Protocol

Microlute™ PLR

Removal of Phospholipids from Plasma & Serum

Efficiently and reproducibly remove phospholipids from plasma and serum samples with the Microlute™ PLR 96-well plate or cartridge.

1. Load

Dispense 50 – 200 µL of plasma or serum samples into each well.

2. Crash

Add crash solvent at 3 - 4 times the sample volume to the well to precipitate proteins.

- Recommended solvent
- 1% Formic acid in acetonitrile

Alternative Solvent: 1% Formic acid in methanol

3. Mix

Mix the two solutions for complete protein precipitation before elution.

Option 1 - Aspiration
(Recommended):
Aspirate up and down with manual, automatic pipette or automatic liquid handling system 3 – 4 times.

Option 2 - Vortexing
High speeds for mixing is recommended for optimal homogenous protein precipitation whilst ensuring no splashing and risk of contamination occurs between wells.

4. Elute

Compared to traditional loose-filled products, Microlute™ PLR does not require high vacuum or pressure to efficiently and uniformly elute samples*.

For vacuum:
Apply less than -0.1 bar of vacuum for 3 minutes or until sample has eluted.

For positive pressure:
Apply less than 3 PSI for 3 minutes or until sample has eluted.

Note: If phospholipid removal or clean-up is not sufficient, reduce vacuum or pressure to slow down flow.

*Higher elution vacuums or pressures can lead to inefficient phospholipid removal and can increase the risk of breakthrough of other matrix components such as proteins into your sample.

5. Analyse

Directly inject the eluent onto the LC, dilute prior to injection or evaporate eluent down to reconstitute into a more suitable solvent for analysis before injecting.

Technical Support

Email: technical@porvairsciences.com
Phone: +44 1978 661144

Sales

Email: int.sales@porvairsciences.com
Phone: +44 1978 661144

Learn More

www.microplates.com/microlute