

HCoV-HKU1 (isolate N5) Spike Trimer Protein, His Tag (MALS verified)

Catalog # SPN-H52H5



Synonym

Spike,S protein,Spike glycoprotein,S glycoprotein

Source

HCoV-HKU1 (isolate N5) Spike Trimer, His Tag (SPN-H52H5) is the ectodomain of HCoV-HKU1 (isolate N5) spike protein which contains AA Ala 13 - Asn 1276 (Accession # [Q0ZME7-1](#)). The recombinant protein is expressed from human 293 cells (HEK293) with T4 fibritin trimerization motif and a polyhistidine tag at the C-terminus. The S1/S2 furin-recognition site 752-RRKRR-756 is mutated to GGSGS to generate the uncleaved protein. Proline substitutions (N1067P, L1068P) are introduced to stabilize the trimeric prefusion state of the spike protein.  
Predicted N-terminus: Ala 13

Molecular Characterization

Spike protein(Ala 13 - Asn 1276)  
Q0ZME7-1

Poly-his

This protein carries a polyhistidine tag at the C-terminus.  
The protein has a calculated MW of 145.5 kDa. The protein migrates as 180-210 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) 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 µm filtered solution in 0.1 M Sodium citrate, pH5.5 with trehalose as protectant.  
Contact us for customized product form or formulation.

Reconstitution

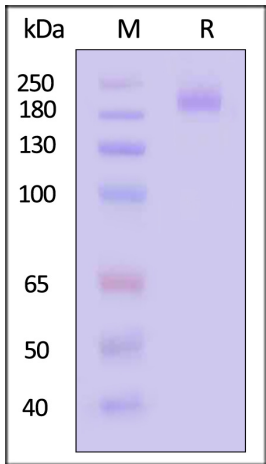
Please see Certificate of Analysis for specific instructions.  
*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.*

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:

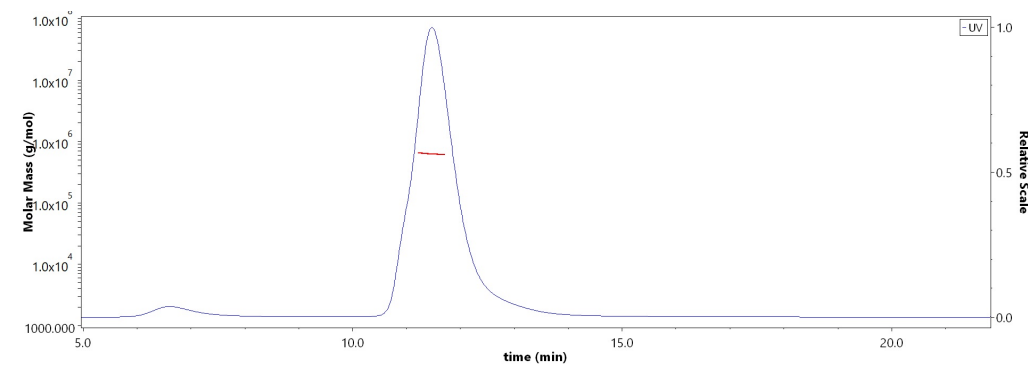
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



HCoV-HKU1 (isolate N5) 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% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-MALS



The purity of HCoV-HKU1 (isolate N5) Spike Trimer, His Tag (Cat. No. SPN-H52H5) is more than 85% and the molecular weight of this protein is around 600-660 kDa verified by SEC-MALS.  
[Report](#)

Background

Discounts, Gifts,  
and more!

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It's been reported that SARS-CoV-2 can infect the human respiratory epithelial cells through interaction with the human ACE2 receptor. 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.

