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SPTLC3 Antibody (C-Term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22094b

Product Information

Application	WB, E
Primary Accession	Q9NUV7
Reactivity	Human
Predicted	Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB55412
Calculated MW	62049

Additional Information

Gene ID	55304
Other Names	Serine palmitoyltransferase 3, 2.3.1.50, Long chain base biosynthesis protein 2b, LCB2b, Long chain base biosynthesis protein 3, LCB 3, Serine-palmitoyl-CoA transferase 3, SPT 3, SPTLC3, C20orf38, SPTLC2L
Target/Specificity	This SPTLC3 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 503-545 amino acids from human SPTLC3.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
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	SPTLC3 Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SPTLC3 (HGNC:16253)
Synonyms	C20orf38, SPTLC2L
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). 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. 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. 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).
Cellular Location	Endoplasmic reticulum membrane; Single-pass membrane protein
Tissue Location	Expressed in most tissues, except peripheral blood cells and bone marrow, with highest levels in heart, kidney, liver, uterus and skin.

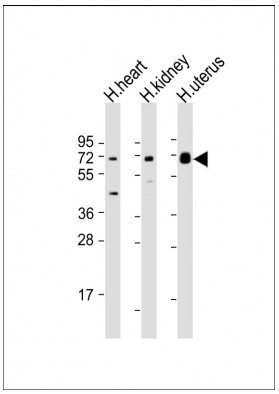
Background

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-SPTLC3-SPTSSA isozyme uses both C14-CoA and C16-CoA as substrates, while the SPTLC1-SPTLC3-SPTSSB has the ability to use a broader range of acyl-CoAs without apparent preference.

References

Hornemann T.,et al.J. Biol. Chem. 281:37275-37281(2006).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Deloukas P.,et al.Nature 414:865-871(2001).
Han G.,et al.Proc. Natl. Acad. Sci. U.S.A. 106:8186-8191(2009).

Images



All lanes : Anti-SPTLC3 Antibody (C-Term) at 1:2000 dilution Lane 1: human heart lysate Lane 2: human kidney lysate Lane 3: human uterus lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 62 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.