

NOVEL CORONAVIRUS (2019-NCOV) RT-PCR DETECTION KIT

Features

- Comprehensive** 3 targets (ORF1ab, N and E genes) detected in 1 tube
- Reliable** Internal control, UNG enzyme and dUTP were used to reduce risk of contamination and false negative results
- Faster results** 1.5 hours post-extraction turnaround time
- Sample Type** Nasopharyngeal swab/ Throat swab / Sputum/Stool
- Instrument** Four-channel RT-PCR instrument (FAM/JOE/ROX/CY5)

Product information

| | |
|--------------------------|---|
| Registration certificate | CE: Ref. No.: GZ 8821-2020 China NMPA: GUOXIEZHUSHUN 20203400299 |
| Specification | 48 tests/kit; 96 tests/kit |
| Sample type | Nasopharyngeal swab/ Throat swab / Sputum/Stool |
| Sensitivity | 300 copies/mL |
| Amplification time | 1h20min |
| Instrument | Four-channel RT-PCR instrument(FAM/JOE/ROX/CY5) |
| Storage & Shelf Life | -25℃~-15℃, 12 months |

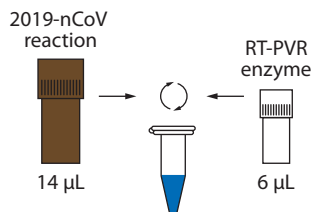
Performance

| | Clinical Diagnostic Results | | Total |
|-----------------|-----------------------------|----------|-------|
| | Positive | Negative | |
| Positive | 209 | 8 | 217 |
| Negative | 1 | 376 | 377 |
| Total | 210 | 384 | 594 |

Compared with the results of clinical diagnosis, the clinical sensitivity was 99.53%, and the clinical specificity was 97.92%.

Workflow

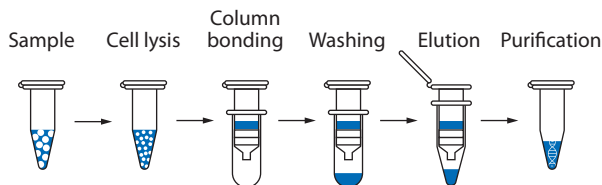
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Step 1: Reagent preparation

Add $n \times 6 \mu\text{L}$ of RT-PCR enzyme and $n \times 14 \mu\text{L}$ of 2019-nCoV reaction reagent into the centrifuge tube, mix by shaking, and centrifugate at low speed for a few seconds, then make aliquots of $20 \mu\text{L}$ into different PCR reaction tubes.

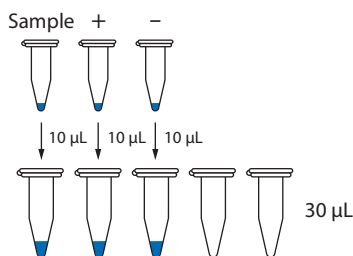
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Step 2: Nucleic Acid Extraction

The volume of sample to be extracted is $200 \mu\text{L}$, and $5 \mu\text{L}$ of internal reference A will be added to each sample (including the reference);

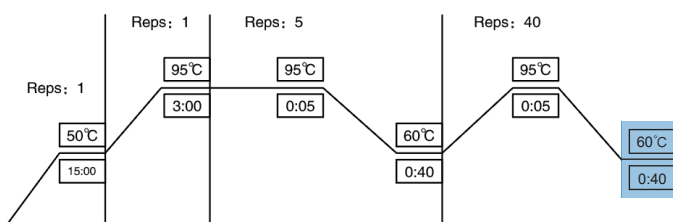
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Step 3: Template Addition

Add $10 \mu\text{L}$ of extracted Negative Control, $10 \mu\text{L}$ of extracted Positive Control, and $10 \mu\text{L}$ of extracted RNA from sample to different PCR reaction tubes. Centrifuge them at low speed. Then, move them to the Real-time PCR instrument.

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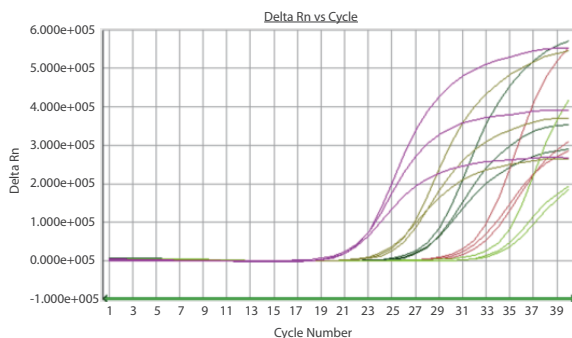


Step 4: PCR Amplification

1. 50°C for 15 minutes, 1 cycle;
2. 95°C for 3 minutes, 1 cycle;
3. 95°C for 5 seconds to 60°C for 40 seconds, 5 cycles;
4. 95°C for 5 seconds to 60°C for 40 seconds, 40 cycles.

The signals of FAM, JOE, ROX and CY5 fluorescence channels will be collected at 60°C

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Step 5: Data Analysis

Test data file need to be saved after PCR reaction. Please set the parameters and analysis the results of FAM, JOE, ROX and CY5 channels respectively.

Note:

The nucleic acid extraction reagent used in Step 2 is not provided in the kit, which needs to be prepared by the user.

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