abcam

Product datasheet

Anti-Mucin 5AC antibody [45M1] ab3649

リコンピナント

★★★★★ 7 Abreviews 113 References 画像数 9

製品の概要

製品名 Anti-Mucin 5AC antibody [45M1]

製品の詳細 Mouse monoclonal [45M1] to Mucin 5AC

由来種 Mouse

アプリケーション 適用あり: ICC/IF, IHC-Fr, mIHC, IHC-P

種交差性 交差種: Mouse, Rat, Human

免疫原 Full length protein. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール HC-P: Human, mouse, and rat stomach tissues; IHC-Fr: Mouse and rat stomach tissues; ICC/IF:

A549 cells. mIHC: Human stomach tissue.

特記事項 This product has switched from a hybridoma to recombinant production method on 8th March

2021.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

製品の特性

製品の状態 Liquid

保存方法 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.

バッファー pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 0.05% BSA, 40% Glycerol (glycerin, glycerine)

精製度 Protein A purified

ポリ/モノ モノクローナル

クローン名 45M1

₹ID-₹ unknown

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アイソタイプ lgG1

軽鎖の種類 kappa

アプリケーション

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab3649の使用に適用されます

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
ICC/IF	★★★★ <u>(2)</u>	1/100.
IHC-Fr	★★★★★ <u>(2)</u>	1/100.
mIHC		Use at an assay dependent concentration.
IHC-P	★★★★★ (3)	1/100 - 1/5000.

ターゲット情報

機能 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.

組織特異性 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.

配列類似性 Contains 1 CTCK (C-terminal cystine knot-like) domain.

Contains 3 TIL (trypsin inhibitory-like) domains.

Contains 4 VWFC domains.
Contains 4 VWFD domains.

ドメイン The cysteine residues in the Cys-rich subdomain repeats are not involved in disulfide bonding.

翻訳後修飾 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

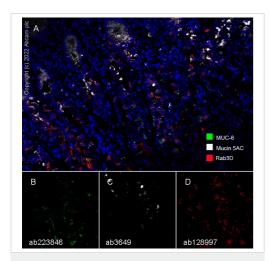
from the endoplasmic reticulum during biosynthesis.

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.

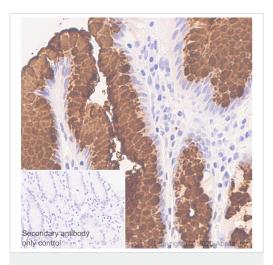
細胞内局在 Secreted.

画像



Multiplex immunohistochemistry - Anti-Mucin 5AC antibody [45M1] (ab3649)

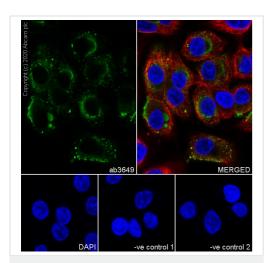
Fluorescence multiplex immunohistochemical analysis of the human stomach (Formalin/PFA-fixed paraffin-embedded sections). Panel A: merged staining of anti-Mucin 5AC (ab3649, gray; Opal™690), anti-MUC-6 (ab223846, green; Opal™520) and anti-Rab3D (ab128997, red; Opal™570) on human stomach. Panel B: anti-MUC-6 stained on mucous neck cells. Panel C: anti-Mucin 5AC stained on surface mucous cells. Panel D: anti-Rab3D stained on Chief cells. Opal Polymer HRP Ms + Rb was used as a secondary antibody. The immunostaining was performed on a Leica Biosystems BOND[®] RX instrument with an Opal™ 4-color kit. The section was incubated in three rounds of staining: in the order of ab3649 (1/5000 dilution), ab223846 (1/1000 dilution), and ab128997 (1/10000 dilution) for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) was used for 20 mins. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Leica SP8 confocal microscope.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Mucin 5AC antibody [45M1] (ab3649)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human stomach tissue labeling Mucin 5AC with ab3649 at 1/5000 dilution. Heat mediated antigen retrieval was performed using Citrate buffer pH 6 (epitope retrieval solution 1) for 20 minutes. The section was incubated with ab3649 for 30 mins at room temperature. Goat Anti-Mouse IgG H&L (HRP polymer) (ab214879) was used as the secondary antibody. Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument

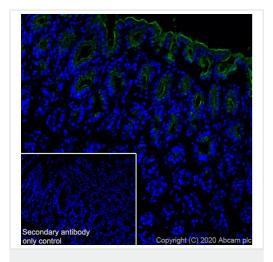


Immunocytochemistry/ Immunofluorescence - Anti-Mucin 5AC antibody [45M1] (ab3649)

Immunocytochemistry analysis of A549 (human lung carcinoma cell line) cells labeling Mucin 5AC with ab3649 at 1/100 dilution. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) (ab150113) at 1/1000 was used as the secondary antibody (green). Cells were counterstained with Anti-beta Tubulin rabbit monoclonal antibody (ab179513) at 1/200 dilution followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 594) (ab150080) at 1/1000 dilution (red). Nuclear DNA was labelled with DAPI (blue).

