abcam

ab235450

Anti-MUC13 antibody [EPR21901]

Recombinant | RabMAb

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	EPR21901
Purification technique	Affinity purification Protein A
Concentration	0.33 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Human
Dilution info	1/1000
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/50
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/40
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1/4000
Notes	-

Target data

See full target information MUC13

Function	Epithelial and hemopoietic transmembrane mucin that may play a role in cell signaling.

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

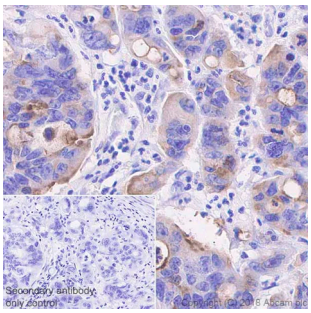
We do not recommend this combination. It is not covered by our product promise.

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.

9 product images

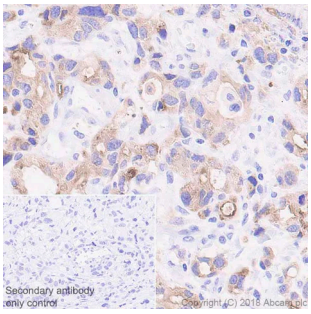


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MUC13 antibody [EPR21901] (ab235450)

MUC13 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-MUC13 antibody

Immunohistochemical analysis of paraffin-embedded human colorectal cancer tissue labeling MUC13 with ab235450 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Positive cytoplasmic staining in human colorectal cancer (PMID: 17360025) 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) ready to use.

Heat-mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0).

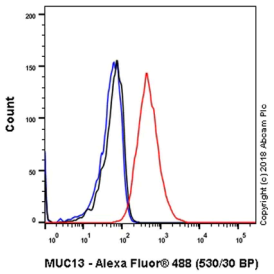


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MUC13 antibody [EPR21901] (ab235450)

MUC13 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-MUC13 antibody

Immunohistochemical analysis of paraffin-embedded human gastric cancer tissue labeling MUC13 with ab235450 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Positive cytoplasmic staining in human gastric cancer (PMID: 15904467) 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) ready to use.

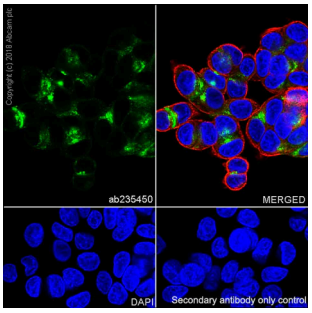
Heat-mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0).



Flow Cytometry (Intracellular) - Anti-MUC13 antibody [EPR21901] (ab235450)

MUC13 Flow Cytometry (Intracellular) staining using rabbit Anti-MUC13 antibody

Intracellular flow cytometric analysis of4% paraformaldehyde-fixed, 90% methanol permeabilized LoVo (human colorectal adenocarcinoma cell line) cells labeling MUC13 with ab235450 at 1/40 (red) compared with a Isotype control details (ab172730) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077), at 1/2000 dilution was used as the secondary antibody.

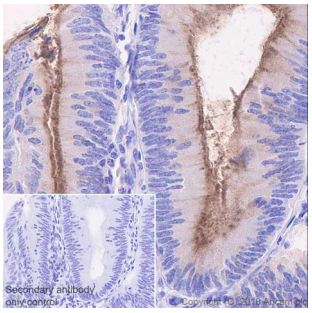


Immunocytochemistry/ Immunofluorescence - Anti-MUC13 antibody [EPR21901] (ab235450)

MUC13 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-MUC13 antibody

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized LoVo (human colorectal adenocarcinoma cell line) cells labeling MUC13 with ab235450 at 1/50 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic staining in the LoVo cell line. The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (ab195889) at 1/200 dilution (red).

Secondary antibody only control: Use PBS instead of primary antibody, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution.

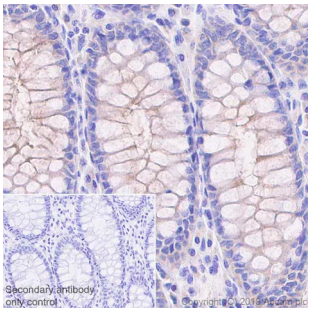


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MUC13 antibody [EPR21901] (ab235450)

MUC13 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-MUC13 antibody

Immunohistochemical analysis of paraffin-embedded human colorectal cancer tissue labeling MUC13 with ab235450 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Positive staining on the apical surface and in the cytoplasm in human colorectal cancer (PMID: 17360025) 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) ready to use.

