# SARS-COV-2 Spike RBD Protein

Cat. No. COV-VM3BD



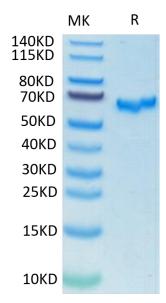
| Description             |   |
|-------------------------|---|
| Source                  | Recombinant SARS-COV-2 Spike RBD Protein is expressed from HEK293 with mFc (IgG1) tag at the C-Terminus.  |
|                         | It contains Arg319-Asn532.  |
| Accession               | QHD43416.1  |
| Molecular<br>Weight     | The protein has a predicted MW of 49.7 kDa. Due to glycosylation, the protein migrates to 60-70 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 receipt80°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**

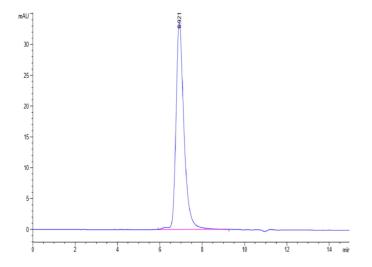


SARS-COV-2 Spike RBD on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



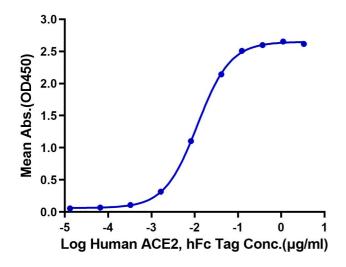
### **Assay Data**



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

### **ELISA Data**

SARS-COV-2 Spike RBD, mFc Tag ELISA 0.05µg SARS-COV-2 Spike RBD, mFc Tag Per Well



Immobilized SARS-COV-2 Spike RBD at 0.5µg/ml (100µl/Well). Dose response curve for Human ACE2, hFc Tag with the EC50 of 11.6ng/ml determined by ELISA.