

### **EMA / MUC1 Antibody**

Mouse Monoclonal Antibody Catalog # ALS13263

# **Specification**

### **EMA / MUC1 Antibody - Product Information**

Application IHC
Primary Accession P15941
Reactivity Human
Host Mouse
Clonality Monoclonal
Calculated MW 122kDa KDa

# EMA / MUC1 Antibody - 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

### Target/Specificity

Recognizes underglycosylated and natural MUC1 protein (isolated from human milk by affinity chromatography). Does not cross-react with normal serum proteins and human tissues of nonepithelial origin. Binds with high efficiency with different epitopes ...

### **Reconstitution & Storage**

Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

#### **Precautions**

EMA / MUC1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# **EMA / MUC1 Antibody - 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**

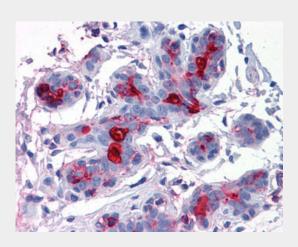
Expressed on the apical surface of epithelial cells, especially of airway passages, breast and uterus. Also expressed in activated and unactivated T-cells. Overexpressed in epithelial tumors, such as breast or ovarian cancer and also in non-epithelial tumor cells. Isoform Y is expressed in tumor cells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

### **EMA / MUC1 Antibody - Protocols**

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

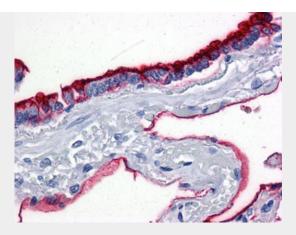
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# EMA / MUC1 Antibody - Images

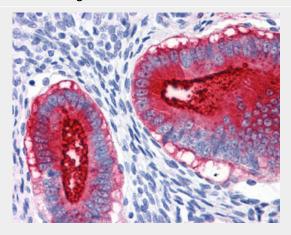


Anti-MUC1 antibody IHC of human breast.





Anti-MUC1 antibody IHC of human lung.



Anti-MUC1 antibody IHC of human uterus.

# EMA / MUC1 Antibody - Background

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.

# **EMA / MUC1 Antibody - References**

Lan M.S., et al.J. Biol. Chem. 265:15294-15299(1990). Ligtenberg M.J.L., et al.J. Biol. Chem. 265:5573-5578(1990). Gendler S.J., et al.J. Biol. Chem. 265:15286-15293(1990). Lancaster C.A., et al.Biochem. Biophys. Res. Commun. 173:1019-1029(1990). Wreschner D.H., et al.Eur. J. Biochem. 189:463-473(1990).