# Liprin α1 (H-89): sc-67262



The Power to Question

## **BACKGROUND**

Liprins interact with members of the leukocyte common antigen-related (LAR) family of transmembrane protein tyrosine phosphatases, which are implicated in axon guidance and mammary gland development. Liprins are multivalent proteins that form complex structures and act as scaffolds for the recruitment and anchoring of LAR phosphatases. Based on sequence similarities and binding characteristics, liprins are subdivided into  $\alpha$  and  $\beta$  liprins. Both  $\alpha$  and  $\beta$  liprins homodimerize via their N-terminal, coiled-coil regions. Liprin  $\alpha 1$  is a ubiquitously expressed protein that interacts with the tumor suppressor ING4 to regulate cell migration and possibly prevent metastasis. The interaction between LAR and Liprin  $\alpha 1$  can be weakened by treatment of Liprin  $\alpha 1$  with calf intestinal phosphatase.

## **REFERENCES**

- Serra-Pagès, C., et al. 1998. Liprins, a family of LAR transmembrane proteintyrosine phosphatase-interacting proteins. J. Biol. Chem. 273: 15611-15620.
- 2. Kaufmann, N., et al. 2002. *Drosophila* Liprin  $\alpha$  and the receptor phosphatase Dlar control synapse morphogenesis. Neuron 34: 27-38.

#### CHROMOSOMAL LOCATION

Genetic locus: PPFIA1 (human) mapping to 11q13.3; Ppfia1 (mouse) mapping to 7 F5.

## SOURCE

Liprin  $\alpha$ 1 (H-89) is a rabbit polyclonal antibody raised against amino acids 475-563 mapping within an internal region of Liprin  $\alpha$ 1 of human origin.

# **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

#### **APPLICATIONS**

Liprin  $\alpha$ 1 (H-89) is recommended for detection of Liprin  $\alpha$ 1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

Liprin  $\alpha$ 1 (H-89) is also recommended for detection of Liprin  $\alpha$ 1 in additional species, including equine and canine.

Suitable for use as control antibody for Liprin  $\alpha$ 1 siRNA (h): sc-72330, Liprin  $\alpha$ 1 siRNA (m): sc-72331, Liprin  $\alpha$ 1 shRNA Plasmid (h): sc-72330-SH, Liprin  $\alpha$ 1 shRNA Plasmid (m): sc-72331-SH, Liprin  $\alpha$ 1 shRNA (h) Lentiviral Particles: sc-72330-V and Liprin  $\alpha$ 1 shRNA (m) Lentiviral Particles: sc-72331-V.

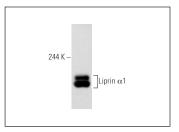
Molecular Weight of Liprin  $\alpha$ 1: 134-136 kDa.

Positive Controls: BT-20 cell lysate: sc-2223 or MDA-MB-468 cell lysate: sc-2282.

#### **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**



Liprin  $\alpha$ 1 (H-89): sc-67262. Western blot analysis of Liprin  $\alpha$ 1 expression in BT-20 whole cell lysate.

#### **SELECT PRODUCT CITATIONS**

1. Yin, H., et al. 2011. Upregulation of liprin- $\alpha$ 1 protein in the temporal neocortex of intractable epileptic patients and experimental rats. Synapse 65: 742-750.

## **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.



Try Liprin  $\alpha$ 1 (A-6): sc-398030 or Liprin  $\alpha$ 1 (A-2): sc-374477, our highly recommended monoclonal alternatives to Liprin  $\alpha$ 1 (H-89).

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