

Laminin-R (G-7): sc-74531

BACKGROUND

Laminin receptor (Laminin-R) has a heterodimeric structure similar to that of receptors for other extracellular matrix proteins such as Fibronectin and Vitronectin. Incorporation of Laminin-R into lysosomal membranes makes it possible for lysosomes to attach to surfaces coated with Laminin. This and other properties identify Laminin-R as a member of the integrin family of cell adhesion receptors. The Laminin-R precursor is a polypeptide whose expression is consistently upregulated in aggressive carcinoma. The precursor, which is also identified as p40 ribosome-associated protein, appears to be a multi-functional protein involved in the translational machinery. Laminin-R (also known as colon carcinoma Laminin-binding protein) is found at nine-fold higher levels in colon carcinoma than in adjacent normal colonic epithelium. Additionally, the level of the Laminin-R is higher in the lung cancer cell line than in the lung cell line.

CHROMOSOMAL LOCATION

Genetic locus: RPSA (human) mapping to 3p22.1; Rpsa (mouse) mapping to 9 F4.

SOURCE

Laminin-R (G-7) is a mouse monoclonal antibody raised against amino acids 110-250 mapping within an internal region of Laminin-R of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain 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-R (G-7) is recommended for detection of Laminin-R of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), 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-R (G-7) is also recommended for detection of Laminin-R in additional species, including equine, canine and porcine.

Suitable for use as control antibody for Laminin-R siRNA (h): sc-35789, Laminin-R siRNA (m): sc-37262, Laminin-R shRNA Plasmid (h): sc-35789-SH, Laminin-R shRNA Plasmid (m): sc-37262-SH, Laminin-R shRNA (h) Lentiviral Particles: sc-35789-V and Laminin-R shRNA (m) Lentiviral Particles: sc-37262-V.

Molecular Weight of Laminin-R cytosolic precursor: 37 kDa.

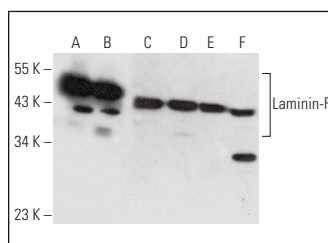
Molecular Weight of mature Laminin-R: 67 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, NIH/3T3 whole cell lysate: sc-2210 or Hep G2 cell lysate: sc-2227.

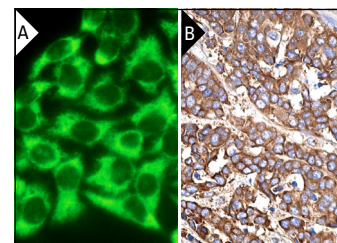
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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-IgGκ BP-FITC: sc-516140 or m-IgGκ 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-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



Laminin-R (G-7): sc-74531. Western blot analysis of Laminin-R expression in Hep G2 (A), Jurkat (B), NIH/3T3 (C), AMJZ-C8 (D), KNRK (E) and RBL-1 (F) whole cell lysates.



Laminin-R (G-7): sc-74531. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing cytoplasmic staining of glandular cells (B).

SELECT PRODUCT CITATIONS

- Gardmo, C., et al. 2011. Proteomics for the discovery of nuclear bile acid receptor FXR targets. *Biochim. Biophys. Acta* 1812: 836-841.
- Drozdziak, M., et al. 2020. Monocarboxylate transporter 1 (MCT1) in liver pathology. *Int. J. Mol. Sci.* 21: 1606.
- Taniguchi, Y., et al. 2022. Periapical lesion following Cnm-positive *Streptococcus mutans* pulp infection worsens cerebral hemorrhage onset in an SHRSP rat model. *Clin. Exp. Immunol.* 210: 321-330.

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.