SANTA CRUZ BIOTECHNOLOGY, INC.

Laminin-R (h6): 293T Lysate: sc-159313

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 multifunctional 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., Dillner, L., Engvall, E. and Ruoslahti, E. 1988. The human Laminin receptor is a member of the integrin family of cell adhesion receptors. Science 241: 1228-1229.
2. Yow, H.K., Wong, J.M., Chen, H.S., Lee, C.G., Davis, S., Steele, G.D., Jr. and Chen, L.B. 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., Roux-Dosseto, M., Zeigler, M.E., Mattei, M.G., Lissitzky, J.C., Wicha, M.S. and Martin, P.M. 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., Narumi, K., Sakai, T., Abe, T., Kikuchi, T., Matsushima, K., Sindoh, S. and Motomiya, M. 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., Minoletti, F., Belotti, D., Clausse, N., Sozzi, G., Sobel, M.E. and Castronovo, V. 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.

PRODUCT

Laminin-R (h6): 293T Lysate represents a lysate of human Laminin-R transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

APPLICATIONS

Laminin-R (h6): 293T Lysate is suitable as a Western Blotting positive control for human reactive Laminin-R antibodies. Recommended use: 10-20 µl per lane.

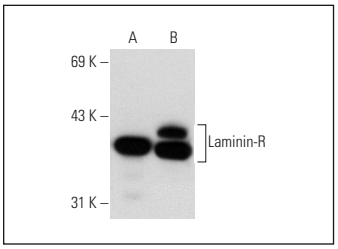
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Laminin-R (G-7): sc-74531 is recommended as a positive control antibody for Western Blot analysis of enhanced human Laminin-R expression in Laminin-R transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

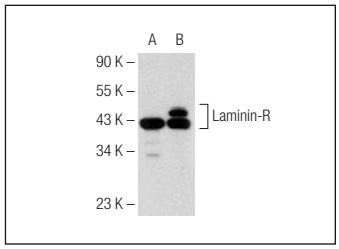
RECOMMENDED SUPPORT REAGENTS

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.

DATA



Laminin-R (G-7): sc-74531. Western blot analysis of Laminin-R expression in non-transfected: sc-117752 (**A**) and human Laminin-R transfected: sc-159313 (**B**) 293T whole cell lysates.



Laminin-R (H-2): sc-74515. Western blot analysis of Laminin-R expression in non-transfected: sc-117752 (**A**) and human Laminin-R transfected: sc-159313 (**B**) 293T whole cell lysates.

RESEARCH USE

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