



Lipidomics analysis

Lipids are essential structural components of cellular membranes. These membranes confer the ability to separate living entities from their surrounds. However, lipids have many more highly relevant functions, including energy storage, transport and signaling.

BACKGROUND

Lipid composition of membranes and storage lipids across different kingdoms of life can be surprisingly diverse. Many of these uncommon lipids have highly interesting properties as they might form micelles of different stabilities or membranes with special permeability properties. While in depth analysis of mammalian bulk lipids is well established, analytical technologies targeting speciality lipids as found in fungi and archaea are poorly developed.

TECHNOLOGY

We employ liquid chromatography high resolution ion mobility mass spectrometry to identify and quantify uncommon lipids from various hosts as required for metabolic engineering and production optimization of these compounds. So far, we have developed analytical workflows for uncommon sterol lipids and for ether lipids but are also available to expand to new targets.



OFFER

Under protection of a CDA/NDA we provide you with professional strategies for untargeted or targeted analysis of lipids from various hosts. IP developed in such a project would fully belong to our investor/industrial partner.

EXPERT:

Dr. Matthias Schittmayer-Schantl

AVAILABLE FOR:

- Joint Research Projects
- Contract Research

DEVELOPMENT STATUS:

Technology Readiness Level 2-7 (Lipid class dependent, technology concept formulated to complete established analytical workflow)

IPR:

Can be generated for our industrial partners / investors

KEYWORDS:

Lipid composition
Structural elucidation
Food analysis
Antioxidant
Pharma Industry
Nutraceutical

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