

# 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 Gly25-Ile305(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 Tris-Bis PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

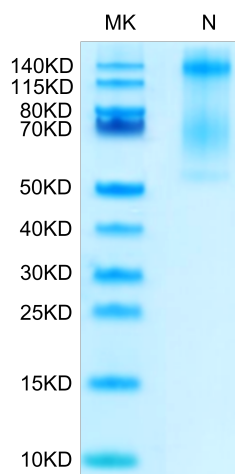
Formulation and Storage	
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days 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

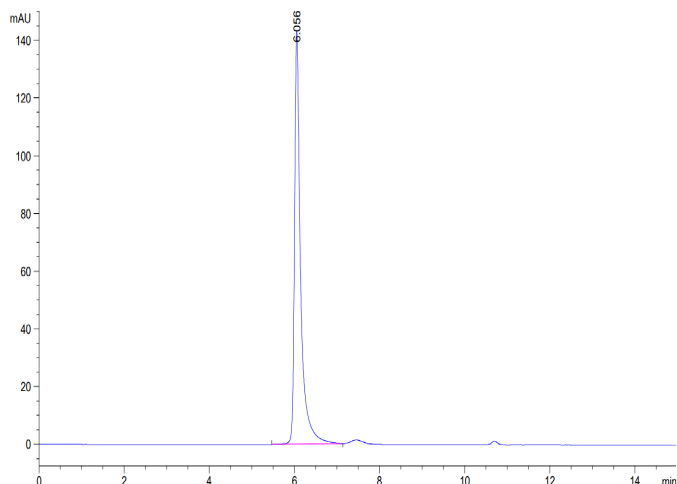
### Tris-Bis PAGE



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

### SEC-HPLC

**Assay Data**

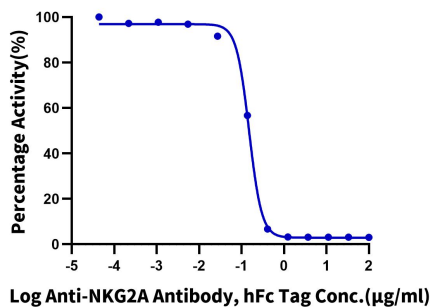


The purity of Biotinylated Human HLA-E\*01:03&B2M&Peptide (VMAPRTLVL) Tetramer is greater than 95% as determined by SEC-HPLC.

**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.