

# COVID-19 Products

01

## iDetect™ SARS-CoV-2 Detection Kit

- Testing time within 1 hour
- Equivalent to US CDC's reagents  
(Confirmed by University of Indonesia as per the request of Ministry of Health, Indonesia)

02

## Now Detect Mobile Real Time Isothermal Amplifier Device

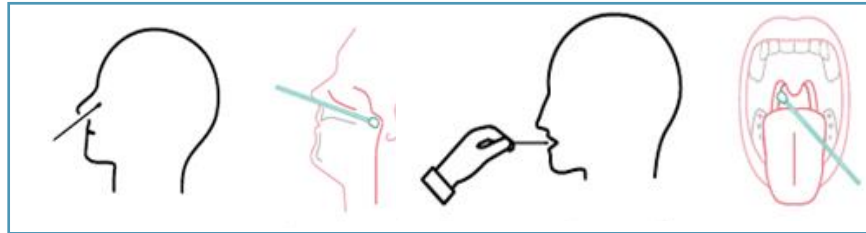
- Portable, inexpensive and optimized for field verification
- Equivalent to Roche

03

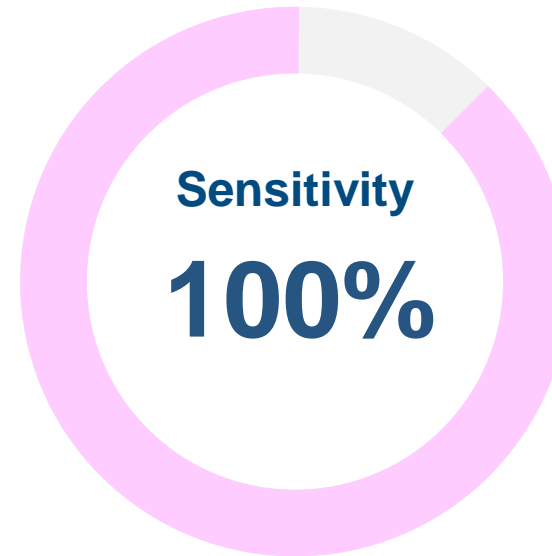
## NOW Detect COVID-19 IgM/IgG Rapid Test

- Within 15 minutes
- Storage: 2 ~ 30 °C

## Recent Clinical Evaluation in November, 2020



- Equivalent to both US CDC's reagents & Roche's PCR device  
(Confirmed by University of Indonesia as per the request of Indonesian Ministry of Health)

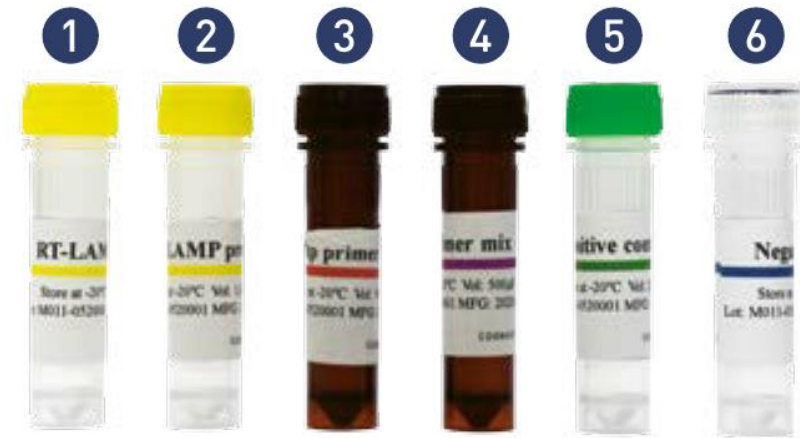


- Equivalent to US CDC's reagents & Powerchek™ 2019-nCoV Real-time PCR kit of KOREA Kogenebiotech
- The tests have been conducted with the following Instruments;
  - A) 7500 Real-Time PCR Instrument System, ABI;
  - B) QuantStudio™ 6 Flex Real-Time PCR System, Applied Biosystems;
  - C) LightCycler480, Roche

01

# iDetect™ SARS-CoV-2 Detection Kit

RT-LAMP assay intended for the qualitative detection of RdRp and N gene for SARS-CoV-2 in upper (nasopharyngeal and oropharyngeal swabs) and lower respiratory tract (sputum) specimens from individuals suspected of COVID-19 by their healthcare provider.



