

Unconjugated Human HLA-A*02:01&B2M&p53 (HMTEVVRHC) Complex Protein (Monomer, MALS verified)

Catalog # HLP-H52E3



Synonyms

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

Source

Unconjugated Human HLA-A*02:01&B2M&p53 (HMTEVVRHC) Complex Protein (HLP-H52E3) is expressed from human 293 cells (HEK293). It contains AA Gly 25 - Ile 308 (HLA-A*02:01) & Ile 21 - Met 119 (B2M) & HMTEVVRHC peptide (Accession # [AAA59606.1](#) (HLA-A*02:01) & [P61769-1](#) (B2M) & HMTEVVRHC).

Predicted N-terminus: Gly 25 & Ile 21

Molecular Characterization

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

This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™). The protein has a calculated MW of 36.3 kDa and 11.7 kDa. The protein migrates as 40-43 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

The protein is designed as a heterotrimer.

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.

Shipping and Storage

This product is shipped at ambient temperature.

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

Please avoid repeated freeze-thaw cycles.

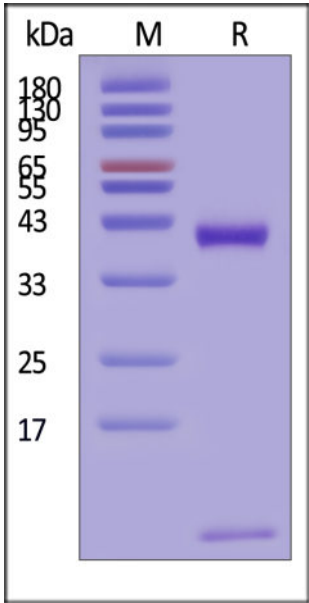
This product is stable after storage at:

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

ACRO Quality Management System

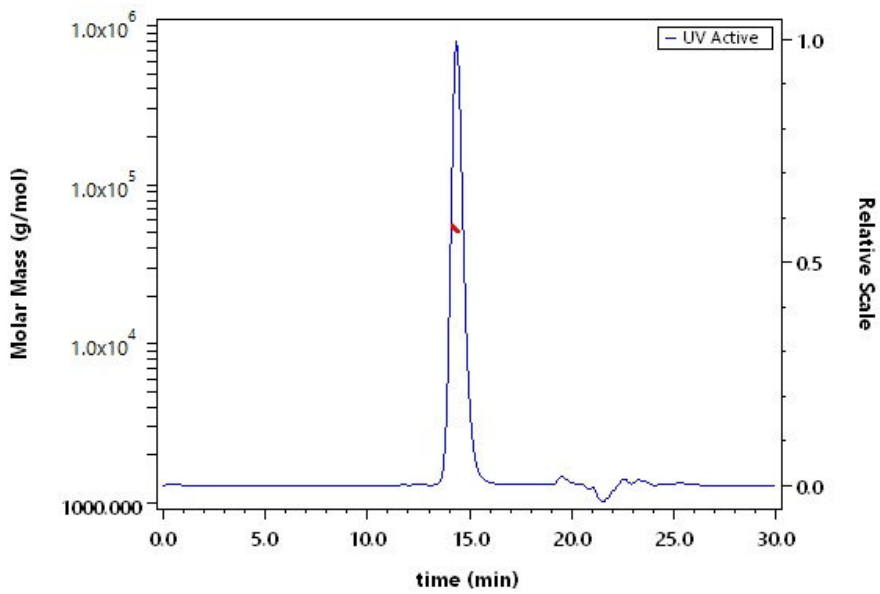
- [QMS\(ISO, GMP\)](#)
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE



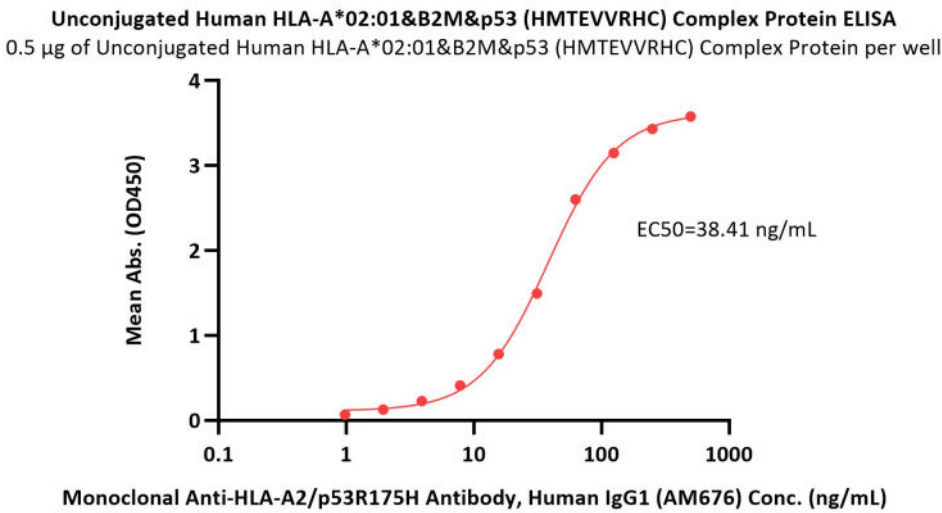
Unconjugated Human HLA-A*02:01&B2M&p53 (HMTEVVRHC) Complex Protein on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-MALS



The purity of Unconjugated Human HLA-A*02:01&B2M&p53 (HMTEVVRHC) Complex Protein (Cat. No. HLP-H52E3) is more than 90% and the molecular weight of this protein is around 50-70 kDa verified by SEC-MALS.

Activity-ELISA



Immobilized Unconjugated Human HLA-A*02:01&B2M&p53 (HMTEVVRHC) Complex Protein (Cat. No. HLP-H52E3) at 5 µg/mL (100 µL/well) can bind Monoclonal Anti-HLA-A2/p53R175H Antibody, Human IgG1 (AM676) with a linear range of 1-63 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.



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