# Pangolin coronavirus isolate PCoV\_GX-P5L Spike Trimer Protein (R679A, KV980-981PP), His Tag (MALS verified)

Catalog # SPN-P52H4





## **Synonym**

Spike,S protein,Spike glycoprotein,S glycoprotein

#### Source

Pangolin coronavirus isolate PCoV\_GX-P5L Spike Trimer, His Tag (SPN-P52H4) is expressed from human 293 cells (HEK293) with T4 fibritin trimerization motif and a polyhistidine tag at the C-terminus. It contains AA Pro 9 - Pro 1207 (Accession # <u>A0A6G6A1M4</u> (R679A, KV980-981PP)). Predicted N-terminus: Pro 9

## **Molecular Characterization**



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

The protein has a calculated MW of 138.2 kDa. The protein migrates as 170-200 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

### **Endotoxin**

Less than 1.0 EU per  $\mu g$  by the LAL method.

# **Purity**

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

#### **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**

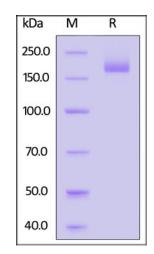
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

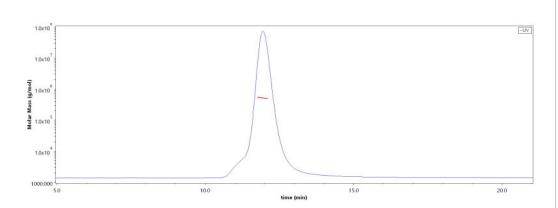
## **SDS-PAGE**



Pangolin coronavirus isolate PCoV\_GX-P5L 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 95%.

# **Bioactivity-ELISA**

## **SEC-MALS**

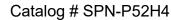


The purity of Pangolin coronavirus isolate PCoV\_GX-P5L Spike Trimer, His Tag (Cat. No. SPN-P52H4) is more than 90% and the molecular weight of this protein is around 488-540 kDa verified by SEC-MALS.

Report

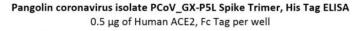


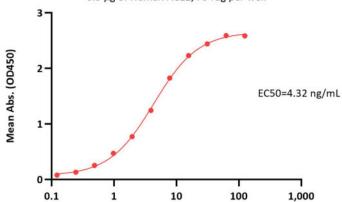
# Pangolin coronavirus isolate PCoV\_GX-P5L Spike Trimer Protein (R679A, KV980-981PP), His Tag (MALS verified)











Pangolin coronavirus isolate PCoV\_GX-P5L Spike Trimer, His Tag Conc. (ng/mL)

Immobilized Human ACE2, Fc Tag (Cat. No. AC2-H5257) at 5  $\mu$ g/mL (100  $\mu$ L/well) can bind Pangolin coronavirus isolate PCoV\_GX-P5L Spike Trimer, His Tag (Cat. No. SPN-P52H4) with a linear range of 0.1-16 ng/mL (QC 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**

