

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

### Concentration:

1000 ug/ml

### 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 10<sup>6</sup> 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  $\beta$  2-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

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

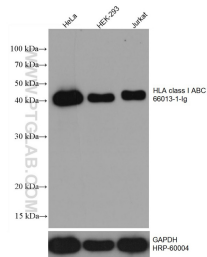
T: 4006900926

E: Proteintech-CN@ptglab.com

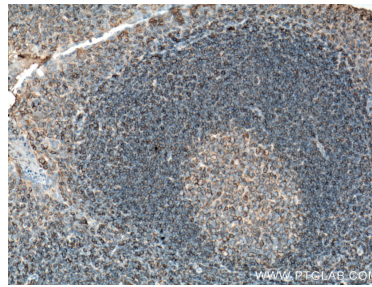
W: ptgcn.com

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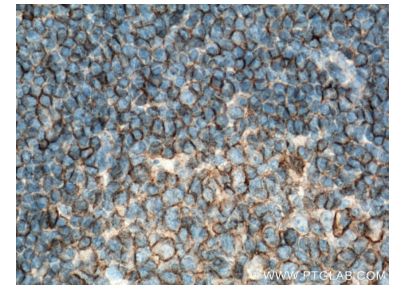
## Selected Validation Data



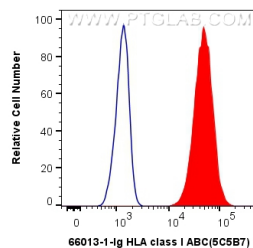
Various lysates were subjected to SDS PAGE followed by western blot with 66013-1-Ig (HLA class I ABC antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



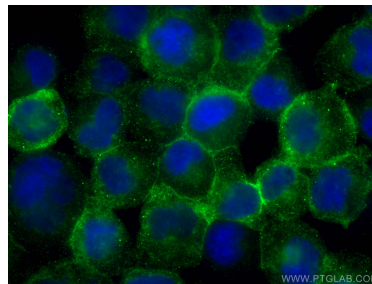
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 66013-1-Ig (HLA class I ABC antibody) at dilution of 1:10000 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



1X10<sup>6</sup> 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).