

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



Cat. No. MHC-HM406TB

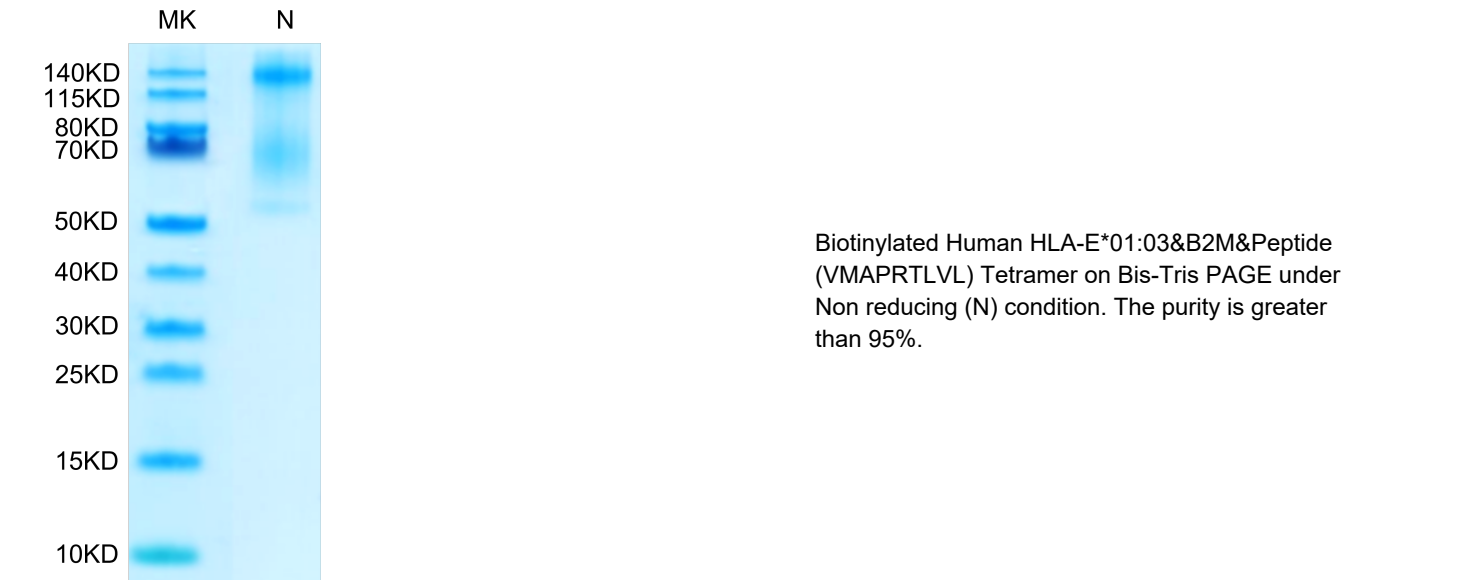
Description	
Source	Recombinant Biotinylated Human HLA-E*01:03&B2M&Peptide (VMAPRTLVL) Tetramer Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus,tetramer is assembled by biotinylated monomer and streptavidin. It contains Gly22-Thr302(HLA-E*01:03), Ile21-Met119(B2M) and VMAPRTLVL 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 1 EU 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	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-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



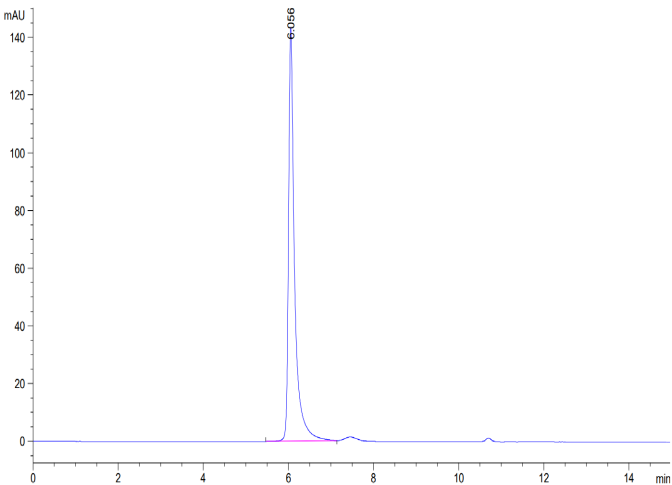
SEC-HPLC

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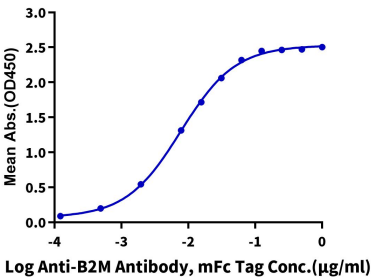
Assay Data



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

ELISA Data

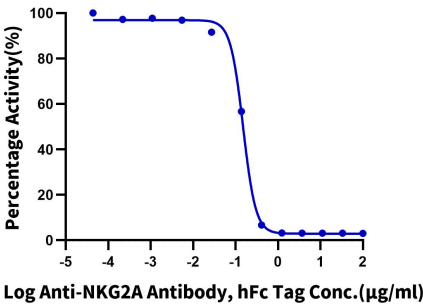
Biotinylated Human HLA-E*01:03&B2M&Peptide (VMAPRTLVL) Tetramer, His Tag ELISA
0.05µg Biotinylated Human HLA-E*01:03&B2M&Peptide (VMAPRTLVL) Tetramer, His Tag Per Well



Immobilized Biotinylated Human HLA-E*01:03&B2M&Peptide (VMAPRTLVL) Tetramer, His Tag at 0.5µg/ml (100µl/Well) on streptavidin (5µg/ml) precoated plate. Dose response curve for Anti-B2M Antibody, mFc Tag with the EC50 of 7.7ng/ml determined by ELISA (QC Test).

Blocking Data

Inhibition of Human NKG2A&CD94 and HLA-E Tetramer Binding
0.2µg Human NKG2A&CD94, mFc Tag Per Well



Serial dilutions of Anti-NKG2A Antibody were added into Biotinylated Human HLA-E*01:03&B2M&Peptide (VMAPRTLVL) Tetramer, His Tag : Human NKG2A&CD94, mFc Tag binding reactions. The half maximal inhibitory concentration (IC50) is 0.15µg/ml.