



# MASTISOPLEX<sup>®</sup> SARS-CoV-2



- Isothermal amplification assay for the detection of SARS-CoV-2

- Simple and fast analysis in 45 minutes

- Multiplex RT-LAMP by using novel mediator displacement probes



# MASTISOPLEX® SARS-CoV-2

MASTISOPLEX® SARS-CoV-2 is an in vitro diagnostic kit for the qualitative detection of SARS-CoV-2 in human respiratory specimens.

## Specifications

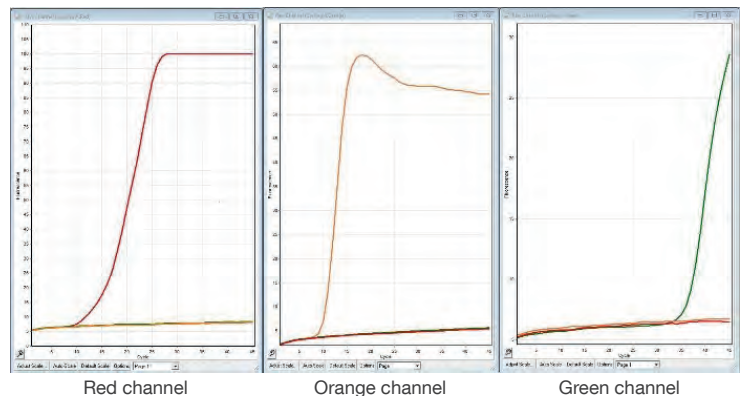
|                            |  |
|----------------------------|--|
| Test principle             | Multiplex RT-LAMP  |
| Specimen material          | Extracted RNA from human respiratory specimen  |
| Sensitivity*               | 98%  |
| Specificity*               | 99%  |
| Positive predictive value* | 98%  |
| Negative predictive value* | 99%  |
| Efficiency*                | 99%  |
| Assay-Dauer                | 45 min   |
| Storage temperature        | ≤-20°C   |
| Device                     | Real-time PCR cyclers or programmable heating blocks, suitable for isothermal nucleic acid amplification and fluorescence detection (FAM, Cy5, ROX), e.g. <b>MASTISOPLEX® MD12</b> |
| Pack Size                  | 100 tests  |

\* Collective of 241 negative and 171 positive samples, compared to RT-PCR.

## New: Multiplex RT-LAMP of specific target sequences by using novel Mediator Displacement Probes

MASTISOPLEX® SARS-CoV-2 is based on the principle of LAMP, whereby viral RNA, which is first transcribed into cDNA by using of reverse transcriptase (RT), is amplified in a loop-mediated isothermal amplification reaction<sup>(1)</sup>. In this process, the use of novel „Mediator Displacement Probes“ in conjunction with universal reporters<sup>(2)</sup> allows real-time multiplexing of the SARS-CoV-2 specific target sequences in the RdRp and N gene as well as of the internal inhibition control RNA (IC) or extraction control RNA (EC).

For isothermal amplification and detection, all appropriate real-time PCR cyclers can be used or programmable real-time heating blocks equipped for the detection of fluorescence signals, e.g. **MASTISOPLEX® SARS-CoV-2**. The amplified products can be detected within 45 minutes.



## Ordering information

| Order Code | Product                 | CE | Pack Size |
|------------|-------------------------|----|-----------|
| 67COV2-2   | MASTISOPLEX® SARS-CoV-2 |    | 100 tests |

### Literatur

1. T Notomi 1, H Okayama, H Masubuchi, T Yonekawa, K Watanabe, N Amino, T Hase; Loop-mediated Isothermal Amplification of DNA, Nucleic Acids Res. 2000 Jun 15;28(12):E63. doi: 10.1093/nar/28.12.e63.
2. Simplified Real-Time Multiplex Detection of Loop-Mediated Isothermal Amplification Using Novel Mediator Displacement Probes with Universal Reporters. Becherer L, Bakheit M, Frischmann S, Stinco S, Borst N, Zengerle R, von Stetten F. Anal Chem. 2018 Apr 3;90(7):4741-4748. doi: 10.1021/acs.analchem.7b05371. Epub 2018 Mar 14.

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