



DPX[®] Tips for Automated SPE with HybridSPE[®] Technology

Extraction in Seconds

DPX stands for Dispersive Pipette Extraction, a patented technology that introduces the benefits of solid phase extraction into a revolutionary, easy-to-use pipette tip. This device is unique from all other SPE devices because HybridSPE sorbent material is loosely contained within a tip. The HybridSPE material inside is a patented sorbent designed for selective retention and removal of endogenous phospholipid interferences from biological matrices for LC-MS or LC-MS/MS analysis.

Dispersive pipette extraction provides an INTip solution for complete sample preparation that can be easily automated. The loose sorbent mixes with a sample solution during aspirate and dispense steps and enables a highly efficient interaction of the sorbent and analyte of interest for accurate downstream analysis. This technology is ideal for bind – wash – elute and/or cleanup protocols.

The unique mixing technique provides numerous advantages over traditional SPE formats:

| | Dispersive Pipette Extraction | SPE Cartridge | 96-Well plate |
|-------------------------|-------------------------------|---------------|---------------|
| Customization | ✓ | ✗ | ✗ |
| High efficiency | ✓ | ✗ | ✗ |
| Low sample volumes | ✓ | ✗ | ✓ |
| Reduced solvent volumes | ✓ | ✗ | ✓ |
| Scalable Process 1-96 | ✓ | ✗ | ✗ |
| Automation | ✓ | ✗ | ✓ |
| No hardware required | ✓ | ✗ | ✗ |

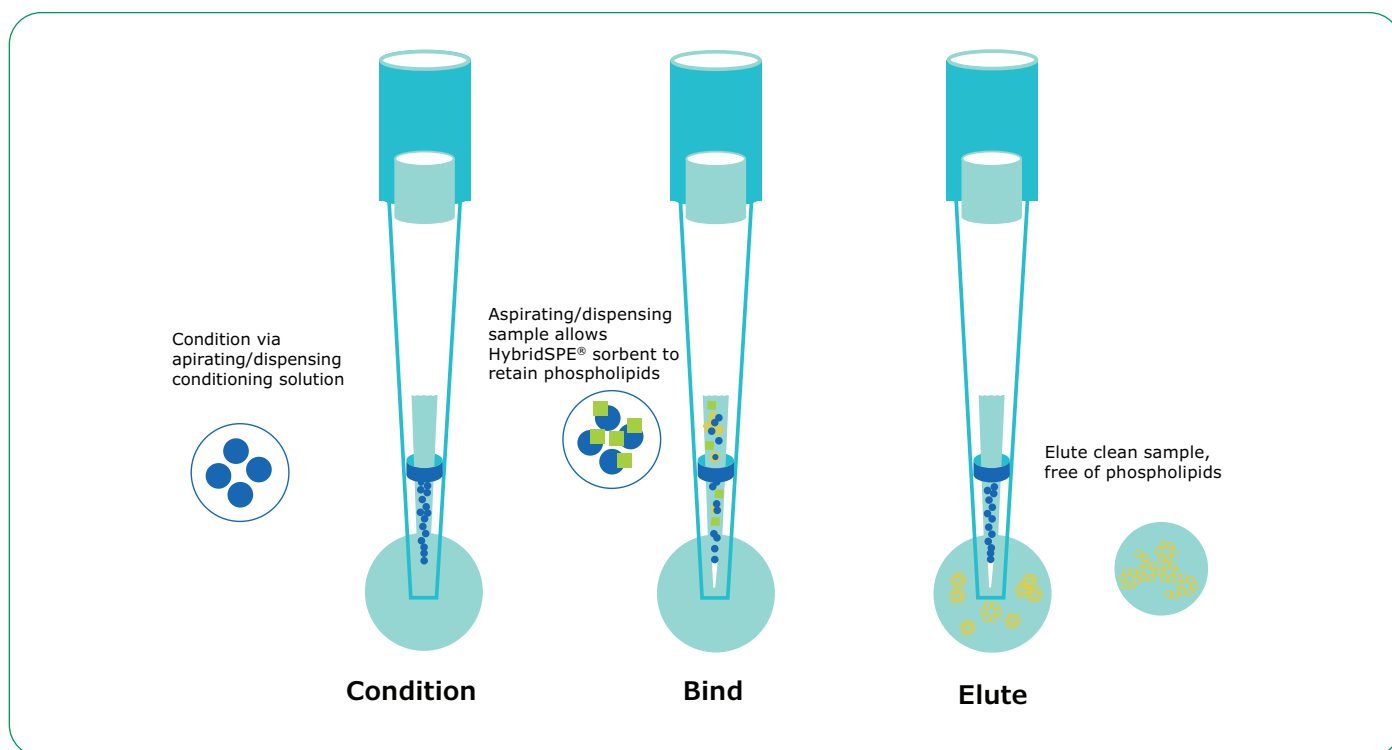
In this simple technique, biological plasma or serum is first subjected to protein precipitation via the addition and mixing of acidified acetonitrile. Precipitated proteins are then removed by centrifugation and the resulting supernatant is extracted using the HybridSPE[®] DPX tip which acts as a chemical filter that specifically targets the removal of endogenous sample phospholipids.

The phospholipid retention mechanism is based on a highly selective Lewis acid-base interaction between the proprietary zirconia ions functionally bonded to the HybridSPE[®] stationary phase and the phosphate moiety consistent with all phospholipids. The resulting eluent is ready for immediate LC-MS or LC-MS/MS analysis.

Automated SPE with HybridSPE® DPX Tips

Extraction in Seconds

HybridSPE® Sample Prep Workflow Using DPX® Tips



What size tips do I need?

| HybridSPE® Sample and PPT Agent Guidelines | | |
|--|------------|------------|
| | 30 mg tips | 50 mg tips |
| Plasma/serum | 30-100 µL | 100-300 µL |
| Precipitating agent | 90-300 µL | 300-900 µL |

Ordering Information

| Cat. No. | Product Description |
|----------|---|
| 52973-U | HybridSPE® DPX® tip, 30 mg, Tecan® 200 uL (96-tip box) |
| 52974-U | HybridSPE® DPX® tip, 50 mg, Tecan® 1 mL (96-tip box) |
| 52977-U | HybridSPE® DPX® tip, 30 mg, Hamilton® 300 uL (96-tip box) |
| 52978-U | HybridSPE® DPX® tip, 50 mg, Hamilton® 1 mL (96-tip box) |
| 52979-U | HybridSPE® DPX® tip, 30 mg, Integra 300 uL (96-tip box) |
| 52980-U | HybridSPE® DPX® tip, 50 mg, Integra 1250 uL (96-tip box) |
| 52981-U | HybridSPE® DPX® tip, 30 mg, Universal 1 mL (96-tip box) |
| 52982-U | HybridSPE® DPX® tip, 50 mg, Universal 1 mL (96-tip box) |

