

## **Technical Bulletin**

## COVID-19 Testing Antigen vs. Antibody Testing: What does each method offer?

## Antigen Tests

- An antigen is a molecule or structure present on the outside of a pathogen.
- Antigen tests are typically used for early identification of an active infection in symptomatic patients.
- These tests identify the virus through detection of nucleoproteins, similar to influenza tests.
- Viral antigens can often be detected in samples taken from nasal passages and from the throat.
- The Centers for Disease Control and Prevention recommends using a test that detects the SARS-CoV-2 virus, such as one that checks respiratory samples, to test for active infection.<sup>1</sup>

## **Antibody Tests**

- Antibodies are proteins that the body's white blood cells produce to fight infection, which may remain in the blood long after the infection clears.
- Antibody tests identify active (IgM) or past (IgG) infections by looking for antibodies against the specific virus.
- Antibody tests look for exposure to a pathogen resulting in the generation of an immune response, e.g. increase in IgG/IgM antibodies. The immune response may take days or weeks to show up in a serology assay post-exposure.
- Antibodies are typically detected in blood samples; either whole blood or serum/plasma.
- Antibody tests typically cannot diagnose the disease immediately after exposure, as antibodies may take 1-3 weeks to develop.<sup>1</sup>
- A positive antibody test indicates that a person had an immune response to SARS-CoV-2 regardless of the presence of symptoms.<sup>2</sup> Whether antibodies may indicate immunity to further infection is still being investigated by the healthcare community.

If you have any questions, please contact Quidel Technical Support at 1.800.874.1517 (in the U.S.) or <u>technicalsupport@quidel.com</u>. If outside the U.S., further information can be obtained from your distributor, or directly from Quidel at one of the numbers listed below. Reference **quidel.com** to see more options for Support.





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<sup>1</sup> https://www.cdc.gov/coronavirus/2019-ncov/lab/serology-testing.html <sup>2</sup> https://www.cdc.gov/coronavirus/2019-ncov/about/testing.html

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