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10-10037-B: Anti-SARS CoV2 Spike RBD Antibody (Clone: ABM5D1.1E8) Biotin Conjugated

Clonality :	Monoclonal
Clone Name :	ABM5D1.1E8
Application :	ELISA,WB
Conjugate :	Biotin
Format :	Purified
Alternative Name :	Anti-coronavirus s1 Antibody, Anti-coronavirus spike Antibody; Anti-cov spike Antibody; Anti-ncov RBD Antibody; Anti-ncov s1 Antibody; Anti-ncov spike Antibody; Anti-novel coronavirus RBD Antibody; Anti-novel coronavirus s1 Antibody; Anti-novel coronavirus spike Antibody; Anti-RBD Antibody; Anti-S1 Antibody, Anti-Spike RBD Antibody, SARS-CoV-2, SARS
Isotype :	Mouse IgG2a, Kappa
Immunogen Information :	A partial length recombinant SARS-CoV2 Spike RBD protein with sequence (319-541aa) was used as the immunogen for this antibody.

Description

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.

Product Info

Amount :	100 µg
Purification :	Protein G Chromatography
Content :	25 µg in 50 µl/100 µg in 200 µl PBS containing 0.05% sodium azide. Sodium azide is highly toxic.
Storage condition :	Store the antibody at 4°C, stable for 6 months.

Application Note

Recommended dilutions: WB: 0.5-1 µg/ml. However, this need to be optimized based on the research applications.

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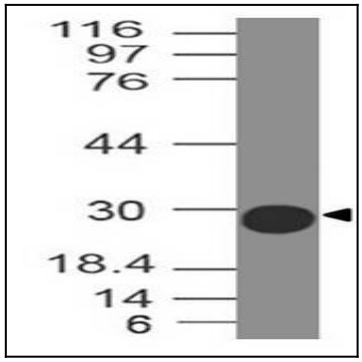

Figure-1: Western Blot analysis of SARS-CoV-2 Spike RBD Antibody: Anti- SARS-CoV-2 Spike RBD Antibody biotin conjugated (Clone: ABM5D1.1E8) was used at 0.5 µg/ml on SARS-CoV-2 Spike RBD Recombinant protein.

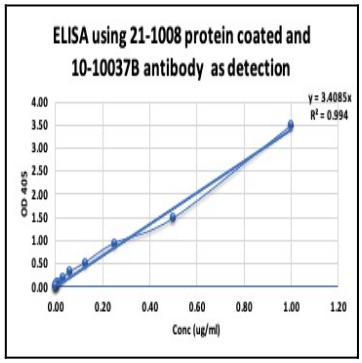

Figure 2: Elisa was done using 21-1008, SARS CoV2 S1 recombinant as coated protein (4µg/ml). Cat no. 10-10037B (biotin) was used as detection antibody (starting concentration 1 µg/ml). Streptavidin-HRP was used for detection.