

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 % 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 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

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 EC₅₀ of 41.3 ng/mL determined by ELISA.

Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

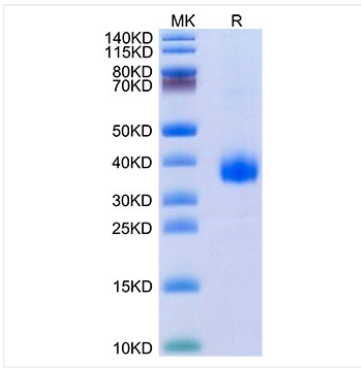
Storage

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.

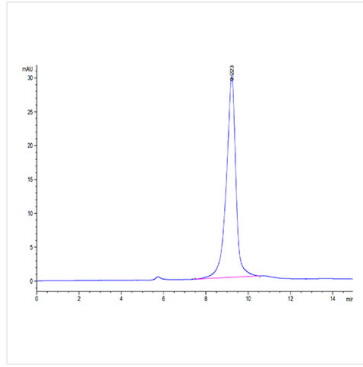
Operational Notes

For your safety and health, please wear a lab coat and disposable gloves for handling.

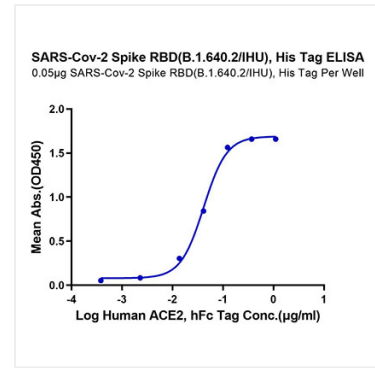
Validation Data



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 0.5µg/ml (100µl/well) on the plate. Dose response curve for Human ACE2, hFc Tag with the EC₅₀ of 41.3ng/ml determined by ELISA.