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

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Abstract

Introduction

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

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

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

2.2 targeted metabolomics

2.3 lipidomics

https://www.nature.com/articles/nprot.2016.156

3, Integrative sample prepatation 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.

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

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References

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