# How to Process ISOLUTE SLE+ Plates and Columns with Pressure+ 96 & 48 Positive Pressure Manifolds

Biotage® PRESSURE+ manifolds deliver positive pressure, parallel processing for 96 well plates and column formats. The systems utilize a consistent, uniform flow of positive pressure to move both low and high viscosity liquids through SPE plates and columns.

ISOLUTE SLE+ Supported Liquid Extraction plates and columns offer an efficient alternative to traditional liquid-liquid extraction (LLE) for bioanalytical sample preparation, providing high analyte recoveries, no emulsion formation and greatly matrix effects associated with biofluid analysis.



#### Processing I SOLUTE SLE+ Plates on the PRESSURE+ 96 Positive Pressure Manifold



- Turn adjustable flow control to zero. It is important that no pressure is in the system when the gasket comes into contact with the plate.
- 2) Load collection plate and ISOLUTE SLE+ plate onto tray
- 3) Load aqueous sample onto plate by pipette
- 4) Slide tray under manifold
- 5) Lower manifold onto plates by pressing the 2 rocker switches
- 6) Turn on the gas supply by turning the 'off' switch to the left
- Increase pressure using the adjustable flow control to 1-2 psi to initiate sample loading.
- 8) Once sample starts to load turn off gas supply and reset the adjustable flow to zero.
- 9) Wait 5 minutes
- 10) Lift manifold and slide sample tray out. Apply elution solvent to plate and wait 5 minutes
- 11) Slide tray back under manifold
- 12) Lower manifold on to plates by pressing the 2 rocker switches
- 13) Turn on gas supply by moving off switch to the left
- 14) Increase pressure and initiate flow using the adjustable flow switch and setting pressure at 1-2 psi until elution solvent begins to flow.
- 15) Once elution solvent flow has stopped, turn off gas supply and reset adjustable flow to zero.
- 16) If using multiple elution steps (as is sometimes required with SLE+ depending on sample size and format) repeat steps 10 to 15



## Using ISOLUTE SLE+ Columns on PRESSURE+ 48 Positive Pressure Manifold

1)



- Turn adjustable flow control to zero. It is important that no pressure is in the system when the gasket comes into contact with the columns.
- 2) Load collection tubes and ISOLUTE SLE+ columns onto rack.
- 3) Load aqueous sample onto column by pipette.
- 4) Slide tray under manifold.
- 5) Lower manifold onto columns by pressing the 2 rocker switches
- 6) Turn on the gas supply by turning the 'off' switch to the left
- 7) Increase pressure using the adjustable flow control to 1-2 psi to initiate sample loading.
- 8) Once sample starts to load turn off gas supply and reset the adjustable flow to zero.
- 9) Wait 5 minutes
- 10) Lift manifold and slide sample tray. Apply elution solvent to columns and wait 5 minutes
- 11) Slide tray back under manifold
- 12) Lower manifold onto columns by pressing the 2 rocker switches
- 13) Turn on gas supply by moving 'off' switch to the left
- 14) Increase pressure and initiate flow using the adjustable flow switch and setting pressure at 1-2 psi until elution solvent begins to flow.
- 15) Once elution solvent flow has stopped, turn off gas supply and reset adjustable flow to zero.
- 16) If using multiple elution steps (as is sometimes required with SLE+ depending on sample size and format) repeat steps 10 to 15

## Features and Advantages of the Pressure+ Positive Pressure Manifold

- Highly uniform flow from sample to sample for SPE, Protein Precipitation and Supported Liquid Extraction
- Improved reproducibility, accuracy and extraction efficiency, even with viscous samples
- Parallel processing for increased sample throughput
- Easy to set-up and use with just a gas source
- Universal designs accommodate all 96 well plates, or 1 mL, 3 mL and 6 mL SPE columns
- Built-in safety features ensure ease of use and safe operation

## Ordering information

Part number	Description	Quantity
820-0200-P01	ISOLUTE SLE+ 200 µL supported liquid extraction plate	1
820-0400-P01	ISOLUTE SLE+ 400 µL supported liquid extraction plate	1
820-0140-C	ISOLUTE SLE+ 1 mL Sample Volume 1	30
PPM-96	PRESSURE+ 96 Positive Pressure Manifold 96 Well. Includes 1 x 1 mL 96 well collection plate, 1 x 2 mL 96 well collection plate, 1 x 10 mL 24 well collection plate (waste plate), 96-column sealing gasket, gas supply adapter kit (6' of 1/8" i.d. polyethylene tubing and 1/8" and 1/4" NPT connectors), User Manual CD	1
PPM-48	PRESSURE+ 48 Positive Pressure Manifold 48 Well. Includes Sealing gasket 48 position, gas supply adapter kit(6' of 1/8" i.d. polyethylene tubing and 1/8" and 1/4" NPT connectors), Waste bin rack, Waste bin inserts, User Manual CD.  Racks must be ordered separately.	1

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## Distributors

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