

SPTLC3 Antibody (C-Term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22094b

Specification

SPTLC3 Antibody (C-Term) - Product Information

Application	WB,E
Primary Accession	<u>Q9NUV7</u>
Reactivity	Human
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Calculated MW	62049

SPTLC3 Antibody (C-Term) - Additional Information

Gene ID 55304

Other Names

Serine palmitoyltransferase 3, 2.3.1.50, Long chain base biosynthesis protein 2b, LCB2b, Long chain base biosynthesis protein 3, LCB 3, Serine-palmitoyl-CoA transferase 3, SPT 3, SPTLC3, C20orf38, SPTLC2L

Target/Specificity

This SPTLC3 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 503-545 amino acids from human SPTLC3.

Dilution WB~~1:2000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

SPTLC3 Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

SPTLC3 Antibody (C-Term) - Protein Information

Name SPTLC3 (HGNC:16253)

Synonyms C20orf38, SPTLC2L



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 (PubMed:<u>19416851</u>, PubMed:<u>19648650</u>). The SPT complex is composed of SPTLC1, SPTLC2 or SPTLC3 and SPTSSA or SPTSSB. Within this complex, the heterodimer consisting of SPTLC1 and SPTLC2/SPTLC3 forms the catalytic core. The composition of the serine palmitoyltransferase (SPT) complex determines the substrate preference (PubMed:<u>19416851</u>). 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. The SPTLC1-SPTLC2-SPTSSB complex shows a strong preference for C18-CoA substrate, while the SPTLC1-SPTLC3-SPTSSB isozyme displays an ability to use a broader range of acyl-CoAs, without apparent preference (PubMed:<u>19416851</u>).

Cellular Location

Endoplasmic reticulum membrane; Single-pass membrane protein

Tissue Location

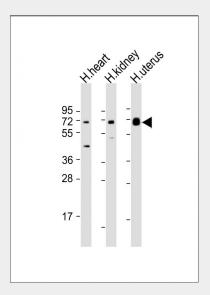
Expressed in most tissues, except peripheral blood cells and bone marrow, with highest levels in heart, kidney, liver, uterus and skin.

SPTLC3 Antibody (C-Term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

SPTLC3 Antibody (C-Term) - Images



All lanes : Anti-SPTLC3 Antibody (C-Term) at 1:2000 dilution Lane 1: human heart lysate Lane 2: human kidney lysate Lane 3: human uterus lysate Lysates/proteins at 20 µg per lane. Secondary



Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 62 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

SPTLC3 Antibody (C-Term) - Background

Serine palmitoyltransferase (SPT). The heterodimer formed with LCB1/SPTLC1 constitutes the catalytic core. The composition of the serine palmitoyltransferase (SPT) complex determines the substrate preference. The SPTLC1-SPTLC3-SPTSSA isozyme uses both C14-CoA and C16-CoA as substrates, while the SPTLC1-SPTLC3-SPTSSB has the ability to use a broader range of acyl-CoAs without apparent preference.

SPTLC3 Antibody (C-Term) - References

Hornemann T., et al.J. Biol. Chem. 281:37275-37281(2006). Ota T., et al.Nat. Genet. 36:40-45(2004). Deloukas P., et al.Nature 414:865-871(2001). Han G., et al.Proc. Natl. Acad. Sci. U.S.A. 106:8186-8191(2009).