# Biotinylated Human HLA-A\*02:01&B2M&MAGE-A2 (YLQLVFGIEV) Complex Protein (Monomer, MALS verified)

Catalog # HLM-H82E6





# **Synonym**

HLA-A\*0201 & B2M & MAGE-A2 (YLQLVFGIEV)

#### Source

Biotinylated Human HLA-A\*02:01&B2M&MAGE-A2 (YLQLVFGIEV) Complex Protein(HLM-H82E6) is expressed from human 293 cells (HEK293). It contains AA Gly 25 - Ile 308 (HLA-A\*02:01) & Ile 21 - Met 119 (B2M) & YLQLVFGIEV peptide (Accession # <u>AAA59606.1</u> (HLA-A\*02:01) & <u>P61769-1</u> (B2M) & YLQLVFGIEV).

Predicted N-terminus: Gly 25 & Ile 21

#### **Molecular Characterization**

Biotinylated Human HLA-A\*02:01&B2M&MAGE-A2 (YLQLVFGIEV) Complex Protein is produced by co-expression of HLA and B2M loaded with MAGE-A2 peptide.

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

The protein has a calculated MW of 36.3 kDa and 11.7 kDa. The protein migrates as 38-44 kDa and 12 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### Labeling

Biotinylation of this product is performed using Avitag<sup>TM</sup> technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

# **Purity**

>90% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

#### **Formulation**

Lyophilized from  $0.22~\mu m$  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

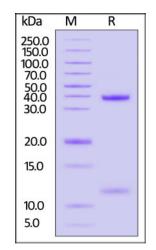
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

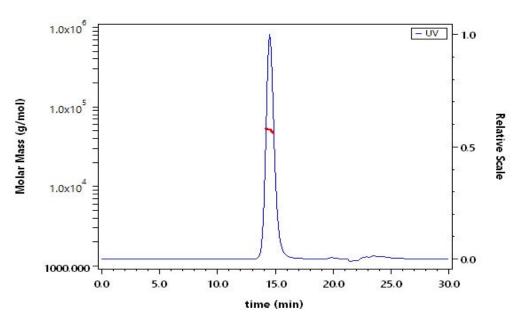
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## **SDS-PAGE**



Biotinylated Human HLA-A\*02:01&B2M&MAGE-A2 (YLQLVFGIEV) 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%.

## **SEC-MALS**



The purity of Biotinylated Human HLA-A\*02:01&B2M&MAGE-A2 (YLQLVFGIEV) Complex Protein (Cat. No. HLM-H82E6) is more than 95% and the molecular weight of this protein is around 45-60 kDa verified by SEC-MALS.

Report



# Biotinylated Human HLA-A\*02:01&B2M&MAGE-A2 (YLQLVFGIEV) Complex Protein (Monomer, **MALS** verified)

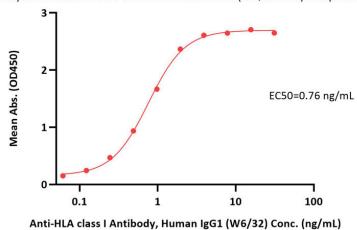
Catalog # HLM-H82E6





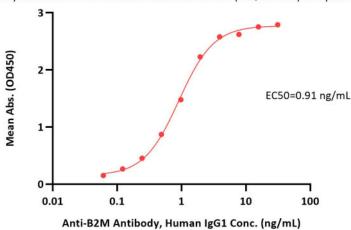
# **Bioactivity-ELISA**

Biotinylated Human HLA-A\*02:01&B2M&MAGE-A2 (YLQLVFGIEV) Complex Protein ELISA 0.1 µg of Biotinylated Human HLA-A\*02:01&B2M&MAGE-A2 (YLQLVFGIEV) Complex Protein per well



Immobilized Biotinylated Human HLA-A\*02:01&B2M&MAGE-A2 (YLQLVFGIEV) Complex Protein (Cat. No. HLM-H82E6) 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 0.1-2 ng/mL (QC tested).

Biotinylated Human HLA-A\*02:01&B2M&MAGE-A2 (YLQLVFGIEV) Complex Protein ELISA 0.1 µg of Biotinylated Human HLA-A\*02:01&B2M&MAGE-A2 (YLQLVFGIEV) Complex Protein per well



Immobilized Biotinylated Human HLA-A\*02:01&B2M&MAGE-A2 (YLQLVFGIEV) Complex Protein (Cat. No. HLM-H82E6) at 1 µg/mL (100 μL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 μg/well) plate can bind Anti-B2M Antibody, Human IgG1 with a linear range of 0.1-2 ng/mL (Routinely tested).

# Background

The MAGE-A2 antigen is a cancer-testis antigen and is expressed intracellularly in various solid tumor tissues, MAGE-A2 157-166 peptide (YLQLVFGIEV) is a cytotoxic T lymphocyte (CTL) epitope presented by HLA-A\*0201. The Human HLA-A\*0201 MAGE-A2 (YLQLVFGIEV) complex protein is a complex of HLA-A\*0201 of the MHC Class I, B2M, and YLQLVFGIEV peptide of the MAGE-A2.

