

# Synonym

Glycoprotein B,gB,Envelope glycoprotein B

#### Source

HSV-2 (strain 333) Glycoprotein B (gB), His Tag(GLB-H52H3) is expressed from human 293 cells (HEK293). It contains AA Glu 98 - Ala 730 (Accession # P06763).

Predicted N-terminus: Glu 98

### **Molecular Characterization**

Glycoprotein B(Glu 98 - Ala 730) P06763

Poly-his

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

The protein has a calculated MW of 74.3 kDa. The protein migrates as 70-90 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.

>90% as determined by SEC-MALS.

#### **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

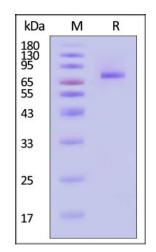
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

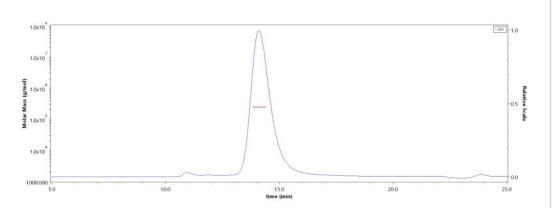
## **SDS-PAGE**



HSV-2 (strain 333) Glycoprotein B (gB), 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** 

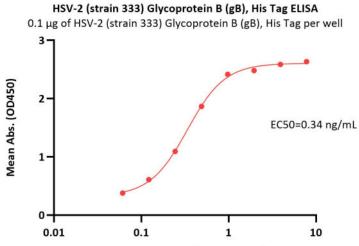
## **SEC-MALS**



The purity of HSV-2 (strain 333) Glycoprotein B (gB), His Tag (Cat. No. GLB-H52H3) is more than 90% and the molecular weight of this protein is around 225-255 kDa verified by SEC-MALS.

<u>Report</u>





Mouse anti-Herpes virus 1 and 2, clone T111 (Monoclonal), Mouse IgG1 Conc. (ng/mL)

Immobilized HSV-2 (strain 333) Glycoprotein B (gB), His Tag (Cat. No. GLB-H52H3) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Mouse anti-Herpes virus 1 and2, clone T111 (Monoclonal) ,Mouse IgG1) with a linear range of 0.06-0.5 ng/mL (QC tested).

# Background

Human cytomegalovirus is a species of the Cytomegalovirus genus of viruses, which in turn is a member of the viral family known as Herpesviridae or herpesviruses. It is typically abbreviated as HCMV or, commonly but more ambiguously, as CMV. CMV Virus Envelope Glycoportein B (CMV-GB) can be cleaved into glycoprotein GP55. Envelope glycoprotein that plays a role in host cell entry, cell to-cell virus transmission, and fusion of infected cells. CMV-GB may be involved in the initial attachment via binding to heparan sulfate together with the gM/gN complex that binds heparin with higher affinity. Furthermore, CMV-GB can interact with host integrin ITGB1, PDGFRA and EGFR that likely serve as postattachment entry receptors. Also, CMV-GB participates in the fusion of viral and cellular membranes leading to virus entry into the host cell. Membrane fusion is mediated by the fusion machinery composed at least of gB and the heterodimer gH/gL.

# **Clinical and Translational Updates**

Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.

