Datasheet for ABIN2721979

GBA Protein (Transcript Variant 1) (Myc-DYKDDDDK Tag)

2 Images

Go to Product page

Overview

Quantity:	20 µg
Target:	GBA
Protein Characteristics:	Transcript Variant 1
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This GBA protein is labelled with Myc-DYKDDDDK Tag.
Application:	Antibody Production (AbP), Standard (STD), Functional Studies (Func), Protein Interaction (PI)

Product Details

Specificity:	Optimal preservation of protein structure, post-translational modifications and functions.
Characteristics:	• Recombinant human Glucosylceramidase (transcript variant 1) protein expressed in HEK293 cells. • Produced with end-sequenced ORF clone • Tested for bioactivity.
Purity:	> 80 % as determined by SDS-PAGE and Coomassie blue staining
Biological Activity Comment:	The enzymatic activity of (GBA) was measured by its ability to hydrolyze a fluorescent substrate 4-methylumbelliferyl-ß-D-glucopyranoside. The specific activity is > 70,000 pmol/hour/µg, as measured under the following conditions: 27 ng of GBA was incubated with 10 mM 4-methylumbelliferyl- ß-D-glucopyranoside in the following buffer at 37°C for 40 min:

Product Details

	150 mM citrate-phosphate buffer, pH 5.4, 0.25% (w/w) sodium taurocholate, 0.25% (w/w) Triton X-100, and 1% bovine serum albumin. The reaction was terminated by adding 0.5 volume of 1M glycine buffer, pH 12.5. The hydrolyzed product of reaction, 4-methylumbelliferone (4-MU), was measured using a FlexStation 3 microplate reader (Ex365/Em445). Specific activity of GBA was calculated based on a standard curve of known concentration of 4-MU.

Target Details

Target:	GBA
Alternative Name:	Glucosylceramidase (GBA Products)
Background:	This gene encodes a lysosomal membrane protein that cleaves the beta-glucosidic linkage of glycosylceramide, an intermediate in glycolipid metabolism. Mutations in this gene cause Gaucher disease, a lysosomal storage disease characterized by an accumulation of glucocerebrosides. A related pseudogene is approximately 12 kb downstream of this gene on chromosome 1. Alternative splicing results in multiple transcript variants.
Molecular Weight:	55.5 kDa
NCBI Accession:	NP_000148
Pathways:	Cellular Glucan Metabolic Process

Application Details

Application Notes:	Recombinant human proteins can be used for: Native antigens for optimized antibody production Positive controls in ELISA and other antibody assays Protein-protein interaction In vitro biochemical assays and cell-based functional assays
Comment:	The tag is located at the C-terminal.
Restrictions:	For Research Use only

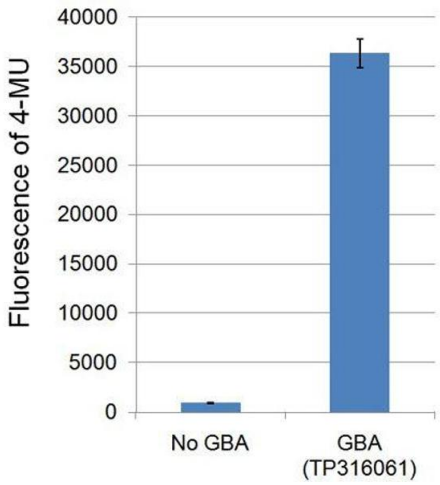
Handling

Concentration:	> 50 µg/mL
Buffer:	25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10 % glycerol.
Storage:	-80 °C

Handling

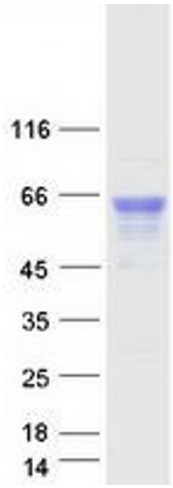
Storage Comment:	Store at -80°C. Thaw on ice, aliquot to individual single-use tubes, and then re-freeze immediately. Only 2-3 freeze thaw cycles are recommended.

Images



Activity Assay

Image 1. Bioactivity measured with Activity Assay



Western Blotting

Image 2. Validation with Western Blot