

# Biotinylated Human HLA-A\*24:02&B2M&NY-ESO-1 (LLMWITQCF) Complex Protein (Monomer, MALS verified)

Catalog # HL1-H82E3



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## Synonym

HLA-A\*2402 & B2M & NY-ESO-1 (LLMWITQCF)

## Source

Biotinylated Human HLA-A\*24:02&B2M&NY-ESO-1 (LLMWITQCF) Complex Protein(HL1-H82E3) is expressed from human 293 cells (HEK293). It contains AA Gly 25 - Thr 305 (HLA-A\*24:02) & Ile 21 - Met 119 (B2M) & LLMWITQCF peptide (Accession # [AAA59600.1](#) (HLA-A\*24:02) & [P61769](#) (B2M) & LLMWITQCF).

Predicted N-terminus: Gly 25 & Ile 21

## Molecular Characterization

Biotinylated Human HLA-A\*24:02&B2M&NY-ESO-1 (LLMWITQCF) Complex Protein is produced by co-expression of HLA and B2M loaded with NY-ESO-1 peptide.

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

The protein has a calculated MW of 35.8 kDa and 11.7 kDa. The protein migrates as 38-42 kDa and <14 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) 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

Supplied as 0.2 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

## Shipping

*This product is supplied and shipped with dry ice, please inquire the shipping cost.*

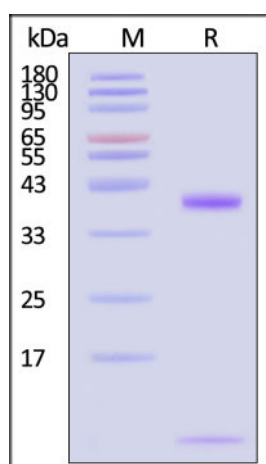
## Storage

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

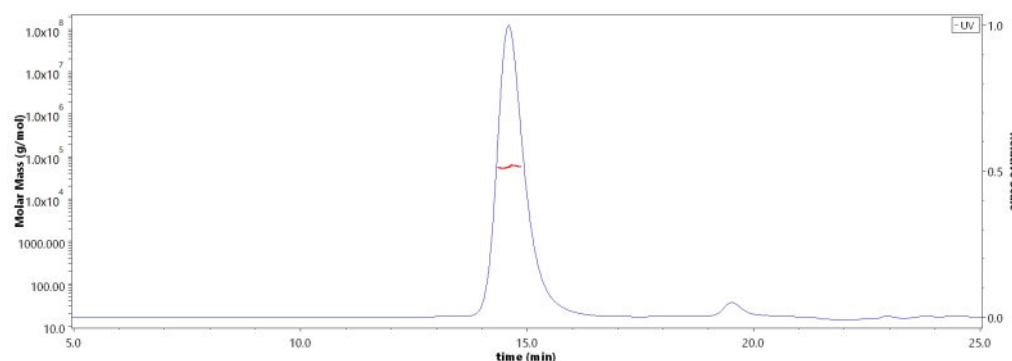
- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

## SDS-PAGE



Biotinylated Human HLA-A\*24:02&B2M&NY-ESO-1 (LLMWITQCF) Complex Protein on SDS-PAGE under reducing (R) condition. The gel was

## SEC-MALS



The purity of Biotinylated Human HLA-A\*24:02&B2M&NY-ESO-1 (LLMWITQCF) Complex Protein (Cat. No. HL1-H82E3) is more than 90%

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12/29/2023

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stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

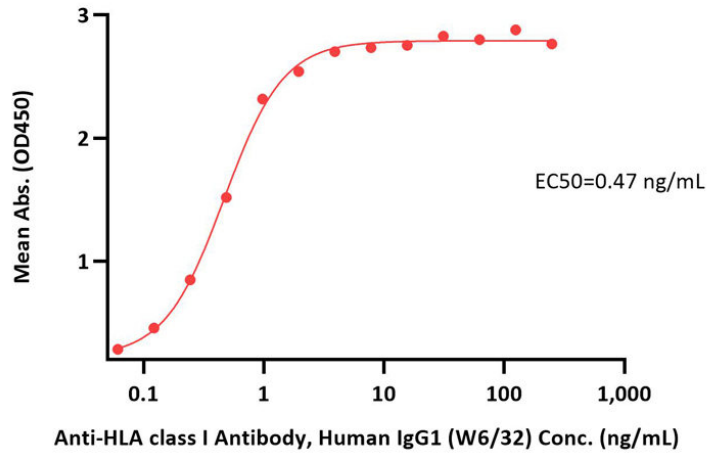
and the molecular weight of this protein is around 45-65 kDa verified by SEC-MALS.

[Report](#)

## Bioactivity-ELISA

### Biotinylated Human HLA-A\*24:02&B2M&NY-ESO-1 (LLMWITQCF) Complex Protein ELISA

0.1 µg of Biotinylated Human HLA-A\*24:02&B2M&NY-ESO-1 (LLMWITQCF) Complex Protein per well



Immobilized Biotinylated Human HLA-A\*24:02&B2M&NY-ESO-1 (LLMWITQCF) Complex Protein (Cat. No. HL1-H82E3) at 1 µg/mL (100 µL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 µg/well) plate can bind Anti-HLA class I Antibody, Human IgG1 (W6/32) with a linear range of 0.1-1 ng/mL (QC tested).

## Background

NY-ESO-1, which is also well-known as New York esophageal squamous cell carcinoma 1, is an efficient target for cancer immunotherapy. This antigen is a member of cancer-testis antigens (CTAs) and is highly expressed in various cancers, including melanoma, ovarian, cervical cancer, etc. Adoptive T cell therapy with HLA-A24 restricted NY-ESO-1 transduced CD8<sup>+</sup> T cells has improved the clinical response rates and overall survival of treatment-refractory melanoma patients. The Human HLA-A\*2402 NY-ESO-1 (LLMWITQCF) complex protein is a complex of HLA-A\*2402 of the MHC Class I, B2M and LLMWITQCF peptide of the NY-ESO-1.

## Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.

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