

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:[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..

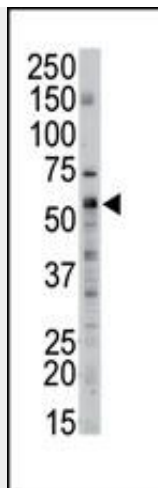
Serine Palmitoyltransferase (SPTLC2) Antibody (C-term) - Protocols

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

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

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





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

- 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).