For Research Use Only

CD45 Recombinant antibody

Catalog Number:80297-1-RR 1 Publications



Basic Information

Catalog Number: GenBank Accession Number:

80297-1-RR GeneID (NCBI): Size:

100ul, Concentration: 250 ug/ml by 5788

Nanodrop; **ENSEMBL Gene ID:** Source ENSG00000081237 Rabbit **UNIPROT ID:** P08575 Isotype IgG **Full Name:**

Immunogen Catalog Number: protein tyrosine phosphatase,

AG13712 receptor type, C

> Calculated MW: 1304 aa, 147 kDa Observed MW: 220-240 kDa

Purification Method:

Protein A purification

CloneNo.: 6019

Recommended Dilutions:

WB 1:20000-1:100000 IHC 1:4000-1:16000 IF-P 1:250-1:1000 IF-Fro 1:125-1:500 IF/ICC 1:500-1:2000

Applications

Tested Applications:

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

Cited Applications:

Species Specificity: human, mouse Cited Species:

human

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be operformed with citrate buffer pH 6.0

Positive Controls:

WB: Daudi cells, Raji cells, Ramos cells

IHC: mouse colon tissue, human appendicitis tissue,

human tonsillitis tissue IF-P: mouse spleen tissue,

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

Jurkat cells

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
Siying Li	36463319	Commun Biol	IF

Storage

Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1%BSA

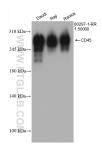
For technical support and original validation data for this product please contact:

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

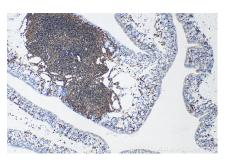
E: proteintech@ptglab.com W: ptglab.com

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

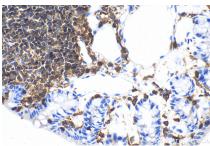
Selected Validation Data



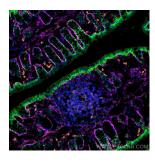
Various lysates were subjected to SDS PAGE followed by western blot with 80297-1-RR (CD45 antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours.



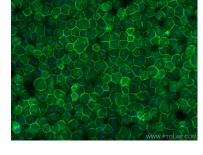
Immunohistochemical analysis of paraffinembedded mouse colon tissue slide using 80297-1-RR (CD45 antibody) at dilution of 1:8000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



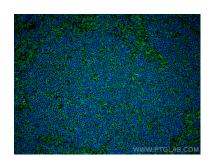
Immunohistochemical analysis of paraffinembedded mouse colon tissue slide using 80297-1-RR (CD45 antibody) at dilution of 1:8000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



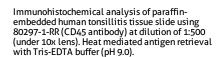
Immunofluorescence of mouse colon: Frozen OCT-embedded mouse colon sections were stained with anti-E-cadherin antibody (20874-1-AP) labeled with CoraLite488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2, green) in the frist step,anti-CD45 antibody (80297-1-RR) labeled with FlexAble CoraLite Plus 555 Kit (KFA002, orange) in the second step,anti-Collagen Type III antibody (22734-1-AP) labeled with FlexAble CoraLite647 Kit

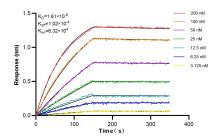


Immunofluorescent analysis of (4% PFA) fixed Jurkat cells using CD45 antibody (80297-1-RR, Clone: 6019) at dilution of 1:1000 and CoraLite® 488-Conjugated Affini Pure Goat Anti-Rabbit IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed mouse spleen tissue using CD45 antibody (80297-1-RR, Clone: 6019) at dilution of 1:500 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).





Biolayer interferometry (BLI) kinetic assays of 80297-1-RR against Human CD45 were performed. The affinity constant is 1.61 nM.