



# SARS-CoV-2 Nucleic Acid Detection Kit

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(PCR-Fluorescent Probe Method)



Molecular

# SARS-CoV-2 Nucleic Acid Detection Kit (PCR-Fluorescent Probe Method)

SARS-CoV-2 Nucleic Acid Detection Kit is designed for qualitative detecting the RNA of SARS-CoV-2 in the samples of nasopharyngeal swabs, sputum, bronchoalveolar lavage fluid, stool, etc., for suspected case, suspected cluster case or other cases that require the diagnostic and differential diagnosis of SARS-CoV-2 infection, which helps the clinical diagnosis of the infection of SARS-CoV-2.



## Principle

This product qualitatively detects the RNA of SARS-CoV-2 in the specimen through measuring the change of fluorescence signal intensity during RT-PCR amplification with specific primers and probes against the conserved region of ORF 1ab and N gene, using One Step RT-PCR method. The UNG-dUTP was used to minimize the possibility of contamination of PCR amplification products. In the meantime, with the internal positive control, it can avoid false negative result in PCR amplification.

## Parameters

**Sample type:** nasopharyngeal swabs, sputum, bronchoalveolar lavage fluid, stool, etc.

**Sample volume:** 10  $\mu$ L

**Package:** 32 T/ kit 96 T/ kit

**Limit of detection:** 200 copies/ mL

## Performance

**High Efficiency:** With Nucleic Acid Extraction Kit, one person, one machine, one day can do more than 1000 tests.

**Full Monitoring:** False negative possibility can be reduced by monitoring the extraction and detection with internal tagged gene.

**Anti-contamination:** UNG-dUTP is set to minimize the possibility of contamination caused by PCR amplification products during detection.

**Undetection Prevention:** By adopting multi-fluorescence PCR amplification method and taking ORF 1ab and N gene as detection target, the kit detects various points at the same time and avoids undetection caused by mutation.

**Applicable Instruments:** ABI 7500 Real-Time PCR System, SLAN-96P Real-Time PCR System and other PCR systems with FAM, VIC/HEX and ROX channels.

### Auxiliary extraction reagents and instruments

Nucleic acid extraction kit- Virus

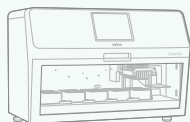
Nucleic Acid Isolation System EXM3000/EXM6000

# Integrated Solution SARS-CoV-2 Nucleic Acid Detection

## • Plan 1: High-throughput Nucleic Acid Isolation system + PCR System



Nucleic Acid Extraction Kit



Nucleic Acid Isolation System EXM6000



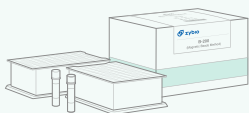
SARS-CoV-2 Nucleic Acid Detection Kit



Quantitative real-time PCR system

- 1 With the Nucleic Acid Extraction Kit and Nucleic Acid Isolation system EXM6000, the extraction of nucleic acid of 96 samples can be processed during 12 minutes.
- 2 One person can finish more than 1000 tests in 12 hours.
- 3 Recommended for high volume laboratories with fast test demand.

## • Plan 2: Low-throughput Nucleic Acid Isolation system + PCR System



Nucleic Acid Extraction Kit



Nucleic Acid Isolation System EXM3000



SARS-CoV-2 Nucleic Acid Detection Kit



Quantitative real-time PCR system

- 1 With the Nucleic Acid Extraction Kit and Nucleic Acid Isolation system EXM3000, the extraction of nucleic acid of 32 samples can be processed during 9 minutes.
- 2 Most test items only require one extraction, which reduces operation time and process.
- 3 With SARS-CoV-2 Nucleic Acid Detection Kit, one hour is enough for the PCR detection.

## • Plan 3: Manual Extraction + PCR System



Nucleic Acid Extraction Kit



SARS-CoV-2 Nucleic Acid Detection Kit



Quantitative real-time PCR system

- 1 The extraction kit absorbs the nucleic acid of the virus by magnetic beads, only takes 4 minutes for cell breaking and absorption of nucleic acid.
- 2 Only one washing is required during the extraction to get highly purified nucleic acid, avoid the loss during the washing and reduces the use of consumables and operation.
- 3 Manual extraction requires magnetic separator, centrifuge, dry bath, etc.



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