Biotinylated Human HLA-DRA1*01:01&HLA-DRB1*04:01 Monomer Protein (Peptide free, MALS verified)

Catalog # HL1-H82W8

Source

Biotinylated Human HLA-DRA1*01:01&HLA-DRB1*04:01 Monomer Protein(HL1-H82W8) 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) (Accession # CAI2388006.1 (HLA-DRA1*01:01) & CAI9239961.1 (HLA-DRB1*04:01)).
Predicted N-terminus: Ile 26 & Gly 30

Molecular Characterization

Biotinylated Human HLA-DRA1*01:01&HLA-DRB1*04:01 Monomer Protein, produced by co-expression of HLA-DRA1*01:01 and HLA-DRB1*04:01, has a calculated MW of 29.2 kDa (HLA-DRA1*01:01) and 27.1 kDa (HLA-DRB1*04:01). Subunit HLA-DRA1*01:01 is fused with a polyhistidine tag at the C-terminus and subunit HLA-DRB1*04:01 is fused with an Avi tag (Avitag™) at the C-terminus. The protein migrates as 38-40 kDa and 31-32 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

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

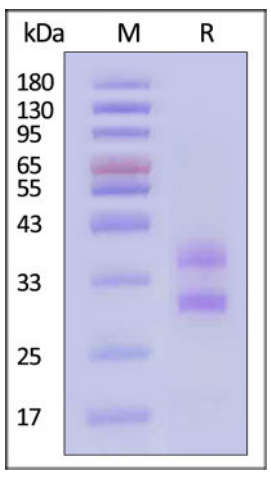
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

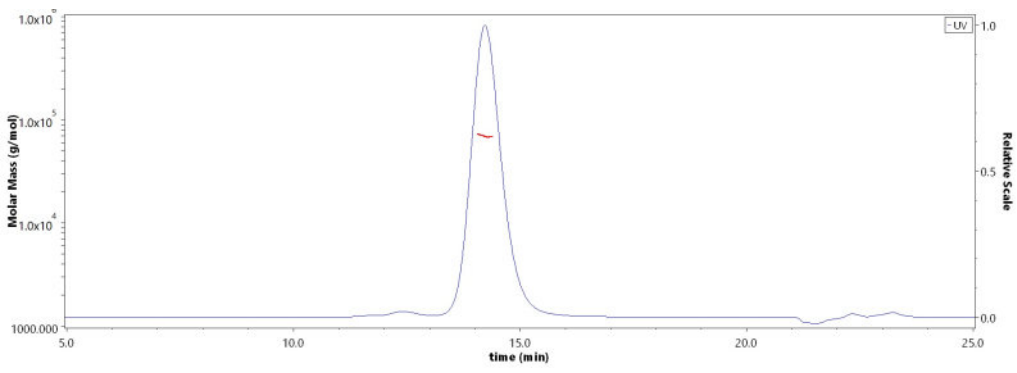
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



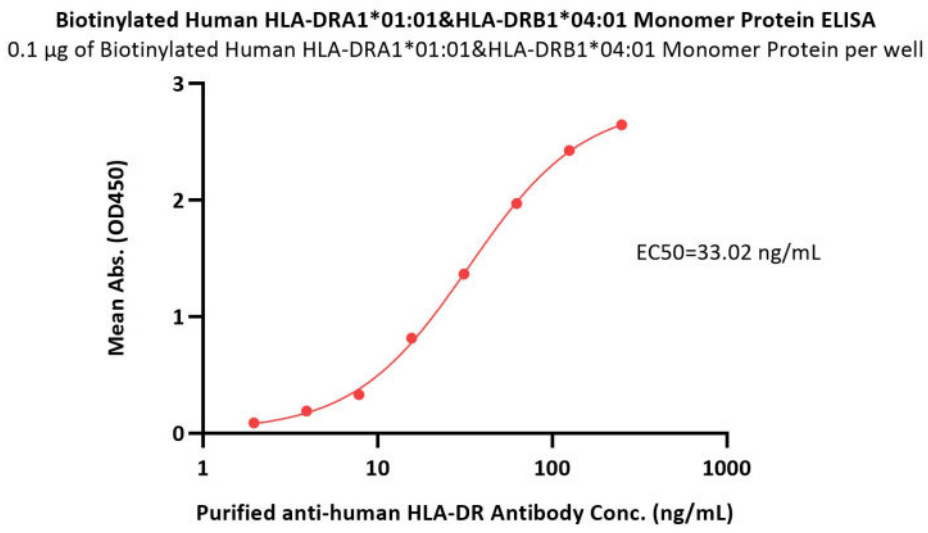
Biotinylated Human HLA-DRA1*01:01&HLA-DRB1*04:01 Monomer Protein on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS



The purity of Biotinylated Human HLA-DRA1*01:01&HLA-DRB1*04:01 Monomer Protein (Cat. No. HL1-H82W8) is more than 90% and the molecular weight of this protein is around 60-75 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA



Immobilized Biotinylated Human HLA-DRA1*01:01&HLA-DRB1*04:01 Monomer Protein (Cat. No. HL1-H82W8) at 1 μg/mL (100 μL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 μg/well) plate can bind Purified anti-human HLA-DR Antibody with a linear range of 2-63 ng/mL (Routinely tested).

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.