

Tel:240-252-7368(USA) Fax: 240-252-7376(USA) techsupport@elabscience.com Website: www.elabscience.com

## Anti-MERS-CoV Spike Protein S2 Monoclonal Antibody

E-AB-V1299

Application WB Host Mouse

Storage Store at -20°C. Avoid freeze / thaw cycles.

Important Note Centrifuge before opening to ensure complete recovery of vial contents.

## **Product Details**

**Immunogen** Recombinant MERS-CoV Spike/S2 Protein (S2 Subunit, aa 726-1296, His Tag)

Isotype IgG1
Host Mouse
Reactivity MERS-CoV

**Dilution** WB 1:1000-1:5000

Storage Buffer 0.2 μm filtered solution in PBS Stability & Storage Ships on ice packs. Store at -20°C

**Description** 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 MERS-CoV Spike/S2 Protein (S2 Subunit, aa 726-1296, His Tag). And the antibody was purified by

## **Antigen Infomation**

Alternate Names coronavirus s1,coronavirus s2,coronavirus spike,cov spike,ncov RBD,ncov s1,ncov s2,ncov

spike, RBD, S, s1, Spike RBD

**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 neutralizingantibody 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.

For Research Use Only

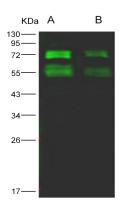
Thank you for your recent purchase.

Focus on your research Service for life science



Tel:240-252-7368(USA) Fax: 240-252-7376(USA) techsupport@elabscience.com Website: www.elabscience.com

## **Images**



Western Blot analysis of Recombinant MERS-CoV Spike/S2 Protein (S2 Subunit, aa 726-1296, His Tag)(PKSV030243 with 200ng and 50ng) using Anti-MERS-CoV Spike Protein S2 Monoclonal Antibody at dilution of 1:1000.