

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

Catalog No: CARP01259

Category: Recombinant Protein

Description: Recombinant 2019-nCoV Spike S1 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Val11-Arg682) of 2019-ncov Spike S1 (Accession #YP_009724390.1) fused with an Fc, 6×His tag at the C-terminus.

Bio-Activity: Measured by its binding ability in a functional ELISA. Immobilized Recombinant Human ACE2 at 2µg/mL (100 µL/well) can bind Recombinant SARS-COV-2 Spike S1, the EC50 of SARS-COV-2 Spike S1 is 6.79 ng/mL. Immobilized Human ACE2 on COOH Chip, can bind SARS-COV-2 Spike S1 with an affinity constant of 90.8 nM as determined in a SPR assay (Nicoya OpenSPR).

Sequence Information

Species: SARS-COV-2

Gene ID: 43740568

Tags: Fc, 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 Product information

Source: HEK293 cells

Purity: > 90% by SDS-PAGE

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.

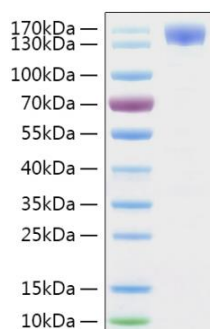
Reconstitution: For lyophilized protein : Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water.

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.

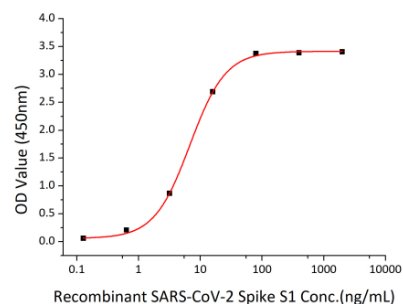
Background

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.

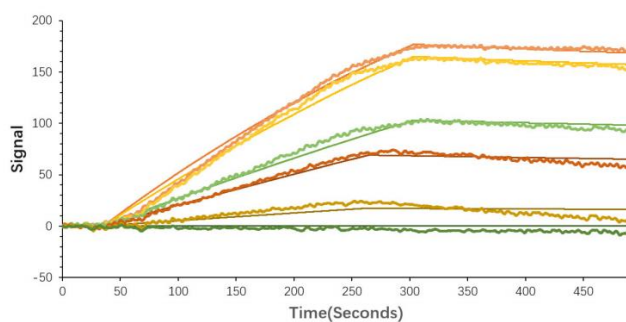
Validated Data



Recombinant SARS-COV-2 Spike S1 Protein with hFc and His tag was determined by SDS-PAGE with Coomassie Blue, showing a band at 130-160 kDa.



Immobilized Recombinant Human ACE2 at 2 μ g/mL (100 μ L/well) can bind Recombinant SARS-COV-2 Spike S1, the EC₅₀ of SARS-COV-2 Spike S1 is 6.79 ng/mL



Immobilized Human ACE2 on COOH Chip, can bind SARS-COV-2 Spike S1 with an affinity constant of 90.8 nM as determined in a SPR assay (Nicoya OpenSPR).