

MGEA5 Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP22340a

Product Information

Application	WB, FC, IHC-P, E
Primary Accession	O60502
Other Accession	Q9EQQ9 , Q8VIJ5
Reactivity	Human, Rat, Mouse
Predicted	Mouse, Rat
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB57955
Calculated MW	102915

Additional Information

Gene ID	10724
Other Names	Protein O-GlcNAcase, OGA, 3.2.1.169, Beta-N-acetylglucosaminidase, 3.2.1.-, Beta-N-acetylhexosaminidase, Beta-hexosaminidase, Meningioma-expressed antigen 5, N-acetyl-beta-D-glucosaminidase, N-acetyl-beta-glucosaminidase, Nuclear cytoplasmic O-GlcNAcase and acetyltransferase, NCOAT, MGEA5, HEXC, KIAA0679, MEA5
Target/Specificity	This MGEA5 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 236-269 amino acids from the human region of human MGEA5.
Dilution	WB~~1:2000 FC~~1:25 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
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	MGEA5 Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	OGA {ECO:0000303 PubMed:20863279, ECO:0000312 HGNC:HGNC:7056}
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Function	[Isoform 1]: Cleaves GlcNAc but not GalNAc from O- glycosylated proteins (PubMed: 11148210 , PubMed: 11788610 , PubMed: 20673219 , PubMed: 22365600 , PubMed: 24088714 , PubMed: 28939839 , PubMed: 37962578). Deglycosylates a large and diverse number of proteins, such as CRYAB, ELK1, GSDMD, LMNB1 and TAB1 (PubMed: 28939839 , PubMed: 37962578). 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) (PubMed: 20673219). Does not bind acetyl-CoA and does not have histone acetyltransferase activity (PubMed: 24088714).
Cellular Location	[Isoform 3]: Nucleus
Tissue Location	Ubiquitous. Shows highest expression in the brain, placenta and pancreas.

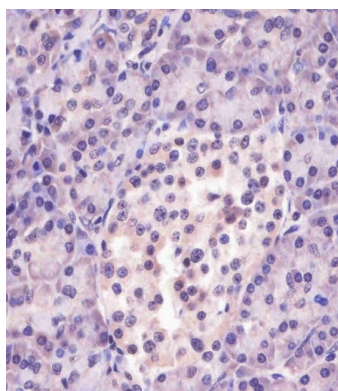
Background

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) (PubMed:[11148210](#)). Does not bind acetyl-CoA and does not have histone acetyltransferase activity (PubMed:[24088714](#)).

References

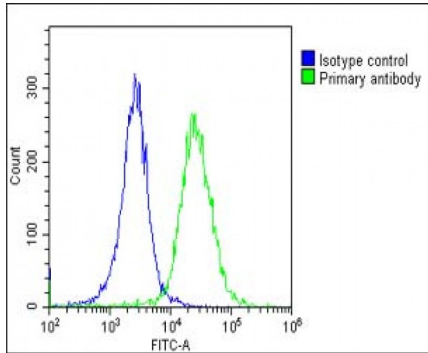
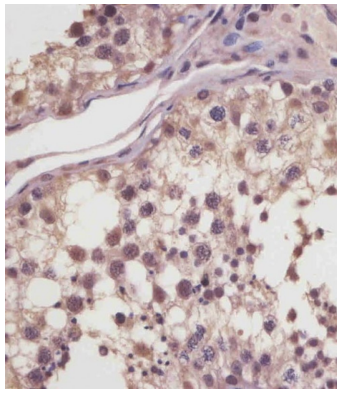
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Images

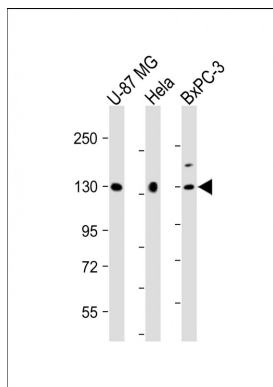


AP22340a staining MGEA5 in human pancreas tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

AP22340a staining MGEA5 in human testis tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



Overlay histogram showing HeLa cells stained with AP22340a(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 (AP22340a, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OE188374) 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.



All lanes : Anti-MGEA5 Antibody (N-Term) at 1:2000 dilution Lane 1: U-87 MG whole cell lysate Lane 2: HeLa whole cell lysate Lane 3: BxPC-3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 103 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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