

T-Plastin (C-15): sc-16655

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.

REFERENCES

- Lin, C.S., et al. 1998. Analysis and mapping of Plastin phosphorylation. *DNA Cell Biol.* 17: 1041-1046.
- Jones, S.L., et al. 1998. A role for the Actin-bundling protein L-Plastin in the regulation of leukocyte integrin function. *Proc. Natl. Acad. Sci. USA* 95: 9331-9336.
- Lin, C.S., et al. 1999. Differential regulation of human T-Plastin gene in leukocytes and non-leukocytes: identification of the promoter, enhancer, and CpG island. *DNA Cell Biol.* 18: 27-37.
- Lapillonne, A., et al. 2000. Expression patterns of L-Plastin isoform in normal and carcinomatous breast tissues. *Anticancer Res.* 20: 3177-3182.
- Lin, C.S., et al. 2000. Upregulation of L-Plastin gene by testosterone in breast and prostate cancer cells: identification of three cooperative androgen receptor-binding sequences. *DNA Cell Biol.* 19: 1-7.

CHROMOSOMAL LOCATION

Genetic locus: PLS3 (human) mapping to Xq23; Pls3 (mouse) mapping to X A7.3.

SOURCE

T-Plastin (C-15) is available as either goat (sc-16655) or rabbit (sc-16655-R) polyclonal affinity purified antibody raised against a peptide mapping near the C-terminus of T-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-16655 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

T-Plastin (C-15) is recommended for detection of T-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).

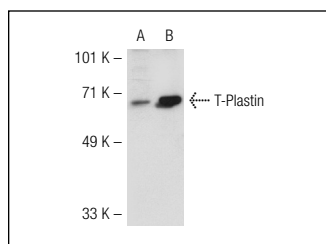
T-Plastin (C-15) is also recommended for detection of T-Plastin in additional species, including equine, canine, porcine and avian.

Suitable for use as control antibody for T-Plastin siRNA (h): sc-43215, T-Plastin siRNA (m): sc-43216, T-Plastin shRNA Plasmid (h): sc-43215-SH, T-Plastin shRNA Plasmid (m): sc-43216-SH, T-Plastin shRNA (h) Lentiviral Particles: sc-43215-V and T-Plastin shRNA (m) Lentiviral Particles: sc-43216-V.

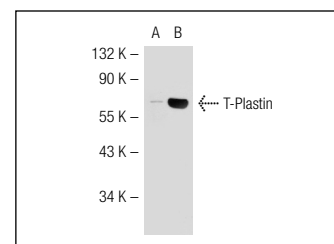
Molecular Weight of T-Plastin: 70 kDa.

Positive Controls: T-Plastin (m): 293T Lysate: sc-123886, Plastin (h2): 293T Lysate: sc-116654 or SJRH30 cell lysate: sc-2287.

DATA



T-Plastin (C-15)-R: sc-16655-R. Western blot analysis of T-Plastin expression in non-transfected: sc-117752 (A) and mouse T-Plastin transfected: sc-123886 (B) 293T whole cell lysates.



T-Plastin (C-15): sc-16655. Western blot analysis of T-Plastin expression in non-transfected: sc-117752 (A) and human T-Plastin transfected: sc-116654 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Rose, F.F., et al. 2009. Delivery of recombinant follistatin lessens disease severity in a mouse model of spinal muscular atrophy. *Hum. Mol. Genet.* 18: 997-1005.

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 **T-Plastin (A-3): sc-166208** or **T-Plastin (A-8): sc-166223**, our highly recommended monoclonal alternatives to T-Plastin (C-15).