# **MERIL COVID-19**

# One-step RT-PCR Kit



Meril COVID-19 One-step RT-PCR Kit is a real-time detection kit based on Multiplex PCR technology that identifies and detects the novel coronavirus (SARS COV-2) nucleic acids (RNA) in human serum nasopharyngeal swabs and throat swab samples. The results can be used to assist diagnosis of patients with COVID-19 infection and provide molecular diagnostic basis for infected patients.



### **Highlights:**

- One tube reaction for identification and detection of 2019-nCoV
- One-step Mutiplex Real-time RT-PCR
- Assay Time: 65mins

#### **Ease of Operation:**

- Provides reagents required for PCR
- Compatible with real time PCR instruments with FAM, HEX/VIC, RED/ROX channels
- Provides all Internal controls

#### **Specificity:**

- Primerand Probe mix based on dual-target gene design
- Target gene ORF 1ab gene and nucleoprotein N gene
- No cross-reacivity with other respiratory viruses
- Specificity: 100%

#### **Accuracy:**

- Analytical accuracy of <500 RNA copies/mL
- Repeatable and reproducible results
- Sensitivity: 100%



Principle: Diagnostics

The primer and probe mix for this kit adopts the dual-target gene design, which targets the specific conserved sequence encoding the ORF 1ab gene and the nucleoprotein N gene. With the PCR reaction mix provided, the amplification of template can be quantitatively monitored by the increasing fluorescence signal detected by a real time PCR instrument.

The PCR detection system includes an endogenous internal control primer and probe mix. The result of internal control provides the accuracy of sampling and extraction process, in order to avoid false negative results.

#### **Template Compatibility:**

- Nasopharyngeal swabs
- Throat swab samples
- Sputum



Compatible with real time PCR instruments with FAM, HEX/VIC, RED/ROX channels Example: Qiagen Instruments, LightCycler®480 Instrument II, Applied Biosystems™ 7500 Real- Time PCR, etc



#### **Kit Components:**

- Covid-19 Enzyme mix
- Covid-19 Primer Probe Mix
- Enzyme Mix Buffer (5X)
- Covid 19 PCR Positive control
- Covid 19 PCR Negative control (DEPC-treated H<sub>2</sub>O)

#### **Salient Features:**

- Specific detection of SARS COV-2 ORF 1ab gene and nucleoprotein N gene
- Analytical accuracy of <500 RNA copies/mL</li>
- Repeatability and reproducible results
- No cross-reactivity with other respiratory viruses
- Simple workflow
- Assay time: 65 Mins
- Specificity: 100%
- Sensitivity: 100%

## **Ordering Information:**

| Material Code | Material Description               | Pack Size |
|---------------|------------------------------------|-----------|
| NCVPCR-02     | Meril COVID-19 One-step RT-PCR Kit | 96 Tests  |

