abcam

ab316971

Anti-MUC17 antibody [EPR28482-85]

Recombinant | RabMAb | Advanced Validation | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR28482-85
Purification technique	Affinity purification Protein A
Concentration	0.517 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

mIHC

Tested

Species	Human
Dilution info	1/500
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1/500
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/500
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/50
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

IP

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information MUC17

Function	Probably plays a role in maintaining homeostasis on mucosal surfaces.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
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 batch production

For more information, read more on recombinant antibodies.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

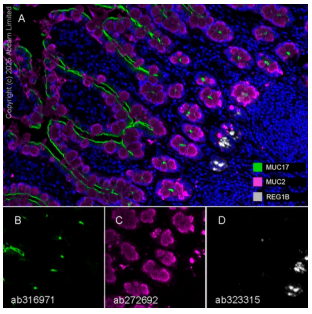
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

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11 product images



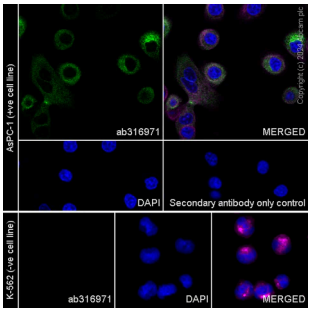
Multiplex immunohistochemistry - Anti-MUC17 antibody [EPR28482-85] (ab316971)

Multiplex immunohistochemistry analysis of formalin/PFA-fixed paraffin-embedded human small intestine tissue staining MUC17 with ab316971 at 1/500 dilution, ab272692 anti-MUC2 used at 1/2000 dilution and ab323315 anti-REG1B used at a 1/5000 dilution. Opal Polymer HRP Ms + Rb was used as a secondary antibody, and DAPI was used for a nuclear counter stain. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.

Panel A: merged staining of anti-MUC17 (green; Opal™570), anti-MUC2 (magenta; Opal™690) and anti-REG1B (grey; Opal™520) on human small intestine.
Panel B: anti-MUC17 staining epithelium in human small intestine.
Panel C: anti-MUC2 staining goblet cells in human small intestine.
Panel D: anti-REG1B staining Paneth cells in human small intestine.
Nuclear DNA was labeled with DAPI (shown in blue).

The section was incubated in three rounds of staining: in the order of ab316971, ab272692 and ab323315 for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. Image acquisition was performed with Leica SP8 confocal microscope.



Immunocytochemistry/ Immunofluorescence - Anti-MUC17 antibody [EPR28482-85] (ab316971)

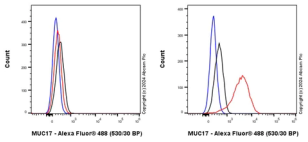
MUC17 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-MUC17 antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed 0.1% TritonX-100 permeabilized AsPC-1 (human Pancreas epithelial cell) cells labelling MUC17 with ab316971 at 1/50 (10.2 ug/ml) dilution followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 (2 ug/mL) dilution (Green).

Confocal image showing cytoplasmic staining in AsPC-1 cell line (shown in green). The counterstain was observed in magenta. Nuclear DNA was labeled with DAPI (shown in blue). Negative control: K-562 (PMID: 11855812)
Image was taken with a confocal microscope(Leica-Microsystems TCS SP8).

ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 (2.5 ug/mL) dilution (Magenta). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 (2 ug/mL) dilution.

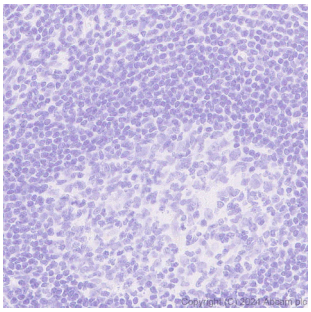


Flow Cytometry (Intracellular) - Anti-MUC17 antibody [EPR28482-85] (ab316971)

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized AsPC-1 (human Pancreas epithelial cell) / right and K-562 (human chronic myelogenous leukemia lymphoblast) / left cells labelling MUC17 with ab316971 at 1/500 dilution (0.1ug)/(Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue).

Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.

Negative control: K-562



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MUC17 antibody [EPR28482-85] (ab316971)

MUC17 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human tonsil using rabbit Anti-MUC17 antibody

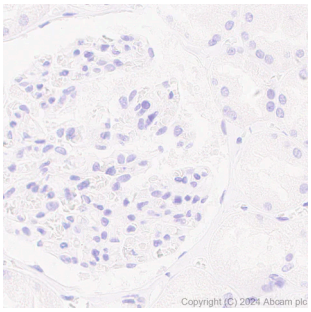
Immunohistochemical analysis of paraffin-embedded Human tonsil tissue labeling MUC17 with ab316971 at 1/500 (1.02 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Negative control: No staining on human tonsil.
The section was incubated with ab316971 for 30 mins at room temperature.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MUC17 antibody [EPR28482-85] (ab316971)

MUC17 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human kidney using rabbit Anti-MUC17 antibody

Immunohistochemical analysis of paraffin-embedded Human kidney tissue labeling MUC17 with ab316971 at 1/500 (1.02 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

