Product Insert

Catalog # YST00153, Covid-19 RT-PCR Detection Kit. Check our website for the various product sizes available.

TaqMan RT-PCR SARS-CoV-2 Detection Kit contains the assays and controls for a real-time reverse transcription polymerase chain reaction (RT-PCR) test intended for the qualitative detection of nucleic acid from SARS-CoV-2.

Principle: RT-PCR primers and three sets of fluorescent probes for amplicons were designed to cover simultaneously three gene regions: ORF 1ab, E and N (all FAM) for SARS-CoV-2. Additionally, human ACE2 (VIC) was used in the kit as an internal reference control.

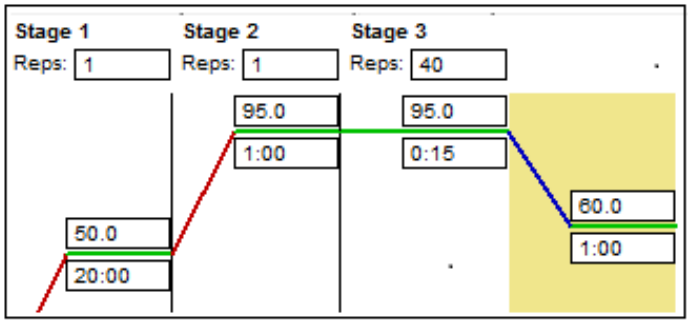
RNA isolated and purified from upper and lower respiratory specimens is reverse transcribed to cDNA and subsequently amplified in the real-time PCR detection system. In the process, the probe anneals to a specific target sequence located between the forward and reverse primers. During the extension phase of the PCR cycle, the 5' nuclease activity of Taq polymerase degrades the probe, causing the reporter dye to separate from the quencher dye, generating a fluorescent signal. With each cycle, additional reporter dye molecules are cleaved from their respective probes, increasing the fluorescence intensity. Fluorescence intensity is monitored at each PCR cycle by real-Time PCR System.

Test Method with Positive Control Sample

1. Positive Control Preparation: Add 20uL Lysis Buffer A in a 1mL tube, and then add 2uL Positive Control. Incubate the tube at 60°C for 5 minutes and then at 90°C for 10 minutes. After cooling down to room temperature, add 20uL Lysis Buffer B. Add 455uL 1X TE buffer and mix well. This is your Positive Control RNA sample for RT-PCR. The sample can be serially diluted for testing your system linearity and sensitivity.

2. RT-PCR for 20uL Reaction Volume:

Component	**Volume, uL**
4X TaqMan RT-PCR Master Mix	10
20X TaqMan Assay (Primer/Probe Mix)	1
RNA Sample	2
Water	7
Total	**20**



425 Boulder Court, Suite 500, Pleasanton, CA 94566, USA Phone: 1+(510) 861-2542 Email: info@sensecarebio.com
www.sensecarebio.com