

CD31 Polyclonal antibody

Catalog Number: 11265-1-AP

Featured Product

304 Publications

Basic Information

Catalog Number:

11265-1-AP

Size:

150ul, Concentration: 600 µg/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG1787

GenBank Accession Number:

BC022512

GeneID (NCBI):

5175

ENSEMBL Gene ID:

ENSG00000261371

UNIPROT ID:

P16284

Full Name:

platelet/endothelial cell adhesion molecule

Calculated MW:

83 kDa

Observed MW:

120-130 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:2000-1:10000

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC 1:2000-1:8000

IF 1:50-1:500

Applications

Tested Applications:

WB, IP, IF, FC, IHC, ELISA

Cited Applications:

WB, IP, IF, FC, IHC, Cell treatment

Species Specificity:

human

Cited Species:

human, goat, monkey, rabbit, pig, canine

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

IP : Jurkat cells,

IHC : human liver cancer tissue, human tonsillitis tissue, human placenta tissue, human renal cell carcinoma tissue, human hepatocirrhosis tissue, human kidney tissue, human gliomas tissue

IF : HUVEC cells, human tonsillitis tissue, human endometrial 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
Qingrong Zhang	34655915	Colloids Surf B Biointerfaces	IHC
Zhou Yang	32993738	J Exp Clin Cancer Res	IHC
Haoyu Guo	36201949	Biomaterials	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

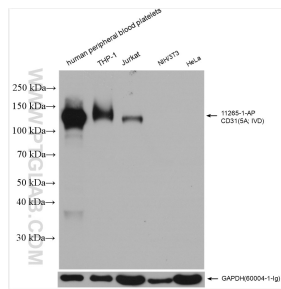
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

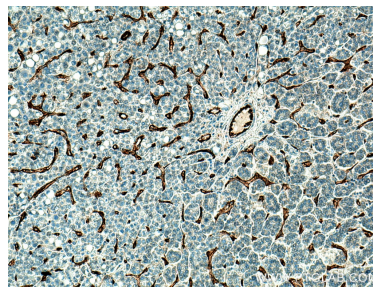
E: proteintech@ptglab.com
W: ptglab.com

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

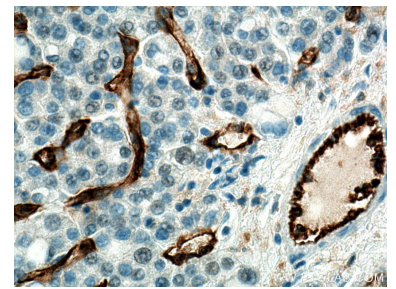
Selected Validation Data



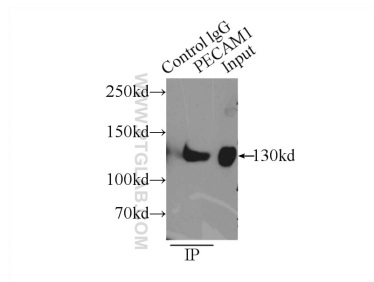
Various lysates were subjected to SDS PAGE followed by western blot with 11265-1-AP (CD31 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



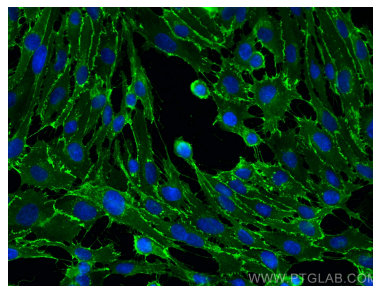
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 11265-1-AP (CD31 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



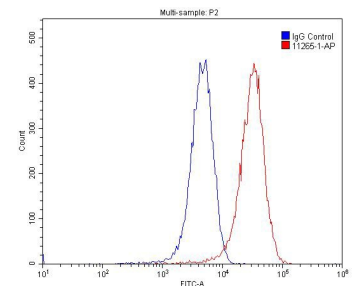
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 11265-1-AP (CD31 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-CD31 (IP: 11265-1-AP, 5ug; Detection: 11265-1-AP 1:300) with Jurkat cells lysate 4000ug.



Immunofluorescent analysis of (-20°C Methanol) fixed HUVEC cells using CD31 antibody (11265-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



1X10⁶ HUVEC cells were stained with 0.2ug CD31 antibody (11265-1-AP, red) and control antibody (blue). Fixed with 4% PFA blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1500.