

For Research Use Only

# CD146/MCAM Polyclonal antibody

Catalog Number: 17564-1-AP

Featured Product

25 Publications



## Basic Information

### Catalog Number:

17564-1-AP

### Size:

150ul, Concentration: 550 ug/ml by Nanodrop;

### 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 ug for 1.0-3.0 mg of total protein lysate

IHC 1:200-1:600

IF-P 1:50-1:500

IF/ICC 1:50-1:500

## Applications

### Tested Applications:

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

### Cited Applications:

WB, IHC, IF, IP, Cell treatment

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, rabbit

**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-P:** mouse spleen tissue,

**IF/ICC:** 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

\*\*\* 20ul sizes contain 0.1% BSA

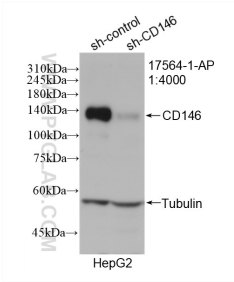
For technical support and original validation data for this product please contact:

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

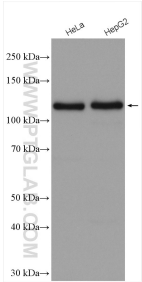
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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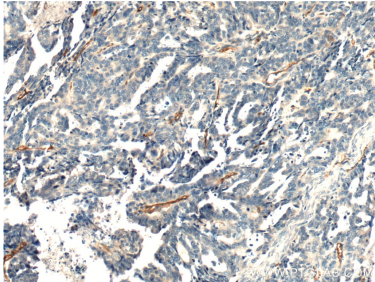
Selected Validation Data



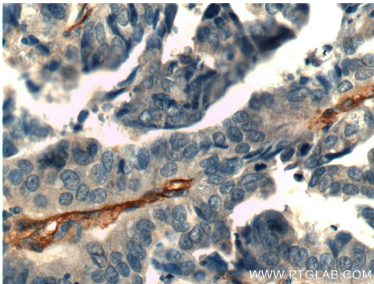
WB result of CD146/MCAM antibody (17564-1-AP; 1:4000; incubated at room temperature for 1.5 hours) with sh-Control and sh-CD146/MCAM transfected HepG2 cells.



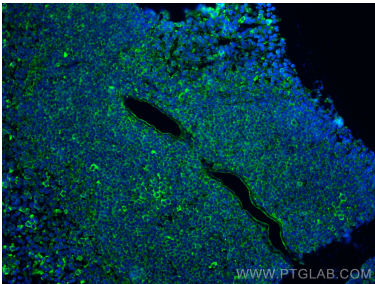
Various lysates were subjected to SDS PAGE followed by western blot with 17564-1-AP (CD146/MCAM antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



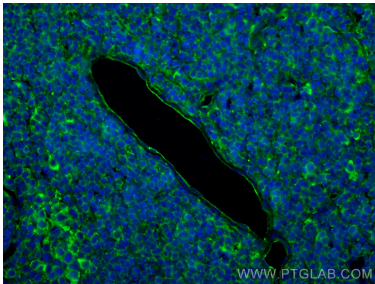
Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 17564-1-AP (CD146/MCAM antibody at dilution of 1:600 (under 10x lens).



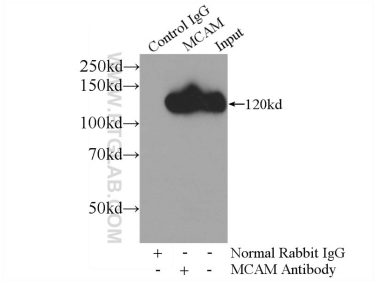
Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 17564-1-AP (CD146/MCAM antibody at dilution of 1:600 (under 40x lens).



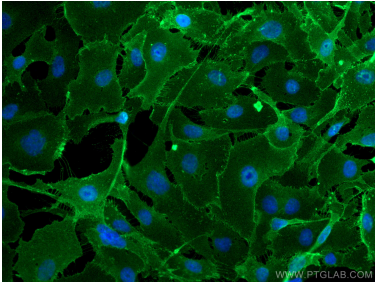
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse spleen tissue using CD146/MCAM antibody (17564-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse spleen tissue using CD146/MCAM antibody (17564-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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 Goat Anti-Rabbit IgG(H+L).