

CD146/MCAM Polyclonal antibody

Catalog Number: 17564-1-AP

Featured Product

23 Publications

Basic Information

Catalog Number:

17564-1-AP

Size:

550 µg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG11762

GenBank Accession Number:

BC056418

GeneID (NCBI):

4162

UNIPROT ID:

P43121

Full Name:

melanoma cell adhesion molecule

Calculated MW:

646 aa, 72 kDa

Observed MW:

113-120 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 1:200-1:600

IF 1:50-1:500

Applications

Tested Applications:

FC, IF/ICC, IHC, IP, WB, ELISA

Cited Applications:

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

Species Specificity:

human, mouse, rat

Cited Species:

human, rat, mouse

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: HeLa cells, A375 cells, mouse lung tissue, HUVEC cells, HepG2 cells

IP: HeLa cells, HepG2 cells

IHC: human ovary tumor tissue, human brain tissue, human heart tissue, human kidney tissue, human lung tissue, human placenta tissue, human spleen tissue, human testis tissue

IF: HUVEC cells, HeLa cells

Background Information

CD146, also known as melanoma cell adhesion molecule (MCAM) or MUC18, originally identified as a biomarker of melanoma progression, is a transmembrane glycoprotein of 113-130 kDa, belonging to the immunoglobulin (Ig) superfamily (PMID: 8378324; 25993332). Structurally, it consists of five Ig domains, a transmembrane domain, and a cytoplasmic region. In normal adult tissue, CD146 is primarily expressed by vascular endothelium and smooth muscle. CD146 is a key cell adhesion protein in vascular endothelial cell activity and angiogenesis, and has been used as marker of circulating endothelium cells (CECs) (PMID: 19356677). In addition to the membrane-anchored form of CD146, a soluble form of CD146 (sCD146, 105 kDa) has also been found in human plasma and in the supernatant of cultured human endothelial cells (PMID: 9462829; 19229070; 16374253; 14597988).

Notable Publications

Author	Pubmed ID	Journal	Application
Peter Genovese	34551191	J Tissue Eng Regen Med	WB, IHC
Hao Zhang	36093059	iScience	WB, IHC, IF
Zuping Wu	36068594	Stem Cell Res Ther	FC

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

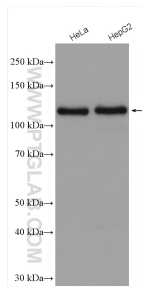
For technical support and original validation data for this product please contact:

T: 4006900926

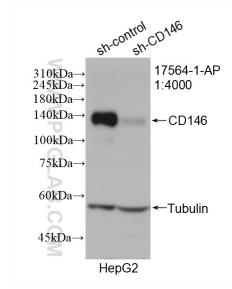
E: Proteintech-CN@ptglab.comW: ptgcn.com

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

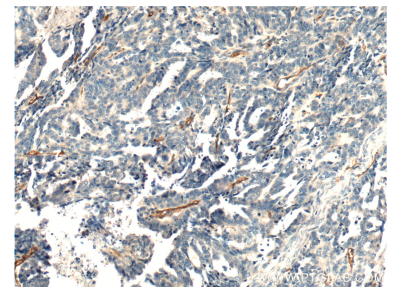
Selected Validation Data



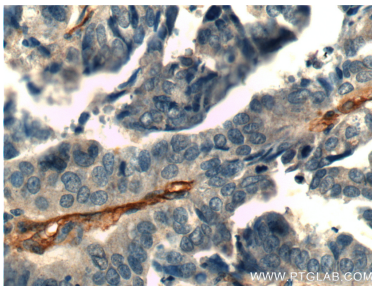
Various lysates were subjected to SDS PAGE followed by western blot with 17564-1-AP (CD146/MCAM antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



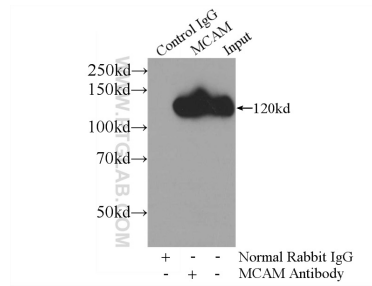
WB result of CD146/MCAM antibody (17564-1-AP; 1:4000; incubated at room temperature for 1.5 hours) with sh-Control and sh-CD146/MCAM transfected HepG2 cells.



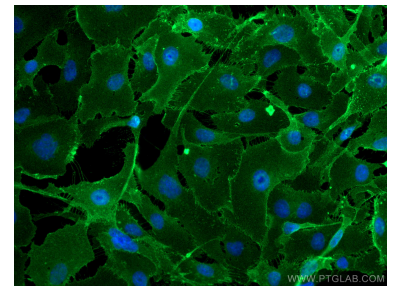
Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 17564-1-AP (CD146/MCAM antibody at dilution of 1:600 (under 10x lens).



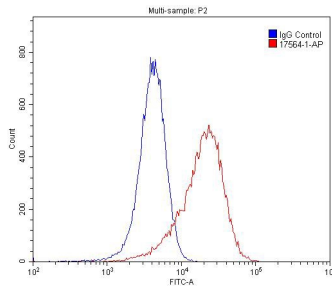
Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 17564-1-AP (CD146/MCAM antibody at dilution of 1:600 (under 40x lens).



IP result of anti-CD146/MCAM (IP:17564-1-AP, 4ug; Detection:17564-1-AP 1:1500) with HeLa cells lysate 4000ug.



Immunofluorescent analysis of (4% PFA) fixed HUVEC cells using CD146/MCAM antibody (17564-1-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 CD146/MCAM antibody (17564-1-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.