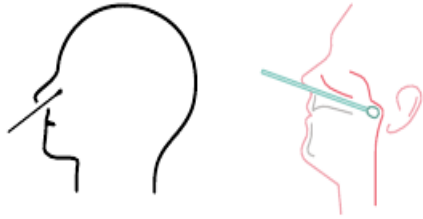
## Specifications

- Specimens: Nasopharyngeal and Oropharyngeal swabs, Sputum
- Detection: RdRp and N gene
- Testing time: within 1 hour (vs. PCR 4~6 hrs. required)
- Packing Unit: 100 tests/Kit
- Compatible with RT-PCR
- COVID-19 Confirmation Test

|      | Reagent          | Volume / Quantity       | Cap label |
|------|------------------|-------------------------|-----------|
| 1, 2 | RT-LAMP Premix   | 1,000 $\mu$ l / 2 tubes | ●         |
| 3    | RdRp primer mix  | 500 $\mu$ l / 1 tube    | ●         |
| 4    | N primer mix     | 500 $\mu$ l / 1 tube    | ●         |
| 5    | Positive control | 200 $\mu$ l / 1 tube    | ●         |
| 6    | Negative control | 200 $\mu$ l / 1 tube    | ○         |

## Test Procedure

### 1 Sample collection [upper/lower respiratory tracts]



[Nasopharyngeal swab] :  
Insert a swab deep into the nostril to collect sample.



[Oropharyngeal swab] :  
Rub swab over both tonsillar pillars and posterior oropharynx to collect sample.



[Sputum] :  
Cough out sputum carefully to prevent it mixing with oral secretions (saliva).

2



[RNA Extraction] :  
Extract RNA using the RNA Extraction Kit, according to the manufacturer's instructions.

3



[RT-LAMP Measurement] :  
Place tubes and operate the machine.

4



[Result Interpretation] :  
Determine Positive/Negative

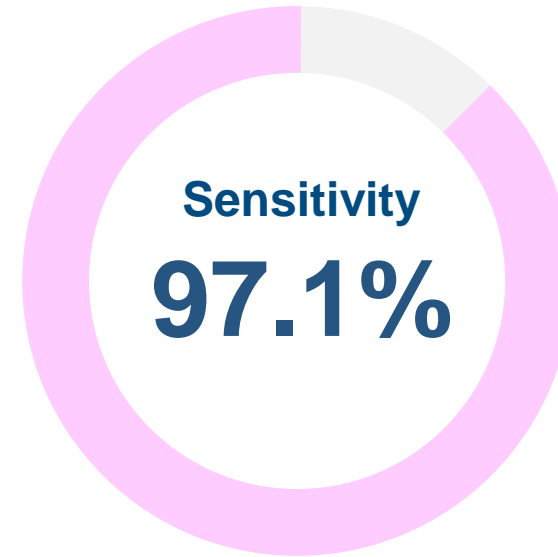
## Performance

### Result Interpretation

| Case | PC+ | NC+ | Gene |     | Results                 |
|------|-----|-----|------|-----|-------------------------|
|      |     |     | RdRp | N   |                         |
| 1    | +   | -   | +    | +   | SARS-CoV-2 detected     |
| 2    | +   | -   | -    | -   | SARS-CoV-2 not detected |
| 3    | +   | -   | +    | -   | SARS-CoV-2 detected     |
| 4    | +   | -   | -    | +   | SARS-CoV-2 detected     |
| 5    | +   | +   | +/-  | +/- | Invalid / retest        |
| 6    | -   | +   | +/-  | +/- | Invalid / retest        |
| 7    | -   | -   | +/-  | +/- | Invalid / retest        |

PC : positive control, NC : negative control

## Clinical Evaluation



## 02 Now Detect Mobile Real Time Isothermal Amplifier Device

### ■ Features

- Portable optimized for field verification
- Compact, lightweight, easy-to-carry
- Rapid, real-time, accurate results within 10-40 min
- Simultaneous test up to 8 channels
- Battery-powered equipment
- Simultaneous test up to 8 channels
- Interconnecting with PC and smartphone
- No need thermal cycles (unlike PCR), highly skilled technicians



# 02

## Application

Smartphone, PC

Interconnecting with Smartphone and PC



### Wide Application



Malaria



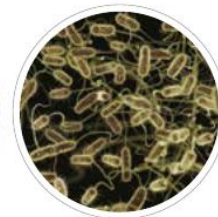
Ebola



COVID-19



Norovirus



O-157



Salmonella



Bird influenza

## Now Detect vs. PCR

|                        | LAMP  | PCR                            |
|------------------------|---|--------------------------------|
| Temperature adjustment | Isothermal amplifications → Device small & simple | Heat cycling → large equipment |
| Detection speed        | Fast (10~40 minutes)                              | Slow (~120 minutes)            |
| Sample preparation     | No need for pure nucleic acid                     | Need for pure nucleic acid     |
| Detection method       | Real time check of turbidity                      | Additional equipment required  |

