10 μ L

*1: In a 20 μ L reverse transcription reaction system, TB Green qPCR can use up to 1 μ g of total RNA.

To ensure the accuracy of the reaction solution preparation, the Master Mix was prepared based on the number of reactions plus two for each reaction. After the reaction solution was prepared on ice, it was gently mixed. Then, 10 µL of the Master Mix was transferred into each genomic DNA removal reaction tube, mixed gently, and the reverse transcription reaction was carried out immediately. A PCR instrument was used to incubate under the following conditions: 37°C 15 min, 85°C 5 sec, 4°C ∞.

Table S3. Reverse transcription reaction

Reagents	Dosage	
genomic DNA removal reaction solution	10.0 µl	Master Mix
PrimeScript RT Enzyme Mix I	1.0 µl	
RT Primer Mix	1.0 µl	
5×PrimeScript Buffer 2 (for Real Time)	4.0 µl	
RNase Free dH ₂ O	4.0 µl	
	Total 20 µl	

Table S4. PCR reaction system (the reaction solution was prepared on ice, applied Biosystems 7300/7500 Real-Time PCR System)

Reagents	Dosage	Final concentration
TB Green Premix Ex Taq II(Tli RNaseH Plus)(2×)	10 µl	1×
PCR Forward Primer(10 µM)	0.8 µl	0.4 µM*1
PCR Reverse Primer(10 µM)	0.8 µl	0.4 µM*1
ROX Reference Dye or Dye I II (50×) *3	0.4 µl	
RT reaction solution (cDNA solution)	2 µl	
RNase Free dH ₂ O	6 µl	
Total	20 µl	

Table S5. Real-Time PCR Reaction Procedure

steps	programme	Cycle times	Temperature	Time
Stage 1	Pre-denaturation	1	95 °C	30 s
Stage 2	PCR reaction	40	60 °C	34 s
Melting curve		1	95 °C	15 s
Stage		1	60 °C	1 min
		1	95 °C	15 s