HRSV (A) Glycoprotein G Protein, His Tag

Catalog # GLG-V5143

Source

HRSV (A) Glycoprotein G Protein, His Tag(GLG-V5143) is expressed from E. coli cells. It contains AA Asn 66- Gln 298 (Accession # P03423).
Predicted N-terminus: Met

Molecular Characterization

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

The protein has a calculated MW of 27.4 kDa. The protein migrates as 38-40 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.

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

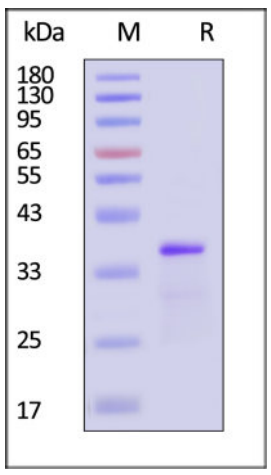
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

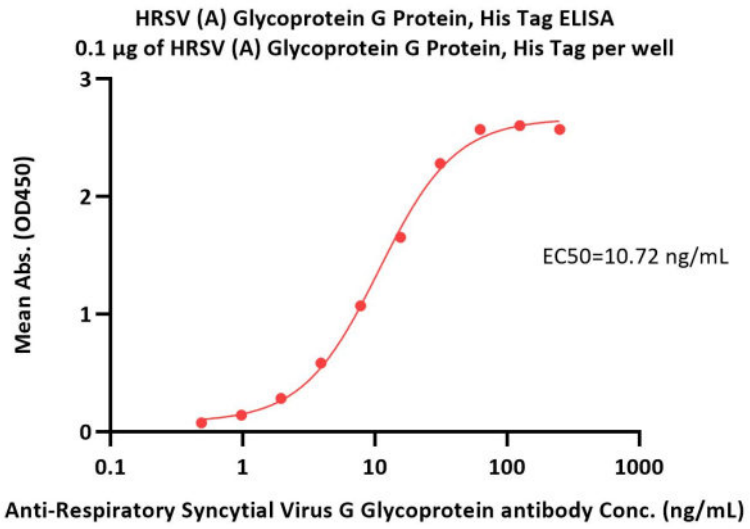
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



HRSV (A) Glycoprotein G 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).

Bioactivity-ELISA



Immobilized HRSV (A) Glycoprotein G Protein, His Tag (Cat. No. GLG-V5143) at 1 μg/mL (100 μL/well) can bind Anti-Respiratory Syncytial Virus G Glycoprotein antibody with a linear range of 0.5-31 ng/mL (QC tested).

Background

Human respiratory syncytial virus (HRSV) is the most common etiological agent of acute lower respiratory tract disease in infants and can cause repeated infections throughout life. Human respiratory syncytial virus A (strain Long) major surface glycoprotein G (RSV-G), a member of the pneumoviruses glycoprotein G family, is also known as attachment glycoprotein G and membrane-bound glycoprotein (mG), which contains a linear heparin binding domain essential for virus attachment to the host. Concretely speaking, RSV-G can attache the virion to the host cell membrane by interacting with heparan sulfate, initiating the infection. Furthermore, RSV-G can also interact with host CX3CR1, the receptor for the CX3C chemokine fractalkine, to modulate the immune response and facilitate infection. Unlike the other paramyxovirus attachment proteins, RSV-G lacks both neuraminidase and hemagglutinating activities.

Clinical and Translational Updates