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Anti-GBA3 Antibody

Catalog # AP60292

Product Information

Application	WB, IF/IC
Primary Accession	Q9H227
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	53696

Additional Information

Gene ID	57733
Other Names	CBG; CBGL1; Cytosolic beta-glucosidase; Cytosolic beta-glucosidase-like protein 1
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human GBA3. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

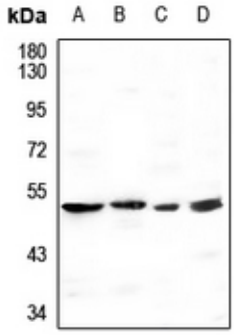
Name	GBA3 (HGNC:19069)
Synonyms	CBG, CBGL1
Function	Neutral cytosolic beta-glycosidase with a broad substrate specificity that could play a role in the catabolism of glycosylceramides (PubMed:11389701, PubMed:11784319, PubMed:17595169, PubMed:20728381, PubMed:26724485, PubMed:33361282). Has a significant 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).

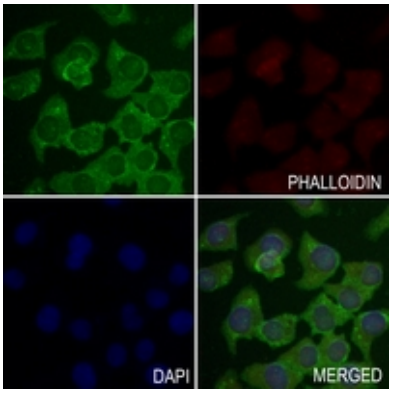
Cellular Location Cytoplasm, cytosol

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

Images



Western blot analysis of GBA3 expression in LO2 (A), HepG2 (B), CT26 (C), rat liver (D) whole cell lysates. (Predicted band size: 53 kD; Observed band size: 54 kD)



Immunofluorescent analysis of GBA3 staining in A549 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.