

ARG59275 anti-SPTLC1 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes SPTLC1
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	SPTLC1
Species	Human
Immunogen	Synthetic peptide corresponding to aa. 444-473 of Human SPTLC1. (IRVVVTVEQTEELERAASTIKEVAQAVLL)
Conjugation	Un-conjugated
Alternate Names	SPTI; LCB1; Serine palmitoyltransferase 1; Serine-palmitoyl-CoA transferase 1; EC 2.3.1.50; LCB1; SPT1; SPT 1; Long chain base biosynthesis protein 1; HSN1; LCB 1; HSN1

Application Instructions

Application table	Application	Dilution
	FACS	1:150 - 1:500
	ICC/IF	1:200 - 1:1000
	IHC-P	0.5 - 1 µg/ml
	WB	0.1 - 0.5 µg/ml
Application Note	IHC-P: Antigen Retrieval: By heat mediation. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	53 kDa	

Properties

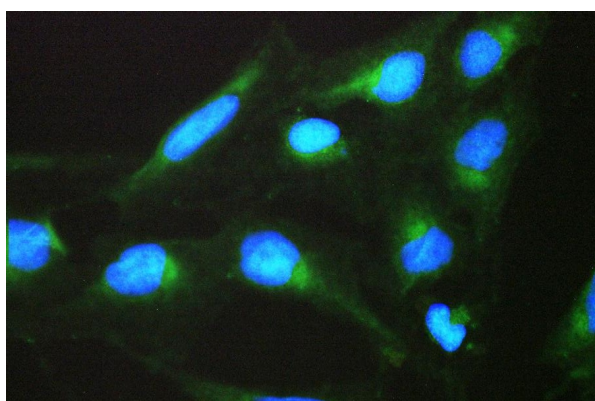
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.9% NaCl, 0.2% Na ₂ HPO ₄ , 0.05% Sodium azide and 5% BSA.
Preservative	0.05% Sodium azide
Stabilizer	5% BSA
Concentration	0.5 mg/ml

Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

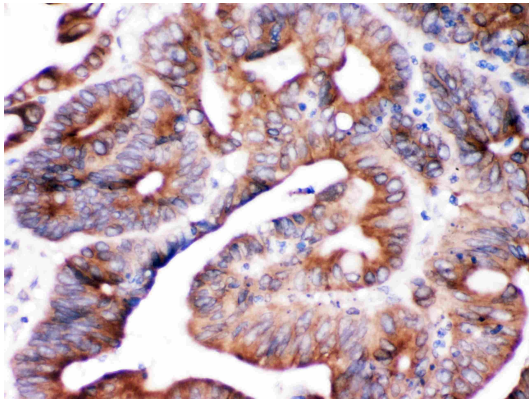
Gene Symbol	SPTLC1
Gene Full Name	serine palmitoyltransferase, long chain base subunit 1
Background	This gene encodes a member of the class-II pyridoxal-phosphate-dependent aminotransferase family. The encoded protein is the long chain base subunit 1 of serine palmitoyltransferase. Serine palmitoyltransferase 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	Serine palmitoyltransferase (SPT). The heterodimer formed with SPTLC2 or SPTLC3 constitutes the catalytic core. The composition of the serine palmitoyltransferase (SPT) complex determines the substrate preference. 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. 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. [UniProt]
Calculated Mw	53 kDa
PTM	Phosphorylation at Tyr-164 inhibits activity and promotes cell survival. [UniProt]
Cellular Localization	Endoplasmic reticulum membrane; Single-pass membrane protein. [UniProt]

Images



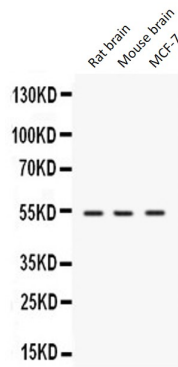
ARG59275 anti-SPTLC1 antibody ICC/IF image

Immunofluorescence: U2OS cells were blocked with 10% goat serum and then stained with ARG59275 anti-SPTLC1 antibody (green) at 2 µg/ml dilution, overnight at 4°C. DAPI (blue) for nuclear staining.



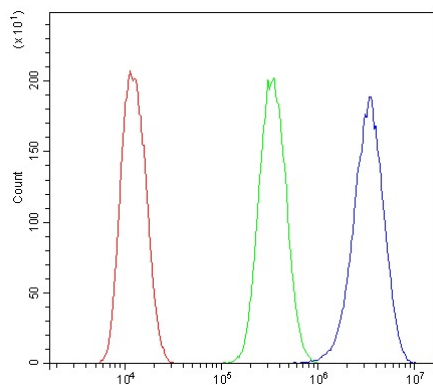
ARG59275 anti-SPTLC1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human intestinal cancer stained with ARG59275 anti-SPTLC1 antibody at 1 µg/ml dilution.



ARG59275 anti-SPTLC1 antibody WB image

Western blot: Rat brain, Mouse brain and MCF-7 whole cell lysates stained with ARG59275 anti-SPTLC1 antibody at 0.5 µg/ml dilution.



ARG59275 anti-SPTLC1 antibody FACS image

Flow Cytometry: U2OS cells were blocked with 10% normal goat serum and then stained with ARG59275 anti-SPTLC1 antibody (blue) at 1 µg/10⁶ cells for 30 min at 20°C, followed by incubation with DyLight®488 labelled secondary antibody. Isotype control antibody (green) was rabbit IgG (1 µg/10⁶ cells) used under the same conditions. Unlabelled sample (red) was also used as a control.