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Serine Palmitoyltransferase (SPTLC2) Antibody (C-term) Blocking peptide

Synthetic peptide
Catalog # BP2533b

Specification

Serine Palmitoyltransferase (SPTLC2) Antibody (C-term) Blocking peptide - Product Information

Primary Accession	O15270
Other Accession	NP_004854

Serine Palmitoyltransferase (SPTLC2) Antibody (C-term) Blocking peptide - 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
The synthetic peptide sequence used to generate the antibody AP2533b was selected from the C-term region of human SPTLC2 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Serine Palmitoyltransferase (SPTLC2) Antibody (C-term) Blocking peptide - 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:<a

href="http://www.uniprot.org/citations/19648650" target="_blank">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..

Serine Palmitoyltransferase (SPTLC2) Antibody (C-term) Blocking peptide - Protocols

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

- Blocking Peptides

Serine Palmitoyltransferase (SPTLC2) Antibody (C-term) Blocking peptide - Images

Serine Palmitoyltransferase (SPTLC2) Antibody (C-term) Blocking peptide - Background

Serine palmitoyltransferase (SPT) 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.

Serine Palmitoyltransferase (SPTLC2) Antibody (C-term) Blocking peptide - References

Stachowitz, S., et al., J. Invest. Dermatol. 119(5):1048-1052 (2002).Dias Neto, E., et al., Proc. Natl. Acad. Sci. U.S.A. 97(7):3491-3496 (2000).Weiss, B., et al., Eur. J. Biochem. 249(1):239-247 (1997).Hillier, L.D., et al., Genome Res. 6(9):807-828 (1996).Takeda, J., et al., Hum. Mol. Genet. 2(11):1793-1798 (1993).