

A rapid test for the qualitative detection of SARS-CoV-2 Nucleocapsid Protein antigens present in nasal swab specimen.

For self-testing *in vitro* diagnostic use.

TESTING PROCEDURE

12-step testing procedure including: 01 Wash hands, 02 Remove cover, 03 Remove swab, 04 Insert swab into nostril, 05 Insert swab into tube, 06 Pull out swab, 07 Close cap, 08 Remove cassette, 09 Add solution, 10 Read result at 15 minutes, 11 Dispose of kit, 12 Wash hands.

READ RESULTS

Please share your test result with your healthcare provider and carefully follow your local COVID guidelines/requirements.

POSITIVE: You can see two colored lines. One colored line appears in the control line area (C), and the other line appears in the test line area (T).



Note: The intensity of the color in the test line region (T) will vary based on the amount of SARS-CoV-2 antigen present in the sample. So any shade of color in the test region (T) should be considered positive.

The positive result means that you are most likely to suffer from COVID-19, but the results should be confirmed. Carefully follow your local COVID guidelines / requirements. If it is necessary, your doctor may prescribe PCR detection reagent for confirmation.

NEGATIVE: You can see only one colored line appears in the control line area (C). There is no line appears in the test line area (T). This means you are unlikely to have COVID-19. However, it is possible for this test to give a negative result that is incorrect (a false negative) in some people with COVID-19.



Even with a negative test result, distance and hygiene rules must be observed, migration/traveling, attending events and etc should follow your local COVID guidelines/requirements.

INVALID: There is no line appears in the control line area (C). The most likely reason for this situation is insufficient specimen size or incorrect process operation. It is recommended to review the procedure, and then re-operate with a new test. Stop using the test kit if the problem is not resolved, and contact your local COVID-19 Center.



WARNINGS AND PRECAUTIONS

Read all the information in this package insert before performing the test.

- 1. For self-testing in vitro diagnostic use only.
2. Test for children should be used under the supervision of an adult.
3. Do not eat, drink or smoke in the area where the specimens or kits are handled.
4. Use the test only once, do not reuse the test. Do not use after expiration date.
5. Do not use test if pouch is damaged.
6. Wash hands thoroughly before and after handling.
7. If the result is preliminary positive, share your test result with your healthcare provider and carefully follow your local COVID guidelines/requirements.
8. Do not drink the buffer in the kit. Carefully handle the buffer and avoid it contacting skin or eyes, rinse with plenty of running water immediately if contacting.
9. The used test should be disposed according to local regulations.
10. Collect of sample from nasal of infants or small children may be painful and harmful. It is recommended that infants or new-borns might be tested with the guidance of medical staff.
When collecting of sample from nasal of children you may need another person to steady the child's head while swabbing, you may not need to insert the swab as far into the nostril.

STORAGE

Store the test at 35.6-86°F (2-30°C). Do not open the pouch until ready for use. DO NOT FREEZE. Keep dry.

INTENDED USE

The COVID-19 Antigen Rapid Test (Swab) is a single-use test kit intended to detect the novel coronavirus SARS-CoV-2 that causes COVID-19 in self-collected nasal swab specimen from symptomatic / asymptomatic individuals who are suspected of being infected with COVID-19.

A positive result indicates the presence of SARS-CoV-2. Individuals whose test results are positive should self-isolate and seek help from relevant healthcare institutions. A positive result may also be caused by bacterial infection or co-infection with other viruses. A negative result may also be infected with SARS-CoV-2.

The COVID-19 Antigen Rapid Test (Swab) only indicates a preliminary result. The confirmation of the final result should be based on the clinical diagnosis.

BACKGROUND

The novel coronavirus belongs to the beta genus. COVID-19 is an acute respiratory infectious disease. People are generally susceptible. Currently, the patients infected by the novel coronavirus are the main source of infection; asymptomatic infected people can also be an infectious source.

TEST PRINCIPLE

The COVID-19 Antigen Rapid Test (Swab) is a qualitative membrane-based immunoassay for the detection of SARS-CoV-2 Nucleocapsid protein Antigens in human nasal swab specimen.

REAGENTS

The test contains monoclonal anti-SARS-CoV-2 antibody and goat anti-mouse IgG as the capture reagent and monoclonal anti-SARS-CoV-2 antibody and mouse IgG as the detection reagent.

