

Laminin β -3 (H-300): sc-20775

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 embryo-genesis and early development, cells migrate along basement membranes, which are required for the polarization of cells. At least eight Laminin isoforms have been described: α -1, α -2, α -3, β -1, β -2, β -3, γ -1 and γ -2. Each isoform differs in the relative affinity with which it associates with individual Laminin receptors.

REFERENCES

1. Timpl, R. and Brown, J.C. 1994. The laminins. *Matrix Biol.* 14: 275-281.
2. Yurchenco, P.D. and O'Rear, J.J. 1994. Basal lamina assembly. *Curr. Opin. Cell Biol.* 6: 674-681.
3. Engvall, E. 1995. Structure and function of basement membranes. *Intl. J. Dev. Biol.* 39: 781-787.

CHROMOSOMAL LOCATION

Genetic locus: LAMB3 (human) mapping to 1q32.2; Lamb3 (mouse) mapping to 1 H6.

SOURCE

Laminin β -3 (H-300) is a rabbit polyclonal antibody raised against amino acids 873-1172 mapping at the C-terminus of Laminin β -3 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.

APPLICATIONS

Laminin β -3 (H-300) is recommended for detection of Laminin β -3 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Laminin β -3 (H-300) is also recommended for detection of Laminin β -3 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for Laminin β -3 siRNA (h): sc-43151, Laminin β -3 siRNA (m): sc-43152, Laminin β -3 shRNA Plasmid (h): sc-43151-SH, Laminin β -3 shRNA Plasmid (m): sc-43152-SH, Laminin β -3 shRNA (h) Lentiviral Particles: sc-43151-V and Laminin β -3 shRNA (m) Lentiviral Particles: sc-43152-V.

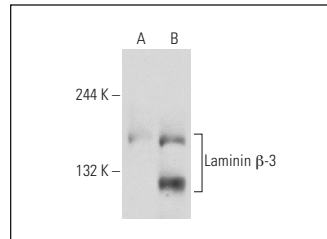
Molecular Weight of Laminin β -3: 140 kDa.

Positive Controls: Laminin β -3 (h): 293T Lysate: sc-177458, HeLa whole cell lysate: sc-2200 or SCC-4 whole cell lysate: sc-364363.

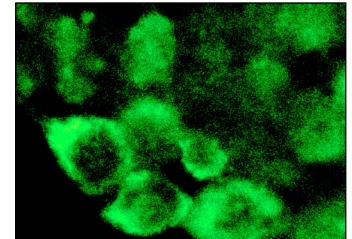
STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



Laminin β -3 (H-300): sc-20775. Western blot analysis of Laminin β -3 expression in non-transfected: sc-117752 (A) and human Laminin β -3 transfected: sc-177458 (B) 293T whole cell lysates.



Laminin β -3 (H-300): sc-20775. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic and cell surface membrane localization.

SELECT PRODUCT CITATIONS

1. Qian, J., et al. 2005. *In vitro* modeling of human pancreatic duct epithelial cell transformation defines gene expression changes induced by K-Ras oncogenic activation in pancreatic carcinogenesis. *Cancer Res.* 65: 5045-5053.
2. Zapatka, M., et al. 2007. Basement membrane component Laminin-5 is a target of the tumor suppressor Smad4. *Oncogene* 26: 1417-1427.
3. Tripathi, M., et al. 2008. Laminin-332 is a substrate for hepsin, a protease associated with prostate cancer progression. *J. Biol. Chem.* 283: 30576-30584.
4. Yamashita, H., et al. 2010. Epitope mapping of function-blocking monoclonal antibody CM6 suggests a "weak" integrin binding site on the laminin-332 LG2 domain. *J. Cell. Physiol.* 223: 541-548.
5. Isono, T. 2011. O-GlcNAc-specific antibody CTD110.6 cross-reacts with N-GlcNAc2-modified proteins induced under glucose deprivation. *PLoS ONE* 6: e18959.
6. Tripathi, M., et al. 2011. Laminin-332 cleavage by matriptase alters motility parameters of prostate cancer cells. *Prostate* 71: 184-196.
7. Isono, T., et al. 2013. Study of global transcriptional changes of N-GlcNAc2 proteins-producing T24 bladder carcinoma cells under glucose deprivation. *PLoS ONE* 8: e60397.

RESEARCH USE

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


 MONOS
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Try **Laminin β -3 (A-6): sc-133178** or **Laminin β -3 (17): sc-135968**, our highly recommended monoclonal alternatives to Laminin β -3 (H-300).