

## Recombinant Human GBA3/CBGL1 Protein (His Tag)

Catalog No. PKSH031073

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

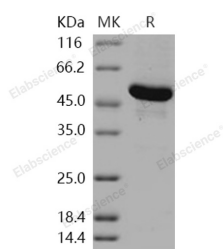
### Description

<b>Synonyms</b>	CBG;CBGL1;GBA3;GLUC;KLRP;MGC104276;MGC126878
<b>Species</b>	Human
<b>Expression Host</b>	Baculovirus-Insect Cells
<b>Sequence</b>	Met 1-Leu 469
<b>Accession</b>	NP_066024.1
<b>Calculated Molecular Weight</b>	55.0 kDa
<b>Observed molecular weight</b>	50 kDa
<b>Tag</b>	C-His
<b>Bioactivity</b>	Measured by its ability to hydrolyze 4-methylumbelliferyl- $\beta$ -D glucopyranoside. The specific activity is > 1, 500 pmoles/min/ $\mu$ g.

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per $\mu$ g of the protein as determined by the LAL method.
<b>Storage</b>	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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile 20mM Tris, 500mM NaCl, 10% glycerol, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



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### Background

Cytosolic beta-glucosidase, also known as Cytosolic beta-glucosidase-like protein 1, GBA3, CBG and CBGL1 is a

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cytoplasm protein which belongs to the glycosyl 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.