

## Product datasheet

# Anti-Mucin 5AC antibody [EPR16904] ab198294

Recombinant RabMAb

[14 References](#) [5 Images](#)

### Overview

<b>Product name</b>	Anti-Mucin 5AC antibody [EPR16904]
<b>Description</b>	Rabbit monoclonal [EPR16904] to Mucin 5AC
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: Human stomach lysate. IHC-P: Human stomach tissue. ICC/IF: HeLa and SW480 cells.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR16904
<b>Isotype</b>	IgG

## Applications

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**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab198294 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
WB		1/20000. Detects a band of approximately 250-600 kDa (predicted molecular weight: 527 kDa).
IHC-P		1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		1/250.

## Target

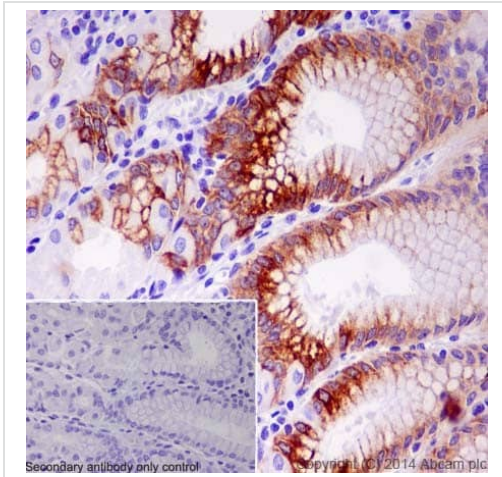
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<b>Function</b>	Gel-forming glycoprotein of gastric and respiratory tract epithelia that protects the mucosa from infection and chemical damage by binding to inhaled microorganisms and particles that are subsequently removed by the mucociliary system.
<b>Tissue specificity</b>	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.
<b>Sequence similarities</b>	Contains 1 CTCK (C-terminal cystine knot-like) domain. Contains 3 TIL (trypsin inhibitory-like) domains. Contains 4 VWFC domains. Contains 4 VWFD domains.
<b>Domain</b>	The cysteine residues in the Cys-rich subdomain repeats are not involved in disulfide bonding.
<b>Post-translational modifications</b>	C-, O- and N-glycosylated. O-glycosylated on the Thr-/Ser-rich tandem repeats. C-mannosylation in the Cys-rich subdomains may be required for proper folding of these regions and for export from the endoplasmic reticulum during biosynthesis. Proteolytic cleavage in the C-terminal is initiated early in the secretory pathway and does not involve a serine protease. The extent of cleavage is increased in the acidic parts of the secretory pathway. Cleavage generates a reactive group which could link the protein to a primary amide.
<b>Cellular localization</b>	Secreted.

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## Images

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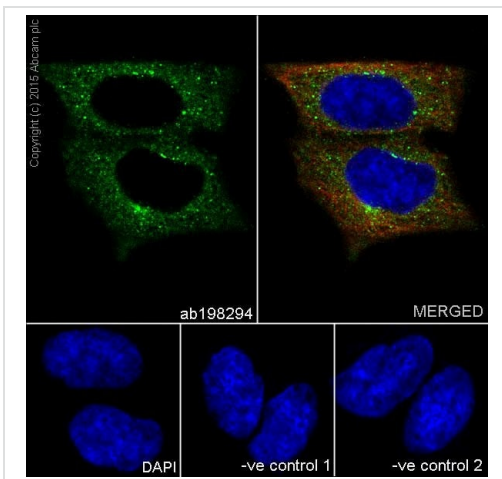
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Mucin 5AC antibody [EPR16904] (ab198294)

Immunohistochemical analysis of paraffin-embedded Human stomach tissue labeling Mucin 5AC with ab198294 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution.

Cytoplasm staining on Human stomach tissue is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-Mucin 5AC antibody [EPR16904] (ab198294)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (Human epithelial cells from cervix adenocarcinoma) cells labeling Mucin 5AC with ab198294 at 1/250 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) ([ab150077](#)) secondary antibody at 1/500 dilution (green).

Cytoplasm staining on HeLa cell line is observed.

