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MUC1 / EMA / CD227 (Epithelial Marker) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone MUC1/967]
Catalog # AH11863

Specification

MUC1 / EMA / CD227 (Epithelial Marker) Antibody - With BSA and Azide - Product Information

Application	**IHC-P, IF, FC**
Primary Accession	P15941
Other Accession	4582, 89603
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse / IgG1, kappa**
Calculated MW	**265-400kDa KDa**

MUC1 / EMA / CD227 (Epithelial Marker) Antibody - With BSA and Azide - Additional Information

Gene ID 4582

Other Names
Mucin-1, MUC-1, Breast carcinoma-associated antigen DF3, Cancer antigen 15-3, CA 15-3, Carcinoma-associated mucin, Episialin, H23AG, Krebs von den Lungen-6, KL-6, PEMT, Peanut-reactive urinary mucin, PUM, Polymorphic epithelial mucin, PEM, Tumor-associated epithelial membrane antigen, EMA, Tumor-associated mucin, CD227, Mucin-1 subunit alpha, MUC1-NT, MUC1-alpha, Mucin-1 subunit beta, MUC1-beta, MUC1-CT, MUC1, PUM

Application Note
IHC-P~~N/A<br \>IF~~1:50~200<br \>FC~~1:10~50

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

Precautions
MUC1 / EMA / CD227 (Epithelial Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

MUC1 / EMA / CD227 (Epithelial Marker) Antibody - With BSA and Azide - Protein Information

Name MUC1

Synonyms PUM

Function
The alpha subunit has cell adhesive properties. Can act both as an adhesion and an anti-adhesion

protein. May provide a protective layer on epithelial cells against bacterial and enzyme attack.

Cellular Location
Apical cell membrane; Single-pass type I membrane protein. Note=Exclusively located in the apical domain of the plasma membrane of highly polarized epithelial cells After endocytosis, internalized and recycled to the cell membrane Located to microvilli and to the tips of long filopodial protusions [Isoform Y]: Secreted. [Mucin-1 subunit beta]: Cell membrane. Cytoplasm. Nucleus. Note=On EGF and PDGFRB stimulation, transported to the nucleus through interaction with CTNNB1, a process which is stimulated by phosphorylation. On HRG stimulation, colocalizes with JUP/gamma-catenin at the nucleus

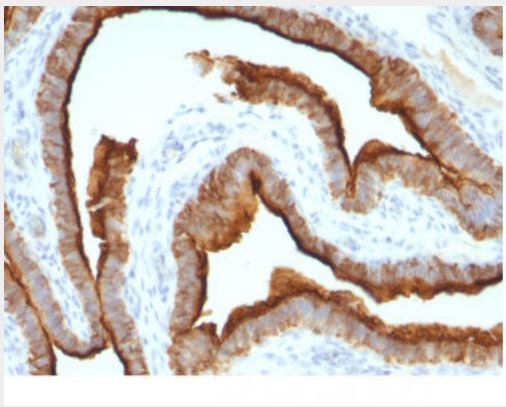
Tissue Location
Expressed on the apical surface of epithelial cells, especially of airway passages, breast and uterus. Also expressed in activated and unactivated T-cells. Overexpressed in epithelial tumors, such as breast or ovarian cancer and also in non-epithelial tumor cells. Isoform Y is expressed in tumor cells only

MUC1 / EMA / CD227 (Epithelial Marker) Antibody - With BSA and Azide - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

MUC1 / EMA / CD227 (Epithelial Marker) Antibody - With BSA and Azide - Images



Formalin-fixed, paraffin-embedded human Ovarian Carcinoma stained with EMA Monoclonal Antibody (MUC1/967).

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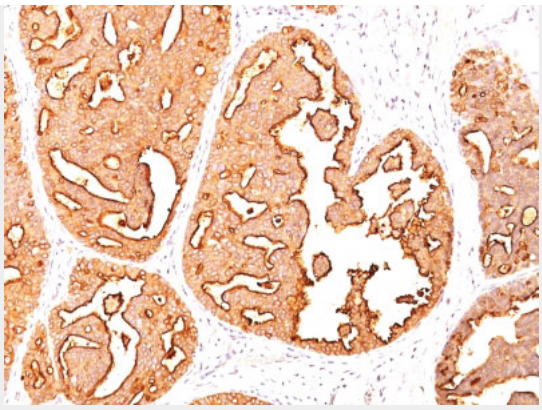
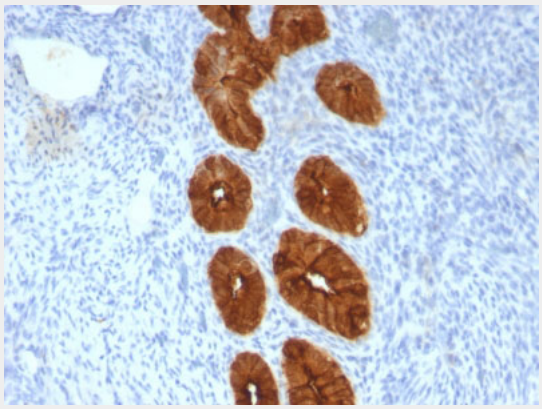


Formalin-fixed, paraffin-embedded human Breast Carcinoma stained with EMA Monoclonal Antibody (MUC1/967).



Formalin-fixed, paraffin-embedded human Endometrial Carcinoma stained with EMA Monoclonal Antibody (MUC1/967).

MUC1 / EMA / CD227 (Epithelial Marker) Antibody - With BSA and Azide - Background

This MAb recognizes full-length MUC1 in a glycosylation-independent manner and can bind to the fully glycosylated protein. The dominant epitope of this MAb is APDTR in the VNTR region. It reacts with the core peptide of the MUC1 protein, which is a member of a family of mucin glycoproteins that are characterized by high carbohydrate content, O-linked oligosaccharides, high molecular weight (>200kDa) and an amino acid composition rich in serine, threonine, proline and glycine. The core protein contains a domain of 20 amino-acid tandem repeats that functions as multiple epitopes for the MAb. Incomplete glycosylation of some tumor-associated mucins may lead to variable unmasking of the multiple peptide epitopes leading to the observed differences in staining intensity between normal and malignant tissues. This MAb reacts with both normal and malignant epithelia of various tissues including breast and colon.

MUC1 / EMA / CD227 (Epithelial Marker) Antibody - With BSA and Azide - References

Stanley CM, Phillips TE. Am J Physiol. 1999;277:G191-200