



Synonym

HLA-A*0201 & B2M & p53 (HMTEVVRHC)

Source

Biotinylated Human HLA-A*02:01&B2M&p53 (HMTEVVRHC) Complex Protein(HLP-H82Ef) is expressed from human 293 cells (HEK293). It contains AA Ile 21 - Met 119 (B2M) & Gly 25 - Ile 308 (HLA-A*02:01) & HMTEVVRHC peptide (Accession # <u>P61769-1</u> (B2M) & <u>AAA59606.1</u> (HLA-A*02:01) & HMTEVVRHC).

Predicted N-terminus: Ile 21 & Gly 25

Molecular Characterization

Biotinylated Human HLA-A*02:01&B2M&p53 (HMTEVVRHC) Complex Protein is produced by co-expression of HLA and B2M loaded with p53 peptide.

This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (AvitagTM).

The protein has a calculated MW of 49.3 kDa. The protein migrates as 58-65 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag[™] technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

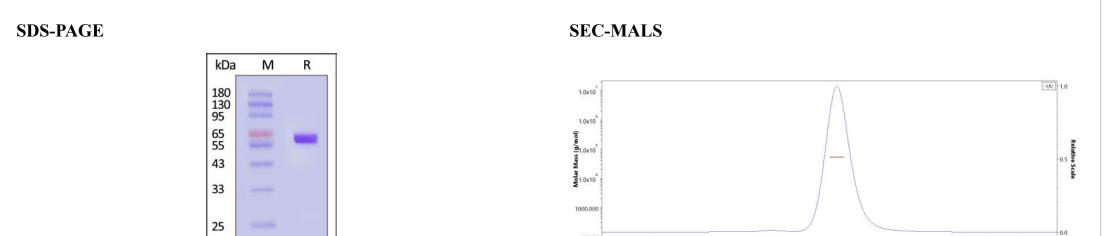
Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

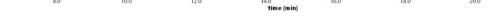
This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.



80 100 120 140 160 180 200





Biotinylated Human HLA-A*02:01&B2M&p53 (HMTEVVRHC) Complex Protein on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With <u>Star</u> <u>Ribbon Pre-stained Protein Marker</u>). The purity of Biotinylated Human HLA-A*02:01&B2M&p53 (HMTEVVRHC) Complex Protein (Cat. No. HLP-H82Ef) is more than 90% and the molecular weight of this protein is around 45-65 kDa verified by SEC-MALS. <u>Report</u>

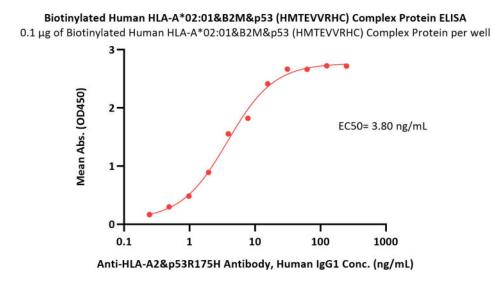






Catalog # HLP-H82Ef

Bioactivity-ELISA



Immobilized Biotinylated Human HLA-A*02:01&B2M&p53 (HMTEVVRHC) Complex Protein (Cat. No. HLP-H82Ef) at 1 μg/mL (100 μL/well) on a Nickel Coated plate can bind Anti-HLA-A2&p53R175H Antibody, Human IgG1 with a linear range of 0.2-4 ng/mL (QC tested).

Background

TP53 has been recognized as a tumor suppressor. 50% of cancers carry a TP53 mutation while many others affect other pathway components. High-copy numbers of WT p53 peptide-MHC class I complexes were detected on tumor cells as compared to low copies on normal cells. The Human HLA-A*0201 p53 (HMTEVVRHC) complex protein is a complex of HLA-A*0201 of the MHC Class I, B2M, and HMTEVVRHC peptide of the p53.

Clinical and Translational Updates



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