**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 undergo cell-secretion and incorporation into the ECM. Laminins can self-assemble and bind to other matrix macromolecules, and have unique and shared cell interactions mediated by integrins, dystroglycan and cognate laminin receptors. The human Laminin α-2 gene is necessary for sustenance of mature muscle cells. The Laminin α-2 gene is associated with congenital muscular dystrophy (CMD) in humans and dystrophia muscularis in mice.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: LAMA2 (human) mapping to 6q22.33; Lama2 (mouse) mapping to 10 A4.

**SOURCE**

Laminin α-2 (4H8-2) is a rat monoclonal antibody raised against native Laminin α-2 of mouse origin, with epitope mapping to the N-terminal domain.

**PRODUCT**

Each vial contains 200 µg IgG1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**STORAGE**

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

**APPLICATIONS**

Laminin α-2 (4H8-2) is recommended for detection of Laminin α-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:50, dilution range 1:50-1:100), 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).


Molecular Weight of Laminin α-2: 300 kDa.

Positive Controls: C2C12 whole cell lysate: sc-364188.

**DATA**

Laminin α-2 (4H8-2) sc-59854. Western blot analysis of Laminin α-2 expression in C2C12 whole cell lysate.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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