

SARS-CoV-2, Influenza and Respiratory Syncytial Virus Nucleic Acid Test Kit

Fluorescent Probe-Based Real-Time PCR Assay

Background

COVID-19 is an acute respiratory infectious disease. People are generally susceptible. Asymptomatic infected people can also be an infectious source. The main manifestations include fever, fatigue and dry cough, etc.

Influenza virus is a type of pathogen that can cause acute respiratory infections in humans. It is highly infectious, spreads quickly, has a high morbidity rate and is accompanied by a certain mortality.

RSV is one of the most common viruses to infect children worldwide and increasingly is recognized as an important pathogen in adults, especially the elderly. RSV commonly presents in young children as bronchiolitis, a lower respiratory tract illness with small airway obstruction, and can rarely progress to pneumonia, respiratory failure, apnea, and death.

■ Detection Significance

1. Early diagnosis and early isolation can be achieved for the infection of the three pathogens, in order to block the transmission of pathogens, and reduce the risk of epidemic transmission.
2. The symptoms caused by SARS-CoV-2, Influenza and RSV are similar, the test can help to distinguish the different diseases.

■ Test Principle

Using multiple fluorescent PCR technology to detect the ORF1ab gene of 2019 Novel Coronavirus, M1 gene or NS 1 gene of Influenza Virus and F gene of RSV from respiratory samples of patients or suspected patients at the same time in one tube, which can be used for the infection of three pathogens early diagnosis.

■ Product Advantages

- **High Efficiency:** Three pathogens can be detected in one tube at the same time, which greatly improves the detection efficiency;
- **High Specificity:** The result is more reliable without any cross-reaction with other pathogens that cause
- **High Sensitivity:** The detection limit for SARS-CoV-2 is 100 copies, for influenza virus is 400 copies and for RSV is 200 copies.
- **Reliable Results:** Internal control system is used to monitor the experimental operation process.

■ Applicable Equipment

- Applied Biosystems 7500 Real-Time PCR System
- Stratagene MX 3000P
- BioRad CFX96 Real-Time PCR System

Other Real Time PCR thermocycler which can detect 4 canals at the same time.

Specimen | Oropharyngeal swabs, Sputum and Bronchoalveolar lavage fluid.

Kit size | 50 tests/kit