

Layilin (C-7): sc-377389

BACKGROUND

The Actin cytoskeleton is crucial for cell shape and motility. The interactions between the cell membrane and Actin filaments are important for many cellular processes. Layilin is a widely expressed integral membrane hyaluronan receptor that interacts with the ERM protein family of cytoskeletal membrane linker molecule members, including Talin, Ezrin, Moesin, and Radixin. Layilin plays an important role in cell adhesion and motility. Layilin is important for the maintenance of the cortical structure in the cell because it mediates signals from the extracellular matrix to the cytoskeleton. In spreading cells, Layilin acts as a membrane-binding site for talin in the peripheral ruffles, and it may play a role in the migration of cells to a wound site.

CHROMOSOMAL LOCATION

Genetic locus: LAYN (human) mapping to 11q23.1.

SOURCE

Layilin (C-7) is a mouse monoclonal antibody raised against amino acids 251-382 mapping within a C-terminal cytoplasmic domain of Layilin of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Layilin (C-7) is available conjugated to agarose (sc-377389 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-377389 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-377389 PE), fluorescein (sc-377389 FITC), Alexa Fluor® 488 (sc-377389 AF488), Alexa Fluor® 546 (sc-377389 AF546), Alexa Fluor® 594 (sc-377389 AF594) or Alexa Fluor® 647 (sc-377389 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-377389 AF680) or Alexa Fluor® 790 (sc-377389 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

Layilin (C-7) is recommended for detection of Layilin of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 Layilin siRNA (h): sc-60923, Layilin shRNA Plasmid (h): sc-60923-SH and Layilin shRNA (h) Lentiviral Particles: sc-60923-V.

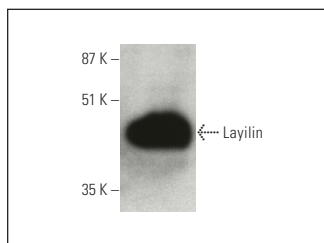
Molecular Weight of Layilin: 43 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409.

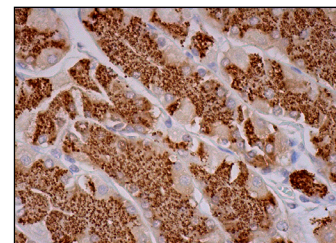
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



Layilin (C-7) HRP: sc-377389 HRP. Direct western blot analysis of Layilin expression in IMR-32 whole cell lysate.



Layilin (C-7): sc-377389. Immunoperoxidase staining of formalin fixed, paraffin-embedded human upper stomach tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

- Kim, Y., et al. 2018. Layilin is critical for mediating hyaluronan 35kDa-induced intestinal epithelial tight junction protein ZO-1 *in vitro* and *in vivo*. *Matrix Biol.* 66: 93-109.
- Tsutiya, A., et al. 2021. Layilin promotes mitochondrial fission by cyclin-dependent kinase 1 and dynamin-related protein 1 activation in HEK293T cells. *Biochem. Biophys. Res. Commun.* 549: 143-149.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.