For Research Use Only

CD45 Monoclonal antibody

Catalog Number:60287-1-Ig 46 Publications

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Basic Information

Catalog Number:
60287-1-Ig

Size:
2000 μg/ml

Source:
Mouse

Isotype:
IgG2a

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:
220 kDa

Purification Method:
Protein A purification

CloneNo.:
4E9B2

Recommended Dilutions:
WB 1:1000-1:4000
IHC 1:4000-1:16000
IF-P 1:500-1:2000

Applications

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

Cited Applications:
WB, IHC, IF

Species Specificity:
human, mouse, rat, pig

Cited Species:
human, mouse, rat, 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 : pig spleen tissue, Raji cells

IHC : human appendicitis tissue, human liver cancer tissue, human colon tissue, rat thymus tissue, human tonsillitis tissue, mouse spleen tissue, rat colon tissue

IF-P : mouse colon tissue, mouse spleen tissue, 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

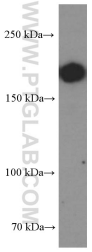
Author	Pubmed ID	Journal	Application
Zhongwei Xin	36115836	Nat Commun	IF
Guang-Nan Jin	36067653	Int Immunopharmacol	IF
Beibei Zhang	34674752	Stem Cell Res Ther	IHC

Storage

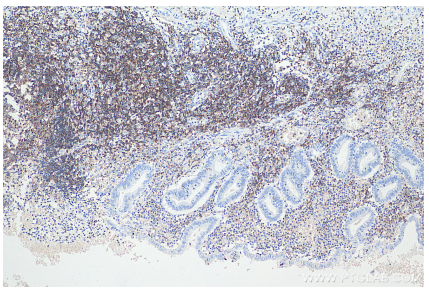
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

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

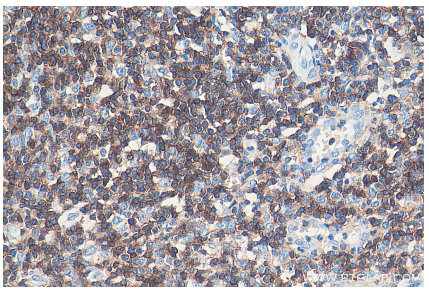
Selected Validation Data



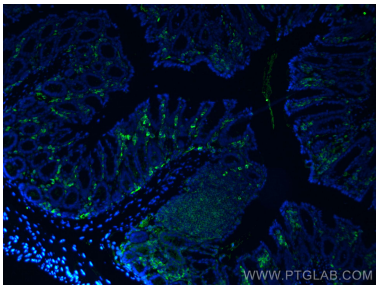
pig spleen tissue were subjected to SDS PAGE followed by western blot with 60287-1-Ig (CD45 Antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



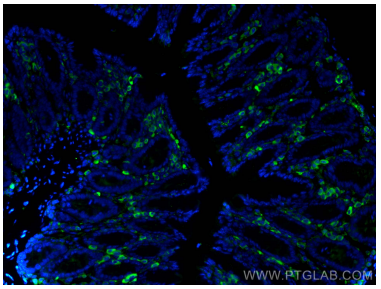
Immunohistochemical analysis of paraffin-embedded human appendicitis tissue slide using 60287-1-Ig (CD45 antibody) at dilution of 1:8000 (under 0x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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 Goat Anti-Mouse IgG(H+L).



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