PE-Labeled Human HLA-A*02:01&B2M&EBV LMP1 (YLLEMLWRL) Tetramer Protein

Catalog # HLP-HP2Hd



Synonym

HLA-A*0201 & B2M & EBV LMP1 (YLLEMLWRL)

Source

PE-Labeled Human HLA-A*02:01&B2M&EBV LMP1 (YLLEMLWRL) Tetramer Protein(HLP-HP2Hd) is expressed from human 293 cells (HEK293). It contains AA Gly 25 - Ile 308 (HLA-A*02:01) & Ile 21 - Met 119 (B2M) & YLLEMLWRL peptide (Accession # AAA59606.1 (HLA-A*02:01) & P61769-1 (B2M) & YLLEMLWRL).

Predicted N-terminus: Gly 25 & Ile 21

Molecular Characterization

PE-Labeled Human HLA-A*02:01&B2M&EBV LMP1 (YLLEMLWRL) Tetramer Protein is assembled by biotinylated monomer (HLP-H82Ec) and PE-labeled streptavidin.

Biotinylated Human HLA-A*02:01&B2M&EBV LMP1 (YLLEMLWRL) Complex Protein is produced by co-expression of HLA and B2M loaded with EBV LMP1 peptide. Biotinylated Human HLA-A*02:01&B2M&EBV LMP1 (YLLEMLWRL) 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.

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.

Background

Epstein-Bar Virus (EBV), also known as human herpesvirus 4, belongs to gamma herpes virus family and is a very common human virus worldwide. EBV causes infectious mononucleosis (IM) and also associates to some specific types of cancers such as Burkitt's lymphoma (BL) and gastric carcinoma (GC). Glycoprotein B (gB) plays an important role in viral entry by binding with $\alpha\nu\beta\delta/\alpha\nu\beta8$ integrins to trigger the membrane fusion and entry process of epithelial cells, which makes it become an great target for EBV research. Epstein-Bar Virus (EBV), also known as human herpesvirus 4, belongs to gamma herpes virus family and is a very common human virus worldwide. EBV causes infectious mononucleosis (IM) and also associates to some specific types of cancers such as Burkitt's lymphoma (BL) and gastric carcinoma (GC). Glycoprotein B (gB) plays an important role in viral entry by binding with $\alpha\nu\beta\delta/\alpha\nu\beta8$ integrins to trigger the membrane fusion and entry process of epithelial cells, which makes it become an great target for EBV research. The Human HLA-A*0201 EBV LMP1 (YLLEMLWRL) complex protein is a complex of HLA-A*0201 of the MHC Class I, B2M and YLLEMLWRL peptide of the EBV LMP1.

Clinical and Translational Updates

