abcam

Product datasheet

Anti-Mucin 5AC antibody [EPR16904] - Low endotoxin, Azide free ab229451

Recombinant RabMAb

4 Images

Overview

Product name	Anti-Mucin 5AC antibody [EPR16904] - Low endotoxin, Azide free
Description	Rabbit monoclonal [EPR16904] to Mucin 5AC - Low endotoxin, Azide free
Host species	Rabbit
Tested applications	**Suitable for:** WB, IHC-P, ICC/IF
Species reactivity	**Reacts with:** Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Human stomach lysate. IHC-P: Human stomach tissue. ICC/IF: HeLa and SW480 cells.
General notes	ab229451 is the carrier-free version of **ab198294**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. Our **Low endotoxin, azide-free formats** have low endotoxin level (≤ 1 EU/ml, determined by the LAL assay) and are free from azide, to achieve consistent experimental results in functional assays.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR16904
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab229451 in the following tested applications.

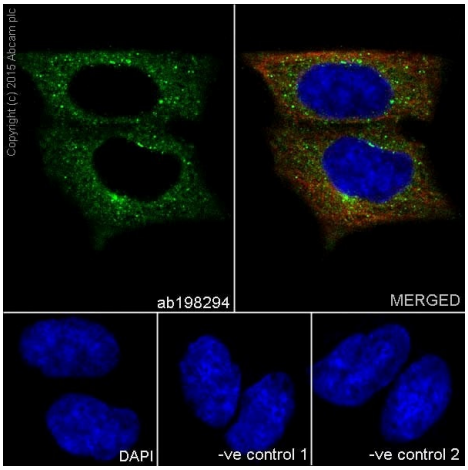
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Detects a band of approximately 250-600 kDa (predicted molecular weight: 527 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		Use at an assay dependent concentration.

Target

Function	Gel-forming glycoprotein of gastric and respiratoy tract epithelia that protects the mucosa from infection and chemical damage by binding to inhaled microrganisms and particles that are subsequently removed by the mucocilary system.
Tissue specificity	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.
Sequence similarities	Contains 1 CTCK (C-terminal cystine knot-like) domain. Contains 3 TIL (trypsin inhibitory-like) domains. Contains 4 VWFC domains. Contains 4 VWFD domains.
Domain	The cysteine residues in the Cys-rich subdomain repeats are not involved in disulfide bonding.
Post-translational modifications	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.
Cellular localization	Secreted.

Images



Immunocytochemistry/ Immunofluorescence - Anti-Mucin 5AC antibody [EPR16904] - Low endotoxin, Azide free (ab229451)

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).

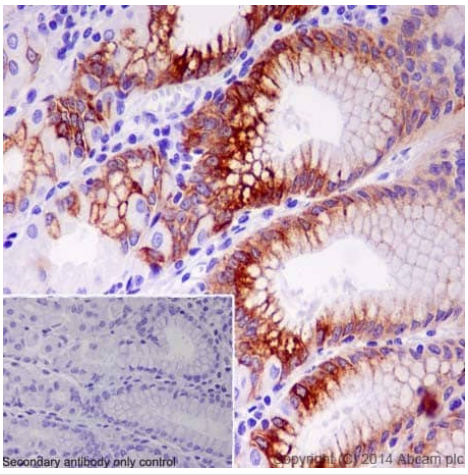
Cytoplasm staining on HeLa cell line is observed.

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab198294**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Mucin 5AC antibody [EPR16904] - Low endotoxin, Azide free (ab229451)

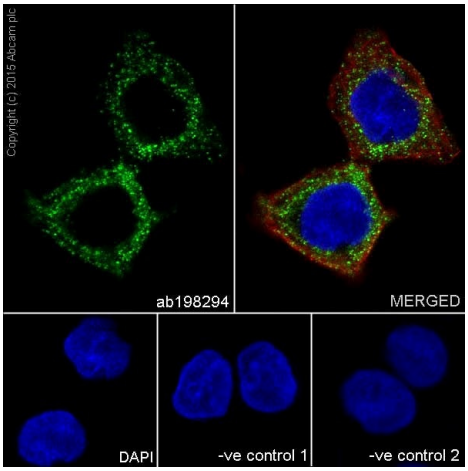
This IHC data was generated using the same anti-Mucin 5AC antibody clone, EPR16904, in a different buffer formulation (cat# **ab198294**).

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] - Low endotoxin, Azide free (ab229451)

This ICC/IF data was generated using the same anti-Mucin 5AC antibody clone, EPR16904, in a different buffer formulation (cat# **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.

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