Biotinylated Human HLA-A*02:01&B2M&CMVpp65 (NLVPMVATV) Monomer Protein

Cat. No. MHC-HE013B

Description

Source	Recombinant Biotinylated Human HLA-A*02:01&B2M&CMVpp65 (NLVPMVATV) Monomer Protein is expressed from E.coli with His tag and Avi tag at the C-terminus.
	It contains Gly25-Thr305 (HLA-A*02:01), Ile21-Met119 (B2M) and NLVPMVATV peptide.
Accession	A0A140T913(HLA-A*02:01)&P61769(B2M)&NLVPMVATV
Molecular Weight	The protein has a predicted MW of 35.6 kDa (HLA-A*02:01) and 11.9 kDa (B2M) same as 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

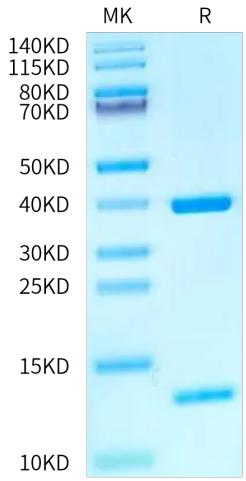
Formulation	Supplied as 0.22 μm filtered solution in 20mM Tris, 200mM NaCl (pH 8.0).
Storage	Valid for 12 months from date of receipt when stored at -80°C. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

Human cytomegalovirus (CMV), a β-herpes virus with a double-stranded DNA, infects a wide variety of cells and establishes latency in the host. CMVpp65, a tegument protein of the herpes virus CMV, is the main viral antigen found in peripheral blood mononuclear cells (PBMCs) after viral infection and may activate cell-mediated immunity, accounting for 70-90% of the cytotoxic CD8+ T cells' (CTLs) response to CMV. Among the pp65-derived CTL epitope peptides, the 9-mer peptide 495NLVPMVATV503 (CMVpp65 495-503 peptide) is the most immunogenic T cell epitope predominantly displayed on HLA-A*02:01, the most common MHC-I allele in the population.

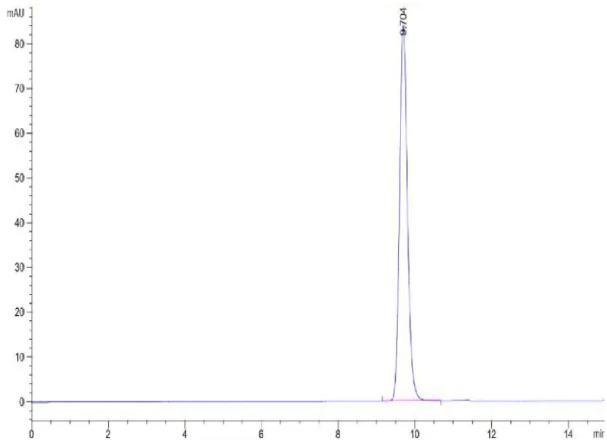
Assay Data

Tris-Bis PAGE



Biotinylated Human HLA-A*02:01&B2M&CMVpp65 (NLVPMVATV) Monomer on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



The purity of Biotinylated Human HLA-A*02:01&B2M&CMVpp65 (NLVPMVATV) Monomer is greater than 95% as determined by SEC-HPLC.