PE-Labeled Human HLA-A*24:02&B2M Tetramer Protein (Peptide free)

Catalog # HLM-HP2H4

Synonym

HLA-A*2402 & B2M

Source

PE-Labeled Human HLA-A*24:02&B2M Tetramer Protein(HLM-HP2H4) is expressed from human 293 cells (HEK293). It contains AA Gly 25 - Thr 305 (HLA-A*24:02) & Ile 21 - Met 119 (B2M) (Accession # AAA59600.1 (HLA-A*24:02) & P61769 (B2M)).
Predicted N-terminus: Gly 25 & Ile 21

Molecular Characterization

PE-Labeled Human HLA-A*24:02&B2M Tetramer Protein is assembled by biotinylated monomer (HLM-H82W4) and PE-labeled streptavidin.

Biotinylated Human HLA-A*24:02&B2M Monomer Protein is produced by co-expression of HLA and B2M. This Protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™).

Conjugate

PE

Excitation Wavelength: 488 nm / 561 nm

Emission Wavelength: 575 nm

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, 1% BSA, 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

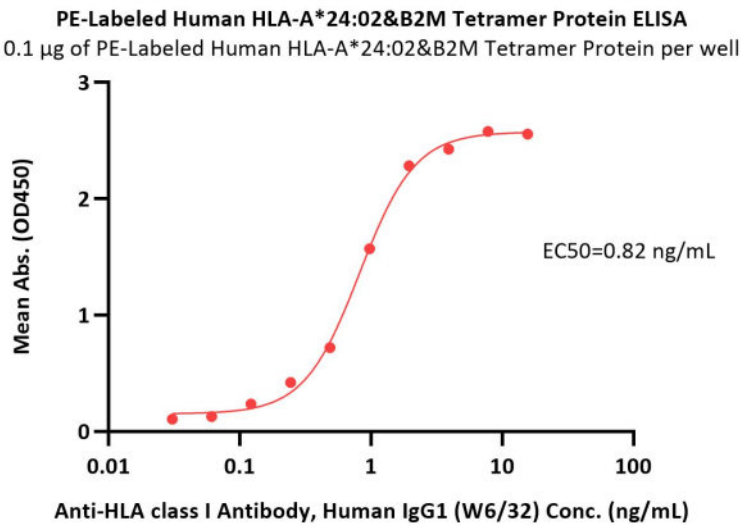
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please protect from light and avoid repeated freeze-thaw cycles.

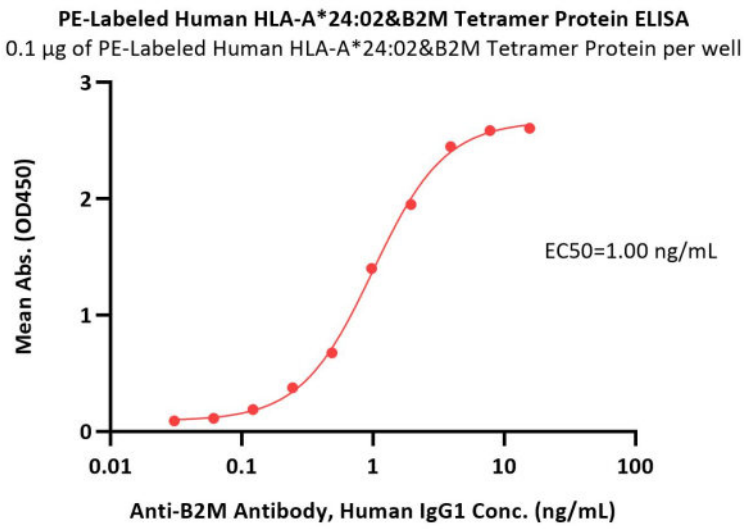
This product is stable after storage at:

