Unique High Pressure Research Tools

The Barozyme[™] HT48

The Barozyme HT48, the newest member of PBI's Pressure Cycling Technology (PCT) Barocycler family of products, is a high throughput bench-top instrument designed for accelerated enzymatic digestion of proteins at high pressure. The Barozyme HT48 uses an airpressure-to-liquid-pressure intensifier system, with a pressure amplification ratio of 160:1, to reach an output pressure of 20,000 psi (~1.4 kbar or ~140 MPa). The Barozyme HT48 is capable of processing up to 48 samples at a time in six single-use BaroFlex 8-well Strips in the Barozyme Sample Carrier. Typical trypsin digestion times can be reduced from hours to minutes.



BaroFlex 8-well Strips

BaroFlex 8-well strips are used in the Barozyme HT48 (See Specification Sheet) for pressure-enhanced enzymatic digestion at 20,000 psi (~1.4 kbar or ~140 MPa). Only tubes and caps provided by PBI can be used in the Barozyme. Use of non-approved tubes will result in tube breakage and loss of sample under pressure.



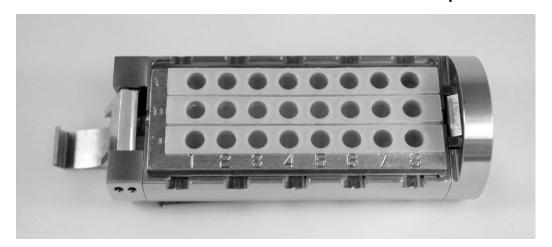
The Barozyme Sample Carrier

The stainless steel Barozyme Sample Carrier holds from 1 to 48 samples in up to six BaroFlex 8-well Strips (PBI Product #BF8WS-0006). The fully assembled carrier fits into the sample chamber for processing at 20,000 psi (~1.4 kbar or ~140 MPa).





Cassette with Tube Holder Plate and Three BaroFlex Strips in Place



Features & Benefits:

- Ideal for Accelerated Enzymatic Digestion of Proteins
- Uses Proprietary Pressure Cycling Technology (PCT)
- Operates at Optimum Pressure of 20,000 psi (~1.4 kbar or ~140 MPa)
- Choice of Run Times for Customizing Digestion Conditions
- Adjustable Chamber Temperature for Added Flexibility
- Uses Convenient "PCR-style" BaroFlex 8-well Strips (Cat # BF8WS-0006.).
- Process Up To 48 Samples at a Time
- Digestion Times Can Be Reduced from Hours to Minutes.
- Bench-top High Pressure System with Convenient User Interface
- Laptop with All Necessary Software is Provided with the System
- USB-powered Computer Interface.
- Standard 9mm Tube Spacing is Compatible with Standard Multichannel Pipettes, Robotic Liquid Handlers and 96-well Plate Centrifuge Rotors

Specifications Barozyme HT48*

- Operating Pressure 20,000 psi (~1.4 kbar or ~140 MPa)
- Minimum Air Pressure Required for Operation is 140 psi
- 24 VDC Power
- Approximate System Dimension 22" (W) X22" (D) X18" (H)
 - Pressure Module Size 20" (W) X 10" (D) x10" (H)
 - Chamber Module Size 20" (W) X10" (D) X13" (H)
 - Base Frame 21" (W) X21 (D) "X2" (H)
- Approximate Total System Weight < 105 lbs (Without Laptop)
 - Chamber Module 36 lbs
 - Pressure Module 55 lbs
- Minimum Recommended Bench Space 30" (W) X30"(D) X 25" (H)
- Recommended Bench Height 30"
- Internal Volume Sample Chamber 181 mL (11 in³)
- Operating Temperature Ambient to 60°C.
- PCT Settings at 5, 20, 60, 120 or 240 Cycles
- PCT Cycles Preset for 50 Seconds at High Pressure and 10 Seconds at Atmospheric Pressure, Per Cycle
- 1 Year Warranty (One Year and Four Year Extended Warranties are Available)

Hardware Required But Not Supplied (Sold Separately)

Air Compressor or Air Source (minimum 140 psi)

Set-up and Training Packages are Available

*For Research Use Only

