APC-Labeled Human HLA-E*01:03&B2M&EBV LMP1 (GGDPHLPTL) Tetramer Protein

Catalog # HLP-HA2H8

Source

APC-Labeled Human HLA-E*01:03&B2M&EBV LMP1 (GGDPHLPTL) Tetramer Protein(HLP-HA2H8) is expressed from human 293 cells (HEK293). It contains AA Gly 22 - Ile 305 (HLA-E*01:03) & Ile 21 - Met 119 (B2M) & GGDPHLPTL peptide (Accession # P13747 (HLA-E*01:03) & P61769-1 (B2M) & GGDPHLPTL).
Predicted N-terminus: Gly 22 & Ile 21

Molecular Characterization

APC-Labeled Human HLA-E*01:03&B2M&EBV LMP1 (GGDPHLPTL) Tetramer Protein is assembled by biotinylated monomer and APC-labeled streptavidin.

Biotinylated Human HLA-E*01:03&B2M&EBV LMP1 (GGDPHLPTL) Complex Protein is produced by co-expression of HLA and B2M loaded with EBV LMP1 peptide. Biotinylated Human HLA-E*01:03&B2M&EBV LMP1 (GGDPHLPTL) Complex Protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™).

Conjugate

APC

Excitation Wavelength: 640 nm

Emission Wavelength: 661 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.

Background

HLA-E belongs to the HLA class I heavy chain paralogues. This class I molecule is a heterodimer consisting of a heavy chain and a light chain (beta-2 microglobulin). The heavy chain is anchored in the membrane. HLA-E binds a restricted subset of peptides derived from the leader peptides of other class I molecules. The heavy chain is approximately 45 kDa and its gene contains 8 exons. Exon one encodes the leader peptide, exons 2 and 3 encode the alpha1 and alpha2 domains, which both bind the peptide, exon 4 encodes the alpha3 domain, exon 5 encodes the transmembrane region, and exons 6 and 7 encode the cytoplasmic tail.

Clinical and Translational Updates