

PaxView[®] COVID-19 real-time RT-PCR Kit

Overview

COVID-19 (Corona Virus disease 2019) is the respiratory infectious disease caused by SARS-CoV-2 that has not been previously identified in humans. WHO declared this beta-coronavirus as a pandemic disease being regarded as spreading all around the world.

The PaxView[®] COVID-19 real-time RT-PCR Kit detects the novel coronavirus, COVID-19 using one-step real-time RT-PCR in a single tube intended for *in vitro* diagnostic use. The target genes for the detection of the virus are Orf1ab and N gene. The sequence of primers and probes for the amplification were adapted from sources published by China CDC and WHO. The kit includes primers and probe set targeting the human RNase P gene that serves as an internal positive control for the real-time RT-PCR.

Targets

Target	Fluorescence	Detection
Orf1ab	FAM	510 - 530
N gene	HEX/JOE	560 - 580
RNase P (Internal Control)	CY5	675 - 690

Comparison of COVID-19 real-time PCR Kits

Company	PaxGenBio	Company K	Company S
Kit Name	PaxView COVID-19 real-time RT-PCR Kit	Product P	Product A
Target Gene	2 genes (Orf1ab, N)	2 gene (RdRp, E)	3 genes (RdRP, E, N)
Real-time PCR machine	ABI7500 CFX96	ABI7500 CFX96	CFX96
Kit Components	4X RT-PCR premix Primer/Probe Mix Positive control	RT-PCR premix Primer/Probe Mix 1 (E gene) Primer/Probe Mix 2 (RdRP gene) Control 1 (E gene) Control 2 (RdRP gene)	RP-V IC 2019-nCoV MOM Water One-step buffer One-step Enzyme
Internal Control	Rnase P (house keeping RNA gene)	Synthetic DNA (use at PCR reaction)	Synthetic DNA (use at extraction)
PCR tube use	One	Two	One
LoD	100 copies/reaction	E gene (5.7copies/ul) RdRP gene(7.6copies/ul)	100 copies/reaction

Kit Components

COMPONENTS	VOLUME	TUBES
4X RT-PCR PREMIX	240 μl /tube	2 tubes
PRIMER/PROBE MIX	240 μl /tube	2 tubes
POSITIVE CONTROL	50 μl /tube	1 tube

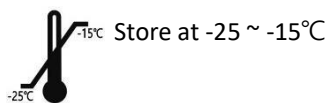
Specimens

Oropharyngeal swab, nasopharyngeal swab, sputum and bronchoalveolar lavage fluid(BALF).

Package



Product Storage



Expiration date

6 months from the date of manufacturing

* Once opened, components are stable during the period below.


Components	Shelf life after opening
4X RT-PCR PREMIX	3 Months
PRIMER/PROBE MIX	3 Months
POSITIVE CONTROL	3 Months

References

1. National institute for viral disease control and prevention (China); http://ivdc.chinaccdc.cn/kyjz/202001/t20200121_211337.html
2. Laboratory testing for 2019 novel coronavirus (2019-nCoV) in suspected human cases Interim guidance (WHO)
3. Real-Time RT-PCR Panel for Detection 2019-Novel Coronavirus (CDC)
4. CDC protocol of real time RTPCR for influenza A(H1N1) (WHO)

Contact Information

Customer services, SRAM & MRAM Group
 T: +60 3-2775 7326
 E: saleskl@sramram.com


PaxGenBio Co., Ltd.