

Sample desalting for mass spectrometry

Revised June 2011 by Lori.

Equipment:

C18 Spec tips, Agilent, cat #A57203

p200 and p1000 pipetmen

You can use a p1000 pipetman to wash and elute spec tips. For each wash, add the required volume into the top of the spec tip, then press a p1000 tip firmly into the spec tip and depress the plunger to drive the liquid through the device.

1. Wet the spec tip by pushing through 200 μ l of HPLC grade methanol.
2. Wash the spec tip with 3 x 200 μ l 5% acetonitrile/5% formic acid.
3. If your sample does not already contain an acidic ion pairing agent, add formic acid to your sample to 5%. NOTE: Do not pipet concentrated formic acid with plastic pipet tips; use glass.
4. Push the sample through the spec tip. You may pass the sample through twice, washing with 5% acetonitrile/5% formic acid between each pass, if you would like to maximize binding.
5. Wash with 3 x 200 μ l 5% acetonitrile/ 5% formic acid.
6. Elute with 2 x 100 μ l 80% acetonitrile/5% formic acid.
7. Speed vac the sample to dryness.

Reagents:

HPLC grade methanol

5% HPLC grade acetonitrile/5% formic acid

80% HPLC grade acetonitrile/5% formic acid

Make solutions with MilliQ or better water. NOTE: Do not pipet concentrated formic acid with plastic pipet tips; use glass.