Datasheet for ABIN3135647

GBA2 Protein (AA 1-918) (Strep Tag)

Go to Product page

Overview

Quantity:	250 µg
Target:	GBA2
Protein Characteristics:	AA 1-918
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This GBA2 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	MVTCVPASEQ VGCAERDSQV YCEDTGGTEA VRVTDCGSPE DSGPQDEPSY CNSEDSGQLM ASYEGKARGY QVPPFGWRIC LAHEFAEKRR PFQANNISLS NLVKHLGMGL RYLKWWYRKT HVEKKTPFID MLNSLPLRQI YGCPLGGIGG GTITRGWRGQ FCRWQLNPGM YQHQTVIADQ FIVCLRRDGR TVYQQVLSLE LPNVLRSWNW GLCGYFAFYH ALYPRAWTVY QLPGQNVTLT CRQVTPILPH DYQDSSLPVG VFVWDVENEG DETLDVSITF SMRNGLGGED DAAGSLWNEP FRLEQGGTTV QGLLLHHPTP PNPYTMAVAA RCTADTTVTH TTAFDPNGTG QQVWQDLLQD GQLDSPAGQS TPTQKGEGIA GAVCVSSKLL PRSRCCLEFS LAWDMPKIMF GAKSQVHYRR YTRFFGSDGD VAPALSHYAL CHYADWEDRI SAWQNPVLDD RTLPAWYKSA LFNELYFLAD GGTVWLEVPA DSLPEGLGGS MRQLRSTLQD YGRFGYLEGQ EYRMYNTYDV HFYASFALVM LWPKLELSLQ YDMALATLKE DLTRRRYLMS GVVAPVKRRN VIPHDIGDPD DEPWLRVNAY LIHDTADWKD LNLKFVLQIY RDYYLTGDQG FLEDMWPVCL AVMESEMKFD KDQDGLIENG

GYADQTYDAW VTTGPSAYCG GLWLAAVAVM VQMAVLCGAQ DVQERFASIL CRGREAYERL LWNGRYYNYD SSSHPQSRSI MSDQCAGQWF LRACGLGEGD TEVFPTLHVV RALQTIFELN VQAFAGGAMG AVNGMHPHGV PDRSSVQSDE VWVGVVYGLA ATMIQEGLTW EGFRTAEGCY RTVWERLGLA FQTPEAYCQQ QVFRSLAYMR PLSIWAMQLA LQQQQHKKSR RPSVTQGTGL STQPECGPKR SLANLNSE

Sequence without tag. The proposed Strep-Tag is based on experience s 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:

Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

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.

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.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Product Details

Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
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 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,

Target Details

	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.
Comment:	ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications. During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months