

Antigen testing 101

*Everything you need to know about testing
with the SARS-CoV-2 Antigen Self Test Nasal*



What is antigen testing?

An **antigen test** can detect if SARS-CoV-2 is present. The SARS-CoV-2 virus causes coronavirus disease (COVID-19). If your test sample contains the virus, then

you might be infectious to others, which is why self-isolation might be needed. If you have symptoms, appropriate medical care should be received.

Symptoms of COVID-19

The course of SARS-CoV-2 infections

can vary widely. Some people do not have any symptoms, others experience mild symptoms such as fever, a cough, loss of taste or smell, or diarrhoea. But it can also cause more serious symptoms such as difficulty in breathing¹.

Usually, it takes 5 – 6 days for symptoms to develop after an exposure to SARS-CoV-2. However, the number of days to symptom onset can vary in some cases².



e.g. **cough**
and **shortness of breath**



e.g. **sore throat**
and **muscle pain**



e.g. **fever**
and **headache**

¹ WHO. <https://apps.who.int/iris/handle/10665/332196>. Accessed 28 June 2021.

² Centers for Disease Control and Prevention. <https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>. Accessed 6 Jan 2021.

Testing for SARS-CoV-2



An antigen test detects the structural nucleocapsid (N) protein that is present in the virus.

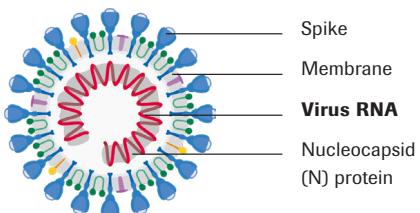
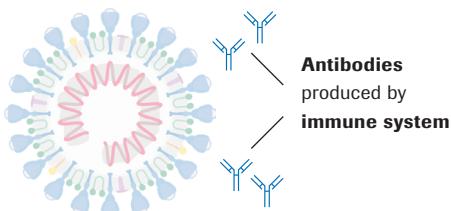
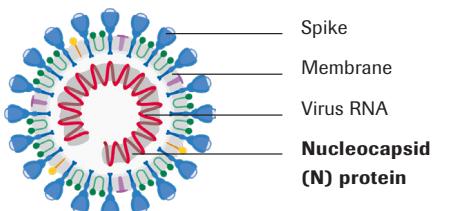


An antibody test detects the body's reaction to the virus – the production of antibodies.

It cannot detect a current infection but it can indicate if you've had a past infection. It may be detected in your blood after 2 - 3 weeks and for several months or more after you recover from COVID-19.



A PCR test detects genetic material from the virus (RNA), which is a very sensitive method of testing. For a PCR (polymerase chain reaction) test a laboratory analyser is needed, and it often takes a few days to get the results^{3, 4}.



Why don't all tests have the same accuracy?

The more virus material present in the body, the easier it is for tests to detect it. During the course of an infection the amount of virus, the so-called viral load, varies. A PCR test can pick up even a very small amount of virus, because with this test method, the existing virus material in the sample gets amplified. The test can even detect quantities of the virus material so small that they are insufficient to be infectious.

An antigen test needs a certain level of virus material in order to properly detect it, because within the test device the protein from the virus nucleocapsid (which is the envelope of the RNA strand) binds with a substance to cause a reaction^{3, 4}.

³ Cevik et al. doi.org/10.1016/S2666-5247(20)30172-5

⁴ Mina et al. DOI: 10.1056/NEJMp2025631

The benefits of testing



Working
safely



Keeping
your loved
ones safe

How does antigen testing help in the fight against COVID-19

Testing is critical to diagnose and contain the spread of SARS-CoV-2. If people know they are infectious, they can self-isolate to keep others safe. Now that we can take Self Tests at home, this offers even more benefits for us and also for society as a whole.

Negative test results do not exclude infection with COVID-19 (so face masks, social distancing and good hygiene practice must be maintained). Positive test results, whether you are symptomatic or asymptomatic, require immediate confirmatory testing with a polymerase chain reaction (PCR) test.



Safer socialising

Test yourself before meeting your loved ones.



Reliable results anywhere

Self-testing does not require medical assistance.



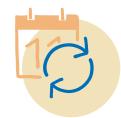
Testing without appointment

This also relieves our health care system.



