

Product information

QF 24 V4
CV21 2020

SARS-CoV-2 RT-PCR Detection Kit

Catalog #: COV-2-RT-PCR
Size: 50 Rxns, 500 Rxns, 1000 Rxns
Storage: -10°C to -30°C for all components

Product Description:

SARS-CoV-2 RT-PCR Detection Kit is a one-step RT-PCR Kit for the detection of SARS-CoV-2-specific RNA in specimens including serum from suspected patients. The kit contains SARS-CoV-2-specific primer and probe sets designed by comparing all available sequences of other coronaviruses that allows both transcription and subsequent PCR amplification in a single reaction. An internal control for human RNA species will be provided with the kit to identify possible PCR inhibition and assess the reliability of the PCR reaction.

Specifications

- Target: SARS-CoV-2
- Detection:

Probe	Dye	Quencher
2019-nCoV ORF1ab	FAM	DQ-1 ¹
2019-nCoV N-target	VIC	DQ-1 ¹
Internal Positive Control (IPC)	Cy5	DQ-3 ¹

¹: DQ is a Dark Quencher equivalent as designed by the CDC

Kit Contents

Components	50 Rxns	500 Rxns	1000 Rxns
EZ-RT-PCR Master Mix	55 µl	550 µl	1100 µl
COVID-19 Primer + Buffer mix	1000 µl	5 ml x2	5 ml x4
COVID-19 Positive Control	60 µl	600 µl	1200 µl
RT-PCR grade water	60 µl	600 µl	1200 µl

Limit of Detection (LoD)

Limit of detection (LoD) for this kit is 10 copies/reaction; Ct<37.

Procedure

1. Isolate RNA immediately after collection of specimens.
2. Completely thaw all reagents on ice and mix gently.
3. Prepare a reaction mix according to the table below to the PCR tube or plate.

Components	Sample*	Positive control*	Negative control*
EZ-RT-PCR Master Mix	1 µl	1 µl	1 µl
COVID-19 Primer + Buffer Mix	19 µl	19 µl	19 µl
COVID-19 Positive Control	0 µl	5 µl	0 µl
Sample**	X µl	0 µl	0 µl
RT-PCR grade water	Upto 25 µl	0 µl	5 µl

*: Reaction volumes of 25 ul are recommended

** : Start with 5 pg to 1 ug RNA sample per 25 ul reaction

4. Close reaction tube or plate, vortex for 5-10 sec and spin down the tube or plate briefly.

Note: Due to the high viscosity of master mix, mix well to ensure accurate PCR results.

5. Real-time PCR reaction condition

Step	Temp.	Time	Cycle #
cDNA synthesis	55°C	15 min	1 cycle
RT inactivation pre-denaturation	95°C	30 sec	1 cycle
Amplification	95°C 60°C	15 sec 1 min	45 cycles

6. Interpretation of Results

2019-nCoV ORF1ab (FAM)	+	+	-	-	-
2019-nCoV N-target (VIC)	+	-	+	-	-
IPC (Cy5)	+	+	+	+	-
Result	Positive	Positive	Positive	Negative	Invalid repeat













RT-PCR Machine Notes:

- This Assay is validated on the Applied Biosystems® 7500 Fast and 7500 Real Time PCR system, as well as the Bio-Rad CFX96.

Clinical Performance

Clinical performance for this kit was confirmed at 100% at LoD of 10 copies/reaction; Ct<37.

Index of Symbols

	<i>In Vitro</i> Diagnostic Use		See Instructions for Use		Caution
	Catalog Number		Manufacturing Date		Lot Number
	Expiry Date		Number of Tests		Store at -10 ~ -30°C
	Manufacturer		CE Marking		European Authorized Representative



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