

# Laminin-R (33): sc-101518

## 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.

## REFERENCES

1. Gehlsen, K.R., et al. 1988. The human Laminin receptor is a member of the integrin family of cell adhesion receptors. *Science* 241: 1228-1229.
2. Yow, H.K., et al. 1988. Increased mRNA expression of a Laminin-binding protein in human colon carcinoma: complete sequence of a full length cDNA encoding the protein. *Proc. Natl. Acad. Sci. USA* 85: 6394-6398.
3. Bignon, C., et al. 1991. Genomic analysis of the 67 kDa Laminin receptor in normal and pathological tissues: circumstantial evidence for retroposon features. *Genomics* 10: 481-485.
4. Satoh, K., et al. 1992. Cloning of 67 kDa Laminin receptor cDNA and gene expression in normal and malignant cell lines of the human lung. *Cancer Lett.* 62: 199-203.
5. Jackers, P., et al. 1996. Isolation from a multigene family of the active human gene of the metastasis-associated multifunctional protein 37LRP/p40 at chromosome 3p21.3. *Oncogene* 13: 495-503.

## CHROMOSOMAL LOCATION

Genetic locus: RPSA (human) mapping to 3p22.1.

## SOURCE

Laminin-R (33) is a mouse monoclonal antibody raised against recombinant Laminin-R of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## 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](http://www.scbt.com) for detailed protocols and support products.

## APPLICATIONS

Laminin-R (33) is recommended for detection of Laminin-R of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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

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

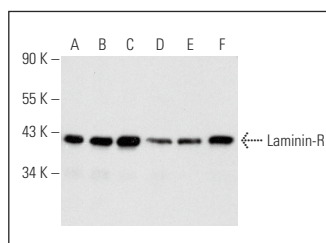
Molecular Weight of mature Laminin-R: 67 kDa.

Positive Controls: Laminin-R (h2): 293T Lysate: sc-116343, T84 whole cell lysate: sc-364797 or Jurkat whole cell lysate: sc-2204.

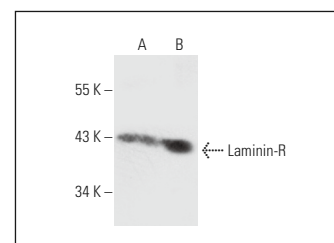
## RECOMMENDED SUPPORT REAGENTS

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).

## DATA



Laminin-R (33): sc-101518. Western blot analysis of Laminin-R expression in Jurkat (A), MOLT-4 (B), Raji (C), T84 (D), SHP-77 (E) and COLO 320DM (F) whole cell lysates.



Laminin-R (33): sc-101518. Western blot analysis of Laminin-R expression in non-transfected: sc-117752 (A) and human Laminin-R transfected: sc-116343 (B) 293T whole cell lysates.

## RESEARCH USE

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



See **Laminin-R (H-2): sc-74515** for Laminin-R antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.