## SANTA CRUZ BIOTECHNOLOGY, INC.

# Laminin β-3 (C-19): sc-7651



## BACKGROUND

The Laminins comprise a growing family of disulfide-linked heterotrimers consisting of three genetically distinct polypeptide chains, designated  $\alpha$ ,  $\beta$  and  $\gamma$ . 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 embryogenesis and early development, cells migrate along basement membranes, which are required for the polarization of cells. At least eight Laminin isoforms have been described:  $\alpha$ -1,  $\alpha$ -2,  $\alpha$ -3,  $\beta$ -1,  $\beta$ -2,  $\beta$ -3,  $\gamma$ -1 and  $\gamma$ -2. Each isoform differs in the relative affinity with which it associates with individual laminin receptors.

## REFERENCES

- Schnaper, H.W., et al. 1993. Role of laminin in endothelial cell recognition and differentiation. Kidney Int. 43: 20-25.
- 2. Tryggvason, K. 1993. The laminin family. Curr. Opin. Cell Biol. 5: 877-882.

## CHROMOSOMAL LOCATION

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

#### SOURCE

Laminin  $\beta$ -3 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Laminin  $\beta$ -3 of human origin.

### PRODUCT

Each vial contains 200  $\mu$ g lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-7651 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Laminin  $\beta$ -3 (C-19) is recommended for detection of Laminin  $\beta$ -3 of mouse, rat and 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)], 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  $\beta$ -3 (C-19) is also recommended for detection of Laminin  $\beta$ -3 in additional species, including equine and bovine.

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

Molecular Weight of Laminin β-3: 140 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, A-431 whole cell lysate: sc-2201 or SCC-4 whole cell lysate.

## STORAGE

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

## DATA



Laminin  $\beta$ -3 (C-19): sc-7651. Western blot analysis of Laminin  $\beta$ -3 expression in SCC-4 whole cell lysate.

### SELECT PRODUCT CITATIONS

- Tunggal, L., et al. 2002. Defective Laminin 5 processing in cylindroma cells. Am. J. Pathol. 160: 459-468.
- Tasanen, K., et al. 2004. Keratinocytes from patients lacking collagen XVII display a migratory phenotype. Am. J. Pathol. 164: 2027-2038.
- 3. Sigle, R.O., et al. 2004. Globular domains 4/5 of the Laminin  $\alpha$ -3 chain mediate deposition of precursor Laminin 5. J. Cell Sci. 117: 4481-4494.
- 4. Yamamoto, H., et al. 2004. Developmental properties of the Hertwig's epithelial root sheath in mice. J. Dent. Res. 83: 688-692.
- Mavilio, F., et al. 2006. Correction of junctional epidermolysis bullosa by transplantation of genetically modified epidermal stem cells. Nat. Med. 12: 1397-1402.
- Di Nunzio, F., et al. 2008. Correction of Laminin 5 deficiency in human epidermal stem cells by transcriptionally targeted lentiviral vectors. Mol. Ther. 16: 1977-1985.
- Grootenboer-Mignot, S., et al. 2009. Place of human amniotic membrane immunoblotting in the diagnosis of autoimmune bullous dermatoses. Br. J. Dermatol. 162: 743-750.

#### **RESEARCH USE**

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

## PROTOCOLS

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

# MONOS Satisfation Guaranteed

Try Laminin  $\beta$ -3 (A-6): sc-133178 or Laminin  $\beta$ -3 (17): sc-135968, our highly recommended monoclonal alternatives to Laminin  $\beta$ -3 (C-19).