

Rev04
Update: Aug,08,2025

DATASHEET

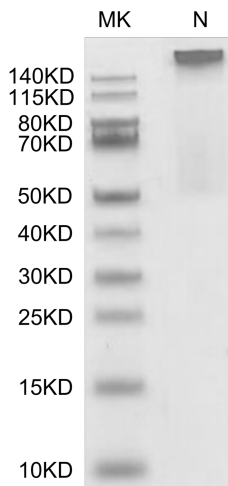
HLA-G&B2M&Peptide (RIIPRHLQL) Tetramer, His & Avi, Human

Cat. No.: Z06649

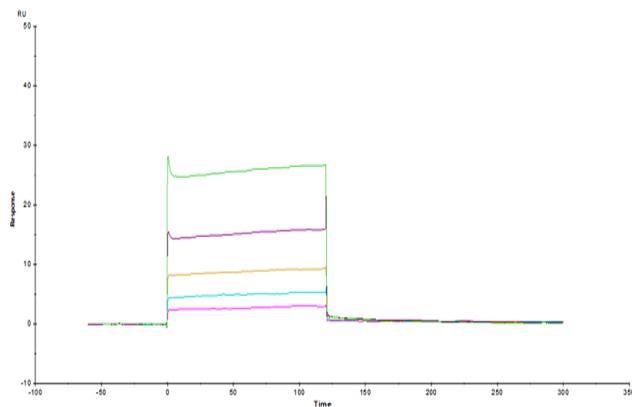
Product Introduction

Species	Human
Protein Construction	HLA-G&B2M&Peptide (RIIPRHLQL) Tetramer[Gly25-Thr305(HLA-G), Ile21-Met119(B2M) and RIIPRHLQL peptide] Accession # P17693-1(HLA-G)&P61769(B2M)&RIIPRHLQL HisAv N-termC-term
Purity	> 95% as determined by BisTris PAGE > 90% as determined by HPLC
Endotoxin Level	Less than 1EU per µg by the LAL method.
Biological Activity	Measured by its binding ability in a functional ELISA. Immobilized HLA-G&B2M&Peptide (RIIPRHLQL) Tetramer, His & Avi, Human at 0.5µg/ml (100µl/well) on the plate can bind AntiHLA-G Antibody, hFc Tag. Test result was comparable to standard batch.
Expression System	HEK293
Theoretical Molecular Weight	258 kDa
Apparent Molecular Weight	Due to glycosylation, the protein migrates to 260-265 kDa under Non reducing (N) condition based on Bis-Tris PAGE result.
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4).
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage & Stability	Upon receiving, the product remains stable up to 6 months at -20 °C or below. Upon reconstitution, the product should be stable for 3 months at -80 °C. Avoid repeated freeze-thaw cycles.

