

# Biotinylated SARS-COV-2 Spike RBD Protein

Cat. No. COV-VM5BDB



## Description

|                  |                                                                                                                                    |
|------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Source           | Recombinant Biotinylated SARS-COV-2 Spike RBD Protein is expressed from HEK293 with hFc tag and Avi tag at the C-Terminus.         |
|                  | It contains Arg319-Asn532.                                                                                                         |
| Accession        | QHD43416.1                                                                                                                         |
| Molecular Weight | The protein has a predicted MW of 51.7 kDa. Due to glycosylation, the protein migrates to 60-62 kDa based on Bis-Tris PAGE result. |
| Endotoxin        | Less than 1 EU per µg by the LAL method.                                                                                           |
| Purity           | > 95% as determined by Bis-Tris PAGE                                                                                               |
|                  | > 95% as determined by HPLC                                                                                                        |

## Formulation and Storage

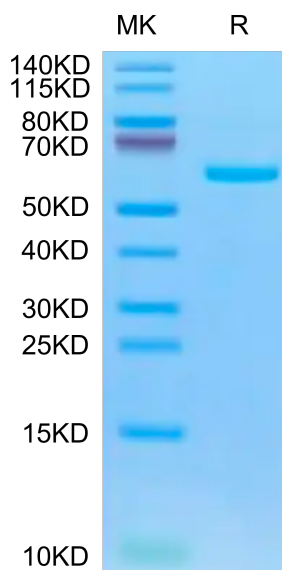
|                |                                                                                                                                                                                                                         |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Formulation    | Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.                                                                                          |
| Reconstitution | Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.                                                                                             |
| Storage        | -20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months 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

### Bis-Tris PAGE



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

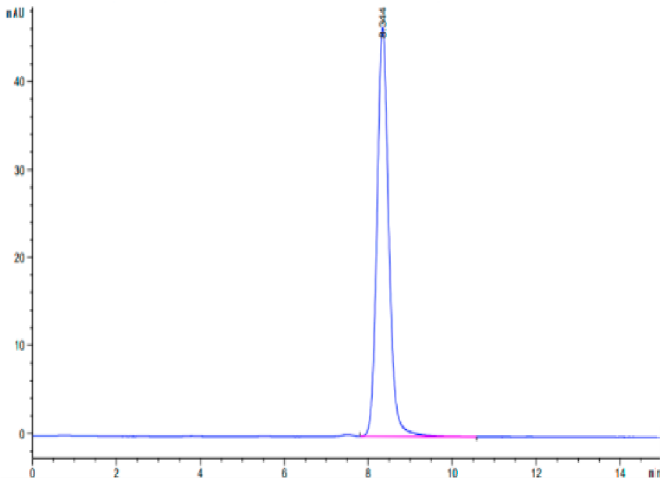
### SEC-HPLC

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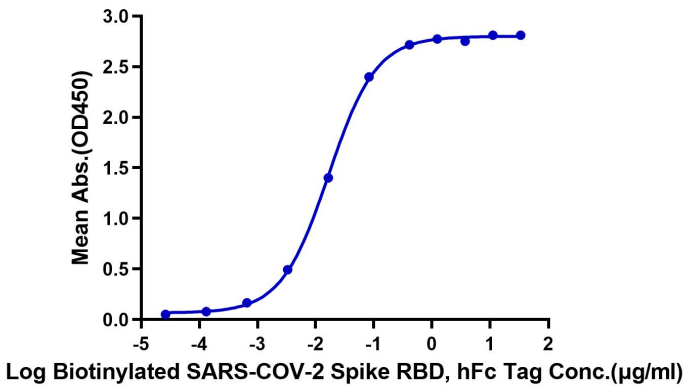
Assay Data



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

ELISA Data

Biotinylated SARS-COV-2 Spike RBD, hFc Tag ELISA  
0.5µg Human ACE2, His Tag Per Well



Immobilized Human ACE2, His Tag at 5µg/ml (100µl/well) on the plate. Dose response curve for Biotinylated SARS-COV-2 Spike RBD, hFc Tag with the EC50 of 16.7ng/ml determined by ELISA.