

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



Cat. No. MHC-HM407B

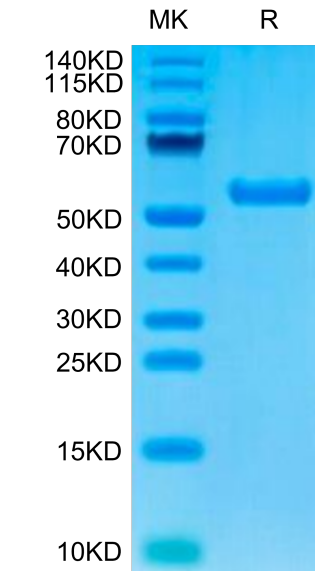
| Description | |
|------------------|--|
| Source | Recombinant Biotinylated Human HLA-A*02:01&B2M&AFP (FMNKFIYEI) Monomer Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Gly25-Thr305(HLA-A*02:01), Ile21-Met119(B2M) and FMNKFIYEI peptide. |
| Accession | A0A140T913(HLA-A*02:01)&P61769(B2M)&FMNKFIYEI |
| Molecular Weight | The protein has a predicted MW of 50.6 kDa. Due to glycosylation, the protein migrates to 53-63 kDa based on 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 | Lyophilized from 0.22µm 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 | |
|--|--|
| 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

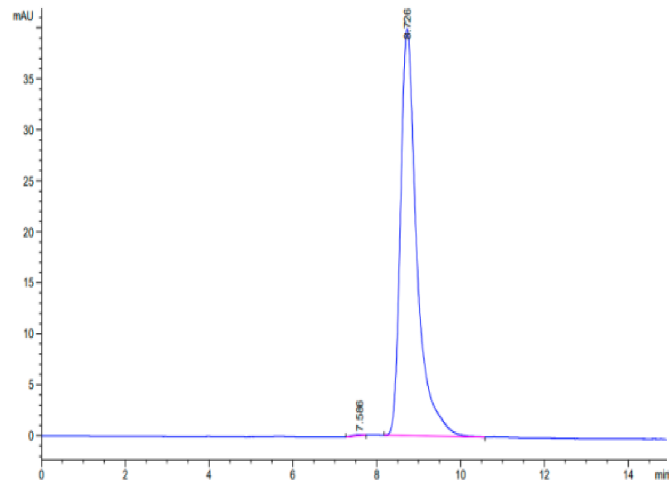
Bis-Tris PAGE



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

SEC-HPLC

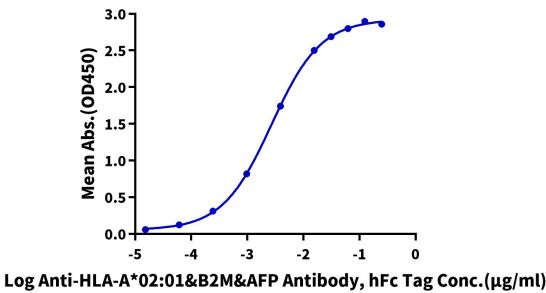
Assay Data



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

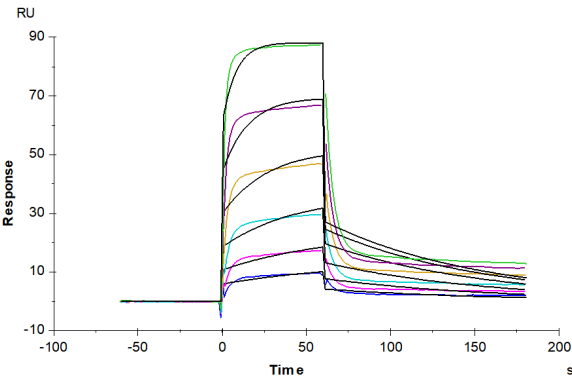
ELISA Data

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



Immobilized Biotinylated Human HLA-A*02:01&B2M&AFP (FMNKFIYEI) Monomer, His Tag at 1µg/ml (100µl/well) on the streptavidin precoated plate (5µg/ml). Dose response curve for Anti-HLA-A*02:01&B2M&AFP (FMNKFIYEI) Antibody, hFc Tag with the EC50 of 2.7ng/ml determined by ELISA (QC Test).

SPR Data



Biotinylated 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 TCR with an affinity constant of 0.14 µM as determined in SPR assay (Biacore T200).