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MUC18 / CD146 / MCAM (Melanoma Cell Adhesion Molecule) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone MCAM/1101]
Catalog # AH11786

Product Information

Application	IHC, IF, FC
Primary Accession	P43121
Other Accession	4162, 599039
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Clone Names	MCAM/1101
Calculated MW	71607

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
Application Note	IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	MUC18 / CD146 / MCAM (Melanoma Cell Adhesion Molecule) Antibody - With BSA and Azide 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

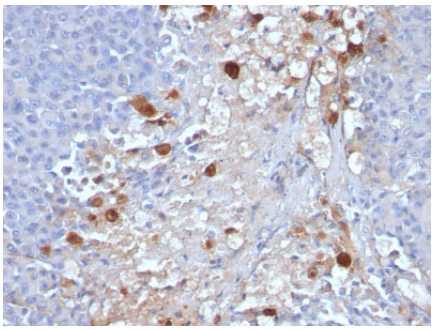
Background

The human Mel-CAM gene maps to chromosome 11q23 and encodes a trans-membrane glycoprotein, also designated MCAM, MUC 18 or CD146, that belongs to the immunoglobulin superfamily and functions as a Ca2+-independent cell adhesion molecule. Mel-CAM expression is restricted to advanced primary and metastatic melanomas and to cell lines of the neuroectodermal lineage, but not normal melanocytes. Mel-CAM is found on 80% of advanced primary human melanomas and correlates well with development of metastatic disease.

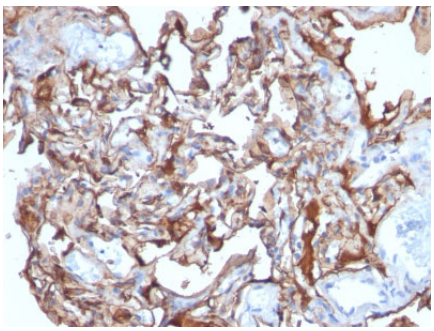
References

Pruszak J et al. Stem Cells 25:2257-68 (2007

Images

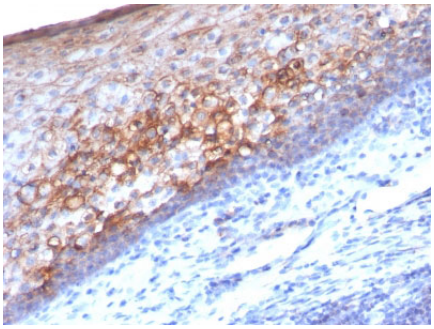


Formalin-fixed, paraffin-embedded human Melanoma stained with MCAM Monoclonal Antibody (MCAM/1101)



Formalin-fixed, paraffin-embedded human Melanoma stained with MCAM Monoclonal Antibody (MCAM/1101)

Formalin-fixed, paraffin-embedded human Tonsil stained with MCAM Monoclonal Antibody (MCAM/1101)



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