

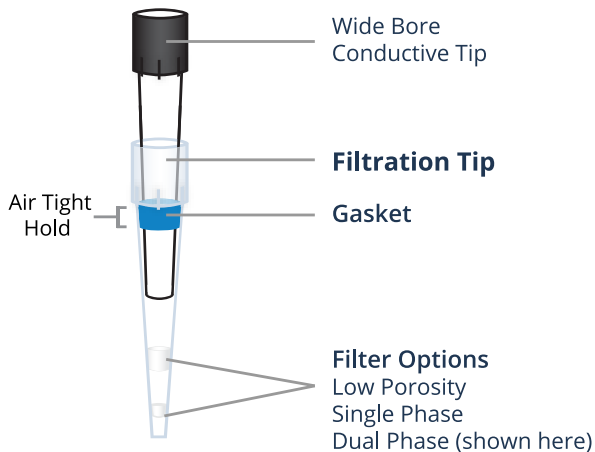
TIP-ON-TIP TECHNOLOGY



Technology Overview

Tip-on-Tip (ToT) Technology was designed to promote the simplification and automation of complex sample preparation. ToT has two main methodologies: ToT Filtration and ToT SPE. This technology provides a fast, automated INTip solution for numerous applications.

ToT Filtration



ToT Filtration combines a conductive wide bore top tip with a bottom Filtration tip to provide an automated alternative to traditional filtration/centrifugation. This methodology is ideal for high-throughput online protein precipitation and filtration, β -glucuronidase removal, or any other particulate removal.

Low Porosity

High efficiency sub-micron matrix filtration including urine, blood, and serum.

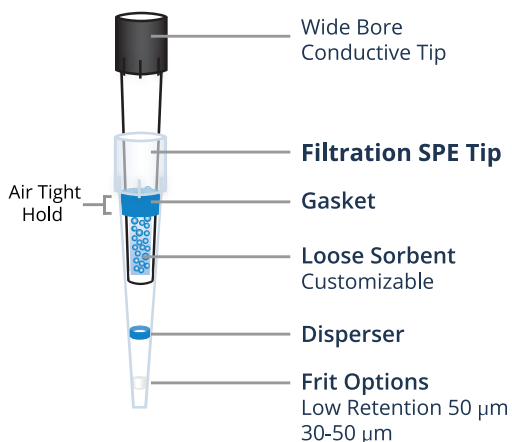
Single Phase

Minimal dead volume ideal for small volume blood and serum protein precipitation applications.

Dual Phase

Two filters in series provide maximum filtration without clogging for higher volume blood and serum protein precipitation applications.

ToT SPE



ToT SPE combines a top conductive wide bore tip with a bottom Filtration SPE tip. The Filtration SPE tip includes a disperser for optimal dispersive solid phase extraction conditions. ToT SPE is ideal for applications that require specific incubation conditions between sorbent and sample solution prior to extraction.

Low Retention 50 μ m

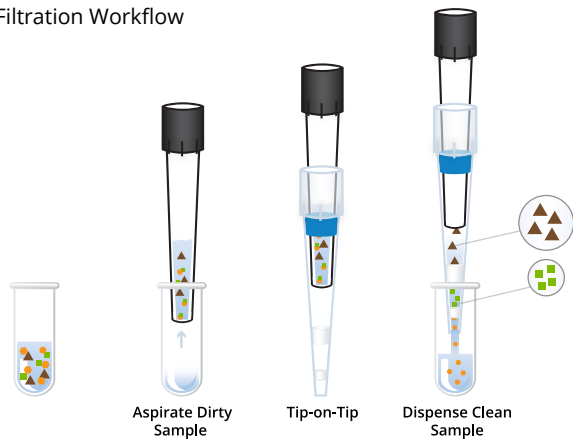
Low retention frit promotes minimum dead volume and maximum flows. Ideal for sorbents greater than 50 μ m in size.

