

# LASS5 (N-14): sc-65124

## 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. LASS5, also called Trh4, is a 392 amino acid endoplasmic reticulum, multi-pass membrane protein. On the luminal side of the endoplasmic reticulum membrane, the N-terminal asparagine residue is glycosylated. Functioning as a bonafide (dihydro)ceramide synthase, LASS5 increases the levels of short ceramide species, such as C14:0- and C16:0-ceramides, as well as those selectively enriched in palmitic acid. LASS5 is the most abundantly expressed longevity assurance homolog in lung epithelia, where it functions as a regulator of PtdCho metabolism. In cells deficient for CLN9, as observed in neuronal ceroid lipofuscinosis (NCL) or Batten disease, LASS5 can increase ceramide levels and partially correct growth and apoptosis.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: LASS5 (human) mapping to 12q13.13; Lass5 (mouse) mapping to 15 F1.

## SOURCE

LASS5 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of LASS5 of human origin.

## STORAGE

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

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-65124 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-65124 X, 200 µg/0.1 ml.

## APPLICATIONS

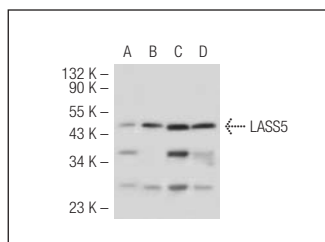
LASS5 (N-14) is recommended for detection of LASS5 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 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 LASS5 siRNA (h): sc-62551, LASS5 siRNA (m): sc-62552, LASS5 shRNA Plasmid (h): sc-62551-SH, LASS5 shRNA Plasmid (m): sc-62552-SH, LASS5 shRNA (h) Lentiviral Particles: sc-62551-V and LASS5 shRNA (m) Lentiviral Particles: sc-62552-V.

LASS5 (N-14) X TransCruz antibody is recommended for Gel Supershift and ChIP applications..

Molecular Weight of LASS5: 46 kDa.

## DATA



LASS5 (N-14): sc-65124. Western blot analysis of LASS5 expression in HeLa (A) and Jurkat (B) whole cell lysates and HeLa (C) and Jurkat (D) nuclear extracts.

## RESEARCH USE

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

## PROTOCOLS

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