

**Synonym**

Glycoprotein D, gD

**Source**

HSV-1 (strain 17) Envelope Glycoprotein D (gD), His Tag(GLD-V52H3) is expressed from human 293 cells (HEK293). It contains AA Lys 26 - Thr 310 (Accession # [Q69091-1](#) ).

Predicted N-terminus: Lys 26

**Molecular Characterization**

gD(Lys 26 - Thr 310) Q69091-1	Poly-his
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This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 33.5 kDa. The protein migrates as 40-50 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.

**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**

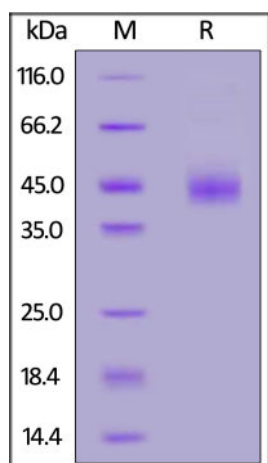
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*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.

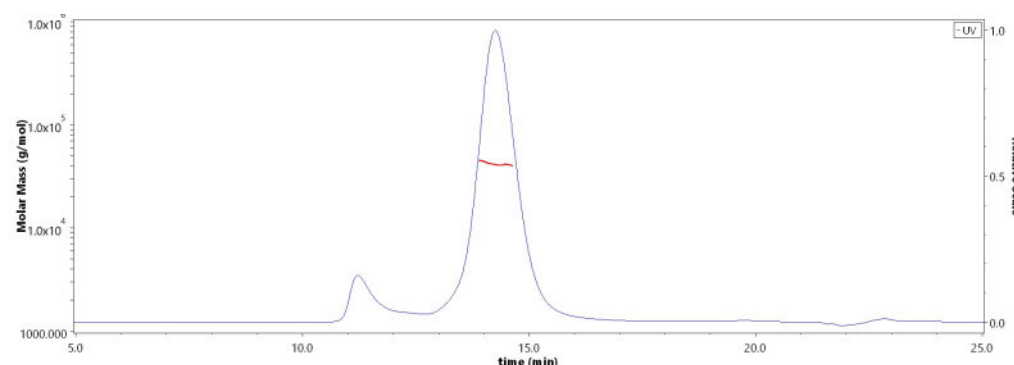
**SDS-PAGE**



HSV-1 (strain 17) Envelope Glycoprotein D (gD), 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%.

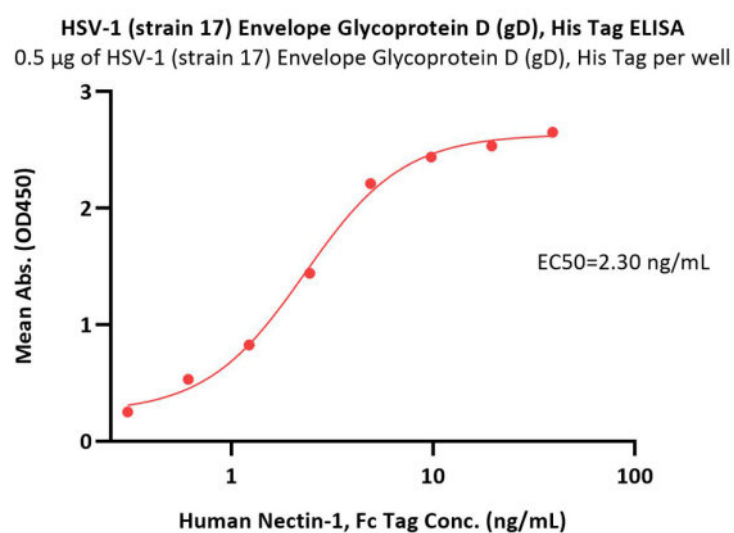
**Bioactivity-ELISA**

**SEC-MALS**

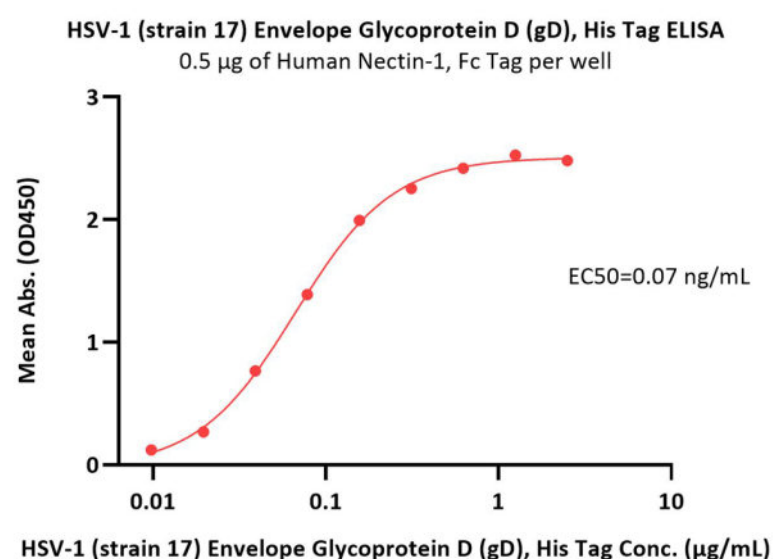


The purity of HSV-1 (strain 17) Envelope Glycoprotein D (gD), His Tag (Cat. No. GLD-V52H3) is more than 85% and the molecular weight of this protein is around 33-50 kDa verified by SEC-MALS.

[Report](#)



Immobilized HSV-1 (strain 17) Envelope Glycoprotein D (gD), His Tag (Cat. No. GLD-V52H3) at 5 µg/mL (100 µL/well) can bind Human Nectin-1, Fc Tag (Cat. No. PV1-H5253) with a linear range of 0.3-5 ng/mL (QC tested).



Immobilized Human Nectin-1, Fc Tag (Cat. No. PV1-H5253) at 5 µg/mL (100 µL/well) can bind HSV-1 (strain 17) Envelope Glycoprotein D (gD), His Tag (Cat. No. GLD-V52H3) with a linear range of 0.01-0.313 µg/mL (Routinely 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. Glycoprotein D (gD) is a structural component of the herpes simplex virus type 1 (HSV-1) envelope which is essential for virus entry and fusion with host cells. gD plays an important role by binding to the host receptors such as herpes virus entry mediator (HVEM) and nectin-1, a member of the immunoglobulin (Ig)-like cell adhesion molecules.

## Clinical and Translational Updates

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