

## **Product datasheet for TA381938**

# **S Protein Rabbit Polyclonal Antibody**

### **Product data:**

**Applications:** 

Product Type: Primary Antibodies

Recommended Dilution: ELISA,1:50000-1:200000

WB,1:500 - 1:2000

ELISA, ICC/IF, IP, WB

IF,1:50 - 1:200 IP,1:50 - 1:200

**Reactivity:** SARS-CoV-2

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

**Immunogen:** Recombinant fusion protein of SARS-CoV-2 Spike RBD.

**Formulation:** Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.

**Concentration:** lot specific

**Purification:** Affinity purification

**Conjugation:** Unconjugated

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

**Stability:** Shelf life: one year from despatch.

**Gene Name:** S Protein

Database Link: Entrez Gene 43740568 SARS-CoV-2

PODTC2



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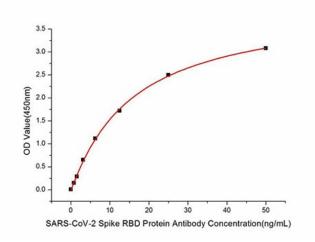




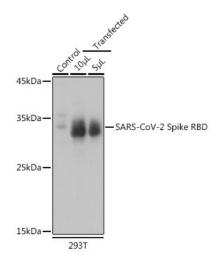
#### Background:

The spike (S) glycoprotein of coronaviruses contains protrusions that will only bind to certain receptors on the host cell. The spike is essential for both host specificity and viral infectivity. 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. S1 mainly contains a receptor binding domain (RBD), which is responsible for recognizing the cell surface receptor. 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 images:**

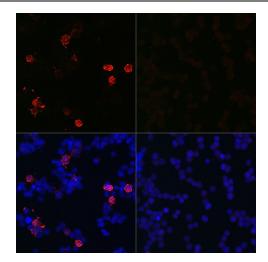


Immobilized Recombinant SARS-COV-2 Spike RBD Protein (RP01278LQ) at  $1\mu g/mL$  ( $100\mu L/well$ ) can bind SARS-CoV-2 Spike RBD Rabbit pAb (TA381938) with a linear range of 0.78-50ng/mL.

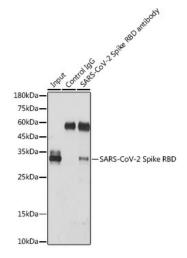


Western blot analysis of extracts of normal 293T cells and 293T transfected with Spike RBD Protein,using SARS-CoV-2 Spike RBD antibody (TA381938) at 1:1000 dilution. | Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution. | Lysates/proteins: 25ug per lane. | Blocking buffer: 3% nonfat dry milk in TBST. | Detection: ECL Basic Kit. | Exposure time: 5s.





Immunofluorescence analysis of 293T cells transfected with SARS-CoV-2 Spike RBD protein and untreated 293T cells use SARS-CoV-2 Spike RBD Rabbit pAb (TA381938) at dilution of 1:50 (40x lens). Blue: DAPI for nuclear staining.



Immunoprecipitation analysis of 300ug extracts of 293T cells using 3ug SARS-CoV-2 Spike RBD antibody (TA381938). Western blot was performed from the immunoprecipitate using SARS-CoV-2 Spike RBD antibody (TA381938) at a dilition of 1:3000.