



Portable Mini Lab for COVID-19 Express Diagnostics



LifeCase COVID-19

Intended Use

The portable mini lab is designed to quickly detect SARS-CoV-2 RNA presence in biological material by using real-time isothermal amplification from nasopharyngeal and oropharyngeal swabs and sputum.

Testing time – 30 minutes, including pretreatment procedure (3 minutes/sample) and the isothermal amplification reaction (not more than 25 minutes).

Average laboratory on-the-flow capacity is 20 samples/hour.
Sensitivity - from 100 particles

Portable Laboratory Includes:

1. Pretreatment device (for RNA isolation) – 1 pc.
2. Isothermal amplifier (for detection) – 1 pc.
3. Automatic pipettes – 2 pcs.
4. Single-use tips for pipettes.
5. Microtube rack.
6. Laptop.

Consumables Required for Testing:

1. Detection kit for the SARS-CoV-2 RNA presence.
2. Reagent kit for the SARS-CoV-2 RNA nucleic acids extraction.

Storage

Portable lab – no expiry date when $t = +2...+35^{\circ}\text{C}$ (non-condensing).
Detection kit for the SARS-CoV-2 RNA presence – 12 months (-20°C); 7 days ($+2...+4^{\circ}\text{C}$).
Reagent kit for the SARS-CoV-2 RNA nucleic acids extraction – 12 months when $t = +2...+30^{\circ}\text{C}$.

Environmental Conditions

Temperature: $+ 18...+25^{\circ}\text{C}$
Relative humidity: 30...75 %

Required Staff

1 laboratory assistant duly trained to work in a PCR laboratory