

SARS-CoV Spike Antibody, Rabbit PAb, Antigen Affinity Purified

Catalog No: #21806



Package Size: #21806-1 50ul #21806-2 100ul

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Description

Product Name	SARS-CoV Spike Antibody, Rabbit PAb, Antigen Affinity Purified
Purification	Protein A & Antigen Affinity
Specificity	SARS CoV spike/S Has cross-reactivity in ELISA and WB with SARS-CoV-2 (2019-nCoV) Spike S1 SARS-CoV-2 (2019-nCoV) Spike RBD
Immunogen Description	Recombinant SARS-CoV Spike S1 Subunit Protein
Conjugates	Unconjugated
Other Names	Anti-coronavirus s1 Antibody; Anti-coronavirus s2 Antibody; Anti-coronavirus spike Antibody; Anti-cov spike Antibody; Anti-ncov RBD Antibody; Anti-ncov s1 Antibody; Anti-ncov s2 Antibody; Anti-ncov spike Antibody; Anti-novel coronavirus RBD Antibody; Anti-novel coronavirus s1 Antibody; Anti-novel coronavirus s2 Antibody; Anti-novel coronavirus spike Antibody; Anti-RBD Antibody; Anti-S1 Antibody; Anti-s2 Antibody; Anti-Spike RBD Antibody
Formulation	0.2 um filtered solution in PBS
Storage	This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Avoid repeated freeze-thaw cycles.

Application Details

WB 1:1000-1:5000 ELISA 1:5000-1:10000

Validated Applications:WB,ELISA,IHC-P,FCM,ICC/IF,IP (Antibody's applications have not been validated with corresponding viruses. Optimal concentrations/dilutions should be determined by the end user.)

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Product Description

Preparation Method:Produced in rabbits immunized with purified, recombinant SARS-CoV Spike S1 Subunit Protein. The specific IgG was purified by SARS-CoV Spike S1 Subunit affinity chromatography.Shipping Method:This antibody is shipped as liquid solution at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

Background

The spike (S) glycoprotein of coronaviruses contains protrusions that will only bind to certain receptors on the host cell. Known receptors bind S1 are ACE2, angiotensin-converting enzyme 2; DPP4, dipeptidyl peptidase-4; APN, aminopeptidase N; CEACAM, carcinoembryonic antigen-related cell adhesion molecule 1; Sia, sialic acid; O-ac Sia, O-acetylated sialic acid. The spike is essential for both host specificity and viral infectivity. The term 'peplomer' is typically used to refer to a grouping of heterologous proteins on the virus surface that function together. The spike (S) glycoprotein of

coronaviruses is known to be essential in the binding of the virus to the host cell at the advent of the infection process. It's been reported that 2019-nCoV can infect the human respiratory epithelial cells through interaction with the human ACE2 receptor. The spike protein is a large type I transmembrane protein containing two subunits, S1 and S2. S1 mainly contains a receptor binding domain (RBD), which is responsible for recognizing the cell surface receptor. S2 contains basic elements needed for the membrane fusion. The S protein plays key parts in the induction of neutralizing-antibody and T-cell responses, as well as protective immunity. The main functions for the Spike protein are summarized as: Mediate receptor binding and membrane fusion; Defines the range of the hosts and specificity of the virus; Main component to bind with the neutralizing antibody; Key target for vaccine design; Can be transmitted between different hosts through gene recombination or mutation of the receptor binding domain (RBD), leading to a higher mortality rate.

References

Shen S, et al. (2007) Expression, glycosylation, and modification of the spike (S) glycoprotein of SARS CoV. *Methods Mol Biol.* 379: 127-35. Du L, et al. (2009) The spike protein of SARS-CoV--a target for vaccine and therapeutic development. *Nat Rev Microbiol.* 7 (3): 226-36. Xiao X, et al. (2004) The SARS-CoV S glycoprotein. *Cell Mol Life Sci.* 61 (19-20): 2428-30.

Note: This product is for in vitro research use only