

# Recombinant SARS-CoV-2 Spike RBD(B.1.640.2/IHU) Protein

Catalog No.: RP02104 **Recombinant** **1 Publications**

## Sequence Information

Species	Gene ID	Swiss Prot
SARS-CoV-2	43740568	QHD43416.1

### Tags

C-His

### Synonyms

Envelope;SARS-CoV-2 Spike RBD (N501Y);Spike;Spike ECD;Spike RBD;Spike S1;Spike S2;Spike S2 ECD;S1-RBD protein;NCP-CoV RBD Protein;novel coronavirus RBD Protein;2019-nCoV RBD Protein;S glycoprotein Subunit1 RBD Protein

## Product Information

Source	Purification
HEK293 cells	>95% by SDS-PAGE;> 95% by HPLC

### Endotoxin

< 1 EU/μg of the protein by LAL method.

### Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.

### Reconstitution

Centrifuge the tube before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

## Contact

☎ | 400-999-6126

✉ | [cn.market@abclonal.com.cn](mailto:cn.market@abclonal.com.cn)

🌐 | [www.abclonal.com.cn](http://www.abclonal.com.cn)

## 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.

## Basic Information

### Description

Recombinant SARS-CoV-2(2019-nCoV) Spike RBD(B.1.640.2/IHU)-His Protein is produced by Expi293 cells expression system. The target protein is expressed with sequence (Arg319-Phe541(R346S, N394S, Y449N, E484K, F490S, N501Y)) of SARS-COV-2(2019-nCoV) Spike RBD(B.1.640.2/IHU)-His (Accession #QHD43416.1) fused with His tag at the C-terminus.

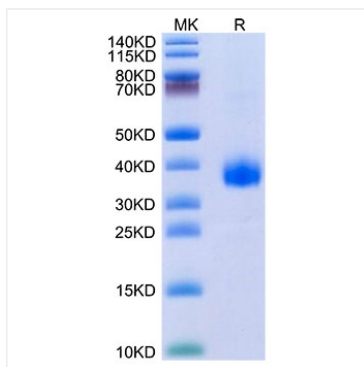
### Bio-Activity

Immobilized SARS-Cov-2 Spike RBD(B.1.640.2/IHU), His Tag at 0.5 μg/mL (100 μL/well) on the plate. Dose response curve for Human ACE2, hFc Tag with the EC<sub>50</sub> of 41.3 ng/mL determined by ELISA.

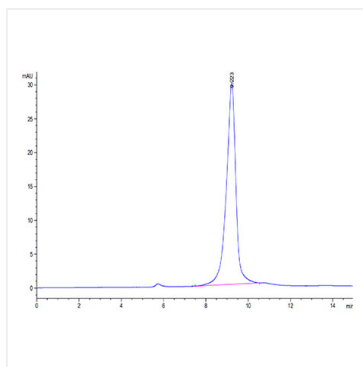
### Storage

Store the lyophilized protein at -20°C to -80 °C for long term. After reconstitution, the protein solution is stable at -20 °C for 3 months, at 2-8 °C for up to 1 week. Avoid repeated freeze/thaw cycles.

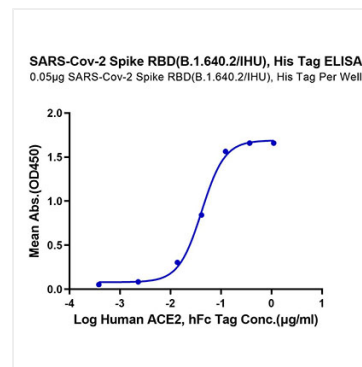
## Validation Data



SARS-Cov-2 Spike RBD (B.1.640.2/IHU) on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.



The purity of SARS-Cov-2 Spike RBD (B.1.640.2/IHU) is greater than 95% as determined by SEC-HPLC.



Immobilized SARS-Cov-2 Spike RBD (B.1.640.2/IHU) , His Tag at 0.5µg/ml (100µl/well) on the plate. Dose response curve for Human ACE2, hFc Tag with the EC<sub>50</sub> of 41.3ng/ml determined by ELISA.