

For Research Use Only

CD146/MCAM Monoclonal antibody, PBS Only

Catalog Number: 66153-1-PBS



Basic Information

Catalog Number:

66153-1-PBS

Size:

100ug, Concentration: 1mg/ml by
Nanodrop;

Source:

Mouse

Isotype:

IgG1

Immunogen Catalog Number:

AG11855

GenBank Accession Number:

BC056418

GeneID (NCBI):

4162

UNIPROT ID:

P43121

Full Name:

melanoma cell adhesion molecule

Calculated MW:

646 aa, 72 kDa

Observed MW:

120 kDa

Purification Method:

Protein G purification

CloneNo.:

4D8A9

Applications

Tested Applications:

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

Species Specificity:

human

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 LO2 cells with PNGase F, which removes oligosaccharides from N-linked glycoproteins, led to a down-shift of the detected band.

Storage

Storage:

Store at -80°C.

Storage Buffer:

PBS Only

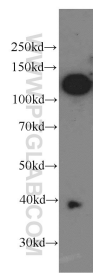
For technical support and original validation data for this product please contact:

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

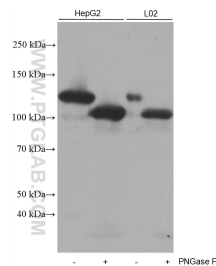
E: proteintech@ptglab.com
W: ptglab.com

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

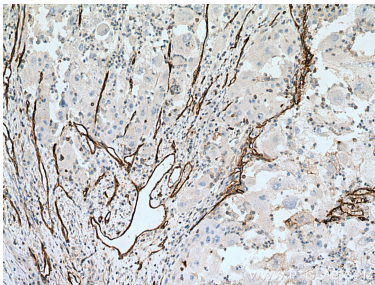
Selected Validation Data



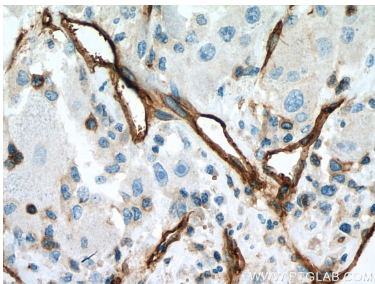
A375 cells were subjected to SDS PAGE followed by western blot with 66153-1-Ig (CD146/MCAM antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66153-1-PBS in a different storage buffer formulation.



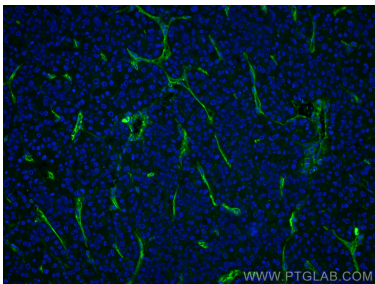
Untreated and PNGase F-treated lysates of HepG2 cells and L02 cells were subjected to SDS PAGE followed by western blot with 66153-1-Ig (CD146/MCAM antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. PNGase F was obtained from Atagenix (cat.NO. ata808). This data was developed using the same antibody clone with 66153-1-PBS in a different storage buffer formulation.



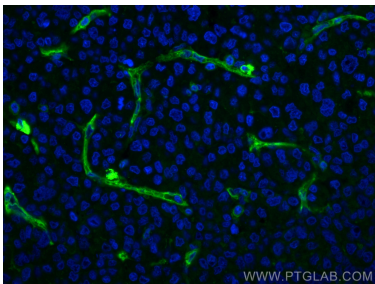
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66153-1-Ig (CD146/MCAM antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66153-1-PBS in a different storage buffer formulation.



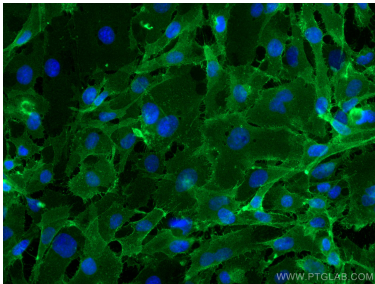
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66153-1-Ig (CD146/MCAM antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66153-1-PBS in a different storage buffer formulation.



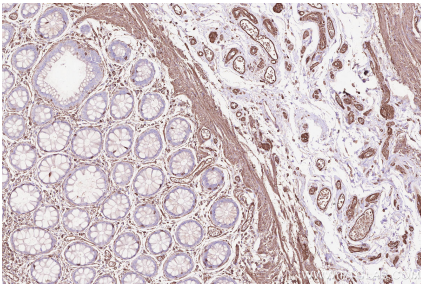
Immunofluorescent analysis of (4% PFA) fixed human liver cancer tissue using CD146/MCAM antibody (66153-1-Ig, Clone: 4D8A9) at dilution of 1:2000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 66153-1-PBS in a different storage buffer formulation.



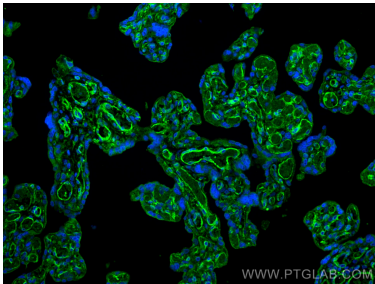
Immunofluorescent analysis of (4% PFA) fixed human liver cancer tissue using CD146/MCAM antibody (66153-1-Ig, Clone: 4D8A9) at dilution of 1:2000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 66153-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 66153-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 66153-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 66153-1-PBS in a different storage buffer formulation.