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SPTLC2 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20262c

Specification

SPTLC2 Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	O15270
Other Accession	P97363, NP_004854.1, Q3B7D2
Reactivity	**Human**
Predicted	**Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**62924**
Antigen Region	**372-401**

SPTLC2 Antibody (Center) - Additional Information

Gene ID 9517

Other Names
Serine palmitoyltransferase 2, Long chain base biosynthesis protein 2, LCB 2, Long chain base biosynthesis protein 2a, LCB2a, Serine-palmitoyl-CoA transferase 2, SPT 2, SPTLC2, KIAA0526, LCB2

Target/Specificity
This SPTLC2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 372-401 amino acids from the Central region of human SPTLC2.

Dilution
WB~~1:1000

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
SPTLC2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

SPTLC2 Antibody (Center) - Protein Information

Name SPTLC2 (HGNC:11278)

Synonyms KIAA0526, LCB2

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:19648650, PubMed:19416851, PubMed:20920666, PubMed:20504773). 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 (PubMed:19416851). The composition of the serine palmitoyltransferase (SPT) complex determines the substrate preference (PubMed:19416851). 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 an ability to use a broader range of acyl-CoAs, without apparent preference (PubMed:19648650, PubMed:19416851). Crucial for adipogenesis (By similarity).

Cellular Location
Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:P97363}; Single-pass membrane protein {ECO:0000250|UniProtKB:P97363}

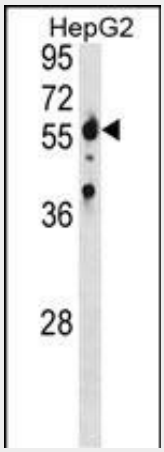
Tissue Location
Widely expressed..

SPTLC2 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SPTLC2 Antibody (Center) - Images



SPTLC2 Antibody (Center) (Cat. #AP20262c) western blot analysis in HepG2 cell line lysates

(35ug/lane).This demonstrates the SPTLC2 antibody detected the SPTLC2 protein (arrow).

SPTLC2 Antibody (Center) - Background

This gene encodes a long chain base subunit of serine palmitoyltransferase. Serine palmitoyltransferase, which consists of two different subunits, is the key enzyme in sphingolipid biosynthesis. It catalyzes the pyridoxal-5-prime-phosphate-dependent condensation of L-serine and palmitoyl-CoA to 3-oxosphinganine. Mutations in this gene were identified in patients with hereditary sensory neuropathy type I. Alternatively spliced variants encoding different isoforms have been identified.

SPTLC2 Antibody (Center) - References

Rotthier, A., et al. Am. J. Hum. Genet. 87(4):513-522(2010)
Han, G., et al. Proc. Natl. Acad. Sci. U.S.A. 106(20):8186-8191(2009)
Hornemann, T., et al. Biochem. J. 405(1):157-164(2007)
Chen, M., et al. Plant Cell 18(12):3576-3593(2006)
Olsen, J.V., et al. Cell 127(3):635-648(2006)