



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

# SPTLC1 (m): 293T Lysate: sc-123763

## 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

1. Weiss, B. and Stoffel, W. 1997. Human and murine serine-palmitoyl-CoA transferase—cloning, expression and characterization of the key enzyme in sphingolipid synthesis. *Eur. J. Biochem.* 249: 239-247.
2. Uhlinger, D.J., Carton, J.M., Argentieri, D.C., Damiano, B.P. and D'Andrea, M.R. 2001. Increased expression of serine palmitoyltransferase (SPT) in balloon-injured rat carotid artery. *Thromb. Haemost.* 86: 1320-1326.
3. Stachowitz, S., Alessandrini, F., Abeck, D., Ring, J. and Behrendt, H. 2002. Permeability barrier disruption increases the level of serine palmitoyltransferase in human epidermis. *J. Invest. Dermatol.* 119: 1048-1052.
4. Batheja, A.D., Uhlinger, D.J., Carton, J.M., Ho, G. and D'Andrea, M.R. 2003. Characterization of serine palmitoyltransferase in normal human tissues. *J. Histochem. Cytochem.* 51: 687-696.
5. Carton, J.M., Uhlinger, D.J., Batheja, A.D., Derian, C., Ho, G., Argentieri, D. and D'Andrea, M.R. 2003. Enhanced serine palmitoyltransferase expression in proliferating fibroblasts, transformed cell lines, and human tumors. *J. Histochem. Cytochem.* 51: 715-726.
6. Dedov, V.N., Dedova, I.V., Merrill, A.H. Jr. and Nicholson, G.A. 2004. Activity of partially inhibited serine palmitoyltransferase is sufficient for normal sphingolipid metabolism and viability of HSN1 patient cells. *Biochim. Biophys. Acta* 1688: 168-175.
7. LocusLink Report (LocusID: 10558). <http://www.ncbi.nlm.nih.gov/LocusLink/>

## CHROMOSOMAL LOCATION

Genetic locus: Sptlc1 (mouse) mapping to 13 B1.

## PRODUCT

SPTLC1 (m): 293T Lysate represents a lysate of mouse SPTLC1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

## APPLICATIONS

SPTLC1 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive SPTLC1 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.