

## Recombinant Human GBA Protein (Ala40-Gln536), His-tagged

Cat. No. GBA-539H    Lot. No. (See product label)

### SPECIFICATION

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                |
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| <b>Product Overview</b>     | Recombinant Human GBA Protein (NP_000148.2) (Ala40-Gln536) was produced by HEK293 Cells expression system. This protein was expressed with a polyhistidine tag at the C-terminus.                                                                                                                                                                                                                              |
| <b>Species</b>              | Human                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Source</b>               | HEK293                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>ProteinLength</b>        | Ala40-Gln536                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Description</b>          | Mutations in the GBA gene, encoding the lysosomal hydrolase glucocerebrosidase (GCase), are the most common known genetic risk factor for Parkinson's disease (PD) and dementia with Lewy bodies (DLB). ASAH1 (acid ceramidase 1) and GBA2 (glucocerebrosidase 2) enzymes that mediate glucosylsphingosine production and metabolism are attractive therapeutic targets for treating mutant GBA-associated PD. |
| <b>Predicted N Terminal</b> | Ala                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Form</b>                 | Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.                                                                                                                                                                                                                                                                 |
| <b>Molecular Mass</b>       | The recombinant human GBA consists of 508 amino acids and predicts a molecular mass of 57 kDa.                                                                                                                                                                                                                                                                                                                 |
| <b>Endotoxin</b>            | < 1.0 EU per µg protein as determined by the LAL method.                                                                                                                                                                                                                                                                                                                                                       |

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|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purity</b>         | > 95 % as determined by SDS-PAGE.                                                                                                                                                                                                                            |
| <b>Stability</b>      | Samples are stable for up to twelve months from date of receipt at -70 centigrade.                                                                                                                                                                           |
| <b>Storage</b>        | Store it under sterile conditions at -20 centigrade to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.                                                                               |
| <b>Reconstitution</b> | It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 mg/ml. Centrifuge the vial at 4°C before opening to recover the entire contents.                                                                                |
| <b>Shipping</b>       | In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature.<br>Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise. |

## GENE INFORMATION

|                        |                                                                                                  |
|------------------------|--------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>       | GBA glucosidase, beta, acid [ Homo sapiens ]                                                     |
| <b>Official Symbol</b> | GBA                                                                                              |
| <b>Synonyms</b>        | GBA; glucosidase, beta, acid; GBA1; alglucerase; imiglucerase; acid beta-glucosidase; GCB; GLUC; |
| <b>Gene ID</b>         | 2629                                                                                             |
| <b>mRNA Refseq</b>     | NM_000157                                                                                        |
| <b>Protein Refseq</b>  | NP_000148                                                                                        |

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| MIM | 606463 |
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| UniProt ID | P04062 |
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