

GBA3 Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP12289b**Specification**

GBA3 Antibody (C-term) Blocking peptide - Product InformationPrimary Accession [Q9H227](#)**GBA3 Antibody (C-term) Blocking peptide - Additional Information**

Gene ID 57733

Other Names

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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

GBA3 Antibody (C-term) Blocking peptide - Protein InformationName 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](http://www.uniprot.org/citations/11389701), PubMed: [11784319](http://www.uniprot.org/citations/11784319), PubMed: [20728381](http://www.uniprot.org/citations/20728381), PubMed: [26724485](http://www.uniprot.org/citations/26724485), PubMed: [17595169](http://www.uniprot.org/citations/17595169), PubMed: [33361282](http://www.uniprot.org/citations/33361282)). Has a significant glucosylceramidase activity in vitro (PubMed: [26724485](http://www.uniprot.org/citations/26724485), PubMed: [17595169](http://www.uniprot.org/citations/17595169)). However, that activity is relatively low and its significance in vivo is not clear (PubMed: [26724485](http://www.uniprot.org/citations/26724485), PubMed: [17595169](http://www.uniprot.org/citations/17595169), PubMed: [20728381](http://www.uniprot.org/citations/20728381)). Hydrolyzes galactosylceramides/GalCers, glucosylsphingosines/GlcSphs and galactosylsphingosines/GalSphs (PubMed: [17595169](http://www.uniprot.org/citations/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-(1<->1')-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) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

GBA3 Antibody (C-term) Blocking peptide - Images

GBA3 Antibody (C-term) Blocking peptide - 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 an only lysosomal catabolic pathway of glucosylceramide metabolism (Hayashi et al., 2007 [PubMed 17595169]).

GBA3 Antibody (C-term) Blocking peptide - 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)