

**Synonym**

Glycoprotein E (HSV-2)

**Source**

HSV-2 (HG52) Glycoprotein E, His Tag(GLE-H52H4) is expressed from human 293 cells (HEK293). It contains AA Ala 21 - Arg 414 (Accession # [P89475](#) ).

Predicted N-terminus: Ala 21

**Molecular Characterization**

|  |          |
|--|----------|
| Glycoprotein E (HSV-2)(Ala 21 - Arg 414)<br>P89475 | Poly-his |
|--|----------|

This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 45.0 kDa. The protein migrates as 50-60 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

**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**

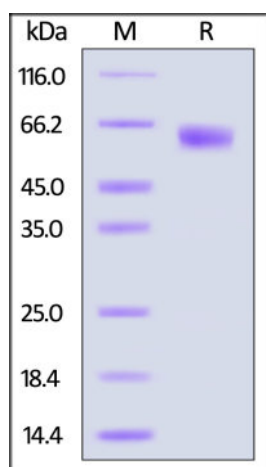
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*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.

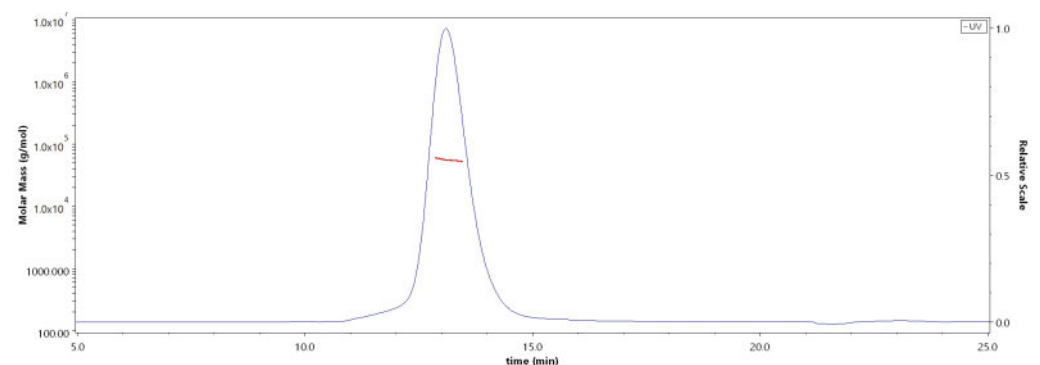
**SDS-PAGE**



HSV-2 (HG52) Glycoprotein E, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

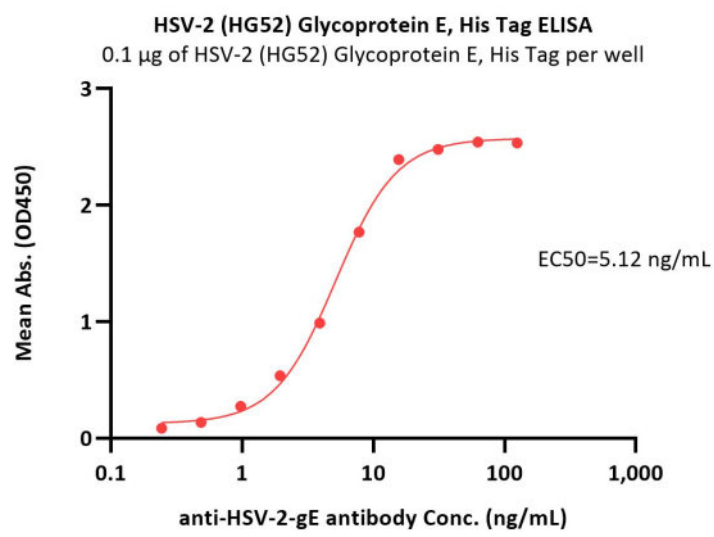
**Bioactivity-ELISA**

**SEC-MALS**



The purity of HSV-2 (HG52) Glycoprotein E, His Tag (Cat. No. GLE-H52H4) is more than 90% and the molecular weight of this protein is around 50-65 kDa verified by SEC-MALS.

[Report](#)



Immobilized HSV-2 (HG52) Glycoprotein E, His Tag (Cat. No. GLE-H52H4) at 1 µg/mL (100 µL/well) can bind anti-HSV-2-gE antibody with a linear range of 0.2-16 ng/mL (QC tested).

### Background

Herpesvirus infections are widely spread throughout the world population. Herpes simplex virus (HSV) belongs to the  $\alpha$ -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. In epithelial cells, the heterodimer gE/gI is required for the cell-to-cell spread of the virus, by sorting nascent virions to cell junctions. Once the virus reaches the cell junctions, virus particles can spread to adjacent cells extremely rapidly through interactions with cellular receptors that accumulate at these junctions. Implicated in basolateral spread in polarized cells. In neuronal cells, gE/gI is essential for the anterograde spread of the infection throughout the host nervous system.

### Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.