

LASP-1 (Q-18): sc-103594

BACKGROUND

LASP-1 (LIM and SH3 domain protein 1), also known as MLN50, is a 261 amino acid protein that localizes to both the cytoplasm and the cytoskeleton and contains one SH3 domain, one LIM zinc-binding domain and 2 nebulin repeats. Expressed as two alternatively spliced isoforms, LASP-1 interacts with F-Actin and plays an important role in the regulation of Actin-associated cytoskeletal organization. LASP-1 is subject to post-translational phosphorylation, an event which may regulate Actin-related ion transport activities in epithelial cells. Overexpression of LASP-1 is associated with breast cancer, suggesting a role for LASP-1 in tumor transformation and metastasis. The gene encoding LASP-1 maps to human chromosome 17, which comprises over 2.5% of the human genome and encodes over 1,200 genes.

REFERENCES

- Tomasetto, C., et al. 1995. LASP-1 (MLN 50) defines a new LIM protein subfamily characterized by the association of LIM and SH3 domains. *FEBS Lett.* 373: 245-249.
- Schreiber, V., et al. 1998. Chromosomal assignment and expression pattern of the murine LASP-1 gene. *Gene* 207: 171-175.
- Butt, E., et al. 2003. Actin binding of human LIM and SH3 protein is regulated by cGMP- and cAMP-dependent protein kinase phosphorylation on serine 146. *J. Biol. Chem.* 278: 15601-15607.
- Strehl, S., et al. 2003. The human LASP1 gene is fused to MLL in an acute myeloid leukemia with t(11;17)(q23;q21). *Oncogene* 22: 157-160.
- Online Mendelian Inheritance in Man, OMIM™. 2003. Johns Hopkins University, Baltimore, MD. MIM Number: 602920. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Keicher, C., et al. 2004. Phosphorylation of mouse LASP-1 on threonine 156 by cAMP- and cGMP-dependent protein kinase. *Biochem. Biophys. Res. Commun.* 324: 308-316.

CHROMOSOMAL LOCATION

Genetic locus: LASP1 (human) mapping to 17q12; LASP1 (mouse) mapping to 11 D.

SOURCE

LASP-1 (Q-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of LASP-1 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.

Blocking peptide available for competition studies, sc-103594 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

LASP-1 (Q-18) is recommended for detection of LASP-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

LASP-1 (Q-18) is also recommended for detection of LASP-1 in additional species, including equine and canine.

Suitable for use as control antibody for LASP-1 siRNA (h): sc-105607, LASP-1 siRNA (m): sc-105608, LASP-1 shRNA Plasmid (h): sc-105607-SH, LASP-1 shRNA Plasmid (m): sc-105608-SH, LASP-1 shRNA (h) Lentiviral Particles: sc-105607-V and LASP-1 shRNA (m) Lentiviral Particles: sc-105608-V.

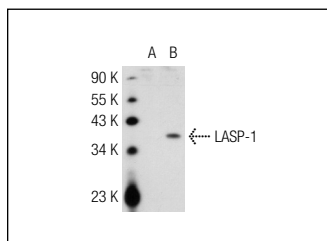
Molecular Weight of LASP-1: 40 kDa.

Positive Controls: LASP-1 (h3): 293T Lysate: sc-159181.

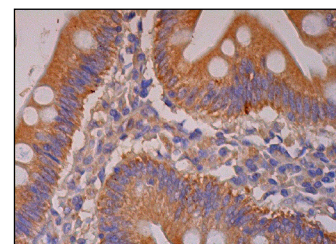
RECOMMENDED SECONDARY REAGENTS

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) 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



LASP-1 (Q-18): sc-103594. Western blot analysis of LASP-1 expression in non-transfected: sc-117752 (A) and human LASP-1 transfected: sc-159181 (B) 293T whole cell lysates.



LASP-1 (Q-18): sc-103594. Immunoperoxidase staining of formalin fixed, paraffin-embedded human small intestine tissue showing cytoplasmic staining of glandular cells.

RESEARCH USE

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



Try **LASP-1 (G-7): sc-374059** or **LASP-1 (B-3): sc-398990**, our highly recommended monoclonal alternatives to LASP-1 (Q-18).