

Jun 24, 2022

## C4 ZipTip Solid Phase Extraction

DOI

[dx.doi.org/10.17504/protocols.io.5jyl89x97v2w/v1](https://dx.doi.org/10.17504/protocols.io.5jyl89x97v2w/v1)

Lauren Adams<sup>1</sup>

<sup>1</sup>Northwestern University

Kelleher Research Group

Tech. support email: [kelleher-ofc@northwestern.edu](mailto:kelleher-ofc@northwestern.edu)



Kelleher KRG KRG Research Group

Northwestern University, National Resource for Translational...

### Create & collaborate more with a free account

Edit and publish protocols, collaborate in communities, share insights through comments, and track progress with run records.

Create free account

OPEN  ACCESS



DOI: <https://dx.doi.org/10.17504/protocols.io.5jyl89x97v2w/v1>

**Protocol Citation:** Lauren Adams 2022. C4 ZipTip Solid Phase Extraction. **protocols.io**

<https://dx.doi.org/10.17504/protocols.io.5jyl89x97v2w/v1>

**License:** This is an open access protocol distributed under the terms of the **Creative Commons Attribution License**, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

**Protocol status:** Working

**We use this protocol and it's working**

**Created:** June 24, 2022

**Last Modified:** June 24, 2022

**Protocol Integer ID:** 65204

**Keywords:** c4 ziptip solid phase extraction solid phase extraction, c4 ziptip solid phase extraction, solid phase extraction, introduction into the mass spectrometer, mass spectrometer, concentration of protein, protein, extraction

## 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  $\mu$ L of C4 ZipTip Activation Buffer and discarding onto a Kimwipe for a total of 6 times.
  
- 2     Equilibrate the Ziptip by pipetting 10  $\mu$ L 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  $\mu$ L 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  $\mu$ L of C4 ZipTip Equilibration/Wash Buffer and discard onto a Kimwipe for a total of 10 times.
  
- 5     Pipette into 5  $\mu$ L of C4 ZipTip Elution Buffer that is inside a clean LoBind tube a total of 10 times. Dilute the final volume up to 25  $\mu$ L for LC-MS or 80  $\mu$ L for I2MS.