Catalog # HLM-H82E4

# Acro Surprise Inside!

#### 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 # <u>P17693-1</u> (HLA-G) & <u>P61769</u> (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<sup>TM</sup>).

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<sup>™</sup> 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  $\mu g$  by the LAL method.

# Purity

>95% as determined by SDS-PAGE.

#### Formulation

Lyophilized from 0.22  $\mu m$  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.

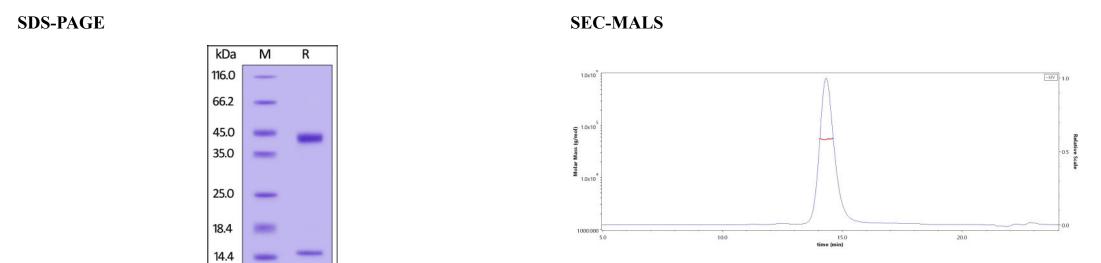
#### Storage

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.





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%.

**Bioactivity-ELISA** 



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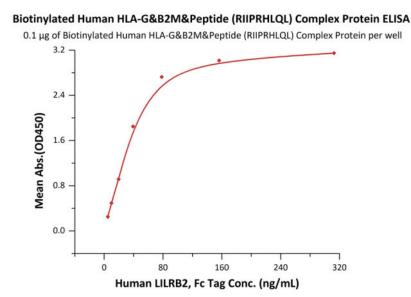
The purity of Biotinylated Human HLA-G&B2M&Peptide (RIIPRHLQL) Complex Protein (Cat. No. HLM-H82E4) is more than 85% and the molecular weight of this protein is around 50-60 kDa verified by SEC-MALS. <u>Report</u>



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



#### Catalog # HLM-H82E4



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  $\mu$ g/mL (100  $\mu$ L/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5  $\mu$ g/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 extravvillous 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 classI antigen. The Human HLA-G & B2M & RIIPRHLQL Complex Protein is a complex of HLA-G of the MHC Class I, B2M and RMFPNAPYL peptide.

#### **Clinical and Translational Updates**

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



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