

For Research Use Only

CD146/MCAM Polyclonal antibody

Catalog Number: 17564-1-AP

Featured Product

32 Publications



Basic Information

Catalog Number:

17564-1-AP

Concentration:

550 ug/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 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

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

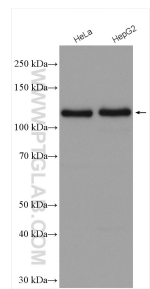
T: 4006900926

E: Proteintech-CN@ptglab.com

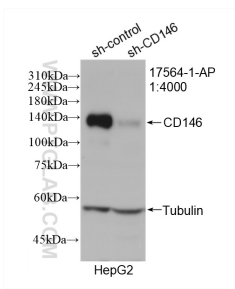
W: ptgcn.com

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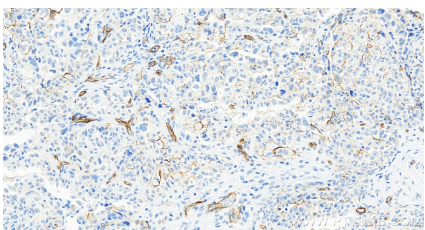
Selected Validation Data



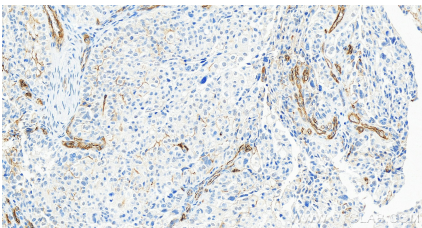
Various lysates were subjected to SDS PAGE followed by western blot with 17564-1-AP (CD146/MCAM antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



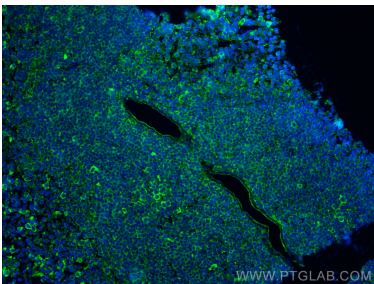
WB result of CD146/MCAM antibody (17564-1-AP; 1:4000; incubated at room temperature for 1.5 hours) with sh-Control and sh-CD146/MCAM transfected HepG2 cells.



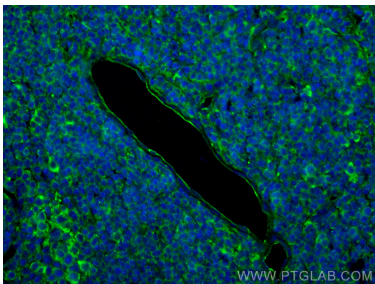
Immunohistochemical analysis of paraffin-embedded human ovary cancer tissue slide using 17564-1-AP (CD146/MCAM antibody) at dilution of 1:40000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



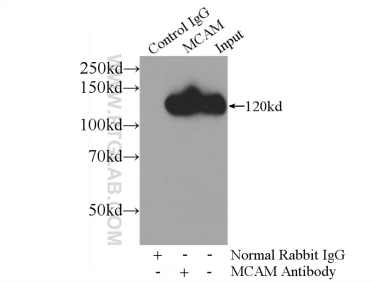
Immunohistochemical analysis of paraffin-embedded human ovary cancer tissue slide using 17564-1-AP (CD146/MCAM antibody) at dilution of 1:40000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



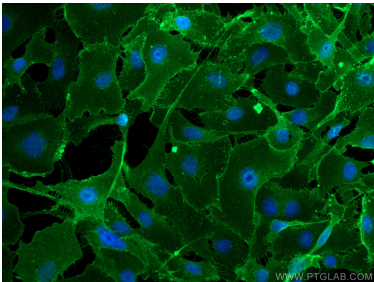
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse spleen tissue using CD146/MCAM antibody (17564-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).