### For Research Use Only

# HLA-E Monoclonal antibody, PBS Only



**Purification Method:** 

Protein A purification

CloneNo.:

1A4G3

Catalog Number: 66530-1-PBS

**Basic Information** 

Catalog Number:

66530-1-PBS

Size: 1 mg/ml Source:

Mouse Isotype: IgG2a

Immunogen Catalog Number:

AG6724

40 kDa

**Applications Tested Applications:** 

WB, IF, IHC, Indirect ELISA

Species Specificity:

## **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 antigenes, 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)

GenBank Accession Number:

major histocompatibility complex,

BC002578

GeneID (NCBI):

**UNIPROT ID:** 

Full Name:

class I. E

Calculated MW: 40 kDa Observed MW:

P13747

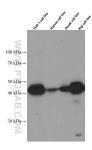
#### Storage

Storage:

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C Storage Buffer:

PBS Only

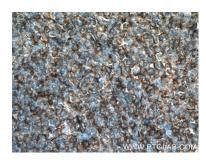
## Selected Validation Data



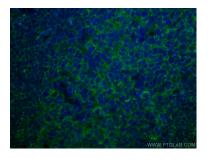
THP-1, Ramos, Daudi, and Raji cells were subjected to SDS PAGE followed by western blot with 66530-1-Ig (HLA-E antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66530-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 66530-1-lg (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 paraffinembedded 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-lg, 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.