

## NanoPak-C pipette tips

### Product Description

NanoPak-C pipette tip clean-up is a highly effective method for protein and peptide purification, particularly before LC/MS analysis. NanoPak-C tips are ideal for offline desalting peptide samples, offering a convenient and efficient way to remove contaminants. These tips effectively eliminate contaminants like salts, lipids, and other matrix components that can obscure the target analytes, leading to inaccurate or unreliable results. By removing interfering substances, the sensitivity of the mass spectrometer is enhanced, allowing for the detection of lower protein concentrations. Cleaner samples result in less ion suppression and better peak shapes, producing more accurate and reproducible data.

### Contents

	Item	SKU no	Aspiration volume	Average time required for extraction
<b>Dispersive tips</b>	1ml,30mg	SM-11-MG-23-RR-29	950 ul	2.5 min
	1ml,50mg	SM-11-MG-25-RR-29	940 ul	3 min
	200ul,6mg	SM-02-MG-16-RR-29	170 ul	1.5 min
	200ul,10mg	SM-02-MG-21-RR-29	150 ul	2 min
<b>Monolith tips</b>	1ml, 40mg	FM-11-MG-24-RR-29	910 ul	2.5 min
	1ml, 20mg	FM-11-MG-22-RR-29	930 ul	2 min
	200ul, 5mg	FM-02-MG-15-RR-29	120 ul	1.5 min
	200ul, 2mg	FM-02-MG-12-RR-29	140 ul	1 min

### Important points to consider before you use NanoPak-C micropipette tips

- Select the appropriate pipette tip based on the size and nature of your sample.
- Consistent and accurate pipetting is crucial for optimal performance.
- Properly equilibrate the tip with the equilibration solvent to ensure optimal binding and recovery of peptides/proteins.
- Apply gentle pressure when conditioning, loading, washing, and eluting your sample to prevent damage to tips and loss of sample.
- Avoid introducing air bubbles during aspiration as it can reduce recovery.
- Avoid overloading the pipette tip with excessive sample volume, as this can lead to poor recovery.
- While the pipette tips can be reused, it's generally recommended to use a fresh tip for each sample to avoid cross-contamination.
- Prevent the evaporation of solvents during the desalting process, as this can affect sample concentration and recovery.

### Required Solvents

- Wetting/conditioning solvents: 100% ACN
- Equilibration solvents: 0.1% TFA or 0.1% FA in water
- Wash solvents: 0.1% TFA or 0.1% FA in water
- Elution solvents 0.1% TFA or 0.1% FA in 50% ACN

## **How to use**

Set the pipettor to the appropriate aspiration volume as mentioned in the above table.

Attach the pipette tip. Aspirate the required volume of solvent/sample and discard it.

Use the following steps for optimal binding and recovery of peptides/proteins.

### **1. Condition the tip**

Wet the tip by aspirating and dispensing/discarding the conditioning solution 4-5 times.

### **2. Equilibrate the tip**

Equilibrate the tip by aspirating and dispensing/discarding the equilibration solution 3-4 times.

### **3. Sample Loading**

Load peptide sample onto the equilibrated tip by repeated aspiration and dispensing.

### **4. Washing**

Aspirate, wash solvent, and discard. Repeat 2-3 times.

### **5. Elution**

Elute peptide/protein by repeated aspiration and dispensing with elution solvent. Collect the eluate in a clean tube.