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 / rFC method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from $0.22~\mu m$ filtered solution in 0.1~M Sodium citrate, pH5.5 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

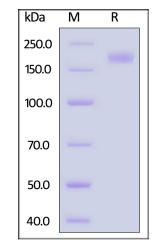
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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

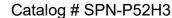


Pangolin coronavirus hCoV-19/pangolin/Guangdong/1/2019 Spike Trimer, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA



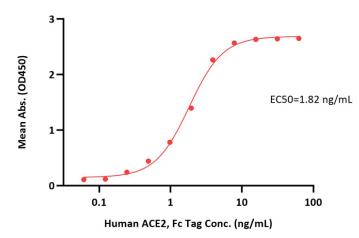
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Pangolin coronavirus hCoV-19/pangolin/Guangdong/1/2019 Spike Trimer, His Tag ELISA 0.1 μ g of Pangolin coronavirus hCoV-19/pangolin/Guangdong/1/2019 Spike Trimer, His Tag per well



Immobilized Pangolin coronavirus hCoV-19/pangolin/Guangdong/1/2019 Spike Trimer, His Tag (Cat. No. SPN-P52H3) at 1 μ g/mL (100 μ 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.

