

# 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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Integrative multi-omics analysis is a powerful approach to study complex biological responses and has gained popularity in recent years. To avoid the potential

1, Sample preparation for proteomics

2, Sample preparation for metabolomics

2.1 non-targeted metabolomics

[\[3\]](#)

2.2 targeted metabolomics

2.3 lipidomics

[\[4\]](#)

3, Integrative sample preparation for multi-omics

In the context of multi-omics analyses, being able to perform multiple measurements on the same sample can also decrease experimental variation.

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[\[6\]](#)

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