Chimeric HLA-A*02:01 (mα3) &mB2M&GP100 (YLEPGPVTA) Monomer Protein

Cat. No. MHC-HM150



Description	
Source	Recombinant Chimeric HLA-A*02:01 (mα3) &mB2M&GP100 (YLEPGPVTA) Monomer Protein is expressed from HEK293 with His tag at the C-terminus.
	It contains Gly25-Thr206 (Human HLA-A*02:01 α 1& α 2) and Asp207-Glu299 (Mouse H-2Ld α 3), Ile21-Met119(mB2M) and YLEPGPVTA peptide.
Accession	A0A140T933(Human HLA-A*02:01 α1&α2)&P01897(Mouse H-2Ld α3)&P01887(Mouse B2M)&YLEPGPVTA
Molecular Weight	The protein has a predicted MW of 47.90 kDa. Due to glycosylation, the protein migrates to 50-65 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1 EU per μg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE
	> 95% as determined by HPLC

Formulation and Storage

Formulation Supplied as 0.22 µm filtered solution in PBS (pH 7.4).

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.

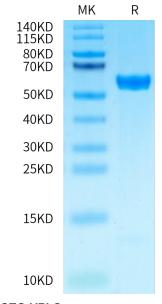
Background

Storage

Glycoprotein 100, gp100 or Melanocyte protein PMEL is 661 amino acids long and is a type I transmembrane glycoprotein enriched in melanosomes, which are the melanin-producing organelles in melanocytes. This protein is involved in melanosome maturation. The Human HLA-A*0201 gp100 (YLEPGPVTA) complex Protein is a complex of HLA-A*0201 of the MHC Class I, B2M and YLEPGPVTA peptide of the gp100.

Assay Data

Bis-Tris PAGE

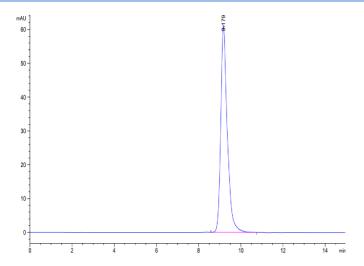


Chimeric HLA-A*02:01 (ma3) &mB2M&GP100 (YLEPGPVTA) Monomer on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



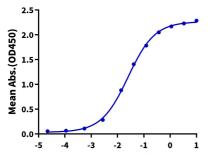
Assay Data



The purity of Chimeric HLA-A*02:01 (m α 3) &mB2M&GP100 (YLEPGPVTA) Monomer is greater than 95% as determined by SEC-HPLC.

ELISA Data

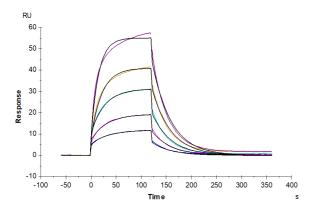
Chimeric HLA-A*02:01 (ma3) &mB2M&GP100 (YLEPGPVTA), His Tag ELISA 0.2µg Chimeric HLA-A*02:01 (ma3) &mB2M&GP100 (YLEPGPVTA), His Tag Per Well



Log Anti-HLA-A*02:01&B2M&GP100 Antibody, hFc Tag Conc.(μg/ml)

Immobilized Chimeric HLA-A*02:01 (m α 3) &mB2M&GP100 (YLEPGPVTA) Monomer, His Tag at 2 μ g/ml (100 μ l/well) on the plate. Dose response curve for Anti-HLA-A*02:01&B2M&GP100 (YLEPGPVTA) Antibody, hFc Tag with the EC50 of 25.3ng/ml determined by ELISA (QC Test).

SPR Data



Anti-HLA-A*02:01&B2M&GP100 (YLEPGPVTA) Antibody, hFc Tag captured on CM5 Chip via Protein A can bind Chimeric HLA-A*02:01 (m α 3) &mB2M&GP100 (YLEPGPVTA) Monomer, His Tag with an affinity constant of 67.84 nM as determined in SPR assay (Biacore T200).