

L-Plastin (C-4): sc-133219

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 lineages, has been proposed to be involved in the control of cell adhesion and motility. It is 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. Additionally, 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 (C-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 298-331 within an internal region of L-Plastin of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-133219 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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 (C-4) is recommended for detection of L-Plastin of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), 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).

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.

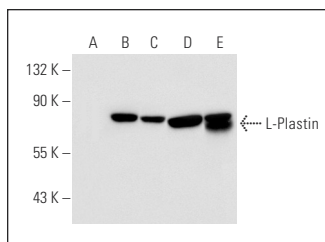
Molecular Weight of L-Plastin: 65 kDa.

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

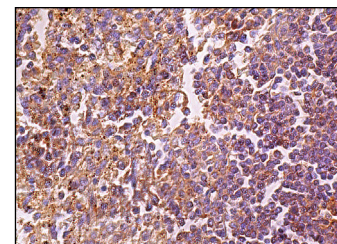
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



L-Plastin (C-4): sc-133219. Western blot analysis of L-Plastin expression in non-transfected 293T: sc-117752 (A), human L-Plastin transfected 293T: sc-113499 (B), CCRF-CEM (C), K-562 (D) and RAW 264.7 (E) whole cell lysates.



L-Plastin (C-4): sc-133219. Immunoperoxidase staining of formalin fixed, paraffin-embedded human spleen tissue showing cytoplasmic staining of cells in white and red pulps.

SELECT PRODUCT CITATIONS

- Li, J. and Zhao, R. 2011. Expression and clinical significance of L-Plastin in colorectal carcinoma. *J. Gastrointest. Surg.* 15: 1982-1988.
- Koide, N., et al. 2017. Evidence for critical role of lymphocyte cytosolic protein 1 in oral cancer. *Sci. Rep.* 7: 43379.

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.