

For Research Use Only

# CD31 Monoclonal antibody

Catalog Number: 66065-1-Ig **30 Publications**



## Basic Information

<b>Catalog Number:</b> 66065-1-Ig	<b>GenBank Accession Number:</b> BC022512	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 150ul , Concentration: 913 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 5175	<b>CloneNo.:</b> 2A1E2
<b>Source:</b> Mouse	<b>ENSEMBL Gene ID:</b> ENSG00000261371	<b>Recommended Dilutions:</b> WB: 1:2000-1:8000 IHC: 1:400-1:4000
<b>Isotype:</b> IgG2b	<b>UNIPROT ID:</b> P16284	
<b>Immunogen Catalog Number:</b> AG1787	<b>Full Name:</b> platelet/endothelial cell adhesion molecule	
	<b>Calculated MW:</b> 83 kDa	
	<b>Observed MW:</b> 120-130 kDa	

## Applications

<b>Tested Applications:</b> WB, IF, IHC, ELISA	<b>Positive Controls:</b>
<b>Cited Applications:</b> WB, IHC, IF	<b>WB :</b> Jurkat cells, THP-1 cells, human placenta tissue
<b>Species Specificity:</b> human	<b>IHC :</b> human liver cancer tissue, human tonsillitis tissue, human breast cancer tissue
<b>Cited Species:</b> human	
<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
Shiro Matsubara	31533865	J Immunother Cancer	IF
Alina Jankowska-Konsur	27630298	Anticancer Res	
Miranda R Sun	33117819	Front Cell Dev Biol	IF

## Storage

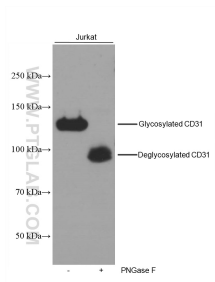
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
**Aliquoting is unnecessary for -20°C storage**

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

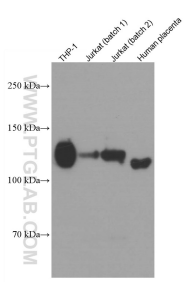
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

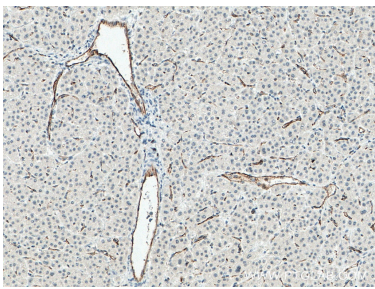
Selected Validation Data



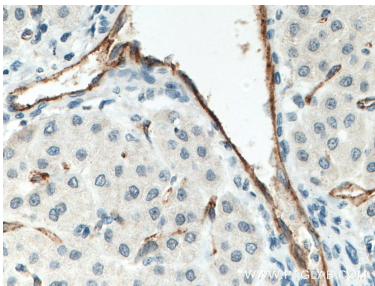
Untreated and PNGase F-treated lysates of Jurkat cells were subjected to SDS PAGE followed by western blot with 66065-1-Ig (CD31 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours. PNGase F was obtained from Atagenix (cat.NO. ata808).



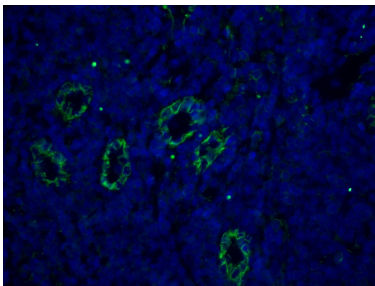
Various lysates were subjected to SDS PAGE followed by western blot with 66065-1-Ig (CD31 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



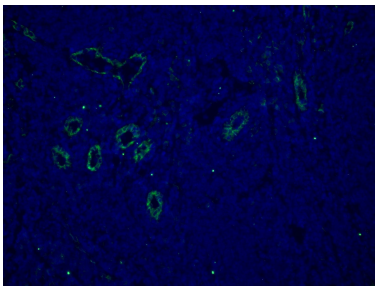
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66065-1-Ig (CD31 antibody) at dilution of 1:4000 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66065-1-Ig (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 human tonsillitis tissue using 66065-1-Ig(CD31 antibody) at dilution of 1:200 and Alexa Fluor 488-conjugated Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of (4% PFA ) fixed human tonsillitis tissue using 66065-1-Ig(CD31 antibody) at dilution of 1:200 and Alexa Fluor 488-conjugated Goat Anti-Mouse IgG(H+L).