

## 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/ $\mu$ g 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 $\times$ His tag at the C-terminus.

### Product Info

**Amount :** 100  $\mu$ g  
**Purification :** > 90% by SDS-PAGE.  
**Content :** Lyophilized from a 0.22  $\mu$ m filtered solution of PBS, pH 7.4. or Supplied as a 0.22  $\mu$ m filtered solution in PBS, pH 7.4.  
**Storage condition :** Store the lyophilized protein at -20 $^{\circ}$ C to -80  $^{\circ}$ C for long term. After reconstitution, the protein solution is stable at -20  $^{\circ}$ C for 3 months, at 2-8  $^{\circ}$ C for up to 1 week. This product is stable at -70 $^{\circ}$ 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 $\times$ 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 2 $\mu$ g/mL (100  $\mu$ L/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).

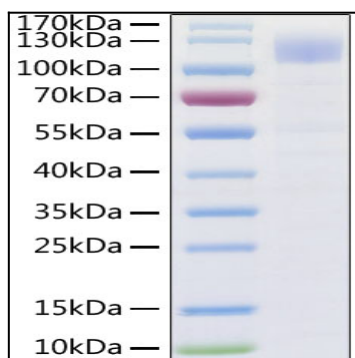


Fig 1 : Recombinant 2019-nCoV Spike S1 Protein with His tag was determined by SDS-PAGE with Coomassie Blue, showing a band at 110-130 kDa.

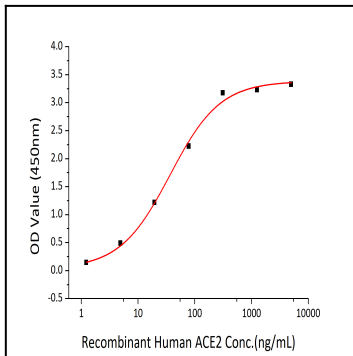


Fig 2 :Immobilized Recombinant 2019-nCoV Spike S1-His at  $2 \hat{1} \frac{1}{4} \text{g/mL}$  ( $100 \hat{1} \frac{1}{4} \text{L/well}$ ) can bind Recombinant Human ACE2 with a linear range of 1.5-36.5 ng/mL.

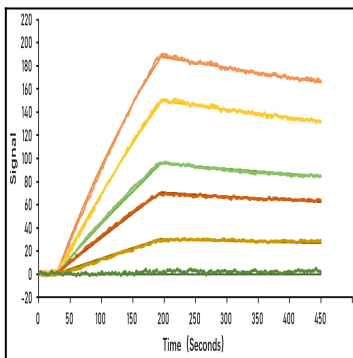


Fig 3 :Immobilized Human ACE2 on COOH Chip, can bind 2019-nCoV Spike S1 with an affinity constant of 27.3 nM as determined in a SPR assay (Nicoya OpenSPR).