



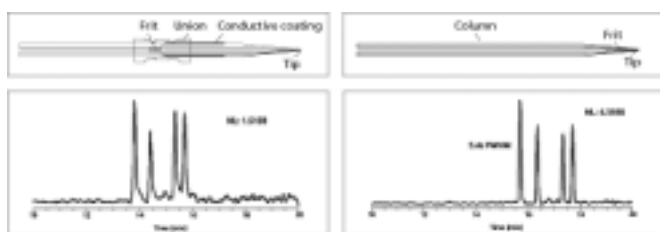
## PicoFrit Columns



### PicoFrit Benefits:

- Eliminates band broadening
  - Sprays directly from column to inlet
  - Minimizes post-column loss
  - Integral frit greatly reduces tip clogging
  - Robust performance compatible with automated systems
  - High-resolution separations yield femtomole sensitivity
- \*Frit material is borosilicate glass; silica available on a custom basis.

### The PicoFrit Advantage



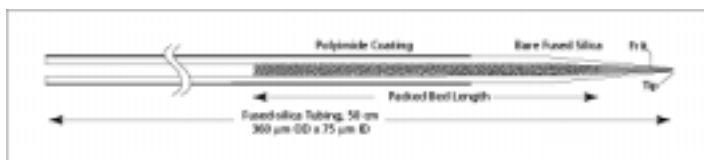
Standard Column Coupled with a Tip

PicoFrit™ Column

Spraying directly off the column boosts the performance of your mass spectrometer compared to that provided by a column attached to a tip. Less time spent making connections increases efficiency. That's the PicoFrit advantage.

- Ion chromatograms for full-scan MS data of 4 angiotensin variants at 25 fmol injected on column
- The chromatogram at left was obtained using a C18-packed column coupled to a coated emitter with a union
- The chromatogram at right was obtained using a C18-packed PicoFrit column (75  $\mu\text{m}$  OD/15  $\mu\text{m}$  ID)
- The PicoFrit column yielded better peak shape with decreased peak width, resulting in higher sensitivity

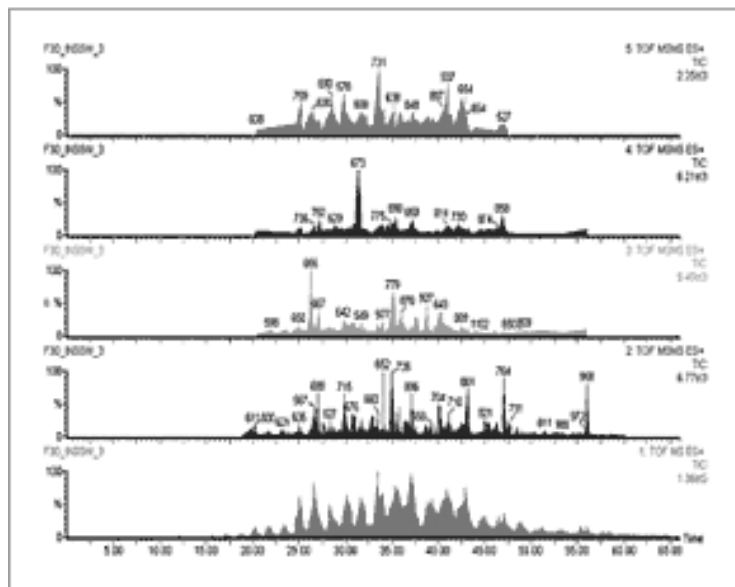
### PicoFrit Specifications



- Column IDs 75  $\mu\text{m}$  and 50  $\mu\text{m}$ , tip IDs of 15  $\mu\text{m}$  and 10  $\mu\text{m}$
- Packed with a variety of high-performance, reverse-phase, HPLC packings
- Short columns (1 cm) for sample concentration/desalting procedures
- Medium columns (5 cm) for rapid-gradient LC-MS
- Long columns (10 cm) for gradient LC-MS
- Biphasic columns for shotgun digests

### The PicoFrit Robustness

The study of global proteomics requires robust performance on a 24/7 basis. With the right sample preparation, PicoFrit® columns provide high predictability without compromising sensitivity.

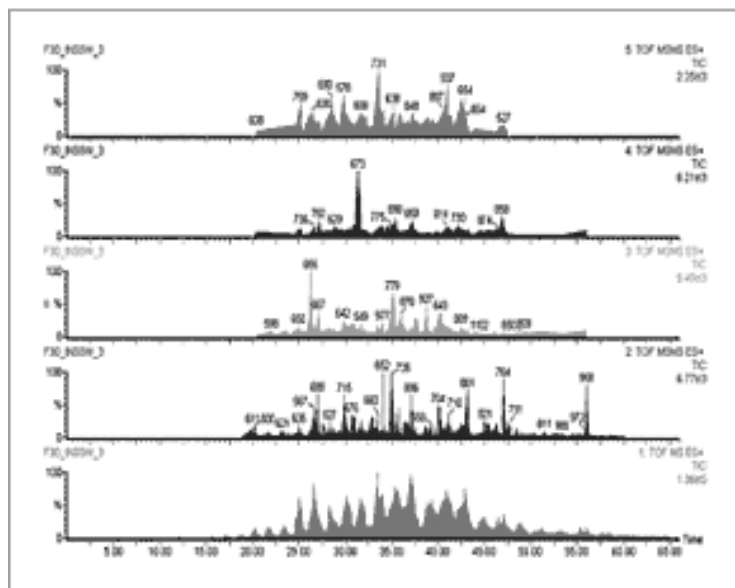


### Injection #31 - DAY TWO

Plasma membrane challenged with insulin

In gel digestion of slice no. 30 of 64

75  $\mu\text{m}$  4x10 cm C18 PicoFrit® column with 300  $\mu\text{m}$ ,  
1 mm C18 Trap Cartridge on Micromass® Q-ToF™



### Injection #881 - ONE MONTH LATER

Smooth endoplasmic reticulum, aqueous phase

In gel digestion of slice no. 45 of 92

Over 30 days of continuous, 24/7 operation