SANTA CRUZ BIOTECHNOLOGY, INC.

Laminin β-2 (K-20): sc-30976

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The Laminins comprise a growing family of disulfide-linked heterotrimers consisting of three genetically distinct polypeptide chains, designated α, β and γ. 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. The β-2 laminin chain plays a role in melanoma spread, promoting tumor migration along the abluminal surface of vessel, a phenomenon which has been termed extra-vascular migratory metastasis.

REFERENCES

1. Yurchenco, P.D. and O'Rear, J.J. 1994. Basal lamina assembly. Curr. Opin. Cell Biol. 6: 674-681.
2. Engvall, E. 1995. Structure and function of basement membranes. Int. J. Dev. Biol. 39: 781-787.
3. 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.
4. Aumailley, M. and Krieg, T. 1996. Laminins: a family of diverse multifunctional molecules of basement membranes. J. Invest. Dermatol. 106: 209-214.
5. 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.
6. 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.
7. Durkin, M.E., Gautam, M., Loechel, F., Sanes, J.R., Merlie, J.P., Albrechtsen, R. and Wewer, U.M. 1996. Structural organization of the human and mouse Laminin β-2 chain genes, and alternative splicing at the 5' end of the human transcript. J. Biol. Chem. 271: 13407-13416.
8. Vogel, W., Kanz, L., Brugger, W., Berndt, A. and Kosmehl, H. 1999. Expression of Laminin β-2 chain in normal human bone marrow. Blood 94: 1143-1145.

CHROMOSOMAL LOCATION

Genetic locus: LAMB2 (human) mapping to 3p21.31; Lamb2 (mouse) mapping to 9 F2.

SOURCE

Laminin β-2 (K-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Laminin β-2 of human origin.

STORAGE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-30976 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Laminin β-2 (K-20) is recommended for detection of Laminin β-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Laminin β-2 (K-20) is also recommended for detection of Laminin β-2 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for Laminin β-2 siRNA (h): sc-35784, Laminin β-2 siRNA (m): sc-35785, Laminin β-2 shRNA Plasmid (h): sc-35784-SH, Laminin β-2 shRNA Plasmid (m): sc-35785-SH, Laminin β-2 shRNA (h) Lentiviral Particles: sc-35784-V and Laminin β-2 shRNA (m) Lentiviral Particles: sc-35785-V.

Molecular Weight of Laminin β-2: 200 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, DU 145 cell lysate: sc-2268 or LNCaP cell lysate: sc-2231.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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

PROTOCOLS

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