

L-Plastin (D-16): sc-16657

BACKGROUND

Plastins (fimbrins) are members of a family of Actin-binding proteins that exhibit a tissue-specific expression pattern. Both L- and T-Plastin have been shown to be involved in cytoskeletal reorganization. L-Plastin, which is specifically expressed in hematopoietic cell lineage, has been proposed to be involved in the control of cell adhesion and motility. L-Plastin is also frequently expressed in cell lines derived from mammary solid tumors and is implicated in cancer invasion and metastasis. L-Plastin is also expressed in the majority of human cancer cell lines that are derived from various types of solid tumors. In addition, L-Plastin is involved in regulating of leukocyte adhesion, and the phosphorylation of L-Plastin is implicated in modulating integrin regulation signaling pathways. T-Plastin is unique in that it is expressed in many types of tissues and notably absent in leukocytes.

CHROMOSOMAL LOCATION

Genetic locus: LCP1 (human) mapping to 13q14.13; Lcp1 (mouse) mapping to 14 D3.

SOURCE

L-Plastin (D-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of L-Plastin 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-16657 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

L-Plastin (D-16) is recommended for detection of L-Plastin 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).

L-Plastin (D-16) is also recommended for detection of L-Plastin in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for L-Plastin siRNA (h): sc-43208, L-Plastin siRNA (m): sc-43209, L-Plastin shRNA Plasmid (h): sc-43208-SH, L-Plastin shRNA Plasmid (m): sc-43209-SH, L-Plastin shRNA (h) Lentiviral Particles: sc-43208-V and L-Plastin shRNA (m) Lentiviral Particles: sc-43209-V.

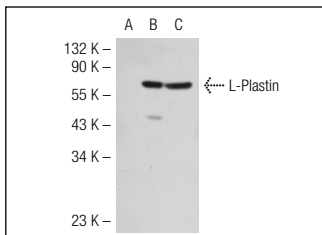
Molecular Weight of L-Plastin: 65 kDa.

Positive Controls: CCRF-CEM cell lysate: sc-2225, RAW 264.7 whole cell lysate: sc-2211 or L-Plastin (h): 293T Lysate: sc-113499.

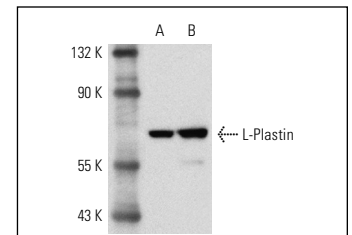
RECOMMENDED SECONDARY REAGENTS

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.

DATA



L-Plastin (D-16): sc-16657. Western blot analysis of L-Plastin expression in non-transfected 293T: sc-117752 (A), human L-Plastin transfected 293T: sc-113499 (B) and CCRF-CEM (C) whole cell lysates.



L-Plastin (D-16): sc-16657. Western blot analysis of L-Plastin expression in CCRF-CEM (A) and RAW 264.7 (B) whole cell lysates.

SELECT PRODUCT CITATIONS

- Ma, T., et al. 2010. Regulation of sealing ring formation by L-Plastin and cortactin in osteoclasts. *J. Biol. Chem.* 285: 29911-29924.
- Li, J. and Zhao, R. 2011. Expression and clinical significance of L-Plastin in colorectal carcinoma. *J. Gastrointest. Surg.* 15: 1982-1988.
- Zhang, H., et al. 2013. Transforming growth factor-β1 induces matrix metalloproteinase-9 expression in rat vascular smooth muscle cells via ROS-dependent ERK-NF-κB pathways. *Mol. Cell. Biochem.* 375: 11-21.

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.


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Try **L-Plastin (B-9): sc-133218** or **L-Plastin (C-4): sc-133219**, our highly recommended monoclonal alternatives to L-Plastin (D-16).