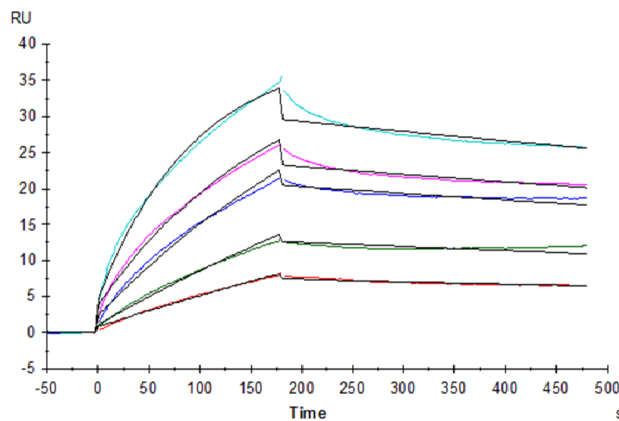
Examples



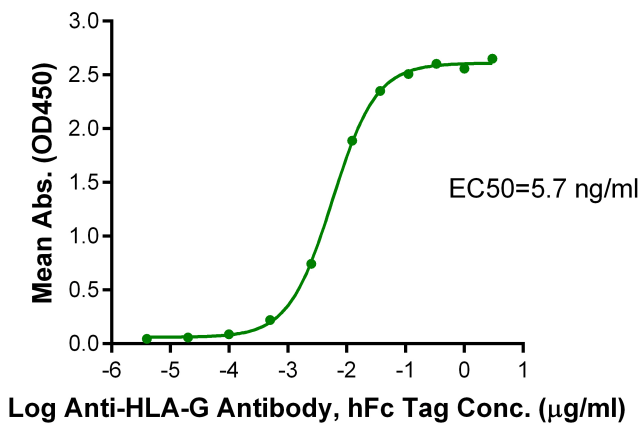
HLA-G&B2M&Peptide (RIIPRHLQL) Tetramer, His & Avi, Human on Bis-Tris PAGE under Non reducing (N) condition. The purity is greater than 95%.



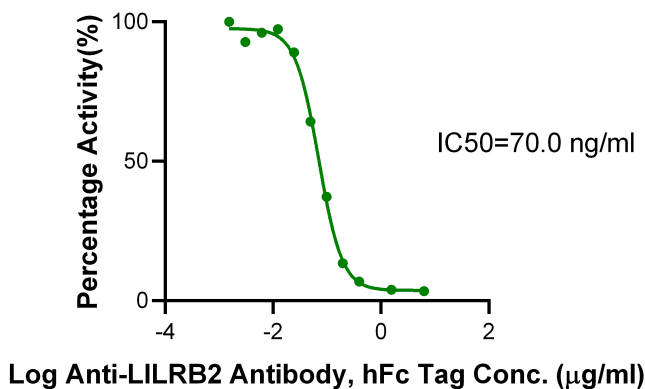
HLA-G&B2M&Peptide (RIIPRHLQL) Tetramer, His & Avi, Human, His Tag immobilized on CM5 Chip can bind Human LILRB2 Domain1&2, His Tag with an affinity constant of $6.5\mu\text{M}$ as determined in a SPR assay (Biacore T200).



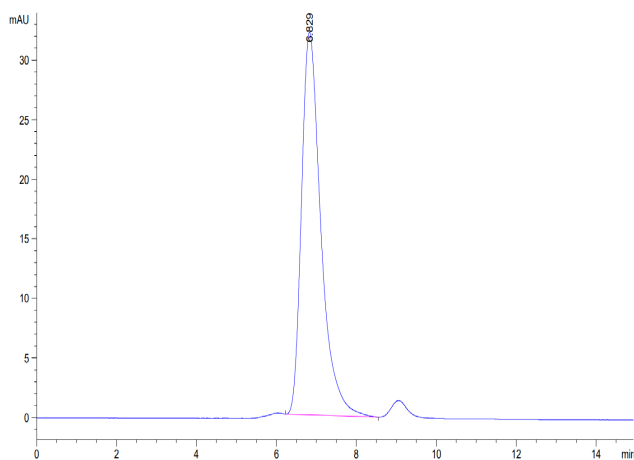
Human LILRB2, hFc Tag captured on CM5 Chip via Protein A can bind HLA-G&B2M&Peptide (RIIPRHLQL) Tetramer, His & Avi, Human with an affinity constant of 4.62 nM as determined in SPR assay (Biacore T200).



Immobilized HLA-G&B2M&Peptide (RIIPRHLQL) Tetramer, His & Avi, Human, His Tag at 0.5 $\mu\text{g/ml}$ (100 μl /well) on the plate. Dose response curve for Anti-HLA-G Antibody, hFc Tag with the EC50 of 5.7 ng/ml determined by ELISA.



Serial dilutions of Anti-LILRB2 Antibody were added into HLA-G&B2M&Peptide (RIIPRHLQL) Tetramer, His & Avi, Human, His Tag : Human LILRB2, mFc Tag binding reactions. The half maximal inhibitory concentration (IC50) is 70.0 ng/ml.



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

Background

Target 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.

Synonyms : HLA G antigen; sHLA-G; b2 microglobulin; HLA G; HLAG; HLA-G; MHC Class I Antigen G; MHC class Ib antigen; MHC-G; sHLA-G

For research use only. Not intended for human or animal clinical trials, therapeutic or diagnostic use.

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