

## Active Recombinant Human GBA, His-tagged

**Cat. No.** GBA-22H    **Lot. No.** (See product label)

### SPECIFICATION

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b>     | Recombinant Human GBA, fused with C-terminal 6-His tag, was expressed in CHO Cells.                                                                                                                                                                                                                                                                                                                                                        |
| <b>Species</b>              | Human                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Source</b>               | CHO                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Description</b>          | 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. |
| <b>Predicted N Terminal</b> | Ala40                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Form</b>                 | Supplied as a 0.2 µm filtered solution in Tris, NaCl, Glycerol and DTT.                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Bio-activity</b>         | Measured by its ability to hydrolyze 4-methylumbelliferyl-beta-D-glucopyranoside.                                                                                                                                                                                                                                                                                                                                                          |
| <b>Molecular Mass</b>       | Predicted Molecular Mass: 56 kDa<br>SDS-PAGE: 58-75 kDa, reducing conditions                                                                                                                                                                                                                                                                                                                                                               |
| <b>Endotoxin</b>            | < 1.0 eu per 1 µg of the protein by the lal                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Purity</b>               | >95%, by SDS-PAGE under reducing conditions and visualized by Colloidal                                                                                                                                                                                                                                                                                                                                                                    |

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Coomassie® Blue stain at 5 µg per lane.

**Storage**

Avoid repeated freeze-thaw cycles. 6 months from date of receipt, -70 °C as supplied. 3 months, -70 °C under sterile conditions after opening.

## GENE INFORMATION

**Gene Name**

[GBA glucosidase, beta, acid \[ Homo sapiens \]](#)

**Official Symbol**

GBA

**Synonyms**

GBA; GCB; GBA1; GLUC; glucosidase, beta, acid; glucosylceramidase; beta-GC; alglucerase; imiglucerase; acid beta-glucosidase; beta-glucocerebrosidase; lysosomal glucocerebrosidase; D-glucosyl-N-acylsphingosine glucohydrolase; NP\_000148.2; EC 3.2.1.45; NP\_001005741.1; NP\_001005742.1; NP\_001165282.1; NP\_001165283.1

**Gene ID**

[2629](#)

**mRNA Refseq**

[NM\\_000157](#)

**Protein Refseq**

[NP\\_000148](#)

**MIM**

[606463](#)

**UniProt ID**

[P04062](#)

**Chromosome  
Location**

1q21

**Pathway**

Glycosphingolipid metabolism; Other glycan degradation; Sphingolipid metabolism

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**Function**

glucosylceramidase activity; protein binding; receptor binding

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