

For Research Use Only

CD31 Monoclonal antibody

Catalog Number: 66065-2-Ig **37 Publications**



Basic Information

Catalog Number: 66065-2-Ig	GenBank Accession Number: BC022512	Purification Method: Protein A purification
Size: 150ul, Concentration: 1000 µg/ml by Nanodrop;	GeneID (NCBI): 5175	CloneNo.: 3F8E2
Source: Mouse	Full Name: platelet/endothelial cell adhesion molecule	Recommended Dilutions: WB 1:5000-1:50000 IHC 1:5000-1:20000 IF 1:50-1:500
Isotype: IgG1	Calculated MW: 83 kDa	
Immunogen Catalog Number: AG19730	Observed MW: 120-130 kDa	

Applications

Tested Applications:
FC, IF, IHC, WB, ELISA

Cited Applications:
FC, IF, IHC, WB

Species Specificity:
Human

Cited Species:
human

Positive Controls:

WB: human peripheral blood platelets, Jurkat cells, THP-1 cells

IHC: human liver cancer tissue, human breast cancer tissue, human tonsillitis tissue

IF: human placenta tissue, human liver cancer tissue

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

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
Qianlei Zhao	36129348	ACS Chem Neurosci	IF
Folnetti A Alvarez	36114323	Breast Cancer Res Treat	WB
Jianjun Ma	36368650	Biochim Biophys Acta Mol Basis Dis	IF

Storage

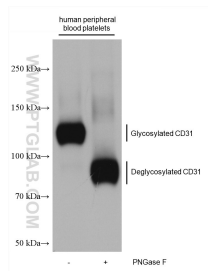
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

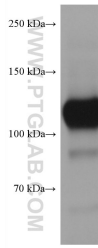
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

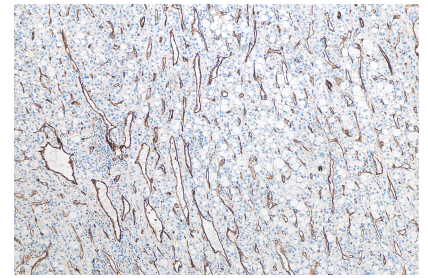
Selected Validation Data



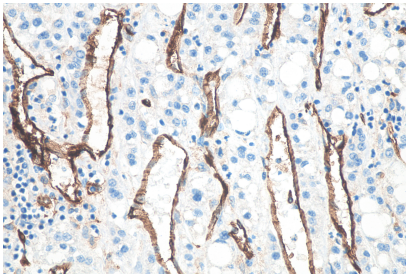
Untreated and PNGase F-treated lysates of human peripheral blood platelets were subjected to SDS PAGE followed by western blot with 66065-2-Ig (CD31 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. PNGase F was obtained from Atagenix (cat.NO. ata808).



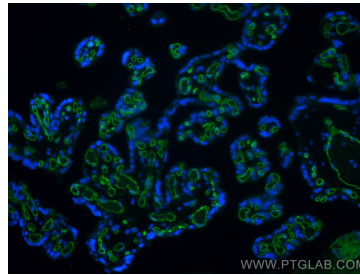
human peripheral blood platelets were subjected to SDS PAGE followed by western blot with 66065-2-Ig (CD31 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



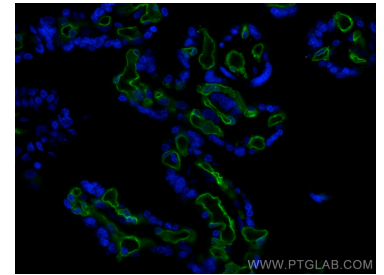
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66065-2-Ig (CD31 antibody) at dilution of 1:10000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



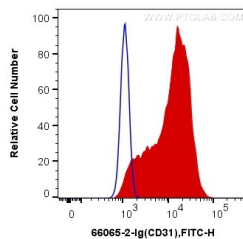
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66065-2-Ig (CD31 antibody) at dilution of 1:10000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



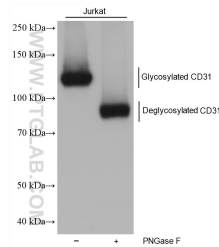
Immunofluorescent analysis of (4% PFA) fixed human placenta tissue using CD31 antibody (66065-2-Ig, Clone: 3F8E2) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed human placenta tissue using CD31 antibody (66065-2-Ig, Clone: 3F8E2) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



1X10⁶ THP-1 cells were surface stained with 0.4 ug Anti-Human CD31 (66065-2-Ig, Clone:3F8E2) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were not fixed.



Untreated and PNGase F-treated lysates of Jurkat cells were subjected to SDS PAGE followed by western blot with 66065-2-Ig (CD31 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.