

#### **Anti-MUC1 Antibody**

Mouse monoclonal antibody to MUC1 Catalog # AP61609

# **Specification**

# **Anti-MUC1 Antibody - Product Information**

Application WB, IHC
Primary Accession P15941
Reactivity Human
Host Mouse
Clonality Monoclonal
Calculated MW 122102

# **Anti-MUC1 Antibody - Additional Information**

#### **Gene ID 4582**

#### **Other Names**

PUM; 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

KLH-conjugated synthetic peptide encompassing a sequence within human MUC1. The exact sequence is proprietary.

# **Dilution**

WB~~1:1000 IHC~~1:100~500

#### **Format**

Mouse IgG2b. Liquid in PBS containing 50% glycerol, 0.2% BSA and 0.09% (W/V) sodium azide.

#### Storage

Store at -20 °C. Stable for 12 months from date of receipt

# **Anti-MUC1 Antibody - Protein Information**

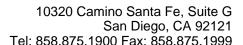
#### Name MUC1

# **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**

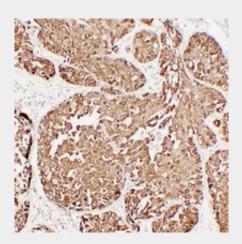
Expressed on the apical surface of epithelial cells, especially of airway passages, breast and uterus. Also expressed in activated and unactivated T-cells. Overexpressed in epithelial tumors, such as breast or ovarian cancer and also in non-epithelial tumor cells. Isoform Y is expressed in tumor cells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

# **Anti-MUC1 Antibody - Protocols**

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

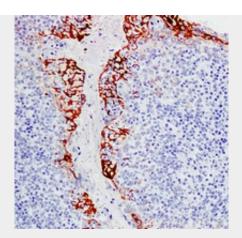
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# **Anti-MUC1 Antibody - Images**



Immunohistochemical analysis of MUC1 staining in human breast carcinoma formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.





Immunohistochemical analysis of MUC1 staining in human tonsil formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

# **Anti-MUC1 Antibody - Background**

KLH-conjugated synthetic peptide encompassing a sequence within human MUC1. The exact sequence is proprietary.