

Datasheet for ABIN7564019

GBA2 Protein (AA 1-918) (His tag)



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Overview

Quantity:	1 mg
Target:	GBA2
Protein Characteristics:	AA 1-918
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This GBA2 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat Gba2 Protein expressed in mammalian cells.
Sequence:	<p>MVTCVPASEQ VGCAERDSQV YCEDTGGTEA VRVTDGCSPE DSGPQDEPSY CNSEDSGQLM</p> <p>ASYEGKARGY QVPPFGWRIC LAHEFAEKRR PFQANNISLS NLVKHLGMGL RYLKWWYRKT</p> <p>HVEKKTPFID MLNSLPLRQI YGCPLGGIGG GTITRGWRGQ FCRWQLNPGM YQHQTVIADQ</p> <p>FIVCLRRDGR TVYQQVLSLE LPNVLRSWNW GLCGYFAFYH ALYPRAWTVY QLPGQNVTLT</p> <p>CRQVTPILPH DYQDSSLPVG VFWWDVENEG DETLDVSITF SMRNLGGED DAAGSLWNEP</p> <p>FRLEQGGTTV QGLLHHPTP PNPYTMASAA RCTADTTVTH TTAFPNGTG QQVWQDLLQD</p> <p>GQLDSPAGQS TPTQKGEGIA GAVCVSSKLL PRSRCCLEFS LAWDMPKIMF GAKSQVHYRR</p> <p>YTRFFGSDGD VAPALSHYAL CHYADWEDRI SAWQNPVLDD RTLPAWYKSA LFNELYFLAD</p> <p>GGTVWLEVPA DSLPEGLGGS MRQLRSTLQD YGRFGYLEGQ EYRMYNTYDV HFYASFALVM</p> <p>LWPKLELSLQ YDMALATLKE DLTRRRYLMS GVVAPVKRRN VIPHDIGDPD DEPWLRVNAY</p> <p>LIHDTADWKD LNLKFVLQIY RDYYLTGDQG FLEDMPVCL AVMESEMKFD KDQDGLIENG</p>

Product Details

GYADQTYDAW VTTGPSAYCG GLWLAAVAVM VQMAVLCGAQ DVQERFASIL CRGREAYERL
LWNGRYNYD SSSHPQSRSI MSDQCAGQWF LRACGLGEDG TEVFPTLHVV RALQTIFELN
VQAFAGGAMG AVNGMHPHGV PDRSSVQSDE VWVGVVYGLA ATMIQEGLTW EGFRTAEGCY
RTVWERLGLA FQTPEAYCQQ QVFRSLAYMR PLSIWAMQLA LQQQQHKKSR RPSVTQGTGL
STQPECCKPKR SLANLNSE **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**

Characteristics:	<p>Key Benefits:</p> <ul style="list-style-type: none">• Made to order protein - from design to production - by highly experienced protein experts.• Protein expressed in mammalian cells and purified in one-step affinity chromatography• The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.• State-of-the-art algorithm used for plasmid design (Gene synthesis). <p>This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.</p> <p>If you are not interested in a full length protein, please contact us for individual protein fragments.</p> <p>The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.</p>
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Purity:	> 90 % as determined by Bis-Tris Page, Western Blot
Grade:	custom-made

Target Details

Target:	GBA2
Alternative Name:	Gba2 (GBA2 Products)
Background:	Non-lysosomal glucosylceramidase (NLGase) (EC 3.2.1.45) (Beta-glucocerebrosidase 2) (Beta-glucosidase 2) (Bile acid beta-glucosidase GBA2) (Bile acid glucosyl transferase GBA2) (Cholesterol glucosyltransferase GBA2) (EC 2.4.1.-) (Cholesteryl-beta-glucosidase GBA2) (EC 3.2.1.-) (Glucosylceramidase 2) (Non-lysosomal cholesterol glycosyltransferase) (Non-lysosomal galactosylceramidase) (EC 3.2.1.46) (Non-lysosomal glycosylceramidase),FUNCTION: Non-lysosomal glucosylceramidase that catalyzes the

Target Details

hydrolysis of glucosylceramides/GlcCers (such as beta-D-glucosyl-(1<->1')-N-acylsphing-4-
enine) to free glucose and ceramides (such as N-acylsphing-4-enine) (PubMed:17080196,
PubMed:23250757). GlcCers are membrane glycosphingolipids that have a wide intracellular
distribution (PubMed:23250757). They are the main precursors of more complex
glycosphingolipids that play a role in cellular growth, differentiation, adhesion, signaling,
cytoskeletal dynamics and membrane properties (PubMed:25803043). Also involved in the
transglucosylation of cholesterol, transferring glucose from GlcCer, thereby modifying its water
solubility and biological properties (PubMed:26724485, PubMed:32144204). Under specific
conditions, may catalyze the reverse reaction, transferring glucose from cholesteryl-3-beta-D-
glucoside to ceramide (such as N-acylsphing-4-enine) (PubMed:26724485, PubMed:32144204).
May play a role in the metabolism of bile acids (PubMed:17080196). Able to hydrolyze bile acid
3-O-glucosides as well as to produce bile acid-glucose conjugates thanks to a bile acid glucosyl
transferase activity (PubMed:17080196). Catalyzes the hydrolysis of
galactosylceramides/GalCers (such as beta-D-galactosyl-(1<->1')-N-acylsphing-4-enine), as well
as galactosyl transfer between GalCers and cholesterol in vitro with lower activity compared
with their activity against GlcCers (PubMed:32144204). {ECO:0000269|PubMed:17080196,
ECO:0000269|PubMed:23250757, ECO:0000269|PubMed:25803043,
ECO:0000269|PubMed:26724485, ECO:0000269|PubMed:32144204,
ECO:0000303|PubMed:23250757}.

Molecular Weight: 103.3 kDa

UniProt: [Q69ZF3](#)

Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies
as well. As the protein has not been tested for functional studies yet we cannot offer a
guarantee though.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Handling

Storage Comment: Store at -80°C.

Expiry Date: 12 months