

# Plastin (H-300): sc-28531

## 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., Lau, A. and Lue, T.F. 1998. Analysis and mapping of plastin phosphorylation. *DNA Cell Biol.* 17: 1041-1046.
- Jones, S.L., Wang, J., Turck, C.W. and Brown, E.J. 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., Lau, A., Huynh, T. and Lue, T.F. 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., Coue, O., Friederich, E., Nicolas, A., Del Maestro, L., Louvard, D., Robine, S. and Sastre-Garau, X. 2000. Expression patterns of L-plastin isoform in normal and carcinomatous breast tissues. *Anticancer Res.* 20: 3177-3182.
- Lin, C.S., Lau, A., Yeh, C.C., Chang, C.H. and Lue, T.F. 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.

## SOURCE

Plastin (H-300) is a rabbit polyclonal antibody raised against amino acids 328-627 mapping at 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.

## STORAGE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

## APPLICATIONS

Plastin (H-300) is recommended for detection of T-, L-, and I-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).

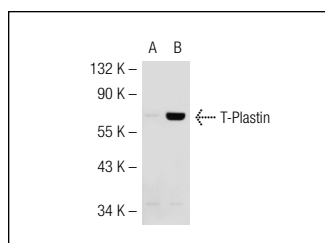
Plastin (H-300) is also recommended for detection of T-, L-, and I-plastin in additional species, including equine, canine, bovine, porcine and avian.

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

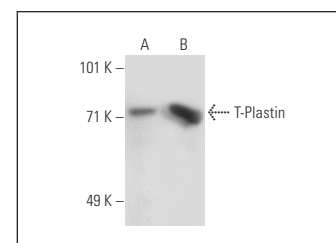
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



Plastin (H-300): sc-28531. 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.



Plastin (H-300): sc-28531. 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.

## SELECT PRODUCT CITATIONS

- Gao, N. and Kaestner, K.H. 2010. Cdx2 regulates endo-lysosomal function and epithelial cell polarity. *Genes Dev.* 24: 1295-1305.

## RESEARCH USE

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

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Satisfaction  
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Try **Plastin (F-2): sc-271223**, our highly recommended monoclonal alternative to Plastin (H-300).