



SARS-CoV-2 N501Y Mutation Detection Kit

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Qualitative PCR-based detection of the
SARS-CoV-2 N501Y Mutation

Product Description

DIAGNOVITAL® SARS-CoV-2 N501Y Mutation Detection Kit is a real-time RT-PCR-based test for the identification of the SARS-CoV-2 N501Y mutation in respiratory specimens. **This kit is only designed to test samples that have previously proven to be SARS-CoV-2 positive.** The DIAGNOVITAL® SARS-CoV-2 N501Y Mutation Detection Kit detects the N501Y mutation in **extracted SARS-CoV-2 RNA** from nasopharyngeal and oropharyngeal swab samples during infection.

Knowing matters

The
N501Y mutation
is shared by both the alpha
and beta variants. This mutation is
located in the viral receptor-binding domain
(RBD) for cell entry and increases binding to the
angiotensin-converting enzyme 2 (ACE2) receptor.
The enhanced binding at this site perhaps explains
the initial rapid rise to dominance of the alpha strain.
Citation: SARS-CoV-2 N501Y mutation adversely affects
cellular immune response

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SARS-CoV-2 N501Y mutation adversely affects
cellular immune response ([https://www.
news-medical.net/news/20210204/SARS-CoV-
2-N501Y-mutation-adversely-affects-cellular-
immune-response.aspx](https://www.news-medical.net/news/20210204/SARS-CoV-2-N501Y-mutation-adversely-affects-cellular-immune-response.aspx))

Features

- Single mutation assay
- Identifies spike protein mutation-N501Y
- Qualitative RT-PCR method using TaqMan probe technology
- Human endogenous control (HEC): RNase P (Ribonuclease P)
- Three different fluorophores are detected in 3 different channels
 - **FAM™** for the wild type allele
 - **HEX/VIC** for the N501Y allele
 - **Cy5** for RNase P (HEC)
- Ready to use PCR Master mix, positive and nuclease-free dH₂O controls
- RNA isolation required
- Cycling run time of 75 minutes
- Cycling temperature of 60°C

Benefits

- All Diagnovital Mutation Detection kits follow a similar procedure making implementation easy in the lab
- Excellent correlation with gold standard sequencing method
- Easy to use with pre-mixed reaction reagents and easy interpretation
- Reflex testing performed using isolated nucleic acid obtained from routine SARS-CoV-2 diagnostic test
- No disruption of routine lab operations for SARS-CoV-2 testing

Recommended Samples	Isolated RNA from Oropharyngeal and Nasopharyngeal Swabs
Extraction Systems	QIAamp® MinElute Virus Spin Kit / RTA Viral NA Isolation Kit from Swabs / Tianlong Generotex 96
Real-Time Instrument	Applied Biosystems™ QuantStudio5 Real-Time PCR System
Storage conditions	Store all components at -15°C /-25°C Avoid more than 3 freeze /Thaw cycles

Ordering Information

Product Name	DIAGNOVITAL SARS-CoV-2 N501Y Mutation Detection Kit
Number Reactions/Kit	50
A1 Life Sciences Catalog Number	090R01050

For Research Use Only. Not for use in diagnostic procedures.

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