

Anti-Mucin Gastric Antibody (Monoclonal, 45M1)
Catalog # ABO10449

Specification

Anti-Mucin Gastric Antibody (Monoclonal, 45M1) - Product Information

Application	IHC
Primary Accession	P98088
Host	Mouse
Isotype	Mouse IgG1
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal
Format	Lyophilized

Description

Mouse IgG monoclonal antibody for Mucin Gastric, mucin 5AC, oligomeric mucus/gel-forming (MUC5AC) detection. Tested with WB, IHC-P, ICC in Human;mouse;rabbit;rat. No cross reactivity with other proteins.

Reconstitution

Add 1ml of PBS buffer will yield a concentration of 100ug/ml.

Anti-Mucin Gastric Antibody (Monoclonal, 45M1) - 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
{ECO:0000303|PubMed:11535137, ECO:0000312|HGNC:HGNC:7515}

Calculated MW

585570 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 2-4 µg/ml, Human, mouse, rabbit, rat, By Heat
Immunocytochemistry , 1 µg/ml, Human, mouse, rabbit, rat, Western blot, 1-2 µg/ml, Human, mouse, rabbit, rat

Subcellular Localization

Secreted .

Tissue Specificity

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. .

Protein Name

Mucin-5AC

Contents

Mouse ascites fluid, 1.2% sodium acetate, 2mg BSA, with 0.01mg NaN₃ as preservative.

Immunogen

Mucin from human ovarian cyst fluid.

Purification

Ascites

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After r^oConstitution, at 4°C for one month. It^oCan also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities

Contains 1 CTCK (C-terminal cystine knot-like) domain.

Anti-Mucin Gastric Antibody (Monoclonal, 45M1) - 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

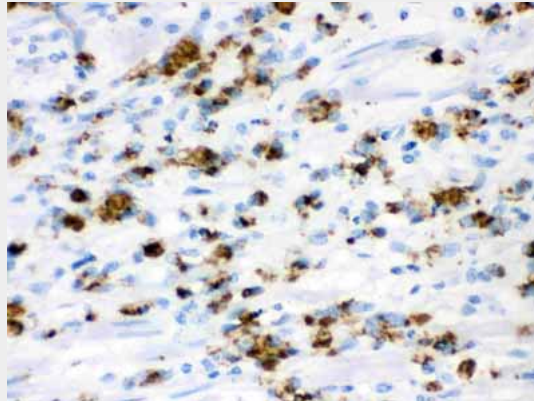
Highly expressed in surface mucosal cells of respiratory tract and stomach epithelia. Overexpressed in a number of carcinomas. Also expressed in Barrett's esophagus epithelium and in the proximal duodenum.

Anti-Mucin Gastric Antibody (Monoclonal, 45M1) - Protocols

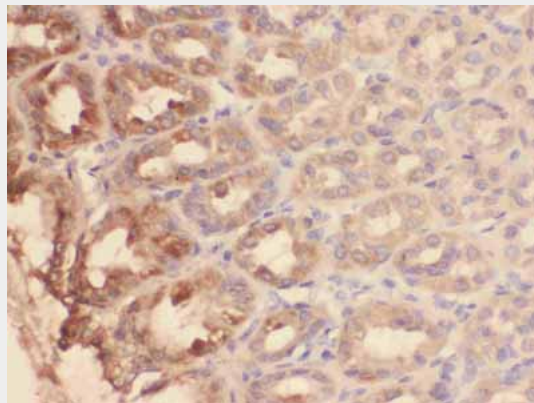
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Mucin Gastric Antibody (Monoclonal, 45M1) - Images



Anti- Mucin Gastric antibody, ABO10449, IHC(P)IHC(P): Human Gastric Cancer Tissue



Anti- Mucin Gastric antibody, ABO10449, IHC(P)IHC(P): Rat Gastric Cancer Tissue

Anti-Mucin Gastric Antibody (Monoclonal, 45M1) - Background

Mucin 5AC (Muc5AC) is a protein that in humans is encoded by the MUC5AC gene. Using real-time RT-PCR, Moehle et al. (2006) found that MUC5AC was highly expressed in adult trachea and stomach. Expression was lower in adult lung and weak in fetal lung, and no expression was detected in other tissues. This gene has been linked to mucus hypersecretion in the pulmonary tracts and associated to chronic obstructive pulmonary disease. Moreover, Muc5ac is identified as a direct and critical mediator of resistance during intestinal nematode infection.