

# SARS-CoV-2 Nucleic Acid Multiple Rapid Detection Kit (Fluorescent RT-PCR)

## Product Introduction

For the design of this kit, the wild type sequence tested were selected from the reference genome of SARS-CoV-2(NCBI Reference Sequence: NC\_045512.2). After comparison with the Alpha, Beta, Gamma, Delta, Lambd and Omicron variants, the conserved sequences of ORF1ab, N and E genes are used to design specific primers and probes. Combined with LineGene 9600 Plus or QuantGene 9600 real-time fluorescence quantitative PCR instrument of Hangzhou Bioer Technology Co., LTD, it can achieve multiplex-detection, rapid diagnosis, and making sure that the wild-type and all variants are detected.

## Product Features

**1**

**Strong specificity:** No cross reaction with similar respiratory viruses. The presence of blood, mucin and nasal secretions in the sample did not affect the test.

**2**

**Rapid detection:** The kit only takes 40min for a reaction,It is used for rapid triage of people with relevant suspected symptoms.

**3**

**Multiple-detection:** Multiple and rapid detection of ORF1ab, N and E genes of SARS-COV-2 in one test to validate that the wild-type and all variants are detected.

**4**

**Strong applicability:** Suitable for human nasopharyngeal swabs, oropharyngeal swabs or sputum specimens from suspected cases.

**5**

**High sensitivity:** Three different batches of reagents were tested with a sensitivity of up to 200 copies/ml.

## Specifications

Sample Type	Nasopharyngeal swabs, Oropharyngeal swabs or Sputum
Sensitivity	200 copies/mL
Accuracy	CV < 5%
Detectability	Triple-detections in a single tube, including 3 independent genes of SARS-CoV-2
Supporting Instruments	Bioer LineGene 9600 Plus & QuantGene 9600
Detection Time	Bioer LineGene 9600 Plus: 1h    QuantGene 9600: 39min
Storage Condition	-25°C ~ -15°C away from light and avoid repeated freeze-thaw. 5 days at 2-8°C after opening.

## Application case

### Application Case 1

Pseudovirus containing ORF1ab, N genes and E genes of SARS-CoV-2 were diluted according to a 10-fold gradient and then extracted by Bioer MagaBio plus Virus DNA/RNA Purification Kit III. This product was used to test the nucleic acid.

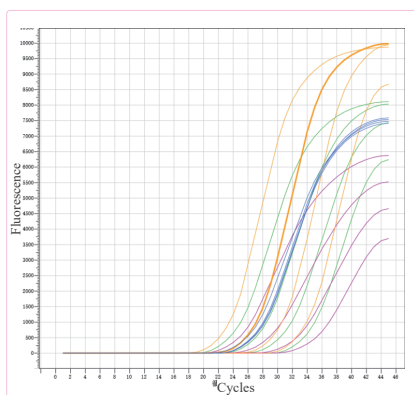


Figure 1 Pseudovirus containing ORF1ab, N genes and E genes of SARS-CoV-2

※The results showed that the amplification coefficient of target genes of SARS-COV-2 pseudovirus was high and the linear relationship was good. There was no interference between each other, and the nucleic acid results were consistent.

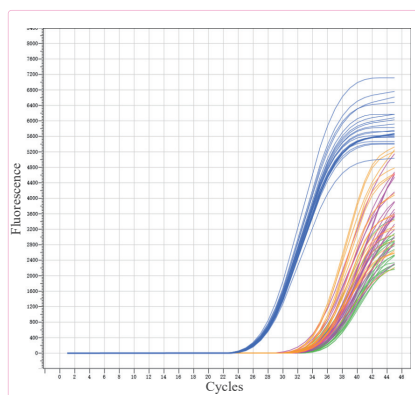


Figure 2 Pseudovirus containing ORF1ab, N genes and E genes of SARS-CoV-2 200copies/mL (20 times)

※The results showed that pseudovirus containing ORF1ab, N genes and E genes of SARS-CoV-2 were diluted to the detection limit of 200copies/mL, and the amplification curve and fluorescence increment were good. The detection rate was 100%.

### Application Case 2

The positive nucleic acid samples of SARS-COV-2 Delta mutant were diluted 10 times and tested with Bioer SARS-CoV-2 Nucleic Acid Multiple Rapid Detection Kit (Fluorescent RT-PCR)

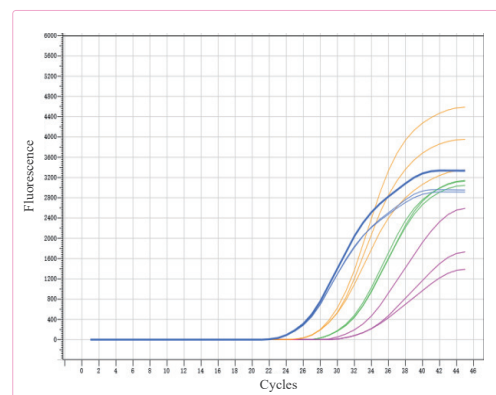


Figure 3 Positive samples of SARS-COV-2 Delta variant

※The results showed that after the positive samples of SARS-COV-2 Delta mutant were diluted 10 times, the ORF1ab gene, N gene and E gene were effectively amplified by this product.

## Ordering Information

Product Name	Cat#	Package	Price
SARS-CoV-2 Nucleic Acid Multiple Rapid Detection Kit (Fluorescent RT-PCR)	BSJ25S1	24T	Inquiry
	BSJ25M1	48T	Inquiry



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