

GBA3 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP50623

Product Information

Application	WB
Primary Accession	<u>Q9H227</u>
Reactivity	Human
Host	Rabbit
Clonality	polyclona
Calculated MW	53696

Additional Information

Gene ID	57733
Other Names	Cytosolic beta-glucosidase, Cytosolic beta-glucosidase-like protein 1, GBA3, CBG, CBGL1
Dilution	WB~~ 1:500-1:1000
Format	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.
Storage Conditions	-20°C

Protein Information

Name	GBA3 (<u>HGNC:19069</u>)
Synonyms	CBG, CBGL1
Function	Neutral cytosolic beta-glycosidase with a broad substrate specificity that could play a role in the catabolism of glycosylceramides (PubMed: <u>11389701</u> , PubMed: <u>11784319</u> , PubMed: <u>17595169</u> , PubMed: <u>20728381</u> , PubMed: <u>26724485</u> , PubMed: <u>33361282</u>). Has a significant glucosylceramidase activity in vitro (PubMed: <u>17595169</u> , PubMed: <u>26724485</u>). However, that activity is relatively low and its significance in vivo is not clear (PubMed: <u>17595169</u> , PubMed: <u>20728381</u> , PubMed: <u>26724485</u>). Hydrolyzes galactosylceramides/GalCers, glucosylsphingosines/GlcSphs and galactosylsphingosines/GalSphs (PubMed: <u>17595169</u>). However, the in vivo relevance of these activities is unclear (PubMed: <u>17595169</u>). 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: <u>11784319</u>). 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: <u>33361282</u>). Could also play a role in the catabolism of cytosolic sialyl free N-glycans (PubMed: <u>26193330</u>).
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

Background

Glycosidase probably involved in the intestinal absorption and metabolism of dietary flavonoid glycosides. Able to hydrolyze a broad variety of glycosides including phytoestrogens, flavonols, flavones, flavanones and cyanogens. Possesses beta- glycosylceramidase activity and may be involved in a nonlysosomal catabolic pathway of glycosylceramide.

References

Yahata K.,et al.J. Mol. Med. 78:389-394(2000). de Graaf M.,et al.Biochem. J. 356:907-910(2001). Berrin J.-G.,et al.Eur. J. Biochem. 269:249-258(2002). Hays W.S.,et al.Submitted (NOV-2000) to the EMBL/GenBank/DDBJ databases. Suzuki Y.,et al.Submitted (APR-2005) to the EMBL/GenBank/DDBJ databases.

Images



Western blot analysis of lysates from human liver and spleen tissue lysate(from left to right),using GBA3 Antibody(AP50623). AP50623 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysates at 35ug per lane.

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