

Product datasheet

Anti-Mucin 5AC antibody [2-11M1] ab24071

9 References 2 Images

Overview

Product name	Anti-Mucin 5AC antibody [2-11M1]
Description	Mouse monoclonal [2-11M1] to Mucin 5AC
Host species	Mouse
Tested applications	Suitable for: ICC, Flow Cyt, IHC-P, IHC-Fr, WB
Species reactivity	Reacts with: Mouse, Cat, Human, Monkey
Immunogen	Mucin isolated from an ovarian cyst fluid (pure endocervical type according to the Fenoglio's classification) Human.

General notes

This antibody reacts with peptide core of gastric mucin restricted to the surface gastric epithelium. It characterised the M1-b epitope, completely destroyed by b-mercapto-ethano. The M1-b epitope is found located on a 58 kD and 40 kD peptide after trypsin treatment of native M1 mucin. This M1-b epitope coprecipites with the M1-f epitope encoded by Mucin 5AC gene. It is probably associated with the gastric mucin encoded by Mucin 5AC gene or with a gastric mucin encoded by another gastric MUC gene which polymerized with the M1/Mucin 5AC gastric mucin.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term.
Storage buffer	Preservative: 0.05% Sodium azide Constituent: PBS
Purity	Protein G purified
Primary antibody notes	This antibody reacts with peptide core of gastric mucin restricted to the surface gastric epithelium. It characterised the M1-b epitope, completely destroyed by b-mercapto-ethano. The M1-b epitope is found located on a 58 kD and 40 kD peptide after trypsin treatment of native M1 mucin. This M1-b epitope coprecipites with the M1-f epitope encoded by Mucin 5AC gene. It is probably associated with the gastric mucin encoded by Mucin 5AC gene or with a gastric mucin encoded by another gastric MUC gene which polymerized with the M1/Mucin 5AC gastric mucin.
Clonality	Monoclonal
Clone number	2-11M1

Myeloma	Sp2/0
Isotype	IgG1

Applications

Our [Abpromise guarantee](#) covers the use of **ab24071** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC		1/1000. PubMed: 19503797
Flow Cyt		Use 2µg for 10 ⁶ cells. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
IHC-P		Use at an assay dependent concentration. The use of periodate solution (0.1 - 0.05M) for 10-20 minutes is recommended when detecting mucin by IHC.
IHC-Fr		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 130 kDa.

Target

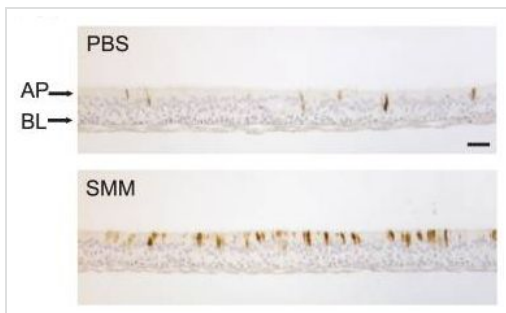
Relevance

Mucins are high molecular weight glycoproteins with 80% carbohydrates and 20% core protein. Gastric Mucin 5AC antigen is found in columnar mucus cells of surface gastric epithelium and in goblet cells of the fetal and precancerous colon but not in normal colon. Resurgence of gastric mucin during colonic carcinogenesis is suggestive of either re-expression of the peptide core of gastric mucin in the adult colon or due to changes in the glycosylation pattern of mucin, which expose the hidden Mucin 5AC antigen.

Cellular localization

Secreted; Cytoplasmic and cell surface

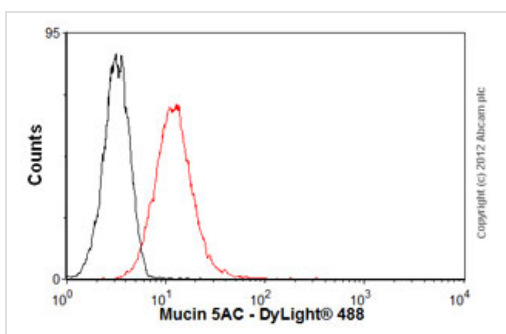
Images



Immunocytochemistry - Anti-Mucin 5AC antibody [2-11M1] (ab24071)

Image from Ribeiro et. al., PLoS ONE. 2009; 4(6): e5806 (Fig 5B).

ab24071 at 1/1000 dilution staining MUCin 5Ac in Human bronchial epithelia by Immunocytochemistry. Well-differentiated HBE were exposed for 24 hr to mucosal PBS or mucosal SMM (Supernatant of mucopurulent material) before experiment. An immunoperoxidase detection system was used for staining.



Flow Cytometry - Anti-Mucin 5AC antibody [2-11M1] (ab24071)

Overlay histogram showing A549 cells stained with ab24071 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab24071, 2µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed.

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors