

Rhesus macaque HLA-G&B2M&Peptide (RIIPRHLQL) Monomer Protein

Cat. No. HLG-RM41C

Description

Source	Recombinant Rhesus macaque HLA-G&B2M&Peptide (RIIPRHLQL) Monomer Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Gly25-Thr305 (HLA-G), Ile21-Met119 (B2M) and RIIPRHLQL peptide.
Accession	O02948(HLA-G)&Q6V7J5(B2M)&RIIPRHLQL
Molecular Weight	The protein has a predicted MW of 50.5 kDa. Due to glycosylation, the protein migrates to 58-63 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
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	-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.

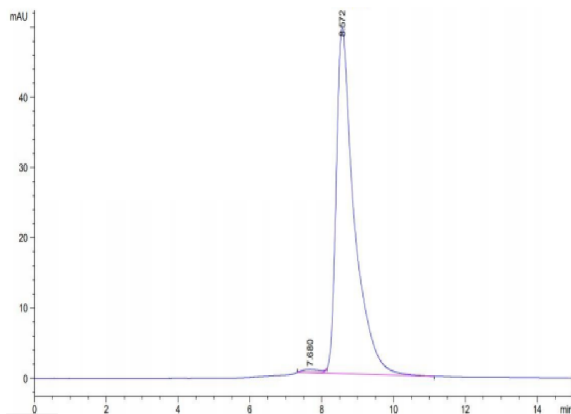
Assay Data

Bis-Tris PAGE



Rhesus macaque HLA-G&B2M&Peptide (RIIPRHLQL) Monomer on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



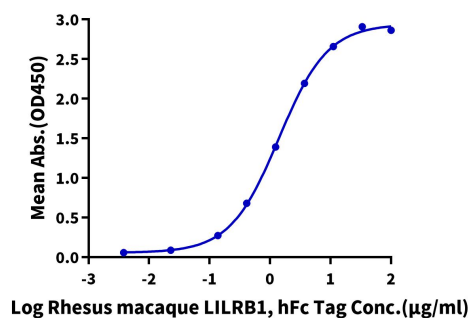
The purity of Rhesus macaque HLA-G&B2M&Peptide (RIIPRHLQL) Monomer is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

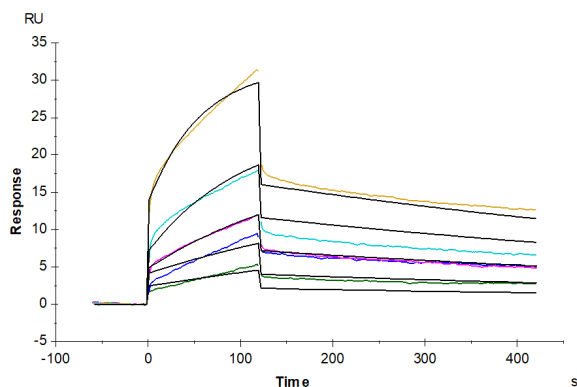
Rhesus macaque HLA-G&B2M&Peptide (RIIPRHLQL) Monomer, His Tag ELISA

0.5µg Rhesus macaque HLA-G&B2M&Peptide (RIIPRHLQL) Monomer, His Tag Per Well



Immobilized Rhesus macaque HLA-G&B2M&Peptide (RIIPRHLQL) Monomer, His Tag at 5µg/ml (100µl/well) on the plate. Dose response curve for Rhesus macaque LILRB1, hFc Tag with the EC50 of 1.4µg/ml determined by ELISA (QC Test).

SPR Data



Rhesus macaque LILRB1, hFc Tag captured on CM5 Chip via Protein A can bind Rhesus macaque HLA-G&B2M&Peptide (RIIPRHLQL) Monomer, His Tag with an affinity constant of 27.18 nM as determined in SPR assay (Biacore T200).