

For Research Use Only

# PE-conjugated CD146/MCAM Monoclonal antibody

Catalog Number: PE-66153



## Basic Information

<b>Catalog Number:</b> PE-66153	<b>GenBank Accession Number:</b> BC056418	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 100ul , Concentration: 200 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 4162	<b>CloneNo.:</b> 4D8A9
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P43121	<b>Recommended Dilutions:</b> IF-P: 1:50-1:500
<b>Isotype:</b> IgG1	<b>Full Name:</b> melanoma cell adhesion molecule	<b>Excitation/Emission maxima wavelengths:</b> 496 nm, 565 nm / 578 nm
<b>Immunogen Catalog Number:</b> AG11855	<b>Calculated MW:</b> 646 aa, 72 kDa	
	<b>Observed MW:</b> 120 kDa	

## Applications

<b>Tested Applications:</b> IF-P	<b>Positive Controls:</b> IF-P : human colon cancer tissue,
<b>Species Specificity:</b> 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.

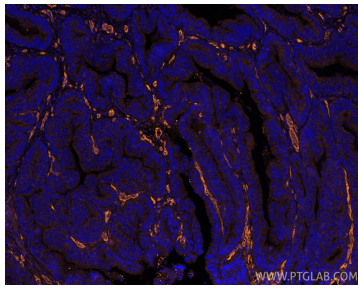
## Storage

**Storage:**  
Store at 2-8°C. Avoid exposure to light. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.09% sodium azide and 0.5% BSA, pH7.3

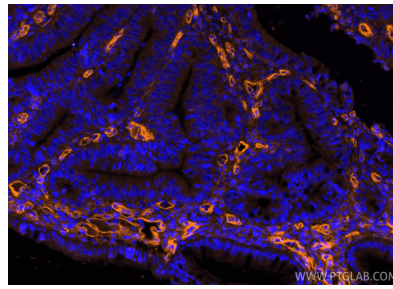
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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## Selected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



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded human colon cancer tissue using PE CD146/MCAM antibody (PE-66153, Clone: 4D8A9) at dilution of 1:200. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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