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

Cat. No. HLG-HM41CT

Description

Source	Recombinant Human HLA-G&B2M&Peptide (RIIPRHLQL) Tetramer Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus,tetramer is assembled by biotinylated monomer and streptavidin.
	It contains Gly25-Thr305(HLA-G), Ile21-Met119(B2M) and RIIPRHLQL peptide.
Accession	P17693-1(HLA-G)&P61769(B2M)&RIIPRHLQL
Molecular Weight	The protein has a predicted MW of 258 kDa. Due to glycosylation, the protein migrates to 260-265 kDa under Non reduced (N) condition based on Bis-Tris PAGE result.
Endotoxin	Less than 1 EU per μg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE
	> 90% as determined by HPLC

Formulation and Storage

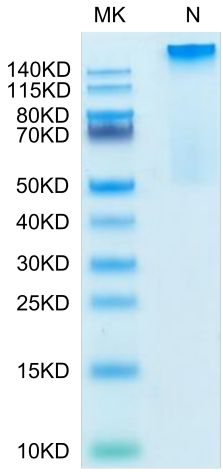
Formulation	Lyophilized from 0.22μm filtered solution in PBS, 100mM L-Arginine (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 12 months as supplied from date of receipt.-80°C for 3 months after reconstitution.Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

HLA-G is a molecule that was first known to confer protection to the fetus from destruction by the immune system of its mother, thus critically contributing to fetal-maternal tolerance. The first functional finding constituted the basis for HLA-G research and can be summarized as such: HLA-G, membrane-bound or soluble, strongly binds its inhibitory receptors on immune cells (NK, T, B, monocytes/dendritic cells), inhibits the functions of these effectors, and so induces immune inhibition.

Assay Data

Bis-Tris PAGE



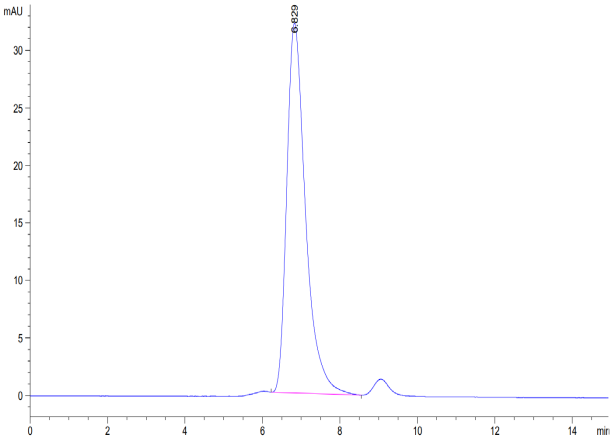
Human HLA-G&B2M&Peptide (RIIPRHLQL) Tetramer on Bis-Tris PAGE under Non reduced (N) condition. The purity is greater than 95%.

SEC-HPLC

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

Cat. No. HLG-HM41CT

Assay Data



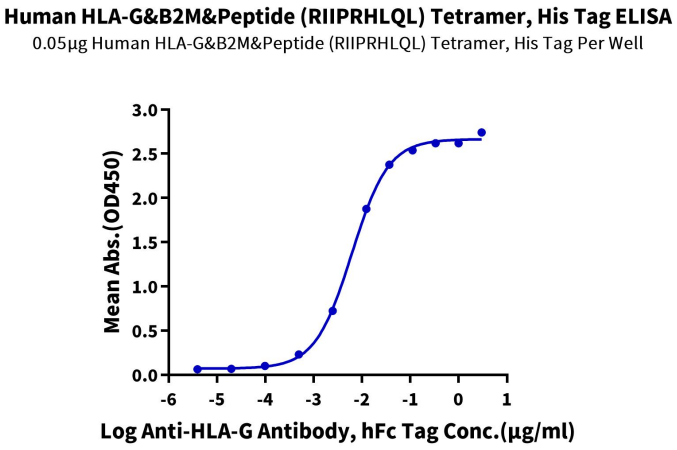
The purity of Human HLA-G&B2M&Peptide (RIIPRHLQL) Tetramer is greater than 90% as determined by SEC-HPLC.

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

Cat. No. HLG-HM41CT

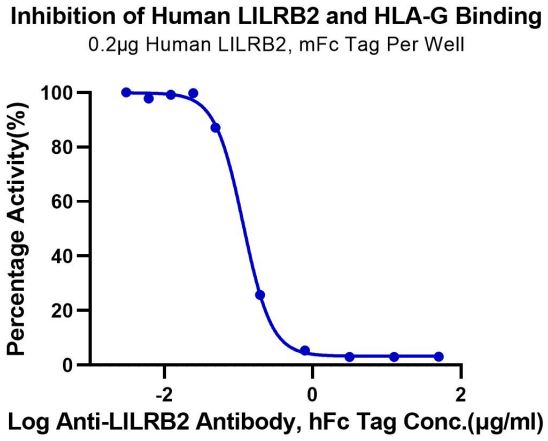
Assay Data

ELISA Data



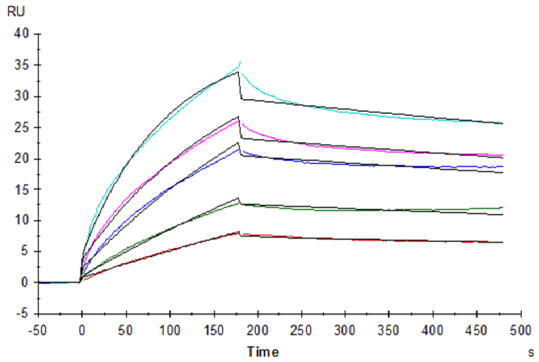
Immobilized Human HLA-G&B2M&Peptide (RIIPRHLQL) Tetramer, His Tag at 0.5μg/ml (100μl/well) on the plate. Dose response curve for Anti-HLA-G Antibody, hFc Tag with the EC50 of 6.2ng/ml determined by ELISA (QC Test).

Blocking Data



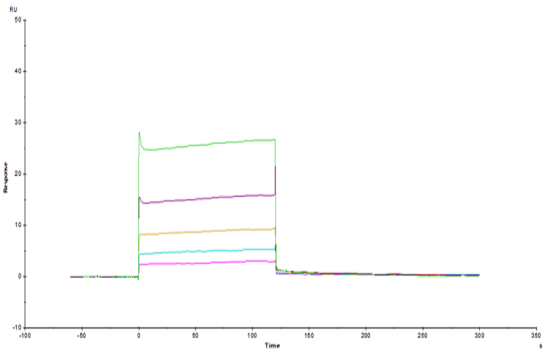
Serial dilutions of Anti-LILRB2 Antibody were added into Human HLA-G&B2M&Peptide (RIIPRHLQL) Tetramer, His Tag : Human LILRB2, mFc Tag binding reactioins. The half maximal inhibitiory concentration (IC50) is 0.11μg/ml.

SPR Data



Human LILRB2, hFc Tag captured on CM5 Chip via Protein A can bind Human HLA-G&B2M&Peptide (RIIPRHLQL) Tetramer with an affinity constant of 4.62 nM as determined in SPR assay (Biacore T200).

SPR Data



Human HLA-G&B2M&Peptide (RIIPRHLQL) Tetramer, His Tag immobilized on CM5 Chip can bind Human LILRB2 Domain1&2, His Tag with an affinity constant of 6.5μM as determined in a SPR assay (Biacore T200).

For Research Use Only