



3050 Spruce Street
Saint Louis, Missouri 63103 USA
Telephone 800-325-5832 • (314) 771-5765
Fax (314) 286-7828
email: techserv@sial.com
sigma-aldrich.com

Product Information

Laminin from Engelbreth-Holm-Swarm murine sarcoma (basement membrane)

Product Number **L 2020**
Storage Temperature $-20\text{ }^{\circ}\text{C}$

CAS RN: 114956-81-9

Product Description

Laminin is isolated as the intact native form from Engelbreth-Holm-Swarm tumor, a mouse tumor that produces large amounts of basement membranes.¹ Laminin chains are designated A (molecular weight 400 kDa), B1 (molecular weight 210 kDa) and B2 (molecular weight 200 kDa). The cohesion between these chains is the result of many inter- and intrachain disulfide bonds. Together, they cause the molecule to look like a crucifix. Laminin has active domains for collagen binding, cell adhesion, heparin binding, and neurite outgrowth (PHD) fragment.²

It is recommended for use as a cell culture substratum at $1\text{-}2\text{ }\mu\text{g}/\text{cm}^2$. The optimal concentration will depend upon the cell type as well as the application or research objectives.

Reagent

Supplied at a concentration of approximately 1 mg/mL in 50 mM Tris-HCl, pH 7.5, with 150 mM NaCl. It is sterile-filtered using a $0.2\text{ }\mu\text{m}$ filter.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

The solution should be thawed slowly at $2\text{-}8\text{ }^{\circ}\text{C}$. If warmed too quickly, it may form a gel and cannot be reactivated for use.

Storage/Stability

Store unused portion in working aliquots at $-20\text{ }^{\circ}\text{C}$.

Procedure

Optimal conditions for attachment must be determined for each cell line and application.

1. Slowly thaw the laminin solution at $2\text{-}8\text{ }^{\circ}\text{C}$ to avoid the formation of a gel.
2. Dilute in a sterile balanced salt solution, or in sterile water, and coat culture surface with a minimal volume.
3. Incubate at $37\text{ }^{\circ}\text{C}$ for two hours
4. Wash 3 times with PBS and plate the cells.

Laminin coatings, such as laminin-coated cover slips, may be stored for approximately one month at $2\text{-}8\text{ }^{\circ}\text{C}$.

Do not use the product if discoloration or spider web formations appear on the surface of the coated material.

References

1. Timpl, R., et al., Laminin--a glycoprotein from basement membranes. *J. Biol. Chem.*, **254**, 9933-9937 (1979).
2. Kleinman, H. K., et al., Use of extracellular matrix components for cell culture. *Anal. Biochem.*, **166**, 1-13 (1987).

NDH,PHC 03/05-1

Sigma brand products are sold through Sigma-Aldrich, Inc.

Sigma-Aldrich, Inc. warrants that its products conform to the information contained in this and other Sigma-Aldrich publications. Purchaser must determine the suitability of the product(s) for their particular use. Additional terms and conditions may apply. Please see reverse side of the invoice or packing slip.