

# MUC1 / CA15-3 / EMA / CD227 (Epithelial Marker) Antibody Mouse Monoclonal Antibody [Clone SPM493]

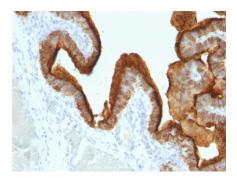
Catalog No	Format	Size
4582-MSM5XX-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
4582-MSM5XX-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
4582-MSM5XX-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

Applications	Tested Dillution	Note
Flow Cytometry (Flow)	1-2ug/million cells	
Immunofluorescence (IF)	1-3ug/ml	
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

Product Details		
Clone	SPM493	
Gene Name	MUC1	
Immunogen	Breast Cancer Cell line ZR75-1	
Host	Mouse	
Clonality	Monoclonal	
Isotype / Light Chain	IgG1 / Kappa	
Mol. Weight of Antigen	265-400kDa	
Cellular Localization	Apical cell membrane, Cell membrane, Cytoplasm, Nucleus, Secreted	
Species Reactivity	Human, Mouse	
Positive Control	Colon, endometrial carcinoma., MCF-7 or MDA-231 cells. Breast, Ovarian	

<sup>\*</sup>Optimal dilution for a specific application should be determined.

## Product Images for MUC1 / CA15-3 / EMA / CD227 (Epithelial Marker) Antibody



Formalin-fixed, paraffin-embedded human Ovarian Carcinoma stained with MUC-1 / CA15-3 / EMA Mouse Monoclonal Antibody (SPM493).



### **Specificity & Comments**

This MAb reacts with MUC1. The dominant epitope of this MAb has not yet been determined. MUC1 is a large cell surface mucin glycoprotein expressed by most glandular and ductal epithelial cells and some hematopoietic cell lineages. It is expressed on most secretory epithelium, including mammary gland and some hematopoietic cells. It is expressed abundantly in lactating mammary glands and over expressed abundantly in 90% breast carcinomas and metastases. Transgenic MUC1 has been shown to associate with all four c-erbB receptors and localize with c-erbB1 (EGFR) in lactating glands. The MUC1 gene contains seven exons and produces several different alternatively spliced variants. The major expressed form of MUC1 uses all seven exons and is a type 1 transmembrane protein with a large extracellular tandem repeat domain. The tandem repeat domain is highly O glycosylated and alterations in glycosylation have been shown in epithelial cancer cells. Antibody to EMA is useful as a pan-epithelial marker for detecting early metastatic loci of carcinoma in bone marrow or liver.

#### **Supplied As**

200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

### Storage and Stability

Antibody with azide - store at 2 to  $8^{\circ}$ C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

#### **Research Areas**

Cancer, Cytokine Signaling, Immunology, Infectious Disease

### **Limitations and Warranty**

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

