Product Name: SPTLC1 Rabbit Polyclonal Antibody
Catalog #: APRab18230
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
Molecular Weight	52kDa

Antigen Information

Gene Name	SPTLC1
Alternative Names	SPTLC1; LCB1; Serine palmitoyltransferase 1; Long chain base biosynthesis protein 1; LCB 1; Serine-palmitoyl-CoA transferase 1; SPT 1; SPT1
Gene ID	10558.0
SwissProt ID	O15269
Immunogen	Synthesized peptide derived from SPTLC1 . at AA range: 411-460

Background

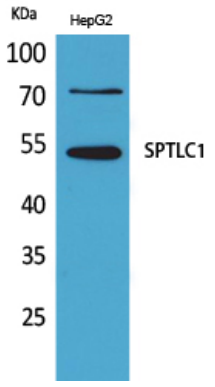
This gene encodes a member of the class-II pyridoxal-phosphate-dependent aminotransferase family. The encoded protein is

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],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 family.,subunit:SPTLC1, SPTLC2 and SPTLC3 may encode subunits of the enzyme.,tissue specificity:Widely expressed. Not detected in small intestine.,

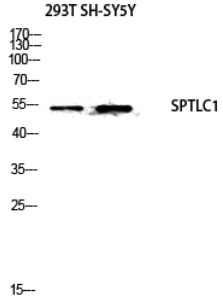
Research Area

Sphingolipid metabolism;

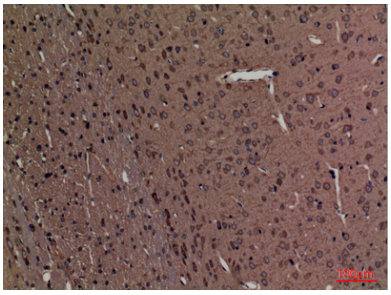
Image Data



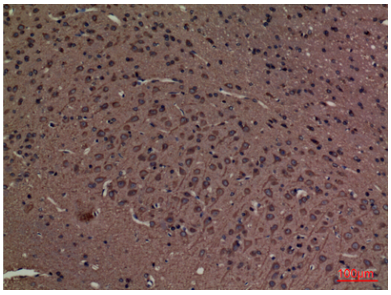
Western Blot analysis of HepG2 cells using SPTLC1 Polyclonal Antibody. Antibody was diluted at 1:500. Secondary antibody was diluted at 1:20000



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



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



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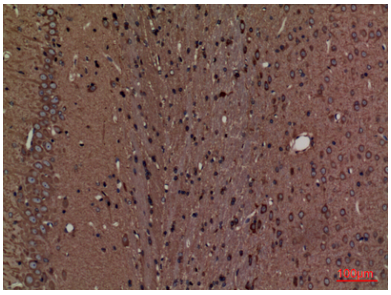

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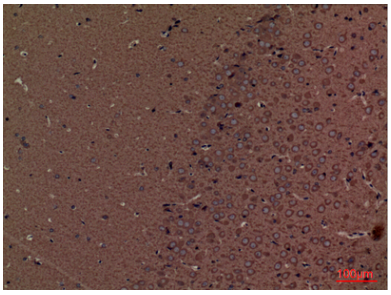

Immunohistochemical analysis of paraffin-embedded mouse-brain, antibody was diluted at 1:100