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GBA3 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12289B

Specification

GBA3 Antibody (C-term) - Product Information

Application	**IHC-P, WB,E**
Primary Accession	Q9H227
Other Accession	NP_001121904.1, NP_066024.1
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
IHC-P~~1:10~50
WB~~1:1000
E~~Use at an assay dependent concentration.

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:17595169, PubMed:20728381, PubMed:26724485, PubMed:33361282). Has a significant glucosylceramidase activity in vitro (PubMed:17595169, PubMed:26724485). However, that activity is relatively low and its significance in vivo is not clear (PubMed:17595169, PubMed:20728381, PubMed:26724485). 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

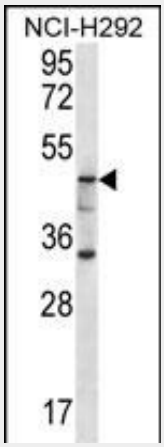
Tissue Location
Present in small intestine (at protein level). Expressed in liver, small intestine, colon, spleen and kidney. Down- regulated in renal cell carcinomas and hepatocellular carcinomas

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 Cytomety
- Cell Culture

GBA3 Antibody (C-term) - Images



GBA3 Antibody (C-term) (Cat. #AP12289b) western blot analysis in NCI-H292 cell line lysates

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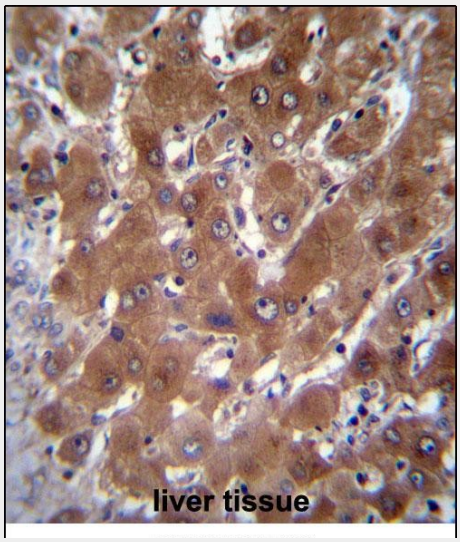
(35ug/lane).This demonstrates the GBA3 antibody detected the GBA3 protein (arrow).



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 :
Noguchi, J., et al. Biochem. Biophys. Res. Commun. 374(3):549-552(2008)
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)