

Liprin β 2 (H-4): sc-514253

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 -type and β -type liprins. Both α - and β -liprins homodimerize via their N-terminal, coiled coil regions. Liprin β 2 is expressed strongly in liver, kidney, intestine, heart, lung and testis, however it can be detected at low levels in brain and thymus. Four isoforms exist for Liprin β 2 due to splicing variants. Isoform 1 represents the full length protein. Isoform 2 lacks amino acids 459-469. Isoform 3 contains an alternative sequence for amino acids 127-200 and is truncated at amino acid 200. Isoform 4 lacks amino acids 459-469 and contains an alternative sequence for amino acids 877-882.

REFERENCES

1. Serra-Pagès, C., et al. 1998. Liprins, a family of LAR transmembrane protein-tyrosine phosphatase-interacting proteins. *J. Biol. Chem.* 273: 15611-15620.
2. Kriajevska, M., et al. 2002. Liprin β 1, a member of the family of LAR transmembrane tyrosine phosphatase-interacting proteins, is a new target for the metastasis-associated protein S100A4 (Mts1). *J. Biol. Chem.* 277: 5229-5235.
3. Heidenblad, M., et al. 2002. Detailed genomic mapping and expression analyses of 12p amplifications in pancreatic carcinomas reveal a 3.5-Mb target region for amplification. *Genes Chromosomes Cancer* 34: 211-223.

CHROMOSOMAL LOCATION

Genetic locus: PPFIBP2 (human) mapping to 11p15.4; Ppfibp2 (mouse) mapping to 7 E3.

SOURCE

Liprin β 2 (H-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 265-287 within an internal region of Liprin β 2 of human origin.

PRODUCT

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

Liprin β 2 (H-4) is available conjugated to agarose (sc-514253 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514253 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514253 PE), fluorescein (sc-514253 FITC), Alexa Fluor[®] 488 (sc-514253 AF488), Alexa Fluor[®] 546 (sc-514253 AF546), Alexa Fluor[®] 594 (sc-514253 AF594) or Alexa Fluor[®] 647 (sc-514253 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-514253 AF680) or Alexa Fluor[®] 790 (sc-514253 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-514253 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

Liprin β 2 (H-4) is recommended for detection of Liprin β 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).

Suitable for use as control antibody for Liprin β 2 siRNA (h): sc-62563, Liprin β 2 siRNA (m): sc-62564, Liprin β 2 shRNA Plasmid (h): sc-62563-SH, Liprin β 2 shRNA Plasmid (m): sc-62564-SH, Liprin β 2 shRNA (h) Lentiviral Particles: sc-62563-V and Liprin β 2 shRNA (m) Lentiviral Particles: sc-62564-V.

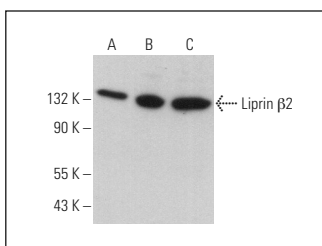
Molecular Weight of Liprin β 2 isoforms 1/2/3: 99/98/22 kDa.

Positive Controls: JAR cell lysate: sc-2276, A-431 whole cell lysate: sc-2201 or K-562 whole cell lysate: sc-2203.

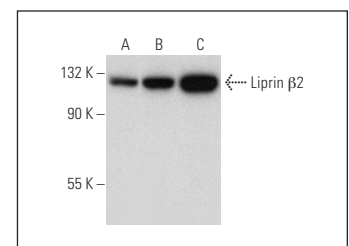
RECOMMENDED SUPPORT REAGENTS

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 β 2 (H-4): sc-514253. Western blot analysis of Liprin β 2 expression in JAR (A), Caco-2 (B) and Neuro-2A (C) whole cell lysates.



Liprin β 2 (H-4): sc-514253. Western blot analysis of Liprin β 2 expression in JAR (A), A-431 (B) and K-562 (C) 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.

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