For Research Use Only

CD31 Monoclonal antibody

Catalog Number:66065-2-lg 83 Publications



Basic Information

Catalog Number: 66065-2-lg

Concentration: 1000 ug/ml 5175

Source: Mouse UNIPROT ID: Isotype: lgG1 P16284

Immunogen Catalog Number:

AG19730

GenBank Accession Number:

BC022512 GeneID (NCBI):

ENSEMBL Gene ID: ENSG00000261371 Full Name:

platelet/endothelial cell adhesion

Calculated MW: 83 kDa Observed MW: 120-130 kDa

molecule

Applications

Tested Applications:

WB, IHC, IF/ICC, IF-P, ELISA

Cited Applications: WB, IHC, IF

Species Specificity:

human

Cited Species: human, rabbit

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

buffer pH 6.0

Purification Method:

Protein G purification

CloneNo.: 3F8E2

Recommended Dilutions:

WB: 1:5000-1:50000 IHC: 1:5000-1:20000 IF-P: 1:400-1:1600 IF/ICC: 1:1000-1:4000

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-P: human placenta tissue, human liver cancer tissue

IF/ICC: HUVEC cells,

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

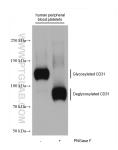
Storage

Store at -20°C. Stable for one year after shipment.

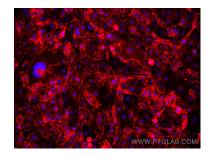
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

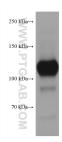
Selected Validation Data



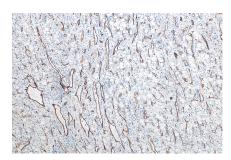
Untreated and PNGase F-treated lysates of human peripheral blood platelets were subjected to SDS PAGE followed by western blot with 66065-2-lg (CD31 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. PNGase F was obtained from Atagenix (cat.NO. ata808).



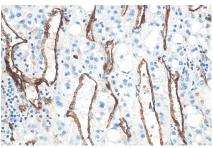
Immunofluorescent analysis of (4% PFA) fixed HUVEC cells using CD31 antibody (66065-2-1g, Clone: 3F8E2) at dilution of 1:1000 and Multi-Ab CoraLite® Plus 594-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (Cat.NO. RGAM004).



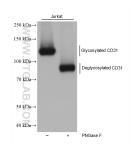
human peripheral blood platelets were subjected to SDS PAGE followed by western blot with 66065-2-lg (CD31 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



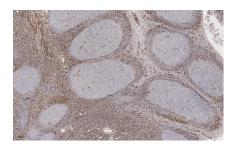
Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 66065-2-lg (CD31 antibody) at dilution of 1:10000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



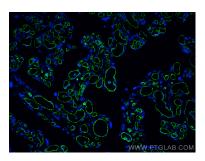
Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 66065-2-lg (CD31 antibody) at dilution of 1:10000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



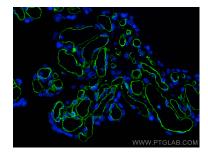
Untreated and PNGase F-treated lysates of Jurkat cells were subjected to SDS PAGE followed by western blot with 66065-2-1g (CD31 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



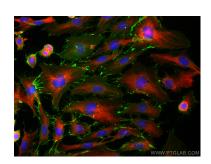
Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 66065-2-lg (CD31 antibody) at dilution of 1:10000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded human placenta tissue using CD31 antibody (66065-2-lg, Clone: 3F8E2) at dilution of 1:800 and Coralite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) (SA00013-1). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded human placenta tissue using CD31 antibody (66065-2-lg, Clone: 3F8E2) at dilution of 1:800 and Coralite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) (SA00013-1). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HUVEC cells using CD31 antibody (66065-2-1g, Clone: 3F8E2) at dilution of 1:2000 and MultirAb Coralite ® Plus 488-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (RGAM002), Beta Tubulin antibody (80713-1-RR, Clone: 2013, red).