# PE-Labeled Human HLA-A\*02:01&B2M&EBV LMP2A (CLGGLLTMV) Tetramer Protein

Catalog # HLA-HP2H6



### **Synonym**

HLA-A\*0201 & B2M & EBV LMP2A (CLGGLLTMV)

#### **Source**

PE-Labeled Human HLA-A\*02:01&B2M&EBV LMP2A (CLGGLLTMV)
Tetramer Protein(HLA-HP2H6) is expressed from human 293 cells (HEK293). It contains AA Gly 25 - Ile 308 (HLA-A\*02:01) & Ile 21 - Met 119 (B2M) & CLGGLLTMV peptide (Accession # <u>AAA59606.1</u> (HLA-A\*02:01) & <u>P61769-1</u> (B2M) & CLGGLLTMV).

Predicted N-terminus: Gly 25 & Ile 21

### **Molecular Characterization**

PE-Labeled Human HLA-A\*02:01&B2M&EBV LMP2A (CLGGLLTMV) Tetramer Protein is assembled by biotinylated monomer (HLA-H82E5) and PE-labeled streptavidin.

Biotinylated Human HLA-A\*02:01&B2M&EBV LMP2A (CLGGLLTMV) Complex Protein is produced by co-expression of HLA and B2M loaded with EBV LMP2A peptide. Biotinylated Human HLA-A\*02:01&B2M&EBV LMP2A (CLGGLLTMV) Complex Protein carries a polyhistidine tag at the Cterminus, followed by an Avi tag (Avitag<sup>TM</sup>).

## Conjugate

PE

Excitation Wavelength: 488 nm / 561 nm

Emission Wavelength: 575 nm

## Endotoxin

Less than 1.0 EU per  $\mu g$  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 ανβ6/ανβ8 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 ανβ6/ανβ8 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 LMP2A (CLGGLLTMV) complex protein is a complex of HLA-A\*0201 of the MHC Class I, B2M and CLGGLLTMV peptide of the EBV LMP2A.

## **Clinical and Translational Updates**

