

Equipment

Liposome Production Tools Mini Extruder
for LUV Preparation

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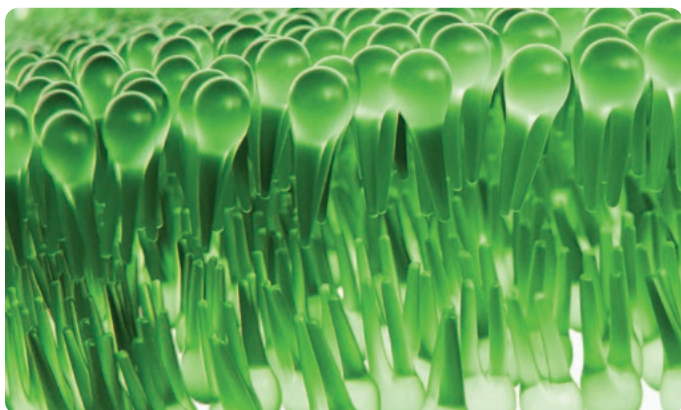
* Merck is the exclusive supplier of Avanti Research™ to customers in Canada.



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.

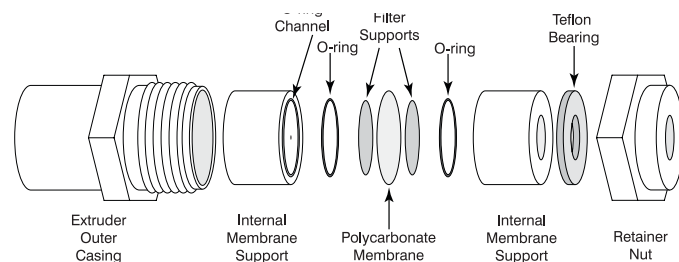


Complete set

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

Durable and Affordable

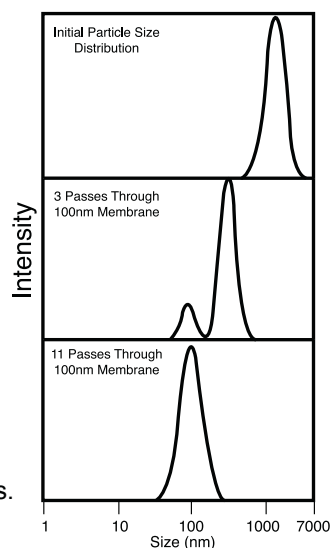
- Constructed of stainless steel and PTFE.
- Guaranteed to give years of trouble-free service.
- Replacement parts are available from one source.
- A fraction of the price of a larger model



Flexible

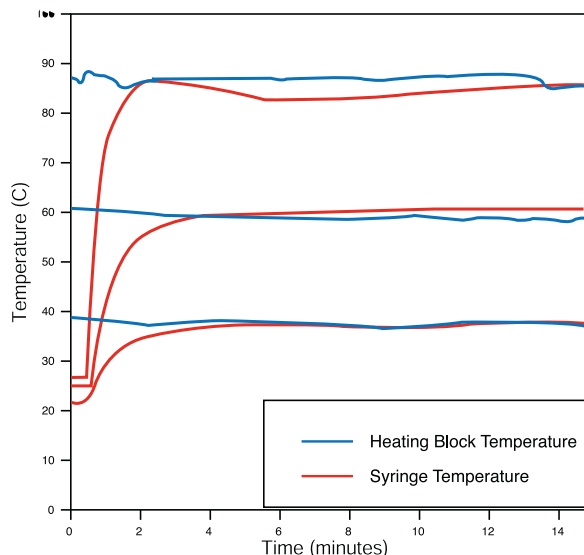
- The optional heating block allows the extrusion of vesicles at elevated temperatures, which is critical for the successful production of vesicles from phospholipids with a phase transition temperature above room temperature.
- Generate unilamellar liposomes ranging from 30 nm–1 μm when assembled with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

Hydrated lipid solutions will initially form large, multi-lamellar vesicles. After the initial pass through a membrane, the particle size distribution will tend towards bimodal. After sufficient passes through the membrane, a unimodal, normal distribution is obtained. A minimum of eleven passes through the extruder membrane is recommended for most lipids.



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.

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
- Extrusion technique
- Assembly
- Care

Product Showcase

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- Neutral lipids

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Polar Bear photo provided by: Kyriakos Kaziras