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MCAM Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2767C

Product Information

Application	IHC-P, FC, WB, E
Primary Accession	P43121
Other Accession	NP_006491
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB20606
Calculated MW	71607
Antigen Region	161-189

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
Target/Specificity	This MCAM antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 161-189 amino acids from the Central region of human MCAM.
Dilution	IHC-P~~1:100~500 FC~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MCAM Antibody (Center) 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

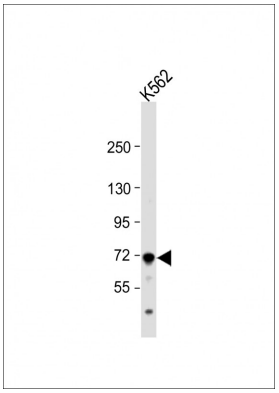
Background

MCAM 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. It could be an adhesion molecule active in neural crest cells during embryonic development. It acts as surface receptor that triggers tyrosine phosphorylation of FYN and PTK2, and a transient increase in the intracellular calcium concentration.

References

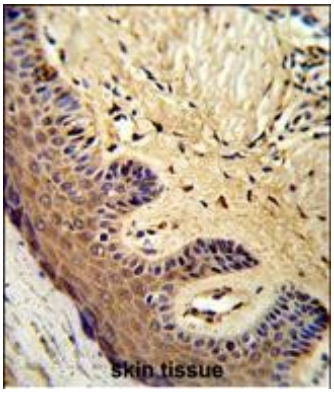
Fritzsche,F.R., Pathology 40 (5), 457-464 (2008)
Malyszko,J., Clin. Appl. Thromb. Hemost. 14 (3), 338-345 (2008)
Guezguez,B., J. Immunol. 179 (10), 6673-6685 (2007)

Images

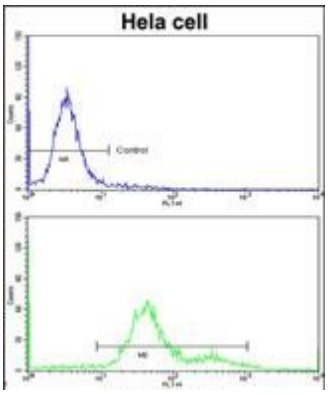


Anti-MCAM Antibody (Center) at 1:1000 dilution + K562 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 72 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Formalin-fixed and paraffin-embedded human skin reacted with MCAM Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical



relevance has not been evaluated.



Flow cytometric analysis of hela cells using MCAM Antibody (Center)(bottom histogram) compared to a negative control cell (top histogram)FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.