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

Mouse Monoclonal Antibody [Clone MUC5AC/917 + 45M1]
Catalog # AH11920

Product Information

Application	IHC, IF, FC
Primary Accession	P98088
Other Accession	4586, 534332
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG's
Clone Names	MUC5AC/917 + 45M1
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	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	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 Highly expressed in surface mucosal cells of respiratory tract and stomach

Tissue Location	epithelia. Overexpressed in a number of carcinomas. Also expressed in Barrett's esophagus epithelium and in the proximal duodenum.

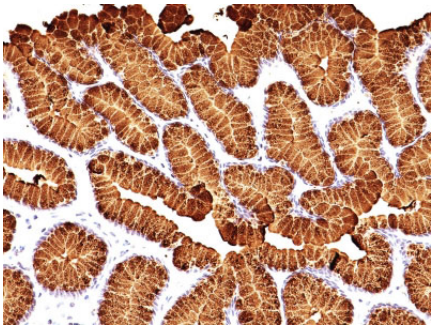
Background

Mucin 5AC glycoprotein (MUC5AC) is a 641kDa glycoprotein belonging to the superfamily of mucins. Mucins are high molecular weight glycoproteins produced by epithelial cells and can be divided into two families; secretory mucins and membrane bound mucins. MUC5AC is a mucus-forming secreted mucin that is found in normal gastric and tracheo-bronchial mucosa, but absent from normal colon. MUC5AC expression 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.

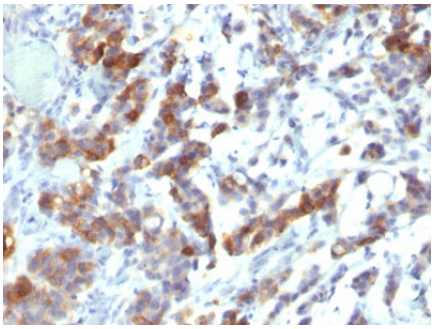
References

Albarracin CT, Jafri J, Montag AG, Hart J, Kuan SF. Differential expression of MUC2 and MUC5AC mucin genes in primary ovarian and metastatic colonic carcinoma. Hum Pathol 2000;31:672-7. | Horinouchi M, et al. Expression of different glycoforms of membrane mucin (MUC1) and secretory mucin (MUC2, MUC5AC and MUC6) in pancreatic neoplasms. Acta Histo Chem 2003;36:443-53. |

Images



Formalin-fixed, paraffin-embedded human Stomach stained with MUC5AC Monoclonal Antibody (MUC5AC/917 + 45M1).



Formalin-fixed, paraffin-embedded human Gastric Carcinoma stained with MUC5AC Monoclonal Antibody (MUC5AC/917 + 45M1).