

For Research Use Only

# CD247 Polyclonal antibody

Catalog Number: 12837-2-AP **2 Publications**



## Basic Information

### Catalog Number:

12837-2-AP

### Size:

150ul, Concentration: 800 µg/ml by Nanodrop and 300 µg/ml by Bradford method using BSA as the standard;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG3889

### GenBank Accession Number:

BC025703

### GeneID (NCBI):

919

### Full Name:

CD247 molecule

### Calculated MW:

16 kDa

### Observed MW:

16 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:3000

IP 0.5-4.0 ug for IP and 1:500-1:1000 for WB

IHC 1:50-1:500

IF 1:50-1:500

## Applications

### Tested Applications:

FC, IF, IHC, IP, WB, ELISA

### Cited Applications:

WB

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse

**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 : Jurkat cells, human spleen tissue, mouse spleen tissue

IP : Jurkat cells,

IHC : human tonsillitis tissue,

IF : Jurkat cells,

## Background Information

CD247, also known as CD3Z (T-cell surface glycoprotein CD3 zeta chain), belongs to the CD3Z/FCER1G family. CD3 is a complex of proteins that directly associates with the T cell receptor (TCR). The TCR/CD3 complex of T-lymphocytes consists of either a TCR alpha/beta or TCR gamma/delta heterodimer coexpressed at the cell surface with the invariant subunits of CD3 labeled gamma, delta, epsilon, zeta, and eta. The TCR recognizes antigens bound to major histocompatibility complex (MHC) molecules. TCR-mediated peptide-MHC recognition is transmitted to the CD3 complex, leading to the intracellular signal transduction. CD3 is considered to be a pan-T cell marker for detection of normal and neoplastic T cells.

## Notable Publications

Author	Pubmed ID	Journal	Application
Zilong Guo	33854512	Front Immunol	WB
Julita Kaczmarek	24924593	PLoS One	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

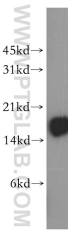
For technical support and original validation data for this product please contact:

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

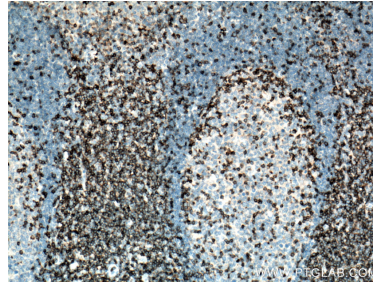
E: proteintech@ptglab.com  
W: ptglab.com

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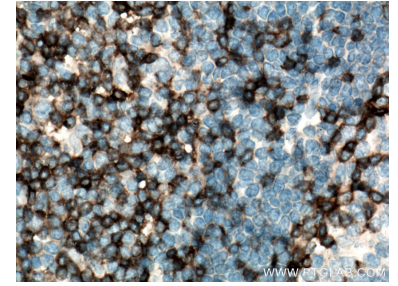
## Selected Validation Data



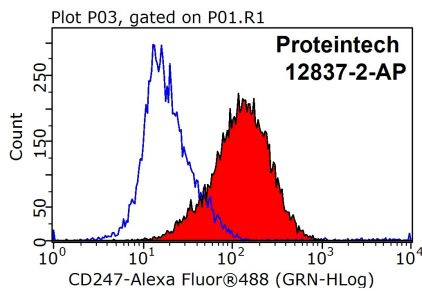
Jurkat cells were subjected to SDS PAGE followed by western blot with 12837-2-AP (CD247 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



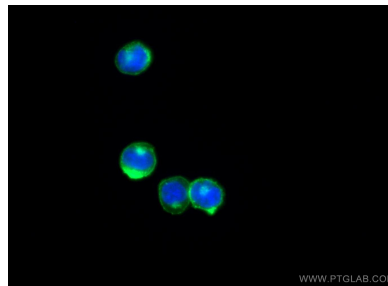
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 12837-2-AP (CD247 antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



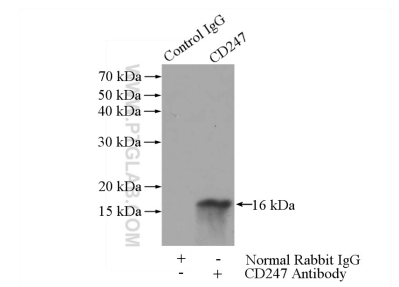
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 12837-2-AP (CD247 antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10<sup>6</sup> Jurkat cells were stained with 0.5ug CD247 antibody (12837-2-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.



Immunofluorescent analysis of (4% PFA) fixed Jurkat cells using 12837-2-AP (CD247 antibody), at dilution of 1:200 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



IP Result of anti-CD247 (IP:12837-2-AP, 3ug; Detection:12837-2-AP 1:700) with Jurkat cells lysate 1200ug.