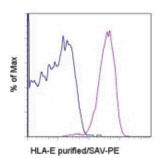


# **Anti-Human HLA-E Purified**

Catalog Number: 14-9953

Also Known As:

RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of normal human peripheral blood cells with 0.5 ug of Mouse IgG1 K Isotype Control Purified (cat. 14-4714) (open histogram) or 0.5 ug of Anti-Human HLA-E Purified (filled histogram) followed by Anti-Mouse IgG Biotin (cat. 13-4013)and Streptavidin PE (cat. 12-4317). Cells in the lymphocyte gate were used for analysis.

Formulation: aqueous buffer, 0.09% sodium azide, may contain

#### **Product Information**

Contents: Anti-Human HLA-E Purified

REF Catalog Number: 14-9953
Clone: 3D12HLA-E
Concentration: 0.5 mg/mL
Host/Isotype: Mouse IgG1, kappa

carrier protein/stabilizer

Temperature Limitation: Store at 2-8°C.

Batch Code: Refer to Vial
Use By: Refer to Vial

Caution, contains Azide

### Description

The monoclonal antibody 3D12 (HLA-E) recognizes human HLA-E, a member of the Human Leukocyte Antigen family. HLA-E is a MHC Class IB member, which has a specialized role in NK cell recognition. Binding of a restricted set of peptides derived from other Class I leader sequences to the HLA-E and B2M (beta2 microglobulin) complex leads to interaction with NKG2A on NK cells. This binding protects the HLA-G-expressing cell from NK cell killing. HLA-E expression is ubiquitous.

#### **Applications Tested**

This 3D12 (HLA-E) antibody has been tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at less than or equal to 1  $\mu$ g per test. A test is defined as the amount ( $\mu$ g) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

### References

Wooden SL, Kalb SR, Cotter RJ, Soloski MJ. Cutting edge: HLA-E binds a peptide derived from the ATP-binding cassette transporter multidrug resistance-associated protein 7 and inhibits NK cell-mediated lysis. J Immunol. 2005 Aug 1;175(3):1383-7.(3D12 HLA-E, FC, PubMed)

Strong RK, Holmes MA, Li P, Braun L, Lee N, Geraghty DE. HLA-E allelic variants. Correlating differential expression, peptide affinities, crystal structures, and thermal stabilities. J Biol Chem. 2003 Feb 14;278(7):5082-90. Epub 2002 Oct 30.(3D12 HLA-E, FC, ELISA, PubMed)

Lee N, Llano M, Carretero M, Ishitani A, Navarro F, López-Botet M, Geraghty DE. HLA-E is a major ligand for the natural killer inhibitory receptor CD94/NKG2A. Proc Natl Acad Sci U S A. 1998 Apr 28:95(9):5199-204. (3D12 HLA-E, FC, FA, PubMed)

# **Related Products**

12-4317 Streptavidin PE 13-4013 Anti-Mouse IgG Biotin (Polyclonal) 14-4714 Mouse IgG1 K Isotype Control Purified (P3.6.2.8.1)