

PRODUCT INFORMATION

SARS-CoV-2 Neutralizing Antibody Human Plasma Control Set

Item No. 502080

Synonym: Severe Acute Respiratory Syndrome Coronavirus 2 Neutralizing Antibody Human Plasma Control

Storage: -20°C

Stability: ≥2 years

Description

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is an enveloped positive-stranded RNA virus, a member of the *Betacoronavirus* genus, and the causative agent of COVID-19.¹⁻⁵ The SARS-CoV-2 surface glycoprotein, also known as the spike glycoprotein, is located on the outer envelope of the virion, and contains the receptor binding domain (RBD), which binds to angiotensin-converting enzyme 2 (ACE2), the functional receptor for SARS-CoV-2.^{1,6-10}

SARS-CoV-2 infection can result in the production of neutralizing antibodies, which bind to the SARS-CoV-2 spike RBD preventing further viral entry and infection, starting approximately 4-10 days after symptom onset.^{11,12} Plasma levels of SARS-CoV-2 spike glycoprotein-specific IgG antibodies increase for at least four weeks following symptom onset.^{11,13} SARS-CoV-2 plasma antibody levels begin to decrease 2-3 months post-infection in both symptomatic and asymptomatic individuals, disappearing completely in some asymptomatic individuals.¹⁴ The detection of neutralizing antibodies to SARS-CoV-2 is important in evaluating the lifetime and efficacy of specific antibodies in the host.

Contents

Cayman's SARS-CoV-2 Neutralizing Antibody Human Plasma Control Set contains human plasma collected prior to the SARS-CoV-2 pandemic that has been spiked at low, mid, or high levels with a recombinant human anti-SARS-CoV-2 neutralizing IgG antibody. A negative control, free of neutralizing antibody, is also included. The levels of neutralizing antibody to be added to each control were determined by screening numerous positive and negative samples using Cayman's SARS-CoV-2 Neutralizing Antibody Detection ELISA Kit (Item No. 502070). The amount of neutralizing antibody spiked into the controls was designed to be representative of the range of antibody levels found in a typical sample set.

The human plasma used for the isolation of this product was processed from single donors via apheresis plasma units. It was found to be negative for HBsAg, HCV, HIV-1, HIV-2, HIV1-Ag or HIV-1 (NAT), alanine transaminase (ALT), and syphilis by FDA-approved methods. Human blood products should always be properly handled in accordance with safe handling procedures. Disposal should follow state and federal regulations and is the responsibility of the customer.

Included in the set are:

Item No.	Component	Amount
502081	SARS-CoV-2 Neutralizing Antibody Negative Human Plasma Control	0.1 ml
502082	SARS-CoV-2 Neutralizing Antibody Low Human Plasma Control	0.1 ml
502083	SARS-CoV-2 Neutralizing Antibody Mid Human Plasma Control	0.1 ml
502084	SARS-CoV-2 Neutralizing Antibody High Human Plasma Control	0.1 ml

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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References

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