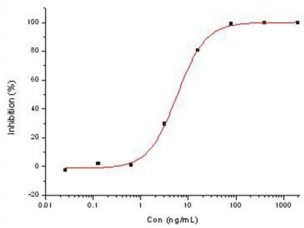
Middle East Respiratory Syndrome Spike (MERS-CoV S) Antibody

Catalogue No.:abx201391



ELISA analysis, measuring the ability to inhibit infection of Caco-2 cells induced by MERS-CoV pseudovirus (ED50: 2.5-11 ng/ml).

Middle East Respiratory Syndrome Spike (MERS-CoV S) Antibody is a Rabbit Monoclonal antibody for the detection of Middle East Respiratory Syndrome Spike (MERS-CoV S).

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.

Target:	Middle East Respiratory Syndrome Spike (MERS-CoV S)
Clonality:	Monoclonal
Reactivity:	Virus
Tested Applications:	ELISA
Host:	Rabbit
Recommended dilutions:	ELISA: 1/1000 - 1/10000. Optimal dilutions/concentrations should be determined by the end user.
Conjugation:	Unconjugated
Immunogen:	Recombinant MERS-CoV Spike Protein (S1+S2 ECD, aa 1-1297)

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Isotype:	IgG
Form:	Liquid
Purification:	Purified by Protein A affinity chromatography. 0.2 µm filtered.
Storage:	Aliquot and store at -20 °C. Avoid repeated freeze/thaw cycles.
Buffer:	PBS.
Concentration:	1 mg/ml
Note:	THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC, THERAPEUTIC OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION.
Directions for use:	Centrifuge before opening to ensure complete recovery of vial contents.

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