

GC Antibody(Center) (Ascites)
Mouse Monoclonal Antibody (Mab)
Catalog # AM2180a

Specification

GC Antibody(Center) (Ascites) - Product Information

Application	WB,E
Primary Accession	P04062
Other Accession	Q70KH2 , O2KHZ8 , NP_000148.2
Reactivity	Human
Predicted	Bovine, Pig
Host	Mouse
Clonality	Monoclonal
Isotype	IgM
Calculated MW	59716
Antigen Region	337-365

GC Antibody(Center) (Ascites) - Additional Information

Gene ID 2629

Other Names

Glucosylceramidase, Acid beta-glucosidase, Alglucerase, Beta-glucocerebrosidase, Beta-GC, D-glucosyl-N-acylsphingosine glucohydrolase, Imiglucerase, GBA, GC, GLUC

Target/Specificity

This GC antibody is generated from mice immunized with a KLH conjugated synthetic peptide between 337-365 amino acids from the Central region of human GC.

Dilution

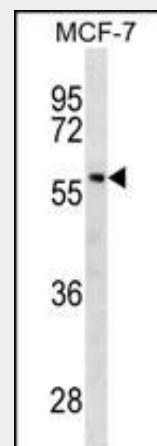
WB~~1:100~1600

Format

Mouse monoclonal antibody supplied in crude ascites with 0.09% (W/V) sodium azide.

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.



GC Antibody(Center) (Cat. #AM2180a) western blot analysis in MCF-7 cell line lysates (35µg/lane). This demonstrates the GC antibody detected the GC protein (arrow).

GC Antibody(Center) (Ascites) - Background

This gene encodes a lysosomal membrane protein that cleaves the beta-glucosidic linkage of glycosylceramide, an intermediate in glycolipid metabolism. Mutations in this gene cause Gaucher disease, a lysosomal storage disease characterized by an accumulation of glucocerebrosides. A related pseudogene is approximately 12 kb downstream of this gene on chromosome 1. Alternative splicing results in multiple transcript variants.

GC Antibody(Center) (Ascites) - References

Dos Santos, A.V., et al. *Neurosci. Lett.* 485(2):121-124(2010)
Bailey, S.D., et al. *Diabetes Care* 33(10):2250-2253(2010)
Jeong, S.Y., et al. *Blood Cells Mol. Dis.* (2010) In

Precautions

GC Antibody(Center) (Ascites) is for research use only and not for use in diagnostic or therapeutic procedures.

press :

Hu, F.Y., et al. Eur. J. Neurol. (2010) In press :
Velayati, A., et al. Curr Neurol Neurosci Rep
10(3):190-198(2010)

GC Antibody(Center) (Ascites) - Protein Information

Name GBA ([HGNC:4177](#))

Synonyms GC, GLUC

Function

Glucosylceramidase that catalyzes, within the lysosomal compartment, the hydrolysis of glucosylceramide/GlcCer into free ceramide and glucose (PubMed:[9201993](http://www.uniprot.org/citations/9201993) target="_blank">9201993, PubMed:[24211208](http://www.uniprot.org/citations/24211208) target="_blank">24211208, PubMed:[15916907](http://www.uniprot.org/citations/15916907) target="_blank">15916907). Thereby, plays a central role in the degradation of complex lipids and the turnover of cellular membranes (PubMed:[27378698](http://www.uniprot.org/citations/27378698) target="_blank">27378698). Through the production of ceramides, participates in the PKC-activated salvage pathway of ceramide formation (PubMed:[19279011](http://www.uniprot.org/citations/19279011) target="_blank">19279011). Also plays a role in cholesterol metabolism (PubMed:[24211208](http://www.uniprot.org/citations/24211208) target="_blank">24211208, PubMed:[26724485](http://www.uniprot.org/citations/26724485) target="_blank">26724485). May either catalyze the glucosylation of cholesterol, through a transglucosylation reaction that transfers glucose from glucosylceramide to cholesterol (PubMed:[24211208](http://www.uniprot.org/citations/24211208) target="_blank">24211208, PubMed:[26724485](http://www.uniprot.org/citations/26724485) target="_blank">26724485). The short chain saturated C8:0- GlcCer and the mono-unsaturated C18:0-GlcCer being the most effective glucose donors for that transglucosylation reaction (PubMed:[26724485](http://www.uniprot.org/citations/26724485) target="_blank">26724485). The

f="http://www.uniprot.org/citations/24211208" target="_blank">24211208). Under specific conditions, may alternatively catalyze the reverse reaction, transferring glucose from cholesteryl-beta-D-glucoside to ceramide (PubMed:26724485). Finally, may also hydrolyze cholesteryl-beta-D-glucoside to produce D-glucose and cholesterol (PubMed:24211208, PubMed:26724485).

Cellular Location

Lysosome membrane; Peripheral membrane protein; Lumenal side. Note=Interaction with saposin-C promotes membrane association (PubMed:10781797). Targeting to lysosomes occurs through an alternative MPR-independent mechanism via SCARB2 (PubMed:18022370).

GC Antibody(Center) (Ascites) - 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](#)