

For Research Use Only

# CD45 Recombinant antibody, PBS Only

Catalog Number: 80297-1-PBS



## Basic Information

<b>Catalog Number:</b> 80297-1-PBS	<b>GenBank Accession Number:</b> BC014239	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug , Concentration: 1mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 5788	<b>CloneNo.:</b> 6019
<b>Source:</b> Rabbit	<b>ENSEMBL Gene ID:</b> ENSG00000081237	
<b>Isotype:</b> IgG	<b>UNIPROT ID:</b> P08575	
<b>Immunogen Catalog Number:</b> AG13712	<b>Full Name:</b> protein tyrosine phosphatase, receptor type, C	
	<b>Calculated MW:</b> 1304 aa, 147 kDa	
	<b>Observed MW:</b> 220-240 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, IF-P, IF-Fro, ELISA

**Species Specificity:**  
human, mouse

## 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.

## Storage

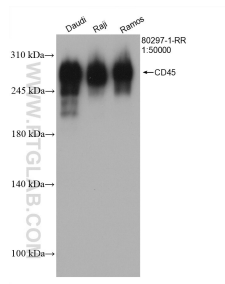
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

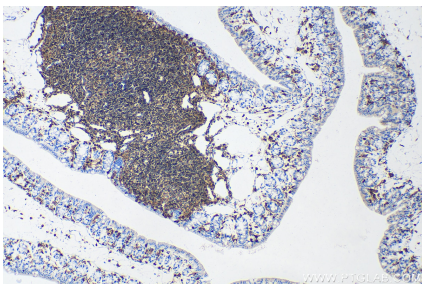
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

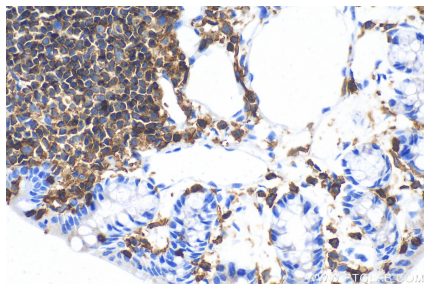
Selected Validation Data



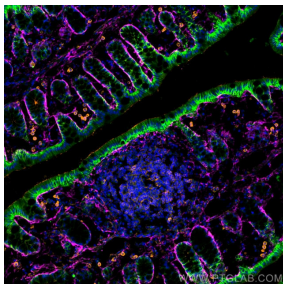
Various lysates were subjected to SDS PAGE followed by western blot with 80297-1-RR (CD45 antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 80297-1-PBS in a different storage buffer formulation.



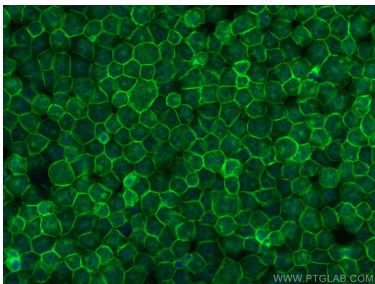
Immunohistochemical analysis of paraffin-embedded mouse colon tissue slide using 80297-1-RR (CD45 antibody) at dilution of 1:8000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 80297-1-PBS in a different storage buffer formulation.



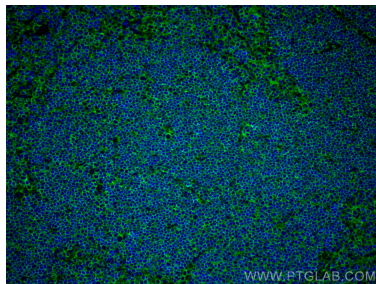
Immunohistochemical analysis of paraffin-embedded mouse colon tissue slide using 80297-1-RR (CD45 antibody) at dilution of 1:8000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 80297-1-PBS in a different storage buffer formulation.



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 first 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

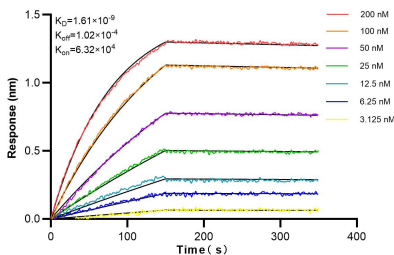


Immunofluorescent analysis of (4% PFA) fixed Jurkat cells using CD45 antibody (80297-1-RR, Clone: 6019 ) at dilution of 1:1000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). This data was developed using the same antibody clone with 80297-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 80297-1-PBS in a different storage buffer formulation.

Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 80297-1-RR (CD45 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 80297-1-PBS in a different storage buffer formulation.



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