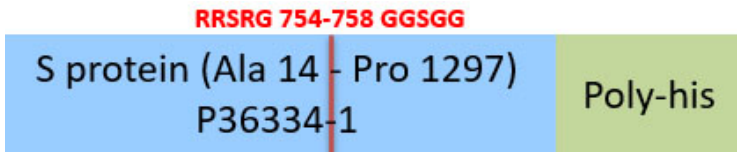
Synonym

Spike,S protein,Spike glycoprotein,S glycoprotein

Source

HCoV-OC43 Spike protein, His Tag(SPN-H52Hz) is expressed from Baculovirus-Insect cells. It contains AA Ala 14 - Pro 1297 (RRSRG 754-758 GGSGG) (Accession # P36334-1).
Predicted N-terminus: Ala 14

Molecular Characterization



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

The protein has a calculated MW of 148.3 kDa. The protein migrates as 170 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE).

Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

Purity

>90% 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

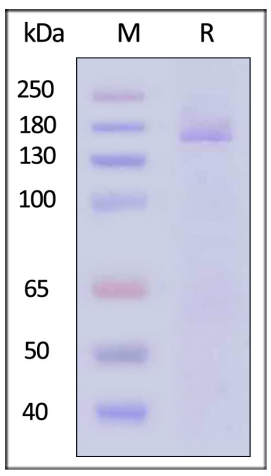
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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-OC43 Spike 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% (With Star Ribbon Pre-stained Protein Marker).

Background

Human coronavirus OC43 (HCoV-OC43) is one of seven known coronaviruses to infect humans, which is responsible for the common cold and may have been responsible for the 1889–1890 pandemic. The infecting coronavirus is an enveloped, positive-sense, single-stranded RNA virus that enters its host cell by binding to the N-acetyl-9-O-acetylneuraminic acid receptor. The spike protein of HCoV-OC43 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.