

Liprin α 2 (C-10): sc-393292

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 α and β liprins. Both α and β liprins homodimerize via their N-terminal, coiled coil regions. Liprin α 2, also known as PTPRF-interacting protein α 2, regulates the disassembly of focal adhesions and is expressed in brain and prostate. Liprin α 2 is downregulated by dihydrotestosterone (DHT) in prostate cancer cells in an androgen-dependent manner. The loss of Liprin α 2 expression may be associated with the androgen-independent characteristics of prostate cancer.

REFERENCES

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- Fujinami, K., et al. 2002. Liprin- α 2 gene, protein tyrosine phosphatase LAR interacting protein related gene, is downregulated by androgens in the human prostate cancer cell line LNCaP. *Int. J. Mol. Med.* 10: 173-176.
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CHROMOSOMAL LOCATION

Genetic locus: PPFIA2 (human) mapping to 12q21.31; Ppfia2 (mouse) mapping to 10 D1.

SOURCE

Liprin α 2 (C-10) is a mouse monoclonal antibody raised against amino acids 489-590 mapping within an internal region of Liprin α 2 of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Liprin α 2 (C-10) is recommended for detection of Liprin α 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Liprin α 2 (C-10) is also recommended for detection of Liprin α 2 in additional species, including equine and bovine.

Suitable for use as control antibody for Liprin α 2 siRNA (h): sc-72332, Liprin α 2 siRNA (m): sc-72333, Liprin α 2 shRNA Plasmid (h): sc-72332-SH, Liprin α 2 shRNA Plasmid (m): sc-72333-SH, Liprin α 2 shRNA (h) Lentiviral Particles: sc-72332-V and Liprin α 2 shRNA (m) Lentiviral Particles: sc-72333-V.

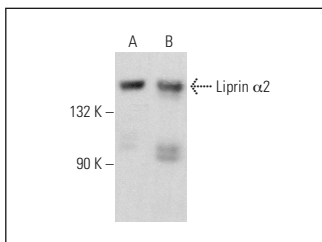
Molecular Weight of Liprin α 2: 143 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409, Neuro-2A whole cell lysate: sc-364185 or human cerebral cortex extract: sc-516707.

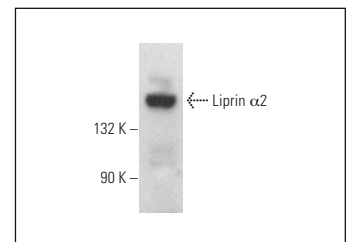
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Liprin α 2 (C-10): sc-393292. Western blot analysis of Liprin α 2 expression in IMR-32 whole cell lysate (A) and human cerebral cortex tissue extract (B).



Liprin α 2 (C-10): sc-393292. Western blot analysis of Liprin α 2 expression in Neuro-2A whole cell lysate.

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.