## Specifications

| Category              | Specification  | Remark   |
|-----------------------|--|--|
| Device size           | 150mm * 169mm * 89mm (W*L*H)   |  |
| Weight                | About 900g   | Including 220g of battery  |
| Power                 | High capacity battery built-in 12V-4000Ah                                  |  |
| Battery               | Operable for over 6 hours  | Built-in high capacity battery(5200mAh)<br>anytime, anywhere with rechargeable |
| Form                  | Portable device  | Real time  |
| Operating temperature | 40~80℃ (1℃ unit limit, temperature difference 0.5℃)                        | 1℃ step control, deviation within 0.5  |
| Turbidity             | Wavelength of 650nm  |  |
| Detection method      | LAMP method  | Isothermal amplification + detection + compact                                 |
| Items                 | Up to 8 items  | Multiple detectable simultaneously   |
| Detection Speed       | 10min ~ 40min  | Fast   |
| Check the result      | *Device-LCD (4.3 LCD)<br>*PC-Program (USB)<br>*Smart phone-App (Bluetooth) | Accessible to PCs Smart phone  |



03

# NOW Detect COVID-19 IgM/IgG Rapid Test

NOW Detect COVID-19 IgM/IgG Rapid Test is a rapid immunochromatographic assay for the qualitative detection of specific antibodies to SARS-CoV-2 in human whole blood, serum or plasma.



## Specifications

- Specimens: Whole blood, Serum, Plasma
- Testing time: within 15 min.
- Packing Unit: 25 tests/Kit
- Storage: 2 - 30 °C

## Test Procedure

### Using Fingertip blood

- [Collect specimen] :  
Collect the 10 $\mu$ l of capillary whole blood using a capillary tube or pipette.
- [Load specimen] :  
Load the collected blood to the sample well.
- [Add sample buffer] :  
Add 4 drops of buffer into the sample well.
- [Read & Interpret] :  
Read the test result at 15 minutes.

### Using Serum / plasma / whole blood

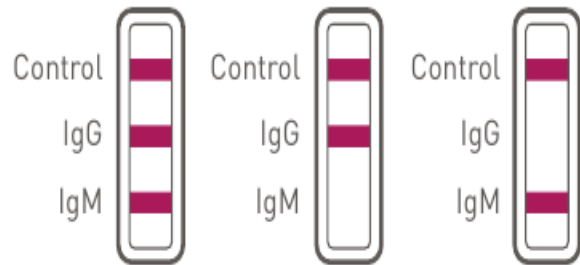
- [Collect specimen] :  
Collect the 10 $\mu$ l of serum / plasma / whole blood with micropipette.
- [Load specimen] :  
Load the collected blood to the sample well.
- [Add sample buffer] :  
Add 4 drops of buffer into the sample well.
- [Read & Interpret] :  
Read the test result at 15 minutes.

