

**GBA3 Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP12289B****Specification**

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**GBA3 Antibody (C-term) - Product Information**

Application	WB, IHC-P,E
Primary Accession	<a href="#">Q9H227</a>
Other Accession	<a href="#">NP_001121904.1</a> , <a href="#">NP_066024.1</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	53696
Antigen Region	296-325

**GBA3 Antibody (C-term) - Additional Information****Gene ID** 57733**Other Names**

Cytosolic beta-glucosidase, Cytosolic beta-glucosidase-like protein 1, GBA3, CBG, CBGL1

**Target/Specificity**

This GBA3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 296-325 amino acids from the C-terminal region of human GBA3.

**Dilution**

WB~~1:1000

IHC-P~~1:10~50

**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**

GBA3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**GBA3 Antibody (C-term) - Protein Information****Name** GBA3 ([HGNC:19069](#))**Synonyms** CBG, CBGL1

**Function** Neutral cytosolic beta-glycosidase with a broad substrate specificity that could play a role in the catabolism of glycosylceramides (PubMed:[11389701](#), PubMed:[11784319](#), PubMed:[20728381](#), PubMed:[26724485](#), PubMed:[17595169](#), PubMed:[33361282](#)). Has a significant glucosylceramidase activity in vitro (PubMed:[26724485](#), PubMed:[17595169](#)). However, that activity is relatively low and its significance in vivo is not clear (PubMed:[26724485](#), PubMed:[17595169](#), PubMed:[20728381](#)). Hydrolyzes galactosylceramides/GalCers, glucosylsphingosines/GlcSphs and galactosylsphingosines/GalSphs (PubMed:[17595169](#)). However, the in vivo relevance of these activities is unclear (PubMed:[17595169](#)). It can also hydrolyze a broad variety of dietary glycosides including phytoestrogens, flavonols, flavones, flavanones and cyanogens in vitro and could therefore play a role in the metabolism of xenobiotics (PubMed:[11784319](#)). Possesses transxylosylase activity in vitro using xylosylated ceramides/XylCers (such as beta-D-xylosyl-(11')-N-acylsphing-4-enine) as xylosyl donors and cholesterol as acceptor (PubMed:[33361282](#)). Could also play a role in the catabolism of cytosolic sialyl free N-glycans (PubMed:[26193330](#)).

#### Cellular Location

Cytoplasm, cytosol

#### Tissue Location

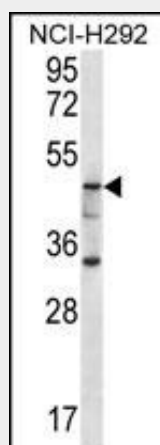
Present in small intestine (at protein level). Expressed in liver, small intestine, colon, spleen and kidney. Down- regulated in renal cell carcinomas and hepatocellular carcinomas

### GBA3 Antibody (C-term) - Protocols

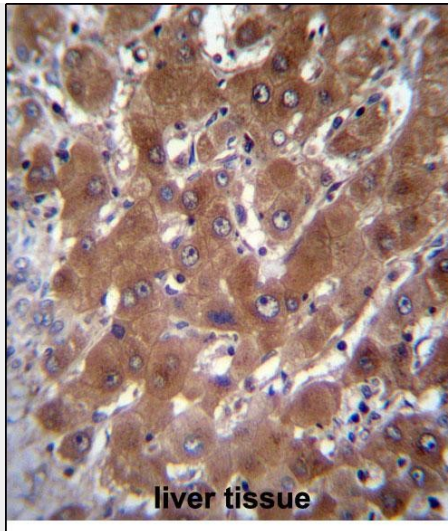
Provided below are standard protocols that you may find useful for product applications.

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

### GBA3 Antibody (C-term) - Images



GBA3 Antibody (C-term) (Cat. #AP12289b) western blot analysis in NCI-H292 cell line lysates (35ug/lane). This demonstrates the GBA3 antibody detected the GBA3 protein (arrow).



GBA3 Antibody (C-term) (Cat. #AP12289b) immunohistochemistry analysis in formalin fixed and paraffin embedded human liver tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of GBA3 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

#### **GBA3 Antibody (C-term) - Background**

GBA3, or cytosolic beta-glucosidase (EC 3.2.1.21), is a predominantly liver enzyme that efficiently hydrolyzes beta-D-glucoside and beta-D-galactoside, but not any known physiologic beta-glycoside, suggesting that it may be involved in detoxification of plant glycosides (de Graaf et al., 2001 [PubMed 11389701]). GBA3 also has significant neutral glycosylceramidase activity (EC 3.2.1.62), suggesting that it may be involved in a nonlysosomal catabolic pathway of glucosylceramide metabolism (Hayashi et al., 2007 [PubMed 17595169]).

#### **GBA3 Antibody (C-term) - References**

Dekker, N., et al. Blood Cells Mol. Dis. (2010) In press :  
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Hayashi, Y., et al. J. Biol. Chem. 282(42):30889-30900(2007)  
Tribolo, S., et al. J. Mol. Biol. 370(5):964-975(2007)  
Beutler, E., et al. J. Lab. Clin. Med. 144(2):65-68(2004)