

Lipotype

Lipidomics



Lipotype Lipidomics

Lipotype Lipidomics provides you with easy access to lipids and lipid metabolism data. Our mass spectrometry-based lipidomics platforms are combined with state-of-the-art data visualization and statistical analyses to translate your complex lipidomics data sets into convincing lipidomics results.

OUR SOLUTION

→ *Lipotype Lipidomics is the worldwide leading lipid analysis service technology.*

We can work with all samples

Organelles, bacteria, yeast, and other microbes, animal cells, skin tapes, body fluids, blood and plasma, tissues and organs (liver, brain, etc.), oils, milk, and far more – our lipidomics services can be applied to all biological samples.

Project design guidance

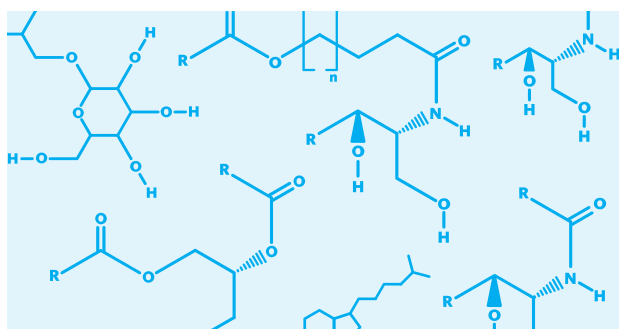
Depending on your sample and research needs, we recommend you the ideal Lipotype Lipidomics platform and sample preparation protocol, and perform lipid extraction for you in the Lipotype laboratories.

Minimal sample amounts

Our mass spectrometry-based Lipotype Lipidomics technology requires only minimal sample amounts per lipid analysis. For example: our lipidomics platform can perform measurements of 1 μ L of blood plasma.

Get your results fast

We developed a high throughput workflow for thousands of samples per week. Our lipid analysis automation increases reproducibility and offers you to get your lipidomics reports in as little as two weeks.



The broadest coverage of lipids

From storage lipids to membrane lipids and signaling lipids, Lipotype Lipidomics offers the broadest coverage of lipids. Our targeted and untargeted lipid analysis services identify and quantify 100+ lipid classes, in total more than 4200 individual lipids.

Lipid classes covered by Lipotype Lipidomics

| | |
|---------|---------------------------------|
| FFA | Free Fatty Acids |
| LiFA | Linear Fatty Acids |
| SCFA | Short Chain Fatty Acids |
| MCFA | Medium Chain Fatty Acids |
| LCFA | Long Chain Fatty Acids |
| SFA | Saturated Fatty Acids |
| UFA | Unsaturated Fatty Acids |
| WE | Wax Esters |
| CAR | Acylcarnitines |
| NAE | Endocannabinoids |
| oxiOME | Oxidized Octadecaenoic Acids |
| oxiODE | Oxidized Octadecadienoic Acids |
| Pgd | Prostaglandins |
| LT | Leukotrienes |
| TX | Thromboxanes |
| LX | Lipoxins |
| IsoP | Isoprostanes |
| oxiETRe | Oxidized Eicosatrienoic Acids |
| oxiETE | Oxidized Eicosatetraenoic Acids |
| oxiEPE | Oxidized Eicosapentaenoic Acids |
| MaR | Maresins |
| RvD | Resolvin Ds |
| PD | Protectins |
| oxiDPA | Oxidized Docosapentaenoic Acids |
| oxiDHA | Oxidized Docosahexaenoic Acids |
| TAG | Triacylglycerols |
| DAG | Diacylglycerols |
| MAG | Monoacylglycerols |
| PA | Phosphatidates |
| PC | Phosphatidylcholines |
| PE | Phosphatidylethanolamines |
| PG | Phosphatidylglycerols |
| PI | Phosphatidylinositols |
| PS | Phosphatidylserines |
| LPA | Lyso-Phosphatidates |

| | |
|----------|---|
| LPC | Lyso-Phosphatidylcholines |
| LPE | Lyso-Phosphatidylethanolamines |
| LPG | Lyso-Phosphatidylglycerols |
| LPI | Lyso-Phosphatidylinositols |
| LPS | Lyso-Phosphatidylserines |
| BMP | Bis(monoacylglycero)phosphates |
| PC O- | Ether-linked Phosphatidylcholines |
| PE O- | Ether-linked Phosphatidylethanolamines |
| LPC O- | Ether-linked Lyso-Phosphatidylcholines |
| LPE O- | Ether-linked Lyso-Phosphatidylethanolamines |
| CL | Cardiolipins |
| CDP-DAG | CDP-Diacylglycerols |
| Sph | Sphingosines |
| dhSph | Sphinganine |
| SphP | Sphingosine-phosphates |
| dhSphP | Sphinganine-phosphates |
| GlcSph | Glucosylsphingosines |
| GalSph | Galactosylsphingosines |
| Cer | Ceramides |
| dhCer | Dihydroceramides |
| deoxyCer | Deoxyceramides |
| CerP | Ceramide-1-phosphates |
| EOdS | Omega-hydroxy-dihydrosphingosines |
| EOS | Omega-hydroxy-sphingosines |
| EOP | Omega-hydroxy-phytosphingosines |
| EOH | Omega-hydroxy-6-hydroxysphingosines |
| NdS | Non-hydroxy-dihydrosphingosines |
| NS | Non-hydroxy-sphingosines |
| NP | Non-hydroxy-phytosphingosines |
| NH | Non-hydroxy-6-hydroxysphingosines |
| AdS | Alpha-hydroxy-dihydrosphingosines |
| AS | Alpha-hydroxy-sphingosines |

