

### Source

HRSV (B) Glycoprotein G Protein, His Tag(GLG-V5144) is expressed from E. coli cells. It contains AA His 67- Ala 299 (Accession # <u>O36633</u>).

Predicted N-terminus: Met

#### **Molecular Characterization**

Poly-his Glycoprotein G/G protein (RSV)(His 67- Ala 299)
O36633

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

The protein has a calculated MW of 27.6 kDa. The protein migrates as 33-35 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> 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  $\mu m$  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**

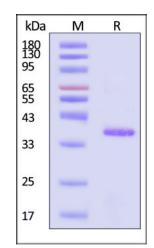
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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**

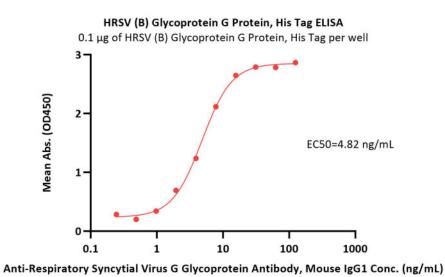


HRSV (B) Glycoprotein G Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

## **Bioactivity-ELISA**

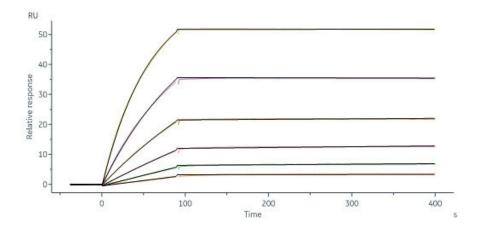






Immobilized HRSV (B) Glycoprotein G Protein, His Tag (Cat. No. GLG-V5144) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Anti-Respiratory Syncytial Virus G Glycoprotein Antibody, Mouse IgG1 with a linear range of 0.2-8 ng/mL (QC tested).

## **Bioactivity-SPR**



HRSV (B) Glycoprotein G Protein, His Tag (Cat. No. GLG-V5144) immobilized on CM5 Chip can bind Anti-Respiratory Syncytial Virus G Glycoprotein antibody with an affinity constant of 91.9 pM as determined in a SPR assay (Biacore 8K) (Routinely tested).

# Background

The two major glycoproteins on the surface of the RSV virion, the attachment glycoprotein (G) and the fusion (F) glycoprotein, control the initial phases of infection. The central region of the G protein contains a 13-amino acid highly conserved domain, partially overlapping the cysteine noose domain with 4 cysteines linked 1–4 and 2–3, followed by a highly basic heparin-binding domain (HBD). The HBD is the likely attachment site for heparan sulfate (HS) found on the surface of most cells. A peptide from the G protein HBD (amino acids 184–198) binds efficiently to HEp-2 cells and inhibits RSV infection.

### **Clinical and Translational Updates**

