# Biotinylated SARS-CoV-2 Spike RBD (L452R, T478K), His,Avitag™ (Trehalose free) (MALS verified)

Catalog # SPD-C82Ep



### **Synonym**

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

#### Source

Biotinylated SARS-CoV-2 Spike RBD (L452R, T478K), His,Avitag<sup>TM</sup> (Trehalose free) (SPD-C82Ep) is expressed from human 293 cells (HEK293).

### **Molecular Characterization**

This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag<sup>TM</sup>)

The protein has a calculated MW of 28.3 kDa. The protein migrates as 33-40 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

## Labeling

Biotinylation of this product is performed using Avitag<sup>TM</sup> technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

## **Protein Ratio**

Passed as determined by the HABA assay / binding ELISA.

#### Endotoxin

Less than 1.0 EU per µg by the LAL method.

## **Purity**

>90% as determined by SDS-PAGE.

#### **Formulation**

Supplied as 0.2 µm filtered solution in PBS, pH7.4.

Contact us for customized product form or formulation.

### **Shipping**

This product is supplied and shipped as sterile liquid solution with blue ice, please inquire the shipping cost.

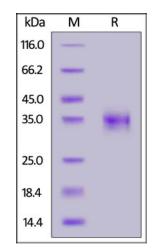
## **Storage**

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

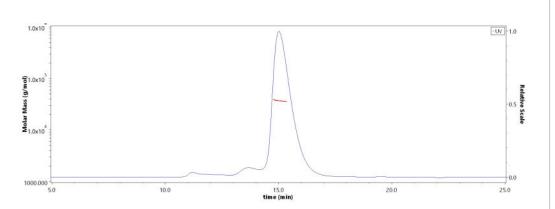
- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

## SDS-PAGE



Biotinylated SARS-CoV-2 Spike RBD (L452R, T478K), His,Avitag<sup>™</sup> (Trehalose free) on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

### **SEC-MALS**



The purity of Biotinylated SARS-CoV-2 Spike RBD (L452R, T478K), His,Avitag<sup>TM</sup> (Trehalose free) (Cat. No. SPD-C82Ep) is more than 85% and the molecular weight of this protein is around 30-44 kDa verified by SEC-MALS.

<u>Report</u>

## Background

Its 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

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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**

Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.