

### MUC5AC (Mucin 5AC / Gastric Mucin) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone 2-11M1]
Catalog # AH11917

## **Specification**

# MUC5AC (Mucin 5AC / Gastric Mucin) Antibody - With BSA and Azide - Product Information

Application IHC-F, IF, FC Primary Accession P98088

Other Accession 4586, 534332

Reactivity Human, Mouse, Monkey, Bovine, Cat Host Mouse

Clonality Monoclonal

Isotype Mouse / IgG1, kappa
Calculated MW >1,000kDa KDa

# MUC5AC (Mucin 5AC / Gastric Mucin) Antibody - With BSA and Azide - Additional Information

#### **Gene ID 4586**

### **Other Names**

Mucin-5AC, MUC-5AC, Gastric mucin, Lewis B blood group antigen, LeB, Major airway glycoprotein, Mucin-5 subtype AC, tracheobronchial, Tracheobronchial mucin, TBM, MUC5AC, MUC5

### **Application Note**

<span class ="dilution\_IHC-F">IHC-F~~N/A</span><br \> <span class = "dilution\_IF">IF~~1:50~200</span><br \> <span class = "dilution\_FC">FC~~1:10~50</span>

#### Storage

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

#### **Precautions**

MUC5AC (Mucin 5AC / Gastric Mucin) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

# MUC5AC (Mucin 5AC / Gastric Mucin) Antibody - With BSA and Azide - Protein Information

Name MUC5AC {ECO:0000303|PubMed:11535137, ECO:0000312|HGNC:HGNC:7515}

## **Function**

Gel-forming glycoprotein of gastric and respiratory tract epithelia that protects the mucosa from infection and chemical damage by binding to inhaled microorganisms and particles that are subsequently removed by the mucociliary system (PubMed:<a

href="http://www.uniprot.org/citations/14535999" target="\_blank">14535999</a>, PubMed:<a href="http://www.uniprot.org/citations/14718370" target="\_blank">14718370</a>). Interacts with H.pylori in the gastric epithelium, Barrett's esophagus as well as in gastric metaplasia of the



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duodenum (GMD) (PubMed:<a href="http://www.uniprot.org/citations/14535999" target=" blank">14535999</a>).

**Cellular Location** Secreted

#### **Tissue Location**

Highly expressed in surface mucosal cells of respiratory tract and stomach epithelia. Overexpressed in a number of carcinomas. Also expressed in Barrett's esophagus epithelium and in the proximal duodenum.

# MUC5AC (Mucin 5AC / Gastric Mucin) Antibody - With BSA and Azide - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

MUC5AC (Mucin 5AC / Gastric Mucin) Antibody - With BSA and Azide - Images

# MUC5AC (Mucin 5AC / Gastric Mucin) Antibody - With BSA and Azide - Background

This MAb recognizes the peptide core of gastric mucin M1 (recently identified as Mucin 5AC). Ālts epitope is located in the N-terminal cysteine rich part of the peptide core of MUC5AC, which is heavily glycosylated. Its epitope is destroyed by beta-mercaptoethanol but not by periodate treatment. MAb 2-11M1 reacts with the protein backbone exclusively; it only reacts with fully deglycosylated MUC5AC. Therefore, the material under test should also be fully deglycosylated. This can be achieved with standard periodate oxidation method. The success of the deglycosylation can be checked with routine PAS (Periodic Acid Shiff) staining. After deglycosylation, the preparation should no longer be stainable with PAS reagent. Only then 2-11M1 will react should MUC5AC be present. This mucin is present in primary ovarian mucinous cancer but usually absent in colorectal adenocarcinoma, thus showing an expression pattern opposite to MUC2. Together with a panel of antibodies, Anti-MUC5AC may be useful for differential identification of primary mucinous ovarian tumors from colon adenocarcinoma metastatic to the ovary. MUC5AC antibodies may also be useful for identification of intestinal metaplasia as well as in the identification of pancreatic carcinoma and pre-cancerous changes vs. normal pancreas.

## MUC5AC (Mucin 5AC / Gastric Mucin) Antibody - With BSA and Azide - References

Cancer Res.46: 3983-3989 (1986). | Biochem. J. 254: 185-193 (1988). | Int. J. Cancer 47: 304-310 (1991). | J. Immunol. Methods 149: 105-113 (1992)