

## CD45 Monoclonal antibody

Catalog Number: 60287-1-Ig **62 Publications**

## Basic Information

|  |   |  |
|--|---|--|
| <b>Catalog Number:</b><br>60287-1-Ig                           | <b>GenBank Accession Number:</b><br>BC014239                        | <b>Purification Method:</b><br>Protein A purification  |
| <b>Size:</b><br>150ul , Concentration: 2000 ug/ml by Nanodrop; | <b>GeneID (NCBI):</b><br>5788                                       | <b>CloneNo.:</b><br>4E9B2  |
| <b>Source:</b><br>Mouse  | <b>ENSEMBL Gene ID:</b><br>ENSG00000081237                          | <b>Recommended Dilutions:</b><br>WB: 1:1000-1:4000<br>IHC: 1:4000-1:16000<br>IF-P: 1:500-1:2000<br>IF-Fro: 1:400-1:1600<br>IF/ICC: 1:200-1:800 |
| <b>Isotype:</b><br>IgG2a                                       | <b>UNIPROT ID:</b><br>P08575  |  |
| <b>Immunogen Catalog Number:</b><br>AG13712                    | <b>Full Name:</b><br>protein tyrosine phosphatase, receptor type, C |  |
|  | <b>Calculated MW:</b><br>1304 aa, 147 kDa                           |  |
|  | <b>Observed MW:</b><br>220 kDa                                      |  |

## Applications

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|--|--|
| <b>Tested Applications:</b><br>WB, IHC, IF/ICC, IF-P, IF-Fro, ELISA  | <b>Positive Controls:</b><br>WB : pig spleen tissue, Raji cells  |
| <b>Cited Applications:</b><br>WB, IHC, IF  | <b>IHC :</b> human appendicitis tissue, human colon tissue, human liver cancer tissue, human lymphoma tissue, human tonsillitis tissue, mouse spleen tissue, rat colon tissue, rat thymus tissue |
| <b>Species Specificity:</b><br>human, mouse, rat, pig  | <b>IF-P :</b> mouse colon tissue, mouse spleen tissue, human tonsillitis tissue  |
| <b>Cited Species:</b><br>human, mouse, rat, pig  | <b>IF-Fro :</b> mouse colon tissue,  |
| <b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b> | <b>IF/ICC :</b> 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 |
|---------------|-----------|---------------------|-------------|
| Zhongwei Xin  | 36115836  | Nat Commun          | IF          |
| Guang-Nan Jin | 36067653  | Int Immunopharmacol | IF          |
| Beibei Zhang  | 34674752  | Stem Cell Res Ther  | IHC         |

## Storage

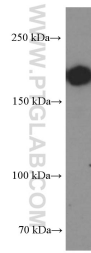
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
 Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

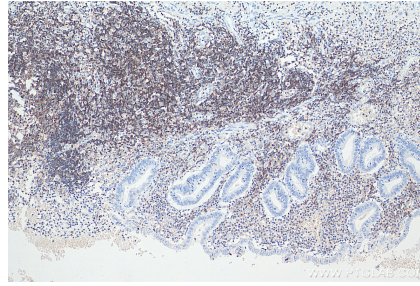
For technical support and original validation data for this product please contact:  
 T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
 E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
 W: [ptglab.com](http://ptglab.com)

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

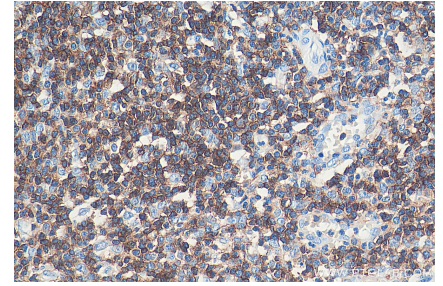
## Selected Validation Data



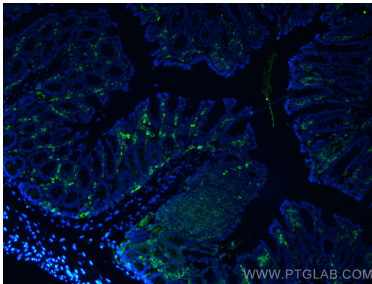
pig spleen tissue were subjected to SDS PAGE followed by western blot with 60287-1-Ig (CD45 Antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



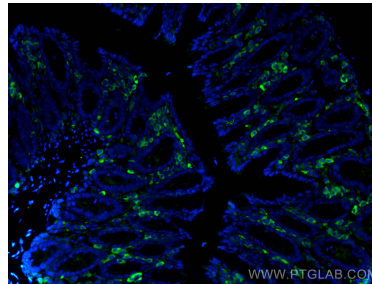
Immunohistochemical analysis of paraffin-embedded human appendicitis tissue slide using 60287-1-Ig (CD45 antibody) at dilution of 1:8000 (under 0x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



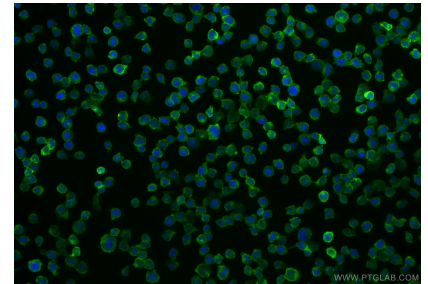
Immunohistochemical analysis of paraffin-embedded human appendicitis tissue slide using 60287-1-Ig (CD45 antibody) at dilution of 1:8000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



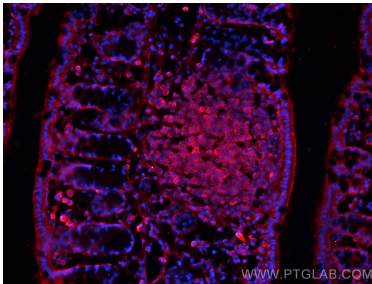
Immunofluorescent analysis of (4% PFA) fixed mouse colon tissue using CD45 antibody (60287-1-Ig, Clone: 4E9B2 ) at dilution of 1:1000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed mouse colon tissue using CD45 antibody (60287-1-Ig, Clone: 4E9B2 ) at dilution of 1:1000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed Jurkat cells using CD45 antibody (60287-1-Ig, Clone: 4E9B2 ) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1).



Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded mouse colon tissue using 60287-1-Ig (CD45 antibody) at dilution of 1:800 and CoraLite®594-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).