A step towards normality

A safer option for opening up the economy and making travel and events possible.



More convenient repetitive testing

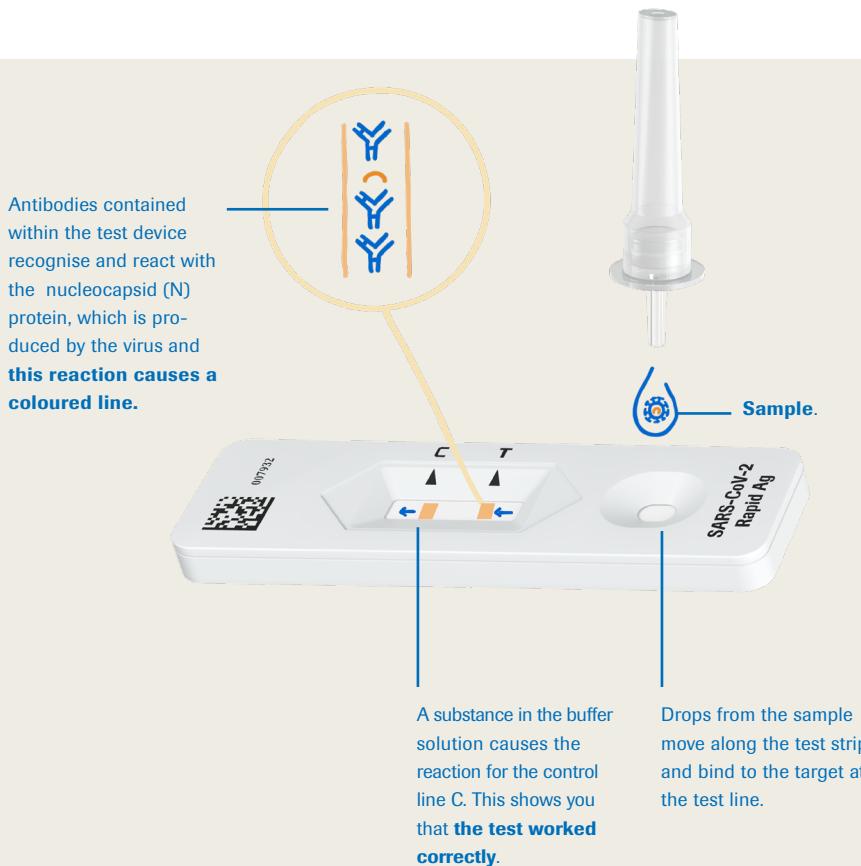


Peace of mind

Store some tests at home to have them at your disposal whenever needed.

How does a rapid antigen test work?

A rapid antigen test checks for the presence of the nucleocapsid (N) protein produced by the SARS-CoV-2 virus. If the protein is present in the sample, it causes a reaction that forms a coloured line where the sample window is marked with a T.



Testing essentials

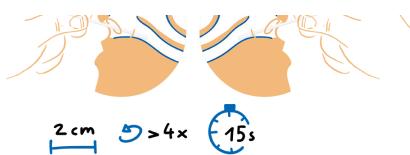
Pay attention to these steps:

There are critical steps which need to be done correctly when performing a test, in order to ensure a proper result. **NOTE:** How to use a test is explained in detail in the Quick Reference Guide and the Instructions for Use.

Collecting the sample

To ensure a reliable result the sample needs to be collected correctly.

To collect a nasal sample, slowly slide the swab into both nostrils for at least 15 seconds each, while rotating it against the nasal wall of each nostril. This step makes sure that a sufficient amount of sample is collected.

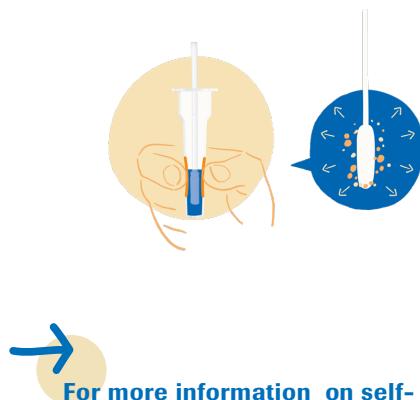


Pay attention to the time

The readout time frame for test results is 15 – 30 minutes after applying the sample drops to the test device. Don't read the results before or after this time, as this may provide a false result.

