

# High Pressure Liposome Extruder

Liposome | Lipopolyplex | Sterile Filtration | Lab | Pilot | Manufacture

## Unique Benefits

The Genizer Extruder is designed to produce unilamellar populations of liposomes and lipopolyplex by the extrusion of a multilamellar liposome suspension. A multilamellar sample is forced repeatedly through polycarbonate filters with a defined pore size, and the smaller liposome 50nm-120nm with homogeneous size is produced.

- **Sanitary:** 316L Stainless Steel
- **Compatible:** Tri-clamp, NPT, UNF, Flange and custom fittings are available
- **Efficient:** micron pore supporting maximize the pressure and lower the contamination
- **Compatibility:** GMP and FDA compliant

Always Discount for Public Research



10ml Jacketed Liposome Extruder with Track-Etched Membrane

| Scale                     | Catalog No.                              | Maximum Pressure   | Dimension L×W×H(cm)/Weight(kg) | Membrane Selection |
|---------------------------|--|--------------------|--------------------------------|--------------------|
|                           | HandExtruder-1ml-RT                      | 150 psi            | 23×17×33/2 (jacketed)          | 30 nm              |
|                           | HandExtruder-1ml                         |                    | 23×17×13/2                     |                    |
| Test Scale<br>1-100mL     | GExtruder-10ml                           | 3,000 psi          | 23×13×25/4 (jacketed)          | 50 nm              |
|                           | GExtruder-5ml/min                        |                    | 10×10×8/1                      |                    |
|                           | GExtruder-100ml                          | 3,000 psi          | 23×20×32/7 (jacketed)          | 80 nm              |
|                           | GExtruder-50ml/min                       |                    | 12.5×12.5×9/2                  |                    |
| Pilot Scale<br>200-3000mL | GExtruder-800ml                          | 3,000 psi          | 25×25×37/20 (jacketed)         | 100 nm             |
|                           | GExtruder-400ml/min                      |                    | 18×18×10/5                     |                    |
| Production<br>3-10L       | GExtruder-3000ml                         | 3,000 psi          | 30×25×55/45 (jacketed)         | 200 nm             |
|                           | GExtruder-1500ml/min                     |                    | 30×25×25/21                    |                    |
| Customize<br>10L-50L      | GExtruder-10000ml                        | 3,000 psi          | 45×40×65/130 (jacketed)        | 400 nm             |
|                           | GExtruder-5000ml/min                     |                    | 45×40×30/90                    |                    |
|                           | GExtruder 1-50000ml<br>or Multi-Extruder | up to<br>5,000 psi | TBD (jacketed)<br>TBD          | 800 nm             |



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# High Pressure Liposome Extruder



HandExtruder



Jacketed Extruder



Online Extruder

## Standard Features

|                     |  |
|---------------------|--|
| Surfacing           | Electro-polish and inner Passivation                                     |
| Application         | Liposome   Lipopolyplex   Sterile Filtration   Lab   Pilot   Manufacture |
| Inlet type          | 1/2" or 1" Tri-Clamp or 9/16UNF  |
| Outlet type         | 1/2" or 1" Tri-Clamp or 9/16UNF  |
| Feed Reservoir      | SUS316 Cylinder or Online  |
| Collector Reservoir | SUS316 Cylinder or Online  |
| Product material    | 316L stainless steel   |
| Material standard   | Pharmaceutical Grade, FDA & GMP approvable                               |
| Warranty            | 1 year against any manufacturing defects                                 |

## Available Option

|                     |   |
|---------------------|---|
| Parts               | Tri-clamp, NPT, UNF, Flange and custom fittings are available |
| Customer            | Customer size for larger flow rate                            |
| Detector            | Pressure gauge, Pressure and Temp. transducer                 |
| Outlet type         | NPT, UNF, Flange and custom fittings are available            |
| Feed Reservoir      | 100ml, 200ml, 500ml, 1000ml Syringe, Cylinder                 |
| Collector Reservoir | or Online   |
| Product material    | Titanium (Resistant to strong acid and base)                  |

