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

Mouse Monoclonal Antibody [Clone SPM297]
Catalog # AH10610

Product Information

Application	IF, FC, IHC-P
Primary Accession	P98088
Other Accession	4586, 534332
Reactivity	Human, Mouse, Rat, Rabbit, Monkey, Pig, Chicken, Cat
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Clone Names	SPM297
Calculated MW	585570

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	IF~~1:50~200 FC~~1:10~50 IHC-P~~N/A
Format	200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
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.

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:14535999, PubMed:14718370). Interacts with H.pylori in the gastric epithelium, Barrett's esophagus as well as in gastric metaplasia of the duodenum (GMD) (PubMed:14535999).

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.

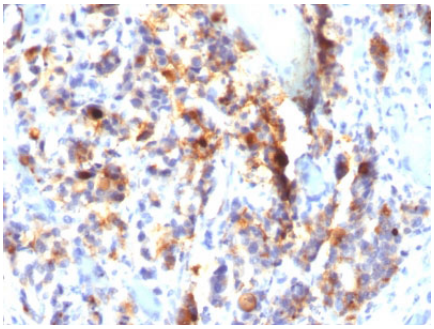
Background

This MAb recognizes the peptide core of gastric mucin M1 (>1,000kDa) (recently identified as Mucin 5AC). Its epitope is destroyed by beta-mercaptoethanol and proteases but not by periodate treatment. Antibody to gastric mucin M1 reacts with the gastric epithelium of normal human gastrointestinal tract as well as with the precancerous and cancerous colon but not with normal adult colon. It also reacts with fetal colonic mucosa. Resurgence of gastric mucin reactivity during colonic carcinogenesis is due to re-expression of the peptide core of gastric (or fetal colonic) mucins.

References

Bara J et. al. International Journal of Cancer, 1991, 47(2):304-10. | Bara J et. al. Journal of Immunological Methods, 1992, 149(1):105-13

Images



Formalin-fixed, paraffin-embedded human Gastric Carcinoma stained with MUC5AC Monoclonal Antibody (SPM297).