

SPTLC2 / LCB2 Antibody (C-Terminus)
Rabbit Polyclonal Antibody
Catalog # ALS15849**Specification**

SPTLC2 / LCB2 Antibody (C-Terminus) - Product Information

Application	IHC, ICC, IF, WB
Primary Accession	O15270
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	63kDa KDa

SPTLC2 / LCB2 Antibody (C-Terminus) - Additional Information**Gene ID** 9517**Other Names**

Serine palmitoyltransferase 2, 2.3.1.50, 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

Human SPTLC2. At least three isoforms of SPT2 are known to exist; this antibody will not detect isoform b. SPT2 antibody is predicted to not cross-react with SPT1.

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

Precautions

SPTLC2 / LCB2 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

SPTLC2 / LCB2 Antibody (C-Terminus) - 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:19416851, PubMed:19648650, PubMed:20504773, PubMed:20920666). 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:19416851, PubMed:19648650). 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:19416851, PubMed:19648650). Crucial for adipogenesis (By similarity).

Cellular Location

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

Tissue Location

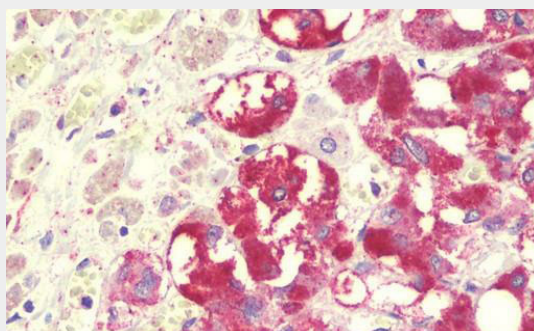
Widely expressed..

SPTLC2 / LCB2 Antibody (C-Terminus) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

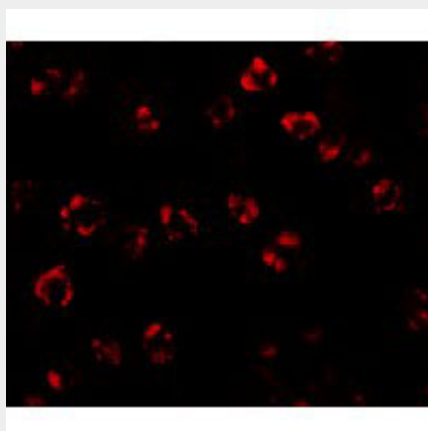
SPTLC2 / LCB2 Antibody (C-Terminus) - Images



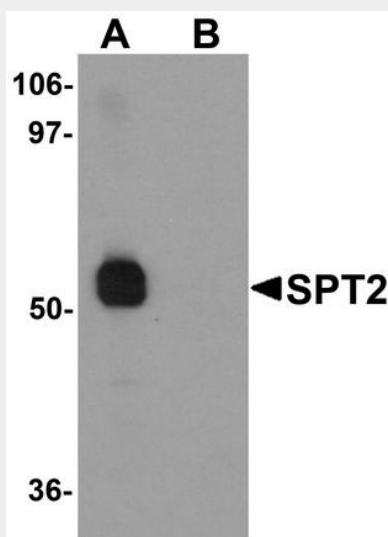
Anti-SPTLC2 / LCB2 antibody IHC staining of human adrenal.



Immunocytochemistry of SPT2 in 3T3 cells with SPT2 antibody at 10 µg/mL.



Immunofluorescence of SPT2 in 3T3 cells with SPT2 antibody at 20 µg/mL.



Western blot analysis of SPT2 in 3T3 cell lysate with SPT2 antibody at (A) 0.25 and (B) 0.5 ug/ml.

SPTLC2 / LCB2 Antibody (C-Terminus) - 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-SPTLC2-SPTSSA complex shows a strong preference for C16-CoA substrate, while the SPTLC1-SPTLC2-SPTSSB complex displays a preference for C18-CoA substrate.

SPTLC2 / LCB2 Antibody (C-Terminus) - References

Weiss B.,et al.Eur. J. Biochem. 249:239-247(1997).
Nagase T.,et al.DNA Res. 5:31-39(1998).
Heilig R.,et al.Nature 421:601-607(2003).
Nagiec M.M.,et al.Gene 177:237-241(1996).
Takeda J.,et al.Hum. Mol. Genet. 2:1793-1798(1993).