

MAGEA2 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP6164a

Product Information

Application	WB, FC, E
Primary Accession	P43356
Other Accession	NP_005352
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB2194
Calculated MW	35055
Antigen Region	81-108

Additional Information

Gene ID	266740;4101
Other Names	Melanoma-associated antigen 2, Cancer/testis antigen 12, CT12, MAGE-2 antigen, MAGEA2, MAGE2, MAGEA2A
Target/Specificity	This MAGEA2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 81-108 amino acids from the N-terminal region of human MAGEA2.
Dilution	WB~~1:2000 FC~~1:25 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MAGEA2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MAGEA2
Synonyms	MAGE2, MAGEA2A
Function	Reduces p53/TP53 transactivation function through recruitment of HDAC3

to p53/TP53 transcription sites. Also represses p73/TP73 activity. 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 by TRIM28 potentially in presence of Ubl-conjugating enzyme UBE2H. Proposed to act through recruitment and/or stabilization of the Ubl-conjugating enzyme (E2) at the E3:substrate complex. May play a role in embryonal development and tumor transformation or aspects of tumor progression. In vitro promotes cell viability in melanoma cell lines. Antigen recognized on a melanoma by autologous cytolytic T-lymphocytes. Negatively regulates acetylation and sumoylation of PML and represses PML-induced p53/TP53 acetylation and activation.

Cellular Location

Nucleus. Nucleus, PML body.

Tissue Location

Expressed in many tumors of several types, such as melanoma, head and neck squamous cell carcinoma, lung carcinoma and breast carcinoma, but not in normal tissues except for testes

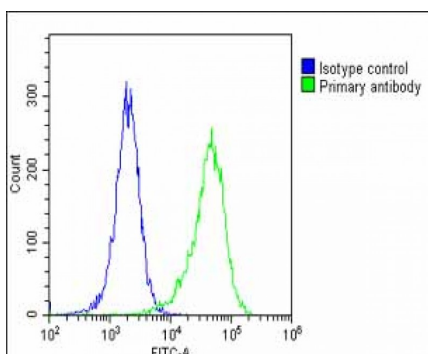
Background

MAGEA2 is a member of the MAGEA gene family. The members of this family have their entire coding sequences located in the last exon, and the encoded proteins show 50 to 80% sequence identity between each other. The promoters and first exons of the MAGEA genes show considerable variability, suggesting that the existence of this gene family enables the same function to be expressed under different transcriptional controls. The MAGEA genes are expressed at a high level in a number of tumors of various histologic types, and are silent in normal tissues with the exception of testis and placenta. The MAGEA genes are clustered on chromosome Xq28. They may be implicated in some hereditary disorders, such as dyskeratosis congenita. This gene has two identical copies at different loci.

References

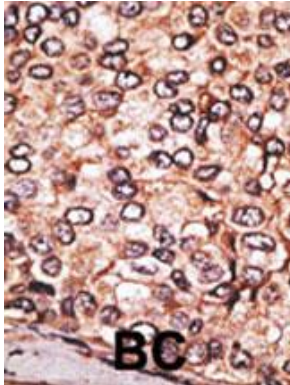
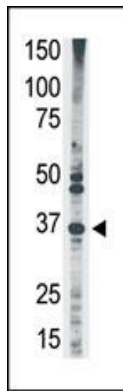
- Rogner, U.C., et al., Genomics 29(3):725-731 (1995).
 De Smet, C., et al., Immunogenetics 39(2):121-129 (1994).
 De Plaen, E., et al., Immunogenetics 40(5):360-369 (1994).
 van der Bruggen, P., et al., Science 254(5038):1643-1647 (1991).

Images



Overlay histogram showing Hela cells stained with AP6164a(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP6164a, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(1583138) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10⁶ cells) used under the same conditions. Acquisition of >10, 000 events was performed.

The anti-MAGEA2 N-term Antibody (Cat.#AP6164a) is used in Western blot to detect MAGEA2 in HL60 lysate.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

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