

Lipidomic Profiling

With Cayman Contract Services, your lipidomics study is in the hands of lipid experts who have more than 35 years of collective experience in lipid synthesis, purification, and characterization. Cayman's state-of-the-art mass spectrometry laboratories are equipped with high-resolution Orbitrap MS, triple quadrupole MS, and GC-MS, enabling us to offer targeted and untargeted lipidomics services to meet your specific project needs.



Lipid Panels

Maximize data from precious samples with customizable multiplex lipid panels offering the sensitivity, efficiency, and specificity needed to identify and quantify biologically relevant lipids.

- Eicosanoids (44-plex)
- Sphingolipids (36-plex)
- Oxidized Phospholipids (12-plex)
- Endocannabinoids (49-plex)
- Urinary Lipid Metabolites (20-plex)
- Cholesterol Esters (12-plex)
- Short-Chain Fatty Acids (10-plex)
- Phospholipids (untargeted)

Eicosanoids 44-Plex Panel

Cyclooxygenase

6-keto PGF_{1α}
TXB₂
PGF_{2α}
PGE₂
PGD₂
PGA₂
PGJ₂
15-deoxy-Δ^{12,14} PGJ₂
12-HHTrE
11-dehydro TXB₂
11-HETE

5-Lipoxygenase

LTB₄
LTC₄
LTD₄
LTE₄
20-hydroxy LTB₄
20-carboxy LTB₄
5(6)-DiHETE
5-HETE
5-OxoETE
LXA₄
LXB₄

Other Lipoxygenases and P450

5(6)-EET
8(9)-EET
11(12)-EET
14(15)-EET
5(6)-DiHET
8(9)-DiHET
11(12)-DiHET
14(15)-DiHET
12-HETE
15-HETE
20-HETE

Others (Not from AA)

9-HODE
13-HODE
17-HDHA
18-HEPE
RvD1
RvD2
RvD3
RvD4
RvE1
MaR1
PD1

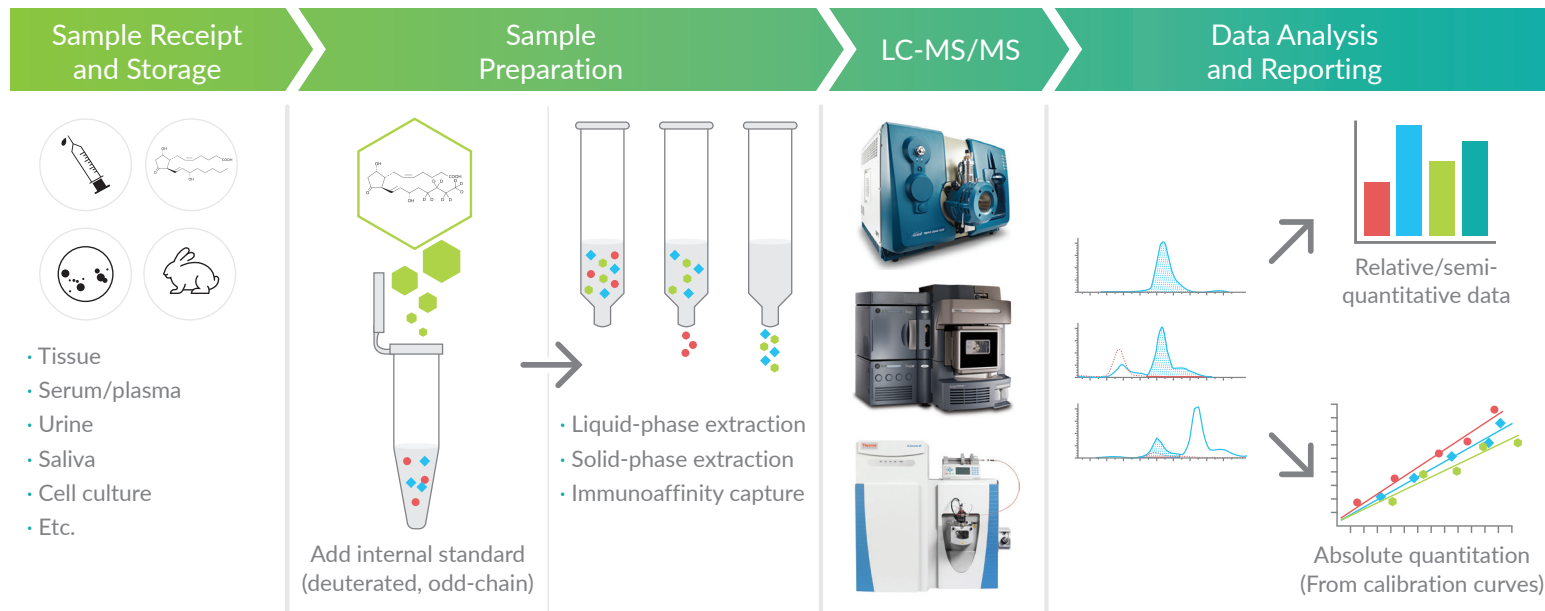
Internal Standards

TXB₂-d₄
PGE₂-d₄
LTD₄-d₅
LXA₄-d₅
LTB₄-d₄
(±)14(15)-DiHET-d₁₁
(±)14(15)-EET-d₁₁
9(S)-HODE-d₄
5(S)-HETE-d₈
RvD1-d₅
RvE1-d₄

Example Panel

Custom Analyte Detection

Cayman is continuously expanding its LC-MS/MS capabilities for the detection and quantification of drugs, metabolites, and biomarkers in biological samples. We can customize our standard lipid panels, or develop a fit-for-purpose method for discovery, pharmacokinetics, and formulation applications.



Results You Can Trust

Our lipidomic profiling services are based on well-established protocols, employ necessary controls and standards, and are applicable to many common biological matrices.

- Expert consultation on best practices for sample collection, pre-shipment processing, and storage to preserve sample integrity
- Optimized sample extraction protocols guided by accepted literature methods (Bligh-Dyer LLE, SPE, targeted immunoaffinity capture)
- Profile analysis or absolute quantitation of customizable analyte sets
- Timely updates, interactive real-time data review, and comprehensive reporting with strict confidentiality

Learn more about our Lipidomics Services
at www.caymanchem.com/lipidomics