

SPTLC1 Polyclonal Antibody

Catalog No: YT5232

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: SPTLC1

Fields: >>Sphingolipid metabolism;>>Metabolic pathways;>>Sphingolipid signaling

pathway

Gene Name: SPTLC1

Protein Name: Serine palmitoyltransferase 1

O15269

O35704

Human Gene Id: 10558

Human Swiss Prot

No:

Mouse Gene ld: 268656

Mouse Swiss Prot

No:

Immunogen: Synthesized peptide derived from SPTLC1 . at AA range: 411-460

Specificity: SPTLC1 Polyclonal Antibody detects endogenous levels of SPTLC1 protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. IHC: 1:100-300 ELISA: 1:20000.. IF 1:50-200

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

1/3



Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 52kD

Cell Pathway: Sphingolipid metabolism;

Background: This gene encodes a member of the class-II pyridoxal-phosphate-dependent

aminotransferase family. The encoded protein is the long chain base subunit 1 of serine palmitoyltransferase. Serine palmitoyltransferase converts L-serine and palmitoyl-CoA to 3-oxosphinganine with pyridoxal 5'-phosphate and is the key enzyme in sphingolipid biosynthesis. Mutations in this gene were identified in patients with hereditary sensory neuropathy type 1. Alternatively spliced variants encoding different isoforms have been identified. Pseudogenes of this gene have been defined on chromosomes 1, 6, 10, and 13. [provided by RefSeq, Jul 2013],

Function: catalytic activity:Palmitoyl-CoA + L-serine = CoA + 3-dehydro-D-sphinganine +

CO(2).,cofactor:Pyridoxal phosphate.,disease:Defects in SPTLC1 are the cause of hereditary sensory and autonomic neuropathy type 1 (HSAN1) [MIM:162400]. The hereditary sensory and autonomic neuropathies are a genetically and clinically heterogeneous group of disorders characterized by degeneration of dorsal root and autonomic ganglion cells, and by sensory and/or autonomic abnormalities. HSAN1 is an autosomal dominant axonal neuropathy with onset in the second or third decades. Initial symptoms are loss of pain, touch, heat, and cold sensation over the feet, followed by distal muscle wasting and weakness.

Loss of pain sensation leads to chronic skin ulcers and distal

amputations.,pathway:Lipid metabolism; sphingolipid

metabolism., similarity: Belongs to the class-II pyridoxal-phosphate-dependent

aminotransferase

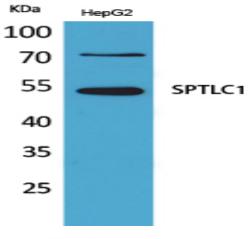
Subcellular Location:

Endoplasmic reticulum membrane; Single-pass membrane protein.

Expression:

Widely expressed. Not detected in small intestine.

Products Images

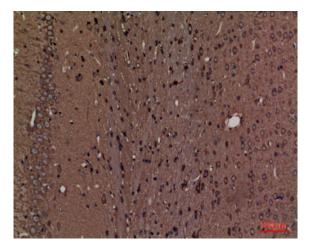


Western Blot analysis of HepG2 cells using SPTLC1 Polyclonal Antibody. Antibody was diluted at 1:500. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



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Western blot analysis of 293T SH-SY5Y lysis using SPTLC1 antibody. Antibody was diluted at 1:500. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded rat-brain, antibody was diluted at 1:100