

For Research Use Only

# HLA-E Monoclonal antibody, PBS Only



Catalog Number: 66530-1-PBS

## Basic Information

<b>Catalog Number:</b> 66530-1-PBS	<b>GenBank Accession Number:</b> BC002578	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug , Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 3133	<b>CloneNo.:</b> 1A4G3
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P13747	
<b>Isotype:</b> IgG2a	<b>Full Name:</b> major histocompatibility complex, class I, E	
<b>Immunogen Catalog Number:</b> AG6724	<b>Calculated MW:</b> 40 kDa	
	<b>Observed MW:</b> 40 kDa	

## Applications

**Tested Applications:**  
WB, IF, FC, IHC, Indirect ELISA

**Species Specificity:**  
Human

## Background Information

Human major histocompatibility complex (MHC) antigens, also referred to as human leukocyte antigens (HLA), are encoded by genes located on the short arm of chromosome 6 (6p21.3). There are two classes of HLA antigens: class I and class II. This class I molecules are membrane glycoproteins composed of a heavy (alpha) chain which is encoded by a HLA class I gene, and  $\beta$ 2-microglobulin light (beta) chain. The most extensively characterized members of the HLA class I gene family are the genes encoding the major transplantation antigens, HLA-A, B and C. HLA-E is a non-classical MHC class I molecule. HLA-E is frequently overexpressed in tumor diseases, transplants and virus-infected cells and represents an immunomodulatory molecule by binding to the receptors CD94/NKG2A, -B and -C on NK and T cells. Due to its immune suppressive features HLA-E expression might represent an important mechanism of tumors to escape immune surveillance. (PMID: 667938; 3375250; 2249951; 27589686)

## Storage

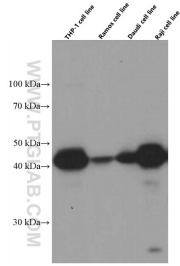
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

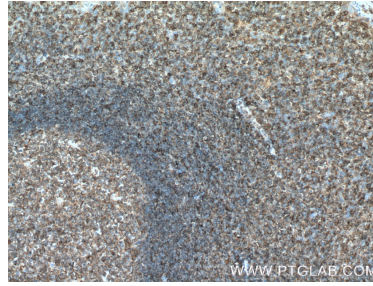
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)      E: proteintech@ptglab.com  
W: ptglab.com

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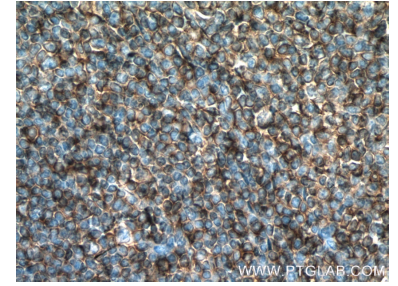
## Selected Validation Data



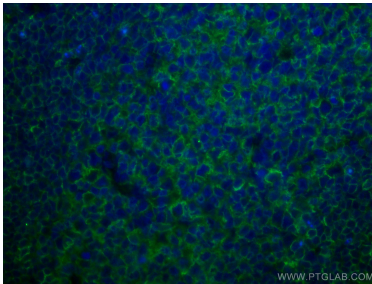
THP-1, Ramos, Daudi, and Raji cells were subjected to SDS PAGE followed by western blot with 66530-1-Ig (HLA-E antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66530-1-PBS in a different storage buffer formulation.



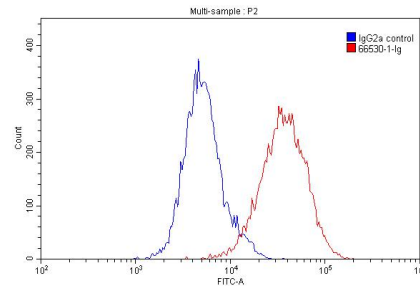
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 66530-1-Ig (HLA-E antibody) at dilution of 1:400 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66530-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 66530-1-Ig (HLA-E antibody) at dilution of 1:400 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66530-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed human tonsillitis tissue using HLA-E antibody (66530-1-Ig, Clone: 1A4G3) at dilution of 1:200 and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 66530-1-PBS in a different storage buffer formulation.



$1 \times 10^6$  THP-1 cells were stained with 0.20ug HLA-E antibody (66530-1-Ig, red) and control antibody (blue). Fixed with 90% MeOH. This data was developed using the same antibody clone with 66530-1-PBS in a different storage buffer formulation.