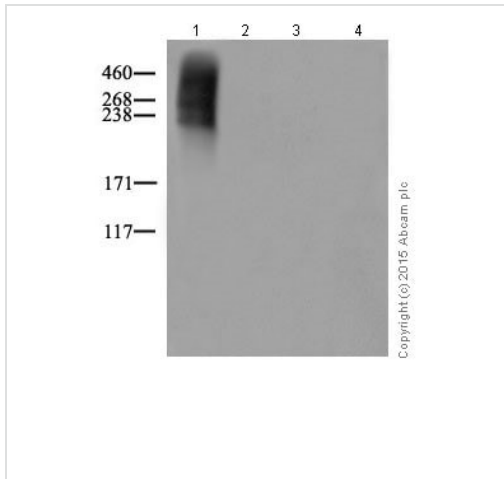
The nuclear counterstain is DAPI (blue).

Tubulin is detected with [ab7291](#) (anti-Tubulin mouse mAb) at 1/1000 dilution and [ab150120](#) (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution (red).

The negative controls are as follows:-

-ve control 1: ab198294 at 1/250 dilution followed by [ab150120](#) (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution.

-ve control 2: [ab7291](#) (anti-Tubulin mouse mAb) at 1/1000 dilution followed by [ab150077](#) (Alexa Fluor®488 Goat Anti-Rabbit IgG H&L) at 1/500 dilution.



Western blot - Anti-Mucin 5AC antibody [EPR16904] (ab198294)

**All lanes :** Anti-Mucin 5AC antibody [EPR16904] (ab198294) at 1/20000 dilution

**Lane 1 :** Human stomach lysate

**Lane 2 :** Human colon cancer lysate

**Lane 3 :** Human small intestine lysate

**Lane 4 :** MCF7 (Human breast adenocarcinoma cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

**All lanes :** Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

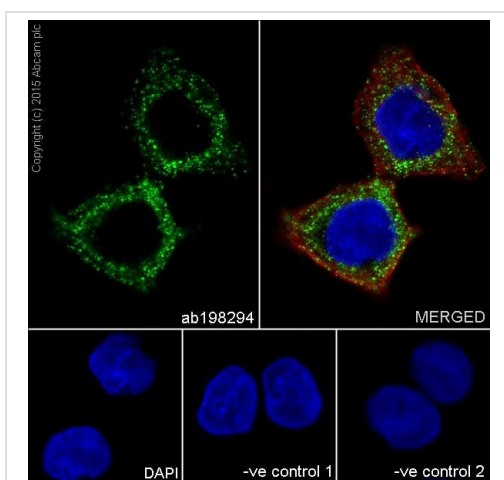
**Predicted band size:** 527 kDa

**Observed band size:** 250-600 kDa

**Exposure time:** 5 seconds

Blocking/Dilution buffer: 5% NFDm/TBST.

This protein is highly expressed in surface mucosal cells of respiratory tract and stomach epithelia. The expression profile observed is consistent with what has been described in the literature PMID: 15050369.



Immunocytochemistry/ Immunofluorescence - Anti-Mucin 5AC antibody [EPR16904] (ab198294)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized SW480 (Human colorectal adenocarcinoma cell line) cells labeling Mucin 5AC with ab198294 at 1/250 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/500 dilution (green).

Cytoplasm staining on SW480 cell line is observed.

The nuclear counterstain is DAPI (blue).


Tubulin is detected with **ab7291** (anti-Tubulin mouse mAb) at 1/1000 dilution and **ab150120** (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution (red).

The negative controls are as follows:-

-ve control 1: ab198294 at 1/250 dilution followed by **ab150120** (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution.

-ve control 2: **ab7291** (anti-Tubulin mouse mAb) at 1/1000 dilution followed by **ab150077** (Alexa Fluor®488 Goat Anti-Rabbit IgG H&L) at 1/500 dilution.

Why choose a recombinant antibody?



- Research with confidence**  
Consistent and reproducible results
- Long-term and scalable supply**  
Recombinant technology
- Success from the first experiment**  
Confirmed specificity
- Ethical standards compliant**  
Animal-free production

Anti-Mucin 5AC antibody [EPR16904] (ab198294)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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