

**RAPID SARS-COV-2 ANTIGEN TEST CARD**  
INSTRUCTION GUIDE FOR ANTERIOR NASAL SWAB SPECIMENS

For self-testing

- REF 1N40C5-2 For 1 Test/Box  
REF 1N40C5-4 For 5 Tests/Box  
REF 1N40C5-6 For 20 Tests/Box



IVD

Please follow the instruction leaflet carefully.

## INTENDED USE

Rapid SARS-CoV-2 Antigen Test Card is an immunochromatography based one step in vitro test. It is designed for the rapid qualitative determination of SARS-CoV-2 virus antigen in anterior nasal swabs from individuals with or without symptoms or other epidemiological reasons to suspect COVID-19. Rapid SARS-CoV-2 Antigen Test Card is nucleus-specific (N protein). Rapid SARS-CoV-2 Antigen Test Card shall not be used as a sole basis to diagnose or exclude SARS-CoV-2 infection. Children under 14 years of age should be assisted by an adult.

**SUMMARY**  
The novel coronavirus belongs to the *Beta* genus, COVID-19 is a severe respiratory infectious disease. People are generally susceptible. Currently, the pathogenesis and the novel coronavirus are the main source of infection, asymptomatic infected people can also be an infectious source. Based on the current epidemiological investigation, the incubation period is 1 to 14 days, mostly 3 to 7 days. The main manifestations include fever, fatigue and dry cough. Nasal congestion, runny nose, sore throat, myalgia and diarrhea are found in a few cases.

## MATERIALS PROVIDED

Components	For 1 Test/Box	For 5 Tests/Box	For 20 Tests/Box
Rapid SARS-CoV-2 Antigen Test Card (sealed foil pouch)	1	5	20
Sterile swab	1	5	20
Extraction tube	1	5	20
Sample extraction buffer	1	5	20
Instructions for use (this leaflet)	1	1	1
Tube storage box (packaging)	1	1	1

**PERFORMANCES (SENSITIVITY AND SPECIFICITY)**  
Rapid SARS-CoV-2-Antigen Test Card was compared to the confirmed clinical diagnosis. The Study involved 1063 nasal samples. The test results are summarized below:

Evaluated Reagent Results	RT-PCR Results		Total
Positive (+)	425	1	426
Negative (-)	10	627	637
Total	435	628	1063

Sensitivity (PPV) = 425/426\*100% = 97.70% (95% CI: 96.29% - 99.11%)  
Specificity (NPV) = 627/628\*100% = 99.84% (95% CI: 99.53% - 99.99%)  
Accuracy (OPA) = 1052/1063\*100% = 98.97% (95% CI: 98.36% - 99.57%)

A feasibility study demonstrated that:  
- 99.7% of the different types of results were interpreted correctly  
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## INTERFERENCES

None of the following substances at the tested concentration showed any interference with the test.

Whole Blood: 1%	Alkalot: 10%	Mucin: 2%
Phenylephrine: 15%	Tobramycin: 0.0004%	Oxymetazolin: 15%
Menthol: 0.15%	Cromolyn: 15%	Benzokain: 0.15%
Fluticasone Propionate: 5%	Mupirocin: 0.25%	Zicam Nasal Spray: 5%
Oseletamivir Phosphate: 0.5%	Sodium chloride: 5%	Human Anti-mouse Antibody (HAMA): 60 ng/ml

**CROSS-REACTIVITY**  
Cross-reactivity of the Test Device was evaluated by testing viruses and other microorganisms. The final test concentrations of viruses and other microorganisms determined in the cross-Test Study. The following viruses and other microorganisms did not elicit the Human SARS-CoV-2 virus response in any of the test results of the Test Device: Human coronavirus 229E, Human coronavirus OC43, Human coronavirus NL63, Human coronavirus HKU1, MERS coronavirus, Parainfluenza virus 1-4, Enterovirus EV71, Respiratory syncytial virus, Rhinovirus, Influenza A virus (H1N1 and H3N2), Influenza B virus (Yamagata and Victoria), Adeno virus 71, Human Metapneumovirus (hMPV), Staphylococcus epidemis, Chlamydia pneumoniae, Streptococcus pneumoniae, Streptococcus pyogenes, Bordetella pertussis, Mycobacterium tuberculosis, Legionella pneumophila, Mycoplasma pneumoniae, Haemophilus influenzae, Candida albicans, Staphylococcus aureus, Pseudomonas aeruginosa, Escherichia coli, Pneumocystis jirovecii (PJP) and Peacock human nasal wash.

## IMPORTANT INFORMATION BEFORE THE EXECUTION

- Read this instruction guide carefully.
- Do not use the product before the expiration date.
- Do not use if the product is damaged or the seal is broken.
- Store the test device at 4 to 30°C in the original sealed pouch. Do Not Freeze.
- The product should be used at room temperature (15°C to 30°C). If the product has been stored in a cool area (less than 15°C), leave it at normal room temperature for 30 minutes before use.
- Handle the product as potentially infectious.
- Inadequate or inappropriate specimen collection, storage, and transport may yield inaccurate test results.
- Correct specimen collection is the most important step in the procedure. Make sure to collect enough specimen material (nasal secretion) with the swab, especially from children.
- Blow your nose several times before collecting specimen.
- The specimens should be tested as soon as possible after collection.
- Apply the drops of test specimen only to the specimen well (S).
- Too many or too few drops of test specimen solution can lead to an invalid or incorrect test result.
- If you have any questions, please do not hesitate to contact your physician.
- Children under 14 years of age should be assisted by an adult.

## LIMITATIONS

- The test is to be used exclusively for the qualitative detection of SARS-CoV-2 viral antigen in anterior nasal swab specimens. The exact concentration of SARS-CoV-2 viral antigen cannot be determined as part of this test.
- Proper specimen collection is critical. Failure to follow the procedure may result in inaccurate test results. Improper collection, storage, or even freezing and thawing of the specimen can lead to inaccurate test results.
- If the viral load of the specimen is beyond the detection limit of the test, the test may produce a negative result.
- As with all medical tests, the clinical diagnosis should not be based on the result of a single test, but should be made by the physician after evaluation of all clinical and laboratory results.
- A negative result does not exclude viral infection except for SARS-CoV-2 and should be confirmed by molecular diagnostic methods if COVID-19 is suspected.
- A positive result does not exclude co-infection with other pathogens.
- The SARS-CoV-2 rapid antigen test can detect both viable and non-viable SARS-CoV-2 material. The performance of the SARS-CoV-2 rapid test is dependent on viral load and may not correlate with other diagnostic methods performed on the same specimen.
- Users should test specimens as soon as possible after specimen collection and within two hours of specimen collection.
- Sensitivity of the test may be lower than nasopharyngeal swabs. It is recommended to use the nasopharyngeal swab specimen for testing.
- Monoclonal antibodies may fail to detect, or detect with less sensitivity, SARS-CoV-2 viruses that have undergone minor amino acid changes in the target epitope region.
- The amount of antigen in a sample may decrease as the duration of illness increases. Specimens collected after day 5-7 of illness are more likely to be tested negative compared to a RT-PCR assay.
- The test is not suitable for use with the assayed swabs. Use of alternative swabs may result in false negative results.
- The validity of Rapid SARS-CoV-2 Antigen Test Card has not been proven for identification/confirmation of tissue culture isolates and should not be used in this capacity.

PREPARATION

- The test kit does not rule out co-infections with other pathogens. Positive results may occur in cases of infection with SARS-CoV.
- Clear, clean and dry a flat surface.
  - Check the test kit contents. Make sure that nothing is damaged or broken.
  - Timer at hand.
  - Wash hands.

**DISPOSAL**  
The test kit may be disposed of with normal household waste in accordance with the applicable local regulations.

**PROCEDURE**  
This test is suitable for people of all ages. The recommended operators are aging from 14 to 90. Children under 14 years of age should be tested by an adult. Do not continue the test if the child feels any pain.

Rotate the lid of sample extraction buffer bottle.  
Caution: Open it away from your face and be careful not to spill any of the liquid.

Squeeze all extraction buffer out of the bottle into the extraction tube.  
Caution: Avoid touching the bottle against the tube.

Find the swab in the sealed wrapper in front of you. Identify the soft, fabric tip of the swab.

Peel open the swab packaging and gently take out the swab.  
Caution: Never touch the soft, fabric tip of the swab with your hands.

Carefully insert swab into one nostril. The swab tip should be inserted no less than 2.5 cm (1 inch) from the edge of the nostril. Roll swab 3-4 times along the mucosa inside the nostril. Leave swab in the nostril for several seconds. Using the same swab, repeat this process for the other nostril. Withdraw swab from the nasal cavity.

Caution: This may feel uncomfortable. Do not insert the swab any deeper if you feel strong resistance or pain.

Place swab into extraction tube. Roll swab three to five (3-5) times. Leave swab in extraction buffer for 1 minute.

Pinch extraction tube with fingers and remove the solution from swab as much as possible.

Install the nozzle cap onto the sample extraction tube tightly.

Bring the kit components to room temperature before testing. Open the pouch and remove the card. Place the card on a flat and level surface.

Caution: Once opened, the test card must be used immediately.

