

# **Synonym**

Glycoprotein C/gC (HSV)

#### Source

HSV-2 (strain 333) Envelope Glycoprotein C (gC), His Tag(GLC-V52H3) is expressed from human 293 cells (HEK293). It contains AA Leu 102 - Glu 446 (Accession # <u>P06475</u>).

Predicted N-terminus: Leu 102

#### **Molecular Characterization**

Glycoprotein C (HSV-2)(Leu 102 - Glu 446) P06475

Poly-his

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

The protein has a calculated MW of 39.8 kDa. The protein migrates as 52-62 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.

>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

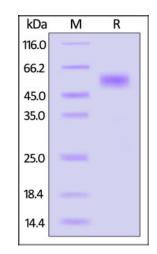
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

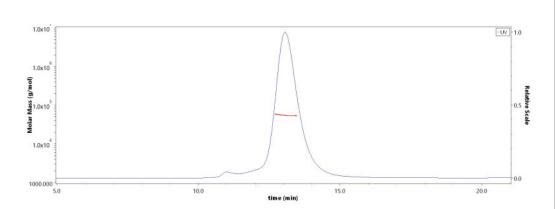
## **SDS-PAGE**



HSV-2 (strain 333) Envelope Glycoprotein C (gC), 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%.

# **Bioactivity-ELISA**

## **SEC-MALS**



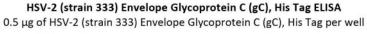
The purity of HSV-2 (strain 333) Envelope Glycoprotein C (gC), His Tag (Cat. No. GLC-V52H3) is more than 90% and the molecular weight of this protein is around 45-60 kDa verified by SEC-MALS.

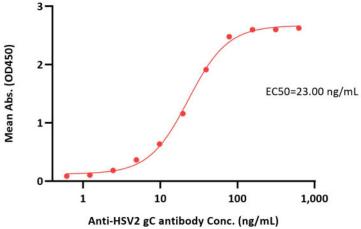
Report

# HSV-2 (strain 333) Envelope Glycoprotein C (gC), His Tag (MALS verified)









Immobilized HSV-2 (strain 333) Envelope Glycoprotein C (gC), His Tag (Cat. No. GLC-V52H3) at 5  $\mu$ g/mL (100  $\mu$ L/well) can bind Anti-HSV2 gC antibody with a linear range of 0.6-78 ng/mL (QC tested).

## Background

Herpesvirus infections are widely spread throughout the world population. Herpes simplex virus (HSV) belongs to the α-herpesvirus subfamily. There are two main types of HSV, HSV-1 and HSV-2, which infect humans. HSV-2 mainly causes genital lesions, whereas HSV-1 is involved in both oral and genital infections. Glycoprotein C (gC) is a structural component of the herpes simplex virus type 2 (HSV-2) envelope that mediates binding of the virus to cell surface heparan sulfate or chondroitin sulfate. Also plays a role in host immune evasion by inhibiting the host complement cascade activation (By similarity).

# **Clinical and Translational Updates**

