Catalog # SPD-C522f



## Synonym

Spike,S protein RBD,Spike glycoprotein Receptor-binding domain,S glycoprotein RBD,Spike protein RBD

## Source

SARS-CoV-2 Spike RBD, His Tag (B.1.1.529/Omicron) (SPD-C522f) is expressed from human 293 cells (HEK293).

# **Molecular Characterization**

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 26.8 kDa. The protein migrates as 33-38 KDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

## Endotoxin

Less than 1.0 EU per  $\mu g$  by the LAL method.

# Purity

>95% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

## Formulation

Supplied as 0.2  $\mu$ m filtered solution in PBS, pH7.4.

Contact us for customized product form or formulation.

## Shipping

*This product is supplied and shipped with dry ice, please inquire the shipping cost.* 

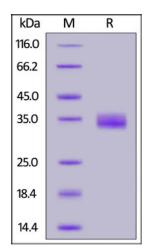
#### Storage

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

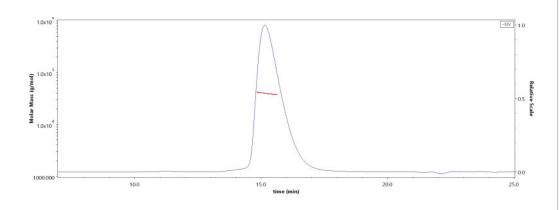
- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

# **SDS-PAGE**



SARS-CoV-2 Spike RBD, His Tag (B.1.1.529/Omicron) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

# **SEC-MALS**



The purity of SARS-CoV-2 Spike RBD, His Tag (B.1.1.529/Omicron) (Cat. No. SPD-C522f) is more than 95% and the molecular weight of this protein is around 32-48 kDa verified by SEC-MALS. <u>Report</u>

# **Bioactivity-ELISA**

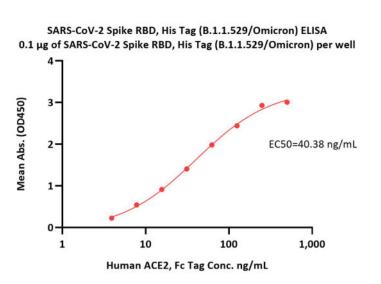


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Immobilized SARS-CoV-2 Spike RBD, His Tag (B.1.1.529/Omicron) (Cat. No. SPD-C522f) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Human ACE2, Fc Tag (Cat. No. AC2-H5257) with a linear range of 2-125 ng/mL (QC tested).

## Background

It's been reported that Coronavirus 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.

**Clinical and Translational Updates** 



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