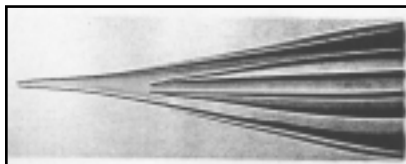




A Variety of Tips to Suit Your Application

Ask us about custom orders!

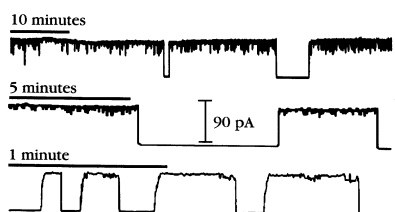
Wide-bore and narrow-bore PicoTips™ can be nested to create versatile, ultra-low volume ESI emitters. Here, a 30 µm tip fabricated from 360 µm OD tubing has been inserted into a 15 µm tip made from 450 µm ID (670 OD) fused silica tubing.



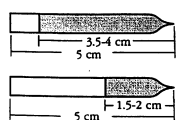
Patented Multi-layer Conductive Coatings

New Objective uses a patented (U.S. Patent 5,788,166), multi-layer coating process. Our pure gold layer is overcoated with an inert, electrochemically stable dielectric layer, locking the gold into place. The resulting coating has excellent resistance to ESI solvent exposure and exceptional electrochemical stability. To try and improve coating performance, other manufacturers increase the mechanical durability of the gold layer by introducing alloy or inter-layer metals. During handling the coating may appear to be more durable, but it may not yield improved ESI performance. These alloy and inter-layer metals can actually reduce the coating's electrochemical stability resulting in coating degradation at the tip.

Stability With Stop/Start Performance

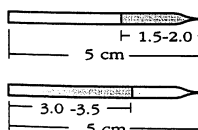


The figure on the left shows the stability of signal at three time scales. The modulation in current is due to turning the spray voltage on and off. Note how the ion current returns to its former level. This tip was sprayed without failure for over 3 hours and was "retired" still functional. The total ion current is (through 3 RF-only quadrupoles) from a 360, 50 (ID/OD) needle with a 5 µm ID tip, operating at 60 nL/min spraying 20 µM Ubiquitin in 2% HoAC.



Glass Pico Tip Standard Dimensions:

1.0 mm OD Tubing: ca. 5 cm long, coating length 3.5 to 4 cm.
1.0 mm Tips are compatible with Micromass Systems
1.2 & 1.5 OD Tubing: ca. 5 cm long, coating length 1.5 to 2 cm
1.2 mm Tips are compatible with Protana (PAC), Bruker, & PE BioSystems



Fused Silica Pico Tip Standard Dimensions:

Tip-end coating:
Tip length: ca. 5 cm long, coating length 1.5 to 2 cm.
Distal-end coating:
Tip length: ca. 5 cm long, coating length 3 to 3.5 cm from distal end.

Select the right tip for your mass spectrometer

For optimal results - and without the need of additional equipment - some mass spectrometers require a specific size emitter. The most common systems and their respective emitters are:

Choose a Tip with a Tubing O.D. of 1.2 mm for:

ABI Mariner™/QSTAR®

Bruker Nanospray™

Protana NanoES Source

Thermo Finnigan Nanospray Ion Source

Choose a Tip with a Tubing O.D. of 1 mm for:

Micromass® ZSpray™ NanoFlow™

PicoTip™ Introduction Kits

At New Objective we realize that choosing the best emitter for low-flow rate ESI can be very confusing. To help you determine which tip is best for a given application we have put together a number of kits, each with a variety of tip sizes to make your decisions easier.

Glass Tip Assortments

Part #	Description		
GLASSKIT-10-CE	Assortment of coated tips fabricated from 1.0 mm OD tubing. Suitable for use in Micromass instruments.		
Includes:	Tubing Size (OD/ID mm)	Tip Size (µm)	Quantity
Econo10	1.0/0.58	1	5 tips
BG10-58-2-CE	1.0/0.58	2	5 tips
BG10-78-4-CE	1.0/0.78	4	5 tips

Part #	Description		
GLASSKIT-12-CE	Assortment of coated tips fabricated from 1.2 mm OD tubing. Suitable for use in Protana, PE Biosystems, Bruker and others.		
Includes:	Tubing Size (OD/ID mm)	Tip Size (µm)	Quantity
Econo12	1.2/0.69	1	5 tips
BG12-69-2-CE	1.2/0.69	2	5 tips
BG12-94-4-CE	1.2/0.94	4	5 tips