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

**Mouse Monoclonal Antibody [Clone MUC1/520 ]**
**Catalog # AH11866**

## Specification

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

| | |
|---|---|
| Application | **,2,3,4,** |
| Primary Accession | P15941 |
| Other Accession | 4582, 89603 |
| Reactivity | **Human** |
| Host | **Mouse** |
| Clonality | **Monoclonal** |
| Isotype | **Mouse / IgG2a, 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

**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

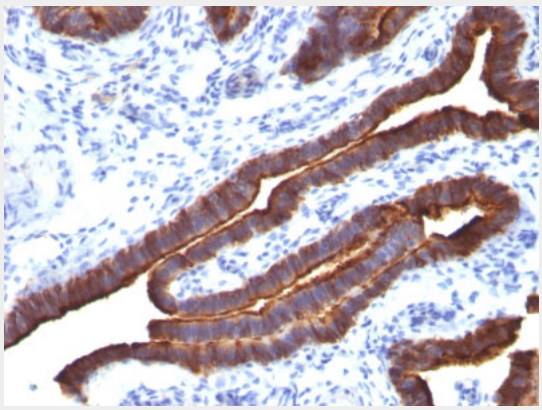
**Tissue Location**
Expressed on the apical surface of epithelial cells, especially of airway passages, breast and uterus. Also expressed in activated and unactivated T-cells. Overexpressed in epithelial tumors, such as breast or ovarian cancer and also in non-epithelial tumor cells. Isoform Y is expressed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

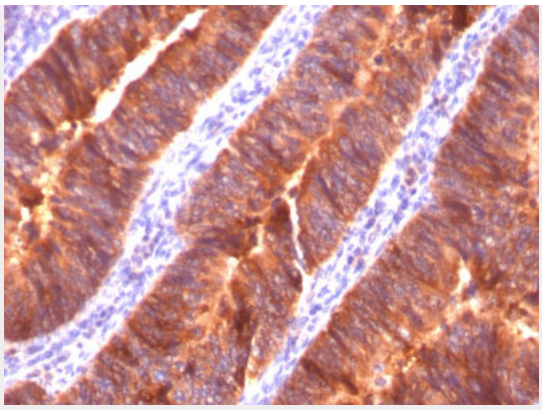
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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

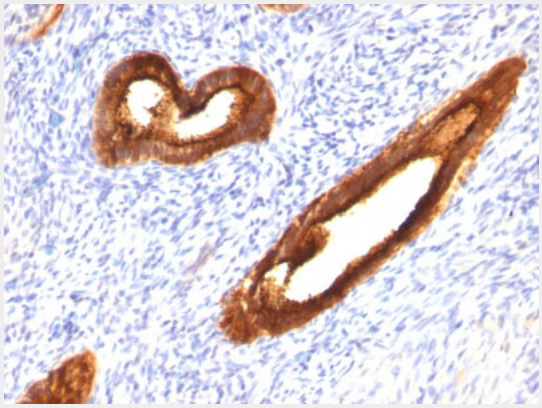


Formalin-fixed, paraffin-embedded human Ovarian Carcinoma stained with MUC-1 / EMA Monoclonal Antibody (MUC1/520).

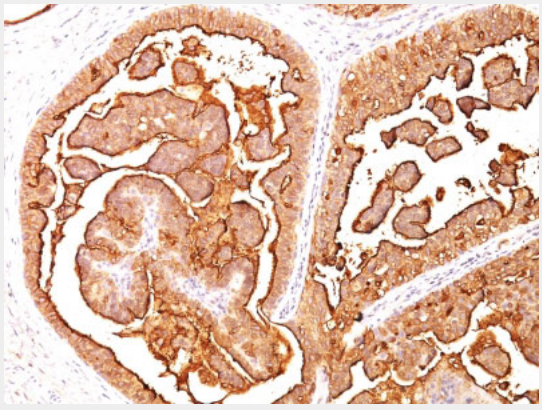
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Formalin-fixed, paraffin-embedded human Colon Carcinoma stained with MUC-1 / EMA Monoclonal Antibody (MUC1/520).

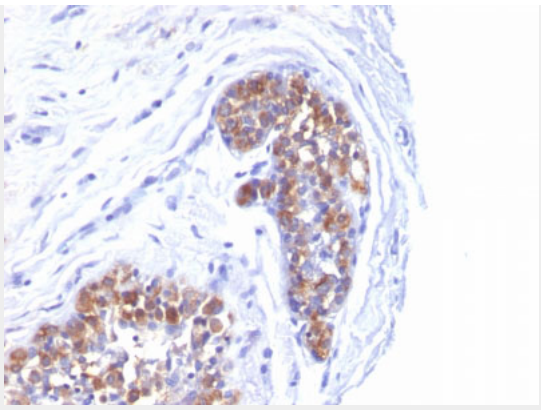


Formalin-fixed, paraffin-embedded human Endometrial Carcinoma stained with MUC-1 / EMA Monoclonal Antibody (MUC1/520).

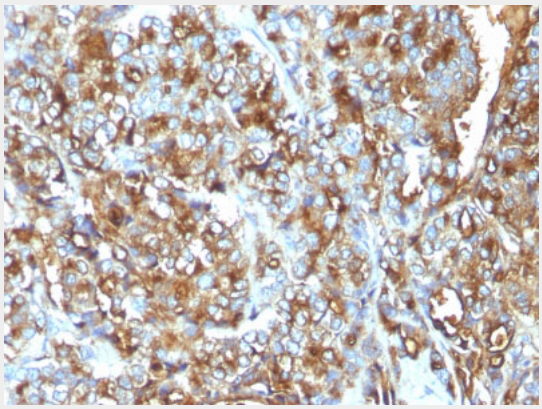


Formalin-fixed, paraffin-embedded human Breast Carcinoma stained with MUC-1 / EMA Monoclonal Antibody (MUC1/520).

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Formalin-fixed, paraffin-embedded human Breast Carcinoma stained with MUC-1 / EMA Monoclonal Antibody (MUC1/520).



Formalin-fixed, paraffin-embedded human Breast Carcinoma stained with MUC-1 / EMA Monoclonal Antibody (MUC1/520).

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

In Western blotting, it recognizes proteins in MW range of 265-400kDa, identified as different glycoforms of EMA. EMA may provide a protective layer on epithelial cells against bacterial and enzyme attack. In immunohistochemical assays, it superbly stains routine formalin/paraffin carcinomas. Antibody to EMA is useful as a pan-epithelial marker for detecting early metastatic loci of carcinoma in bone marrow or liver.

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

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