

Product datasheet

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ARG43723 anti-SARS-CoV-2 Spike protein (cleavage site) antibody

Package: 100 μg Store at: -20°C

Summary

Product Description Rabbit Polyclonal antibody recognizesSARS-CoV-2 Spike protein (cleavage site)

Tested Reactivity Virus

Tested Application ELISA, ICC/IF, WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name SARS-CoV-2 Spike protein (cleavage site)

Species Virus

Immunogen Synthetic peptide corresponding to 12 amino acids near the center of SARS-CoV-2 (COVID-19) Spike

glycoprotein.

The immunogen is located within 650-700 amino acids of SARS-CoV-2 (COVID-19) Spike protein.

Conjugation Un-conjugated

Alternate Names SARS-CoV-2 (COVID-19) Spike Antibody (cleavage site): Severe acute respiratory syndrome coronavirus

2 (SARS-CoV-2), Surface Glycoprotein, Spike protein

Application Instructions

Application table	Application	Dilution
	ELISA	detect 2 ng of free peptide at 1 μg/mL
	ICC/IF	20 μg/mL
	WB	0.5 - 4 μg/mL
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form Liquid

Purification Affinity purification with immunogen.

Buffer PBS and 0.02% Sodium azide.

Preservative 0.02% Sodium azide

Concentration 1 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Bioinformation

Gene Symbol

S

Gene Full Name

SARS-CoV-2 Spike protein (cleavage site)

Background

Coronavirus disease 2019 (COVID-19), formerly known as 2019-nCoV acute respiratory disease, is an infectious disease caused by SARS-CoV-2, a virus closely related to the SARS virus. The disease is the cause of the 2019–20 coronavirus outbreak. The structure of 2019-nCoV consists of the following: a Spike protein (S), hemagglutinin-esterease dimer (HE), a membrane glycoprotein (M), an envelope protein (E) a nucleoclapid protein (N) and RNA. Coronavirus invades cells through Spike (S) glycoproteins, a class I fusion protein. It is the major viral surface protein that coronavirus uses to bind to the human cell surface receptor. It also mediates the fusion of host and viral cell membrane, allowing the virus to enter human cells and begin infection. The spike protein is the major target for neutralizing antibodies and vaccine development. The protein modeling suggests that there is strong interaction between Spike protein receptor-binding domain and its host receptor angiotensin-converting enzyme 2 (ACE2), which regulate both the cross-species and human-to-human transmissions of COVID-19. The recent study has shown that the SARS-CoV-2 spike protein binds ACE2 with higher affinity than SARS-CoV spike protein.

Highlight

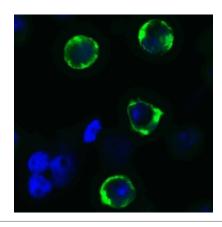
Related products:

<u>SARS-CoV antibodies</u>; <u>SARS-CoV ELISA Kits</u>; <u>SARS-CoV recombinant proteins</u>; <u>Anti-Rabbit IgG</u> secondary antibodies;

Related news:

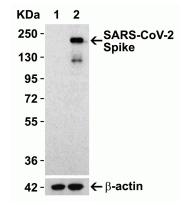
HMGB1, a biomarker and therapeutic target in COVID-19

Images



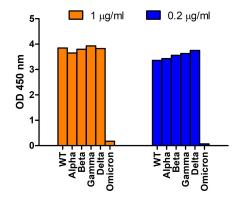
ARG43723 anti-SARS-CoV-2 Spike protein (cleavage site) antibody ICC/IF image

Immunofluorescence: SARS-CoV-2 Spike protein (cleavage site) expressing plasmid transfected 293T cells stained fixed with 4% Paraformaldehyde and then stained with ARG43723 anti-SARS-CoV-2 Spike protein (cleavage site) antibody (green) at 20 $\mu g/ml$ dilution. DAPI (blue) for nuclear staining.



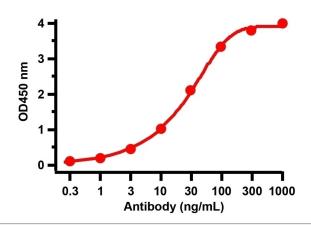
ARG43723 anti-SARS-CoV-2 Spike protein (cleavage site) antibody WB image

Western blot: 10 μ g of SARS-CoV-2 Spike expression plasmid transfected 293 (right) or WT 293 (left) cell lysate stained with ARG43723 anti-SARS-CoV-2 Spike protein (cleavage site) antibody for 1 hour incubation at RT in 5% NFDM/TBST, at 0.5 μ g/ml dilution.



ARG43723 anti-SARS-CoV-2 Spike protein (cleavage site) antibody ELISA image

Direct ELISA: $100\mu l$ of SARS-CoV-2 spike S1 proteins WT, alpha variant (B.1.1.7), beta variant (B.1.351), gamma variant (P.1), delta variant (B.1.617.2), and omicron variant (B.1.1.529) at a concentration of 1 $\mu g/m L$, incubated in a 96-well plate at 4 °C for overnight. The coated plate were incubated with 1 $\mu g/m L$ or 0.2 $\mu g/m L$ of ARG43723 anti-SARS-CoV-2 Spike protein (cleavage site) antibody at RT for 1 hr. ARG43723 anti-SARS-CoV-2 Spike protein (cleavage site) antibody can detect spike S1 protein of all other variants, but not omicron variant.



ARG43723 anti-SARS-CoV-2 Spike protein (cleavage site) antibody ELISA image

Direct ELISA: SARS-CoV-2 Spike S1 protein was coated on the plate and ARG43723 anti-SARS-CoV-2 Spike protein (cleavage site) antibody was used as the capture antibody. Secondary: Goat antirabbit IgG HRP conjugate at 1:20000 dilution. Detection range is from 0.3 ng/mL to 1000 ng/mL.