SANTA CRUZ BIOTECHNOLOGY, INC.

Layilin (H-132): sc-99244



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.

REFERENCES

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- 2. Borowsky, M.L. and Hynes, R.O. 1998. Layilin, a novel Talin-binding transmembrane protein homologous with C-type lectins, is localized in membrane ruffles. J. Cell Biol. 143: 429-442.
- 3. Bono, P., Rubin, K., Higgins, J.M. and Hynes, R.O. 2001. Lavilin, a novel integral membrane protein, is a hyaluronan receptor. Mol. Biol. Cell 12: 891-900.
- 4. Weng, L., Smits, P., Wauters, J. and Merregaert, J. 2002. Molecular cloning and characterization of human Chondrolectin, a novel type I transmembrane protein homologous to C-type lectins. Genomics 80: 62-70.
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- 6. Bono, P., Cordero, E., Johnson, K., Borowsky, M., Ramesh, V., Jacks, T. and Hynes, R.O. 2005. Layilin, a cell surface hyaluronan receptor, interacts with merlin and Radixin. Exp. Cell Res. 308: 177-187.

CHROMOSOMAL LOCATION

Genetic locus: LAYN (human) mapping to 11q23.1; Layn (mouse) mapping to 9 A5.3.

SOURCE

Layilin (H-132) is a rabbit polyclonal antibody raised against amino acids 251-382 mapping within a C-terminal cytoplasmic domain of Lavilin of human origin.

PRODUCT

Each vial contains 200 µg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

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

APPLICATIONS

Layilin (H-132) is recommended for detection of Layilin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Layilin (H-132) is also recommended for detection of Layilin in additional species, including canine.

Suitable for use as control antibody for Layilin siRNA (h): sc-60923, Layilin siRNA (m): sc-146659, Layilin shRNA Plasmid (h): sc-60923-SH, Layilin shRNA Plasmid (m): sc-146659-SH, Layilin shRNA (h) Lentiviral Particles: sc-60923-V and Lavilin shRNA (m) Lentiviral Particles: sc-146659-V.

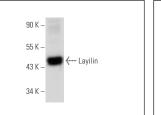
Molecular Weight of Layilin: 43 kDa.

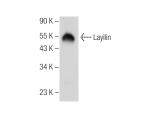
Positive Controls: rat brain extract: sc-2392 or IMR-32 cell lysate: sc-2409.

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 antirabbit 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





Layilin (H-132): sc-99244. Western blot analysis of Lavilin expression in rat brain tissue extract

Lavilin (H-132): sc-99244. Western blot analysis of Layilin expression in IMR-32 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.

MONOS Try Layilin (C-7): sc-377389, our highly recommended Satisfation monoclonal alternative to Layilin (H-132) Guaranteed