abcam

ab223794

Anti-MAGEC2 antibody [EPR19064] - 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	EPR19064
Purification technique	Affinity purification Protein A
Concentration	1.043 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Human
Dilution info	-

Notes	-

Not recommended

Species	Recombinant full length protein
Dilution info	-
Notes	-

WB

Tested

Species	Recombinant full length protein, Human
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Not recommended

Species	Recombinant full length protein
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-

Notes	ab199376 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Not recommended

Species	Recombinant full length protein
Dilution info	-
Notes	-

IHC-P

Tested

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

Not recommended

Species	Recombinant full length protein
Dilution info	-
Notes	-

Target data

See full target information MAGEC2

Function	Proposed to enhance ubiquitin ligase activity of RING-type zinc finger-containing E3 ubiquitin-protein ligases. In vitro enhances ubiquitin ligase activity of TRIM28 and stimulates p53/TP53 ubiquitination in presence of Ubl-conjugating enzyme UBE2H leading to p53/TP53 degradation. Proposed to act through recruitment and/or stabilization of the Ubl-conjugating enzymes (E2) at the E3:substrate complex.

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

ab223794 is the carrier-free version of ab209667.

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.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	MAGEC2 also known as melanoma-associated antigen C2 or CT10 is a protein with a molecular mass of approximately 60 kDa. Researchers have found it expressed mostly in human cancerous tissues particularly in melanoma but not in normal tissues except for the testis. This restricted expression pattern has made MAGEC2 an interesting target for cancer immunotherapy and diagnosis. Its presence varies between different cancer types influencing its potential as a biomarker or therapeutic target.

Biological function summary	MAGEC2 interacts with cellular mechanisms related to cell growth and proliferation. The protein plays a role in processes linked to cancer progression by modulating transcriptional activities through its interaction with other proteins. MAGEC2 is not known to be part of a specific protein complex but its function associates with the ubiquitination process and modulation of p53 a well-known tumor suppressor protein. These interactions suggest critical roles in tumor maintenance and survival.
Pathways	MAGEC2's influence extends to oncogenic pathways involving cell cycle regulation and DNA damage response. It plays a part in the p53 signaling pathway where it impacts p53 stability and activity emphasizing its importance in cancer biology. Additionally connections with the E2F transcription factor highlight its potential role in regulating a series of genes important for cell cycle progression suggesting a strong interplay with cellular division processes.
Associated diseases and disorders	The aberrant expression of MAGEC2 relates most closely to melanomas and carcinomas which demonstrate increased levels of this protein. The association with these cancers emphasizes its potential as a target for cancer immunotherapy. In melanomas MAGEC2 often implicates with the dysregulation of the p53 protein contributing to unchecked cell division and tumor growth. Other cancer types may show similar associations highlighting the universality of MAGEC2's role in tumorigenic processes.

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

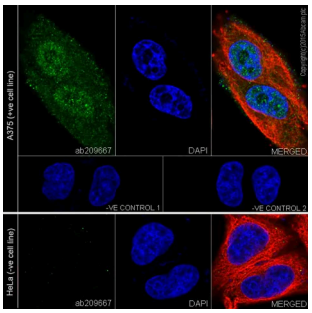
We do not recommend this combination. It is not covered by our product promise.

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.

7 product images



Immunocytochemistry/ Immunofluorescence - Anti-MAGEC2 antibody [EPR19064] - BSA and Azide free (ab223794)

MAGEC2 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-MAGEC2 antibody

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized A-375 (Human malignant melanoma cell line) and HeLa (Human epithelial cell line from cervix adenocarcinoma) cells labeling MAGEC2 with ab209667 at 1/500 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing nuclear and weakly cytoplasmic staining on A-375 cell line

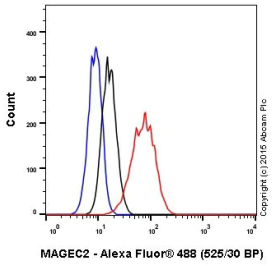
Negative expression in HeLa cells.

The nuclear counter stain 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 1/1000 dilution (red).

The negative controls are as follows:
-ve control 1: ab209667 at 1/500 dilution followed by ab150120 (AlexaFluor®594 Goat anti-Mouse secondary) at 1/1000 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 1/1000 dilution.

