**BACKGROUND**

Laminins are essential and abundant structural non-collagenous glyco-proteins 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-4 gene maps to chromosome 6q21 and is expressed in adult heart, lung, ovary, small and large intestines, liver, and placenta.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: LAMA4 (human) mapping to 6q21.

**SOURCE**

Laminin α-4 (3H2) is a mouse monoclonal antibody raised against purified Laminin α4β1γ1 isolated from platelets of human origin.

**PRODUCT**

Each vial contains 100 μg IgG1 in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

Laminin α-4 (3H2) is recommended for detection of Laminin α-4 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:300).

Suitable for use as control antibody for Laminin α-4 siRNA (h): sc-43147, Laminin α-4 shRNA Plasmid (h): sc-43147-SH and Laminin α-4 shRNA (h) Lentiviral Particles: sc-43147-V.

Molecular Weight of Laminin α-4: 227 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

**SELECT PRODUCT CITATIONS**


**STORAGE**

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

**RESEARCH USE**

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

**PROTOCOLS**

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