Human HLA-E*01:03&B2M&Peptide (VMAPRTLVL) Tetramer Protein

Cat. No. MHC-HM406T

Description

Source	Recombinant Human HLA-E*01:03&B2M&Peptide (VMAPRTLVL) 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 Gly22-Thr302(HLA-E*01:03), Ile21-Met119(B2M) and VMAPRTLVL peptide.
Accession	P13747(HLA-E*01:03)&P61769(B2M)&VMAPRTLVL
Molecular Weight	The protein has a predicted MW of 258 kDa. Due to glycosylation, the protein migrates to 260-265 kDa under Non reducing (N) condition 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 SEC-HPLC

Formulation and Storage

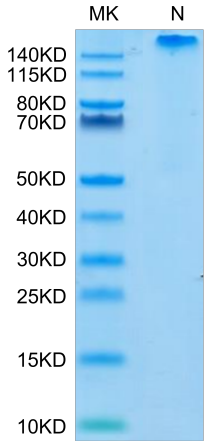
Formulation	Lyophilized from 0.22μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 μg/ml is recommended. Dissolve the lyophilized protein in distilled 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-E is a nonclassical member of the major histocompatibility complex class I gene locus. HLA-E protein shares a high level of homology with MHC Ia classical proteins: it has similar tertiary structure, associates with β2-microglobulin, and is able to present peptides to cytotoxic lymphocytes. The main function of HLA-E under normal conditions is to present peptides derived from the leader sequences of classical HLA class I proteins, thus serving for monitoring of expression of these molecules performed by cytotoxic lymphocytes.

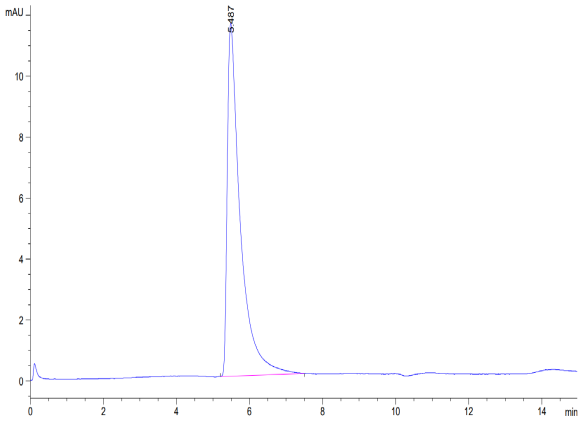
Assay Data

Bis-Tris PAGE



Human HLA-E*01:03&B2M&Peptide (VMAPRTLVL) Tetramer on Bis-Tris PAGE under Non reducing (N) condition. The purity is greater than 95%.

SEC-HPLC



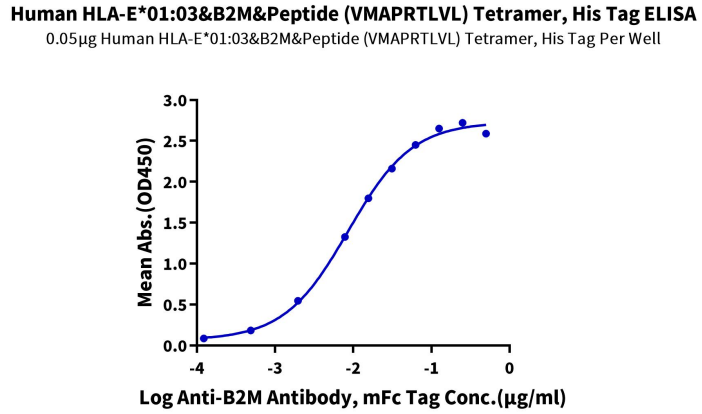
The purity of Human HLA-E*01:03&B2M&Peptide (VMAPRTLVL) Tetramer is greater than 95% as determined by SEC-HPLC.

Human HLA-E*01:03&B2M&Peptide (VMAPRTLVL) Tetramer Protein

Cat. No. MHC-HM406T

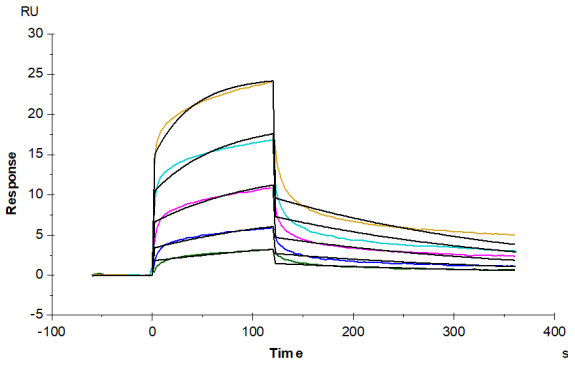
Assay Data

ELISA Data



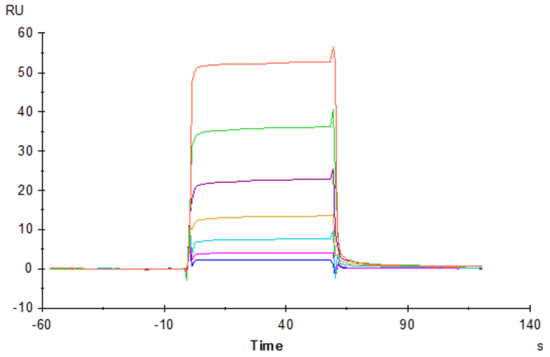
Immobilized Human HLA-E*01:03&B2M&Peptide (VMAPRTLVL) Tetramer, His Tag at 0.5μg/ml (100μl/well) on the plate. Dose response curve for Anti-B2M Antibody, mFc Tag with the EC50 of 8.6ng/ml determined by ELISA (QC Test).

SPR Data



Human NKG2A&CD94, mFc Tag captured on CM5 Chip via anti-mouse antibody can bind Human HLA-E*01:03&B2M&Peptide (VMAPRTLVL) Tetramer, His Tag with an affinity constant of 17.61 nM as determined in SPR assay (Biacore T200).

SPR Data



Human NKG2C&CD94, His Tag immobilized on CM5 Chip can bind Human HLA-E*01:03&B2M&Peptide (VMAPRTLVL) Tetramer, His Tag with an affinity constant of 1.65 μM as determined in SPR assay (Biacore T200).