

Biotinylated Human cytomegalovirus (strain AD169) (HHV-5) & Human UL18 & B2M Heterodimer Protein, His,Avitag™&Tag Free (MALS verified)

Catalog # ULM-V82W3



BIOSYSTEMS
Acro

Surprise Inside!

Synonym

UL18 & B2M

Source

Biotinylated HHV-5 & Human UL18 & B2M Heterodimer Protein, His,Avitag&Tag Free (ULM-V82W3) is expressed from human 293 cells (HEK293). It contains AA Gly 19 - Pro 303 (UL18) & Ile 21 - Met 119 (B2M) (Accession # [P08560](#) (UL18) & [P61769](#) (B2M)).

Predicted N-terminus: Gly 19 (UL18) & Ile 21 (B2M)

Molecular Characterization

UL18 (Gly 19 - Pro 303) P08560	Poly-his	Avi
B2M (Ile 21 - Met 119) P61769		

Biotinylated HHV-5 & Human UL18 & B2M Heterodimer Protein, His,Avitag&Tag Free, produced by co-expression of UL18 and B2M, has a calculated MW of 36.0 kDa (UL18) & 11.7 kDa (B2M). Subunit UL18 carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™) and subunit B2M contains no tag. The protein migrates as 55-95 kDa (UL18) and 10 kDa (B2M) when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

The protein is designed as a heterodimer.

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Purity

>90% 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.

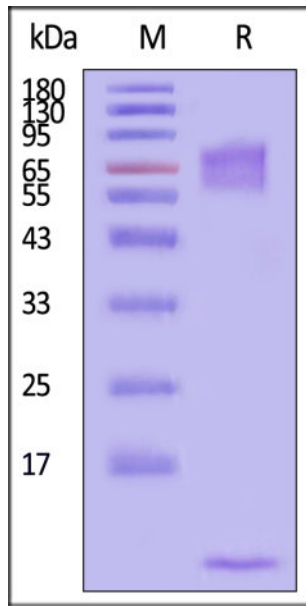
This product is stable after storage at:

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

ACRO Quality Management System

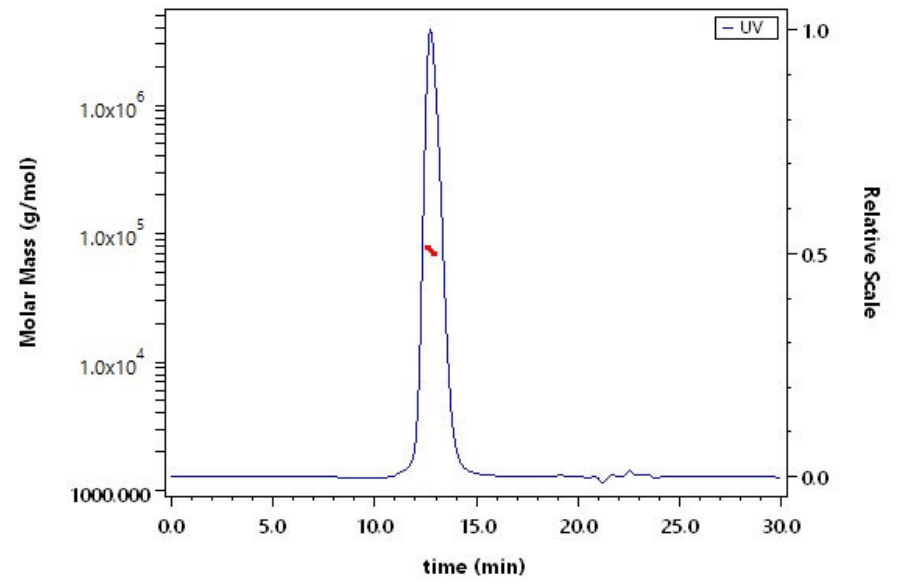
- [QMS\(ISO, GMP\)](#)
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE



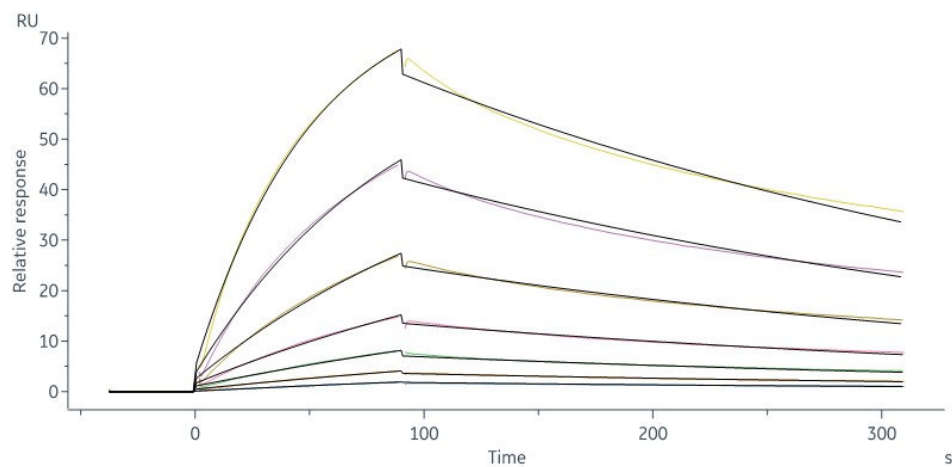
Biotinylated HHV-5 & Human UL18 & B2M Heterodimer Protein, His,Avitag&Tag Free on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-MALS



The purity of Biotinylated HHV-5 & Human UL18 & B2M Heterodimer Protein, His,Avitag&Tag Free (Cat. No. ULM-V82W3) is more than 90% and the molecular weight of this protein is around 50-75 kDa verified by SEC-MALS.

Bioactivity-SPR



Human LILRB1, His Tag (Cat. No. CDJ-H52H4) immobilized on CM5 Chip can bind Biotinylated HHV-5 & Human UL18 & B2M Heterodimer Protein, His,Avitag&Tag Free (Cat. No. ULM-V82W3) with an affinity constant of 6.73 nM as determined in a SPR assay (Biacore 8K) (QC tested).

Background

Human cytomegalovirus (HCMV) encodes UL18, a viral MHC-I homolog that mimics human HLA class I molecules. UL18 forms a stable heterodimer with human β 2-microglobulin (B2M), enabling proper folding and high-affinity interaction with the inhibitory receptor LIR-1/ILT2 on immune cells. This interaction suppresses NK-cell activation and contributes to HCMV immune evasion. Recombinant UL18-B2M complexes are widely used to study viral immunomodulation and receptor-ligand interactions.

Discounts, Gifts,
and more!



www.acrobiosystems.com

