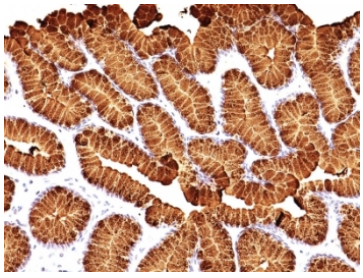
MUC5AC Antibody Cocktail MUC5AC/917 + 45M1 / Gastric Mucin Marker [clone MUC5AC/917 + 45M1] (V2740)

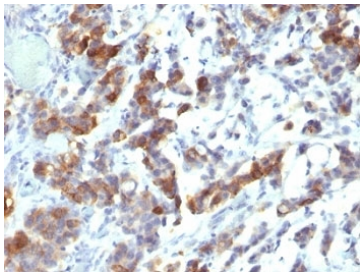
Catalog No.	Formulation	Size
V2740-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2740-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2740SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2740IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

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	MUC5AC/917 + 45M1
Purity	Protein G affinity chromatography
UniProt	P98088
Localization	Cytoplasmic
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This MUC5AC Antibody Cocktail MUC5AC/917 + 45M1 / Gastric Mucin Marker is available for research use only.



MUC5AC Antibody Cocktail MUC5AC/917 + 45M1 in Human Stomach IHC. Immunohistochemistry staining of FFPE human stomach tissue with MUC5AC Antibody Cocktail MUC5AC/917 + 45M1 / Gastric Mucin Marker. HIER was performed by boiling tissue sections in 10 mM Tris with 1 mM EDTA, pH 9, for 10-20 min followed by cooling at RT for 20 min. MUC5AC staining is observed in gastric mucosal epithelium, consistent with expression of this gastric mucin marker.



MUC5AC Antibody Cocktail MUC5AC/917 + 45M1 in Human Gastric Carcinoma IHC. Immunohistochemistry staining of FFPE human gastric carcinoma tissue with MUC5AC Antibody Cocktail MUC5AC/917 + 45M1 / Gastric Mucin Marker. HIER was performed by boiling tissue sections in 10 mM Tris with 1 mM EDTA, pH 9, for 10-20 min followed by cooling at RT for 20 min. Positive staining demonstrates MUC5AC expression in human gastric carcinoma tissue.

Description

MUC5AC Antibody Cocktail MUC5AC/917 + 45M1 / Gastric Mucin Marker detects MUC5AC, a large secreted gel-forming mucin produced by specialized mucus-secreting epithelial cells. MUC5AC is particularly abundant in the stomach and respiratory tract, where it contributes to hydrated mucus barriers that protect epithelial surfaces. Extensive glycosylation gives MUC5AC many of the physical properties required for mucus viscosity, lubrication and resistance to environmental and chemical injury.

MUC5AC is prominently expressed by surface and foveolar epithelial cells of the stomach. Secreted MUC5AC contributes to the gastric mucus layer that protects the underlying epithelium from acid, digestive enzymes, microorganisms and mechanical damage. Its characteristic expression pattern makes MUC5AC a useful gastric mucin marker for studies of gastric epithelial differentiation, mucus production and mucosal barrier function.

Alterations in MUC5AC expression and glycosylation are investigated in gastrointestinal disease and cancer. Changes in expression can accompany gastritis, intestinal metaplasia and gastric carcinoma, while MUC5AC is also studied in pancreatic, colorectal, pulmonary and other epithelial tumors. Analysis of mucin expression patterns can provide information about epithelial differentiation and mucinous tumor phenotypes, particularly when MUC5AC is evaluated alongside other mucin and lineage markers.

In the respiratory tract, MUC5AC is produced primarily by mucus-secreting epithelial cells and is associated with goblet cell differentiation and mucus production. Expression can increase in response to inflammatory signals, allergens, infection and environmental irritants. Excessive production is therefore studied in respiratory conditions characterized by mucus hypersecretion, including asthma and chronic obstructive pulmonary disease.

This MUC5AC Antibody cocktail combines mouse monoclonal clones MUC5AC/917 and 45M1. The MUC5AC/917 component was generated using recombinant human MUC5AC protein, while 45M1 was generated using an M1 mucin preparation from an ovarian mucinous cyst. The cocktail has been evaluated by immunohistochemistry in FFPE human stomach and gastric carcinoma tissue. NSJ Bioreagents supplies antibodies for mucin, gastrointestinal and cancer research. A MUC5AC Antibody cocktail can be used to investigate gastric mucin expression, mucus-producing epithelial cells and MUC5AC-associated tissue differentiation.

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 Cocktail MUC5AC/917 + 45M1 / Gastric 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

Recombinant human protein (MUC5AC/917) and an M1 mucin preparation from the fluid of an ovarian mucinous cyst belonging to an O Le(a-b) patient (45M1) were used as the immunogen for the MUC5AC Antibody Cocktail MUC5AC/917 + 45M1.

Storage

Store the MUC5AC Antibody Cocktail MUC5AC/917 + 45M1 at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

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

Ordering: Phone: 858.663.9055 | Fax: 1.267.821.0800 | Email: info@nsjbio.com
Copyright © NSJ Bioreagents. All rights reserved.