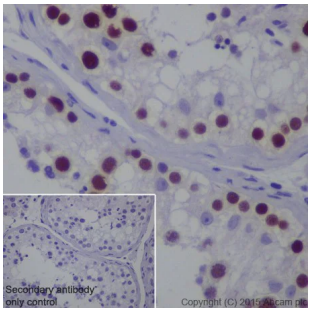
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab209667).



Flow Cytometry (Intracellular) - Anti-MAGEC2 antibody [EPR19064] - BSA and Azide free (ab223794)

MAGEC2 Flow Cytometry (Intracellular) staining using rabbit Anti-MAGEC2 antibody

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed A-375 (Human malignant melanoma cell line) cells labeling MAGEC2 with ab209667 at 1/150 dilution (red) compared with a rabbit monoclonal IgG isotype control (ab172730; black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody; blue). Goat anti rabbit IgG (Alexa Fluor® 488) at 1/500 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 (ab209667).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MAGEC2 antibody [EPR19064] - BSA and Azide free (ab223794)

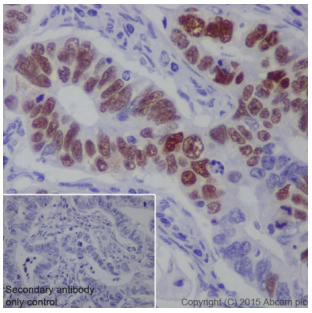
MAGEC2 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-MAGEC2 antibody

Immunohistochemical analysis of paraffin-embedded Human testis tissue labeling MAGEC2 with ab209667 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500

dilution. Nucleus staining on Human germ cells 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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab209667).

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



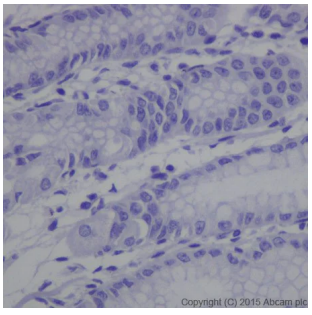
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MAGEC2 antibody [EPR19064] - BSA and Azide free (ab223794)

MAGEC2 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-MAGEC2 antibody

This IHC data was generated using the same anti-MAGEC2 antibody clone [EPR19064] in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (cat# ab209667). Immunohistochemical analysis of paraffin-embedded Human gastric cancer tissue labeling MAGEC2 with ab209667 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Nucleus staining on Human gastric cancer 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.

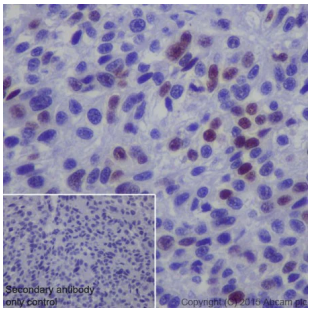


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MAGEC2 antibody [EPR19064] - BSA and Azide free (ab223794)

MAGEC2 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-MAGEC2 antibody

Immunohistochemical analysis of paraffin-embedded Human stomach tissue labeling MAGEC2 with ab209667 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Negative staining on Human stomach. Counter stained with Hematoxylin.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab209667).

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



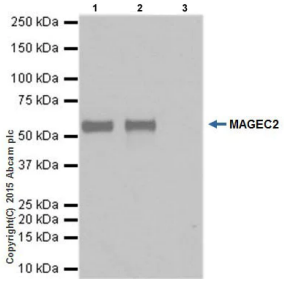
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MAGEC2 antibody [EPR19064] - BSA and Azide free (ab223794)

MAGEC2 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-MAGEC2 antibody

Immunohistochemical analysis of paraffin-embedded Human melanoma tissue labeling MAGEC2 with ab209667 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Nucleus staining on melanoma 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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab209667).

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunoprecipitation - Anti-MAGEC2 antibody [EPR19064] - BSA and Azide free (ab223794)

MAGEC2 was immunoprecipitated from 1mg of A-375 (Human malignant melanoma cell line) whole cell lysate with ab209667 at 1/40 dilution. Western blot was performed from the immunoprecipitate using ab209667 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/10000 dilution.
Lane 1: A-375 whole cell lysate 10µg (Input).

Lane 2: ab209667 IP in A-375 whole cell lysate.

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab209667 in A-375 whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 1 second.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab209667).

All lanes:
Immunoprecipitation - Anti-MAGEC2 antibody [EPR19064] (ab209667)

Predicted band size: 41 kDa

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