PE-Labeled Human HLA-A*02:01&B2M&p53 (HMTEVVRHC) Tetramer Protein

Catalog # HLP-HP2H6



Synonym

HLA-A*0201 & B2M & p53 (HMTEVVRHC)

Source

PE-Labeled Human HLA-A*02:01&B2M&p53 (HMTEVVRHC) Tetramer Protein(HLP-HP2H6) is expressed from human 293 cells (HEK293). It contains AA Gly 25 - Ile 308 (HLA-A*02:01) & Ile 21 - Met 119 (B2M) & HMTEVVRHC peptide (Accession # <u>AAA59606.1</u> (HLA-A*02:01) & <u>P61769-1</u> (B2M) & HMTEVVRHC).

Predicted N-terminus: Gly 25 & Ile 21

Molecular Characterization

PE-Labeled Human HLA-A*02:01&B2M&p53 (HMTEVVRHC) Tetramer Protein is assembled by biotinylated monomer and PE-labeled streptavidin.

Biotinylated Human HLA-A*02:01&B2M&p53 (HMTEVVRHC) Complex Protein is produced by co-expression of HLA and B2M loaded with p53 peptide. Biotinylated Human HLA-A*02:01&B2M&p53 (HMTEVVRHC) Complex Protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (AvitagTM).

Conjugate

PE

Excitation Wavelength: 488 nm / 561 nm

Emission Wavelength: 575 nm

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from $0.22~\mu m$ 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

▶HLA-A*0201 & B2M & p53 (HMTEVVRHC) ELISA

Immobilized PE-Labeled Human HLA-A*02:01&B2M&p53 (HMTEVVRHC) Tetramer Protein (Cat. No. HLP-HP2H6) at 1 μ g/mL (100 μ L/well) can bind Anti-HLA class I Antibody, Human IgG1 (W6/32) with a linear range of 0.1-2 ng/mL (QC tested).

Phla-A*0201 & B2M & p53 (HMTEVVRHC) ELISA

Immobilized PE-Labeled Human HLA-A*02:01&B2M&p53 (HMTEVVRHC) Tetramer Protein (Cat. No. HLP-HP2H6) at 1 μ g/mL (100 μ L/well) can bind Anti-HLA-A2/p53R175H Antibody with a linear range of 0.004-0.125 μ g/mL (Routinely tested).

Background

TP53 has been recognized as a tumor suppressor. 50% of cancers carry a TP53 mutation while many others affect other pathway components. High-copy numbers of WT p53 peptide-MHC class I complexes were detected on tumor cells as compared to low copies on normal cells. The Human HLA-A*0201 p53 (HMTEVVRHC) complex protein is a complex of HLA-A*0201 of the MHC Class I, B2M, and HMTEVVRHC peptide of the p53.

Clinical and Translational Updates

