

For Research Use Only

# CD146/MCAM Polyclonal antibody

Catalog Number: 17564-1-AP

Featured Product

30 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: 1:20000-1:80000

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 cancer tissue,

**IF-P:** mouse spleen tissue,

**IF/ICC:** HUVEC 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	

## 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

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

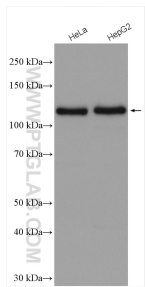
For technical support and original validation data for this product please contact:

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

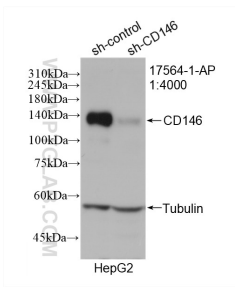
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

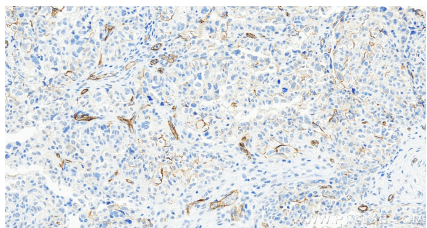
Selected Validation Data



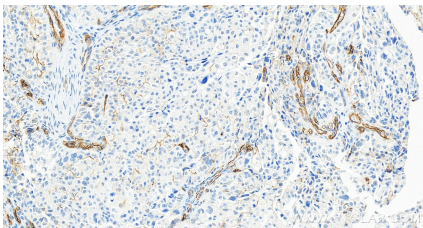
Various lysates were subjected to SDS PAGE followed by western blot with 17564-1-AP (CD146/MCAM antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



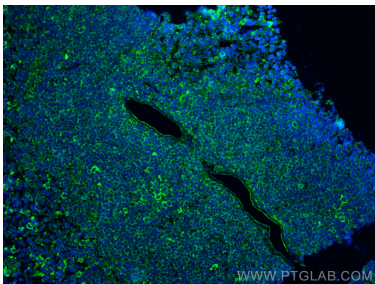
WB result of CD146/MCAM antibody (17564-1-AP; 1:4000; incubated at room temperature for 1.5 hours) with sh-Control and sh-CD146/MCAM transfected HepG2 cells.



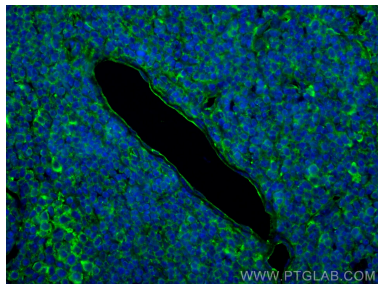
Immunohistochemical analysis of paraffin-embedded human ovary cancer tissue slide using 17564-1-AP (CD146/MCAM antibody) at dilution of 1:40000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



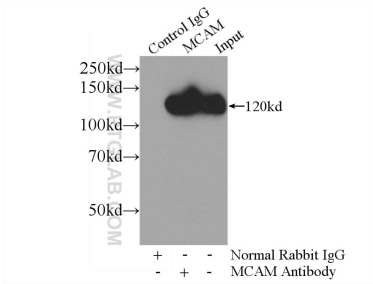
Immunohistochemical analysis of paraffin-embedded human ovary cancer tissue slide using 17564-1-AP (CD146/MCAM antibody) at dilution of 1:40000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



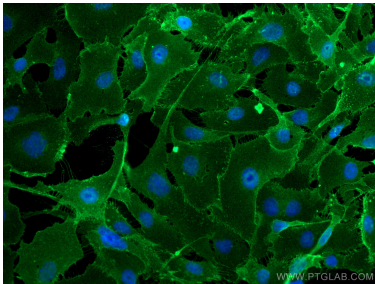
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse spleen tissue using CD146/MCAM antibody (17564-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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 AffiniPure 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 AffiniPure Goat Anti-Rabbit IgG(H+L).