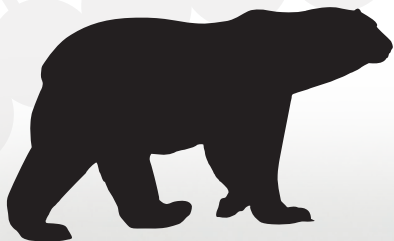


Avanti's Mini-Extruder for LUV Preparation

Convenient

- Prepare large, unilamellar vesicles (LUVs) by extrusion in an easy, rapid, & efficient manner
- Design allows for the rapid cleaning of all wetted parts, reducing "down-time" between production of vesicles from different lipid species
- Generate uniform populations of unilamellar liposomes without the use of solvents or detergents
- Vesicle size readily controlled by polycarbonate membrane selection

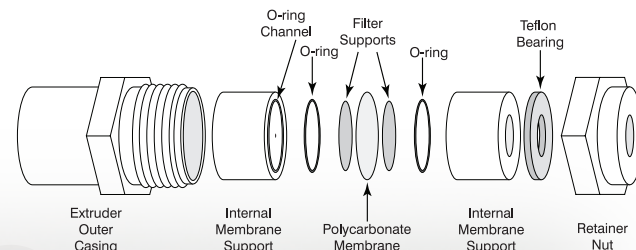


Affordable

- Available for a fraction of the cost of a larger extruder
- All parts/replacement parts are available from Avanti
- Complete set includes:
 - Mini-Extruder
 - Heating Block
 - 2 O-Rings
 - 2-Gas Tight Syringes
 - 100 Polycarbonate Membranes
 - 100 Filter Supports

Flexible

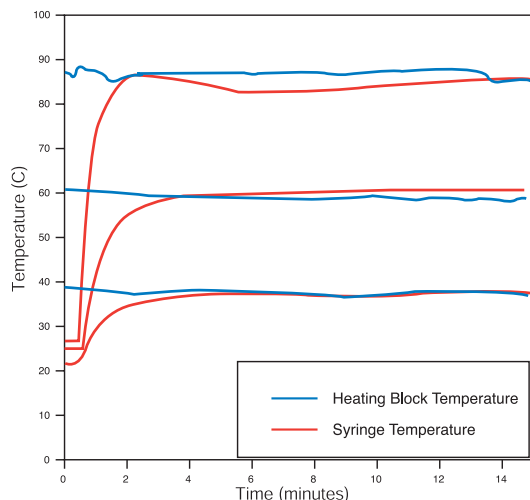
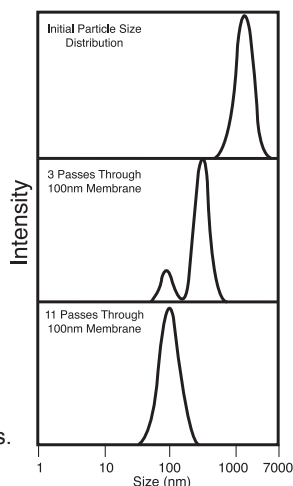
- Optional heating block allows the extrusion of vesicles at elevated temperatures, which is critical for the successful production of vesicles from phospholipids with a phase transition temperature above room temperature
- Generate unilamellar liposomes ranging from 30 nm – 1 μ m when assembled with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

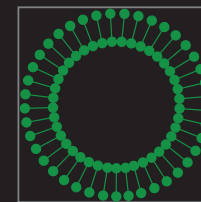
Hydrated lipid solutions will initially form large, multi-lamellar vesicles. After the initial pass through a membrane, the particle size distribution will tend towards bimodal. After sufficient passes through the membrane, a unimodal, normal distribution is obtained. A minimum of eleven passes through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



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



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