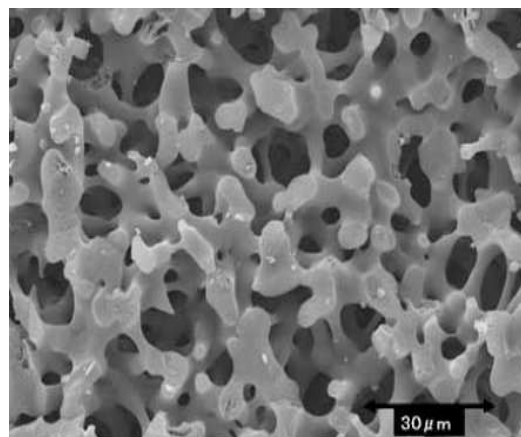


## Monolithic silica extraction tips (MonoTip™ C18) for sample preparation

MonoTip™ pipette tips are designed for the purification and enrichment of femtomole to micromole levels of peptides and proteins prior to MALDI-MS and LC-MS analyses. Monolithic silica consists of a double pore structure having continuous through-pores and silica skeletons which have meso-pores. Silica skeletons make a network structure as shown on the right. The unique monolithic silica structure contributes to low pressure-drop and strong analyte-to-surface interactions. In MonoTip™, the monolithic silica is directly attached to the inner surface of the 10µL tip (used for small sample volumes) and 200µL tips (used for larger sample volumes).



### MonoTip™ C18

Monolithic silica properties and chemical modification

|                                      |                                  |
|--------------------------------------|----------------------------------|
| Silica type                          | : High purity sol-gel silica gel |
| Specific surface area                | : 200m <sup>2</sup> /g           |
| Through pore size                    | : 10~20µm                        |
| Meso pore size                       | : 20nm                           |
| Bonded phase                         | : Octadecyl group                |
| Carbon load                          | : 12%                            |
| Tip volume                           | : 200µL                          |
| Sample capacity                      | : 100µg (Angiotensin II)         |
| Application scope (Molecular weight) | : ~40,000                        |



### MonoTip™ mini C18

Monolithic silica properties and chemical modification

|                                      |                                  |
|--------------------------------------|----------------------------------|
| Silica type                          | : High purity sol-gel silica gel |
| Specific surface area                | : 200m <sup>2</sup> /g           |
| Through pore size                    | : 20~30µm                        |
| Meso pore size                       | : 15nm                           |
| Bonded phase                         | : Octadecyl group                |
| Carbon load                          | : 12%                            |
| Tip volume                           | : 10µL                           |
| Sample capacity                      | : 5µg (Angiotensin II)           |
| Application scope (Molecular weight) | : ~5,000                         |



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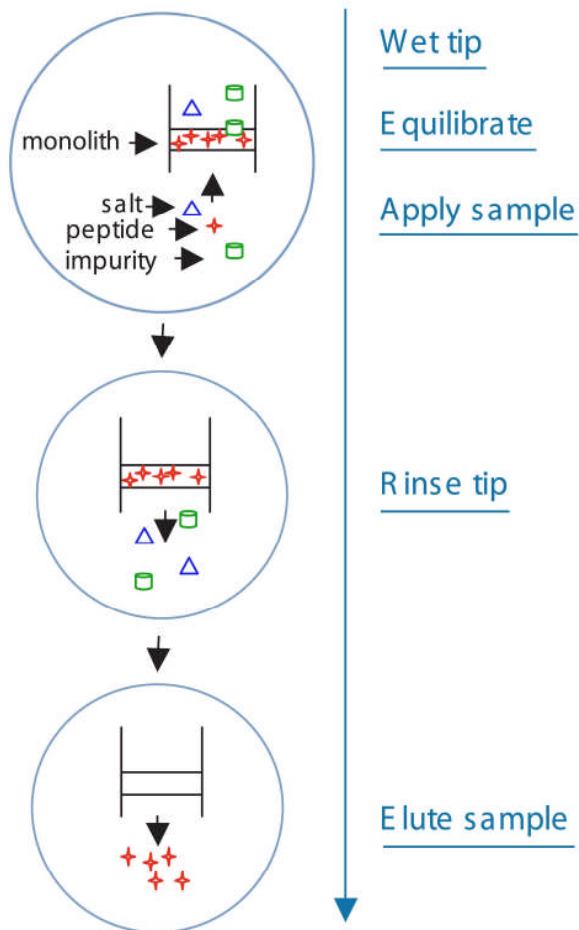
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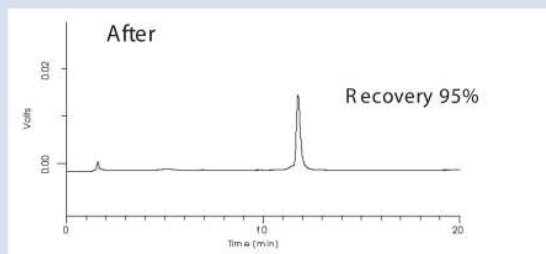
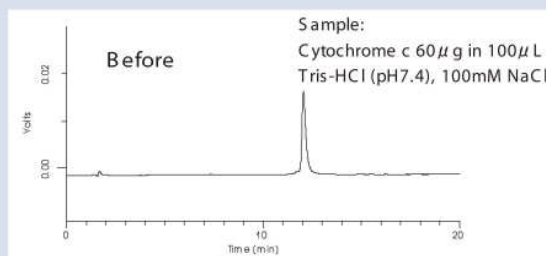
## Features

- : Faster sample preparation
- : Low sample loss
- : No contamination from monolithic silica
- : Large sample capacity

## Scheme of removal salt, concentration



## High recovery with MonoTip™ C18



### Analytical conditions

Column: Inertsil® WP300 C18 (150 X 2.1mm I.D.)  
 Elution: A: water (0.1%TFA)  
 B: Acetonitrile/water=90/10 (0.1%TFA)  
 A/B = 80/20-(20min)-40/60  
 Flow rate=0.3mL/min  
 Injection: 5 µ L  
 Detector: UV280nm



## Ordering Information

| Description       | Tip Volume | pcs           | Cat. No.   |
|-------------------|------------|---------------|------------|
| MonoTip™ C18      | 200µL      | 8 pcs         | 5010-21001 |
|                   |            | 96 well plate | 5010-21000 |
| MonoTip™ mini C18 | 10µL       | 8 pcs         | 5010-21201 |
|                   |            | 96 well plate | 5010-21200 |

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