

Recombinant SARS-COV-2 Spike S1 Protein with His and Avi tag

Catalog No: CARP01261

Category: Recombinant Protein

Description: Recombinant SARS-COV-2(2019-nCoV) Spike S1 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Gln14-Arg683) of SARS-COV-2(2019-nCoV) Spike S1 (Accession #YP_009724390.1) fused with a 6×His tag and Avi at the C-terminus.

Bio-Activity: Measured by its binding ability in a functional ELISA. Immobilized Recombinant SARS-CoV-2 Spike S1 at 2µg/mL (100 µL/well) can bind recombinant Human ACE2 with a linear range of 0.15-6.85 ng/mL. Immobilized Human ACE2 on COOH Chip, can bind SARS-COV-2 Spike S1 with an affinity constant of 24.5 nM as determined in a SPR assay (Nicoya OpenSPR).

Sequence Information

Species: SARS-COV-2

Gene ID: 43740568

Tags: 6×His and Avi tag at the C-terminus

Product Information

Synonyms: S1 protein; Spike glycoprotein Subunit1;S glycoprotein Subunit1;Spike protein S1;novel coronavirus s1 Protein Product information

Source: HEK293 cells

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

Endotoxin: < 1.0 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.

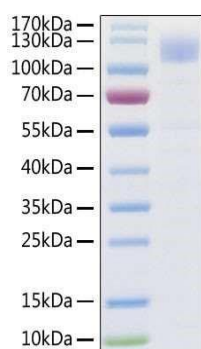
Reconstitution: For lyophilized protein : Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water.

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.

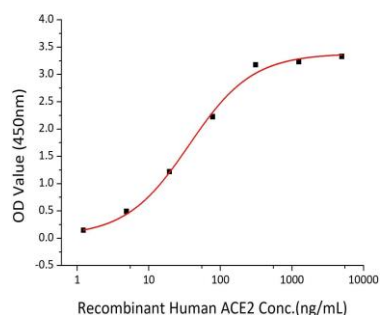
Background

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.

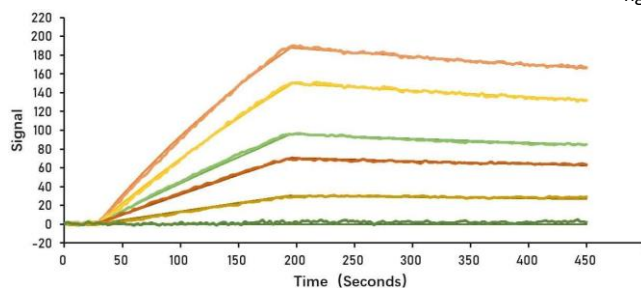
Validated Data



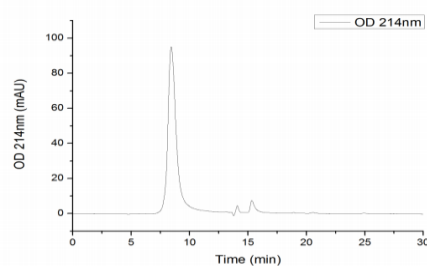
Recombinant SARS-CoV-2 Spike S1 Protein with His and Avi tag was determined by SDS-PAGE with Coomassie Blue, showing a band at 110-120 kDa.



Immobilized Recombinant SARS-CoV-2 Spike S1 at 2 μ g/mL (100 μ L/well) can bind recombinant Human ACE2 with a linear range of 0.15-6.85 ng/mL.



Immobilized Human ACE2 on COOH Chip, can bind SARS-CoV-2 Spike S1 with an affinity constant of 24.5 nM as determined in a SPR assay (Nicoya OpenSPR).



The purity of SARS-CoV-2 Spike S1 Protein with His and Avi tag was greater than 95% as determined by SEC-HPLC.