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Serine Palmitoyltransferase (SPTLC2) Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2533b

Specification

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

Application	**WB,E**
Primary Accession	O15270
Other Accession	P97363, O54694, NP_004854, Q3B7D2
Reactivity	**Human, Mouse**
Predicted	**Hamster, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**62924**
Antigen Region	**531-562**

Serine Palmitoyltransferase (SPTLC2) Antibody (C-term) - 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 Serine Palmitoyltransferase (SPTLC2) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 531-562 amino acids from the C-terminal region of human Serine Palmitoyltransferase (SPTLC2).

Dilution
WB~~1:1000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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
Serine Palmitoyltransferase (SPTLC2) Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Serine Palmitoyltransferase (SPTLC2) Antibody (C-term) - 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..

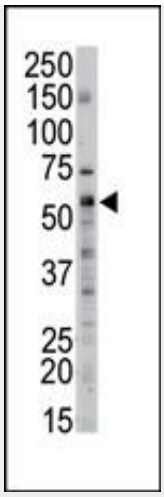
Serine Palmitoyltransferase (SPTLC2) Antibody (C-term) - Protocols

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

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

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The anti-SPTLC2 Pab (Cat. #AP2533b) is used in Western blot to detect SPTLC2 in mouse liver tissue lysate.

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

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Dias Neto, E., et al., Proc. Natl. Acad. Sci. U.S.A. 97(7):3491-3496 (2000).
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