

For Research Use Only

HLA-E Monoclonal antibody

Catalog Number: 66530-1-Ig **1 Publications**



Basic Information

Catalog Number: 66530-1-Ig	GenBank Accession Number: BC002578	Purification Method: Protein A purification
Size: 150ul , Concentration: 2100 µg/ml by Nanodrop and 1000 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 3133	CloneNo.: 1A4G3
Source: Mouse	Full Name: major histocompatibility complex, class I, E	Recommended Dilutions: WB 1:2500-1:10000 IHC 1:200-1:800 IF 1:50-1:500
Isotype: IgG2a	Calculated MW: 40 kDa	
Immunogen Catalog Number: AG6724	Observed MW: 40 kDa	

Applications

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

Cited Applications:
WB

Species Specificity:
Human

Cited Species:
human

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : THP-1 cells, Jurkat cells, HUVEC cells, human placenta tissue, Ramos cells, Daudi cells, Raji cells

IHC : human tonsillitis tissue, human placenta tissue

IF : human tonsillitis tissue,

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 β 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)

Notable Publications

Author	Pubmed ID	Journal	Application
Xiaowei Liu	36706761	Cancer Cell	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

***** 20ul sizes contain 0.1% BSA**

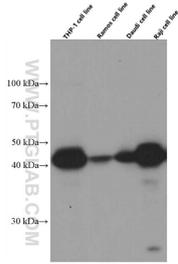
For technical support and original validation data for this product please contact:

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

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

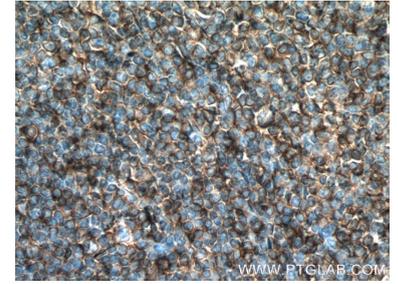
Selected Validation Data



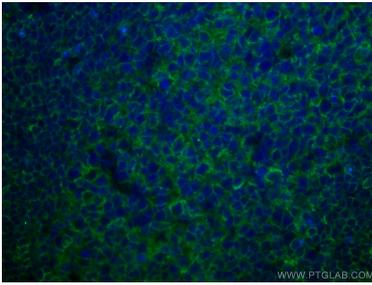
THP-1, Ramos, Daudi, and Raji cells were subjected to SDS PAGE followed by western blot with 66530-1-Ig (HLA-E antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



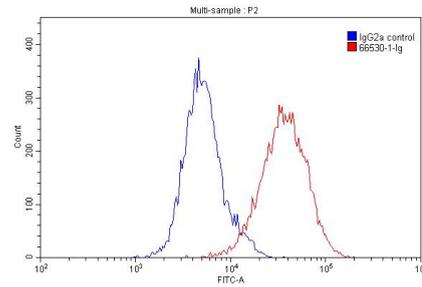
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 66530-1-Ig (HLA-E antibody) at dilution of 1:400 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



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).



1×10^6 THP-1 cells were stained with 0.20ug HLA-E antibody (66530-1-Ig, red) and control antibody (blue). Fixed with 90% MeOH.