For Research Use Only

CD31 Monoclonal antibody

Catalog Number:66065-1-lg 30 Publications



Purification Method:

CloneNo.:

2A1E2

Protein A purification

Recommended Dilutions:

WB: 1:2000-1:8000 IHC: 1:400-1:4000

Basic Information

Catalog Number: 66065-1-lg

Concentration: GeneID (NCBI): 913 µg/ml 5175

Source: ENSEMBL Gene ID:
Mouse ENSG0000261371
Isotype: UNIPROT ID:
IgG2b P16284
Immunogen Catalog Number: Full Name:

AG1787 platelet/endothelial cell adhesion

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

molecule

GenBank Accession Number:

BC022512

Applications

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

Species Specificity:

human

Cited Species:

numan

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

Positive Controls:

WB: Jurkat cells, THP-1 cells, human placenta tissue IHC: human liver cancer tissue, human tonsillitis tissue. human breast cancer tissue

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

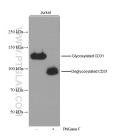
Store at -20°C. Stable for one year after shipment.

Storage Buffer

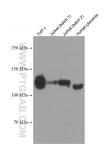
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



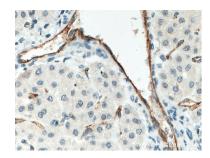
Untreated and PNGase F-treated lysates of Jurkat cells were subjected to SDS PAGE followed by western blot with 66065-1-Ig (CD31 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours. PNGase F was obtained from Atagenix (cat.NO. ata808).



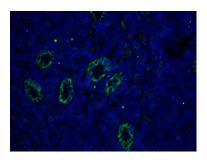
Various lysates were subjected to SDS PAGE followed by western blot with 66065-1-1g (CD31 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



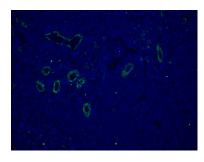
Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 66065-1-lg (CD31 antibody) at dilution of 1:4000 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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



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