HCoV-HKU1(isolate N5) S1 protein, His Tag

Catalog # SIN-V52H6

Synonym

Spike,S1 protein,Spike glycoprotein Subunit1,S glycoprotein Subunit1,Spike protein S1

Source

HCoV-HKU1(isolate N5) S1 protein, His Tag(SIN-V52H6) is expressed from human 293 cells (HEK293). It contains AA Ala 13 - Arg 756 (Accession # Q0ZME7-1).
Predicted N-terminus: Ala 13

Molecular Characterization

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

The protein has a calculated MW of 85.7 kDa. The protein migrates as 110-130 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, pH7.4 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

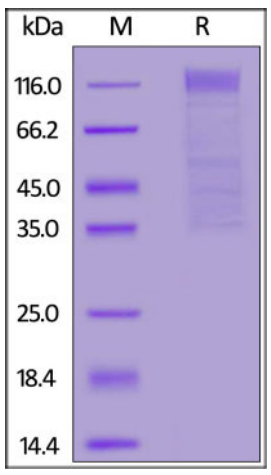
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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) S1 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

HCoV-HKU1, formally known as Human Coronavirus Hong Kong University 1, is a member of the Betacoronavirus genus within the Coronaviridae family. It was first identified in Hong Kong in 2005 and has since been detected in various parts of the world, causing respiratory infections ranging from asymptomatic to severe cases.
HCoV-HKU1 is an enveloped virus, meaning its genetic material is contained within a lipid membrane surrounded by structural proteins. This envelope is studded

with glycoproteins, including the Spike Protein (S Protein), which plays a critical role in virus attachment and entry into host cells. The S Protein is a type I transmembrane protein that protrudes from the virus surface, serving as a bridge between the virus and its host cell receptor. Once the S Protein binds to its cognate receptor on the host cell surface, it triggers a series of events leading to the fusion of the viral and cellular membranes, allowing the release of the virus's genetic material into the host cell cytoplasm.

Clinical and Translational Updates