abcam

ab245755

Anti-MAGEA1 antibody [SP194] - 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	SP194
Purification technique	Affinity purification Protein A/G
Purification notes	Purified from TCS by protein A/G.

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	-
Notes	-

WB

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Target data

See full target information MAGEA1

Function	May be involved in transcriptional regulation through interaction with SNW1 and recruiting histone deactelyase HDAC1. May inhibit notch intracellular domain (NICD) transactivation. May play a role in embryonal development and tumor transformation or aspects of tumor progression. Antigen recognized on a melanoma by autologous cytolytic T-lymphocytes.

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

ab245755 is the carrier-free version of ab183309.

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	MAGEA1 also known as MAGE-1 is a member of the MAGE (Melanoma Antigen Gene) family of proteins. It has a molecular weight of approximately 39 kDa. MAGEA1 is expressed mainly in male germline tissues and in various cancer cells but not in adult somatic tissues. The protein functions mechanically by interacting with specific molecules in cells although detailed mechanisms are still under investigation.
Biological function summary	The protein encoded by MAGEA1 participates in cellular processes linked to cancer development and progression. It does not function as part of a larger complex but interacts directly with certain cellular pathways. In particular the expression of MAGEA1 is often associated with transformation events and uncontrolled cell proliferation underlining its role in oncogenesis.
Pathways	MAGEA1 plays roles in oncogenic and apoptotic pathways. It can influence the p53 signaling pathway important for cell cycle regulation and apoptosis. The interaction with other proteins such as p53 and potentially with the NF-kB pathway highlights how MAGEA1 might modulate the apoptotic response. MAGEA1 impacts cellular mechanisms by affecting apoptosis and proliferation through these pathways.

Associated diseases and disorders	MAGEA1 is strongly related to cancer particularly melanoma and some other tumor types. Its expression in cancers makes MAGEA1 a target for cancer immunotherapy. MAGEA1 associates with proteins like p53 in certain cancers and can alter the tumor suppressive characteristics. Its role in these diseases presents MAGEA1 as a biomarker for cancer diagnosis and treatment adding clinical significance to its study.

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

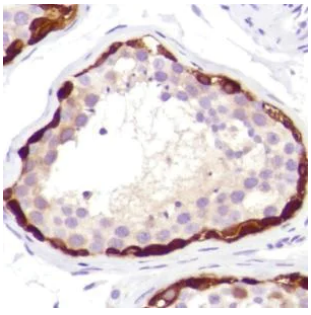
We do not recommend this combination. It is not covered by our product promise.

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.

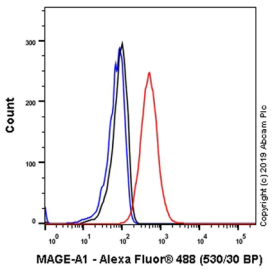
5 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MAGEA1 antibody [SP194] - BSA and Azide free (ab245755)

MAGEA1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-MAGEA1 antibody

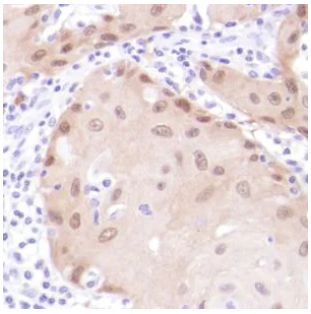
Immunohistochemical analysis of Human testis tissue labeling MAGEA1 using ab183309 at a 1/100 dilution.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and sodium azide (ab183309).



Flow Cytometry (Intracellular) - Anti-MAGEA1 antibody [SP194] - BSA and Azide free (ab245755)

MAGEA1 Flow Cytometry (Intracellular) staining using rabbit Anti-MAGEA1 antibody

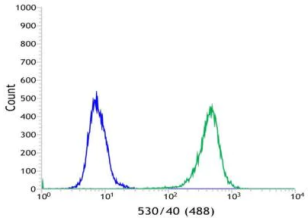
Intracellular Flow Cytometry analysis of SK-OV-3 (Human ovarian cancer epithelial cell) cells labeling MAGEA1 with purified ab183309 at 1/20 dilution (8µg/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG (ab172730) / Black. Unlabeled control - Unlabelled cells / blue.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab183309).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MAGEA1 antibody [SP194] - BSA and Azide free (ab245755)

MAGEA1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-MAGEA1 antibody

Immunohistochemical analysis of Human skin squamous cell carcinoma tissue labeling MAGEA1 using ab183309 at a 1/100 dilution.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and sodium azide (ab183309).

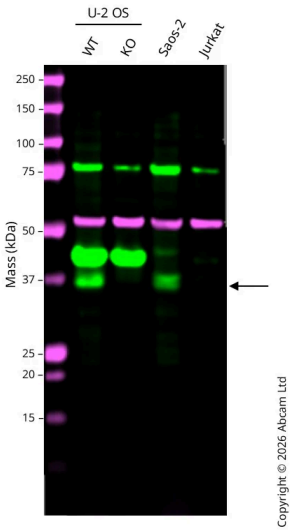


Flow Cytometry (Intracellular) - Anti-MAGEA1 antibody [SP194] - BSA and Azide free (ab245755)

MAGEA1 Flow Cytometry (Intracellular) staining using rabbit Anti-MAGEA1 antibody

Immunohistochemical analysis of Human skin squamous cell carcinoma tissue labeling MAGE 1 using ab183309 at a 1/100 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, and sodium azide (ab183309)



Western blot - Anti-MAGEA1 antibody [SP194] - BSA and Azide free (ab245755)

MAGEA1 Western blot staining using rabbit Anti-MAGEA1 antibody

This data was developed using the same antibody clone in a different buffer formulation (ab183309).

Western blot: Anti-MAGEA1 antibody [SP194] - C-terminal ab183309 staining at 1/400 dilution, shown in green; Mouse anti alpha Tubulin ab7291 loading control staining at 1/20000 dilution, shown in magenta. A band was observed at 37 kDa in Wild-type U-2 OS cell line with no signal observed at this size in MAGEA1 knockout U-2 OS cell line. To generate this image, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 5% 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-MAGEA1 antibody [SP194] - C-terminal (ab183309) at 1/400 dilution

Lane 1:
Wild-type U-2 OS at 20 µg

Lane 2:
MAGEA1 knockout U-2 OS at 20 µg

Lane 3:
Saos-2 at 20 µg

Lane 4:
Jurkat 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: 34 kDa

Observed band size: 37 kDa

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