

Milk Fat Globule (Breast Epithelial Marker) Antibody - With BSA and Azide Mouse Monoclonal Antibody [Clone SPM291 ] Catalog # AH11809

### **Specification**

# Milk Fat Globule (Breast Epithelial Marker) Antibody - With BSA and Azide - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW IHC, IF, FC <u>008431</u> <u>4240, 3745</u> Human Mouse Monoclonal Mouse / IgG1, kappa 45kDa KDa

## Milk Fat Globule (Breast Epithelial Marker) Antibody - With BSA and Azide - Additional Information

Gene ID 4240

**Other Names** 

Lactadherin, Breast epithelial antigen BA46, HMFG, MFGM, Milk fat globule-EGF factor 8, MFG-E8, SED1, Lactadherin short form, Medin, MFGE8

**Application Note** 

<span class ="dilution\_IHC">IHC~~1:100~500</span><br \><span class ="dilution\_IF">IF~~1:50~200</span><br \><span class ="dilution\_FC">FC~~1:10~50</span>

Storage

Store at 2 to 8°C.Antibody is stable for 24 months.

**Precautions** 

Milk Fat Globule (Breast Epithelial Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

# Milk Fat Globule (Breast Epithelial Marker) Antibody - With BSA and Azide - Protein Information

#### Name MFGE8

#### Function

Plays an important role in the maintenance of intestinal epithelial homeostasis and the promotion of mucosal healing. Promotes VEGF-dependent neovascularization (By similarity). Contributes to phagocytic removal of apoptotic cells in many tissues. Specific ligand for the alpha-v/beta-3 and alpha-v/beta-5 receptors. Also binds to phosphatidylserine-enriched cell surfaces in a receptor-independent manner. Zona pellucida-binding protein which may play a role in gamete interaction.



### **Cellular Location**

Membrane; Peripheral membrane protein. Secreted. Cytoplasmic vesicle, secretory vesicle, acrosome membrane {ECO:0000250|UniProtKB:P79385}; Peripheral membrane protein {ECO:0000250|UniProtKB:P79385}. Note=Located in the acrosomal region of zona-pellucida bound sperm. {ECO:0000250|UniProtKB:P79385}

### **Tissue Location**

Mammary epithelial cell surfaces and aortic media. Overexpressed in several carcinomas

## Milk Fat Globule (Breast Epithelial Marker) Antibody - With BSA and Azide - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## Milk Fat Globule (Breast Epithelial Marker) Antibody - With BSA and Azide - Images



Formalin-fixed, paraffin-embedded human Breast Carcinoma stained with Milk Fat Globule Monoclonal Antibody (SPM291)

## Milk Fat Globule (Breast Epithelial Marker) Antibody - With BSA and Azide - Background

Recognizes a protein of 40-45kDa, identified as human milk fat globule membrane protein (HMFG). HMFG is present on normal human breast epithelial cells and cell lines derived from breast carcinomas, as well as to the outer surface of the human milk fat globule. HMFG is considered as a differentiation marker. It is useful as specific breast epithelial marker and can also provide a tool to study the role of the cell surface in normal and neoplastic mammary development.

## Milk Fat Globule (Breast Epithelial Marker) Antibody - With BSA and Azide - References

Larocca D et al. A Mr 46,000 human milk fat globule protein that is highly expressed in human breast tumors contains factor VIII-like domains. Cancer Res 1991, 51: 4994-4998 | Ceriani RL et al. Surface differentiation antigens of human mammary epithelial cells carried on the human milk fat globule. Proc Natl Acad Sci USA 1977, 74(2):582-6 | Corcoran D and Walker RA. Ultrastructural



localization of milk fat globule membrane antigens in human breast carcinomas. J Pathol 1990,161(2):161-6 | Sterns EE et al. Prognostic significance of the immunohistochemical reaction to human milk fat globule antibodies in node-negative and node-positive breast cancer. Breast Cancer Res Treat 1992, 21(3):193-9 | Baildam AD et al. The expression of milk fat globule antigens within human mammary tumours: relationship to steroid hormone receptors and response to endocrine treatment. Eur J Cancer Clin Oncol 1989, 25(3):459-67 |