

**MCAM Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO1808a****Specification****MCAM Antibody - Product Information**

Application	<b>E, WB, FC, IHC</b>
Primary Accession	<a href="#">P43121</a>
Reactivity	<b>Human</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>IgG1</b>
Calculated MW	<b>71.6kDa KDa</b>

**Description**

The protein encoded by this gene 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 surface receptor that triggers tyrosine phosphorylation of FYN and PTK2/FAK1, and a transient increase in the intracellular calcium concentration.

**Immunogen**

Purified recombinant fragment of human MCAM (AA: 84-189) expressed in E. Coli.

**Formulation**

Purified antibody in PBS with 0.05% sodium azide

**MCAM Antibody - 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

**Dilution**

E~~1/10000  
WB~~1/500 - 1/2000  
FC~~1/200 - 1/400  
IHC~~1/200 - 1/1000

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

MCAM Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## MCAM Antibody - 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.

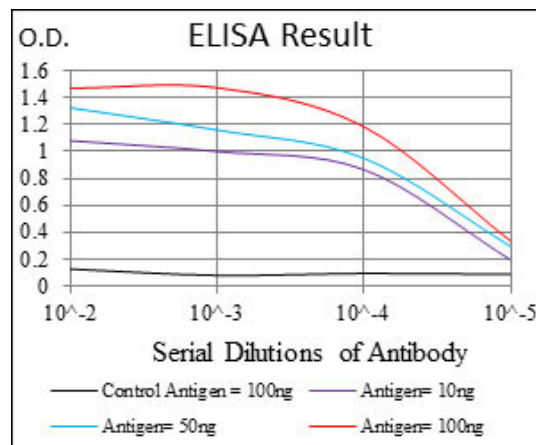
### Tissue Location

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

## MCAM Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)



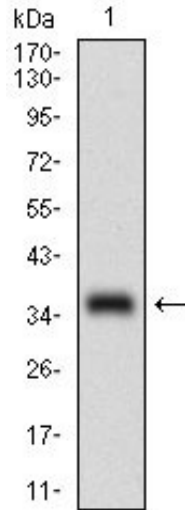


Figure 1: Western blot analysis using MCAM mAb against human MCAM recombinant protein. (Expected MW is 37.7 kDa)

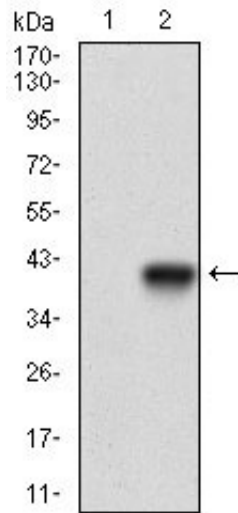


Figure 2: Western blot analysis using MCAM mAb against HEK293 (1) and MCAM (AA: 84-189)-hlgGfc transfected HEK293 (2) cell lysate.

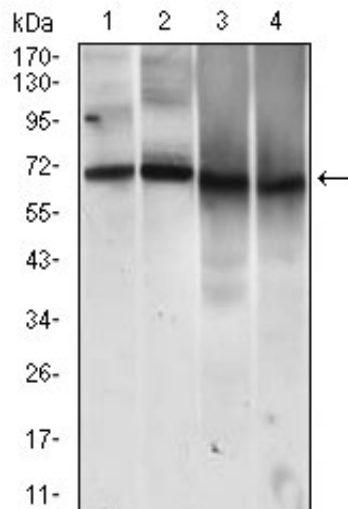


Figure 3: Western blot analysis using MCAM mouse mAb against HUVE-12 (1), EVC-304 (2), HELA (3) and MCF-7 (4) cell lysate.

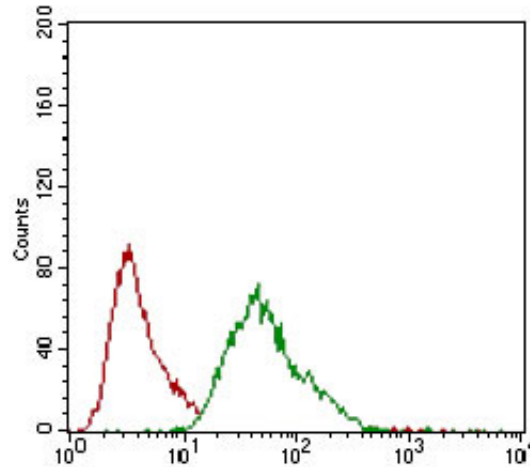


Figure 4: Flow cytometric analysis of MCF-7 cells using MCAM mouse mAb (green) and negative control (red).

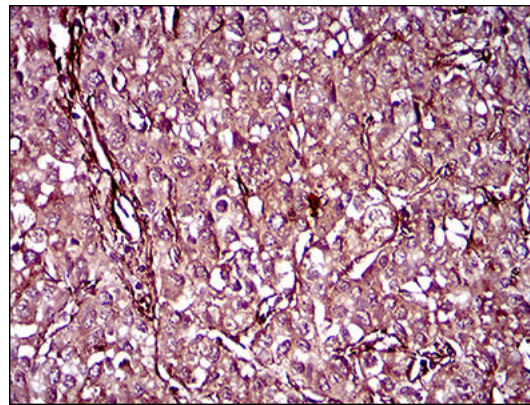


Figure 5: Immunohistochemical analysis of paraffin-embedded liver cancer tissues using MCAM mouse mAb with DAB staining.

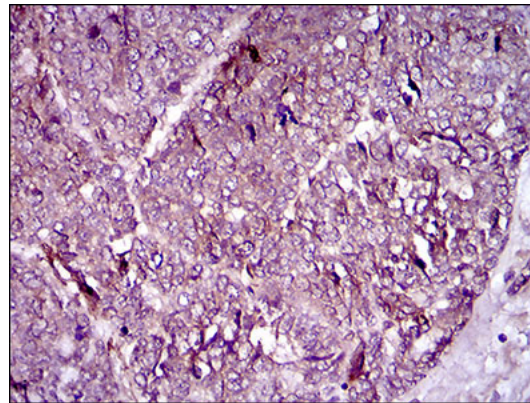


Figure 6: Immunohistochemical analysis of paraffin-embedded esophageal cancer tissues using MCAM mouse mAb with DAB staining.

### MCAM Antibody - Background

The protein encoded by this gene 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 surface receptor that triggers tyrosine phosphorylation of FYN and PTK2/FAK1, and a transient increase in the intracellular calcium concentration. ; ;

**MCAM Antibody - References**

1. Cancer Lett. 2013 Apr 28;330(2):150-62.
2. J Biol Chem. 2013 Jan 25;288(4):2571-9.