

32-190020: Recombinant SARS-CoV-2 Spike S1 Protein (His Tag)

Application : Functional Assay
Gene ID : 43740568
Alternative Name : S1 protein; Spike glycoprotein Subunit1;S glycoprotein Subunit1;Spike protein S1;novel coronavirus s1 Protein

Description

Source: HEK 293 cells. 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.

Product Info

Amount : 100 µg
Purification : >90% by SDS-PAGE.
Content : Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water.
Storage condition : 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. Avoid repeated freeze/thaw cycles.
Amino Acid : The target protein is expressed with sequence (Val16-Arg685) of 2019-nCoV Spike S1 fused with a 6Å-His tag at the C-terminus.

Application Note

Bio-Activity: Recombinant 2019-nCoV Spike S1 Protein is produced by HEK293 cells expression system. Measured by its binding ability in a functional ELISA. Immobilized Recombinant Human ACE2 at 2 µg/mL (100 µL/well) can bind Recombinant nCoV-S1, The EC50 of nCoV-S1 is 0.25-0.45 µg/mL. **Endotoxin :** < 1.0 EU/µg of the protein by LAL method.

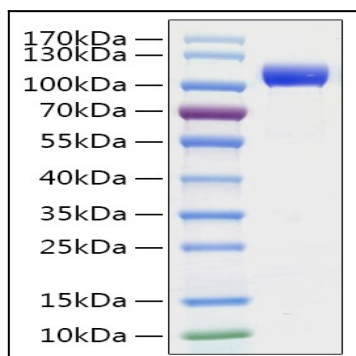


Figure-1: Recombinant COVID-19 Spike S1 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 110-130 kDa.

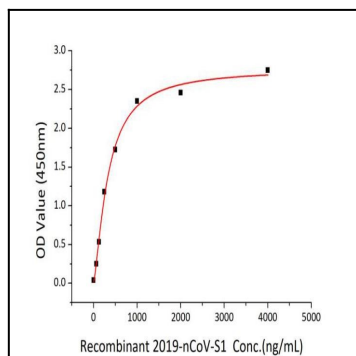


Figure-2: Measured by its binding ability in a functional ELISA. Immobilized Recombinant Human ACE2 at $2 \mu\text{g/mL}$ ($100 \mu\text{L/well}$) can bind Recombinant nCoV-S1, The EC50 of nCoV-S1 is $0.25\text{--}0.45 \mu\text{g/mL}$.