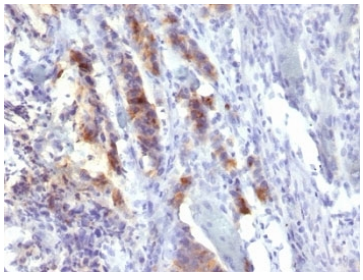
MUC5AC Antibody SPM488 / Gastric Epithelial Mucin Marker [clone SPM488] (V2737)

Catalog No.	Formulation	Size
V2737-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2737-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2737SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2737IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Citations (2)

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	SPM488
Purity	Protein G affinity chromatography
UniProt	P98088
Localization	Cytoplasmic
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This MUC5AC Antibody SPM488 / Gastric Epithelial Mucin Marker is available for research use only.



MUC5AC Antibody SPM488 in Human Gastric Carcinoma IHC. Immunohistochemistry staining of FFPE human gastric carcinoma tissue with MUC5AC Antibody SPM488 / Gastric Epithelial Mucin Marker, clone SPM488. Positive staining demonstrates MUC5AC expression in human gastric carcinoma cells, supporting detection of this gastric epithelial mucin marker in tumor tissue.

Description

MUC5AC Antibody SPM488 / Gastric Epithelial Mucin Marker detects MUC5AC, a high molecular weight secreted glycoprotein and member of the gel-forming mucin family. MUC5AC is produced by specialized mucus-secreting epithelial cells and is particularly abundant in gastric and tracheobronchial mucosa. Extensive glycosylation gives MUC5AC many of the physical properties required for formation of hydrated mucus gels that lubricate and protect epithelial surfaces.

MUC5AC is prominently expressed by surface and foveolar epithelial cells of the stomach. Secreted MUC5AC contributes to the gastric mucus barrier that protects underlying epithelial cells from acid, digestive enzymes, microorganisms and mechanical injury. Its characteristic distribution makes MUC5AC a useful gastric epithelial mucin marker for investigating mucus-producing cells, gastric differentiation and mucosal barrier biology.

Alterations in MUC5AC expression and glycosylation are studied in gastrointestinal disease and cancer. Changes can accompany intestinal metaplasia and neoplastic transformation, while MUC5AC expression is also investigated in pancreatic carcinoma and precancerous pancreatic lesions. MUC5AC can be expressed in primary ovarian mucinous tumors while generally being absent from normal colon and showing a different expression pattern from MUC2 in colorectal adenocarcinoma. These differences make mucin expression profiles relevant to studies of epithelial and mucinous tumor differentiation.

Outside the gastrointestinal tract, MUC5AC is an important component of respiratory mucus. It is produced by mucus-secreting cells of the airway epithelium and can increase in response to inflammation, allergens, infection and environmental stimuli. MUC5AC therefore connects gastric and respiratory research through its broader role in mucus production and mucosal defense.

Clone SPM488 is a mouse monoclonal antibody generated against a synthetic peptide from the tandem repeat region of human MUC5AC. The antibody has been evaluated by immunohistochemistry in FFPE human gastric carcinoma tissue. NSJ Bioreagents supplies antibodies for mucin, gastrointestinal and cancer research. A MUC5AC Antibody can be used to investigate gastric epithelial mucin expression, mucus-producing cells, mucosal differentiation and MUC5AC-associated tumor biology.

For broader research on MUC5AC expression in gastric and respiratory mucus, including the widely published 45M1 clone, see our MUC5AC Antibody 45M1 / Gastric and Respiratory Mucin Marker page.

Application Notes

Optimal dilution of the MUC5AC Antibody SPM488 / Gastric Epithelial Mucin Marker should be determined by the researcher.

1. Staining of formalin-fixed tissues requires boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

A synthetic peptide of human MUC5AC tandem repeat was used as the immunogen for the MUC5AC Antibody SPM488.

Storage

Store the MUC5AC Antibody SPM488 at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

MUC5AC antibody, Gastric Epithelial Mucin Marker antibody, Mucin 5AC antibody, Mucin-5AC antibody, Gastric Mucin antibody

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