Rhinolophus affinis coronavirus isolate LYRa11 Spike Trimer Protein (R671A, KV972-973PP), His Tag (MALS verified)

Catalog # SPN-R52H3





Synonym

Spike,S protein,Spike glycoprotein,S glycoprotein

Source

Rhinolophus affinis coronavirus isolate LYRa11 Spike Trimer, His Tag (SPN-R52H3) is expressed from human 293 cells (HEK293) with T4 fibritin trimerization motif and a polyhistidine tag at the C-terminus. It contains AA Asp 18 - Pro 1199 (Accession # <u>A0A023PUW9</u> (R671A, KV972-973PP)). Predicted N-terminus: Asp 18

Molecular Characterization

Spike protein (Asp 18 - Pro 1199)
A0A023PUW9

R671A, KV972-973PP
Poly-his

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

The protein has a calculated MW of 136.2 kDa. The protein migrates as 160-190 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

>95% 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

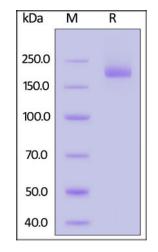
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

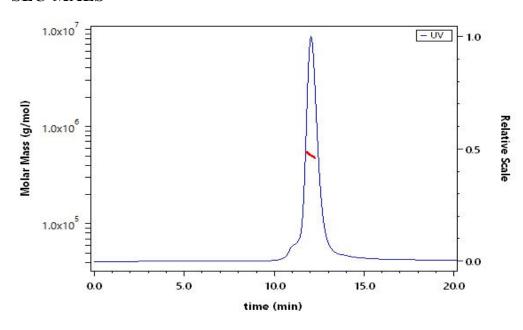
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Rhinolophus affinis coronavirus isolate LYRa11 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%.

SEC-MALS



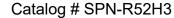
The purity of Rhinolophus affinis coronavirus isolate LYRa11 Spike Trimer, His Tag (Cat. No. SPN-R52H3) is more than 85% and the molecular weight of this protein is around 482-532 kDa verified by SEC-MALS.

Report

Bioactivity-ELISA



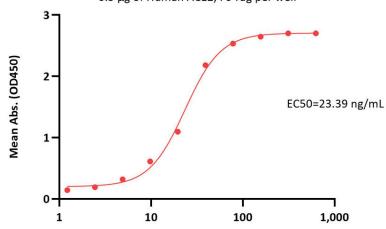
Rhinolophus affinis coronavirus isolate LYRa11 Spike Trimer Protein (R671A, KV972-973PP), His Tag (MALS verified)







Rhinolophus affinis coronavirus isolate LYRa11 Spike Trimer, His Tag ELISA 0.5 μg of Human ACE2, Fc Tag per well



Rhinolophus affinis coronavirus isolate LYRa11 Spike Trimer, His Tag Conc. (ng/mL)

Immobilized Human ACE2, Fc Tag (Cat. No. AC2-H5257) at 5 µg/mL (100 μL/well) can bind Rhinolophus affinis coronavirus isolate LYRa11 Spike Trimer, His Tag (Cat. No. SPN-R52H3) with a linear range of 1-39 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.