MATERIALS

Materials Provided

- Test cassette
• Extraction buffer
• Package insert
• Sterile swab
• Biosafety bag (optional)
• Tube holder

Materials required but not provided

- Timer

LIMITATIONS

- 1. Failure to follow these procedures may affect test performance.
2. The COVID-19 Antigen Rapid Test (Swab) only indicates the presence of SARS-CoV-2 antigens in the specimen.
3. Negative results cannot rule out SARS-CoV-2 infections, especially in those who have been exposed to the virus.
4. Positive results of COVID-19 may be due to infection with non-SARS-CoV-2 coronavirus strains or other interference factors.
5. If the virus concentration in the specimen is too low, false negative results may occur.

PERFORMANCE

Clinical performance

A clinical evaluation was conducted comparing the results obtained using the COVID-19 Antigen Rapid Test with RT-PCR (nasopharyngeal swab) test result. The clinical trial included 997 nasal specimens. The results demonstrated 97.0% sensitivity and >99.9% specificity with an overall accuracy of 98.0%.

Table with 3 columns: Category, PCR (nasopharyngeal swab) confirmed, Correct identified. Rows: Positive sample, Negative sample, Total, Relative Sensitivity, Relative Specificity, Accuracy.

97.0% Sensitivity: In total 665 PCR confirmed positive samples: 645 PCR confirmed positive samples were correctly detected by Citest COVID-19 Antigen Rapid Test. There are 20 false negative cases.

>99.9% Specificity: In total 332 PCR confirmed negative samples: 332 PCR confirmed negative samples were correctly detected by Citest COVID-19 Antigen Rapid Test. There are 0 false positive case.

98.0% Accuracy: In total 997 PCR confirmed samples, 977 PCR confirmed samples were correctly detected by Citest COVID-19 Antigen Rapid Test.

The observed accuracy may vary depending on the prevalence of the virus in the population.

Cross-reactivity

Test results will not be affected by other respiratory viruses and commonly encountered microbial flora and low pathogenic coronaviruses listed in table below at certain concentrations.

Table with 4 columns: Description, Test Level, Description, Test Level. Lists various viruses and bacteria with their respective test levels.

Interfering Substances

Test results will not be interfered by following substances at certain concentrations:

Table with 5 columns: Substance, Concentration, Substance, Concentration, Substance, Concentration. Lists interfering substances and their concentrations.

EXTRA INFORMATION

1. How do I know if the Test worked well?

The COVID-19 Antigen Rapid Test is a rapid chromatographic immunoassay for the qualitative detection of SARS-CoV-2 antigens present in self-collected swab specimens.

When the control line (C) appears, it means the test unit is performing well.

2. How soon can I read my results?

You can read your results after 15 minutes as long as a colored line has appeared next to the Control region (C), do not read result after 20 minutes.

3. When is the best time to run the test?

Test can be done at any time of the day. Can the result be wrong? Are there any factors that can affect the test result? The results will only give accurate results as far as the fresh human nasal swab is used and followed the instructions carefully.

5. How to read the test if the color and the intensity of the lines are different?

The color and intensity of the lines have no importance for result interpretation. The test should be considered as Positive whatever the color intensity of the test line (T) is.

6. What do I have to do if the result is positive?

A positive result means the presence of SARS-CoV-2 antigens. A positive result means it is very likely you have COVID-19 and the result should be confirmed. Immediately go into self-isolation in accordance with the local guidelines and immediately contact your general practitioner / doctor or the local health department in accordance with the instructions of your local authorities.

7. What do I have to do if the result is negative?

A negative result means that you are negative or that the viral load is too low to be recognized by the test. However, it is possible for this test to give a negative result that is incorrect (a false negative) in some people with COVID-19.

In addition, you can repeat the test with a new test kit. In case of suspicion, repeat the test after 1-2 days, as the coronavirus cannot be precisely detected in all phases of an infection.

LITERATURE REFERENCES

- 1. BACKINGER, C.L. and KINGSLEY, P.A., Recommendations for Developing User Instruction Manuals for Medical Devices Used in Home Health Care, Rockville, MD, U.S. Food and Drug Administration, Center for Devices and Radiological Health, HHS Pub. FDA 93-4258.

INDEX OF SYMBOLS

Table with 2 columns: Symbol and Tests per kit. Lists various symbols used in the document and their meanings.

CITEST DIAGNOSTICS INC. 170-422 Richards Street Vancouver BC, V6B 2Z4, Canada

CMC MEDICAL DEVICES & DRUGS, S.L. C/ Narciso Lengua 18, CP 29006, Málaga-Spain

Importer: MR Sanicom GmbH. Kapuzinerstr. 48, 80469 Munich (Germany)