Heat-mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0).

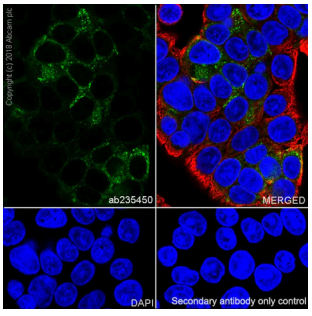


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MUC13 antibody [EPR21901] (ab235450)

MUC13 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-MUC13 antibody

Immunohistochemical analysis of paraffin-embedded human colon tissue labeling MUC13 with ab235450 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Positive staining in epithelial cells of the normal human colon (PMID: 17360025) 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) ready to use.

Heat-mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0).



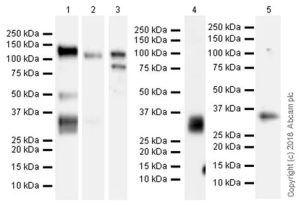
Immunocytochemistry/ Immunofluorescence - Anti-MUC13 antibody [EPR21901] (ab235450)

MUC13 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-MUC13 antibody

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HT-29 (human colorectal adenocarcinoma cell line) cells labeling MUC13 with ab235450 at 1/50 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody

at 1/1000 dilution (green). Confocal image showing cytoplasmic staining in the HT-29 cell line. The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (ab195889) at 1/200 dilution (red).

Secondary antibody only control: Use PBS instead of primary antibody, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution.



Western blot - Anti-MUC13 antibody [EPR21901] (ab235450)

Blocking/Dilution buffer: 5% NFDM/TBST.
Exposure times: Lanes 1-3 and 5: 3 minutes, Lane 4: 26 seconds.

The expression profile observed is consistent with what has been described in the literature (PMID: 15904467). Lane 3 was developed using a high sensitivity ECL substrate.

All lanes:
Western blot - Anti-MUC13 antibody [EPR21901] (ab235450) at 1/1000 dilution

Lane 1:
HT-29 (human colorectal adenocarcinoma cell line) whole cell lysate at 20 µg

Lane 2:
SW480 (human colorectal adenocarcinoma cell line) whole cell lysate at 20 µg

Lane 3:
HCT 116 (human colorectal carcinoma cell line) whole cell lysate at 20 µg

Lane 4:
Human ovary cancer lysate at 10 µg

Lane 5:
LoVo (human colorectal adenocarcinoma cell line) whole cell lysate at 10 µg

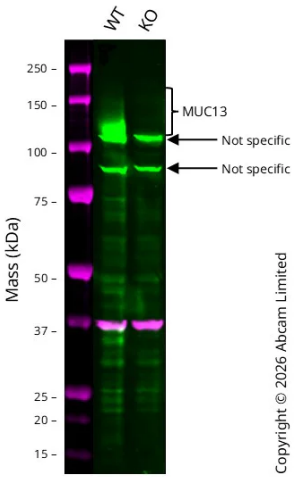
Secondary

Lanes 1 - 3:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Lanes 4 - 5:
Western blot - VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/5000 dilution

Predicted band size: 55 kDa

Observed band size: 120 kDa, 35 kDa, 80 kDa



Western blot - Anti-MUC13 antibody [EPR21901] (ab235450)

MUC13 Western blot staining using rabbit Anti-MUC13 antibody

Western blot: Anti-MUC13 antibody [EPR21901] ab235450 staining at 1/1000 dilution, shown in green; Mouse anti GAPDH ab8245 loading control staining at 1/20000 dilution, shown in magenta. A band was observed at 100-150 kDa in Wild-type A549 cell lysates with no signal observed at this size in MUC13 knockout A549 cell line. Two close non-specific bands were detected near to MUC13. We have not invesitgated the identity of these bands. To generate this image, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3pc Milk in TBS-0.1 % Tween 20 (TBS-T) before incubation with primary antibodies overnight at 4 C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit 800CW and Goat anti-Mouse 680RD at 1/20,000 dilution.
All lanes:
Western blot - Anti-MUC13 antibody [EPR21901] (ab235450) at 1/100 dilution

Lane 1:
Wild-type A549 at 20 µg

Lane 2:
MUC13 knockout A549 at 20 µg

Secondary

All lanes:
Goat anti-Rabbit 800CW & Goat anti-Mouse 680RD at 1/20000 dilution

Performed under reducing conditions.

Predicted band size: 100-150 kDa

Observed band size: 100-150 kDa

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