## Result Interpretation

**Positive**



**Negative**



**Positive**



**Negative**

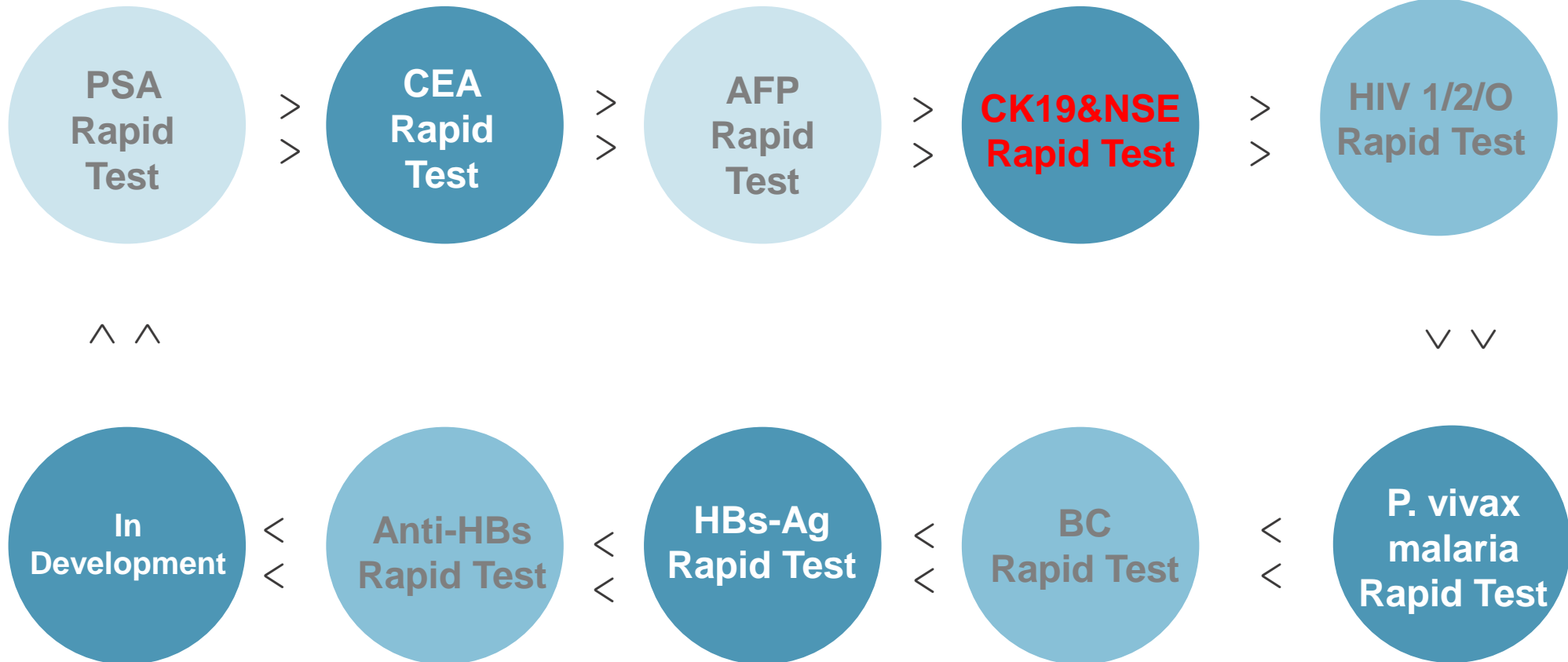


**Invalid**



Thank you

# Other Diagnosis Kits





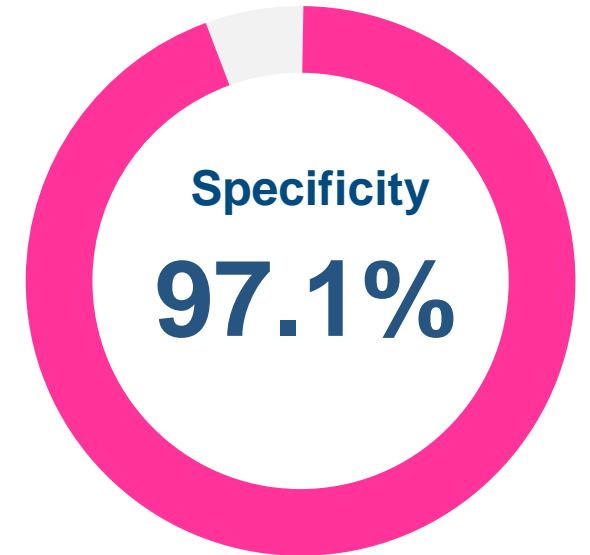
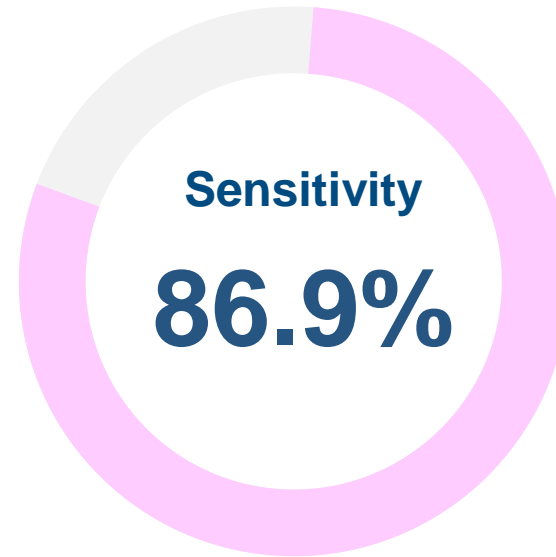
# NOW CHECK Lung Cancer Rapid Test

NOW CHECK CK19&NSE Rapid Test is a one-step rapid kit for the qualitative detection of lung cancer in serum. .



## Specifications

- Detection: SCLC(small cell lung cancer) and NSCLC(non-small cell lung cancer)
- Specimens: Serum
- Testing time: within 20 min.
- Packing Unit: 10 tests/Kit
- Storage: 2 - 30 °C





# NOW CHECK Breast Cancer Rapid Test

NOW CHECK Breast Cancer Rapid Test is the qualitative detection of breast cancer in serum. .



## Specifications

- Specimens: Serum
- Testing time: within 20 min.
- Packing Unit: 10 tests/Kit
- Storage: 2 - 30 °C

