

Biotinylated Human HLA-DRA1*01:01&HLA-DRB1*11:01&Influenza HA (PKYVKQNTLKLAT) Complex Protein (Monomer)

Catalog # HLA-H82E7



Synonym

HLA-DRA1*0101 & HLA-DRB1*1101 & Influenza HA (PKYVKQNTLKLAT)

Source

Biotinylated Human HLA-DRA1*01:01&HLA-DRB1*11:01&Influenza HA (PKYVKQNTLKLAT) Complex Protein(HLA-H82E7) is expressed from human 293 cells (HEK293). It contains AA Ile 26 - Glu 216 (HLA-DRA1*01:01) & Gly 30 - Lys 227 (HLA-DRB1*11:01) & PKYVKQNTLKLAT peptide (Accession # [CAI2388006.1](#) (HLA-DRA1*01:01) & [CAI2388099.1](#) (HLA-DRB1*11:01) & PKYVKQNTLKLAT).
Predicted N-terminus: Ile 26 & Gly 30

Molecular Characterization

Biotinylated Human HLA-DRA1*01:01&HLA-DRB1*11:01&Influenza HA (PKYVKQNTLKLAT) Complex Protein is produced by co-expression of HLA-DRA1 and HLA-DRB1 loaded with Influenza HA peptide.

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

The protein has a calculated MW of 29.2 kDa and 29.2 kDa. The protein migrates as 38-42 kDa and 35-36 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.

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

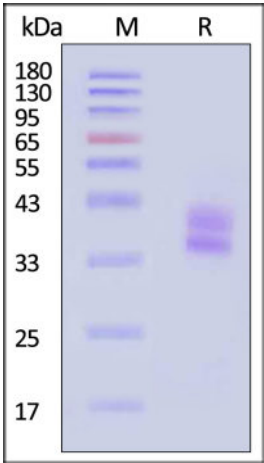
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

SDS-PAGE



Biotinylated Human HLA-DRA1*01:01&HLA-DRB1*11:01&Influenza HA (PKYVKQNTLKLAT) Complex Protein on SDS-PAGE under reducing (R)



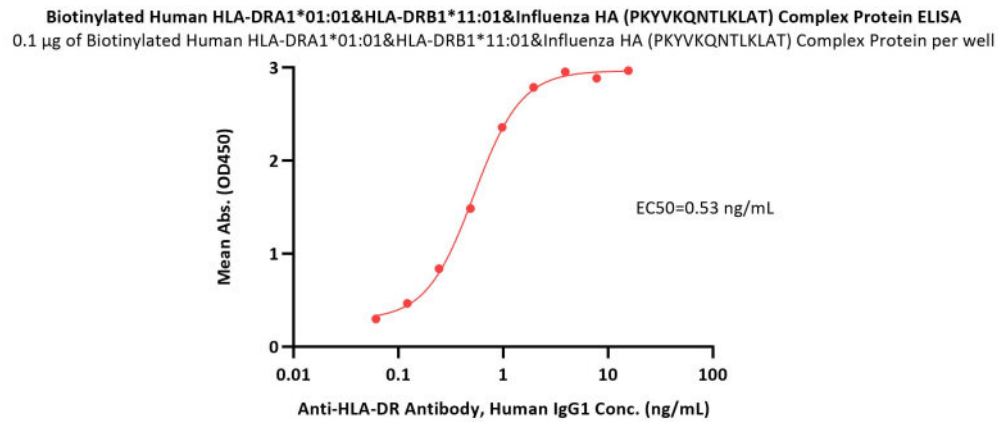
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condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

Bioactivity-ELISA



Immobilized Biotinylated Human HLA-DRA1*01:01&HLA-DRB1*11:01&Influenza HA (PKYVKQNTLKLAT) Complex Protein (Cat. No. HLA-H82E7) 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).

Background

Neuraminidase (NA) and hemagglutinin (HA) are major membrane glycoproteins found on the surface of influenza virus. Hemagglutinin binds to the sialic acid-containing receptors on the surface of host cells during initial infection and at the end of an infectious cycle. Hemagglutinin also plays a major role in the determination of host range restriction and virulence. As a class I viral fusion protein, hemagglutinin is responsible for penetration of the virus into the cell cytoplasm by mediating the fusion of the membrane of the endocytosed virus particle with the endosomal membrane. The Human HLA-DRA1*0101 & HLA-DRB1*1101 Influenza HA (PKYVKQNTLKLAT) complex protein is a complex of HLA-DRA1*0101 & HLA-DRB1*1101 of the MHC Class II and PKYVKQNTLKLAT peptide of the Influenza HA.

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