Datasheet for ABIN7553991

GBA2 Protein (AA 1-927) (His tag)

Go to Product page

Overview

Quantity:	1 mg
Target:	GBA2
Protein Characteristics:	AA 1-927
Origin:	Human
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 mammalien cells.
Sequence:	MGTQDPGNMG TGVPASEQIS CAKEDPQVYC PEETGGTKDV QVTDCKSPED SRPPKETDCC NPEDSGQLMV SYEGKAMGYQ VPPFGWRICL AHEFTEKRKP FQANNVSLSN MIKHIGMGLR YLQWWYRKTH VEKKTPFIDM INSVPLRQIY GCPLGGIGGG TITRGWRGQF CRWQLNPGMY QHRTVIADQF TVCLRREGQT VYQQVLSLER PSVLRSWNWG LCGYFAFYHA LYPRAWTVYQ LPGQNVTLTC RQITPILPHD YQDSSLPVGV FVWDVENEGD EALDVSIMFS MRNGLGGGDD APGGLWNEPF CLERSGETVR GLLLHHPTLP NPYTMAVAAR VTAATTVTHI TAFDPDSTGQ QVWQDLLQDG QLDSPTGQST PTQKGVGIAG AVCVSSKLRP RGQCRLEFSL AWDMPRIMFG AKGQVHYRRY TRFFGQDGDA APALSHYALC RYAEWEERIS AWQSPVLDDR SLPAWYKSAL FNELYFLADG GTVWLEVLED SLPEELGRNM CHLRPTLRDY GRFGYLEGQE YRMYNTYDVH FYASFALIML WPKLELSLQY DMALATLRED LTRRRYLMSG VMAPVKRRNV IPHDIGDPDD EPWLRVNAYL IHDTADWKDL NLKFVLQVYR DYYLTGDQNF LKDMWPVCLA VMESEMKFDK

Product Details

	DHDGLIENGG YADQTYDGWV TTGPSAYCGG LWLAAVAVMV QMAALCGAQD IQDKFSSILS RGQEAYERLL WNGRYYNYDS SSRPQSRSVM SDQCAGQWFL KACGLGEGDT EVFPTQHVVR ALQTIFELNV QAFAGGAMGA VNGMQPHGVP DKSSVQSDEV WVGVVYGLAA TMIQEGLTWE GFQTAEGCYR TVWERLGLAF QTPEAYCQQR VFRSLAYMRP LSIWAMQLAL QQQQHKKASW PKVKQGTGLR TGPMFGPKEA MANLSPE **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:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalien 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). 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. If you are not interested in a full length protein, please contact us for individual protein fragments. 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.
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

Target Details

	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:17105727, PubMed:30308956, PubMed:32144204). GlcCers are membrane glycosphingolipids that have a wide intracellular distribution (By similarity). They are the main precursors of more complex glycosphingolipids that play a role in cellular growth, differentiation, adhesion, signaling, cytoskeletal dynamics and membrane properties (By similarity). Involved in the transglucosylation of cholesterol, transfers glucose from GlcCer to cholesterol, thereby modifying its water solubility and biological properties (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) (Probable). May play a role in the metabolism of bile acids (PubMed:11489889, PubMed:9111029, 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:11489889, PubMed:9111029, PubMed:17080196). Catalyzes the hydrolysis of galactosylceramides/GalCers (such as beta-D-galactosyl-(1<->1')-N-acylsphing-4-enine), as well as the galactosyl transfer between GalCers and cholesterol in vitro with lower activity compared with their activity against GlcCers (PubMed:32144204). {ECO:0000250|UniProtKB:Q69ZF3, ECO:0000269|PubMed:11489889, ECO:0000269|PubMed:17080196, ECO:0000269|PubMed:17105727, ECO:0000269|PubMed:30308956, ECO:0000269|PubMed:32144204, ECO:0000269|PubMed:9111029, ECO:0000305|PubMed:32144204}.
Molecular Weight:	104.6 kDa
UniProt:	Q9HCG7

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

Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months

