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MUC1 / EMA / CD227 (Epithelial Marker) Antibody - With BSA and Azide
Mouse Monoclonal Antibody [Clone SPM132]
Catalog # AH10598

Specification

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

Application	**,14,3,4,**
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

Format
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
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

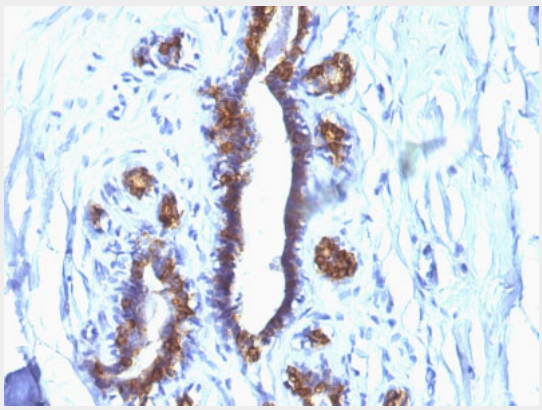
Tissue Location
Expressed on the apical surface of epithelial cells, especially of airway passages, breast and uterus. Also expressed in activated and unactivated T-cells. Overexpressed in epithelial tumors, such as breast or ovarian cancer and also in non-epithelial tumor cells. Isoform Y is expressed 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 Breast Cancer stained with EMA Monoclonal Antibody (SPM132).

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. This MAb reacts with the DTRP epitope in the tandem repeats. The α subunit has cell adhesive properties. It can act both as an adhesion and an anti-adhesion protein. EMA may provide a protective layer on epithelial cells against bacterial and enzyme attack. The β subunit contains a C-terminal domain, which is involved in cell signaling, through phosphorylations and

protein-protein interactions. In immunohistochemical assays, it superbly stains routine formalin/paraffin carcinoma tissues. 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 Jul;277(1 Pt 1):G191-200