

Datasheet for ABIN7555644

SPTLC1 Protein (AA 1-473) (His tag)



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Overview

Quantity:	1 mg
Target:	SPTLC1
Protein Characteristics:	AA 1-473
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SPTLC1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat SPTLC1 Protein expressed in mammalian cells.
Sequence:	<p>MATATEQWVL VEMVQALYEA PAYHLILEGI LILWIIRLLF SKTYKLQERS DLTVKEKEEL IEEWQPEPLV PPVPKDHPL NYNIVSGPPS HKTVVNGKEC INFASFNFLG LLDNPRVKAA ALASLKKEYGV GTCGPRGYG TFDVHLDLED RLAKFMTKEE AIISYGFAT IASAIPAYSK RGDIVFDRA ACFAIQKGLQ ASRSDIKLFK HNDMADLERL LKEQEIEDQK NPRKARVTRR FIVVEGLYMN TGTICPLPEL VKLKYKYKAR IFLEESLSFG VLGEHGRGVT EHYGINIDDI DLISANMENA LASIGGFCCG RSFVIDHQRL SGQGYCFSAS LPPLLAIAAI EALNIMEENP GIFAVLKEKC GQIHKALQGI SGLKVVGESL SPAFHLQLEE STGSREQDVR LLQEIVDQCM NRSIALTQAR YLEKEEKCLP PPSIRVVTV EQTEELERA ASTIKEVAQA VLL 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.</p>

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, Western Blot

Grade:

custom-made

Target Details

Target:

SPTLC1

Alternative Name:

SPTLC1 ([SPTLC1 Products](#))

Background:

Serine palmitoyltransferase 1 (EC 2.3.1.50) (Long chain base biosynthesis protein 1) (LCB 1) (Serine-palmitoyl-CoA transferase 1) (SPT 1) (SPT1), FUNCTION: Component of the serine palmitoyltransferase multisubunit enzyme (SPT) that catalyzes the initial and rate-limiting step in sphingolipid biosynthesis by condensing L-serine and activated acyl-CoA (most commonly palmitoyl-CoA) to form long-chain bases. The SPT complex is also composed of SPTLC2 or SPTLC3 and SPTSSA or SPTSSB. Within this complex, the heterodimer with SPTLC2 or SPTLC3 forms the catalytic core (PubMed:19416851, PubMed:33558762). The composition of the serine palmitoyltransferase (SPT) complex determines the substrate preference (PubMed:19416851, PubMed:33558762). The SPTLC1-SPTLC2-SPTSSA complex shows a strong preference for C16-CoA substrate, while the SPTLC1-SPTLC3-SPTSSA isozyme uses both C14-CoA and C16-CoA as substrates, with a slight preference for C14-CoA (PubMed:19648650, PubMed:19416851). The SPTLC1-SPTLC2-SPTSSB complex shows a strong preference for C18-CoA substrate, while the SPTLC1-SPTLC3-SPTSSB isozyme displays

Target Details

an ability to use a broader range of acyl-CoAs, without apparent preference (PubMed:19648650, PubMed:19416851, PubMed:33558761, PubMed:33558762). Required for adipocyte cell viability and metabolic homeostasis (By similarity). {ECO:0000250|UniProtKB:O35704, ECO:0000269|PubMed:19416851, ECO:0000269|PubMed:19648650, ECO:0000269|PubMed:33558761, ECO:0000269|PubMed:33558762}.

Molecular Weight: 52.7 kDa

UniProt: [O15269](#)

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

Storage Comment: Store at -80°C.

Expiry Date: 12 months