
GenePro

COVID-19 Detection Test

One-Step Real-time RT-PCR Test
for COVID-19

GCH
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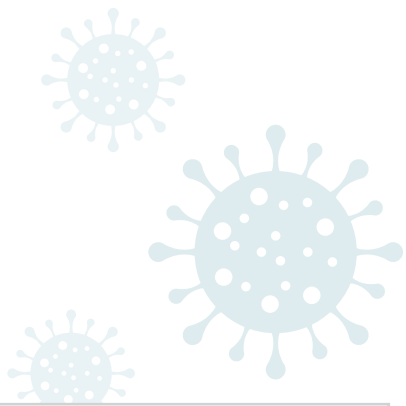
www.gencurix.com

A detailed scanning electron micrograph (SEM) of COVID-19 virus particles. The image shows several spherical virus particles with a textured, bumpy surface. Each particle is covered with numerous spike-like protrusions, which are the glycoprotein spikes that give the virus its characteristic crown-like appearance. The particles are set against a dark background, with some red, disc-shaped structures visible in the upper right corner, likely representing red blood cells. The lighting creates strong highlights and shadows, emphasizing the three-dimensional structure of the virus.

GenePro COVID-19 Detection Test

GenePro COVID-19 Detection Test kit is developed based on “WHO interim guidance for laboratory testing for 2019 novel coronavirus (2019-nCoV) in humans” by WHO (World Health Organization), and qualitatively detects RdRP gene / E gene simultaneously. RdRP gene has specific sequence from COVID-19 and E gene is common sequence within corona viruses. The validity of RT-PCR reaction is confirmed by using RNA template (2019-nCoV) as positive control.

- I Guidance** Developed in accordance to the WHO guideline for 2019 novel coronavirus (2019-nCoV) testing
- I Target gene** RdRP gene, E gene
- I Performance** Sensitivity : 1 copy / μ L
- I Sample Type** Nasopharyngeal swab / Oropharyngeal swab / Sputum
- I RT-PCR Enzyme** SuperScript III RT/Platinum Taq Mix
- I Running Time** < 1.5 hrs after RNA extraction
- I Reporting** Positive / Not detected / Inconclusive



Target Genes(RdRp, E) Recommended by WHO

GenePro COVID-19 Detection Kit has been developed in accordance to the WHO guideline for 'Laboratory testing of 2019 novel coronavirus (2019-nCoV).'



Highest Performance Enzyme

'SuperScript III RT/Platinum Taq DNA polymerase' provides highest detection sensitivity and specificity with minimum amount of sample avoiding false positive and false negative.

Highest Accuracy



High target specificity & low false negative rate. The kit minimizes false negative results with improved primer design, which allows accurate determination with amplification results.

RNA positive control



The test monitors the whole real-time RT-PCR process including reverse-transcription and amplification. DNA based positive controls cannot detect errors during reverse-transcription process.



How to Use : Amplification and Detection (CFX96™, Bio-Rad)

- 01 Specimen Collection**
- Collect the nasopharyngeal or oropharyngeal swab into VTM.
 - Induce the cough and collect sputum while making sure that saliva is not deposited into the sterilization container.
 - Transport specimens to the clinical laboratories at 4°C ± 3°C.

- 02 RNA Purification**
- Total nucleic acids are isolated from the specimens using commercially available viral RNA isolation kits. We recommend Qiagen's or Roche's extraction kits.
 - Use the kits according to the user manual provided from manufacturers.

- 03 Genetic Assay**
- GenePro COVID-19 Detection Test is designed to use with CFX96™ Real Time PCR System.
 - Prepare the reaction mix (left) and set the plate* (right).

*Hard-Shell® 96-Well PCR Plates white/white (Cat.No. HSP9655, Bio-Rad)

PCR Reaction

Component	Volume (μL)/test
Oligo Mix (1 or 2)	4
Reaction Mix A	12.5
Reaction Mix B	2.5
Enzyme	1
Template RNA	5
Total	25

Plate Design

	1	2	3
A	NC OM1	NC OM2	Sample OM1
B	PC OM1	PC OM2	Sample OM1
C	Sample 1 OM1	Sample 1 OM2	⋮
D	Sample 2	Sample 2	

- 04 Data Analysis and Interpretation**
- Set the Baseline Threshold as 3000.
 - Interpretate the results according to Ct values.

Result Interpretation	RdRP Gene	E Gene
SARS-CoV-2 Positive	+	+
SARS-CoV-2 Not Detected	-	-
SARS-CoV-2 Not Detected	-	+
Inconclusive*	+	-

Inconclusive* : Recommend to re-test the specimen

Ordering Information

Cat no.	Product	Size
CV001	GenePro COVID-19 Detection Test	100 tests/kit

