

# Rabbit Anti-SPTLC2 antibody

## SL9027R

Product Name:	SPTLC2
Chinese Name:	丝氨酸棕榈酰转移酶2抗体
Alias:	Serine Palmitoyltransferase; SPTLC-2; LCB 2; LCB2; LCB2a; Long chain base biosynthesis protein 2; Long chain base biosynthesis protein 2a; Serine palmitoyl CoA transferase 2; Serine palmitoyltransferase 2; Serine palmitoyltransferase long chain base subunit 2; Serine palmitoyltransferase subunit II; Serine-palmitoyl-CoA transferase 2; SPT 2; SPTC2_HUMAN; SPTLC 2; Sptlc2.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Horse,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:50-200 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	62kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human SPTLC2:301-400/562
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	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. [provided by RefSeq, Mar 2011].

#### **Function:**

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-SSSPTA complex shows a strong preference for C16-CoA substrate, while the SPTLC1-SPTLC2-SSSPTB complex displays a preference for C18-CoA substrate.

#### **Subunit:**

eterodimer with SPTLC1. Component of the serine palmitoyltransferase (SPT) complex, composed of LCB1/SPTLC1, LCB2 (SPTLC2 or SPTLC3) and ssPT (C14orf147/SSSPTA and C3orf57/SSSPTB).

#### **Subcellular Location:**

Endoplasmic reticulum membrane; Single-pass membrane protein.

#### Tissue Specificity:

Widely expressed.

#### **DISEASE:**

Defects in SPTLC2 are the cause of hereditary sensory and autonomic neuropathy type 1C (HSAN1C) [MIM:613640]. It is a form of hereditary sensory and autonomic neuropathy, a genetically and clinically heterogeneous group of disorders characterized by degeneration of dorsal root and autonomic ganglion cells, and by prominent sensory abnormalities with a variable degree of motor and autonomic dysfunction. The neurological phenotype is often complicated by severe infections, osteomyelitis, and amputations. HSAN1C symptoms include loss of touch and vibration in the feet, dysesthesia and severe panmodal sensory loss in the upper and lower limbs, distal lower limb sensory loss with ulceration and osteomyelitis, and distal muscle weakness.

#### Similarity:

Belongs to the class-II pyridoxal-phosphate-dependent aminotransferase family.

#### **SWISS:**

O15270

#### Gene ID:

9517

#### Database links:

Entrez Gene: 9517 Human

Entrez Gene: 20773 Mouse

Entrez Gene: 366697 Rat

Omim: 605713 Human

SwissProt: O15270 Human

SwissProt: P97363 Mouse

Unigene: 435661 Human

Unigene: 565 Mouse

### **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.