# Human HLA-G&B2M&Peptide (RIIPRHLQL) Tetramer Protein (MALS verified)

Catalog # HLG-H52E9



## **Synonym**

HLA-G & B2M & Peptide (RIIPRHLQL)

#### Source

Human HLA-G&B2M&Peptide (RIIPRHLQL) Tetramer Protein(HLG-H52E9) 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**

Human HLA-G&B2M&Peptide (RIIPRHLQL) Tetramer Protein is assembled by biotinylated monomer (HLM-H82E4) and streptavidin.

Biotinylated Human HLA-G&B2M&Peptide (RIIPRHLQL) Complex Protein is produced by co-expression of HLA and B2M loaded with RIIPRHLQL peptide. Biotinylated Human HLA-G&B2M&Peptide (RIIPRHLQL) Complex 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, 13.9 kDa and 13.3 kDa. The protein migrates as 42-45 kDa and 15 kDa 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.

>90% as determined by SEC-MALS.

#### **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

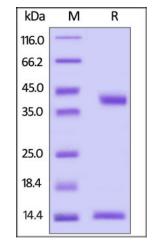
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

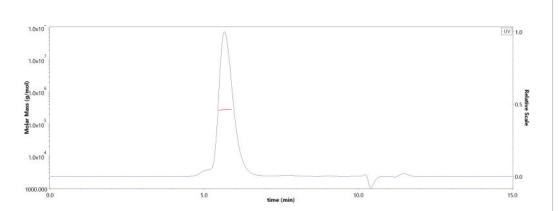
## **SDS-PAGE**



Human HLA-G&B2M&Peptide (RIIPRHLQL) Tetramer 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**

## **SEC-MALS**



The purity of Human HLA-G&B2M&Peptide (RIIPRHLQL) Tetramer Protein (Cat. No. HLG-H52E9) is more than 90% and the molecular weight of this protein is around 260-290 kDa verified by SEC-MALS.

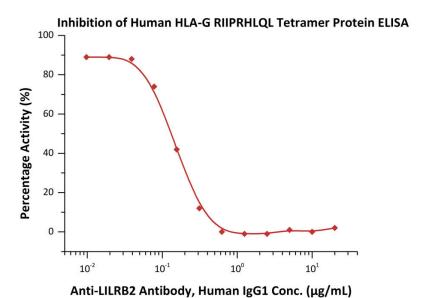
Report



# Human HLA-G&B2M&Peptide (RIIPRHLQL) Tetramer Protein (MALS verified)







Serial dilutions of Anti-LILRB2 Antibody, Human IgG1 were added into Human LILRB2, Fc Tag: Human HLA-G&B2M&Peptide (RIIPRHLQL) Tetramer Protein (Cat. No. HLG-H52E9) binding reactions. The half maximal inhibitory concentration (IC50) is 0.1486 μg/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.

