

# SARS-CoV Spike RBD Rabbit mAb

Catalog NO.: A22368 **Recombinant**

## Basic Information

### Observed MW

182kDa (Full-length protein)

### Calculated MW

139kDa

### Category

Monoclonal Antibodies

### Applications

WB, ELISA

### Cross-Reactivity

SARS-CoV

### Conjugation

Unconjugated

### Clone number

ARC52570

## 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 Dilutions

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

### ELISA

Recommended starting concentration is 1 µg/mL.  
Please optimize the concentration based on your specific assay requirements.

## Immunogen Information

### Gene ID

1489668

### Swiss Prot

P59594

### Immunogen

Synthetic peptide. This information is considered to be commercially sensitive.

### Synonyms

E2; SARS-CoV Spike RBD

## Contact

## Product Information

|   |  |                      |
|---|--|----------------------|
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### Source

Rabbit

### Isotype

IgG

### Purification

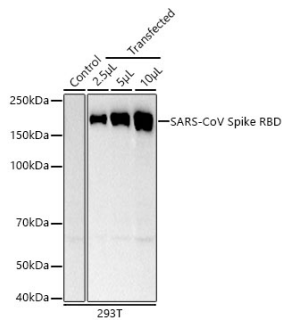
Affinity purification

### Storage

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

Buffer: PBS containing 50% glycerol and 0.05% BSA, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

## Validation Data



Western blot analysis of lysates from wild type (WT) and 293T cells transfected with SARS-CoV Spike RBD using SARS-CoV Spike RBD Rabbit mAb (A22368) at 1:2000 dilution.

Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25μg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 30s.

