

GBA Rabbit mAb
Catalog # AP77642**Specification**

GBA Rabbit mAb - Product Information

Application	WB, IHC-P
Primary Accession	P04062
Reactivity	Human, Rat
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	59716

GBA Rabbit mAb - Additional Information**Gene ID** 2629**Other Names**

GBA

Dilution

WB~~1/500-1/1000

IHC-P~~N/A

Format

Liquid

GBA Rabbit mAb - Protein Information**Name** GBA1 ([HGNC:4177](#))**Synonyms** GBA, GC, GLUC**Function**

Glucosylceramidase that catalyzes, within the lysosomal compartment, the hydrolysis of glucosylceramides/GlcCers (such as beta- D-glucosyl-(1<->1')-N-acylsphing-4-enine) into free ceramides (such as N-acylsphing-4-enine) and glucose (PubMed:15916907, PubMed:24211208, PubMed:32144204, PubMed:9201993). 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). Catalyzes the glucosylation of cholesterol, through a transglucosylation reaction where glucose is transferred from GlcCer to cholesterol (PubMed:24211208, PubMed:26724485, PubMed:<a

[32144204](http://www.uniprot.org/citations/32144204)). GlcCer containing mono-unsaturated fatty acids (such as beta-D-glucosyl-N-(9Z-octadecenoyl)-sphing-4-enine) are preferred as glucose donors for cholesterol glucosylation when compared with GlcCer containing same chain length of saturated fatty acids (such as beta-D-glucosyl-N-octadecanoyl-sphing-4-enine) (PubMed:[24211208](http://www.uniprot.org/citations/24211208)). Under specific conditions, may alternatively catalyze the reverse reaction, transferring glucose from cholesteryl 3-beta-D-glucoside to ceramide (Probable) (PubMed:[26724485](http://www.uniprot.org/citations/26724485)). Can also hydrolyze cholesteryl 3-beta-D-glucoside producing glucose and cholesterol (PubMed:[24211208](http://www.uniprot.org/citations/24211208), PubMed:[26724485](http://www.uniprot.org/citations/26724485)). Catalyzes the hydrolysis of galactosylceramides/GalCers (such as beta-D-galactosyl-(1->1')-N-acylsphing-4-enine), as well as the transfer of galactose between GalCers and cholesterol in vitro, but with lower activity than with GlcCers (PubMed:[32144204](http://www.uniprot.org/citations/32144204)). Contrary to GlcCer and GalCer, xylosylceramide/XylCer (such as beta-D-xylosyl-(1->1')-N-acylsphing-4-enine) is not a good substrate for hydrolysis, however it is a good xylose donor for transxylosylation activity to form cholesteryl 3-beta-D-xyloside (PubMed:[33361282](http://www.uniprot.org/citations/33361282)).

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).

GBA Rabbit mAb - 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](#)

GBA Rabbit mAb - Images



