

CD45 Polyclonal antibody

Catalog Number: 20103-1-AP **83 Publications**

Basic Information

Catalog Number: 20103-1-AP	GenBank Accession Number: BC014239	Purification Method: Antigen affinity purification
Size: 450 µg/ml	GeneID (NCBI): 5788	Recommended Dilutions: WB 1:5000-1:50000 IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate IHC 1:1000-1:6000 IF 1:50-1:500
Source: Rabbit	ENSEMBL Gene ID: ENSG00000081237	
Isotype: IgG	UNIPROT ID: P08575	
Immunogen Catalog Number: AG13712	Full Name: protein tyrosine phosphatase, receptor type, C	
	Calculated MW: 1304 aa, 147 kDa	
	Observed MW: 180-220 kDa	

Applications

Tested Applications:
FC, IF-P, IHC, IP, WB, ELISA

Cited Applications:
WB, IHC, IF, FC

Species Specificity:
human, mouse, rat

Cited Species:
human, chicken, rat, mouse, Bovine

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: human tonsillitis tissue,

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.

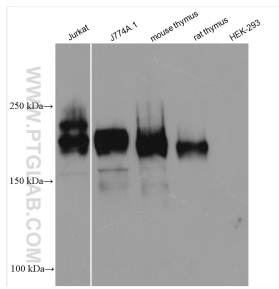
Notable Publications

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, FC

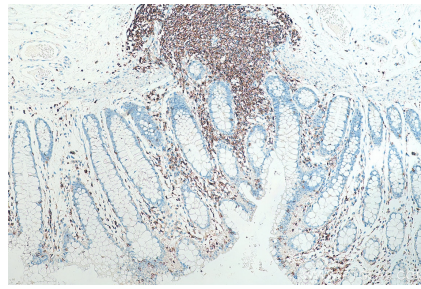
Storage

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

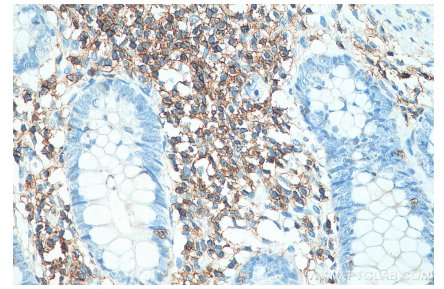
Selected Validation Data



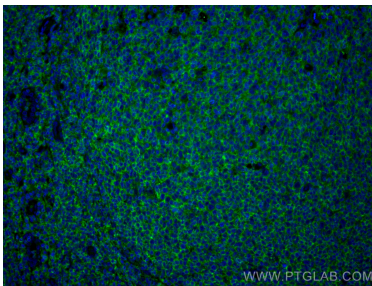
Various lysates were subjected to SDS PAGE followed by western blot with 20103-1-AP (CD45 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



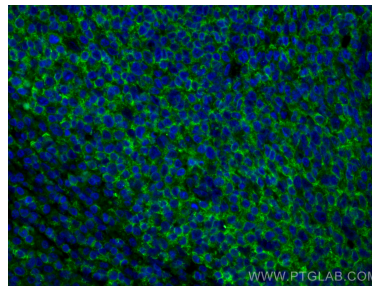
Immunohistochemical analysis of paraffin-embedded human colon tissue slide using 20103-1-AP (CD45 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



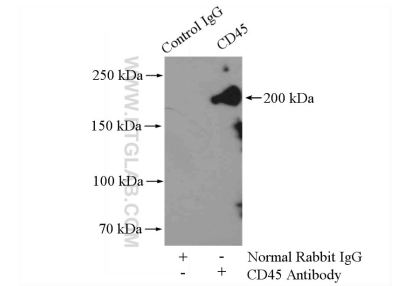
Immunohistochemical analysis of paraffin-embedded human colon tissue slide using 20103-1-AP (CD45 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



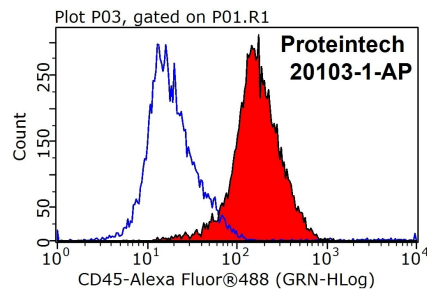
Immunofluorescent analysis of (4% PFA) fixed human tonsillitis tissue using CD45 antibody (20103-1-AP) at dilution of 1:200 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



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.



1×10^6 Jurkat cells were stained with 0.5ug CD45 antibody (20103-1-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.