

Biotinylated Human HLA-A*02:01&B2M&AFP (FMNKFIYEI) Monomer Protein



Cat. No. MHC-HM407B

Description

Source	Recombinant Biotinylated Human HLA-A*02:01&B2M&AFP (FMNKFIYEI) Monomer Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Gly25-Thr305(HLA-A*02:01), Ile21-Met119(B2M) and FMNKFIYEI peptide.
Accession	A0A140T913(HLA-A*02:01)&P61769(B2M)&FMNKFIYEI
Molecular Weight	The protein has a predicted MW of 50.6 kDa. Due to glycosylation, the protein migrates to 53-63 kDa based on 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

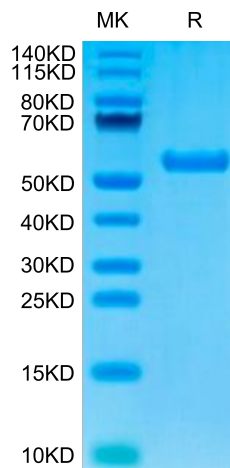
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

Alpha-fetoprotein (AFP), a specific liver cancer marker, T cells expressing AFP-CAR selectively degranulated, released cytokines, and lysed liver cancer cells that were HLA-A*02:01 /AFP while sparing cells from multiple tissue types that were negative for either expressed proteins. CAR T-cell immunotherapy targeting intracellular/secreted solid tumor antigens can elicit a potent antitumor response.

Assay Data

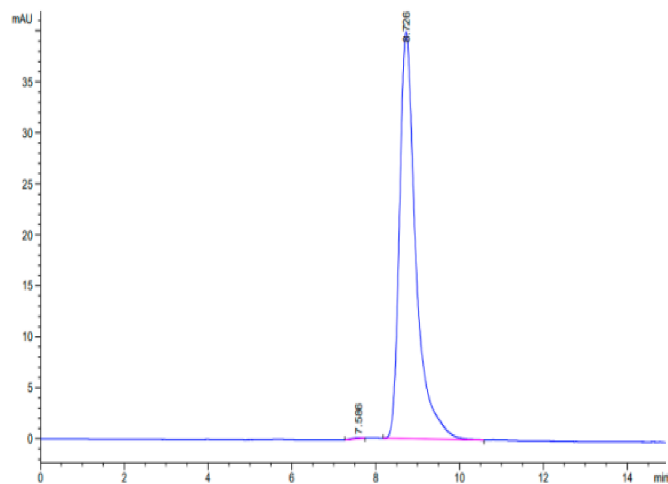
Tris-Bis PAGE



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

SEC-HPLC

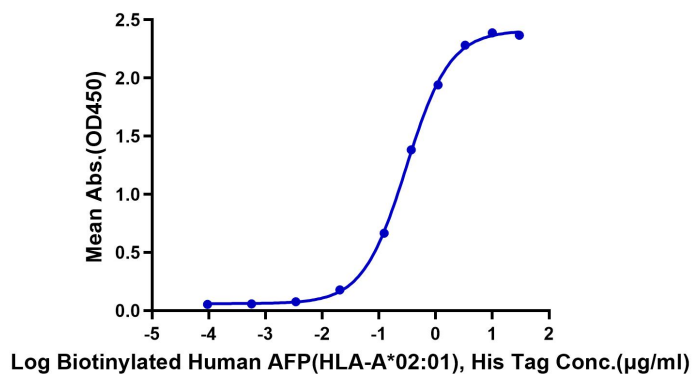
Assay Data



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

ELISA Data

Biotinylated Human AFP(HLA-A*02:01), His Tag ELISA
0.2µg Anti-AFP (HLA-A*02:01) Antibody, hFc Tag Per Well



Immobilized Anti-HLA-A*02:01&B2M&AFP (FMNKFIYEI) Antibody, hFc Tag at 2µg/ml (100µl/Well) on the plate. Dose response curve for Biotinylated Human HLA-A*02:01&B2M&AFP (FMNKFIYEI) Monomer, His Tag with the EC50 of 0.31µg/ml determined by ELISA.