

Laminin α -2 (H-130): sc-20142

BACKGROUND

Laminins are essential and abundant structural non-collagenous glycoproteins localizing to basement membranes. Basement membranes (cell-associated extracellular matrices (ECMs)) are polymers of laminins with stabilizing Type IV collagen networks, Nidogen and several proteoglycans. Basement membranes are found under epithelial layers, around the endothelium of blood vessels, and surrounding muscle, peripheral nerve and fat cells. Formation of basement membranes influences cell proliferation, phenotype, migration, gene expression and tissue architecture. Each Laminin is a heterotrimer of α , β , and γ chain subunits that undergoes cell-secretion and incorporation into the ECM. Laminins can self-assemble, bind to other matrix macromolecules, and have unique and shared cell interactions mediated by integrins, dystroglycan and cognate Laminin receptors. The human Laminin α -2 gene is necessary for sustenance of mature muscle cells. The Laminin α -2 gene is associated with congenital muscular dystrophy (CMD) in humans and dystrophia muscularis in mice.

CHROMOSOMAL LOCATION

Genetic locus: LAMA2 (human) mapping to 6q22.33; Lama2 (mouse) mapping to 10 A4.

SOURCE

Laminin α -2 (H-130) is a rabbit polyclonal antibody raised against amino acids 2811-2940 mapping near the C-terminus of Laminin α -2 of human origin.

PRODUCT

Each vial contains 200 μ g IgG 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

Laminin α -2 (H-130) is recommended for detection of Laminin α -2 of mouse, rat and human 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), 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).

Laminin α -2 (H-130) is also recommended for detection of Laminin α -2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Laminin α -2 siRNA (h): sc-43143, Laminin α -2 siRNA (m): sc-43144, Laminin α -2 shRNA Plasmid (h): sc-43143-SH, Laminin α -2 shRNA Plasmid (m): sc-43144-SH, Laminin α -2 shRNA (h) Lentiviral Particles: sc-43143-V and Laminin α -2 shRNA (m) Lentiviral Particles: sc-43144-V.

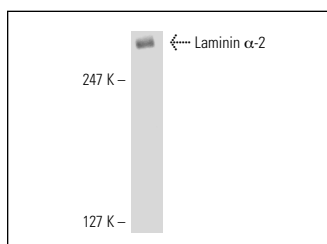
Molecular Weight of Laminin α -2: 300 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or mouse embryo extract: sc-364239.

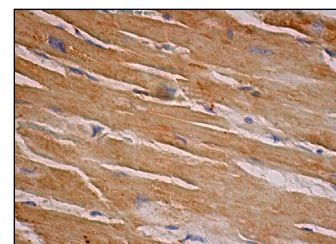
RECOMMENDED SECONDARY REAGENTS

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 anti-rabbit 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. 4) Immunohistochemistry: use ImmunoCruz[™]: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



Laminin α -2 (H-130): sc-20142. Western blot analysis of Laminin α -2 expression in HeLa whole cell lysate.



Laminin α -2 (H-130): sc-20142. Immunoperoxidase staining of formalin fixed, paraffin-embedded human heart muscle tissue showing cytoplasmic staining of myocytes.

SELECT PRODUCT CITATIONS

1. Rooney, J.E., et al. 2006. Severe muscular dystrophy in mice that lack dystrophin and α 7 integrin. *J. Cell Sci.* 119: 2185-2195.
2. Salvadori, C., et al. 2012. Adult-onset muscular dystrophy in a cat associated with a presumptive alteration in trafficking of caveolin-3. *J. Comp. Pathol.* 147: 253-258.

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 or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **Laminin α -2 (B-4): sc-55605** or **Laminin α -2 (4H8-2): sc-59854**, our highly recommended monoclonal alternatives to Laminin α -2 (H-130). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Laminin α -2 (B-4): sc-55605**.