

Recombinant SARS-CoV-2 Spike RBD Protein

Catalog No.: RP01258

Sequence Information

Species **Gene ID**
SARS-CoV-2 43740568

Swiss Prot **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 Subunit 1 RBD Protein

Product Information

Source **Purification**
HEK293 cells ≥ 95 % as determined by SDS-PAGE; ≥ 95 % as determined by HPLC.

Calculated MW **Observed MW**
25.94 kDa 35-40 kDa

Endotoxin

< 0.1 EU/μg of the protein by LAL method.

Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4. or Supplied as a 0.22 μm filtered solution in PBS, pH 7.4. Contact us for customized product form or formulation.

Reconstitution

Centrifuge the vial 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)

Background

Basic Information

Description

Recombinant SARS-CoV-2(2019-nCoV) Spike RBD-His Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Arg319-Phe541) of SARS-COV-2(2019-nCoV) Spike RBD-His (Accession #YP_009724390.1) fused with a 6×His tag at the C-terminus.

Activity

1. Measured by its binding ability in a functional ELISA. Immobilized SARS-CoV-2 Spike RBD (Catalog: RP01258) at 2 μg/mL (100 μL/well) can bind Human ACE-2 (Catalog: RP01275) with a linear range of 0.001-2.96 ng/mL.
2. Immobilized human ACE2 on COOH Chip, can bind SARS-COV-2 Spike RBD Protein with an affinity constant of 35.3 nM as determined in a SPR assay (Nicoya OpenSPR).
3. Measured by its binding ability in a functional ELISA. Immobilized SARS-CoV-2 Spike RBD (Catalog: RP01258) at 2 μg/mL (100 μL/well) can bind Human ACE-2 (Catalog: RP01275) with a linear range of 0.001-1.69 ng/mL.

Shipping

Lyophilized proteins are shipped at ambient temperature.
Liquid proteins are shipped at frozen temperature with dry ice.
Upon receipt, store it immediately at the temperature recommended below.

Storage

Store at -20°C

Operational Notes

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

Contact

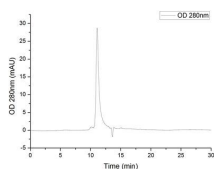
☎ | 400-999-6126

✉ | cn.market@abclonal.com.cn

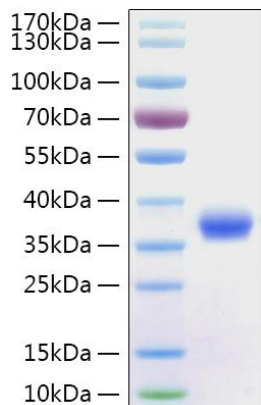
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or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

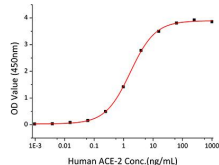
Validation Data



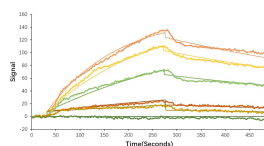
The purity of SARS-CoV-2 Spike RBD Protein with His tag (Cat.RP01258) was greater than 95% as determined by SEC-HPLC.



Recombinant SARS-CoV-2 Spike RBD Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Immobilized SARS-CoV-2 Spike RBD (Catalog: RP01258) at 2 µg/mL (100 µL/well) can bind Human ACE-2 (Catalog: RP01275) with a linear range of 0.001–1.69 ng/mL.



Immobilized human ACE2 on COOH Chip, can bind SARS-CoV-2 Spike RBD Protein with an affinity constant of 35.3 nM as determined in a SPR assay (Nicoya OpenSPR).