Data Sheet (Cat.No.TMPH-02772)

TargetMol

GBA Protein, Mouse, Recombinant (His)

General Information

Synonyms:	Lysosomal cholesterol glycosyltransferase;D-glucosyl-N-acylsphingosine glucohydrolase;Gba;Acid beta-glucosidase;Gba1;Lysosomal acid GCase;Cholesterol glucosyltransferase (SGTase);Lysosomal acid glucosylceramidase;Lysosomal glycosylceramidase;Cholesteryl-beta-glucosidase;Lysosomal galactosylceramidase;Beta-glucocerebrosidase
Protein Construction:	20-515 aa
Species:	Mouse
Expression Host:	P. pastoris (Yeast)
Accession:	P17439
Molecular Weight:	57.5 kDa (predicted)
AA Sequence:	AQPCIPKSFGYSSVVCVCNASYCDSLDPVTLPALGTFSRYESTRRGRRMELSVGAIQANRTGTGLLLTLQPEKKFQKVKGFGGAMTDATALNILALSPPTQKLLLRSYFSTNGIEYNIIRVPMASCDFSIRVYTYADTPNDFQLSNFSLPEEDTKLKIPLIHQALKMSSRPISLFASPWTSPTWLKTNGRVNGKGSLKGQPGDIFHQTWANYFVKFLDAYAKYGLRFWAVTAENEPTAGLFTGYPFQCLGFTPEHQRDFISRDLGPALANSSHDVKLLMLDDQRLLLPRWAEVVLSDPEAAKYVHGIAVHWYMDFLAPAKATLGETHRLFPNTMLFASEACVGSKFWEQSVRLGSWDRGMQYSHSIITNLLYHVTGWTDWNLALNPEGGPNWVRNFVDSPIIVDIPKDAFYKQPMFYHLGHFSKFIPEGSQRVALVASESTDLETVALLRPDGSAVVVVLNRSSEDVPLTISDPDLGFLETVSPGYSIHTYLWRRQ

QC Testing

Biological Activity:	Activity has not been tested. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 90% as determined by SDS-PAGE.
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Tris-based buffer, 50% glycerol

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Glucosylceramidase that catalyzes, within the lysosomal compartment, the hydrolysis of glucosylceramide/GlcCer into free ceramide and glucose. Thereby, plays a central role in the degradation of complex lipids and the turnover of cellular membranes. Through the production of ceramides, participates in the PKC-activated salvage pathway of ceramide formation. Also plays a role in cholesterol metabolism. May either catalyze the glucosylation of cholesterol, through a transglucosylation reaction that transfers glucose from glucosylceramide to cholesterol. The short chain saturated C8:0-GlcCer and the mono-unsaturated C18:0-GlcCer being the most effective glucose donors for that transglucosylation reaction. Under specific conditions, may alternatively catalyze the reverse reaction, transferring glucose from cholesteryl-beta-D-glucoside to ceramide. Finally, may also hydrolyze cholesteryl-beta-D-glucoside to produce D-glucose and cholesterol.

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