

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

Cat. No. MHC-HM407

Description

| | |
|-------------------------|---|
| Source | Recombinant 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 53-60 kDa based on Bis-Tris PAGE result. |
| Endotoxin | Less than 1EU per ug by the LAL method. |
| Purity | > 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC |

Formulation and Storage

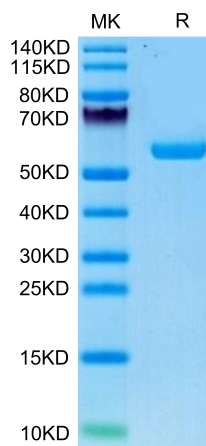
| | |
|-----------------------|---|
| Formulation | Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization. |
| Reconstitution | Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water. |
| Storage | -20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months 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.

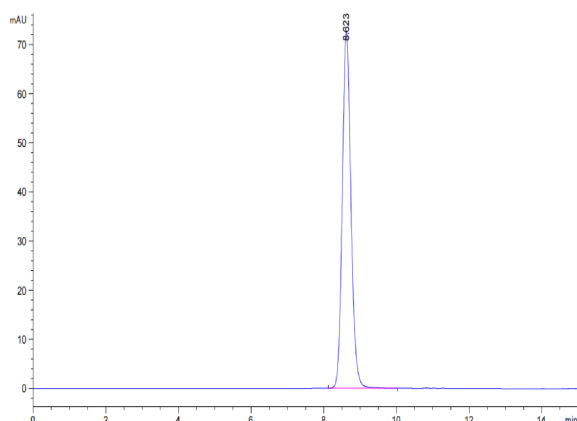
Assay Data

Bis-Tris PAGE



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

SEC-HPLC



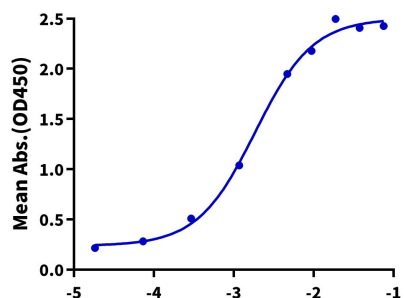
The purity of Human HLA-A*02:01&B2M&AFP (FMNKFIYEI) Monomer is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

Human HLA-A*02:01&B2M&AFP (FMNKFIYEI) Monomer, His Tag ELISA

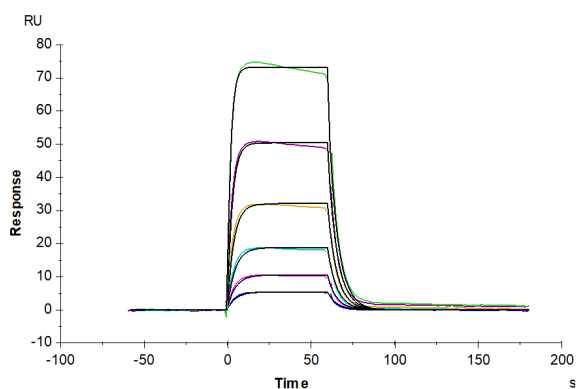
0.1 µg Human HLA-A*02:01&B2M&AFP (FMNKFIYEI) Monomer, His Tag Per Well



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

Immobilized Human HLA-A*02:01&B2M&AFP (FMNKFIYEI) Monomer, His Tag at 1 µg/ml (100 µl/well) on the plate. Dose response curve for Anti-HLA-A*02:01&B2M&AFP (FMNKFIYEI) Antibody, hFc Tag with the EC50 of 1.9 ng/ml determined by ELISA (QC Test).

SPR Data



Human HLA-A*02:01&B2M&AFP (FMNKFIYEI) Monomer, His Tag captured on CM5 Chip via Anti-His Antibody can bind HLA-A*02:01&B2M&AFP (FMNKFIYEI) TCR with an affinity constant of 0.923 µM as determined in SPR assay (Biacore T200).