

Chimeric HLA-A*02:01 ($\alpha 3$) & B2M&LMP2 (CLGGLTMV) Tetramer Protein

Cat. No. MHC-HM413T

Description	
Source	Recombinant Chimeric HLA-A*02:01($\alpha 3$)&B2M&LMP2 (CLGGLTMV) 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-Thr206(Human HLA-A*02:01 $\alpha 1$ & $\alpha 2$)&Asp207-Glu299(Mouse H-2Ld $\alpha 3$), Ile21-Met119(B2M) and CLGGLTMV peptide.
Accession	A0A140T913(Human HLA-A*02:01 $\alpha 1$ & $\alpha 2$)&P01897(Mouse H-2Ld $\alpha 3$)&P61769(B2M)&CLGGLTMV
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 μ g by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

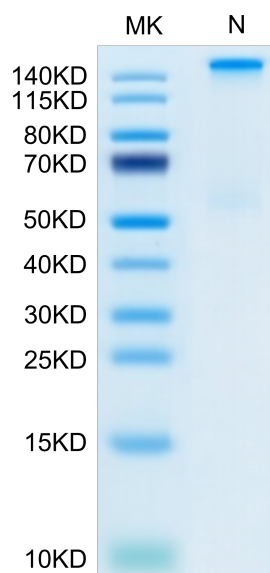
Formulation and Storage	
Formulation	Lyophilized from 0.22 μ m filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
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

The immunoproteasome, having been linked to neurodegenerative diseases and hematological cancers, has been shown to play an important role in MHC class I antigen presentation. The development of molecular probes that selectively inhibit the major catalytic subunit, LMP2, of the immunoproteasome, LMP2-rich cancer cells compared to LMP2-deficient cancer cells are more sensitive to growth inhibition by the LMP2-specific inhibitor, implicating an important role of LMP2 in regulating cell growth of malignant tumors that highly express LMP2.

Assay Data

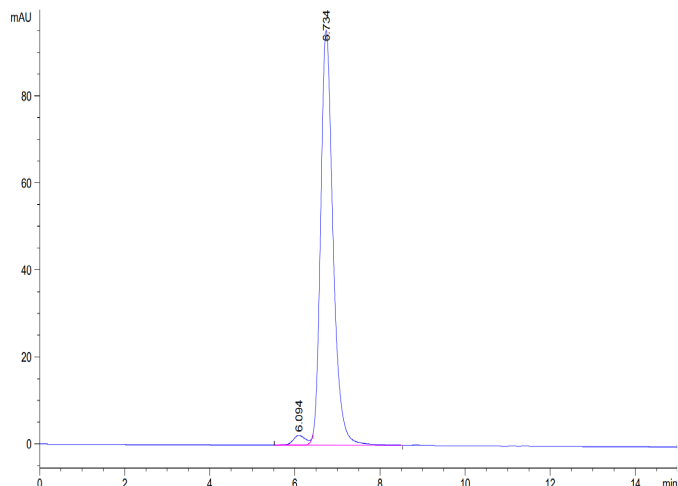
Bis-Tris PAGE



Chimeric HLA-A*02:01 ($\alpha 3$) & B2M&LMP2 (CLGGLTMV) Tetramer on Bis-Tris PAGE under Non reducing (N) condition. The purity is greater than 95%.

SEC-HPLC

Assay Data

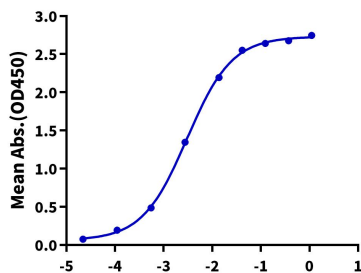


The purity of Chimeric HLA-A*02:01 ($\alpha 3$) & B2M&LMP2 (CLGGLTMV) Tetramer was greater than 95% as determined by SEC-HPLC.

ELISA Data

Chimeric HLA-A*02:01($\alpha 3$)&B2M&LMP2 (CLGGLTMV) Tetramer, His Tag ELISA

0.1 μ g Chimeric HLA-A*02:01($\alpha 3$)&B2M&LMP2 (CLGGLTMV) Tetramer, His Tag Per Well



Immobilized Chimeric HLA-A*02:01($\alpha 3$)&B2M&LMP2 (CLGGLTMV) Tetramer, His Tag at 1 μ g/ml (100 μ l/well) on the plate. Dose response curve for Anti-HLA-A*02:01&B2M&LMP2 (CLGGLTMV) Antibody, hFc Tag with the EC50 of 3.0ng/ml determined by ELISA.