

#### Catalog # HLM-H82Ea

#### Synonym

HLA-DRA1\*0101 & HLA-DRB1\*1501 & MBP(ENPVVHFFKNIVTPR)

### Source

Biotinylated Human HLA-DRA1\*01:01&HLA-DRB1\*15:01&MBP (ENPVVHFFKNIVTPR) Complex Protein(HLM-H82Ea) is expressed from human 293 cells (HEK293). It contains AA Ile 26 - Glu 216 (HLA-DRA1\*01:01) & Gly 30 - Lys 227 (HLA-DRB1\*15:01) & ENPVVHFFKNIVTPR peptide (Accession # <u>CAI2388006.1</u> (HLA-DRA1\*01:01) & <u>CAI2388008.1</u> (HLA-DRB1\*15:01) & ENPVVHFFKNIVTPR). Predicted N-terminus: Ile 26 & Glu

### **Molecular Characterization**

Biotinylated Human HLA-DRA1\*01:01&HLA-DRB1\*15:01&MBP (ENPVVHFFKNIVTPR) Complex Protein is produced by co-expression of HLA-DRA1 and HLA-DRB1 loaded with MBP 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 29.8 kDa and 29.2 kDa. The protein migrates as 37-40 kDa and 32-37 kDa when calibrated against <u>Star Ribbon Pre-</u><u>stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

# Labeling

Biotinylation of this product is performed using Avitag<sup>™</sup> 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  $\mu$ g by the LAL method.

### Purity

>90% as determined by SDS-PAGE.

>90% 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

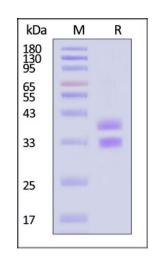
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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

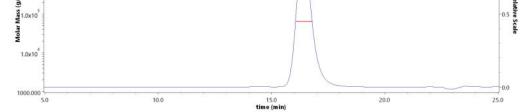


# **SEC-MALS**

1.0x10

1.0x10











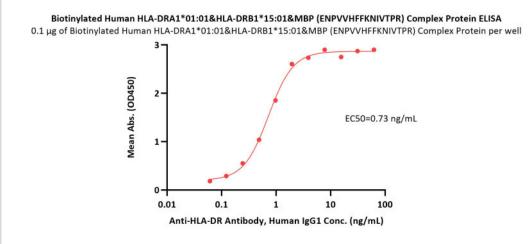
# Biotinylated Human HLA-DRA1\*01:01&HLA-DRB1\*15:01&MBP (ENPVVHFFKNIVTPR) Complex Protein (Monomer, MALS verified)



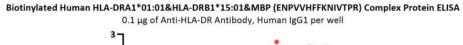
#### Catalog # HLM-H82Ea

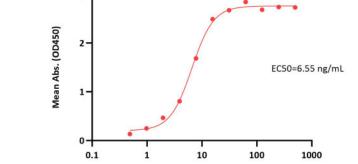
Biotinylated Human HLA-DRA1\*01:01&HLA-DRB1\*15:01&MBP (ENPVVHFFKNIVTPR) Complex Protein on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

### **Bioactivity-ELISA**



Immobilized Biotinylated Human HLA-DRA1\*01:01&HLA-DRB1\*15:01&MBP (ENPVVHFFKNIVTPR) Complex Protein (Cat. No. HLM-H82Ea) at 1 µg/mL (100 µL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 µg/well) plate can bind Anti-HLA-DR Antibody, Human IgG1 with a linear range of 0.06-2 ng/mL (QC tested). The purity of Biotinylated Human HLA-DRA1\*01:01&HLA-DRB1\*15:01&MBP (ENPVVHFFKNIVTPR) Complex Protein (Cat. No. HLM-H82Ea) is more than 90% and the molecular weight of this protein is around 55-75 kDa verified by SEC-MALS. <u>Report</u>





Biotinylated Human HLA-DRA1\*01:01&HLA-DRB1\*15:01&MBP (ENPVVHFFKNIVTPR) Complex Protein Conc. (ng/mL)

Immobilized Anti-HLA-DR Antibody, Human IgG1 at 1 µg/mL (100 µL/well) can bind Biotinylated Human HLA-DRA1\*01:01&HLA-DRB1\*15:01&MBP (ENPVVHFFKNIVTPR) Complex Protein (Cat. No. HLM-H82Ea) with a linear range of 0.5-16 ng/mL (Routinely tested).

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