

Biotinylated Human HLA-G&B2M&Peptide (RIIPRHLQL) Complex Protein (Monomer, MALS verified)

Catalog # HLM-H82E4



Synonym

HLA-G & B2M & Peptide (RIIPRHLQL)

Source

Biotinylated Human HLA-G&B2M&Peptide (RIIPRHLQL) Complex Protein(HLM-H82E4) is expressed from human 293 cells (HEK293). It contains AA Gly 25 - Ile 308 (HLA-G) & Ile 21 - Met 119 (B2M) & RIIPRHLQL peptide (Accession # [P17693-1](#) (HLA-G) & [P61769](#) (B2M) & RIIPRHLQL). Predicted N-terminus: Gly 25 & Arg

Molecular Characterization

Biotinylated Human HLA-G&B2M&Peptide (RIIPRHLQL) Complex Protein is produced by co-expression of HLA and B2M loaded with RIIPRHLQL peptide. This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™). The protein has a calculated MW of 36.3 kDa and 13.9 kDa. The protein migrates as 40-42 kDa and 15 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

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.

Endotoxin

Less than 1.0 EU per µg by the LAL method / rFC 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.*

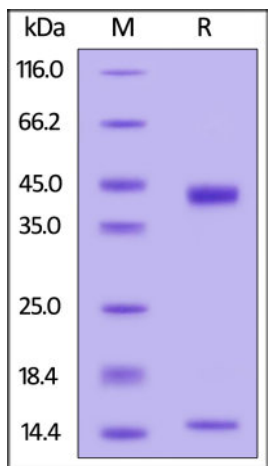
Storage

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:

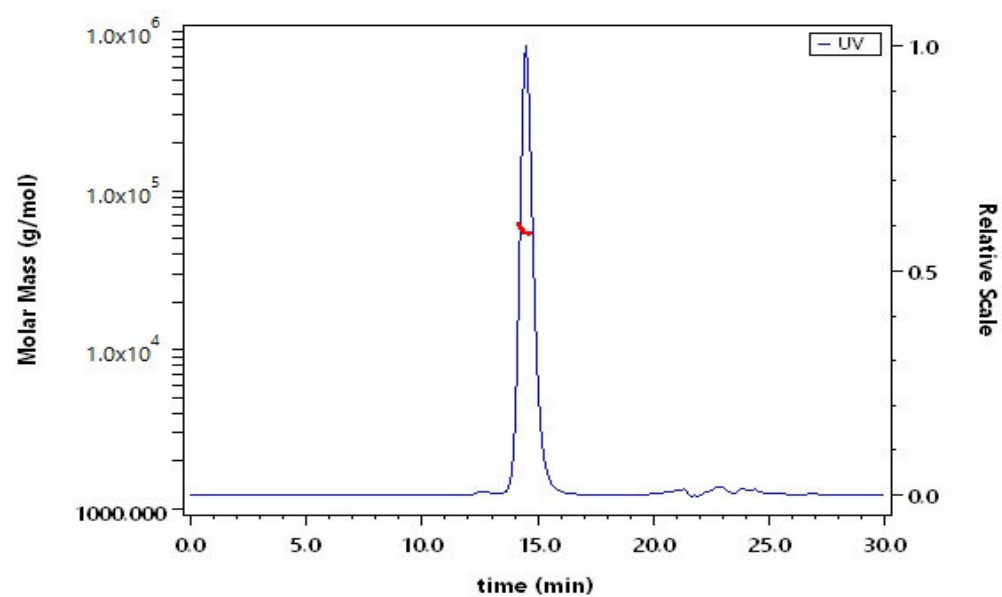
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Biotinylated Human HLA-G&B2M&Peptide (RIIPRHLQL) Complex Protein on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

