The Difference Between Tests for COVID-19 (Coronavirus)

COVID-19 (Coronavirus) Molecular (Swab) Test

This test uses a long swab to collect material, including physical pieces of coronavirus, from the back of the nose where it meets the throat. A positive result indicates that viral genetic material is present, but it does not indicate that bacterial or other infections also are present. A negative result indicates that the SARS-CoV2 virus that causes the COVID-19 disease was not found. It is possible to have a very low level of the virus in the body with a negative test result.

This test is needed to identify the presence of the SARS-CoV-2 virus that causes the COVID-19 disease.

COVID-19 (Coronavirus) Antibody (Serology) Tests
Nucleocapsid Protein IgG Antibody Test

This is a blood test. It is designed to detect IgG antibodies specific for nucleocapsid protein of the coronavirus that causes the disease called COVID-19. Antibodies are proteins produced by the immune system in response to an infection and are specific to that particular infection. They are found in the liquid part of blood specimens, which is called serum or plasma. Nucleocapsid Protein and IgG Spike Protein IgG antibody tests may either be ordered together or separately.

Having the nucleocapsid protein antibody test is helpful if:

- Your health care provider believes you may have been exposed to the coronavirus which causes COVID-19 based on your current or previous signs and symptoms (e.g., fever, cough, difficulty breathing).
- You live in or have recently traveled to a place where transmission of COVID-19 is known to occur.
- You have been in close contact with an individual suspected of or confirmed to have COVID-19.
- You have recovered from COVID-19.

This test detects IgG antibodies that develop in most patients within seven to 10 days after symptoms of COVID-19 begin. IgG antibodies remain in the blood after an infection has passed. These antibodies indicate that you may have had COVID-19 in the recent past and have developed antibodies that may protect you from future infection. It is unknown at this point how much protection antibodies might provide against reinfection.

View COVID-19 IgG Nucleocapsid Protein Antibody Test Fact

Spike Protein IgG Antibody Test

This is a blood test. It is designed to detect IgG antibodies specific for the virus spike protein that develop once a person has received the COVID-19 vaccination. It is intended to confirm that a person has developed the antibodies that protect a person from getting a severe COVID-19 infection or hospitalization. These antibodies also may occur as a result of infection with SARS-CoV-2.

View COVID-19 Spike Protein IgG Antibody Test Fact

Spike Protein IgM Antibody Test

This test detects IgM antibodies. IgM is usually the first antibody produced by the immune system when a virus attacks. A positive IgM test indicates that you may have been infected or that you have recently been vaccinated and your immune system has started responding to the vaccination and that your immune system has started responding to the virus. When IgM is detected you may still be infected, or you may have recently recovered from a COVID-19 infection.

View COVID-19 Spike Protein IgM Antibody Test Fact

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