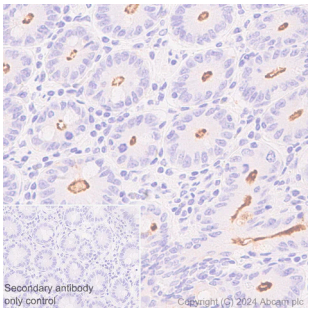
Negative control: No staining on human kidney.
The section was incubated with ab316971 for 30 mins at room temperature.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins

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Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MUC17 antibody [EPR28482-85] (ab316971)

Immunohistochemical analysis of paraffin-embedded Human jejunum tissue labeling MUC17 with ab316971 at 1/500 (1.02 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

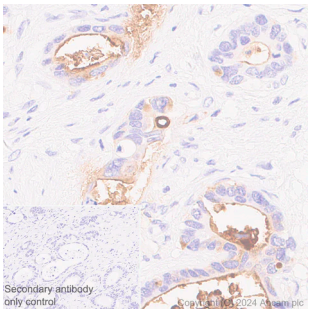
Membranous staining on epithelium of human jejunum.
The section was incubated with ab316971 for 30 mins at room temperature.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins

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Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MUC17 antibody [EPR28482-85] (ab316971)

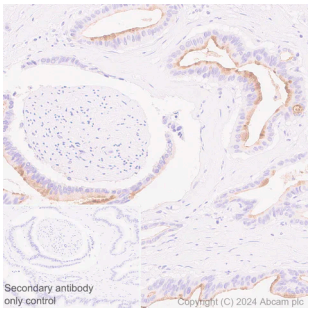
Immunohistochemical analysis of paraffin-embedded Human stomach cancer tissue labeling MUC17 with ab316971 at 1/500 (1.02 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Membranous staining on epithelium of human stomach cancer (PMID: 31262330).
The section was incubated with ab316971 for 30 mins at room temperature.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MUC17 antibody [EPR28482-85] (ab316971)

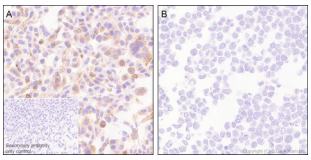
Immunohistochemical analysis of paraffin-embedded Human pancreas cancer tissue labeling MUC17 with ab316971 at 1/500 (1.02 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Membranous staining on epithelium of human pancreas cancer (PMID: 16737958).
The section was incubated with ab316971 for 30 mins at room temperature.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MUC17 antibody [EPR28482-85] (ab316971)

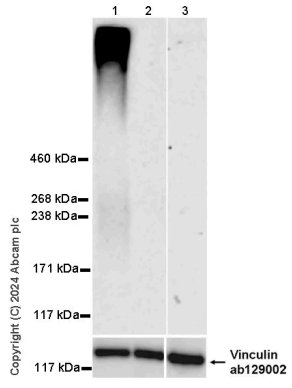
Immunohistochemical analysis of paraffin-embedded (A) AsPC-1 (human Pancreas epithelial cell), (B) K-562 (human chronic myelogenous leukemia lymphoblast) tissue labeling MUC17 with ab316971 at 1/500 (1.02 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Positive staining on panel (A) AsPC-1 cell pellet, no staining on panel (B) K-562 cell pellet.
The section was incubated with ab316971 for 30 mins at room temperature.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



Western blot - Anti-MUC17 antibody [EPR28482-85] (ab316971)

MUC17 Western blot staining using rabbit Anti-MUC17 antibody

Negative control: K-562, Hela (PMID: 11855812).

The expression profile/ molecular weight observed is consistent with what has been described in the literature (PMID: 11855812, 16737958).

In Western blot, Anti-Vinculin antibody [EPR8185] (ab129002) staining at 1/10000 dilution.

All lanes:

Western blot - Anti-MUC17 antibody [EPR28482-85] (ab316971) at 1/1000 dilution

Lane 1:
AsPC-1 (human Pancreas epithelial cell) whole cell lysate at 20 µg

Lane 2:
K-562 (human chronic myelogenous leukemia lymphoblast) whole cell lysate at 20 µg

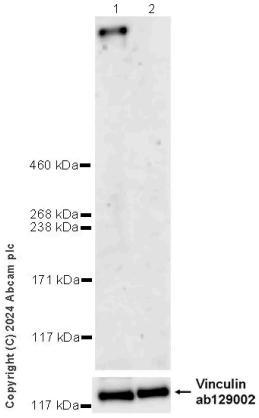
Lane 3:
HeLa (human cervical adenocarcinoma epithelial cell) whole cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Observed band size: 500 kDa, 124 kDa

Exposure time: 180s



Western blot - Anti-MUC17 antibody [EPR28482-85] (ab316971)

MUC17 Western blot staining using rabbit Anti-MUC17 antibody

Negative control: kidney (PMID: 11855812).

In Western blot, Anti-Vinculin antibody [EPR8185] (ab129002) staining at 1/10000 dilution.

All lanes:
Western blot - Anti-MUC17 antibody [EPR28482-85] (ab316971) at 1/1000 dilution

Lane 1:
Human small intestine tissue lysate at 20 µg

Lane 2:
Human kidney tissue lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/2000 dilution

Developed using the ECL technique.

Observed band size: 500 kDa, 124 kDa

Exposure time: 180s

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.