ZipTip

ZipTip® C_{18} & C_4 (Millipore) are micro-scale reverse phase column-like (tips). They are used to concentrate, desalt, and purify peptide and protein samples. Their binding and eluting properties are similar to normal reverse phase column.

C_{18} Zip Tips are more hydrophobic and are preferably used for peptide, while C_4 Zip Tips can be used for both proteins and peptides (especially hydrophobic peptides).

Protocol:

1- Wetting step:
Set pipette to 10 µl, place the zip tip and aspirate full volume **75%** acetonitrile (ACN). Away from the ACN tube pipet in and out several times (~ 5x). Repeat this step ≥5 time.

2- Equilibration step:
As in previous step pipet in and out several time 0.1% trifluoroacetic acid (TFA) solution.

3- Peptide binding step:
Dip the tip into the peptide solution (protease digest). Press the pipette plunger to the dead stop, aspirate and dispense the sample ≥10 times.

4- Wash step:
Same as in step 2.

5- On plate elution step: Remove excess liquid at the tip and aspirate 1.5 µl of 50% ACN/0.1%TFA and dispense the little drop on the plate. Let it dry and redo this step again. Add 1.5 µl of matrix solution (HCCA in 0.1% TFA/33%ACN for peptides and Sinapic acid in 0.1% TFA/33%ACN for proteins)

Note:

- Make sure that the liquid volume gets into the tip.
- Record where on the plate you dispensed what!!!
- Make sure that the dispensed volumes don't leak to the next spots
- (For more info read the User Guide leaflet)