Mouse SARS-CoV-2 (2019-nCoV) Spike Monoclonal Antibody | anti-SARS-CoV-2 antibody

SARS-CoV-2 (2019-nCoV) Spike Antibody, Mouse Mab

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA257788	**Mouse**	**SARS-CoV-2**	**Immunohistochemistry, ELISA, Western Blot**

PRODUCT SYNONYMS

SARS-CoV-2 (2019-nCoV) Spike; Monoclonal Antibody; SARS-CoV-2 (2019-nCoV) Spike Antibody; Mouse Mab; anti-SARS-CoV-2 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	SARS-CoV-2
Clonality	Monoclonal
Isotype	Mouse IgG1
Clone Number	42
Specificity	SARS-CoV-2 (2019-nCoV) Spike S1 Protein
Purity/Purification	Protein A
Form/Format	Liquid. 0.2um filtered solution in PBS
Applicable Applications for anti-SARS-CoV-2 antibody	IHC (Immunohistochemistry), ELISA, WB (Western Blot)
Immunogen	Recombinant SARS-CoV-2 (2019-nCoV) Spike S1-mFc Protein
Conjugation	Unconjugated
Cross-reactivity	No cross-reactivity in ELISA with SARS-CoV Spike S1 Protein MERS-CoV Spike S1 Protein HCoV-HKU1 (isolate N1) Spike S1 Protein HCoV-HKU1 (isolate N5) Spike S1 Protein HCoV-NL63 Spike S1 Protein HCoV-229E Spike S1 Protein HCoV-OC43 Spike S1+S2 ECD Protein
Preparation	This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, Recombinant SARS-CoV-2 (2019-nCoV) Spike S1-mFc Protein. The IgG fraction of the cell culture supernatant was purified by Protein A affinity chromatography.
Preparation and Storage	This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles. This antibody is shipped as liquid solution at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

IMAGES



WB (Western Blot)
Anti-SARS-CoV-2 (2019-nCoV) Spike mouse monoclonal antibody at 1:2000 dilution.Lane A: SARS-COV-2 Spike overexpressed HEK293 Whole Cell LysateLane B: HEK293 Whole Cell LysateLysates/proteins at 30 ug per lane.SecondaryGoat Anti-Mouse IgG (H+L)/HRP at 1/10000 dilutionDeveloped using the ECL technique.Performed under reducing conditions.



WB (Western Blot)
Anti-SARS-S1 mouse monoclonal antibody at 1:1000 dilution.Lane A: SARS-CoV-2 (2019-nCoV) Spike S1 (30ng)Lane B: SARS-CoV-2 (2019-nCoV) Spike S1 (5ng)SecondaryGoat Anti-Mouse IgG (H+L)/HRP at 1/10000 dilution.Developed using the ECL technique.Performed under reducing conditions.

ADDITIONAL INFORMATION

Related Product Information for anti-SARS-CoV-2 antibody	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 SARS-CoV-2 (COVID-19 coronavirus, 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.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: https://stage.aaabiotech.com/monoclonal/sars-cov-2-2019-ncov-spike-antibody-clone-42-immunohistochemistry-western-blot-elisa/257788