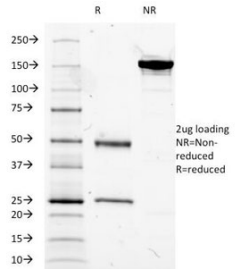
MUC5AC Antibody 2-11M1 / Gastric Mucin M1 Marker [clone 2-11M1] (V2739)

Catalog No.	Formulation	Size
V2739-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2739-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2739SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Citations (6)

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	2-11M1
Purity	Protein G affinity chromatography
UniProt	P98088
Localization	Cytoplasmic
Applications	ELISA: 2-4ug/ml for coating (order BSA/sodium azide-free format) Western blot: 1-2ug/ml Flow cytometry: 0.5-1ug/10^6 cells Immunofluorescence: 1-2ug/ml
Limitations	This MUC5AC Antibody 2-11M1 / Gastric Mucin M1 Marker is available for research use only.



Purified MUC5AC Antibody 2-11M1 SDS-PAGE. Gel run analysis of purified, BSA-free MUC5AC Antibody 2-11M1 / M1 Mucin Epitope Marker, clone 2-11M1. Analysis of the purified mouse monoclonal antibody provides confirmation of antibody integrity and purity.

Description

MUC5AC Antibody 2-11M1 / Gastric Mucin M1 Marker detects MUC5AC, a large secreted gel-forming mucin historically identified as gastric mucin M1. MUC5AC is produced by specialized mucus-secreting epithelial cells and is particularly abundant in gastric and respiratory mucosa. Extensive glycosylation gives the mature protein many of the physical properties required for formation of hydrated mucus gels that protect, lubricate and maintain 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 the underlying epithelium from acid, digestive enzymes, microorganisms and mechanical injury. Its characteristic expression makes gastric mucin M1 useful for studies of mucus-producing epithelial cells, gastric differentiation and mucosal barrier biology.

Changes in MUC5AC expression and glycosylation are investigated in gastrointestinal disease and cancer. MUC5AC can be present in primary ovarian mucinous tumors while typically showing a different expression pattern from MUC2 in colorectal adenocarcinoma. Mucin marker panels can therefore contribute to research investigating the differentiation and potential origin of mucinous tumors. MUC5AC is also studied in intestinal metaplasia, pancreatic carcinoma and precancerous changes of pancreatic epithelium.

Outside the gastrointestinal tract, MUC5AC is produced by mucus-secreting cells of the respiratory epithelium. Expression can increase in response to inflammatory signals, allergens, infection and environmental irritants. These functions connect gastric and respiratory MUC5AC biology through a shared role in mucus production, epithelial protection and mucosal defense.

Clone 2-11M1 is a mouse monoclonal antibody that recognizes the peptide core of gastric mucin M1, now identified as MUC5AC. The antibody was generated using an M1 mucin preparation from ovarian mucinous cyst fluid and recognizes an epitope that is sensitive to papain and mercaptoethanol treatment. The clone has been used for ELISA, western blot, flow cytometry and immunofluorescence applications. NSJ Bioreagents supplies antibodies for mucin, epithelial and cancer research. A MUC5AC Antibody can be used to investigate gastric mucin biology, mucus-producing 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 2-11M1 / Gastric Mucin M1 Marker should be determined by the researcher.

It has been found that treating the testing sample with Papain or mercaptoethanol will destroy the M1 epitope for the 2-11M1 antibody (Ref. 1; Cancer Research 46.8 (1986): 3983-3989.)

Immunogen

An M1 mucin preparation from the fluid of an ovarian mucinous cyst belonging to an O Le(a-b) patient was used as the immunogen for the MUC5AC Antibody 2-11M1.

Storage

Store the MUC5AC Antibody 2-11M1 at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

MUC5AC antibody, Gastric Mucin M1 Marker antibody, Mucin 5AC antibody, Mucin-5AC antibody, Gastric Mucin antibody

References (1)

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