

## Monkeypox Virus (MPV) Nucleic Acid Detection Kit (PCR-Fluorescence Probe Method)



### Application:

It is applied to the monitoring and auxiliary diagnosis of monkeypox virus. The application scenarios mainly include hospitals, CDC, scientific research institutions, and third-party medical testing laboratories recognized by health administrative agencies. (Not Available in the U.S)

### Introduction:

Monkeypox is a zoonotic disease caused by the monkeypox virus, which can be transmitted from animals to humans as well as from human to human. Monkeypox symptoms often include fever, severe headache, muscle aches, swollen lymph nodes, skin lesions, and more. According to the World Health Organization, more than 50 countries and regions around the world have reported confirmed cases of monkeypox. There is currently no cure for monkeypox, and the World Health Organization urges countries to strengthen surveillance and testing of the infectious disease.

This product is based on real-time fluorescent PCR technology, selects the highly conserved region of the monkeypox virus gene coding region as the target region, designs specific primers and fluorescent probes for PCR amplification, and performs PCR amplification on patient serum and lesion leaching fluid (vesicular fluid, pustule fluid) Qualitative detection of monkeypox virus DNA in It is suitable for auxiliary diagnosis of related diseases caused by monkeypox virus infection.

### Features:

Internal Control: the kit contains Internal Control, which is involved in nucleic acid extraction and PCR detection to avoid false negative results

Control: Both negative and positive control in the kit need to be extracted for environmental monitoring and quality control of PCR detection reagents

High Sensitivity: The detection limitation is 200 copies/ml

High Specificity: No cross reaction with other pathogens

Fast Speed: Nucleic acid extraction completed within 10 minutes, and the PCR amplification time is less than 1 hour

Certificate: CE declaration of conformity

### Parameters:

Product Name	Monkeypox Virus (MPV) Nucleic Acid Detection Kit (PCR-Fluorescence Probe Method)
Detection Principle	Fluorescence PCR
Detection Target	Monkeypox Virus F3L gene
Sample Types	Serum or lesion exudate samples
Applicable Instruments	ABI7500、LEIA-X4、FQD-96A, etc
Storage	-20±5°C
Valid Period	12 Months
Reaction Volume	25ul
Detection Time	<60 min
Detection Limit	200 copies/ml
Packing Specification	24T/box or 48T/box or 96T/box; 90 boxes/carton
Packet Size (L*W*H)	500*500*500mm
Gross Weight	24kg(24T/box); 25.5kg(48T/box); 28kg(96T/box)

## Novel Coronavirus (2019-nCoV) Nucleic Acid Detection Kit (Fluorescence PCR)



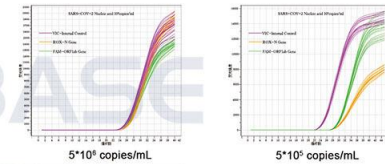
### Advantage:

- ① Internal control: Human  $\beta$ -Globin gene as the internal control is included into the reagent to verify the validity of the experiment.
- ② High sensitivity: The lowest detection limit is 500 copies/ml.
- ③ High specificity: Primers and probes are designed for specific fragments of two gene regions, which confirm each other to make the results more accurate. No cross-reactivity with other pathogens with the same site of infection or similar infection characteristics.
- ④ Strong stability: CV of each channel is all <3%.
- ⑤ Multiple Real-time RT-PCR detection: Each channel does not interfere with each other, and the amplification curve is S-shaped.
- ⑥ Simple operation: one-step method to complete RT-PCR, The whole procedure can be detected within 80min.
- ⑦ Fast speed: The PCR amplification time is less than 80 minutes.

### Experimental Data:

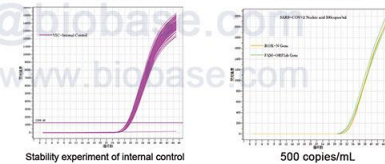
#### 1.Repeatability experiment:

2019-nCoV nucleic acid samples at the concentration of  $5 \times 10^6$ copies/mL and  $5 \times 10^5$ copies/mL were tested by the 2019-nCoV RT-qPCR detection kit to verify the stability of the detection kit. The results are as follows:



#### 2.Repeatability experiment of internal control:

Repeat 96 times for the same negative sample on the BNP96 nucleic acid extraction system, and tested by the 2019-nCoV RT-qPCR detection kit to verify the stability of the internal control. The results are as follows:



#### 3.Repeatability experiment of lower limit:

2019-nCoV nucleic acid samples at the concentration of 500 copies/mL were tested by the 2019-nCoV RT-qPCR detection kit to verify the stability of the lower limit. The results are as follows:

### Parameters:

Product Name	Novel Coronavirus (2019-nCoV) Nucleic Acid Detection Kit (Fluorescence PCR)
Detection Principle	Fluorescence PCR
Detection Target	Novel coronavirus (2019-Ncov) ORF1ab and N gene
Applicable Instrument	Fluorescence quantitative PCR instrument
Storage Conditions	-20±5°C, keep away from light
Valid Period	Unopened ≥6 months; Opened≥90 days
Sample Volume	7ul
Reaction Volume	20ul
Detection Limit	500 copies/ml
Stability	CV <3%
Interpretation of Positive Results	CT≤38
Packing Specification	48T/box; 60 boxes/carton
Packet Size	500*500*500mm
Gross Weight	23kg

\* Not Available in the U.S