

Mouse GC Monoclonal Antibody | anti-GBA antibody

GC Antibody (Center) (Ascites)

CATALOG # AAA283471	HOST Mouse	REACTIVITY Human Predicted Reactivity: Bovine, Pig	APPLICATIONS ELISA, Western Blot
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PRODUCT SYNONYMS

GC; Monoclonal Antibody; GC Antibody (Center) (Ascites); Glucosylceramidase; Acid beta-glucosidase; Alglucerase; Beta-glucocerebrosidase; Beta-GC; D-glucosyl-N-acylsphingosine glucosylhydrolase; Imiglucerase; GBA; GLUC; anti-GBA antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human Predicted Reactivity: Bovine, Pig
Clonality	Monoclonal
Isotype	IgM
Clone Number	660CT8.6.6.2
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.
Form/Format	Mouse monoclonal antibody supplied in crude ascites with 0.09% (W/V) sodium azide.
Sequence Positions	337-365
Sequence Length	536
Applicable Applications for anti-GBA antibody	ELISA, WB (Western Blot)
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 2 weeks. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

IMAGES



WB (Western Blot)

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

ADDITIONAL INFORMATION

Related Product Information for anti-GBA antibody	Function: Glucosylceramidase that catalyzes, within the lysosomal compartment, the hydrolysis of glucosylceramide/GlcCer into free ceramide and glucose (PubMed:9201993, PubMed:24211208, PubMed:15916907). Thereby, plays a central role in the degradation of complex lipids and the turnover of cellular membranes (PubMed:27378698). Through the production of ceramides, participates in the PKC-activated salvage pathway of ceramide formation (PubMed:19279011). Also plays a role in cholesterol metabolism (PubMed:24211208, PubMed:26724485). May either catalyze the glucosylation of cholesterol, through a transglucosylation reaction that transfers glucose from glucosylceramide to cholesterol (PubMed:24211208, PubMed: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: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; Luminal 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)
Product Categories/Family for anti-GBA antibody	Cancer; Metabolism; Neuroscience; Signal transduction
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 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)

NCBI AND UNIPROT INFORMATION

NCBI GI #	54607043
NCBI GeneID	2629
NCBI Accession #	P04062; NP_001005741.1; NP_001005742.1
NCBI GenBank Nucleotide #	NM_000157.3
Molecular Weight	59716
NCBI Official Full Name	glucosylceramidase isoform 1
NCBI Official Synonym Full Names	glucosidase, beta, acid
NCBI Official Symbol	GBA
NCBI Official Synonym Symbols	GCB; GBA1; GLUC
NCBI Protein Information	glucosylceramidase
UniProt Protein Name	Glucosylceramidase
UniProt Gene Name	GBA
UniProt Synonym Gene Names	GC; GLUC; Beta-GC
UniProt Entry Name	GLCM_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.