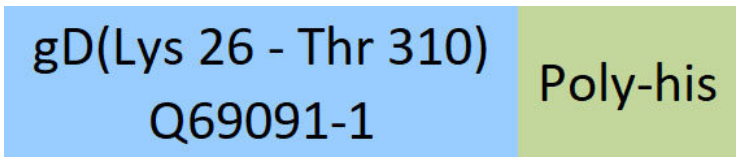
Source

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



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

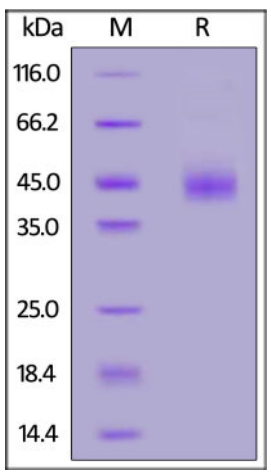
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

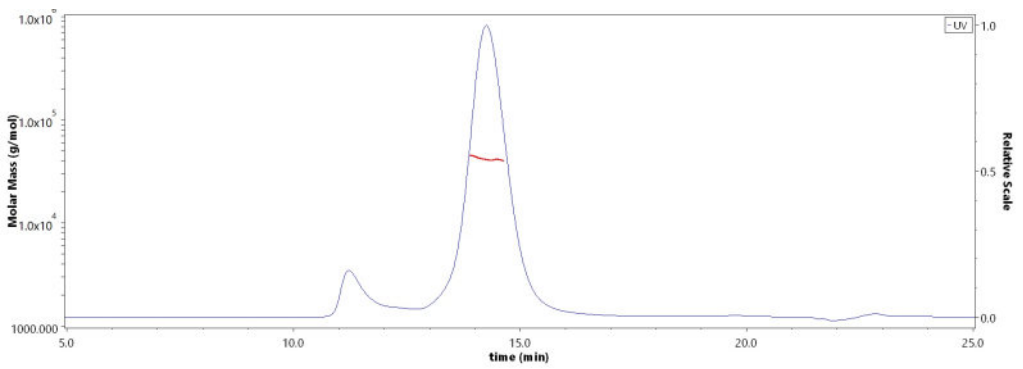
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



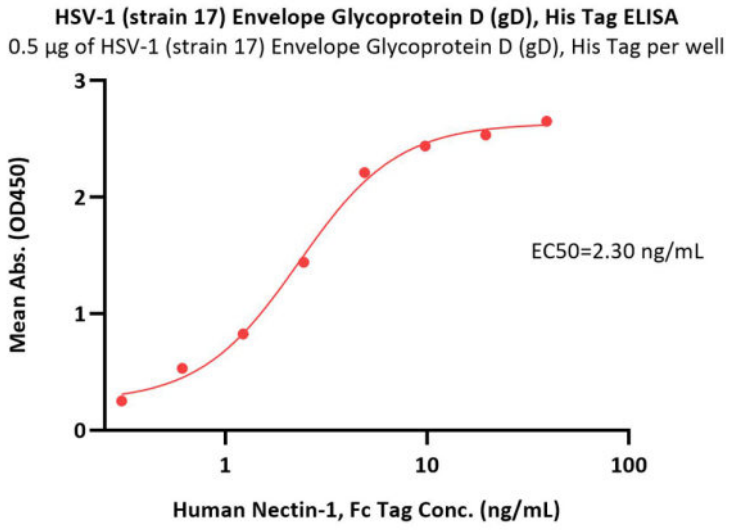
HSV-1 (strain 17) Envelope Glycoprotein D (gD), His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

SEC-MALS

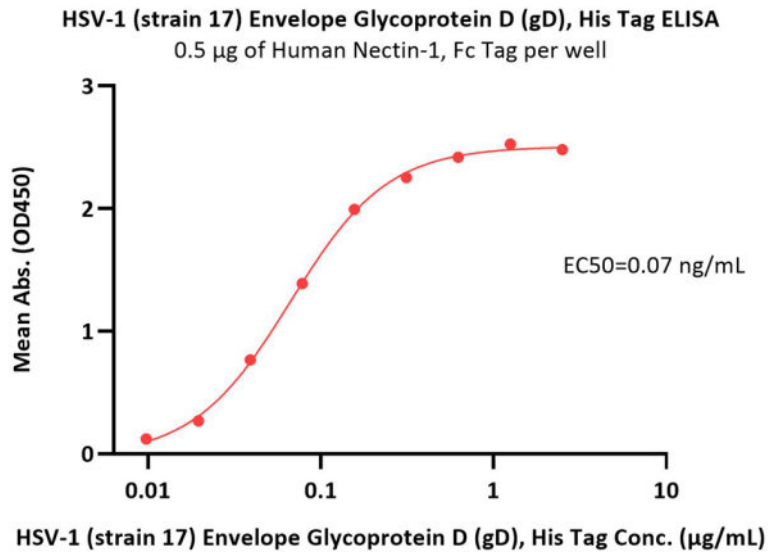


The purity of HSV-1 (strain 17) Envelope Glycoprotein D (gD), His Tag (Cat. No. GLD-V52H3) is more than 85% and the molecular weight of this protein is around 33-50 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA



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 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 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