

Product Showcase

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All products are manufactured by Avanti® Polar Lipids and backed by the same quality standards and informed techniques. Because they're available from MilliporeSigma, ordering is easy, inventory is reliable and support is always within reach.

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- Natural and synthetic lipids
- Sphingolipids
- Sterols
- Fluorescent lipids
- Detergents
- Lipidomics
- Bioactive lipids
- Fatty acid modified lipids
- Headgroup modified lipids
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- Polymers and polymerizable lipids
- Cationic lipids (transfection)
- Neutral lipids
- Aurora® gold probes



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Polar Bear photo provided by: Kyriakos Kaziras



Equipment
Liposome Production Tools
Mini Extruder for LUV Preparation

The life science business of Merck operates as MilliporeSigma in the United States and Canada.

*Merck is the exclusive supplier of Avanti® Polar Lipids to customers outside the United States and Canada.

Avanti's Mini-Extruder for LUV Preparation

Convenient

- Prepare large, unilamellar vesicles (LUVs) by extrusion in an easy, rapid, and efficient manner.
- Design allows for the rapid cleaning of all wetted parts, reducing downtime between production of vesicles from different lipid species.
- Generate uniform populations of unilamellar liposomes without the use of solvents or detergents.
- Control vesicle size via polycarbonate membrane selection.

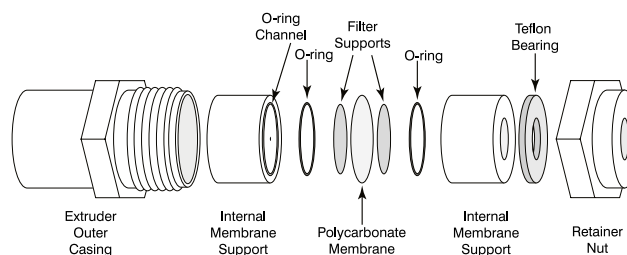
Complete set

- Mini extruder
- Heating block
- 2 o-rings
- 2 gas-tight syringes
- 100 polycarbonate membranes
- 100 filter supports



Durable and Affordable

- Constructed of stainless steel and PTFE.
- Guaranteed to give years of trouble-free service.
- Replacement parts are available from one source.
- A fraction of the price of a larger model

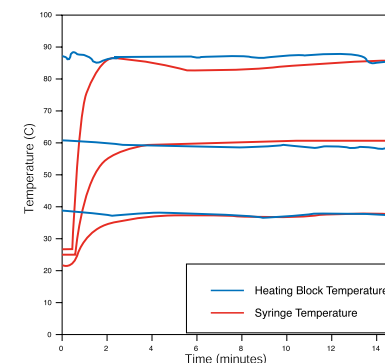
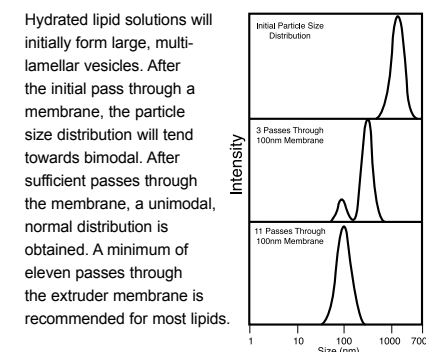


Flexible

- The optional heating block allows the extrusion of vesicles at elevated temperatures, which is critical for the successful production of vesicles from phospholipids with a phase transition temperature above room temperature.
- Generate unilamellar liposomes ranging from 30 nm–1 μ m when assembled with appropriate polycarbonate membrane.
- Useful for a wide variety of lipid compositions.
- Interchangeable with 250 μ L and 1 mL syringes.

Reliable

The particle size distribution of unilamellar vesicles prepared by extrusion is a function of the number of passes through the extruder membrane.



Placing the heating block assembly on a hot plate achieves rapid temperature control for lipids that have transition temperatures above room temperature.

Get Started at
[SigmaAldrich.com/Avanti](https://sigmaaldrich.com/Avanti)

Access technical notes and find procedures and protocols to guide your liposome preparation, transfection, and more.

You can also watch these short online videos about the mini extruder

- Introduction
- Assembly
- Extrusion technique
- Care