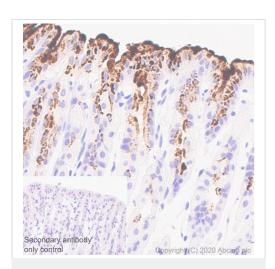
Negative control 1: ab3649 (Mouse monoclonal antibody to Mucin 5AC at 1/100 dilution) and $\underline{ab150080}$ (anti-Rabbit secondary Alexa Fluor $^{\circledR}$ 594 at 1/1000 dilution)

Negative control 2: <u>ab179513</u> (Rabbit monoclonal antibody to beta Tubulin at 1/200 dilution) and <u>ab150113</u> (anti-Mouse secondary Alexa Fluor[®] 488 at 1/1000 dilution)



Immunohistochemistry (Frozen sections) - Anti-Mucin 5AC antibody [45M1] (ab3649)

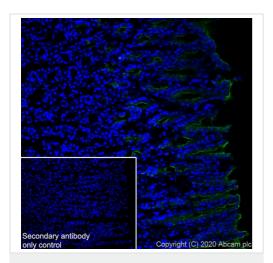
Immunohistochemistry (Frozen sections) analysis of mouse stomach tissue labeling Mucin 5AC with ab3649 at 1/100 dilution. Tissue was fixed with 4% paraformaldehyde and permeabilized with 0.2% Triton X-100. Heat mediated antigen retrieval was performed using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20). Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) (ab150113) was used as the secondary antibody at 1/1000 dilution (green). Nuclei counterstained with DAPI (blue).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Mucin 5AC antibody [45M1] (ab3649)

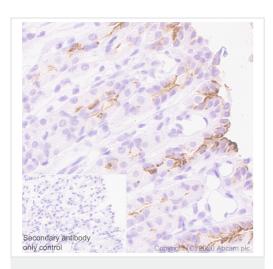
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse stomach tissue labeling Mucin 5AC with ab3649 at 1/5000 dilution. Heat mediated antigen retrieval was performed using Citrate buffer pH 6 (epitope retrieval solution 1) for 20 minutes. The section was incubated with ab3649 for 30 mins at room temperature. Goat Anti-Mouse IgG H&L (HRP polymer) (ab214879) was used as the secondary antibody. Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument



Immunohistochemistry (Frozen sections) - Anti-Mucin 5AC antibody [45M1] (ab3649)

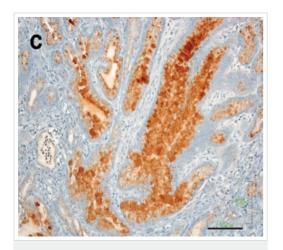
Immunohistochemistry (Frozen sections) analysis of rat stomach tissue labeling Mucin 5AC with ab3649 at 1/100 dilution. Tissue was fixed with 4% paraformaldehyde and permeabilized with 0.2% Triton X-100. Heat mediated antigen retrieval was performed using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20). Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) (ab150113) was used as the secondary antibody at 1/1000 dilution (green). Nuclei counterstained with DAPI (blue).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Mucin 5AC antibody [45M1] (ab3649)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat stomach tissue labeling Mucin 5AC with ab3649 at 1/5000 dilution. Heat mediated antigen retrieval was performed using Citrate buffer pH 6 (epitope retrieval solution 1) for 20 minutes. The section was incubated with ab3649 for 30 mins at room temperature. Goat Anti-Mouse IgG H&L (HRP polymer) (ab214879) was used as the secondary antibody. Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument

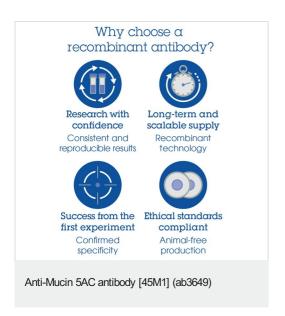


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Mucin 5AC antibody [45M1] (ab3649)

Image from Kikuchi Met al., BMC Gastroenterol. 2010 Jun 18;10:65. doi: 10.1186/1471-230X-10-65.; Fig 5.; 18 June 2010, BMC Gastroenterology 2010, 10:65 This image was generated from the hybridoma version of the product.

Immunohistochemical analysis of rat stomach tissue, staining Mucin 5AC with ab3649.

Antigen retrieval was performed via heat mediation in a citrate buffer. Samples were blocked before incubating with primary antibody (1/100) for 1 hour at room temperature. An HRP-conjugated anti-mouse IgG was used as the secondary antibody and staining was detected using DAB.



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