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SOLIScript® 1-step CoV Kit

For sensitive and reliable detection of SARS-CoV-2 RNA targets by one-step RT-qPCR

solisbiodyne.com

Features

SOLIScript® 1-step CoV Kit is optimized for highly sensitive one-step real-time RT-PCR (RT-qPCR) detection of viral RNA of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) from RNA samples extracted from nasopharyngeal and oropharyngeal swab specimens. SOLIScript® 1-step CoV Kit is suitable for probe-based detection of up to four targets simultaneously.

- Universal component in different SARS-CoV-2 diagnostic assays
- Up to 4 targets in one reaction
- Shipping at room temperature

Performance validated with clinical samples

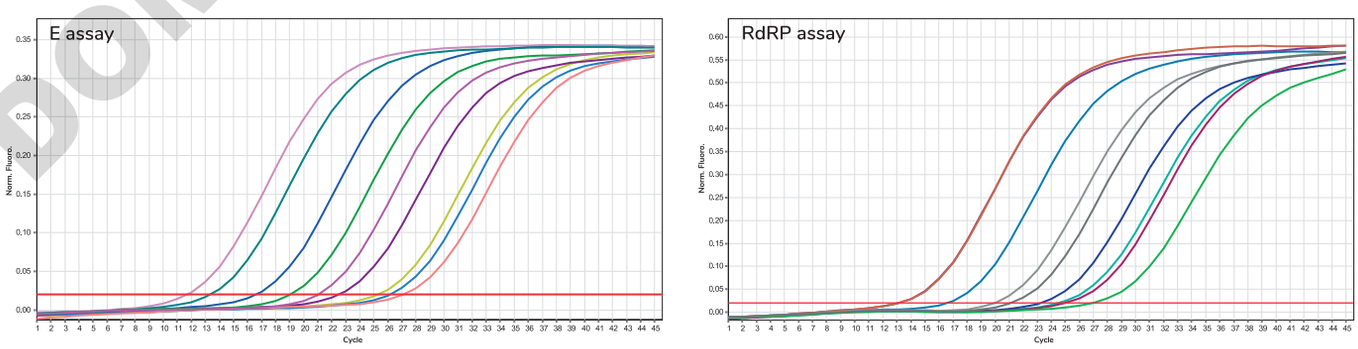
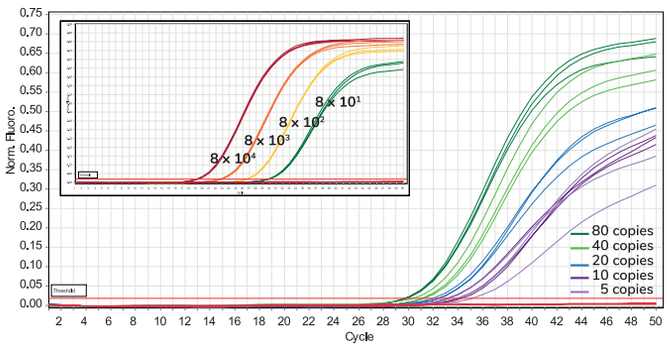


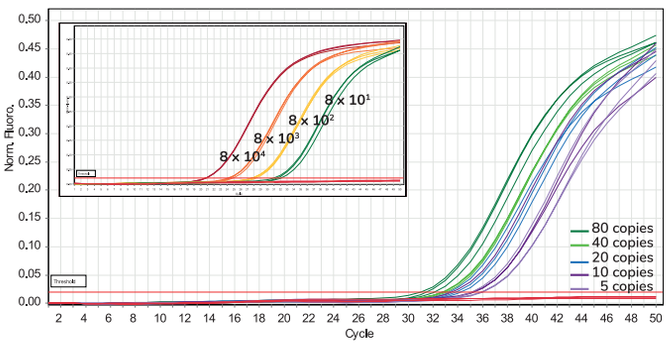
Figure 1. SOLIScript® 1-step CoV Kit was used to perform detection of E gene (left) and RdRP gene (right) in positive COVID-19 clinical RNA samples. Singleplex reactions were performed using the published and widely used primers and dual-labelled FAM-BHQ1 probes from Berlin, Charité RT-qPCR diagnostic panel. Reactions were performed on Rotor-Gene 6000 platform following instructions recommended in SOLIScript® 1-step CoV Kit Supplementary Data Sheet.

Highly sensitive detection, evaluated with SARS-CoV-2 synthetic single stranded RNA

E assay



2019-nCoV_N2 assay



ssRNA copies per 8 µL RNA sample per 20 µL reaction	Diagnostic assay	Average Ct value ± SD
80 000	E_Sarbeco	19.35± 0.11
8 000	E_Sarbeco	22.79 ± 0.15
800	E_Sarbeco	26.72 ± 0.07
80	E_Sarbeco	29.91 ± 0.07
40	E_Sarbeco	31.03 ± 0.5
20	E_Sarbeco	32.39 ± 0.27
10	E_Sarbeco	33.95 ± 0.55
5	E_Sarbeco	34.22 ± 0.93
80 000	2019-nCoV_N2	20.78 ± 0.06
8 000	2019-nCoV_N2	24.48 ± 0.37
800	2019-nCoV_N2	28.00 ± 0.34
80	2019-nCoV_N2	31.57 ± 0.52
40	2019-nCoV_N2	32.92 ± 0.17
20	2019-nCoV_N2	33.86 ±0.46
10	2019-nCoV_N2	34.71 ± 0.99
5	2019-nCoV_N2	35.68 ± 0.47

Figure 2. RT-qPCR amplification plots of synthetic single stranded RNA using SOLIScript® 1-step CoV Kit with E_Sarbeco (Charité, Germany) and 2019-nCoV_N2 (CDC, US) primers/probe assays. Number of single stranded RNA copies per 8 µl sample in 20 µl reaction is shown. Reactions were performed in triplicates. For each dilution and diagnostic assay, average Ct value and standard deviation (SD) is provided in the table. Reactions were run on Rotor-Gene 6000 qPCR cycler using cycling conditions recommended in the Data Sheet of SOLIScript® 1-step CoV Kit.

- SARS-CoV-2 primers and probes, applicable positive and internal extraction controls are not provided with the Kit and should be supplied by the user.
- The Kit has been tested and validated by diagnostic laboratories using primer-probe panels recommended by Charité, (Germany) (Figure1) and CDC (USA) protocols according to WHO "Coronavirus disease (COVID-19) technical guidance: Laboratory testing for 2019-nCoV in humans", section: "Molecular assays to diagnose COVID-19"; subsection: "In-house developed molecular assays".

Kit components:

- **40x One-step SOLIScript® CoV Mix:** SOLIScript® Reverse Transcriptase, RiboGrip™ RNase Inhibitor
- **5x One-step Probe CoV Mix:** HOT FIREPol® DNA polymerase, reaction buffer, dNTPs, 15mM $MgCl_2$ (1x qPCR solution - 3mM $MgCl_2$)
- **Water, nuclease-free**

Routine storage: -20°C. Shipping and temporary storage for up to 30 days at room temperature (15–25°C).

This product is supplied for Research Use Only.

It is suitable for use as a component of molecular diagnostic assays, where applicable country laws allow. This product alone does not provide any diagnostic result.

Ordering information

Product	CAT. NO.	RXN / 20 µl
SOLIScript® 1-step CoV Kit	08-65-0000S (free sample) 08-65-00250 08-65-05000	50 250 5000

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For further details and ordering please contact
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