

Synonym

herpes simplex virus 1 Envelope glycoprotein H&glycoprotein L

Source

HSV-1 (strain 17) gH&gL Protein, Twin-Strep Tag&His Tag(GHL-H5283) is expressed from human 293 cells (HEK293). It contains AA Gln 19- Ala 792 & Gly 20- Leu 224 (Accession # [P06477](#) & [P10185](#)).

Predicted N-terminus: Gln 19 & Gly 20

Molecular Characterization

gH (Gln 19- Ala 792) P06477	Twin-Strep
gL (Gly 20- Leu 224) P10185	Poly-his

This protein carries a twin strep tag at the C-terminus. The protein has a calculated MW of 87.2 kDa & 24.9 kDa. The protein migrates as 35 kDa and 95-110 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) 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.

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

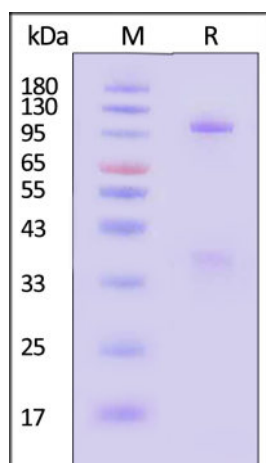
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

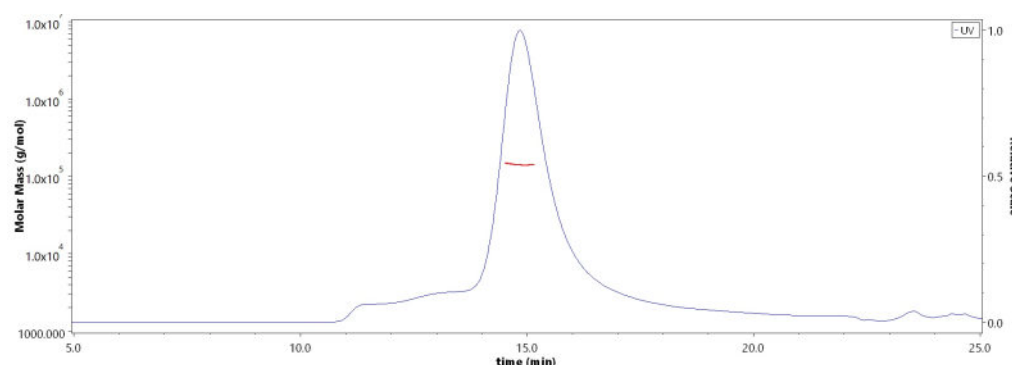
SDS-PAGE



HSV-1 (strain 17) gH&gL Protein, Twin-Strep Tag&His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

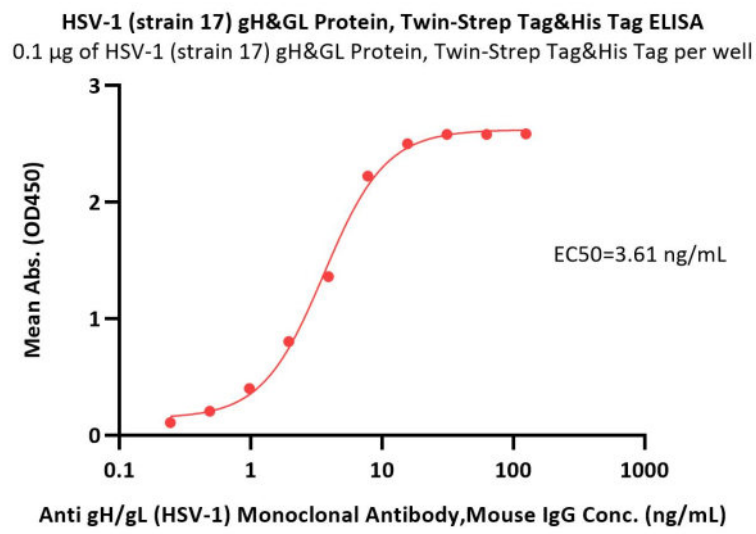
Bioactivity-ELISA

SEC-MALS



The purity of HSV-1 (strain 17) gH&gL Protein, Twin-Strep Tag&His Tag (Cat. No. GHL-H5283) is more than 85% and the molecular weight of this protein is around 130-160 kDa verified by SEC-MALS.

[Report](#)



Immobilized HSV-1 (strain 17) gH&gL Protein, Twin-Strep Tag&His Tag (Cat. No. GHL-H5283) at 1 µg/mL (100 µL/well) can bind Anti gH/gL (HSV-1) Monoclonal Antibody, Mouse IgG with a linear range of 0.2-8 ng/mL (QC tested).

Background

The herpes simplex virus type 1 (HSV-1) gH-gL complex which is found in the virion envelope is essential for virus infectivity and is a major antigen for the host immune system. The heterodimer glycoprotein H-glycoprotein L is required for the fusion of viral and plasma membranes leading to virus entry into the host cell. Following initial binding to host receptor, membrane fusion is mediated by the fusion machinery composed of gB and the heterodimer gH/gL. May also be involved in the fusion between the virion envelope and the outer nuclear membrane during virion morphogenesis.

Clinical and Translational Updates

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