

LASS2 (H-40): sc-135034

BACKGROUND

The LASS (longevity assurance homolog) family members are highly conserved from yeasts to mammals. Six members of this family of proteins involved in sphingolipid synthesis have been characterized (LASS1, LASS2, LASS3, LASS4, LASS5 and LASS6). LASS2 is a 380 amino acid multi-pass membrane protein expressed in kidney, liver, brain, heart, placenta and lung. LASS2 suppresses the growth of cancer cells and is involved in sphingolipid synthesis. Overproduction of LASS2 increases the levels of long ceramides such as C22:0- and C24:0-ceramides. The N-terminal asparagine residue serves as a site for glycosylation on the luminal side of the endoplasmic reticulum membrane. LASS2 interacts with several membrane-associated receptors or transporters including ASGPR1, ASGPR2 and OCT1.

REFERENCES

1. Pan, H., Qin, W.X., Huo, K.K., Wan, D.F., Yu, Y., Xu, Z.G., Hu, Q.D., Gu, K.T., Zhou, X.M., Jiang, H.Q., Zhang, P.P., Huang, Y., Li, Y.Y. and Gu, J.R. 2001. Cloning, mapping, and characterization of a human homologue of the yeast longevity assurance gene LAG1. *Genomics* 77: 58-64.
2. 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: LASS2 (human) mapping to 1q21.3; Lass2 (mouse) mapping to 3 F2.1.

SOURCE

LASS2 (H-40) is a rabbit polyclonal antibody raised against amino acids 141-180 mapping within an internal region of LASS2 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.

APPLICATIONS

LASS2 (H-40) is recommended for detection of LASS2 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).

LASS2 (H-40) is also recommended for detection of LASS2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for LASS2 siRNA (h): sc-62545, LASS2 siRNA (m): sc-62546, LASS2 shRNA Plasmid (h): sc-62545-SH, LASS2 shRNA Plasmid (m): sc-62546-SH, LASS2 shRNA (h) Lentiviral Particles: sc-62545-V and LASS2 shRNA (m) Lentiviral Particles: sc-62546-V.

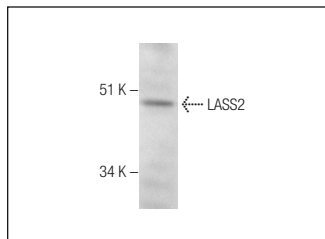
Molecular Weight of LASS2: 45 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



LASS2 (H-40): sc-135034. Western blot analysis of LASS2 expression in Hep G2 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Yu, B., Zhou, S., Wang, Y., Qian, T., Ding, G., Ding, F. and Gu, X. 2012. miR-221 and miR-222 promote Schwann cell proliferation and migration by targeting LASS2 after sciatic nerve injury. *J. Cell Sci.* 125: 2675-2683.

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.



Try **LASS2 (C-11): sc-390745** or **LASS2 (FT-7): sc-100553**, our highly recommended monoclonal alternatives to LASS2 (H-40).