

## Recombinant SARS-COV-2 Spike RBD Protein

**Catalog No:** CARP01258

**Category:** Recombinant Protein

**Description:** Recombinant 2019-nCoV Spike RBD-His Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Arg319-Phe541) of 2019-nCoV Spike RBD-His (Accession #YP\_009724390.1) fused with a 6×His tag at the C-terminus

**Bio-Activity:** Measured by its binding ability in a functional ELISA. Immobilized Recombinant SARS-COV-2 Spike RBD His at 2µg/mL (100 µL/well) can bind Recombinant Human ACE2 with a linear range of 0.15-4.53 ng/mL. Immobilized human ACE2 on COOH Chip, can bind SARS-COV-2 Spike RBD Protein with an affinity constant of 36.7 nM as determined in a SPR assay (Nicoya OpenSPR).

### Sequence Information

**Species:** SARS-COV-2

**Gene ID:** 43740568

**Tags:** 6×His tag at the C-terminus

### Product Information

**Synonyms:** S1-RBD protein; NCP-CoV RBD Protein; novel coronavirus RBD Protein; 2019-nCoV RBD Protein; S glycoprotein Subunit1 RBD Protein

**Source:** HEK293 cells

**Purity:** >90% by SDS-PAGE; > 95% by HPLC

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

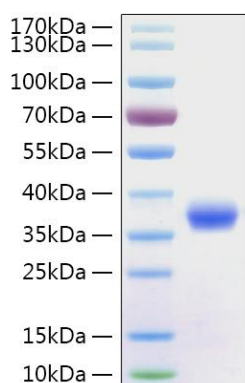
**Formulation:** Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4. or Supplied as a 0.22 µm filtered solution in PBS, pH 7.4. Contact us for customized product form or formulation.

**Reconstitution:** For lyophilized protein : Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water

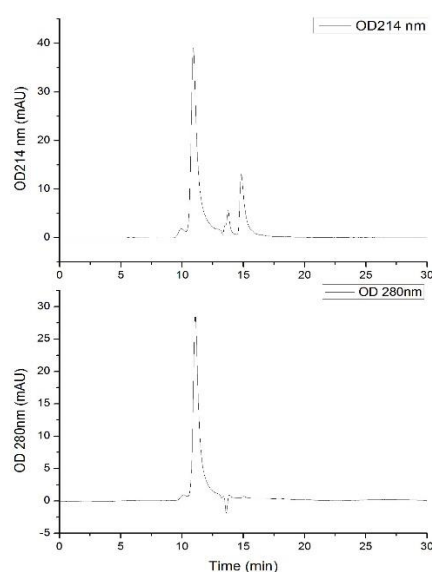
**Storage:** Store the lyophilized protein at -20°C to -80 °C for long term. After reconstitution, the protein solution is stable at -20 °C for 3 months, at 2-8 °C for up to 1 week. or This product is stable at ≤ -70°C for up to 6 months from the date of receipt. For optimal storage, aliquot into smaller quantities after centrifugation and store at recommended temperature. Avoid repeated freeze/thaw cycles.

### Background

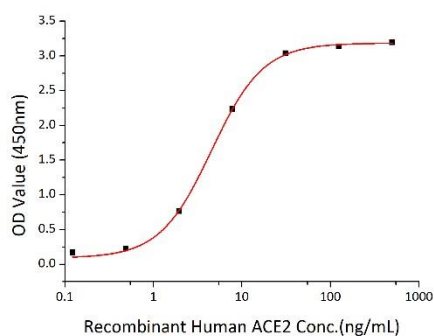
## Validated Data



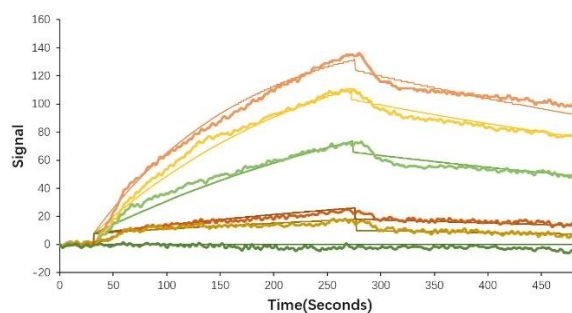
Recombinant SARS-COV-2 Spike RBD Protein with His tag was determined by SDS-PAGE with Coomassie Blue, showing a band at 36 kDa.



The purity of SARS-COV-2 Spike RBD Protein with His tag (Cat.CARP01258) was greater than 95% as determined by SEC-HPLC.



Immobilized Recombinant SARS-COV-2 Spike RBD-His at 2 µg/mL (100 µL/well) can bind Recombinant Human ACE2 with a linear range of 0.15-4.53 ng/mL.



Immobilized human ACE2 on COOH Chip, can bind SARS-COV-2 Spike RBD Protein with an affinity constant of 36.7 nM as determined in a SPR assay (Nicoya OpenSPR).