

LASS2 (FT-7): sc-100553

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

- 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.
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- Schulz, A., Mousallem, T., Venkataramani, M., Persaud-Sawin, D.A., Zucker, A., Luberto, C., Bielawska, A., Bielawski, J., Holthuis, J.C., Jazwinski, S.M., Kozhaya, L., Dbaibo, G.S. and Boustany, R.M. 2006. The CLN9 protein, a regulator of dihydroceramide synthase. *J. Biol. Chem.* 281: 2784-2794.

CHROMOSOMAL LOCATION

Genetic locus: LASS2 (human) mapping to 1q21.3.

SOURCE

LASS2 (FT-7) is a mouse monoclonal antibody raised against recombinant LASS2 of human origin.

PRODUCT

Each vial contains 200 μ l ascites containing IgM with < 0.1% sodium azide.

STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

APPLICATIONS

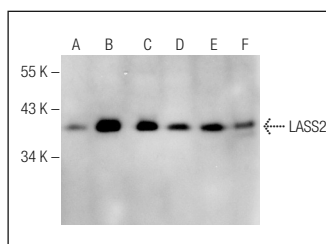
LASS2 (FT-7) is recommended for detection of LASS2 of human origin by Western Blotting (starting dilution to be determined by researcher, dilution range 1:100-1:5000), immunoprecipitation [1-2 μ l per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution to be determined by researcher, dilution range 1:50-1:2500) and solid phase ELISA (starting dilution to be determined by researcher, dilution range 1:100-1:5000).

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

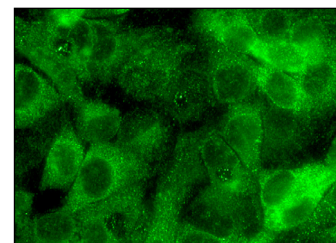
Molecular Weight of LASS2: 45 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, Jurkat whole cell lysate: sc-2204 or K-562 whole cell lysate: sc-2203.

DATA



LASS2 (FT-7): sc-100553. Western blot analysis of LASS2 expression in Hep G2 (A), Jurkat (B), K-562 (C), Ramos (D), MCF7 (E) and SK-BR-3 (F) whole cell lysates.



LASS2 (FT-7): sc-100553. Immunofluorescence staining of methanol-fixed Hep G2 cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

- Inoue, C., Sobue, S., Mizutani, N., Kawamoto, Y., Nishizawa, Y., Ichihara, M., Takeuchi, T., Hayakawa, F., Suzuki, M., Ito, T., Nozawa, Y. and Murate, T. 2020. Vaticanol C, a phytoalexin, induces apoptosis of leukemia and cancer cells by modulating expression of multiple sphingolipid metabolic enzymes. *Nagoya J. Med. Sci.* 82: 261-280.

RESEARCH USE

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

PROTOCOLS

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