

# MUC3 (Mucin 3) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone M3.1] Catalog # AH11891

#### **Product Information**

Application IHC, IF, FC Primary Accession Q02505

Other Accession 4584, 57876, 744422, 744530, Q9H195

Reactivity Human
Host Mouse
Clonality Monoclonal

Isotype Mouse / IgG2a, kappa

Clone Names M3.1 Calculated MW 345127

## **Additional Information**

Gene ID 4584

Other Names Mucin-3A, MUC-3A, Intestinal mucin-3A, MUC3A, MUC3

**Application Note** IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50

**Storage** Store at 2 to 8°C.Antibody is stable for 24 months.

**Precautions** MUC3 (Mucin 3) Antibody - With BSA and Azide is for research use only and

not for use in diagnostic or therapeutic procedures.

#### **Protein Information**

Name MUC3A ( HGNC:7513)

**Function** Major glycoprotein component of a variety of mucus gels. Thought to

provide a protective, lubricating barrier against particles and infectious agents at mucosal surfaces. May be involved in ligand binding and intracellular

signaling.

**Cellular Location** [Isoform 1]: Membrane; Single-pass membrane protein [Isoform 3]: Secreted

[Isoform 5]: Secreted.

**Tissue Location** Broad specificity; small intestine, colon, colonic tumors, heart, liver, thymus,

prostate, pancreas and gall bladder

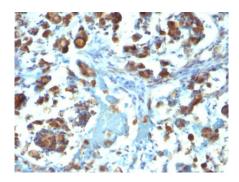
# **Background**

It recognizes a protein of HMW, identified as mucin 3 glycoprotein (MUC3). Its epitope localizes between aa SITTTE. This MAb shows no cross-reaction with human milk fat globule membranes, MUC1, or MUC2. MUC3 is distributed in colon and rectum, and is also present to a lesser extent in breast, lung and salivary gland tissues. The Mucins are a family of highly glycosylated, secreted proteins with a basic structure consisting of a variable number of tandem repeats (VNTRs) encoded by 60 base pairs (Mucin 1), 69 base pairs (Mucin 2) and 51 base pairs (Mucin 3). The number of repeats is highly polymorphic and varies among different alleles. Mucin 1 proteins are expressed as type I membrane proteins in addition to secreted forms. Mucin 1 is aberrantly expressed in epithelial tumors including breast carcinomas. Mucin 2 coats the epithelia of the intestines and airways and is associated with colonic tumors. Mucin 3 is a major component of various mucus gels and is broadly expressed in normal and tumor cells.

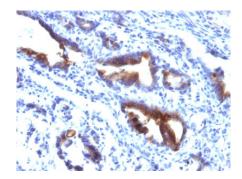
## References

Apostolopoulos V, et. al. Journal of Gastroenterology and Hepatology, 1995, 10:555-61.

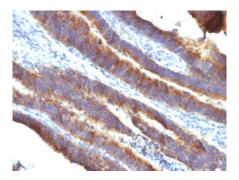
# **Images**



Formalin-fixed, paraffin-embedded human Gastric Carcinoma stained with MUC3 Monoclonal Antibody (M3.1).



Formalin-fixed, paraffin-embedded human Gastric Carcinoma stained with MUC3 Monoclonal Antibody (M3.1).



Formalin-fixed, paraffin-embedded human Colon Carcinoma stained with MUC3 Monoclonal Antibody (M3.1).

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