

For Research Use Only

# CD31 Polyclonal antibody

Catalog Number: 28083-1-AP 102 Publications



## Basic Information

<b>Catalog Number:</b> 28083-1-AP	<b>GenBank Accession Number:</b> NM_001032378	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 700 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 18613	<b>Recommended Dilutions:</b> WB: 1:1000-1:8000
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q08481	<b>IHC:</b> 1:4000-1:16000
<b>Isotype:</b> IgG	<b>Full Name:</b> platelet/endothelial cell adhesion molecule 1	<b>IF-P:</b> 1:200-1:800
<b>Immunogen Catalog Number:</b> AG27828	<b>Calculated MW:</b> 81 kDa	<b>IF-Fro:</b> 1:200-1:800
	<b>Observed MW:</b> 110-130 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF-P, IF-Fro, ELISA	<b>Positive Controls:</b> WB : bEnd.3 cells, mouse liver tissue, mouse spleen tissue
<b>Cited Applications:</b> WB, IHC, IF	<b>IHC :</b> mouse liver tissue, mouse brain tissue, mouse kidney tissue, mouse spleen tissue
<b>Species Specificity:</b> mouse	<b>IF-P :</b> mouse brain tissue, mouse kidney tissue
<b>Cited Species:</b> human, mouse	<b>IF-Fro :</b> mouse brain 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>	

## Background Information

Platelet endothelial cell adhesion molecule-1 (PECAM-1, CD31) is a member of the immunoglobulin gene superfamily of cell adhesion molecules. CD31 is a transmembrane glycoprotein that is highly expressed on the surface of the endothelium, making up a large portion of its intracellular junctions. PECAM-1 is also present on the surface of hematopoietic cells and immune cells including platelets, monocytes, neutrophils, natural killer cells, megakaryocytes and some types of T-cell (PMID: 9011572). As well as its role in cell-cell adhesion, PECAM-1 functions as a signaling receptor, and is involved in important physiological events such as nitric oxide production, regulation of T-cell immunity and tolerance, leukocyte transendothelial migration and inflammation and angiogenesis (PMID: 21183735; 20978210; 17872453; 20634489).

## Notable Publications

Author	Pubmed ID	Journal	Application
Wei Wei	36115458	J Biol Chem	IF
Zhigang Zhang	34721375	Front Immunol	IF
Ping Liu	34900667	Front Oncol	IF

## Storage

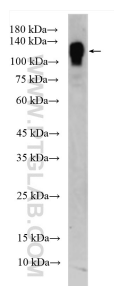
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
Aliquoting is unnecessary for -20°C storage

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

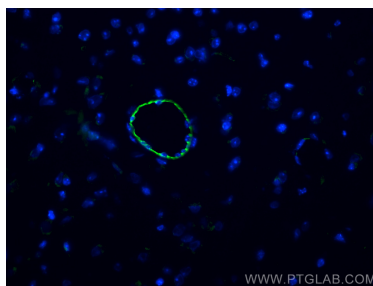
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

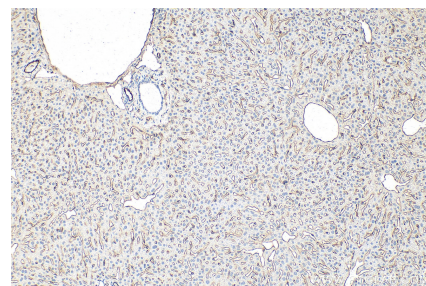
## Selected Validation Data



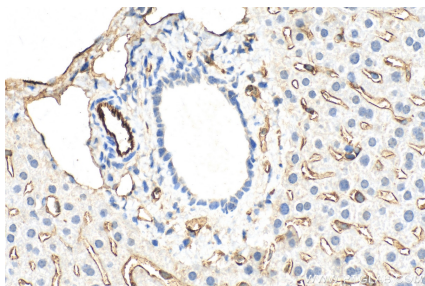
bEnd.3 cells were subjected to SDS PAGE followed by western blot with 28083-1-AP (CD31 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



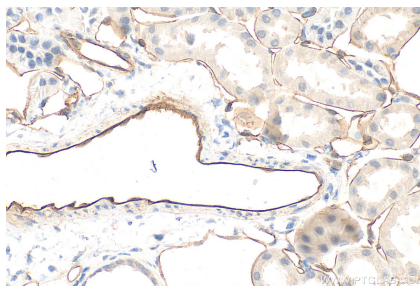
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse brain tissue using CD31 antibody (28083-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



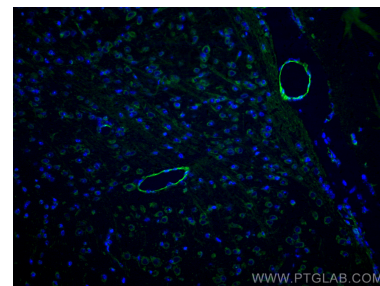
Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 28083-1-AP (CD31 antibody) at dilution of 1:8000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



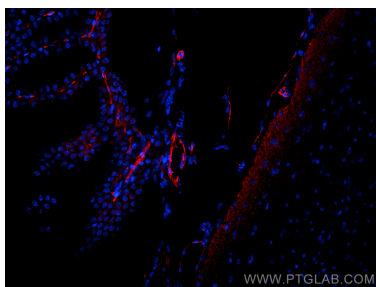
Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 28083-1-AP (CD31 antibody) at dilution of 1:8000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



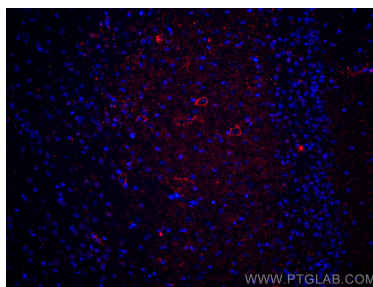
Immunohistochemical analysis of paraffin-embedded mouse kidney tissue slide using 28083-1-AP (CD31 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse brain tissue using CD31 antibody (28083-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse brain tissue using CD31 antibody (28083-1-AP) at dilution of 1:400 and CoraLite®594-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-4). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded mouse brain tissue using CD31 antibody (28083-1-AP) at dilution of 1:400 and CoraLite®594-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-4).