

Anti-CD146 MCAM Rabbit Monoclonal Antibody

Catalog # ABO13605

Product Information

Application	WB, IHC, IF, ICC, IP, FC
Primary Accession	P43121
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-CD146 MCAM Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

Additional Information

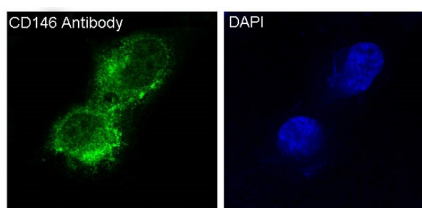
Gene ID	4162
Other Names	Cell surface glycoprotein MUC18, Cell surface glycoprotein P1H12, Melanoma cell adhesion molecule, Melanoma-associated antigen A32, Melanoma-associated antigen MUC18, S-endo 1 endothelial-associated antigen, CD146, MCAM, MUC18
Calculated MW	71607
Application Details	WB 1:500-1:2000 IHC 1:50-1:200 ICC/IF 1:50-1:200 IP 1:50 FC 1:50
Subcellular Localization	Membrane; Single-pass type I membrane protein.
Tissue Specificity	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.
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: AbC83

Immunogen	A synthesized peptide derived from human CD146
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

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

Images



Immunofluorescent analysis of A375 cells, using CD146 Antibody.

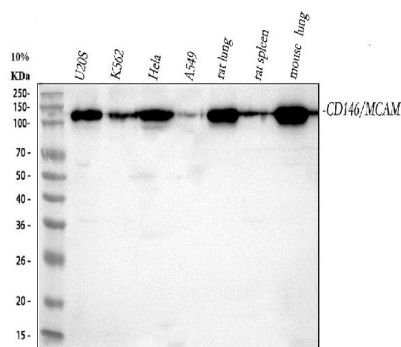


Figure 1. Western blot analysis of CD146 using anti-CD146 antibody (M01683-1).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human U2OS whole cell lysates,
 Lane 2: human K562 whole cell lysates,
 Lane 3: human Hela whole cell lysates,
 Lane 4: human A549 whole cell lysates,
 Lane 5: rat lung tissue lysates,
 Lane 6: rat spleen tissue lysates,
 Lane 7: mouse lung tissue lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes.

Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-CD146 antigen affinity purified monoclonal antibody (Catalog # M01683-1) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:500 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for CD146 at approximately 120 kDa. The expected band size for CD146 is at 72 kDa.

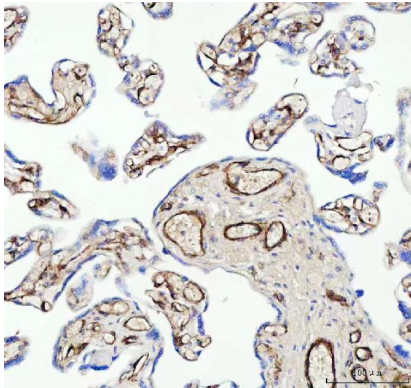


Figure 2. IHC analysis of CD146 using anti-CD146 antibody (M01683-1). CD146 was detected in a paraffin-embedded section of human placenta tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-CD146 Antibody (M01683-1) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

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