## 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 similarites and binding characteristics, liprins are subdivided into $\alpha$-type and $\beta$-type liprins. Both $\alpha$ - and $\beta$-liprins homodimerize via their $N$-terminal, coiled coil regions. Liprin $\beta 1$ interacts with S100A4, a calcium-binding protein related to tumor invasiveness and metastasis. The two proteins colocalize in the cytoplasm and at protrusion sites in the plasma membrane. The interaction of Liprin $\beta 1$ and S100A4 inhibits the phosphorylation of Liprin $\beta 1$ by PKC and protein kinase CK2 in vitro.

## REFERENCES

1. Serra-Pages, C., Medley, Q.G., Tang, M., Hart, A. and Streuli, M. 1998. Liprins, a family of LAR transmembrane protein-tyrosine phosphataseinteracting proteins. J. Biol. Chem. 273: 15611-15620.
2. Kriajevska, M., Fischer-Larsen, M., Moertz, E., Vorm, O., Tulchinsky, E., Grigorian, M., Ambartsumian, N. and Lukanidin, E. 2002. Liprin $\beta 1$, a member of the family of LAR transmembrane tyrosine phosphataseinteracting proteins, is a new target for the metastasis-associated protein S100A4 (Mts1). J. Biol. Chem. 277: 5229-5235.
3. LocusLink Report (LocusID: 8496). World Wide Web URL: http://www.ncbi.nlm.nih.gov/LocusLink/

## CHROMOSOMAL LOCATION

Genetic locus: PPFIBP1 (human) mapping to 12p11.23; Ppfibp1 (mouse) mapping to 6 G3.

## SOURCE

Liprin $\beta 1$ (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C -terminus of Liprin $\beta 1$ of human origin.

## PRODUCT

Each vial contains $200 \mu \mathrm{ggG}$ in 1.0 ml of PBS with $<0.1 \%$ sodium azide and $0.1 \%$ gelatin.

Blocking peptide available for competition studies, sc-22876 P, (100 $\mu \mathrm{g}$ peptide in 0.5 ml PBS containing $<0.1 \%$ sodium azide and $0.2 \% \mathrm{BSA})$.

## STORAGE

Store at $4^{\circ} \mathrm{C}$, **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.

## APPLICATIONS

Liprin $\beta 1$ (C-13) is recommended for detection of Liprin $\beta 1$ of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 $\beta 1$ (C-13) is also recommended for detection of Liprin $\beta 1$ in additional species, including equine, canine, bovine, porcine and avian.
Suitable for use as control antibody for Liprin $\beta 1$ siRNA (h): sc-38031, Liprin $\beta 1$ siRNA (m): sc-38032, Liprin $\beta 1$ shRNA Plasmid (h): sc-38031-SH, Liprin $\beta 1$ shRNA Plasmid (m): sc-38032-SH, Liprin $\beta 1$ shRNA (h) Lentiviral Particles: sc-38031-V and Liprin $\beta 1$ shRNA (m) Lentiviral Particles: sc-38032-V.
Molecular Weight of Liprin $\beta 1$ isoforms 1/2/3/4/5: 114/113/97/110/19 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker ${ }^{\top \mathrm{M}}$ compatible donkey anti-goat lgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz MarkerT Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:1001:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

Try Liprin $\boldsymbol{\beta 1}$ ( $\mathbf{F - 2}$ ): sc-514575, our highly recommended monoclonal alternative to Liprin $\beta 1$ (C-13).



