

# 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 OHD43416.1

## **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

HEK293 cells

## **Purification**

≥ 95 % as determined by SDS-PAGE;≥ 95 % as determined by

HPLC.

## Calculated MW Observed MW

40 kDa

## **Endotoxin**

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

# **Formulation**

Lyophilized from a 0.22  $\mu m$  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 stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

## Contact

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400-999-6126

## **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  $\mu$ g/mL (100  $\mu$ L/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.

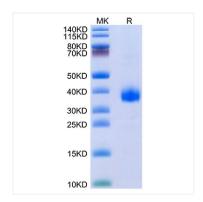
### Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

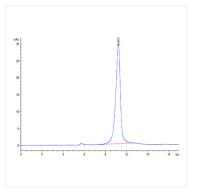
After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

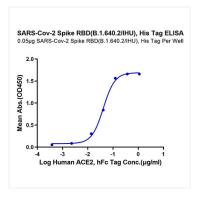
# **Validation Data**



Recombinant SARS-CoV-2 Spike RBD(B.1.640.2/IHU) Protein was determined by Tris-Bis PAGE under reducing conditions.



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 0.5 $\mu$ g/ml (100 $\mu$ l/well) on the plate. Dose response curve for Human ACE2, hFc Tag with the EC<sub>50</sub> of 41.3 $\eta$ g/ml determined by ELISA.