Datasheet for ABIN7562650

UGCG Protein (AA 1-394) (His tag)

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Overview

Quantity:	1 mg
Target:	UGCG
Protein Characteristics:	AA 1-394
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This UGCG protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant Ugcg Protein expressed in mammalian cells.
Sequence:	MALLDLAQEG MALFGFVLFV VLWLMHFMSI IYTRLHLNKK ATDKQPYSKL PGVSLLKPLK GVDPNLINNL ETFFELDYPK YEVLLCVQDH DDPAIDVCKK LLGKYPNVDA RLFIGGKKVG INPKINNLMP AYEVAKYDLI WICDSGIRVI PDTLTDMVNQ MTEKVGLVHG LPYVADRQGF AATLEQVYFG TSHPRSYISA NVTGFKCVTG MSCLMRKDVL DQAGGLIAFA QYIAEDYFMA KAIADRGWRF SMSTQVAMQN SGSYSISQFQ SRMIRWTKLR INMLPATIIC EPISECFVAS LIIGWAAHHV FRWDIMVFFM CHCLAWFIFD YIQLRGVQGG TLCFSKLDYA VAWFIRESMT IYIFLSALWD PTISWRTGRY RLRCGGTAEE ILDV **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.**
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.

Product Details

Characteristics:	Key Benefits: • 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). 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, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

Target Details

Target:	UGCG
Alternative Name:	Ugcg (UGCG Products)
Background:	Ceramide glucosyltransferase (EC 2.4.1.80) (GLCT-1) (Glucosylceramide synthase) (GCS) (Glycosylceramide synthase) (UDP-glucose ceramide glucosyltransferase) (UDP-glucose:N-acylsphingosine D-glucosyltransferase),FUNCTION: Participates in the initial step of the glucosylceramide-based glycosphingolipid/GSL synthetic pathway at the cytosolic surface of the Golgi. Catalyzes the transfer of glucose from UDP-glucose to ceramide to produce glucosylceramide/GlcCer (such as beta-D-glucosyl-(1<->1')-N-acylsphing-4-enine) (PubMed:10430909, PubMed:16109770, PubMed:28373486). Glucosylceramide is the core component of glycosphingolipids/GSLs, amphipathic molecules consisting of a ceramide lipid moiety embedded in the outer leaflet of the membrane, linked to one of hundreds of different externally oriented oligosaccharide structures (PubMed:10430909). Glycosphingolipids are essential components of membrane microdomains that mediate membrane trafficking and signal transduction (PubMed:10430909). They are implicated in many fundamental cellular processes, including growth, differentiation, migration, morphogenesis, cell-to-cell and cell-to-

Target Details

	matrix interactions (PubMed:10430909). They are required for instance in the proper development and functioning of the nervous system (PubMed:16109770). As an example of their role in signal transduction, they regulate the leptin receptor/LEPR in the leptin-mediated signaling pathway (PubMed:23554574). They also play an important role in the establishment of the skin barrier regulating keratinocyte differentiation and the proper assembly of the cornified envelope (PubMed:17145749, PubMed:23748427). The biosynthesis of GSLs is also required for the proper intestinal endocytic uptake of nutritional lipids (PubMed:22851168). Catalyzes the synthesis of xylosylceramide/XylCer (such as beta-D-xylosyl-(1<->1')-N-acylsphing-4-enine) using UDP-Xyl as xylose donor (PubMed:33361282). {ECO:0000269|PubMed:10430909, ECO:0000269|PubMed:16109770, ECO:0000269|PubMed:17145749, ECO:0000269|PubMed:22851168, ECO:0000269|PubMed:23554574, ECO:0000269|PubMed:23748427, ECO:0000269|PubMed:28373486, ECO:0000269|PubMed:33361282, ECO:0000303|PubMed:10430909}.
Molecular Weight:	44.8 kDa
UniProt:	O88693

Application Details

Application Notes:	We expect the protein to work for functional studies. 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
Storage Comment:	Store at -80°C.
Expiry Date:	12 months

