

LASS4 (C-19): sc-65112

BACKGROUND

The LASS (longevity assurance homolog) family members are highly conserved from yeasts to mammals. Six members of this family of proteins have been characterized (LASS1, LASS2, LASS3, LASS4, LASS5 and LASS6) and they are all involved in sphingolipid synthesis. LASS4 is a 394 amino acid endoplasmic reticulum, multi-pass membrane protein. LASS4 increases the levels of long ceramides such as C22:0- and C24:0-ceramides. In cells deficient for CLN9, as observed in neuronal ceroid lipofuscinosis (NCL) or Batten disease, LASS4 can increase ceramide levels and partially correct growth and apoptosis.

REFERENCES

- Riebeling, C., Allegood, J.C., Wang, E. and Futerman, A.H. 2003. Two mammalian longevity assurance gene (LAG1) family members, Trh1 and Trh4, regulate dihydroceramide synthesis using different fatty acyl-CoA donors. *J. Biol. Chem.* 278: 43452-43459.
- Mizutani, Y., Kihara, A. and Igarashi, Y. 2005. Mammalian LASS6 and its related family members regulate synthesis of specific ceramides. *Biochem. J.* 390: 263-271.

CHROMOSOMAL LOCATION

Genetic locus: LASS4 (human) mapping to 19p13.2.

SOURCE

LASS4 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of LASS4 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-65112 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-65112 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LASS4 (C-19) is recommended for detection of LASS4 of 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for LASS4 siRNA (h): sc-62549, LASS4 shRNA Plasmid (h): sc-62549-SH and LASS4 shRNA (h) Lentiviral Particles: sc-62549-V.

LASS4 (C-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

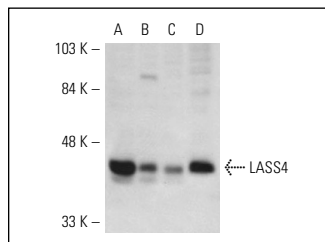
Molecular Weight of LASS4: 47 kDa.

Positive Controls: SK-MEL-28 cell lysate: sc-2236, PC-3 cell lysate: sc-2220 or LNCaP cell lysate: sc-2231.

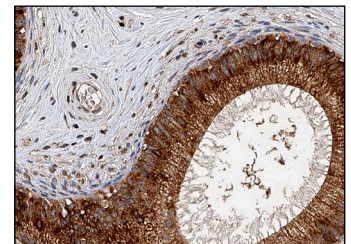
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



LASS4 (C-19): sc-65112. Western blot analysis of LASS4 expression in LNCaP (A), PC-3 (B), SK-MEL-28 (C) and U-698-M (D) whole cell lysates.



LLASS4 (C-19): sc-65112. Immunoperoxidase staining of formalin fixed, paraffin-embedded human epididymis tissue showing cytoplasmic staining of glandular cells at high magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.


 MONOS
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Guaranteed

Try **LASS4 (D-6): sc-376497**, our highly recommended monoclonal alternative to LASS4 (C-19).