

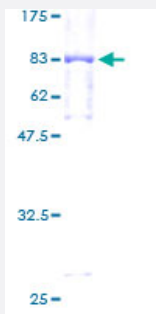
Full-Length

GBA (Human) Recombinant Protein (P01)

Catalog # H00002629-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human GBA full-length ORF (AAH03356, 1 a.a. - 536 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MEFSSPSREECPKPLSRVSIAGSLTGLLLLQAVSWASGARPCIPKSFGYSSVVCVCNATYCDSF
DPPTFPALGTFSRYESTRSGRRMELSMGPIQANHTGTGLLLTLQPEQKFQKVGFGGAMTDA
LNLALSPPAQNLLLKSYFSEEGIGYNIIRVPMASCDFSIRTYTYADTPDDFQLHNFSLPEEDTKLKIP
LIHRALQLAQRPVSLASPWTSPWLKTNGAVNGKGSLLKGPQGDYHQTWARYFVKFLDAYAEHK
LQFWAVTAENEPSAGLLSGYPFQCLGFTPEHQDRFIARDLGPTLANSTHHNVRLMLDDQRLLLP
HWAKVVLTDPEAAKYVHGIAVHWYLDLAPAKATLGETHRLFPNTMLFASEACVGSKFWEQSVR
LGSWDRGMQYSHSIITNLLYHVVGWTDWNLALNPEGPNWVRNFVDSPINVDITKDTFYKQPMFYH
LGHFSGFIPEGSQVRGLVASQKNDLDAVALMHPDGSVVVVLNRSSKDVPLTKDPAVGFLFETIS
PGYSIHTYLWRRQ

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

84.70

Interspecies Antigen Sequence

Mouse (86); Rat (87)

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — GBA

Entrez GeneID	2629
GeneBank Accession#	BC003356
Protein Accession#	AAH03356
Gene Name	GBA
Gene Alias	GBA1, GCB, GLUC
Gene Description	glucosidase, beta; acid (includes glucosylceramidase)
Omim ID	230800 230900 231000 231005 606463 608013
Gene Ontology	Hyperlink
Gene Summary	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 encoding the same protein. [provided by RefSeq]
Other Designations	D-glucosyl-N-acylsphingosine glucosylhydrolase OTTHUMP00000033992 OTTHUMP00000033993 glucocerebrosidase glucocerebrosidase (alt.) lysosomal glucocerebrosidase

Publication Reference

- [TRIP12 ubiquitination of glucocerebrosidase contributes to neurodegeneration in Parkinson's disease.](#)

Bo Am Seo, Donghoon Kim, Heehong Hwang, Min Seong Kim, Shi-Xun Ma, Seung-Hwan Kwon, Sin Ho Kweon, Hu Wang, Je Min Yoo, Seulah Choi, Sang Ho Kwon, Sung-Ung Kang, Tae-In Kam, Kwangsoo Kim, Senthilkumar S Karuppagounder, Bong Gu Kang, Saebom Lee, Hyejin Park, Sangjune Kim, Wei Yan, Yong-Shi Li, Sheng-Han Kuo, Javier Redding-Ochoa, Olga Pletnikova, Juan C Troncoso, Gabsang Lee, Xiaobo Mao, Valina L Dawson, Ted M Dawson, Han Seok Ko.

Neuron 2021 Dec; 109(23):3758.

Application: Pull-Down, Human, Recombinant Protein

Pathway

- [Lysosome](#)
- [Metabolic pathways](#)
- [Other glycan degradation](#)
- [Sphingolipid metabolism](#)

Disease

- [Alzheimer disease](#)
- [Bone Diseases](#)
- [Cardiovascular Diseases](#)
- [Cognition Disorders](#)
- [Cystic fibrosis](#)
- [Deafness](#)
- [Dementia](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Edema](#)
- [Epilepsy](#)

- [Essential tremor](#)
- [Gaucher disease](#)
- [Genetic Diseases](#)
- [Genetic Predisposition to Disease](#)
- [Hypergammaglobulinemia](#)
- [Hypertension](#)
- [Lewy Body Disease](#)
- [Multiple Myeloma](#)
- [Multiple System Atrophy](#)
- [Neoplasms](#)
- [Nervous System Diseases](#)
- [Neuropsychological Tests](#)
- [Parkinson disease](#)
- [Parkinsonian Disorders](#)
- [Postmortem Changes](#)
- [Supranuclear Palsy](#)