

Anti-MUC1 / EMA / CD227 Antibody

Recombinant Mouse Monoclonal Antibody Catalog # AH13407

Specification

Anti-MUC1 / EMA / CD227 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW ,14,3,4, <u>P15941</u> <u>89603</u> Human Mouse Monoclonal Mouse / IgG2b, kappa 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

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.

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

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.