

# Mass Spectrometry-based Multi-Omics: Combinations of Proteomics, Metabolomics, and/or Lipidomics

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# Abstract

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## Introduction

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Here is where we briefly go over the following:

1. Cover other reviews
2. What is proteomics
3. what is metabolomics
  - polar metabolomics
  - lipidomics
4. what does multi-omic integration mean?

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## Sample Preparation for Multi-Omic Analysis

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1, sample preparation for proteomics

2, sample preparation for metabolomics 2.1 non-targeted metabolomics

2.2 targeted metabolomics

2.3 lipidomics

doi:10.1038/nprot.2016.156

<https://www.nature.com/articles/s41596-020-0341-5>

<https://pubs.rsc.org/en/content/articlelanding/2020/an/d0an01149e/unauth>

## References

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2. **Charge state coalescence during electrospray ionization improves peptide identification by tandem mass spectrometry.**  
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