

# COVID-19 Neutralizing Antibody Test

## Neutralizing Antibody Results



TEST NAME	RESULT	VALUE
Neutralizing Antibody Test	Positive	25,000U/ml

**Anti-SARS-CoV-2 Competitive Viral Neutralization Test (cVNT):** A Blocking Enzyme-Linked Immunosorbent Assay (ELISA) intended for the semi-quantitative detection of total neutralizing antibodies to SARS-CoV-2 (COVID-19).<sup>1</sup>

- This test is intended as an aid in identifying individuals with an adaptive immune response to COVID-19, indicating recent or prior infection. This semiquantitative COVID-19 cVNT antibody test provides a positive or negative result and a numerical value that can show your immune response over time if you use the same test.
- A Neutralizing Antibody (NAb) is an antibody that is responsible for defending cells from pathogens, which are microorganisms that cause infection. They are produced naturally by the body as part of its immune response, and their production is triggered by both infections and vaccinations against infection.<sup>2</sup>
- SARS-CoV-2 Neutralizing Antibodies have been shown to be predictive of immune protection against symptomatic SARS-CoV-2 infection.<sup>3-5</sup>
- Individuals with COVID-19 immune response from vaccination or infection may still have significant immunity in the absence of detectable neutralizing antibodies.<sup>3</sup>

ORDERING PHYSICIAN	SPECIMEN INFORMATION	PATIENT INFORMATION
Name: Dr. John Smith	Specimen Type: Blood	Name: Jane Q. Sample
NPI #: 1234567	Accession #: P000001139	Date of Birth: 05   22   2022
Address: 123 Sampleton Road	Collection Date: 05   22   2022	Patient ID/MRN: 483474
Suite 101, Sampleton, CA 95959	Accession Date: 05   22   2022	Gender: Female
CPT Codes: 000XX1	Report Date: 05   22   2022	Requisition #: 2948376

**Disclaimer:** This test was developed, and its performance characteristics determined by DxTernity Diagnostics in a manner consistent with CLIA requirements. It has not been cleared or approved by the U.S. Food and Drug Administration. The information contained in this report is intended to be interpreted by a licensed physician or other licensed healthcare professional. This report is not intended to take the place of professional medical advice. Decisions regarding course of medical treatment must be made only after consulting with a licensed physician or other licensed healthcare professional and should consider each patient's medical history. Validation was performed by DxTernity Diagnostics Inc. CLIA # 05D2054007 on an open automated ELISA system.

**References:**

- Tan C.W. et al A SARS-CoV-2 surrogate virus neutralization test based on antibody-mediated blockage of ACE-2-spike protein-protein interaction. Nat. Biotechnol. (2020)
- <https://www.news-medical.net/health/What-are-Neutralizing-Antibodies.aspx>
- Khoury DS. Neutralizing antibody levels are highly predictive of immune protection from symptomatic SARS-CoV-2 infection. Nat Med (2021). <https://doi.org/10.1038/s41591-021-01377-8>
- DxTernity White Paper – SARS-CoV-2 Neutralizing Antibody Levels Provide Estimate of COVID-19 Protection Following Vaccination or Infection. DxTernity Data on File.
- Abedi MR, et al. 2021. Predicting COVID-19 Vaccine Efficacy from Neutralizing Antibody Levels. medRxiv reprint 2021.10.13.21264921; doi: <https://doi.org/10.1101/2021.10.13.21264921>

# COVID-19 Neutralizing Antibody Test

## TEST NAME

## RESULT

## VALUE

Neutralizing Antibody Test

Below Limit of Detection

**Anti-SARS-CoV-2 Competitive Viral Neutralization Test (cVNT):** A Blocking Enzyme-Linked Immunosorbent Assay (ELISA) intended for the semi-quantitative detection of total neutralizing antibodies to SARS-CoV-2 (COVID-19).<sup>1</sup>

1. This test is intended as an aid in identifying individuals with an adaptive immune response to COVID-19, indicating recent or prior infection. This semiquantitative COVID-19 cVNT antibody test provides a positive or negative result and a numerical value that can show your immune response over time if you use the same test.
2. A Neutralizing Antibody (NAb) is an antibody that is responsible for defending cells from pathogens, which are microorganisms that cause infection. They are produced naturally by the body as part of its immune response, and their production is triggered by both infections and vaccinations against infection.<sup>2</sup>
3. SARS-CoV-2 Neutralizing Antibodies have been shown to be predictive of immune protection against symptomatic SARS-CoV-2 infection.<sup>3-5</sup>
4. Individuals with COVID-19 immune response from vaccination or infection may still have significant immunity in the absence of detectable neutralizing antibodies.<sup>3</sup>

## ORDERING PHYSICIAN

## SPECIMEN INFORMATION

## PATIENT INFORMATION

Name: Dr. John Smith

Specimen Type: Blood

Name: Jane Q. Sample

NPI #: 1234567

Accession #: P000001139

Date of Birth: 05 | 22 | 2022

Address: 123 Sampleton Road

Collection Date: 05 22 2022

Patient ID/MRN: 483474

Suite 101, Sampleton, CA 95959

Accession Date: 05 22 2022

Gender: Female

CPT Codes: 000XX1

Report Date: 05 22 2022

Requisition #: 2948376

**Disclaimer:** This test was developed, and its performance characteristics determined by DxTernity Diagnostics in a manner consistent with CLIA requirements. It has not been cleared or approved by the U.S. Food and Drug Administration. The information contained in this report is intended to be interpreted by a licensed physician or other licensed healthcare professional. This report is not intended to take the place of professional medical advice. Decisions regarding course of medical treatment must be made only after consulting with a licensed physician or other licensed healthcare professional and should consider each patient's medical history. Validation was performed by DxTernity Diagnostics Inc. CLIA # 05D2054007 on an open automated ELISA system.

