

## Beta-Glucocerebrosidase Recombinant Protein | GBA recombinant protein

Recombinant Human Beta-Glucocerebrosidase

CATALOG #  
AAA37987

### PRODUCT SYNONYMS

Beta-Glucocerebrosidase; Recombinant Human Beta-Glucocerebrosidase; Glucosidase; Beta; Acid; D-Glucosyl-N-Acylsphingosine Glucohydrolase; Acid Beta-Glucosidase; Glucosylceramidase; Alglucerase; EC 3.2.1.45; Beta-GC; GLUC; Acid (Includes Glucosylceramidase); Glucosylceramidase-Like Protein; Lysosomal Glucocerebrosidase; GBA1; GCB; GC; Glucosylceramidase.; GBA recombinant protein

### PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Purity/Purification     | Greater than 80% as determined by SDS-PAGE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Form/Format             | GBA protein solution (0.5 mg/ml) contains Phosphate Buffered Saline (pH 7.4) and 10% glycerol.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Sequence                | ARPCIPKSFG YSSVVCVCNA TYCDSFDPPT FPALGTFSRY ESTRSGRRME LSMGPIQANH TGTGLLLTLQ<br>PEQKFQKVKG FGGAMTDAAL LNILALSPPA QNLLLSYFS EEGIGYNIIR VPMASCDFSI RTYTYADTPD<br>DFQLHNFSLP EEDTKLKIPL IHRALQLAQR PVSLLASPWT SPTWLKTNGA VNGKGSCLKGQ PGDIYHQTWA<br>RYFVKFLDAY AEHLKQFWAV TAENEPSAGL LSGYPFQCLG FTPEHQRFI ARDLGPTLAN STHHNVRLLM<br>LDDQRLLLPH WAKVVLTDPE AAKYVHGIAV HWYLDLAPA KATLGETHRL FPNTMLFASE ACVGSKFWEQ<br>SVRLGSWDRG MQYSHSIITN LLYHVVGWTD WNLALNPEGG PNWVRNFVDS PIIVDITKDT FYKQPMFYHL<br>GHFSKFIPEG SQRVGLVASQ KNDLDAVALM HPDGSAAVVVV LNRSSKDVPL TIKDPAVGFL ETISPGYSIH<br>TYLWRRQ <u>HHHHHH</u> |
| Sequence Length         | 536                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Source                  | Sf9, Baculovirus Cells                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Physical Appearance     | Sterile Filtered colorless solution.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Preparation and Storage | Store at 4 degrees C if entire vial will be used within 2-4 weeks.<br>Store, frozen at -20 degrees C for longer periods of time.<br>For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA)<br>Avoid multiple freeze-thaw cycles                                                                                                                                                                                                                                                                                                                                          |

### ADDITIONAL INFORMATION

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|---------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for GBA recombinant protein | <p>Introduction: Beta-Glucocerebrosidase, also known as GBA is a member of the glycosyl hydrolase 30 family. GBA is a lysosomal enzyme which requires a signal peptide for transport across the membrane of the rough endoplasmic reticulum as well as glycosylation for transport into lysosomes. Furthermore, Gaucher disease is caused by a deficiency in the activity of the enzyme glucocerebrosidase.</p> <p>Description: GBA produced in Sf9 Baculovirus cells is a single, glycosylated polypeptide chain containing 503 amino acids (40-536a.a.) and having a molecular mass of 56.4kDa (Molecular size on SDS-PAGE will appear at approximately 50-70kDa). GBA is expressed with a 6 amino acid His tag at C-Terminus and purified by proprietary chromatographic techniques.</p> |
| Product Categories/Family for GBA recombinant protein   | Enzymes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

### NCBI AND UNIPROT INFORMATION

|             |          |
|-------------|----------|
| NCBI GI #   | 54607043 |
| NCBI GeneID | 2629     |

|                                  |                                                                                                                                                                                                                                                         |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI Accession #                 | <a href="#">NP_000148.2</a>                                                                                                                                                                                                                             |
| NCBI GenBank Nucleotide #        | <a href="#">NM_000157.3</a>                                                                                                                                                                                                                             |
| UniProt Accession #              | <a href="#">P04062</a> ; <a href="#">Q16545</a> ; <a href="#">Q4VX22</a> ; <a href="#">Q6I9R6</a> ; <a href="#">Q9UMJ8</a> ; <a href="#">A8K796</a> ; <a href="#">B7Z5G2</a> ; <a href="#">B7Z6S1</a> ; <a href="#">J3KQG4</a> ; <a href="#">J3KQK9</a> |
| NCBI Official Full Name          | glucosylceramidase isoform 1                                                                                                                                                                                                                            |
| NCBI Official Synonym Full Names | glucosylceramidase beta                                                                                                                                                                                                                                 |
| NCBI Official Symbol             | GBA                                                                                                                                                                                                                                                     |
| NCBI Official Synonym Symbols    | GCB; GBA1; GLUC                                                                                                                                                                                                                                         |
| NCBI Protein Information         | glucosylceramidase                                                                                                                                                                                                                                      |
| UniProt Protein Name             | Glucosylceramidase                                                                                                                                                                                                                                      |
| UniProt Gene Name                | <b>GBA</b>                                                                                                                                                                                                                                              |
| UniProt Synonym Gene Names       | GC; GLUC; Beta-GC                                                                                                                                                                                                                                       |
| UniProt Entry Name               | GLCM_HUMAN                                                                                                                                                                                                                                              |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/gba-recombinant-protein/37987>