SARS-CoV Spike RBD Monoclonal Antibody





Product Information

Product SKU: CAB21181 **Gene ID**: 1489668 **Size**: 20uL, 100uL

Clone No: ARC52567 Host Species: Rabbit Reactivity: SARS-CoV

Additional Information

Observed MW: 182kDa **Conjugate:** Unconjugated

Calculated MW: 139kDa Isotype: IgG

Immunogen Information

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.

Recommended Dilution: WB,1:1000 - 1:5000

Synonyms: E2; SARS-CoV Spike RBD

Purifcation Method: Affinity purification

Immunogen: A synthetic peptide corresponding to a sequence within amino acids 350-450 of coronavirus Spike RBD

(NP_828851.1).

Storage: Store at -20°C. Avoid freeze / thaw cycles.Buffer: PBS with 0.05% proclin300,0.05% BSA,50% glycerol,pH7.3.