Diluting the sample

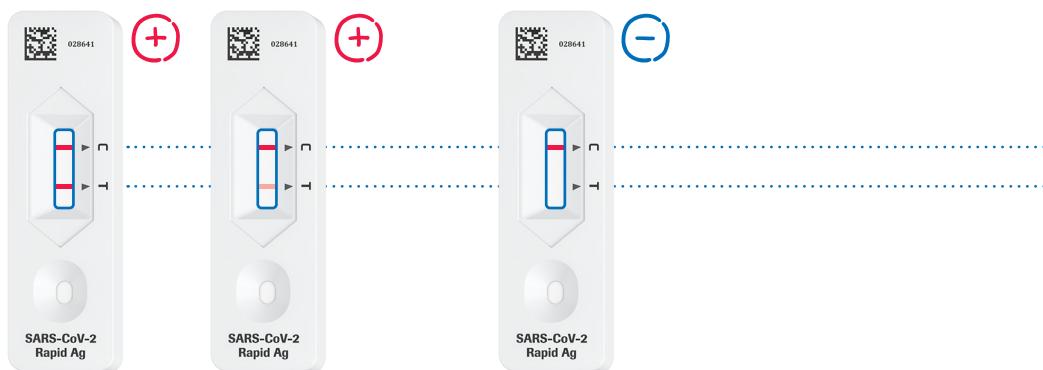
The sample material from the swab needs to be well extracted and added to the buffer solution. Therefore, it is important to rotate the swab at least ten times while it soaks in the liquid, squeezing the tube at the bottom. When taking out the swab, the sides of the tube need to be squeezed together to squeeze out the liquid from the swab.



For more information on self-testing and a step-by-step handling video scan here:



How do I interpret the results?



Positive test result

If both the coloured lines C and T are visible, the test result is positive.

This means the test detected the virus protein in the sample. The tested person is likely infected with SARS-CoV-2.

Negative test result

A visible control line C alone means the test worked correctly. The test result is negative. Either no virus protein could be detected in the sample, or there is insufficient viral load.

What now?



You must **self-isolate** immediately.



Contact your doctor and...



...you must immediately have a **confirmatory PCR test**.

What now?



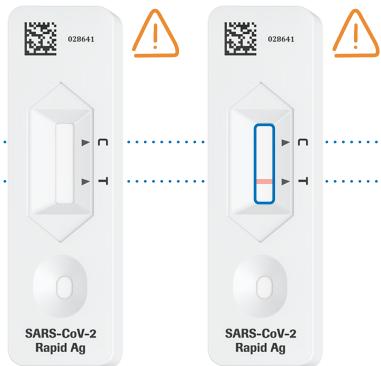
There is a very **low chance** you are currently infectious to others.



Note that this **result is only valid for a limited period of time**.



Continue to **follow the hygiene guidelines**.



Control line C: Confirms test is working correctly

Test line T: Visible if SARS-CoV-2 antigen was detected

Invalid test result

If there is no line visible, or only the line marked with a T, the test did not work correctly and needs to be repeated with another test device.

What now?



To get a valid result you will have to do a new test
(with new test material and new sample).



Make sure to follow the instructions carefully.

Tips for a reliable result:

- Store all the test components according to the instructions.
- Don't open the test device or swab packaging until you are ready to test
- Read test results only within the time frame specified in the instructions. A result read before or after the specified time frame may not be correct.
- Don't reuse test devices or other components.
- Don't use expired tests or test components that are damaged or discoloured.

Remember:

- Even a faint line is valid, you should consider it present when interpreting the results.
- Negative results do not rule out a SARS-CoV-2 infection and should not be used as the sole basis for treatment or patient management decisions, including decisions about infection control. Individuals who have tested negative and continue to show COVID-19-like symptoms should contact their doctor/primary care physician.

Even with a negative result you should still follow hygiene and proactive measures like social distancing and/or wearing a mask, based on your local guidelines.

If you have or develop symptoms, take another test or arrange a PCR test, depending on your local guidelines. For further questions contact your local authority or doctor.



Available for home use from the 1st of November, 2021

For Technical Support Call
1800 497 069
9am-7pm AEST / 9am-8pm AEDT, 7 days per week

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MC-AU-01400