

# gb SARS-CoV-2 Multiplex

## Purpose of use

gb SARS-CoV-2 Multiplex is a CE certified in vitro diagnostic kit that enables detection of SARS-CoV-2 virus (Wuhan coronavirus 2019). Detection is based on the viral E and RdRP genes. The assessment originates from protocol published by Charité laboratory (Berlin) and Institut Pasteur laboratory (Paris), and uses our own proprietary technology of GEMINI™ probes.

## Principle of detection

The test is based on multiplex one-step RT-qPCR method. The analysis is performed using fluorescently labelled probes, which allow the detection of viral gene E in a FAM channel, viral gene RdRP in a HEX channel and exogenous positive control in a Cy5 channel. The kit contains all the necessary components to perform the test.

## Available products

Cat. No.	Product	rxn
3231-200	gb SARS-CoV-2 Multiplex	200
3231-500	gb SARS-CoV-2 Multiplex	500

CE IVD one-step RT-qPCR kit contains reagents to provide 200/500 reactions (20 µl volume of each reaction).

## Parameters of the diagnostic kit

- CE IVD multiplex one-step RT-qPCR kit
- SARS-CoV-2 - detection of viral genes E and RdRP
- fluorescence channels FAM (gene E), HEX (gene RdRP) and Cy5 (EPC)
- technology of GEMINI™ probes for high detection sensitivity
- suitable for multi-channel PCR thermocyclers
- LOD of multiplex assay is 2.13 copies of viral RNA per reaction (95% CI)
- positive and negative control for analysis validity confirmation
- exogenous control (EPC Template RNA) is an artificial RNA, which may be added either to the sample before the isolation or to the RT-qPCR reaction
- exogenous control serves for verification of extraction process and reveals possible inhibition of RT-qPCR

## Content of the diagnostic kit

* Component <sup>1)</sup>	Volume	Qty <sup>2)</sup>	Conc.
● Assay CoV-2 E-RdRP	0.5 ml <sup>3)</sup>	2   5	4x
● Master Mix OneStep Multi	1.0 ml <sup>3)</sup>	2   5	2x
● Positive Control CoV-2	0.2 ml	1   1	4x
● EPC Template RNA	1.0 ml	2   5	
● Deionized Water	1.0 ml	1   1	

1) tube lid colour corresponds to reagent type

2) number for kit size of 200 / 500 reactions

3) volume equates to 100 PCR reactions of 20 µl volume



## Validated for cyclers

- CFX96/96Touch (Bio-Rad)
- QuantStudio 5 (Applied Biosystems)
- RG 3000 (Corbett Research)
- CFX Opus 96 (Bio-Rad)