For Research Use Only

HLA-E Monoclonal antibody, PBS Only

Catalog Number:66530-1-PBS



Basic Information

Catalog Number:

GenBank Accession Number:

Purification Method:

66530-1-PBS

BC002578

Protein A purification

Source: Mouse

GeneID (NCBI): 3133

CloneNo.:

1A4G3

Isotype IgG2a

UNIPROT ID:

P13747

Immunogen Catalog Number: AG6724

Full Name: major histocompatibility complex,

class I. E

Calculated MW:

40 kDa

Observed MW:

40 kDa

Applications

Tested Applications:

WB, IHC, IF-P, IP, 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 $members of the HLA \ class \ I \ gene \ family \ are \ the \ genes \ encoding \ the \ major \ transplantation \ antigenes, \ HLA-A, \ B \ and \ C.$ 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)

Storage

Storage:

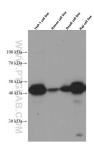
Store at -80°C

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

Storage Buffer:

PBS only, pH7.3

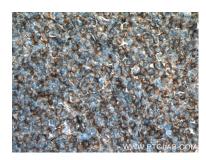
Selected Validation Data



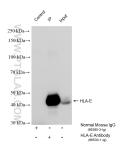
THP-1, Ramos, Daudi, and Raji cells were subjected to SDS PAGE followed by western blot with 66530-1-Ig (HLA-E antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66530-1-PBS in a different storage buffer formulation.



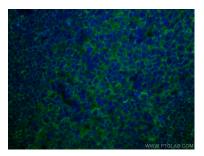
Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 66530-1-Ig (HLA-E antibody) at dilution of 1:400 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66530-1-PBS in a different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



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



IP result of anti-HLA-E (IP:66530-1-Ig, 4ug; Detection:66530-1-Ig 1:3000) with THP-1 cells lysate 1720 ug. 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.