



Mouse Laminin, Ultrapure

Cell Culture Tested

Product Code: CF103

Product Description:

Source: Mouse EHS sarcoma

Molecular Weight: 90kD

Synonyms:

Laminins are heterotrimeric glycoproteins comprised of one α , one β , and one γ chain. There are at least 15 different isoforms of laminins formed by unique combinations between five α , four β , and three γ chains. Laminins have a cruciform-like structure. The short arm of Laminins via its interaction with various other proteins such as syndecan, nidogen, collagen, integrins, dystroglycan, and heparin play a pivotal role in basement membrane organization. These interactions cause actin cytoskeleton rearrangements that in turn modulate cell behavior. Most laminins are essential protein and null mutation of laminins are found to be lethal. Laminins are also implicated in differentiation of lung tissue, and alveolar morphogenesis. Interaction between laminin and heparan sulfate interaction may be essential to lumen formation and branching morphogenesis. Laminins can bind to cell via integrin receptor. Laminins are used as cell culture substrates for both pluripotent stem cells and neural cells. Laminins also participate in the development of nervous system. It is widely used for cell adhesion in 2D cell culture.

Laminin is isolated from mouse Engelbreth-Holm-Swarm (EHS) sarcoma.

Formulation:

1mg Laminin/0.313ml of 0.05M Tris-HCL, 0.15 M NaCl, pH7.
Supplied as Frozen liquid

Directions:

- 1 Thaw ultrapure laminin slowly, at 2-8°C or on ice
- 2 Keep stock of laminin at 2-8°C during use.
- 3 Flocculent material may develop during thawing; this material (aggregated laminin) usually goes into solution after 1-48 hours at 2-8°C.
- 4 Dilute laminin to desired concentration using sterile, serum-free culture medium.
- 5 Suggested coating concentration is 1-10 $\mu\text{g}/\text{cm}^2$. The final solution should be sufficiently dilute so that the amount added to the coating surface will coat it evenly.
- 6 Add appropriate amount of diluted laminin to culture surface.
- 7 Incubate at room temperature for 1 hour.
- 8 Aspirate remaining material.
- 9 Rinse plates carefully -- avoid scraping bottom surface.
- 10 Plates are ready for use. They may also be stored at 2-8°C damp or air dried if sterility is maintained.

Quality Control:

Appearance

Frozen liquid

Purity (by SDS-PAGE)

NLT 95%

Biological activity:

The biological activity is determined in a cell culture neurite growth assay. NG-108 (mouse neuroblastoma/rat glioma) cells differentiated and formed neurites when plated on the given lot of laminin.

Storage and Shelf Life:

Stable for 3 years, when stored at -80 ° C. Avoid multiple freeze-thaws. Do not store in frost-free freezer. Keep Frozen If entire amount of material is not to be used immediately, transfer aliquot to sterile plastic tubes and store at -80 ° C. Do not store in Frost-free freezer . Avoid multiple freeze thaws.

Revision No.: 02/ 2022

Disclaimer:

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