Invert the extraction tube and add 3 drops (about 75 µl) of test specimen into the specimen well (S) by gently squeezing the extraction tube.

Caution: The formation of air bubbles in the specimen well (S) must be avoided.

Read the results at 15-20 minutes.

Caution: Results after 20 minutes may not be accurate.

The used device may be disposed of with normal household waste in accordance with the applicable local regulations.

**INTERPRETATION OF RESULTS**

**Positive:**  
If two colored bands appear with one colored band in the Control Zone (C) and another in the Test Zone (T) within 15-20 minutes, the test result is positive.

Caution: No matter how faint the colored band is in the Test Zone (T), the result should be considered as positive.

**Negative:**  
If one colored band appears in the Control Zone (C) and no colored band appears in the Test Zone (T) within 15-20 minutes, the test result is negative.

**Invalid:**  
If no color line appears in the control area (C) within 15-20 minutes, the test is invalid. Repeat the test with a new test card.

**Negative control:**  
The control line is an integrated reagent and is used to control the procedure. The control line appears when the test has been performed correctly and the reagents are reactive.

**FREQUENTLY ASKED QUESTIONS (FAQ)**

1. How does the detection work?

The N protein of the SARS-CoV-2 virus reacts with the stripe-like coating of the test line and, if present, results in a color change, i.e. a red line appears. Therefore, if the sample does not contain any viral proteins or antigens, there will be no red test line (T).

2. When should I use this myself?

You can use this test kit whenever you have symptoms or no symptoms. Studies show that earlier testing within the first 4 days of illness typically means a higher viral load.

3. What can affect my test result? What should I pay attention to?

Be sure to blow your nose multiple times before collecting the specimen.

Follow the instructions for use carefully.

Apply the drops of extraction solution only to the same well (S).

Too many or too few drops of extraction solution may lead to an invalid or incorrect test result.

4. The test strip is clear, discolored or smudged? What is the reason for this?

Please note that the test card should not be used with more than 3 drops of sample, as the liquid absorption of the test strip is naturally limited. If the control line does not appear or the test strip is badly smudged or discolored, making it unreadable, please repeat the test according to the instructions.

5. I have taken the test, but I don't see a control line (C). What should I do?

Your test result is invalid. Please repeat the test according to the instructions.

6. I am unsure about reading the result. What should I do?

For the result to be positive, 2 straight horizontal lines must be clearly visible with the full width of the cassette. If you are still unsure about the results, contact the nearest health facility according to the recommendations of your local authorities.

7. My result is positive, but the test kit only clearly indicates the control line as well as the test line, what should I do?

If your result is positive and the test kit only clearly indicates the control line as well as the test line, you should contact the nearest medical facility as recommended by your local authorities. Your test result may be double-checked and the authority or facility will explain the appropriate next steps.

8. My result is negative. What should I do?

If the test result only clearly shows the control line, this may mean that you are negative or that the viral load is too low to be detected. If you experience symptoms (fever, runny nose, loss of sense of smell or taste, etc.), please consult your primary care physician, or the nearest health care facility as recommended by your local authorities.

If you are not sure, you can repeat the test.

9. How can I dispose of the product?

The test kit may be disposed of with normal household waste in accordance with the applicable local regulations.

## ACCESSORIES:

Accessory	Manufacturer	EC-Representative	CE-Mark
Swab A	Jiangsu Changfeng Medical Industry Co., Ltd. Toujiao Town, Guangdong District Yangzhou 225109 Jiangsu P.R. China	Lins Service & Consulting GmbH Obere Seegasse 34/2,69124 Heidelberg Germany	CE 0197 acc. 93/42/EEC
Swab B	Goodwood Medical Care Ltd. 1-2 Floor, 3-19 Yongzheng Street Jinzhou District Dalian 116100 Liaoning China	CMC Medical Devices & Drugs S.L. C/ Horacio Lengo No.18, CP 29006, Malaga, Spain	CE 0197 acc. 93/42/EEC
Swab C	Zhejiang Gongding Medical Technology Co., Ltd. No. 10 Beiyuan Ave., Huangyan 318020 Taizhou, Zhejiang, P.R.China	Shanghai International Holding Corp. GmbH (Europe) Eiffestrasse 80, 20537 Hamburg, Germany	CE 0123 acc. 93/42/EEC
Swab D	Jiangsu Hanheng Medical Technology Co., Ltd. 16-B4# 1 North Yinghai Road, Taining District, 213017, Changzhou, Jiangsu, China	Luxus Lebenswelt GmbH Kochstr.1, 47877, Willich, Germany	CE 0197 acc. 93/42/EEC

## EXPLANATION FOR SYMBOLS

IVD	In Vitro Diagnostics Use		See Instructions for Use		Expiry Date



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