

### PRODUCT DATA SHEET

Bioworld Technology,Inc.

# **MUC2** monoclonal antibody

Catalog: MB66163 Host: Mouse Reactivity: Human

#### **BackGround:**

Mucins are a family of large glycoproteins that create the structural component of mucus. Mucus functions as a blockade against pathogenic invasion and physical injury to the respiratory, gastrointestinal, and urogenital tracts. Mucins create a protective layer for epithelial cells as either membrane-bound (MUC1, MUC3, MUC16, and MUC17) or secreted (MUC2, MUC5AC, and MUC19) proteins. MUC2, or mucin-2, the main O-glycosylated protein found in mucus, is secreted by goblet cells. The structure of MUC2 contains cysteine-rich N- and C-terminal domains along with a protein core made up of heavily O-glycosylated mucin domains. The high levels of O-glycosylation along with disulfide bonding make MUC2 resistant to proteolytic cleavage. Mucin expression and glycan structure changes occur in cancers of the intestine and impact the development and progression of these cancers . The presence of MUC2 in the mucous layer of the colon helps prevent ulcerative colitis (UC) by inhibiting the invasion of bacteria.

### **Product:**

Mouse IgG2b. Liquid in PBS containing 50% glycerol, 0.2% BSA and 0.01% sodium azide.

### **Molecular Weight:**

~ 540 kDa

### **Swiss-Prot:**

Q02817

### **Purification&Purity:**

The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

#### **Applications:**

IHC (1/100 - 1/300)

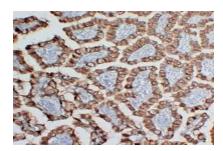
## Storage&Stability:

Store at  $4 \, \mathbb{C}$  short term. Aliquot and store at  $-20 \, \mathbb{C}$  long term. Avoid freeze-thaw cycles.

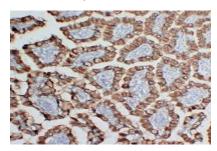
### **Specificity:**

Recognizes endogenous levels of MUC2 protein.

#### DATA:



Immunohistochemical analysis of MUC2 staining in human colon 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.



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### Note:

For research use only, not for use in diagnostic procedure.

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