

Tastin (M-230): sc-135271

BACKGROUND

Tastin (trophinin associated protein), also known as TROAP, is essential for centrosome integrity and proper bipolar organization of spindle assembly during mitosis. It is expressed at high levels in bone marrow, testis, and thymus, localizing to the cytoplasm and associating with microtubules, the mitotic spindle and centrosomes. Tastin expression peaks in the cell during the G₂/M phase and declines after the cell divides. Cells overexpressing Tastin form monopolar spindles, while cells depleted of Tastin form multipolar spindles. Tastin binds directly to the dynein light chain (dynein LC or Tctex-1) and γ tubulin, further supporting its role in spindle assembly and cell proliferation. In addition, Tastin can interact with and form a complex with bystin and trophinin, facilitating cell adhesion and, in particular, embryo implantation.

REFERENCES

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3. Fukuda, M.N., et al. 1999. Trophinin, tastin, and bystin: a complex mediating unique attachment between trophoblastic and endometrial epithelial cells at their respective apical cell membranes. *Semin. Reprod. Endocrinol.* 17: 229-234.
4. Suzuki, N., et al. 1999. Expression of trophinin, tastin, and bystin by trophoblast and endometrial cells in human placenta. *Biol. Reprod.* 60: 621-627.
5. Nadano, D., et al. 2002. Human tastin, a proline-rich cytoplasmic protein, associates with the microtubular cytoskeleton. *Biochem. J.* 364: 669-677.
6. Nakayama, J., et al. 2003. Implantation-dependent expression of trophinin by maternal fallopian tube epithelia during tubal pregnancies: possible role of human chorionic gonadotrophin on ectopic pregnancy. *Am. J. Pathol.* 163: 2211-2219.
7. Sheng, J., et al. 2004. Bystin as a novel marker for reactive astrocytes in the adult rat brain following injury. *Eur. J. Neurosci.* 20: 873-884.
8. Ayala, G.E., et al. 2006. Bystin in perineural invasion of prostate cancer. *Prostate* 66: 266-272.

CHROMOSOMAL LOCATION

Genetic locus: TROAP (human) mapping to 12q13.12; Troap (mouse) mapping to 15 F1.

SOURCE

Tastin (M-230) is a rabbit polyclonal antibody raised against amino acids 3-232 mapping near the N-terminus of Tastin of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Tastin (M-230) is recommended for detection of Tastin of mouse, rat and, to a lesser extent, human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

Suitable for use as control antibody for Tastin siRNA (h): sc-63107, Tastin siRNA (m): sc-63108, Tastin shRNA Plasmid (h): sc-63107-SH, Tastin shRNA Plasmid (m): sc-63108-SH, Tastin shRNA (h) Lentiviral Particles: sc-63107-V and Tastin shRNA (m) Lentiviral Particles: sc-63108-V.

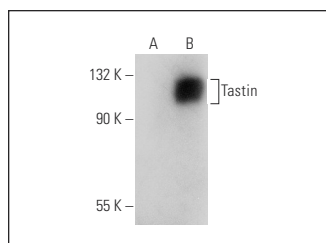
Molecular Weight (predicted) of Tastin: 84 kDa.

Molecular Weight (observed) of Tastin: 99-121 kDa.

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



Tastin (M-230): sc-135271. Western blot analysis of Tastin expression in non-transfected: sc-117752 (A) and human Tastin transfected: sc-115239 (B) 293T whole cell lysates.

STORAGE

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

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.