

CD31 Monoclonal antibody

Catalog Number: 66065-1-Ig 28 Publications

Basic Information

Catalog Number: 66065-1-Ig	GenBank Accession Number: BC022512	Purification Method: Protein A purification
Size: 913 µg/ml	GeneID (NCBI): 5175	CloneNo.: 2A1E2
Source: Mouse	ENSEMBL Gene ID: ENSG00000261371	Recommended Dilutions: WB 1:2000-1:8000 IHC 1:400-1:4000
Isotype: IgG2b	UNIPROT ID: P16284	
Immunogen Catalog Number: AG1787	Full Name: platelet/endothelial cell adhesion molecule	
	Calculated MW: 83 kDa	
	Observed MW: 120-130 kDa	

Applications

Tested Applications: IF/ICC, IHC, WB, ELISA	Positive Controls:
Cited Applications: WB, IF, IHC	WB : Jurkat cells, THP-1 cells, human placenta tissue
Species Specificity: human	IHC : human liver cancer tissue, human tonsillitis tissue, human breast cancer tissue
Cited Species: human	
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).

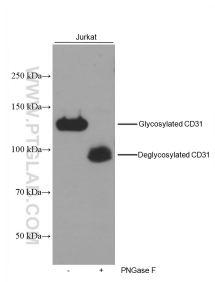
Notable Publications

Author	Pubmed ID	Journal	Application
Shiro Matsubara	31533865	J Immunother Cancer	IF
Alina Jankowska-Konsur	27630298	Anticancer Res	
Miranda R Sun	33117819	Front Cell Dev Biol	IF

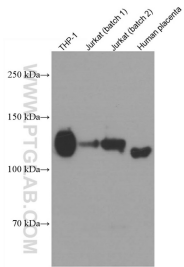
Storage

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

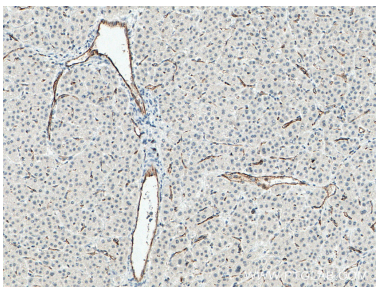
Selected Validation Data



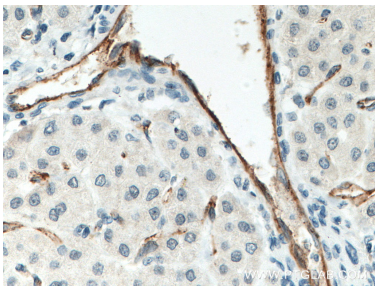
Untreated and PNGase F-treated lysates of Jurkat cells were subjected to SDS PAGE followed by western blot with 66065-1-Ig (CD31 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours. PNGase F was obtained from Atagenix (cat.NO. ata808).



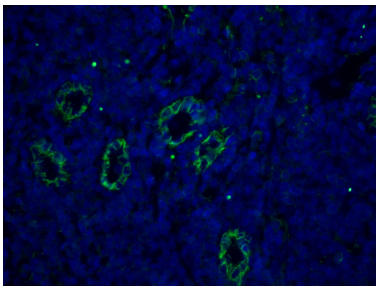
Various lysates were subjected to SDS PAGE followed by western blot with 66065-1-Ig (CD31 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



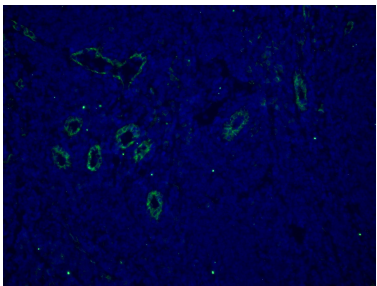
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66065-1-Ig (CD31 antibody) at dilution of 1:4000 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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 AffiniPure 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 AffiniPure Goat Anti-Mouse IgG(H+L).