

For Research Use Only

HLA class I ABC Monoclonal antibody

Catalog Number: 66013-1-Ig

Featured Product

16 Publications



Basic Information

Catalog Number:

66013-1-Ig

Size:

150ul, Concentration: 1130 ug/ml by Nanodrop and 1107 ug/ml by Bradford method using BSA as the standard;

Source:

Mouse

Isotype:

IgG2b

Immunogen Catalog Number:

AG7488

GenBank Accession Number:

BC003069

GeneID (NCBI):

3105

UNIPROT ID:

P04439

Full Name:

major histocompatibility complex, class I, A

Calculated MW:

41 kDa

Observed MW:

40-44 kDa

Purification Method:

Protein A purification

CloneNo.:

5C5B7

Recommended Dilutions:

WB: 1:5000-1:50000

IHC: 1:1000-1:10000

IF/ICC: 1:400-1:1600

FC: 0.40 ug per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

WB, IHC, IF/ICC, FC, ELISA

Cited Applications:

WB, IHC, IF, IP

Species Specificity:

human, pig

Cited Species:

human, pig

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: HeLa cells, HepG2 cells, human white blood, NCCIT cells, pig spleen tissue, U-937 cells, Raji cells, HEK-293 cells, Jurkat cells

IHC: human tonsillitis tissue, human liver cancer tissue, human stomach cancer tissue

IF/ICC: Raji cells,

FC: Raji cells,

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 (HLA-A, B and C) and class II (HLA-D). This class I molecules are polymorphic membrane glycoproteins composed of a heavy (alpha) chain (44 kDa) which is encoded by a HLA class I gene (HLA-A, B or C), and β2-microglobulin light (beta) chain (12 kDa). They are involved in the presentation of foreign antigens to the immune system. (PMID: 667938; 3375250)

Notable Publications

Author	Pubmed ID	Journal	Application
Fengwen Zhang	36136978	Proc Natl Acad Sci U S A	WB,IP
Fengwen Zhang	35665005	bioRxiv	WB
Melania Scarpa	31646078	Oncoimmunology	WB

Storage

Storage:

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

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

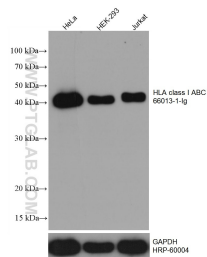
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

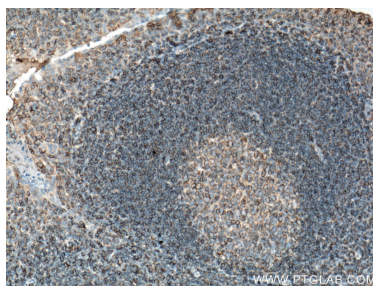
E: proteintech@ptglab.com
W: ptglab.com

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

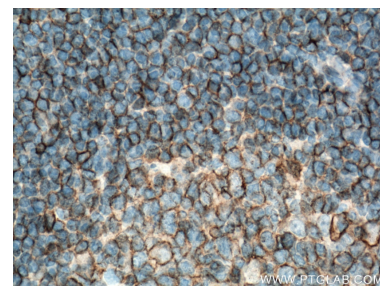
Selected Validation Data



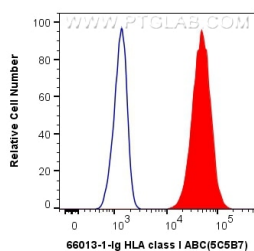
Various lysates were subjected to SDS PAGE followed by western blot with 66013-1-Ig (HLA class I ABC antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



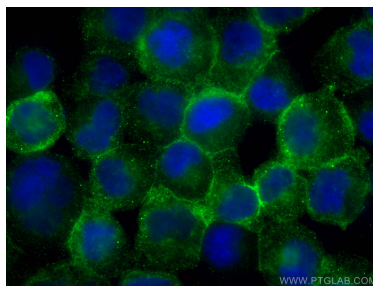
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 66013-1-Ig (HLA class I ABC antibody) at dilution of 1:10000 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 66013-1-Ig (HLA class I ABC antibody) at dilution of 1:10000 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10⁶ Raji cells were surface stained with 0.4 ug Anti-Human HLA class I ABC (66013-1-Ig, Clone:5C5B7) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Mouse IgG2b Isotype Control (MPC-11) (65128-1-Ig, Clone: MPC-11) (blue). Cells were not fixed.



Immunofluorescent analysis of (4% PFA) fixed Raji cells using HLA class I ABC antibody (66013-1-Ig, Clone: 5C5B7) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).