HCoV-NL63 S protein, His Tag

Catalog # SPN-H52H4

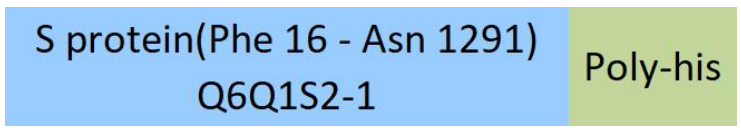
Synonym

Spike,S protein,Spike glycoprotein,S glycoprotein

Source

HCoV-NL63 Spike Trimer, His Tag (SPN-H52H4) is expressed from human 293 cells (HEK293). It contains Phe 16 - Asn 1291 (Accession # Q6Q1S2-1).The recombinant protein is expressed from human 293 cells (HEK293) with T4 fibritin trimerization motif and a polyhistidine tag at the N-terminus.
Predicted N-terminus: Phe 16

Molecular Characterization



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

The protein has a calculated MW of 146.9 kDa. The protein migrates as 200-240 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>90% 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

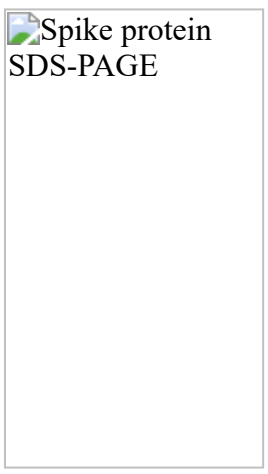
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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



HCoV-NL63 S protein, 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%.

Background

Human coronavirus NL63 (HCoV-NL63) is one of seven known coronaviruses to infect humans. The virus is an enveloped, positive-sense, single-stranded RNA virus which enters its host cell by binding to ACE2. Infection with the virus has been confirmed worldwide, and has an association with many common symptoms and diseases. The spike protein of HCoV-NL63 is a trimer protruding from the viral membrane to engage cellular receptors and mediate viral fusion with host membranes. Each spike trimer contains two large regions: N-terminal S1 responsible for receptor binding and C-terminal S2 responsible for fusion.

Clinical and Translational Updates