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

Cat. No. MHC-HE013T

Description

Source	Recombinant Human HLA-A*02:01&B2M&CMVpp65 (NLVPMVATV) Tetramer Protein is expressed from E.coli with His tag and Avi tag at the C-Terminus, tetramer is assembled by biotinylated monomer and streptavidin.
	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 258 kDa. The protein migrates to 120-180 kDa (HLA-A*02:01&streptavidin tetramer) and 11.9 kDa (B2M) based on Tris-Bis PAGE result under Non reducing (N) condition.
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

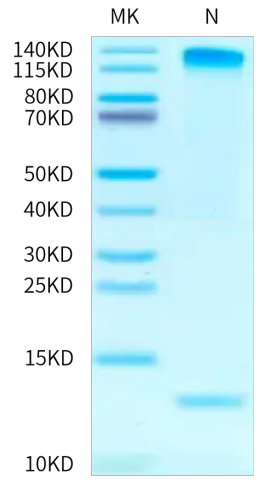
Formulation	Supplied as 0.22 μm filtered solution in PBS (pH 7.4).
Storage	Valid for 12 months from date of receipt when stored at -80°C. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

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.

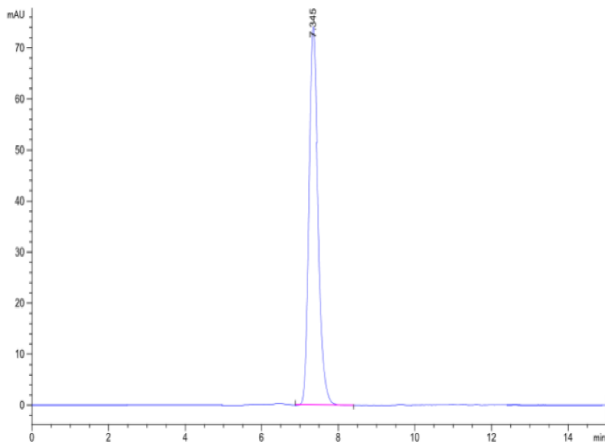
Assay Data

Tris-Bis PAGE



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

SEC-HPLC



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