

**Anti-MUC1 / EMA / CD227 Antibody**  
**Recombinant Mouse Monoclonal Antibody**  
**Catalog # AH13407**

### Specification

#### Anti-MUC1 / EMA / CD227 Antibody - Product Information

Application	IHC-P, IF, FC
Primary Accession	<a href="#">P15941</a>
Other Accession	<a href="#">89603</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG2b, kappa
Calculated MW	122102

#### Anti-MUC1 / EMA / CD227 Antibody - Additional Information

##### Gene ID 4582

##### Other Names

Breast carcinoma-associated antigen DF3, CA15-3, Carcinoma-associated mucin Episialin, Epithelial Membrane Antigen, H23AG, KL-6, MAM6, MUC-1, MUC-1/SEC, MUC-1/X, MUC1-alpha, MUC1-beta, MUC1-CT, MUC1-NT, MUC1/ZD, Mucin 1 cell surface associated, Mucin-1 subunit beta, Peanut-reactive urinary mucin, PEM, PEMT, Polymorphic epithelial mucin, PUM, Tumor-associated epithelial membrane antigen

##### Application Note

<span class ="dilution\_IHC-P">IHC-P~~N/A</span><br /><span class ="dilution\_IF">IF~~1:50~200</span><br /><span class ="dilution\_FC">FC~~1:10~50</span>

##### 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

Anti-MUC1 / EMA / CD227 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### Anti-MUC1 / EMA / CD227 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**

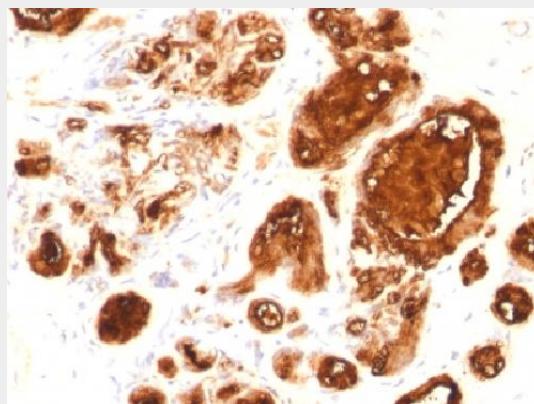
Expressed on the apical surface of epithelial cells, especially of airway passages, breast and uterus. Also expressed in activated and unactivated T-cells. Overexpressed in epithelial tumors, such as breast or ovarian cancer and also in non-epithelial tumor cells. Isoform Y is expressed in tumor cells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

#### **Anti-MUC1 / EMA / CD227 Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **Anti-MUC1 / EMA / CD227 Antibody - Images**



Formalin-fixed, paraffin-embedded human Ovarian Carcinoma stained with EMA Recombinant Mouse Monoclonal Antibody (MUC1/960).

#### **Anti-MUC1 / EMA / CD227 Antibody - Background**

This MAb reacts with MUC1, a large transmembrane glycoprotein expressed on the ductal surface of normal glandular epithelia. The dominant epitope of this MAb involves both amino acids as well as sugar moieties. Neuraminidase treatment destroys the antigen. It is a very good tracer agent in CA15.3 assays. The extracellular domain of MUC1 largely consists of a highly conserved,

O-glycosylated 20 amino acids tandem repeat which can occur 30-100 times per molecule depending on the length of the allele involved. In the vast majority of human carcinomas this protein is up-regulated and poorly glycosylated and appears on the cell surface in a non-polarized fashion.