# Biotinylated Human HLA-DRA1\*01:01&HLA-DRB1\*04:01&GAD65 (NFFRMVISNPAAT) Complex Protein (Monomer, MALS verified)



Catalog # HL5-H82E6

#### Source

Biotinylated Human HLA-DRA1\*01:01&HLA-DRB1\*04:01&GAD65 (NFFRMVISNPAAT) Complex Protein(HL5-H82E6) is expressed from human 293 cells (HEK293). It contains AA Ile 26 - Glu 216 (HLA-DRA1\*01:01) & Gly 30 - Lys 227 (HLA-DRB1\*04:01) & NFFRMVISNPAAT peptide (Accession # CAI2388006.1 (HLA-DRA1\*01:01) & CAI9239961.1 (HLA-DRB1\*04:01) & NFFRMVISNPAAT).

Predicted N-terminus: Ile 26 & Asn

#### **Molecular Characterization**

Biotinylated Human HLA-DRA1\*01:01&HLA-DRB1\*04:01&GAD65 (NFFRMVISNPAAT) Complex Protein is produced by co-expression of HLA-DRA1 and HLA-DRB1 loaded with GAD65 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 29.6 kDa and 29.2 kDa. The protein migrates as 38-42 kDa and 33-37 kDa when calibrated against Star Ribbon Prestained Protein Marker 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 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.

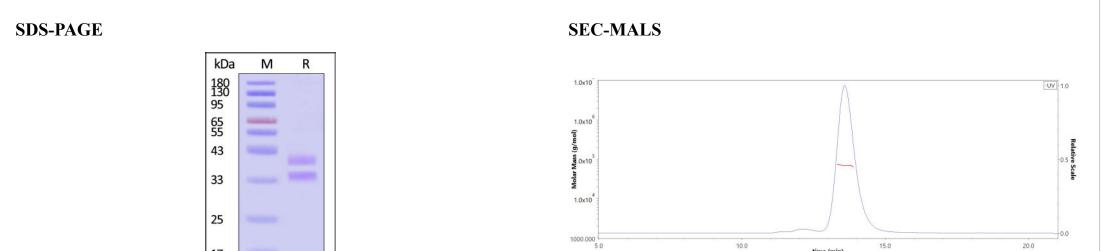
#### Storage

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.





Biotinylated Human HLA-DRA1\*01:01&HLA-DRB1\*04:01&GAD65 (NFFRMVISNPAAT) 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).

The purity of Biotinylated Human HLA-DRA1\*01:01&HLA-DRB1\*04:01&GAD65 (NFFRMVISNPAAT) Complex Protein (Cat. No. HL5-H82E6) is more than 90% and the molecular weight of this protein is around 60-85 kDa verified by SEC-MALS. Report



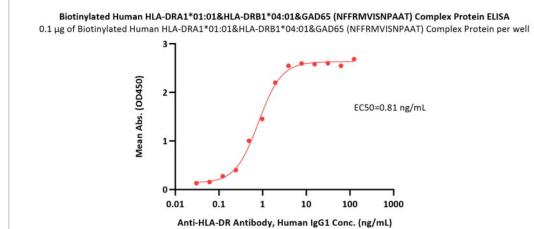






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# **Bioactivity-ELISA**



Immobilized Biotinylated Human HLA-DRA1\*01:01&HLA-DRB1\*04:01&GAD65 (NFFRMVISNPAAT) Complex Protein (Cat. No. HL5-H82E6) 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 0.03-4 ng/mL (QC tested).

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