

Recombinant Human HLA-G Complex Tetramer Protein

Catalog No.: RP02685

Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
Human	3135□567	P17693-1(HLA-A-G)&P61769(B2M)&RIIPRHLQL

Tags

C-His&Avi

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

Product Information

Source	Purification
HEK293 cells	≥ 95 % as determined by Tris-Bis PAGE; ≥ 95 % as determined by HPLC.

Calculated MW	Observed MW
258 kDa	260-265 kDa

Endotoxin

< 1 EU/μg of the protein by LAL method.

Formulation

Reconstitution

Centrifuge the tube before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

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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.

Basic Information

Description

Recombinant Human HLA-G Complex Tetramer Protein is expressed from Expi293 with His tag and Avi tag at the C-terminal, tetramer is assembled by biotinylated monomer and streptavidin. It contains Gly25-Thr305(HLA-G), Ile21-Met119(B2M) and RIIPRHLQL peptide.

Bio-Activity

Storage

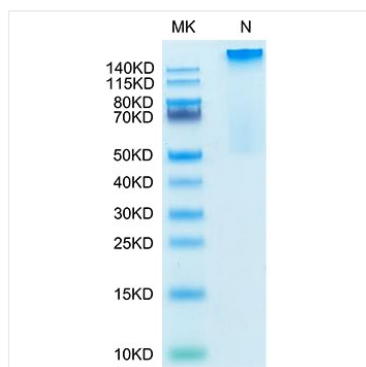
Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

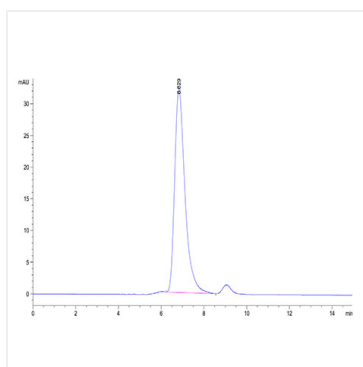
Avoid repeated freeze/thaw cycles.



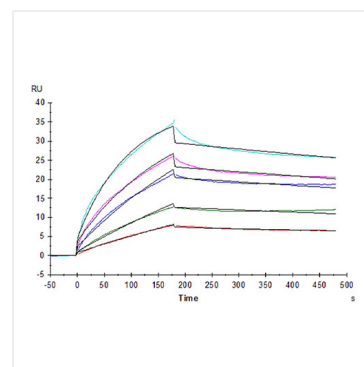
Validation Data



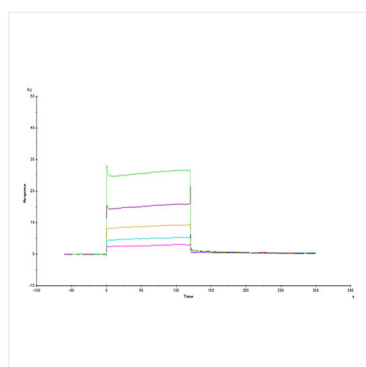
Recombinant Human HLA-G Complex Tetramer Protein was determined by Tris-Bis PAGE under non-reducing (NR) conditions.



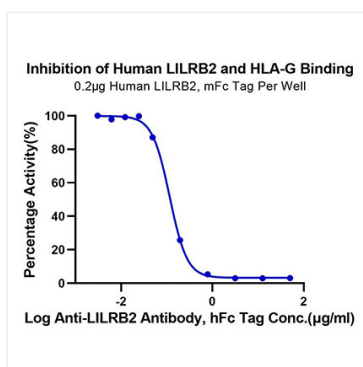
The purity of Human HLA-G Tetramer is greater than 95% as determined by SEC-HPLC.



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



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



Serial dilutions of Anti-LILRB2 Antibody were added into Human HLA-G Tetramer, His Tag : Human LILRB2, mFc Tag binding reactions. The half maximal inhibitory concentration (IC₅₀) is 0.11 μ g/ml.