BACKGROUND
SPTLC1 (serine palmitoyltransferase 1), also known as LCB1, and SPTLC2 (serine palmitoyltransferase 2), also known as LCB2, together catalyze sphingolipid biosynthesis by converting L-serine and palmitoyl-CoA to 3-oxosphinganine, utilizing pyridoxal 5'-phosphate as a cofactor. Increases in transepidermal water loss triggers upregulation of serine palmitoyltransferase mRNA expression in humans. Deficiencies in wildtype SPTLC1 and SPTLC2 can lead to hereditary sensory neuropathy, atopic eczema and psoriasis.

REFERENCES

CHROMOSOMAL LOCATION
Genetic locus: SPTLC1 (human) mapping to 9q22.31; Sptlc1 (mouse) mapping to 13B1.

SOURCE
SPTLC1 (49) is a mouse monoclonal antibody raised against amino acids 121-238 of SPTLC1 of mouse origin.

PRODUCT
Each vial contains 50 µg IgG1 in 500 µl of PBS with < 0.1% sodium azide, 0.1% gelatin, 20% glycerol and 0.04% stabilizer protein.

STORAGE
Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS
SPTLC1 (49) is recommended for detection of SPTLC1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for SPTLC1 siRNA (h): sc-106561, SPTLC1 siRNA (m): sc-153804, SPTLC1 shRNA Plasmid (h): sc-106561-SH, SPTLC1 shRNA Plasmid (m): sc-153804-SH, SPTLC1 shRNA (h) Lentiviral Particles: sc-106561-V and SPTLC1 shRNA (m) Lentiviral Particles: sc-153804-V.

Molecular Weight of SPTLC1: 55 kDa.

Positive Controls: rat kidney extract: sc-2394 or mouse liver extract: sc-2256.

DATA

SELECT PRODUCT CITATIONS

RESEARCH USE
For research use only, not for use in diagnostic procedures. Not for resale.