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

Bioactivity-ELISA



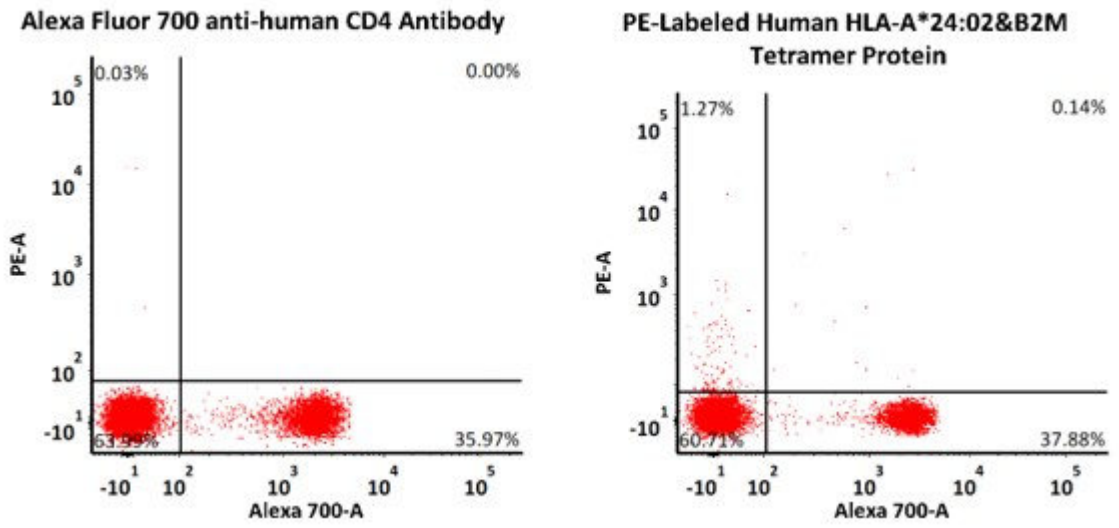
Immobilized PE-Labeled Human HLA-A*24:02&B2M Tetramer Protein (Cat. No. HLM-HP2H4) at 1 μg/mL (100 μL/well) can bind Anti-HLA class I Antibody, Human IgG1 (W6/32) with a linear range of 0.3-2 ng/mL (QC tested).



Immobilized PE-Labeled Human HLA-A*24:02&B2M Tetramer Protein (Cat. No. HLM-HP2H4) at 1 μg/mL (100 μL/well) can bind Anti-B2M Antibody, Human IgG1 with a linear range of 0.3-2 ng/mL (QC tested).

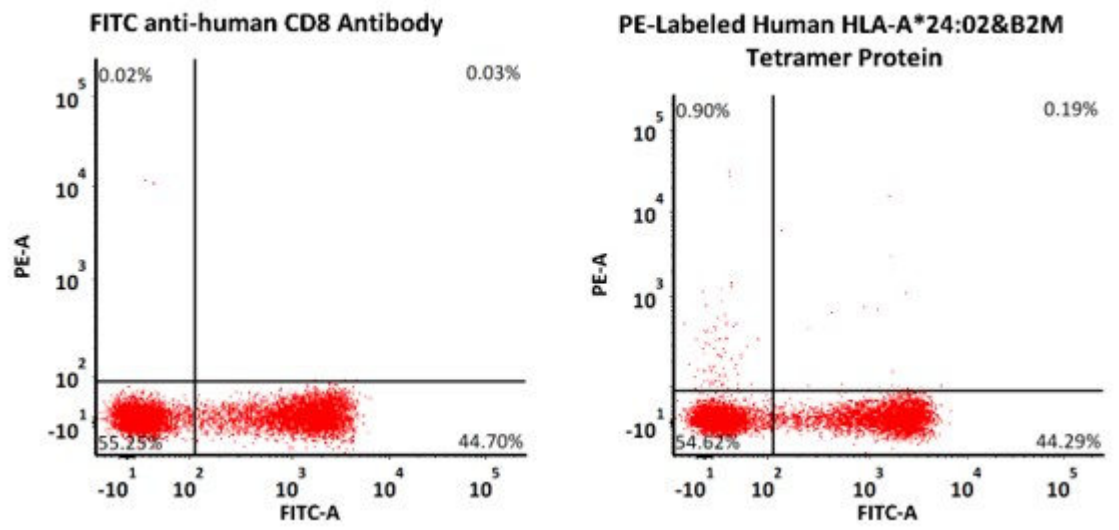
Evaluation of CAR expression

FACS Analysis of Non-specific binding to PBMCs



Non-specificity of PE-Labeled Human HLA-A*24:02&B2M Tetramer Protein (Cat. No. HLM-HP2H4) binding to CD4+ cells present in human PBMC. 5e5 of human PBMCs were simultaneously stained with Alexa Fluor® 700 anti-human CD4 Antibody and PE-Labeled Human HLA-A*24:02&B2M Tetramer Protein (1 μg corresponds to labeling of 5e5 cells in a final volume of 100 μL) and washed and then analyzed with FACS. Both Alexa 700 and PE positive signals was used to evaluate the non-specific binding activity to human CD4+ cells (Routinely tested).

FACS Analysis of Non-specific binding to PBMCs



Non-specificity of PE-Labeled Human HLA-A*24:02&B2M Tetramer Protein (Cat. No. HLM-HP2H4) binding to CD8+ cells present in human PBMC. 5e5 of human PBMCs were simultaneously stained with FITC anti-human CD8 Antibody and PE-Labeled Human HLA-A*24:02&B2M Tetramer Protein (1 μg corresponds to labeling of 5e5 cells in a final volume of 100 μL) and washed and then analyzed with FACS. Both FITC and PE positive signals was used to evaluate the non-specific binding activity to human CD8+ cells (Routinely tested).

Clinical and Translational Updates