Human HLA-A*03:01&B2M Monomer Protein (Peptide free, MALS verified)

Catalog # HLM-H52H3

Source

Human HLA-A*03:01&B2M Monomer Protein(HLM-H52H3) is expressed from human 293 cells (HEK293). It contains AA Gly 25 - Thr 305 (HLA-A*03:01) & Ile 21 - Met 119 (B2M) (Accession # P04439 (HLA-A*03:01) & P61769 (B2M)).
Predicted N-terminus: Gly 25 & Ile 21

Molecular Characterization

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 37.7 kDa and 15.7 kDa. The protein migrates as 42-45 kDa and 16 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

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

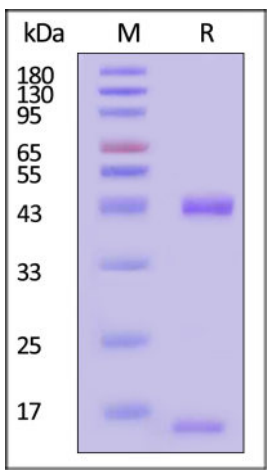
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

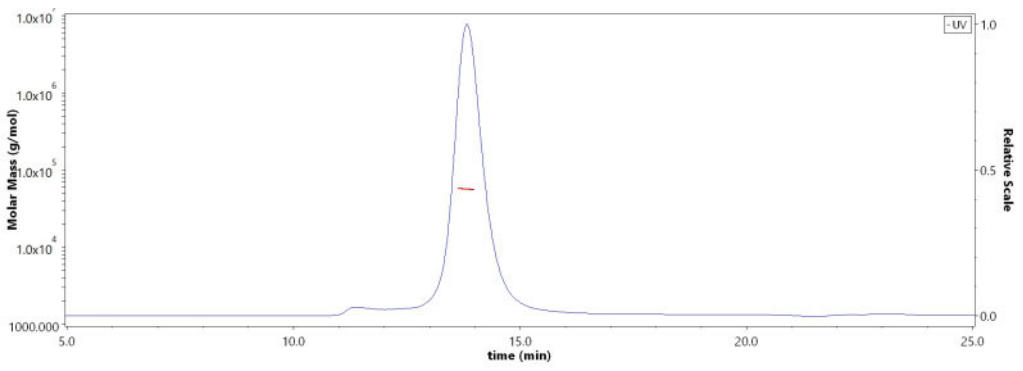
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



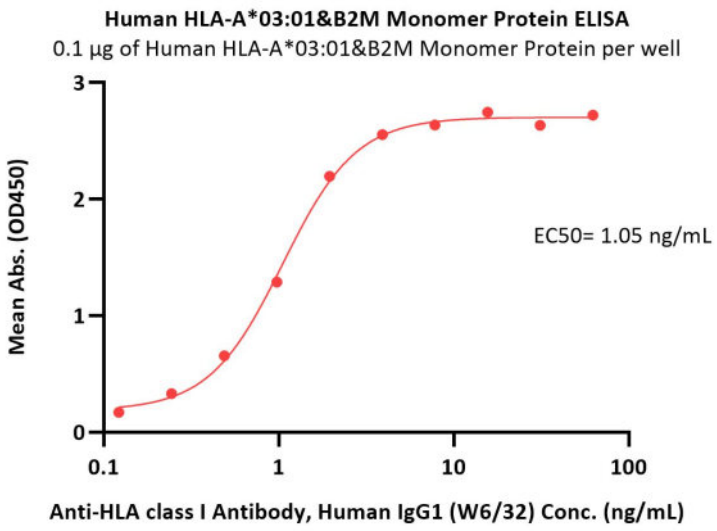
Human HLA-A*03:01&B2M Monomer Protein on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS

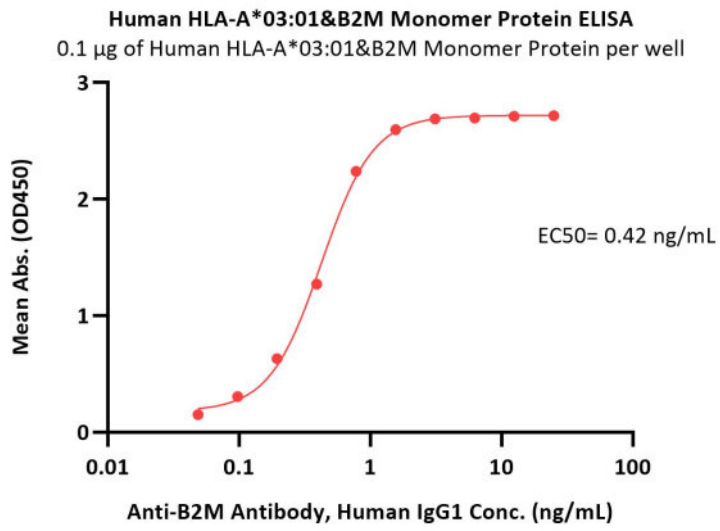


The purity of Human HLA-A*03:01&B2M Monomer Protein (Cat. No. HLM-H52H3) is more than 90% and the molecular weight of this protein is around 50-65 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA



Immobilized Human HLA-A*03:01&B2M Monomer Protein (Cat. No. HLM-H52H3) at 1 μg/mL (100 μL/well) can bind Anti-HLA class I Antibody, Human IgG1 (W6/32) with a linear range of 0.1-2 ng/mL (QC tested).



Immobilized Human HLA-A*03:01&B2M Monomer Protein (Cat. No. HLM-H52H3) at 1 μg/mL (100 μL/well) can bind Anti-B2M Antibody, Human IgG1 with a linear range of 0.05-1 ng/mL (Routinely tested).

Background

Major histocompatibility complex (MHC), group of genes that code for proteins found on the surfaces of cells that help the immune system recognize foreign substances. MHC proteins are found in all higher vertebrates. In human beings the complex is also called the human leukocyte antigen (HLA) system.

Clinical and Translational Updates