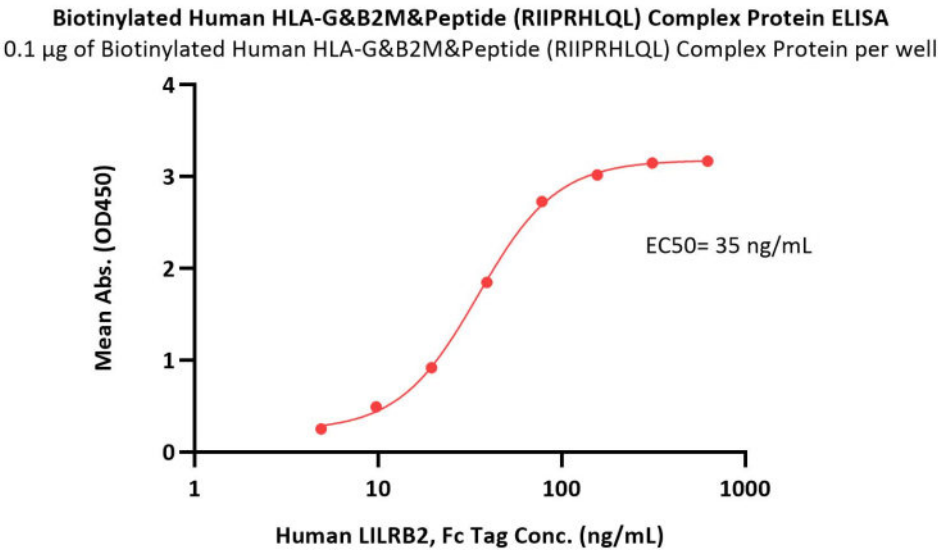
SEC-MALS



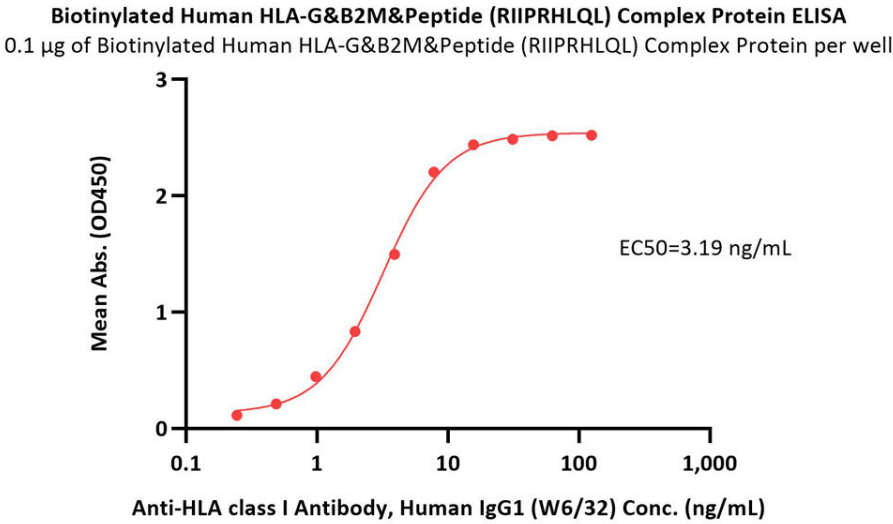
The purity of Biotinylated Human HLA-G&B2M&Peptide (RIIPRHLQL) Complex Protein (Cat. No. HLM-H82E4) is more than 85% and the molecular weight of this protein is around 50-60 kDa verified by SEC-MALS.



Bioactivity-ELISA



Immobilized Biotinylated Human HLA-G&B2M&Peptide (RIIPRHLQL) Complex Protein (Cat. No. HLM-H82E4) at 1 µg/mL (100 µL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 µg/well) plate can bind Human LILRB2, Fc Tag with a linear range of 5-78 ng/mL (QC tested).



Immobilized Biotinylated Human HLA-G&B2M&Peptide (RIIPRHLQL) Complex Protein (Cat. No. HLM-H82E4) at 1 µg/mL (100 µL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 µg/well) plate can bind Anti-HLA class I Antibody, Human IgG1 (W6/32) with a linear range of 0.2-8 ng/mL (QC tested).

Background

Human leukocyte antigen-G (HLA-G) is a group of closely linked genes located on the short arm of human chromosome 6. Hla-g belongs to a non-classical major histocompatibility complex. MHC class I molecules are selectively highly expressed in extravillous trophoblast cells invading the uterine decidual membrane. The gene structure of HLA-G is similar to that of HLA-A, HLA-B and HLA-C, but the termination code appears in advance so that the intracellular segment of protein product encoded by HLA-G is only 6 amino acids, which is significantly shorter than the 30 amino acids of classical HLA class I antigen. The Human HLA-G & B2M & RIIPRHLQL Complex Protein is a complex of HLA-G of the MHC Class I, B2M and RMFPNAPYL peptide.

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and more!

