

Laminin β -2 (C4): sc-59980

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 a vessel, a phenomenon which has been termed extra-vascular migratory metastasis.

CHROMOSOMAL LOCATION

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

SOURCE

Laminin β -2 (C4) is a mouse monoclonal antibody raised against anterior lens capsule of bovine origin.

PRODUCT

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

Laminin β -2 (C4) is available conjugated to agarose (sc-59980 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-59980 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-59980 PE), fluorescein (sc-59980 FITC), Alexa Fluor® 488 (sc-59980 AF488), Alexa Fluor® 546 (sc-59980 AF546), Alexa Fluor® 594 (sc-59980 AF594) or Alexa Fluor® 647 (sc-59980 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-59980 AF680) or Alexa Fluor® 790 (sc-59980 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

RESEARCH USE

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

APPLICATIONS

Laminin β -2 (C4) is recommended for detection of Laminin β -2 of mouse, rat, human, bovine and porcine 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

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.

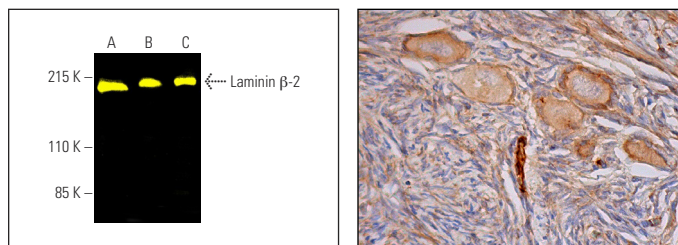
Molecular Weight of Laminin β -2: 200 kDa.

Positive Controls: human ovary extract: sc-363769, LNCaP cell lysate: sc-2231 or DU 145 cell lysate: sc-2268.

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. 4) Immunohistochemistry: use m-IgG κ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



Laminin β -2 (C4) Alexa Fluor® 488: sc-59980 AF488. Direct fluorescent western blot analysis of Laminin β -2 expression in LNCaP (A) and DU 145 (B) whole cell lysates and human ovary tissue extract (C). Blocked with UltraCruz® Blocking Reagent: sc-516214.

Laminin β -2 (C4): sc-59980. Immunoperoxidase staining of formalin fixed, paraffin-embedded human ovary tissue showing cytoplasmic staining of follicle cells and cytoplasmic and membrane staining of ovarian stroma cells.

SELECT PRODUCT CITATIONS

- Ghézali, G., et al. 2018. Connexin 30 controls astroglial polarization during postnatal brain development. *Development* 145: dev155275.
- Nguyen, L.T.B., et al. 2019. Development of thermo-responsive polycaprolactone macrocarriers conjugated with Poly(N-isopropyl acrylamide) for cell culture. *Sci. Rep.* 9: 3477.
- Geuens, T., et al. 2021. Thiol-ene cross-linked alginate hydrogel encapsulation modulates the extracellular matrix of kidney organoids by reducing abnormal type 1a1 collagen deposition. *Biomaterials* 275: 120976.
- Altera, A., et al. 2021. The extracellular matrix complexity of idiopathic epiretinal membranes and the bilaminar arrangement of the associated internal limiting membrane in the posterior retina. *Graefes Arch. Clin. Exp. Ophthalmol.* 259: 2559-2571.

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.

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