

**MGEA5 Antibody (N-Term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP22340a**

**Specification**

---

**MGEA5 Antibody (N-Term) - Product Information**

Application	WB, IHC-P, FC,E
Primary Accession	<a href="#">O60502</a>
Other Accession	<a href="#">O9EQO9</a> , <a href="#">O8VIJ5</a>
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Calculated MW	102915

**MGEA5 Antibody (N-Term) - 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  
IHC-P~~1:25  
FC~~1:25

**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.

**MGEA5 Antibody (N-Term) - Protein Information**

**Name** OGA {ECO:0000303|PubMed:20863279, ECO:0000312|HGNC:HGNC:7056}

**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

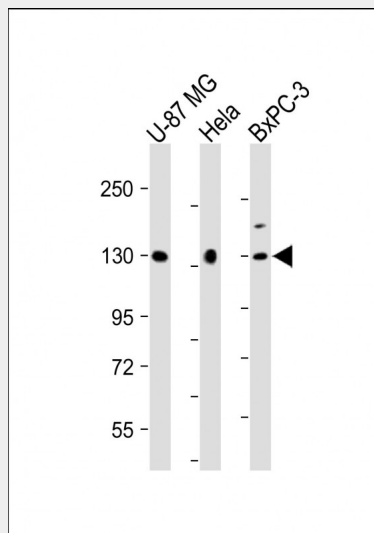
Ubiquitous. Shows highest expression in the brain, placenta and pancreas.

### MGEA5 Antibody (N-Term) - Protocols

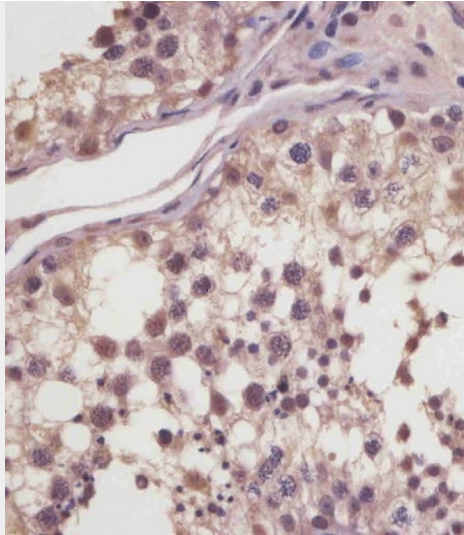
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

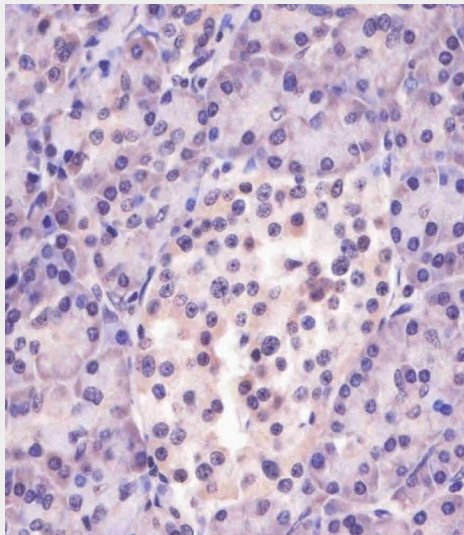
### MGEA5 Antibody (N-Term) - Images



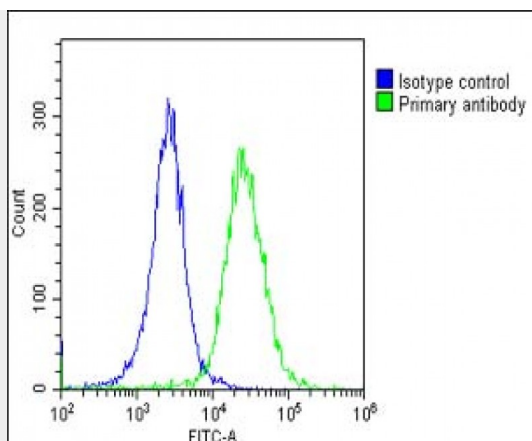
All lanes : Anti-MGEA5 Antibody (N-Term) at 1:2000 dilution Lane 1: U-87 MG whole cell lysate Lane 2: HeLa whole cell lysate Lane 3: BxPC-3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 103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



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 hour at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



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 hour 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/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >10,000 events was performed.

#### **MGEA5 Antibody (N-Term) - 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).

#### **MGEA5 Antibody (N-Term) - References**

- Heckel D., et al. Hum. Mol. Genet. 7:1859-1872(1998).
- Comtesse N., et al. Biochem. Biophys. Res. Commun. 283:634-640(2001).
- Gao Y., et al. J. Biol. Chem. 276:9838-9845(2001).
- Ishikawa K., et al. DNA Res. 5:169-176(1998).
- Nakajima D., et al. DNA Res. 9:99-106(2002).