

Rev03  
 Update: Aug,08,2025
**DATASHEET**

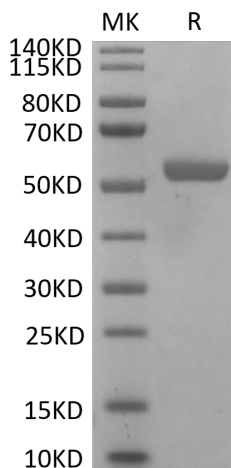
# HLA-E\*01:03&B2M&Peptide (VMAPRTLVL) Monomer[Biotin], His & Avi, Human

Cat. No.: Z06511

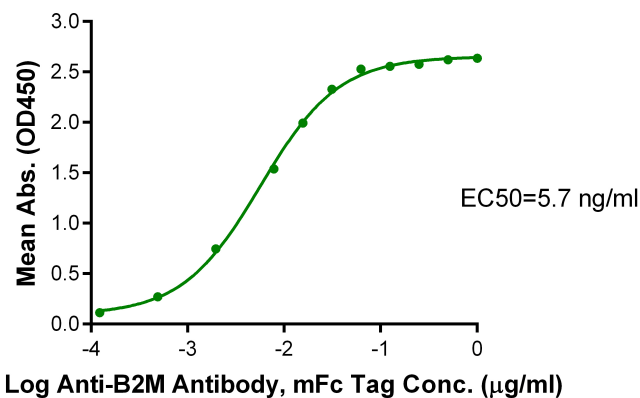
## Product Introduction

<b>Species</b>	Human
<b>Protein Construction</b>	<div style="display: flex; align-items: center; justify-content: space-between;"> <div style="background-color: #0056b3; color: white; padding: 5px; text-align: center;">             HLA-E*01:03&amp;B2M&amp;Peptide (VMAPRTLVL) Monomer [Gly22-Thr302(HLA-E*01:03), Ile21-Met119(B2M) and VMAPRTLVL peptide]              Accession # P13747(HLA-E*01:03)&amp;P61769(B2M)&amp;VMAPRTLVL           </div> <div style="background-color: #90c090; padding: 5px; text-align: center;">His</div> <div style="background-color: #508050; padding: 5px; text-align: center;">Avi</div> </div> <p style="text-align: center; margin-top: 5px;">N-term <span style="float: right;">C-term</span></p>
<b>Conjugate</b>	Biotin
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE
<b>Endotoxin Level</b>	Less than 1EU per µg by the LAL method.
<b>Biological Activity</b>	Measured by its binding ability in a functional ELISA. Immobilized HLA-E*01:03&B2M&Peptide (VMAPRTLVL) Monomer[Biotin], His & Avi, Human at 0.5µg/ml (100µl/Well) on streptavidin (5µg/ml) precoated plate can bind AntiB2M Antibody, mFc Tag. Test result was comparable to standard batch.
<b>Expression System</b>	HEK293
<b>Theoretical Molecular Weight</b>	50.2 kDa
<b>Apparent Molecular Weight</b>	Due to glycosylation, the protein migrates to 52-60 kDa based on Bis-Tris PAGE result.
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4).
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage &amp; Stability</b>	Upon receiving, the product remains stable up to 6 months at -20 °C or below. Upon reconstitution, the product should be stable for 3 months at -80 °C. Avoid repeated freeze-thaw cycles.

## Examples



HLA-E\*01:03&B2M&Peptide (VMAPRTLVL) Monomer[Biotin], His & Avi, Human on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.



Immobilized HLA-E\*01:03&B2M&Peptide (VMAPRTLVL) Monomer[Biotin], His & Avi, Human, His Tag at 0.5 µg/ml (100 µl/Well) on streptavidin(5 µg/ml) precoated plate. Dose response curve for Anti-B2M Antibody, mFc Tag with the EC50 of 5.7 ng/ml determined by ELISA.

## Background

**Target 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  $\beta$ 2-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.

**Synonyms :** HLAE; sHLA-E; HLAE; MHC class I antigen E; MHC HLA-E alpha-1; MHC HLA-E alpha-2.1; MHC; QA1

**For research use only. Not intended for human or animal clinical trials, therapeutic or diagnostic use.**

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