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Anti-CD146 Rabbit Monoclonal Antibody

Rabbit Monoclonal Antibody
Catalog # ABV11816

Product Information

Application	WB, IHC
Primary Accession	P43121
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	71607

Additional Information

Gene ID	4162
Positive Control	WB: A375 cell lysate; IHC: human breast cancer tissue
Application & Usage	IHC: 1:200 -1:500 dilution; WB: 1:1000 - 1:2000 dilution.
Alias Symbol	MCAM
Other Names	MCAM; MUC18; Cell surface glycoprotein MUC18; Cell surface glycoprotein P1H12; Melanoma cell adhesion molecule; Melanoma-associated antigen A32; Melanoma-associated antigen MUC18; S-endo 1 endothelial-associated antigen
Appearance	Colorless liquid
Formulation	In 50% Glycerol/PBS with 1% BSA and 0.09% sodium azide
Reconstitution & Storage	-20 °C
Background Descriptions	
Precautions	Anti-CD146 Rabbit Monoclonal Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

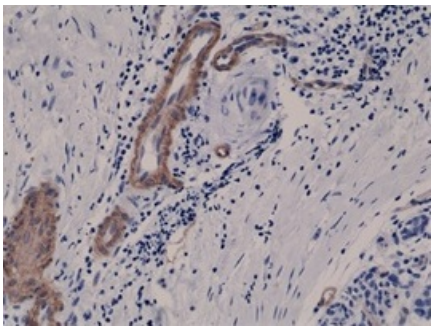
Name	MCAM
Synonyms	MUC18
Function	Plays a role in cell adhesion, and in cohesion of the endothelial monolayer at intercellular junctions in vascular tissue. Its expression may allow melanoma cells to interact with cellular elements of the vascular system, thereby enhancing hematogeneous tumor spread. Could be an adhesion molecule active in neural crest cells during embryonic development. Acts as a surface

	receptor that triggers tyrosine phosphorylation of FYN and PTK2/FAK1, and a transient increase in the intracellular calcium concentration.
Cellular Location	Membrane; Single-pass type I membrane protein.
Tissue Location	Detected in endothelial cells in vascular tissue throughout the body. May appear at the surface of neural crest cells during their embryonic migration. Appears to be limited to vascular smooth muscle in normal adult tissues. Associated with tumor progression and the development of metastasis in human malignant melanoma. Expressed most strongly on metastatic lesions and advanced primary tumors and is only rarely detected in benign melanocytic nevi and thin primary melanomas with a low probability of metastasis

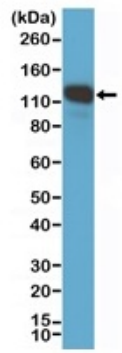
Background

The CD146 antigen, also known as MCAM, is an integral membrane glycoprotein belonging to the immunoglobulin superfamily. CD146 contains the characteristic immunoglobulin-like domains (V-V-C2-C2-C2), a transmembrane region and a short cytoplasmic tail. The CD146 expression is detected in endothelial cells in vascular tissue throughout the body, and plays a role in cell adhesion, as well as in cohesion of the endothelial monolayer at intercellular junctions in vascular tissue. As a Ca2+-independent cell adhesion molecule involved in heterophilic cell to cell interactions and a surface receptor, CD146 triggers tyrosine phosphorylation of FYN and PTK2 and subsequently induced signal transduction, proteolysis, or immune recognition. CD146 is expressed predominantly on metastatic lesions and advanced primary tumors, and has been suggested to play an important role in tumor progression and the development of metastasis in certain human carcinomas.

Images



Immunohistochemical staining of formalin fixed and paraffin embedded human breast cancer tissue sections using anti-CD146 antibody at 1:400 dilution.



Western blot of A375 cell lysate, using anti-CD146 antibody at 1:1000 dilution, showed CD146 (~110kDa) expression in A375 cells.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.