NORGEN BIOTEK CORP.

2019 Novel Coronavirus (COVID-19)

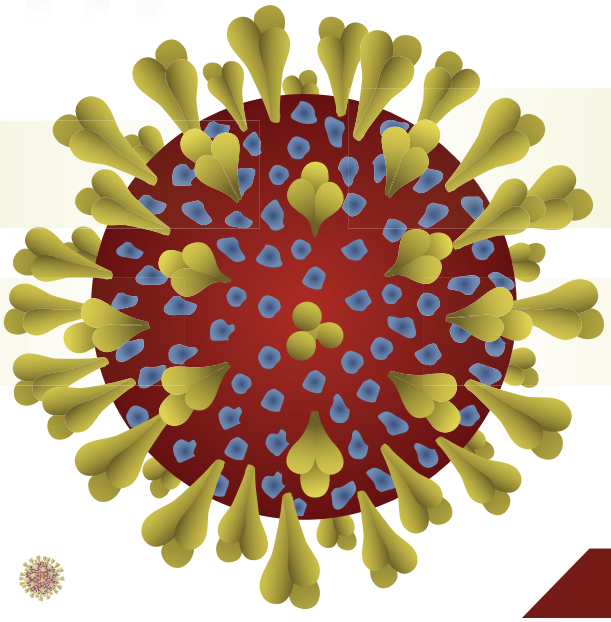
Stop the spread

We are ready to do our part

- Detection kits and reagents for SARS-CoV-2 in COVID-19 (2019-nCoV)
- Available in 1 ready to use format Cat. #TM67100 (master mix included)
- Detection reagents also available for sale seperately

Collection & Preservation
Cat. #68800

Detection
Cat. #TM67100, #TM67101, #PC67102



Isolation & Purification
Cat. #17200

Master Mix
Cat. #28113, #28114, #28115

Understanding COVID-19

The 2019 Novel Coronavirus (COVID-19) has caused an outbreak of respiratory illness that started in Wuhan City, Hubei Province, China and has now spread throughout the world to many different countries.

Coronaviruses are a large family of viruses known to infect both animals and humans. The 2019 Novel Coronavirus (COVID-19) is a new strain of coronavirus infecting humans that had not been previously detected before the outbreak in China in December 2019. While the 2019 Novel Coronavirus (COVID-19) is new, many coronaviruses have been known to infect animals and humans for some time. Coronaviruses are known to commonly infect camels, cattle, cats, and bats. In humans, Coronavirus infections can cause various illnesses from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS).

Human infection is more severe when the coronavirus has originated in animals and spread to humans, as is the case with MERS and SARS. The COVID-19 is a betacoronavirus, similar to MERS and SARS, both of which have their origins in bats. The animal source of COVID-19 has not yet been identified, however Chinese officials have linked many of the early cases to a large seafood and live animal market, suggesting that the initial transmission was the result of animal-to-person spread.

Learn more at www.norgenbiotek.com/coronavirus

2019-nCoV TaqMan RT-PCR Kit

Norgen's 2019-nCoV TaqMan RT-PCR Kit is designed for the detection of SARS-CoV-2 specific RNA in a real-time RT-PCR based on the use of TaqMan technology. This kit is designed for research use only and not for use in diagnostic procedures. The detection of SARS-CoV-2 specific RNA is based on TaqMan one-step RT-PCR providing a simple, reliable and rapid result for the detection of SARS-CoV-2 infection. Norgen's 2019-nCoV TaqMan RT-PCR Kit includes a PCR control to monitor for PCR inhibition, and to validate the quality of the sample and the detection result. The 2019-nCoV TaqMan RT-PCR Kit comprises Master Mix for the target and PCR control detection, 4 target Primer & Probe Mixes, as well as a positive control and a negative control (nuclease-free water) to confirm the integrity of the kit reagents.

Coronavirus - To panic or not to panic?

Chances are, you've been keeping tabs on the recent coronavirus (SARS-CoV-2) outbreak that has emerged out of Wuhan, China—and rightly so. Infectious diseases such as SARS, MERS, Ebola, and this new strain of the coronavirus (CoV) cause widespread morbidity and mortality, provoke civil unrest, and disrupt global travel and supply chains. For more information visit blog.norgenbiotek.com

(B. Abraham, 2020)

Norgen Biotek has what you need for Coronavirus detection:

- 2019-nCoV TaqMan RT-PCR Kit
- 2019-nCoV Primer & Probe Mixes (Cat. TM67101)
- Swab Collection and Total Nucleic Acid Preservation System (Cat. 68800)
- Positive Control
- Master Mix
- Total RNA Purification Kit

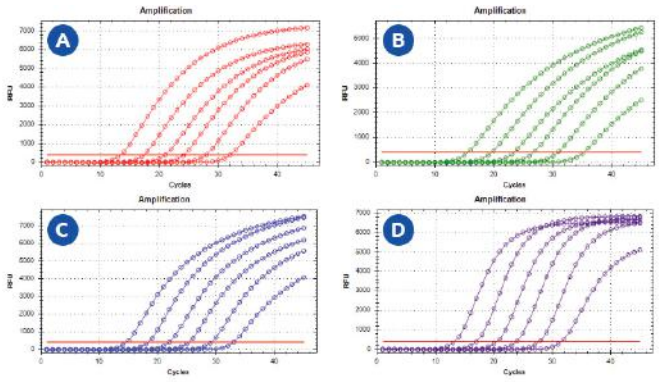


Figure 1. Analytical sensitivity for the detection of 3 SARS-CoV-2 nucleocapsid target genes and the RNase P internal Control target as recommended by the Centers for Disease Control and Prevention (CDC). Panel A represents the 2019-nCoV_N1 target, Panel B represents the 2019-nCoV_N2 target, Panel C represents the 2019-nCoV_N3 target and Panel D represent the RNase P internal Control target. The analytical sensitivity of Norgens 2019-nCoV TaqMan RT-PCR Kit was determined by analyzing a dilution series of quantified Norgen's 2019-nCoV RT-PCR Positive Control (Cat. PC67102) in triplicate (n=3) based on the use of TaqMan® technology. The linear range of Norgens 2019-nCoV TaqMan RT-PCR Kit has been determined to detect as low as 2 copies/µl with a confidence ≥ 90%.

	Positive	Negative
Positive samples	5	0
Negative Samples	0	5
	Positive predictive value (PPV)	Negative predictive value (NPV)
	100%	100%
	Sensitivity	
	100%	
	Specificity	
	100%	
	Diagnostic Accuracy	
	100%	

Figure 2. Diagnostic Accuracy. Clinical evaluation for Norgens 2019-nCoV TaqMan RT-PCR kit was assessed by conducting a blind test with 10 different samples being either spiked or non-spiked with Norgens 2019-nCoV RT-PCR Positive Control (Cat. PC67102) to determine the Positive Predictive Value (PPV), Negative Predictive Value (NPV), Sensitivity, Specificity and the overall Diagnostic Accuracy.

Ordering information

Description	Size	Cat. Number
2019-nCoV TaqMan RT-PCR Kit (master mix included)	50 reactions	TM67100
2019-nCoV Primer & Probe Mixes	50 reactions	TM67101
2019-nCoV RT-PCR Positive Control	50 µL	PC67102
2X One-Step RT-PCR Master Mix	100 reactions	28113
Swab Collection and Total Nucleic Acid Preservation System	50 units	68800
Total RNA Purification Kits	50 units	68800

v1.0

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