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Anti-MUC1 / EMA / CD227 Antibody

Recombinant Mouse Monoclonal Antibody
Catalog # AH13407

Product Information

Application	IHC-P, IF, FC
Primary Accession	P15941
Other Accession	89603
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG2b, kappa
Clone Names	rMUC1/960
Calculated MW	122102

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	Flow Cytometry (0.5-1ug/million cells); Immunofluorescence (1-2ug/ml); ,Immunohistology (Formalin-fixed) (0.5-1ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes),Optimal dilution for a specific application should be determined.
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.

Protein Information

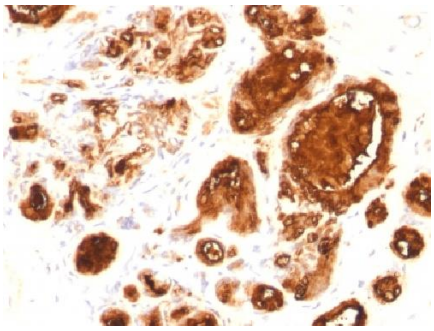
Name	MUC1
Synonyms	PUM

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

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.

Images



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.