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C4 ZipTip Solid Phase Extraction

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Protocol status: Working
We use this protocol and it's working

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Abstract

Solid phase extraction for clean-up and concentration of proteins prior to introduction into the mass spectrometer.

Materials

C4 ZipTips
KimWipes
P20 and P200 pipettes with tips
LoBind Microcentrifuge tubes
C4 ZipTip Activation Buffer
C4 ZipTip Equilibration/Wash Buffer
C4 ZipTip Elution Buffer
HPLC Buffer A

Troubleshooting

1 Activate Ziptip by pipetting 10 µL of C4 ZipTip Activation Buffer and discarding onto a Kimwipe for a total of 6 times.

2 Equilibrate the Ziptip by pipetting 10 µL of C4 ZipTip Equilibration/Wash Buffer and discarding onto a Kimwipe for a total of 6 times.

3 Remove C4 Ziptip from p20 pipette and place safely back into tip box to hold. Take a p200 pipette set at 200 µL and add a p200 pipette tip to the end. Take the p200 with pipette tip and then add the C4 ZipTip to the end. Carefully pipette the elution sample up and down for a total of 10 times per elution fraction. Avoid forcing air bubbles through the pipette tip as this will disrupt the resin and introduce oxidation to the target protein.

4 Remove C4 Ziptip from p200 pipette and place safely back into tip box to hold. Reattach to the p20 pipette and by pipet 10 µL of C4 ZipTip Equilibration/Wash Buffer and discard onto a Kimwipe for a total of 10 times.

5 Pipette into 5 µL of C4 ZipTip Elution Buffer that is inside a clean LoBind tube a total of 10 times. Dilute the final volume up to 25 µL for LC-MS or 80 µL for I2MS.