

MUC1 Antibody (EP1024Y)

Purified Mouse Monoclonal Antibody Catalog # ABV11668

Specification

MUC1 Antibody (EP1024Y) - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW WB <u>P15941</u> Human Mouse Monoclonal Mouse IgG 122102

MUC1 Antibody (EP1024Y) - 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

Target/Specificity MUC1

Formulation				
100 µl antibody	supplied in PBS	with 0.09%	(W/V) sodium	azide.

Handling The antibody solution should be gently mixed before use.

Background Descriptions

Precautions MUC1 Antibody (EP1024Y) is for research use only and not for use in diagnostic or therapeutic procedures.

MUC1 Antibody (EP1024Y) - 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

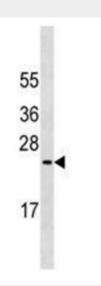
Expressed on the apical surface of epithelial cells, especially of airway passages, breast and uterus. Also expressed in activated and unactivated T-cells. Overexpressed in epithelial tumors, such as breast or ovarian cancer and also in non-epithelial tumor cells. Isoform Y is expressed in tumor cells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

MUC1 Antibody (EP1024Y) - Protocols

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

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

MUC1 Antibody (EP1024Y) - Images



Western blot analysis in MDA-MB435 cell lysate using anti-MUC1 antibody.

MUC1 Antibody (EP1024Y) - 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. The beta subunit contains a C-terminal domain which is involved in cell signaling, through phosphorylations and protein-protein interactions. Modulates signaling in ERK, SRC and NF-kappa-B pathways. In activated T-cells, influences directly or indirectly the Ras/MAPK pathway. Promotes tumor progression. Regulates TP53-mediated transcription and determines cell fate in the genotoxic stress response. Binds, together with KLF4, the PE21 promoter element of TP53 and represses TP53 activity.