Single Phase 30-50 μ m

Ideal for sorbents in the 30-50 μ m particle size range.

ToT Filtration Workflows

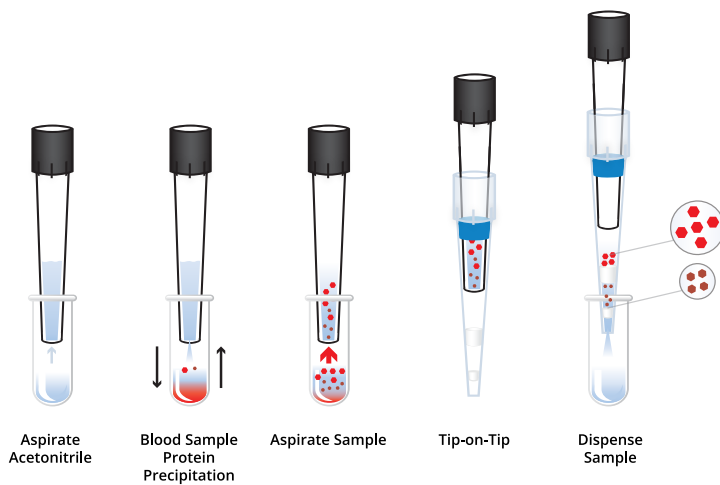
Simple Filtration Workflow



ToT Simple Filtration Application Advantages

- No positive pressure/vacuum manifold
- Could be utilized for: β -glucuronidase removal in urine, phospholipid removal, pharmaceutical applications for complex delivery systems like nanoparticles
- Low cost
- Extend LC Column life

Protein Precipitation Workflow



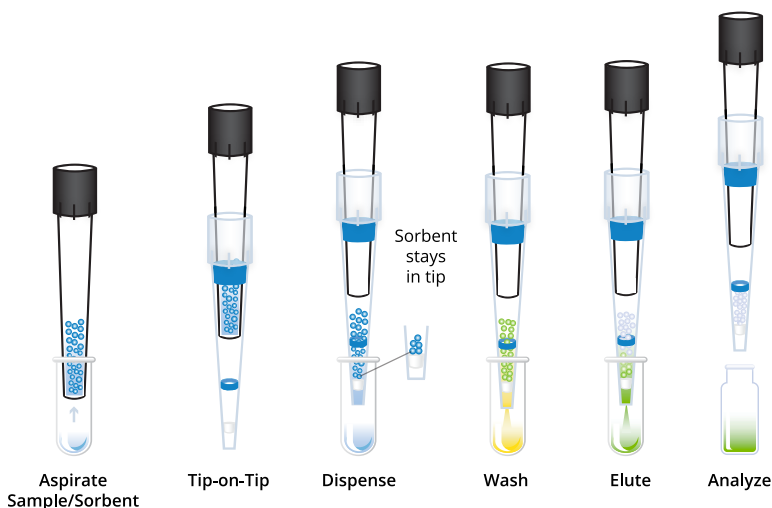
ToT Protein Precipitation Application Advantages

- < 5 minutes / 96 samples
- Could be utilized for: clinical blood applications, gelatin removal from drug formulations, or processing cell lysates
- Eliminate manual steps such as vortex mixing and centrifugation

Ordering Info:

DPX Filtration Tips are available in a variety of styles including low porosity (<1 μm) single and dual phase. These tips are available for Hamilton Robotics systems.

ToT SPE Workflow



Application Advantages

- Compatible with a variety of sorbent chemistries
- Completely customizable
- Could be utilized for: immunoaffinity or antibody purification, small molecule drug discovery, DMPK

Ordering Info:

DPX Filtration SPE Tips are available in two styles: Low Retention and Single Phase. Sorbent is not included with tip purchase. These tips are available for Hamilton Robotics systems.

CUSTOM
Workflow Solutions

Our team of application scientists supports custom method development to help you seamlessly integrate our products into your workflow.