Bat coronavirus RaTG13 Spike Trimer Protein (R681A, KV982-983PP), His Tag

Catalog # SPN-B52H4



Synonym

Spike,S protein,Spike glycoprotein,S glycoprotein

Source

Bat coronavirus RaTG13 Spike Trimer, His Tag (SPN-B52H4) 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 1209 (Accession # <u>A0A6B9WHD3-1</u> (R681A, KV982-983PP)).

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 µg by the LAL method.

Purity

>95% 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

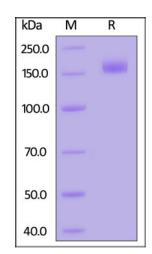
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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



Bat coronavirus RaTG13 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

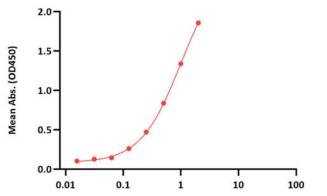


Bat coronavirus RaTG13 Spike Trimer Protein (R681A, KV982-983PP), His Tag





Bat coronavirus RaTG13 Spike Trimer (R681A, KV982-983PP), His Tag ELISA 0.5 μg of Human ACE2, Fc Tag per well



Bat coronavirus RaTG13 Spike Trimer (R681A, KV982-983PP), His Tag Conc. (µg/mL)

Immobilized Human ACE2, Fc Tag (Cat. No. AC2-H5257) at 5 μ g/mL (100 μ L/well) can bind Bat coronavirus RaTG13 Spike Trimer (R681A, KV982-983PP), His Tag (Cat. No. SPN-B52H4) with a linear range of 0.016-2 μ g/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

