

For Research Use Only

CD146/MCAM Monoclonal antibody

Catalog Number: 66153-1-Ig **3 Publications**



Basic Information

Catalog Number: 66153-1-Ig	GenBank Accession Number: BC056418	Purification Method: Protein G purification
Size: 150ul , Concentration: 1053 ug/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 4162	CloneNo.: 4D8A9
Source: Mouse	UNIPROT ID: P43121	Recommended Dilutions: WB 1:2000-1:20000 IHC 1:1000-1:4000 IF-P 1:1000-1:4000 IF/ICC 1:250-1:1000
Isotype: IgG1	Full Name: melanoma cell adhesion molecule	
Immunogen Catalog Number: AG11855	Calculated MW: 646 aa, 72 kDa	
	Observed MW: 120 kDa	

Applications

Tested Applications: WB, IHC, IF/ICC, IF-P, ELISA	Positive Controls: WB : HepG2 cells, HeLa cells, A375 cells, L02 cells, HUVEC cells, human placenta tissue IHC : human liver cancer tissue, human placenta tissue, human rectal cancer tissue IF-P : human liver cancer tissue, human placenta tissue IF/ICC : HUVEC cells,
Cited Applications: WB, IHC	
Species Specificity: human	
Cited Species: human	

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

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). This antibody detects a band at approximately 120 kDa that corresponds to the molecular weight of glycosylated CD146. Treatment of lysates of HepG2 cells and L02 cells with PNGase F, which removes oligosaccharides from N-linked glycoproteins, led to a down-shift of the detected band.

Notable Publications

Author	Pubmed ID	Journal	Application
Xun Xi	33865812	Exp Cell Res	FC
Han-Wen Ding	39397344	Ultrastruct Pathol	IHC
Yue Cheng	37315748	Cell Signal	WB

Storage

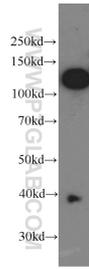
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

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

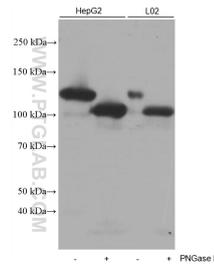
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

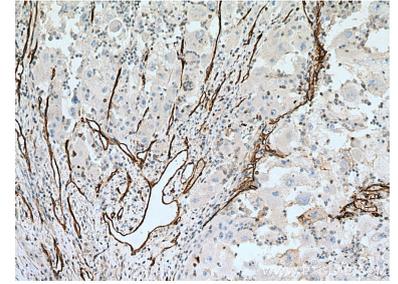
Selected Validation Data



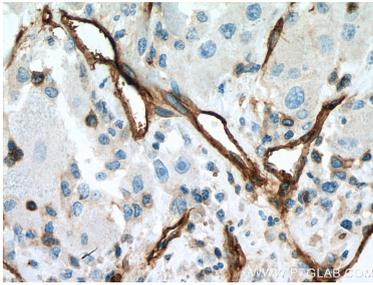
A375 cells were subjected to SDS PAGE followed by western blot with 66153-1-Ig (CD146/MCAM antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



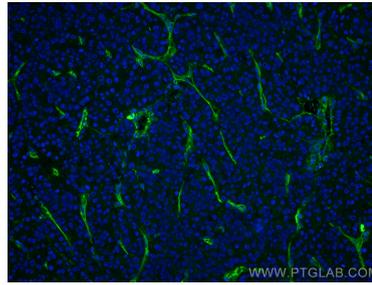
Untreated and PNGase F-treated lysates of HepG2 cells and L02 cells were subjected to SDS PAGE followed by western blot with 66153-1-Ig (CD146/MCAM antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. PNGase F was obtained from Atagenix (cat.NO. ata808).



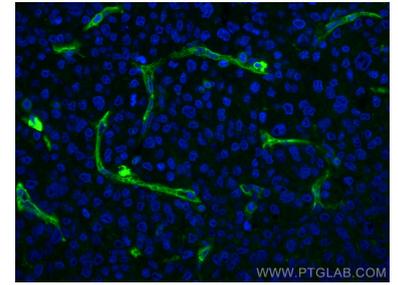
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66153-1-Ig (CD146/MCAM antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



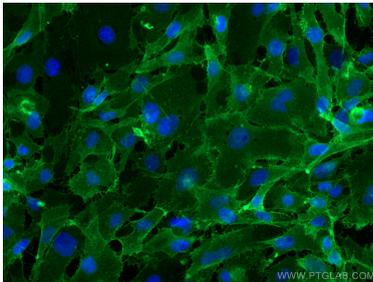
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66153-1-Ig (CD146/MCAM antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



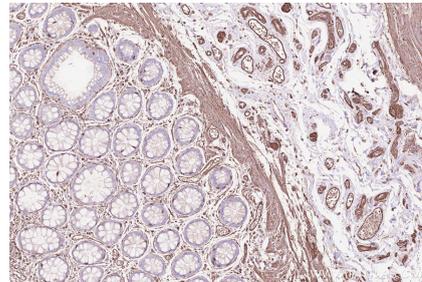
Immunofluorescent analysis of (4% PFA) fixed human liver cancer tissue using CD146/MCAM antibody (66153-1-Ig, Clone: 4D8A9) at dilution of 1:2000 and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



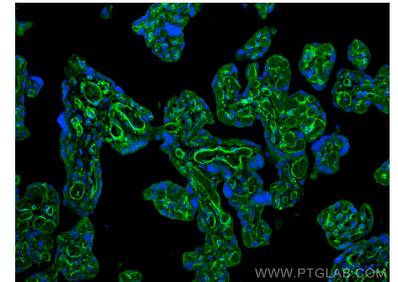
Immunofluorescent analysis of (4% PFA) fixed human liver cancer tissue using CD146/MCAM antibody (66153-1-Ig, Clone: 4D8A9) at dilution of 1:2000 and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed HUVEC cells using CD146/MCAM antibody (66153-1-Ig, Clone: 4D8A9) at dilution of 1:500 and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunohistochemical analysis of paraffin-embedded human rectal cancer tissue slide using 66153-1-Ig (CD146/MCAM antibody) at dilution of 1:16000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded human placenta tissue using CD146/MCAM antibody (66153-1-Ig, Clone: 4D8A9) at dilution of 1:800 and CoraLite@488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).