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

Catalog No: CARP01262 **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 (Val16-Arg685) of SARS-COV-2(2019-nCoV) Spike S1 (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 S1 at 2μg/mL (100 μL/well) can bind Recombinant Human ACE2 with a linear range of 0.5-8.7 ng/mL. Immobilized Human ACE2 on COOH Chip, can bind SARS-COV-2 Spike S1 with an affinity constant of 11.4 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 protein; Spike glycoprotein Subunit1;S glycoprotein Subunit1;Spike protein S1;novel coronavirus s1 Protein

Source: HEK293 cells

Purity: >90% 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.

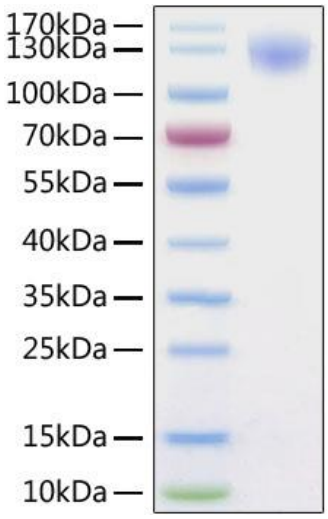
Reconstitution: For lyophilized protein : Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water

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 1 year from the date of receipt.
For optimal storage, aliquot into smaller quantities after centrifugation and store at recommended temperature.
Avoid repeated freeze/thaw cycles.

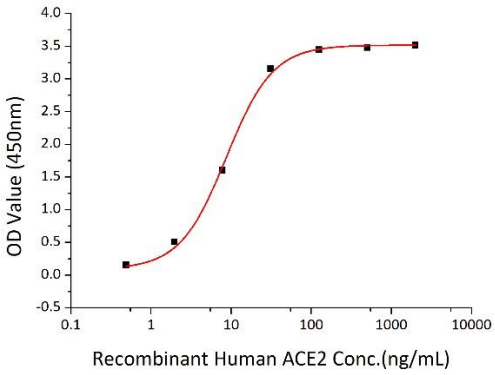
Background

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 tag was determined by SDS-PAGE with Coomassie Blue, showing a band at 110-130 kDa.



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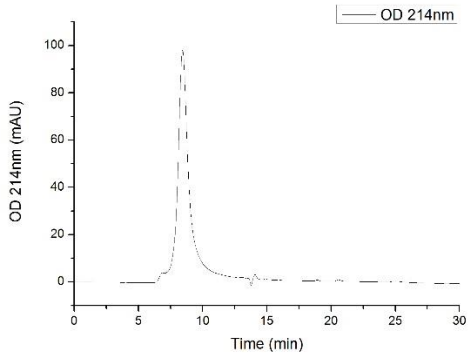
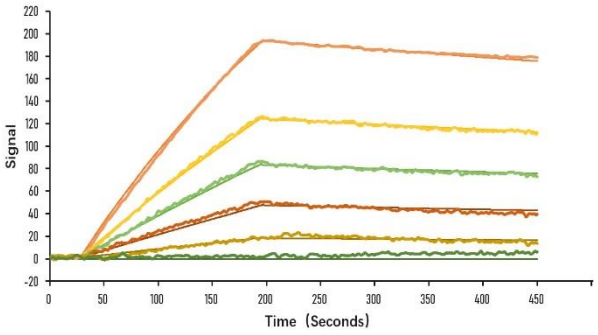


The purity of SARS-COV-2 Spike S1 Protein with His tag (Cat.CARP01262) was greater than 95% as determined by SEC-HPLC.



Immobilized Human ACE2 on COOH Chip, can bind SARS-COV-2 Spike S1 with an affinity constant of 11.4 nM as determined in a SPR assay (Nicoya OpenSPR).