

## 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

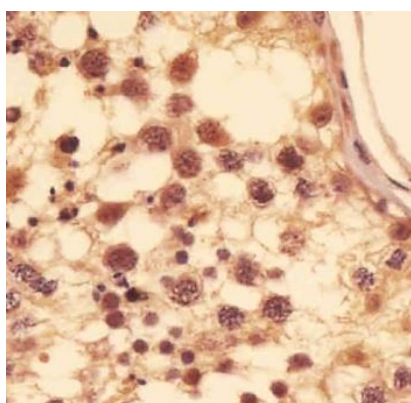
freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

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

## Bioinformation

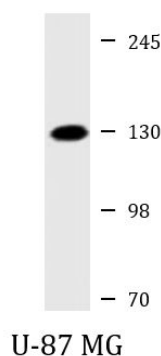
Gene Symbol	MGEA5
Gene Full Name	meningioma expressed antigen 5 (hyaluronidase)
Background	The dynamic modification of cytoplasmic and nuclear proteins by O-linked N-acetylglucosamine (O-GlcNAc) addition and removal on serine and threonine residues is catalyzed by OGT (MIM 300255), which adds O-GlcNAc, 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



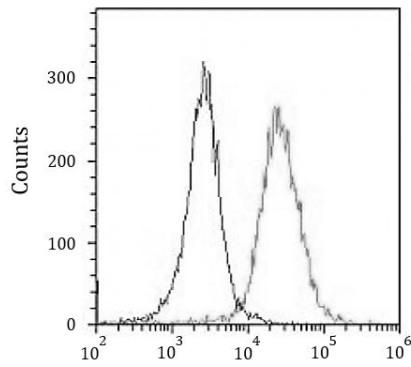
ARG41163 anti-MGEA5 / OGA antibody IHC-P image

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.



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 ( $1 \mu\text{g}/10^6$  cells) used under the same conditions. Acquisition of > 10000 events was performed.