

Laminin α -1 (E3-2): sc-65646

BACKGROUND

Laminins are essential and abundant structural non-collagenous glycoproteins localizing to basement membranes. Basement membranes (cell-associated extracellular matrices (ECMs)) are polymers of laminins with stabilizing Type IV Collagen networks, Nidogen and several proteoglycans. Basement membranes are found under epithelial layers, around the endothelium of blood vessels, and surrounding muscle, peripheral nerve and fat cells. Formation of basement membranes influences cell proliferation, phenotype, migration, gene expression and tissue architecture. Each laminin is a heterotrimer of α , β and γ chain subunits that undergoes cell secretion and incorporation into the ECM. Laminins can self-assemble, bind to other matrix macromolecules and have unique and shared cell interactions mediated by integrins, dystroglycan and cognate Laminin receptors. The human Laminin α -1 gene maps to chromosome 18p11.3 and is overexpressed in Alzheimer disease frontal cortex.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Lama1 (mouse) mapping to 17 E1.1.

SOURCE

Laminin α -1 (E3-2) is a rat monoclonal antibody raised against the E3 fragment of Laminin α -1 of mouse origin, with epitope mapping to the globular domains G4-5.

PRODUCT

Each vial contains 200 μ g IgG_{2a} 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 α -1 (E3-2) is recommended for detection of Laminin α -1 of mouse origin by 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for Laminin α -1 siRNA (m): sc-37126, Laminin α -1 shRNA Plasmid (m): sc-37126-SH and Laminin α -1 shRNA (m) Lentiviral Particles: sc-37126-V.

Molecular Weight of Laminin α -1: 356 kDa.

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.