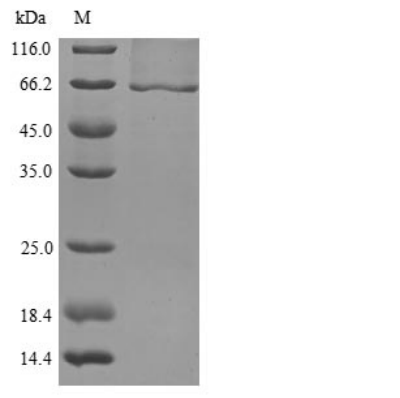
Recombinant Mouse Lysosomal acid Glucosylceramidase (Gba1)

Product Code	CSB-YP009289MO
Relevance	Acid beta-glucosidaseBeta-glucocerebrosidaseD-glucosyl-N-acylsphingosine glucohydrolase
Abbreviation	Recombinant Mouse Gba1 protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P17439
Storage Buffer	Tris-based buffer,50% glycerol
Product Type	Recombinant Proteins
Immunogen Species	Mus musculus (Mouse)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	AQPCIPKSFGYSSVVCVCNASYCDSLDPVTLPALGTFSRYESTRRGRRMELSV GAIQANRTGTGLLLTLQPEKKFQKVKGFGGAMTDATALNILALSPPTQKLLLRS YFSTNGIEYNIIRVPMASCDFSIRVYTYADTPNDFQLSNFSLPEEDTKLKIPLIHQ ALKMSSRPISLFASPWTSPTWLKTNGRVNGKGSLKGQPGDIFHQTWANYFVK FLDAYAKYGLRFWAVTAENEPTAGLFTGYPFQCLGFTPEHQRDFISRDLGPAL ANSSHDVKLLMLDDQRLLLPRWAEVVLSDPEAAKYVHGIAVHWYMDFLAPAK ATLGETHRLFPNTMLFASEACVGSKFWEQSVRLGSWDRGMQYSHSIITNLLY HVTGWTDWNLALNPEGGPNWVRNFVDSPIIVDIPKDAFYKQPMFYHLGHFSK FIPEGSQRVALVASESTDLETVALLRPDGSAVVVVLNRSSEDVPLTISDPDLGF LETVSPGYSIHTYLWRRQ
Research Area	Metabolism
Source	Yeast
Target Names	Gba1
Protein Names	Recommended name: Glucosylceramidase EC= 3.2.1.45Alternative name(s): Acid beta-glucosidase Beta-glucocerebrosidase D-glucosyl-N-acylsphingosine glucohydrolase
Expression Region	20-515aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	57.5 kDa
Protein Length	Full Length of Mature Protein

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

Recombinant Full-length of mature Mouse Lysosomal acid Glucosylceramidase (Gba) with a 6xHis-tag at the N-terminus is produced in the yeast. It contains 20-515aa of mouse Gba. The SDS-PAGE measured its purity by up to 90%. On the reducing SDS-PAGE gel, the Gba protein migrated to a band of approximately 65 kDa. In addition to being used to produce specific antibodies, this recombinant Gba protein also may be applied to study its catalytic substrate-related metabolism.

Gba is a lysosomal enzyme that catalyzes the hydrolysis of glucosylceramide into ceramide and glucose. Genetic deficiency of Gba results in the accumulation of glucosylceramide in the lysosomes of macrophages, inducing the transformation of macrophages into Gaucher cells. The Gaucher cells infiltrate various organs such as bone marrow, spleen, and liver and are responsible for Gaucher's disease (GD), a recessively inherited disorder that affects the central nervous system to varying degrees.

Shelf Life

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