

For Research Use Only

# CD45 Polyclonal antibody

Catalog Number: 20103-1-AP

111 Publications



## Basic Information

### Catalog Number:

20103-1-AP

### Size:

150ul, Concentration: 700 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG13712

### GenBank Accession Number:

BC014239

### GeneID (NCBI):

5788

### ENSEMBL Gene ID:

ENSG00000081237

### UNIPROT ID:

P08575

### Full Name:

protein tyrosine phosphatase, receptor type, C

### Calculated MW:

1304 aa, 147 kDa

### Observed MW:

180-220 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:5000-1:50000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:1000-1:6000

IF-P 1:50-1:500

IF-Fro 1:200-1:800

IF/ICC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IF-P, IF-Fro, IP, ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, pig, canine, bovine, sheep

**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, mouse spleen tissue, J774A.1 cells, mouse thymus tissue, rat thymus tissue

**IP**: mouse spleen tissue,

**IHC**: human colon tissue, human liver cancer tissue, mouse lung tissue, human tonsillitis tissue, human appendicitis tissue

**IF-P**: human tonsillitis tissue,

**IF-Fro**: mouse spleen tissue,

**IF/ICC**: Jurkat cells,

## Background Information

CD45, also known as leukocyte common antigen (LCA), B220, and T200, is a 180-240 kD single-chain type I membrane glycoprotein. It is a tyrosine phosphatase expressed on the plasma membrane of all hematopoietic cells, except erythrocytes and platelets. CD45 is a signaling molecule that regulates a variety of cellular processes including cell growth, differentiation, cell cycle, and oncogenic transformation. CD45 is one of the best negative selection markers for characterizing and/or isolating human mesenchymal stem cells from bone marrow and other sources. Along with the positive selection markers (such as CD29, CD44, CD90, CD105 and CD166), negative selection markers (such as CD34 and CD45) are used for MSC identification.

## Notable Publications

Author	Pubmed ID	Journal	Application
Qingrong Zhang	34655915	Colloids Surf B Biointerfaces	IHC
Xiaoliang Hua	34659199	Front Immunol	IHC
Xiuyue Song	36171979	J Tissue Eng	IF

## 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

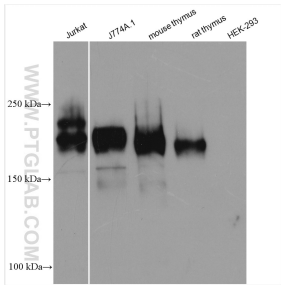
For technical support and original validation data for this product please contact:

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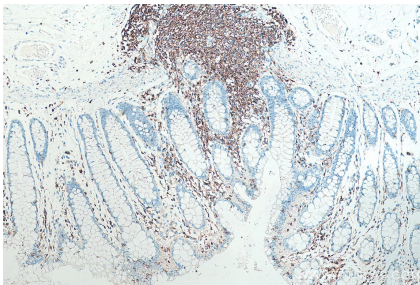
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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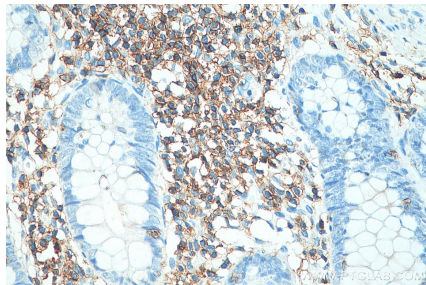
Selected Validation Data



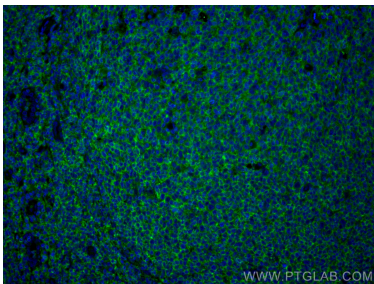
Various lysates were subjected to SDS PAGE followed by western blot with 20103-1-AP (CD45 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



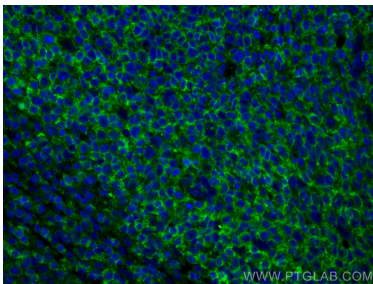
Immunohistochemical analysis of paraffin-embedded human colon tissue slide using 20103-1-AP (CD45 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



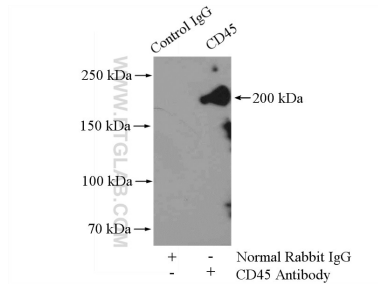
Immunohistochemical analysis of paraffin-embedded human colon tissue slide using 20103-1-AP (CD45 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



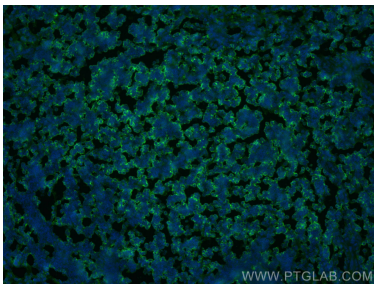
Immunofluorescent analysis of (4% PFA) fixed human tonsillitis tissue using CD45 antibody (20103-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



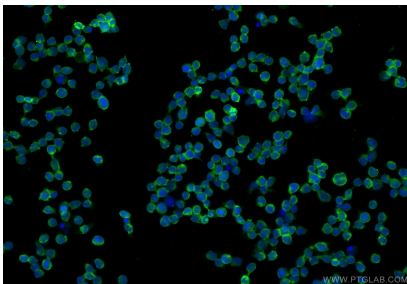
Immunofluorescent analysis of (4% PFA) fixed human tonsillitis tissue using CD45 antibody (20103-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



IP result of anti-CD45 (IP:20103-1-AP, 4ug; Detection:20103-1-AP 1:300) with mouse spleen tissue lysate 4800ug.



Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded mouse spleen tissue using CD45 antibody (20103-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Immunofluorescent analysis of (4% PFA) fixed Jurkat cells using CD45 antibody (20103-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).