Recombinant Human GBA3/CBGL1 Protein (His Tag)

Catalog Number: PKSH031073

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

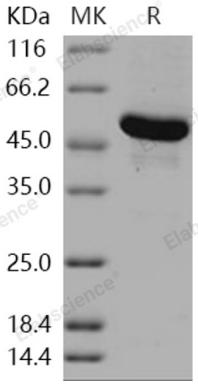
Description

Species	Human
Source	Baculovirus-Insect Cells-derived Human GBA3/CBGL1 protein Met 1-Leu 469, with an C-terminal His
Calculated MW	55 kDa
Observed MW	50 kDa
Accession	NP_066024.1
Bio-activity	Measured by its ability to hydrolyze 4-methylumbelliferyl-β-D glucopyranoside. The specific activity is > 1, 500 pmoles/min/μg.

Properties

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile 20 mM Tris, 500 mM NaCl, 10% glycerol, pH 7.4 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Cytosolic beta-glucosidase, also known as Cytosolic beta-glucosidase-like protein 1, GBA3, CBG and CBGL1 is a cytoplasm protein which belongs to theglycosyl hydrolase 1 family and Klotho subfamily. GBA3/CBGL1 is a glycosidase probably involved in the intestinal absorption and metabolism of dietary flavonoid glycosides. GBA3/CBGL1 is present in small intestine (at protein level). GBA3/CBGL1 is expressed in liver, small intestine, colon, spleen and kidney. GBA3/CBGL1 is down-regulated in renal cell carcinomas and hepatocellular carcinomas. GBA3/CBGL1 is able to hydrolyze a broad variety of glycosides including phytoestrogens, flavonols, flavones, flavanones and cyanogens. GBA3/CBGL1 possesses beta-glycosylceramidase activity and may be involved in a nonlysosomal catabolic pathway of glycosylceramide.

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