abcam

ab237590

Anti-MUC13 antibody [EPR21901] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR21901
Purification technique	Affinity purification Protein A
Concentration	1.003 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.

Notes	-

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

IHC-P

Tested

Species	Human
Dilution info	-
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	Blue Ice
Appropriate short-term storage conditions	+4°C

Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab237590 is the carrier-free version of ab235450.

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.

Conjugation ready

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. 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.

Compatibility

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.

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

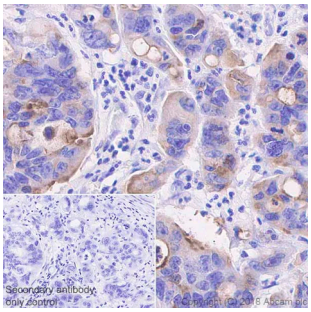
We do not recommend this combination. It is not covered by our product promise.

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.

8 product images



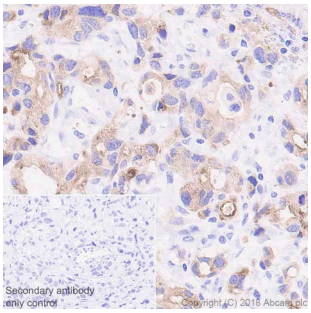
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MUC13 antibody [EPR21901] - BSA and Azide free (ab237590)

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).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab235450).



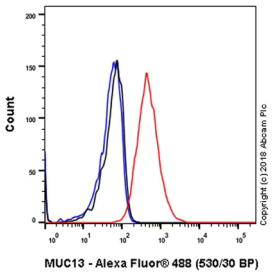
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MUC13 antibody [EPR21901] - BSA and Azide free (ab237590)

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).

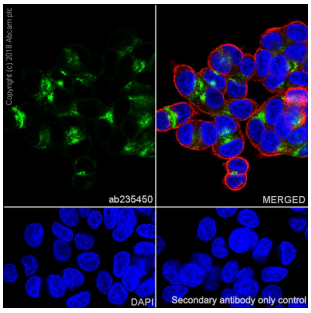
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab235450).



Flow Cytometry (Intracellular) - Anti-MUC13 antibody [EPR21901] - BSA and Azide free (ab237590)

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

Intracellular flow cytometric analysis of 4% 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.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab235450).

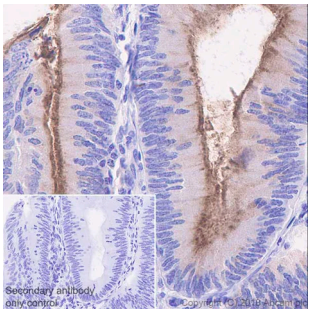


Immunocytochemistry/ Immunofluorescence - Anti-MUC13 antibody [EPR21901] - BSA and Azide free (ab237590)

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.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab235450).



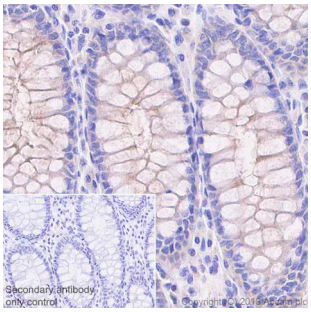
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MUC13 antibody [EPR21901] - BSA and Azide free (ab237590)

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).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab235450).



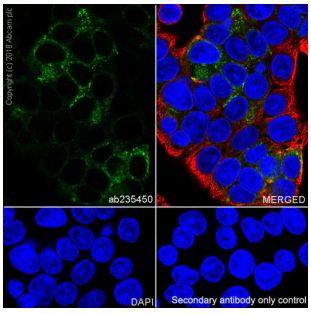
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MUC13 antibody [EPR21901] - BSA and Azide free (ab237590)

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).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab235450).



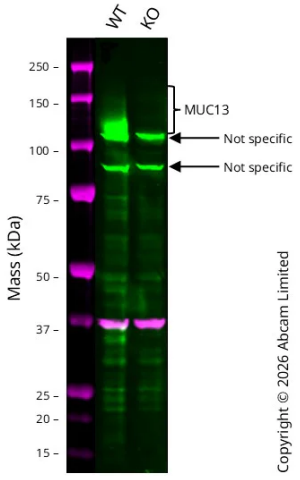
Immunocytochemistry/ Immunofluorescence - Anti-MUC13 antibody [EPR21901] - BSA and Azide free (ab237590)

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab235450).



Western blot - Anti-MUC13 antibody [EPR21901] - BSA and Azide free (ab237590)

MUC13 Western blot staining using rabbit Anti-MUC13 antibody

This data was developed using ab235450, the same antibody clone in a different buffer formulation.

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'.