### References:

1. Tan C.W. et al A SARS-CoV-2 surrogate virus neutralization test based on antibody-mediated blockage of ACE-2-spike protein-protein interaction. Nat. Biotechnol. (2020)
2. <https://www.news-medical.net/health/What-are-Neutralizing-Antibodies.aspx>
3. Khoury DS. Neutralizing antibody levels are highly predictive of immune protection from symptomatic SARS-CoV-2 infection. Nat Med (2021). <https://doi.org/10.1038/s41591-021-01377-8>
4. DxTernity White Paper – SARS-CoV-2 Neutralizing Antibody Levels Provide Estimate of COVID-19 Protection Following Vaccination or Infection. DxTernity Data on File.
5. Abedi MR, et al. 2021. Predicting COVID-19 Vaccine Efficacy from Neutralizing Antibody Levels. medRxiv reprint 2021.10.13.21264921; doi: <https://doi.org/10.1101/2021.10.13.21264921>

# COVID-19 Neutralizing Antibody Test

## Neutralizing Antibody Results



TEST NAME	RESULT	VALUE
Neutralizing Antibody Test	Negative	Below Limit of Detection

**Anti-SARS-CoV-2 Competitive Viral Neutralization Test (cVNT):** A Blocking Enzyme-Linked Immunosorbent Assay (ELISA) intended for the semi-quantitative detection of total neutralizing antibodies to SARS-CoV-2 (COVID-19).<sup>1</sup>

- This test is intended as an aid in identifying individuals with an adaptive immune response to COVID-19, indicating recent or prior infection. This semiquantitative COVID-19 cVNT antibody test provides a positive or negative result and a numerical value that can show your immune response over time if you use the same test.
- A Neutralizing Antibody (NAb) is an antibody that is responsible for defending cells from pathogens, which are microorganisms that cause infection. They are produced naturally by the body as part of its immune response, and their production is triggered by both infections and vaccinations against infection.<sup>2</sup>
- SARS-CoV-2 Neutralizing Antibodies have been shown to be predictive of immune protection against symptomatic SARS-CoV-2 infection.<sup>3-5</sup>
- Individuals with COVID-19 immune response from vaccination or infection may still have significant immunity in the absence of detectable neutralizing antibodies.<sup>3</sup>

ORDERING PHYSICIAN	SPECIMEN INFORMATION	PATIENT INFORMATION
Name: Dr. John Smith	Specimen Type: Blood	Name: Jane Q. Sample
NPI #: 1234567	Accession #: P000001139	Date of Birth: 05   22   2022
Address: 123 Sampleton Road	Collection Date: 05 22 2022	Patient ID/MRN: 483474
Suite 101, Sampleton, CA 95959	Accession Date: 05 22 2022	Gender: Female
CPT Codes: 000XX1	Report Date: 05 22 2022	Requisition #: 2948376

**Disclaimer:** This test was developed, and its performance characteristics determined by DxTerity Diagnostics in a manner consistent with CLIA requirements. It has not been cleared or approved by the U.S. Food and Drug Administration. The information contained in this report is intended to be interpreted by a licensed physician or other licensed healthcare professional. This report is not intended to take the place of professional medical advice. Decisions regarding course of medical treatment must be made only after consulting with a licensed physician or other licensed healthcare professional and should consider each patient's medical history. Validation was performed by DxTerity Diagnostics Inc. CLIA # 05D2054007 on an open automated ELISA system.

**References:**

- Tan C.W. et al A SARS-CoV-2 surrogate virus neutralization test based on antibody-mediated blockage of ACE-2-spike protein-protein interaction. Nat. Biotechnol. (2020)
- <https://www.news-medical.net/health/What-are-Neutralizing-Antibodies.aspx>
- Khoury DS. Neutralizing antibody levels are highly predictive of immune protection from symptomatic SARS-CoV-2 infection. Nat Med (2021). <https://doi.org/10.1038/s41591-021-01377-8>
- DxTerity White Paper – SARS-CoV-2 Neutralizing Antibody Levels Provide Estimate of COVID-19 Protection Following Vaccination or Infection. DxTerity Data on File.
- Abedi MR, et al. 2021. Predicting COVID-19 Vaccine Efficacy from Neutralizing Antibody Levels. medRxiv reprint 2021.10.13.21264921; doi: <https://doi.org/10.1101/2021.10.13.21264921>