

32-190030: 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: HEK293 cells.

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

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 a 6×His tag at the C-terminus.

Product Info

Amount : 100 μg
Purification : > 90% by SDS-PAGE.
Content : 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.
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. 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.
Amino Acid : The target protein is expressed with sequence (Val11-Arg682) of 2019-ncov Spike S1 (Accession #YP_009724390.1) fused with a 6×His tag at the C-terminus.

Application Note

Measured by its binding ability in a functional ELISA. Immobilized Recombinant 2019-nCoV Spike S1-His at 2μg/mL (100 μL/well) can bind Recombinant Human ACE2 with a linear range of 1.5-36.5 ng/mL. Immobilized Human ACE2 on COOH Chip, can bind 2019-nCoV Spike S1 with an affinity constant of 27.3 nM as determined in a SPR assay (Nicoya OpenSPR).

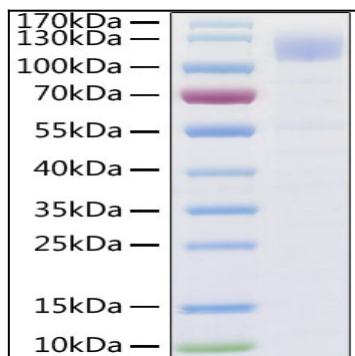


Fig 1 : Recombinant 2019-nCoV Spike S1 Protein with His tag was determined by SDS-PAGE with Coomassie Blue, showing a band at 110-130 kDa.

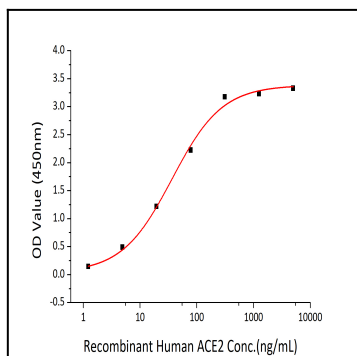


Fig 2 :Immobilized Recombinant 2019-nCoV Spike S1-His at $2 \hat{1} \frac{1}{4} \text{g/mL}$ ($100 \hat{1} \frac{1}{4} \text{L/well}$) can bind Recombinant Human ACE2 with a linear range of 1.5-36.5 ng/mL.

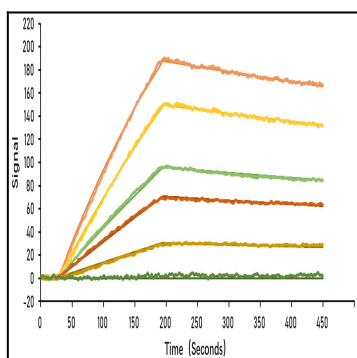


Fig 3 :Immobilized Human ACE2 on COOH Chip, can bind 2019-nCoV Spike S1 with an affinity constant of 27.3 nM as determined in a SPR assay (Nicoya OpenSPR).