

# Biotinylated SARS-COV-2 Spike RBD Protein

Cat. No. COV-VM4BDB



## Description

|                         |  |
|-------------------------|--|
| <b>Source</b>           | Recombinant Biotinylated SARS-COV-2 Spike RBD Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus.<br>It contains Arg319-Asn532. |
| <b>Accession</b>        | QHD43416.1   |
| <b>Molecular Weight</b> | The protein has a predicted MW of 27 kDa. Due to glycosylation, the protein migrates to 36-40 kDa based on Tris-Bis PAGE result.                         |
| <b>Endotoxin</b>        | Less than 1EU per µg by the LAL method.  |
| <b>Purity</b>           | > 95% as determined by Tris-Bis PAGE<br>> 95% as determined by HPLC  |

## Formulation and Storage

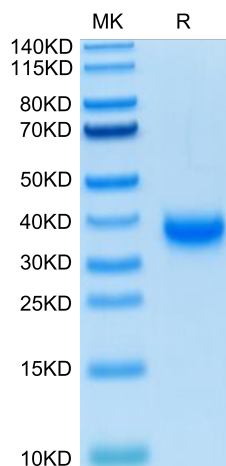
|                       |  |
|-----------------------|--|
| <b>Formulation</b>    | Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.   |
| <b>Reconstitution</b> | Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.   |
| <b>Storage</b>        | -20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3-6 months after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles. |

## Background

The spike protein (S) of coronavirus (CoV) attaches the virus to its cellular receptor, angiotensin-converting enzyme 2 (ACE2). A defined receptor-binding domain (RBD) on S mediates this interaction. The S protein plays key parts in the induction of neutralizing-antibody and T-cell responses, as well as protective immunity.

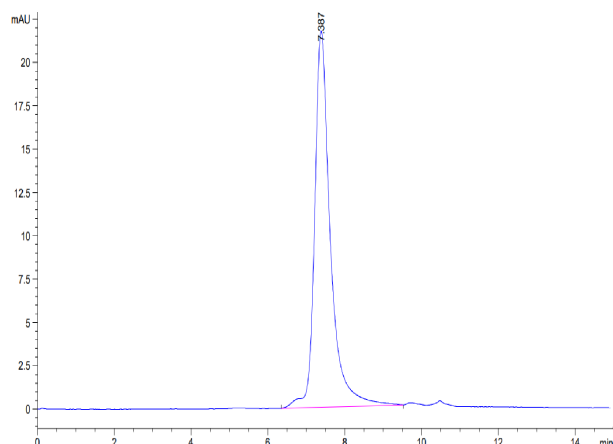
## Assay Data

### Tris-Bis PAGE



Biotinylated SARS-COV-2 Spike RBD on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC



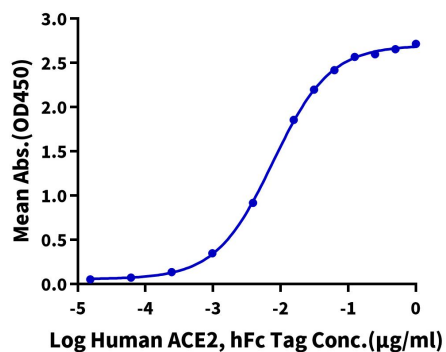
The purity of Biotinylated SARS-COV-2 Spike RBD is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

**Biotinylated SARS-COV-2 Spike RBD, His Tag ELISA**

0.1µg Biotinylated SARS-COV-2 Spike RBD, His Tag Per Well



Immobilized Biotinylated SARS-COV-2 Spike RBD, His Tag at 1µg/ml (100µl/well) on the streptavidin precoated plate (5µg/ml). Dose response curve for Human ACE2, hFc Tag with the EC50 of 7.7ng/ml determined by ELISA.