

ARG41163 anti-MGEA5 / OGA antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes MGEA5 / OGA
Tested Reactivity	Hu
Tested Application	FACS, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	MGEA5 / OGA
Species	Human
Immunogen	KLH-conjugated synthetic peptide between aa. 236-269 of Human MGEA5.
Conjugation	Un-conjugated
Alternate Names	Nuclear cytoplasmic O-GlcNAcase and acetyltransferase; N-acetyl-beta-D-glucosaminidase; MEA5; NCOAT; EC 3.2.1.-; Meningioma-expressed antigen 5; Beta-N-acetylhexosaminidase; Beta-hexosaminidase; EC 3.2.1.169; Protein O-GlcNAcase; Beta-N-acetylglucosaminidase; OGA; N-acetyl-beta-glucosaminidase

Application Instructions

Application table	Application	Dilution
	FACS	1:25
	IHC-P	1:25
	WB	1:2000
Application Note	IHC-P: Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0). * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	U-87 MG	
Observed Size	~120-130 kda	

Properties

Form	Liquid
Purification	Purification with Protein A and immunogen peptide.
Buffer	PBS and 0.09% (W/V) Sodium azide.
Preservative	0.09% (W/V) Sodium azide
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated

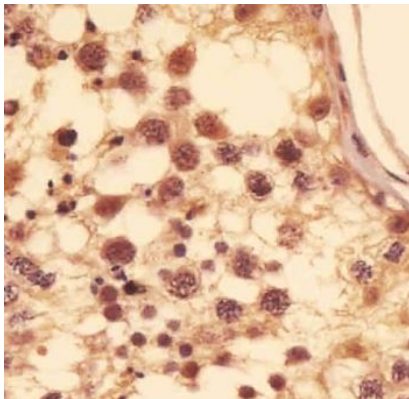
freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

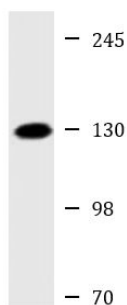
Gene Symbol	MGEA5
Gene Full Name	meningioma expressed antigen 5 (hyaluronidase)
Background	The dynamic modification of cytoplasmic and nuclear proteins by O-linked N-acetylglucosamine (O-GlcNAc) addition and removal on serine and threonine residues is catalyzed by OGT (MIM 300255), which adds O-GlcNAc, and MGEA5, a glycosidase that removes O-GlcNAc modifications (Gao et al., 2001 [PubMed 11148210]).[supplied by OMIM, Mar 2008]
Function	<p>Isoform 1: Cleaves GlcNAc but not GalNAc from O-glycosylated proteins. Can use p-nitrophenyl-beta-GlcNAc and 4-methylumbelliferone-GlcNAc as substrates but not p-nitrophenyl-beta-GalNAc or p-nitrophenyl-alpha-GlcNAc (in vitro). Does not bind acetyl-CoA and does not have histone acetyltransferase activity.</p> <p>Isoform 3: Cleaves GlcNAc but not GalNAc from O-glycosylated proteins. Can use p-nitrophenyl-beta-GlcNAc as substrate but not p-nitrophenyl-beta-GalNAc or p-nitrophenyl-alpha-GlcNAc (in vitro), but has about six times lower specific activity than isoform 1. [UniProt]</p>
Calculated Mw	103 kDa
PTM	Proteolytically cleaved by caspase-3 during apoptosis. The fragments interact with each other; cleavage does not decrease enzyme activity. [UniProt]
Cellular Localization	Isoform 3: Nucleus. Isoform 1: Cytoplasm. [UniProt]

Images



ARG41163 anti-MGEA5 / OGA antibody IHC-P image

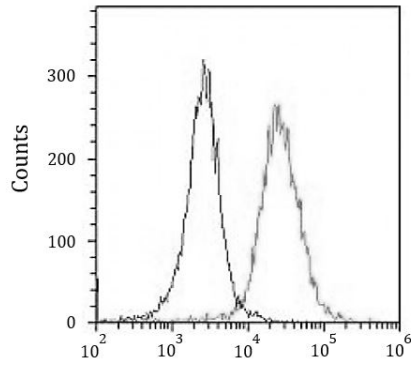
Immunohistochemistry: Paraformaldehyde-fixed and paraffin-embedded Human testis tissue. Tissue was blocked with 3% BSA for 0.5 hour at room temperature. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0). Samples were stained with ARG41163 anti-MGEA5 / OGA antibody at 1:25 dilution for 1 hour at 37°C.



U-87 MG

ARG41163 anti-MGEA5 / OGA antibody WB image

Western blot: 20 µg of U-87 MG cell lysate stained with ARG41163 anti-MGEA5 / OGA antibody at 1:2000 dilution.



ARG41163 anti-MGEA5 / OGA antibody FACS image

Flow Cytometry: HeLa cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% BSA to block non-specific protein-protein interactions followed by ARG41163 anti-MGEA5 / OGA antibody (right histogram) at 1:25 dilution for 60 min at 37°C, followed by incubation with DyLight®488 labelled secondary antibody. Isotype control antibody (left histogram) was Rabbit IgG1 (1 µg/10⁶ cells) used under the same conditions. Acquisition of > 10000 events was performed.