

CD146/MCAM Monoclonal antibody, PBS Only

Catalog Number: 66153-1-PBS

Basic Information

Catalog Number:

66153-1-PBS

Size:

1mg/ml

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 endothelial 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:

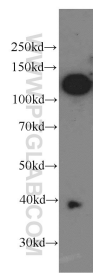
Store at -80°C.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

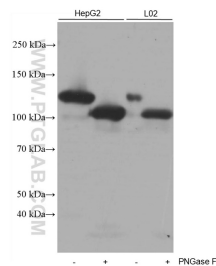
Storage Buffer:

PBS Only

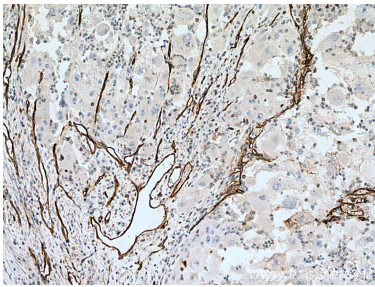
Selected Validation Data



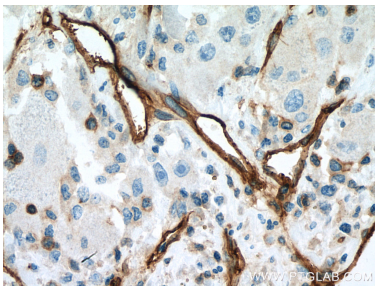
A375 cells were subjected to SDS PAGE followed by western blot with 66153-1-Ig (CD146/MCAM antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66153-1-PBS in a different storage buffer formulation.



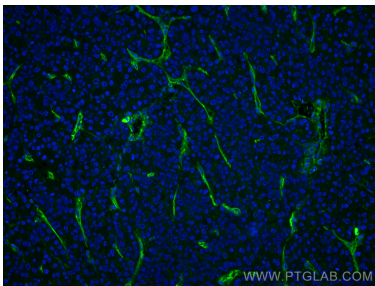
Untreated and PNGase F-treated lysates of HepG2 cells and L02 cells were subjected to SDS PAGE followed by western blot with 66153-1-Ig (CD146/MCAM antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. PNGase F was obtained from Atagenix (cat.NO. ata808). This data was developed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



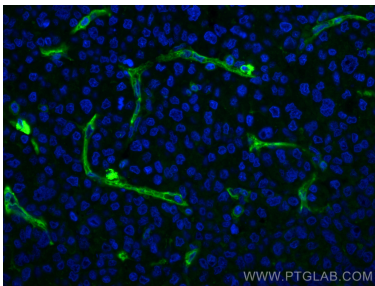
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66153-1-Ig (CD146/MCAM antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66153-1-PBS in a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



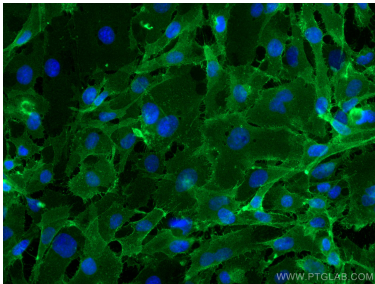
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66153-1-Ig (CD146/MCAM antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66153-1-PBS in a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



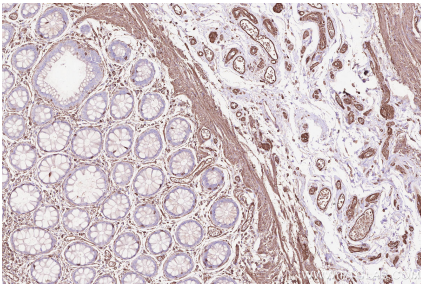
Immunofluorescent analysis of (4% PFA) fixed human liver cancer tissue using CD146/MCAM antibody (66153-1-Ig, Clone: 4D8A9) at dilution of 1:2000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 66153-1-PBS in a different storage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



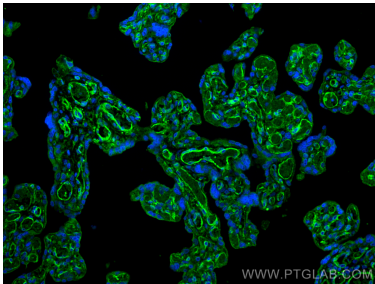
Immunofluorescent analysis of (4% PFA) fixed human liver cancer tissue using CD146/MCAM antibody (66153-1-Ig, Clone: 4D8A9) at dilution of 1:2000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 66153-1-PBS in a different storage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