

Zip-Tip purification

Guidelines for sample preparation

(How to protect your samples from contamination with keratin)

- **Clean your bench**
- **Try to avoid contact of samples and solutions with dust, skin or hair**
- **Wear gloves at all times**
- **All reagents should be prepared fresh**
- **Use ultra-pure water for all solutions**

SOLUTIONS

Buffer A:

98% MilliQ-H₂O
2% CH₃CN
0.1% TFA or FA

Buffer B:

65% CH₃CN
35% MilliQ-H₂O
0.1% TFA or FA
Use HPLC-grade Acetonitrile and FA, and MilliQ-H₂O.

1. Acidify sample (Vol 20-100 µl) by adding TFA (recommended) or FA (0.1 % final concentration)
2. ZipTip equilibration
 - Aspirate **Buffer B** (10 µl) into the tip. Dispense into waste. Repeat.
 - Aspirate **Buffer A** (10 µl) into the tip. Dispense into waste. Repeat.
3. Bind and Wash the peptides/proteins
 - Take 10 µl of sample. Aspirate and dispense the sample (repeat 10 x). Dispense.
 - Wash with **Buffer A** (10 µl). Dispense into waste. Repeat 4x.
4. Elution
 - Elute with 10 µl with **Buffer B** in new tube.
 - dry in vacuum centrifuge
 - resuspend in 10 µl **Buffer A**.

Or sample spotting on a MALDI

4. Elution and spotting on MALDI plate
 - Pipette 1-2 µl of matrix (alpha-cyano) in **50 % water, 50 % acetonitrile, 0.5 % TFA**.
 - Spot the sample on MALDI target. Leave for 10 minutes to dry.