## Pangolin coronavirus hCoV-19/pangolin/Guangdong/1/2019 Spike Trimer Protein (R677A, KV978-979AA), His Tag

Catalog # SPN-P52H3





#### **Synonym**

Spike,S protein,Spike glycoprotein,S glycoprotein

#### Source

Pangolin coronavirus hCoV-19/pangolin/Guangdong/1/2019 Spike Trimer, His Tag (SPN-P52H3) is expressed from human 293 cells (HEK293) with T4 fibritin trimerization motif and a polyhistidine tag at the C-terminus. It contains AA Ala 10 - Pro 1205 (Accession # <u>A0A7D6TQ96-1</u> (R677A, KV978-979AA)).

Predicted N-terminus: Ala 10

#### **Molecular Characterization**



This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 137.6 kDa. The protein migrates as 170-200 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### **Endotoxin**

Less than 1.0 EU per µg by the LAL method.

#### **Purity**

>90% as determined by SDS-PAGE.

#### **Formulation**

Lyophilized from 0.22 µm filtered solution in PBS with trehalose as protectant.

Contact us for customized product form or formulation.

#### Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

#### Storage

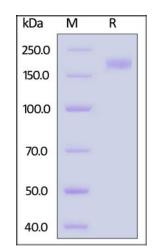
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

### **SDS-PAGE**



Pangolin coronavirus hCoV-19/pangolin/Guangdong/1/2019 Spike Trimer, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

## **Bioactivity-ELISA**



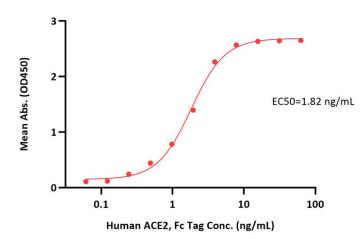
# Pangolin coronavirus hCoV-19/pangolin/Guangdong/1/2019 Spike Trimer Protein (R677A, KV978-979AA), His Tag







Pangolin coronavirus hCoV-19/pangolin/Guangdong/1/2019 Spike Trimer, His Tag ELISA 0.1  $\mu$ g of Pangolin coronavirus hCoV-19/pangolin/Guangdong/1/2019 Spike Trimer, His Tag per well



Immobilized Pangolin coronavirus hCoV-19/pangolin/Guangdong/1/2019 Spike Trimer, His Tag (Cat. No. SPN-P52H3) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Human ACE2, Fc Tag (Cat. No. AC2-H5257) with a linear range of 0.1-8 ng/mL (Routinely tested).

### **Background**

The spike protein is a large type I transmembrane protein containing two subunits, S1 and S2. S1 mainly contains a receptor binding domain (RBD), which is responsible for recognizing the cell surface receptor. S2 contains basic elements needed for the membrane fusion. The S protein plays key parts in the induction of neutralizing-antibody and T-cell responses, as well as protective immunity.

## **Clinical and Translational Updates**

