Laminin β-3 (17): sc-135968



The Power to Question

BACKGROUND

The Laminins comprise a growing family of disulfide-linked heterotrimers consisting of three genetically distinct polypeptide chains, designated $\alpha,\,\beta$ and $\gamma.$ A major component of the basal lamina, Laminins play a crucial role in providing a scaffolding upon which tissues are assembled and which serves as a physical barrier separating specialized tissues. During embryogenesis and early development, cells migrate along basement membranes, which are required for the polarization of cells. At least eight Laminin isoforms have been described: α -1, α -2, α -3, β -1, β -2, β -3, γ -1 and γ -2. Each isoform differs in the relative affinity with which it associates with individual Laminin receptors.

REFERENCES

- 1. Timpl, R. and Brown, J.C. 1994. The Laminins. Matrix Biol. 14: 275-281.
- Yurchenco, P.D. and O'Rear, J.J. 1994. Basal lamina assembly. Curr. Opin. Cell Biol. 6: 674-681.
- Engvall, E. 1995. Structure and function of basement membranes. Int. J. Dev. Biol. 39: 781-787.
- Farwell, A.P., Tranter, M.P. and Leonard, J.L. 1995. Thyroxine-dependent regulation of integrin-Laminin interactions in astrocytes. Endocrinology 136: 3909-3915.
- 5. Aumailley, M. and Krieg, T. 1996. Laminins: a family of diverse multifunctional molecules of basement membranes. J. Invest. Dermatol. 106: 209-214.
- Nomizu, M., Utani, A., Beck, K., Otaka, A., Roller, P.P. and Yamada, Y. 1996.
 Mechanism of Laminin chain assembly into a triple-stranded coiled-coil structure. Biochemistry 35: 2885-2893.
- 7. Ziober, B.L., Lin, C.S. and Kramer, R.H. 1996. Laminin-binding integrins in tumor progression and metastasis. Semin. Cancer Biol. 7: 119-128.
- 8. Ancsin, J.B. and Kisilevsky, R. 1996. Laminin interactions important for basement membrane assembly are promoted by zinc and implicate Laminin zinc finger-like sequences. J. Biol. Chem. 271: 6845-6851.
- 9. Carloni, V., Romanelli, R.G., Pinzani, M., Laffi, G. and Gentilini, P. 1996. Expression and function of integrin receptors for collagen and Laminin in cultured human hepatic stellate cells. Gastroenterology 110: 1127-1136.

CHROMOSOMAL LOCATION

Genetic locus: LAMB3 (human) mapping to 1g32.2.

SOURCE

Laminin β -3 (17) is a mouse monoclonal antibody raised against amino acids 1009-1170 of Laminin β -3 of human origin.

PRODUCT

Each vial contains 50 μ g IgG₁ in 0.5 ml of PBS with < 0.1% sodium azide, 0.1% gelatin, 20% glycerol and 0.04% stabilizer protein.

RESEARCH USE

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

APPLICATIONS

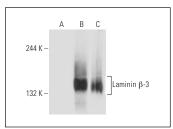
Laminin β -3 (17) is recommended for detection of Laminin β -3 of human and canine origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for Laminin β -3 siRNA (h): sc-43151, Laminin β -3 shRNA Plasmid (h): sc-43151-SH and Laminin β -3 shRNA (h) Lentiviral Particles: sc-43151-V.

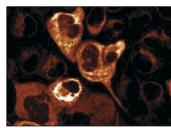
Molecular Weight of Laminin β-3: 140 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201, HeLa whole cell lysate: sc-2200 or Laminin β -3 (h): 293T Lysate: sc-177458.

DATA



Laminin β -3 (17): sc-135968. Western blot analysis of Laminin β -3 expression in non-transfected 293T: sc-117752 (\mathbf{A}), human Laminin β -3 transfected 293T: sc-177458 (\mathbf{B}) and A-431 (\mathbf{C}) whole cell lysates.



Laminin $\beta\text{-}3$ (17): sc-135968. Immunofluorescence staining of A-431 cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

 Ribeiro, J.R., Gaudet, H.M., Khan, M., Schorl, C., James, N.E., Oliver, M.T., DiSilvestro, P.A., Moore, R.G. and Yano, N. 2017. Human epididymis protein 4 promotes events associated with metastatic ovarian cancer via regulation of the extracelluar matrix. Front. Oncol. 7: 332.

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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com