| | |
|----------|--|
| AP | Alpha-hydroxy-phytosphingosines |
| AH | Alpha-hydroxy-6-hydroxysphingosines |
| HexCer | Hexosylceramides |
| GlcCer | Glucosylceramides |
| GalCer | Galactosylceramides |
| DiHexCer | Dihexosylceramides |
| LacCer | Lactosylceramides |
| SM | Sphingomyelins |
| CerPE | Ceramide Phosphoethanolamines |
| IPC | Inositolphosphoryl-ceramides |
| MIPC | Mannosyl-inositolphosphoryl-ceramides |
| M(IP)2C | Mannosyl-di-(inositolphosphoryl)-ceramides |
| GM1 | Ganglioside GM1 |
| GM2 | Ganglioside GM2 |
| GM3 | Ganglioside GM3 |
| GM4 | Ganglioside GM4 |
| GD1 | Ganglioside GD1 |
| GD2 | Ganglioside GD2 |
| GD3 | Ganglioside GD3 |
| GT1 | Ganglioside GT1 |
| GT2 | Ganglioside GT2 |
| GT3 | Ganglioside GT3 |
| GQ1 | Ganglioside GQ1 |
| Gb3 | Gb3 Globosides |
| Gb4 | Gb4 Globosides |
| Sulf | Sulfatides |
| Chol | Cholesterol |
| CE | Cholesteryl Esters |
| Erg | Ergosterol |
| EE | Ergosteryl Esters |
| Sqe | Squalene |
| oxiSqe | Oxidized Squalenes |
| UQ | Ubiquinones/Ubiquinols |

OUR EXPERTISE

→ A worldwide unique team of biologists, biochemists, MS development specialists, and data scientists.

Reliable data quality control

Lipotype Lipidomics is robust, reproducible, and GMP certified. We use internal standards in every sample, and can quickly detect sample collection and storage related quality issues.



Lipidomics and lipids expertise

Lipotype Lipidomics leverages decades of lipids biology expertise from esteemed academic institutions (EMBL, Max-Planck, etc.), industry and medical research. We continue to develop our technology further to provide you with the best solution tailored to your specific research question.



> **10 years**
on the market



> **1000**
finished projects



> **300**
publications



Routine service provider for:

Big **pharma**



Big **biotech**



Big **food**



Big **cosmetics**



Big **academia**



YOUR RESULTS

→ Our lipidomics data analysis reports help you understand complex lipidomics data sets.

Standard Report

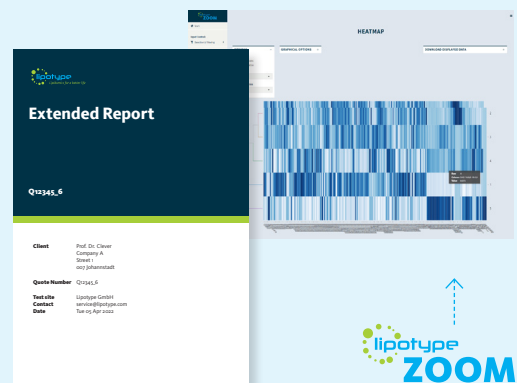
The standard report contains your **quantitative analysis data** (pmol and mol% data for every sample), graphs about the analysis quality, a lipid class profile, and a standard principal component analysis.



Extended Report & LipotypeZoom

The extended report contains further go-to **lipidomics data analyses and figures**, and encompasses an **ANOVA test** to quickly show you what part of your lipidomics data is specifically interesting.

The extended report also comes with **LipotypeZoom**, a lipidomics data exploration tool. Use LipotypeZoom to curate and download your data. Make your data fit your research question!



Statistical Report

Our statistical report contains **custom statistical tests** to answer your questions. Cohort comparisons, correlation analyses, feature and pathway enrichment analyses – you name it, we do it for you.



HOW WE WORK

→ Order your lipidomics. Send in your samples. Receive your results.



1

Contact us!

Reach out to us and tell us about your research.



2

Consultation

We will find the best analysis for your project.



3

Sample prep!

We help you with sample preparation and shipment.



4

Lipidomics

We extract, identify and quantify the lipids.



5

Data analysis

We generate your data, statistics and reports.



6

Eureka!

You receive your reports and your lipidomics data.

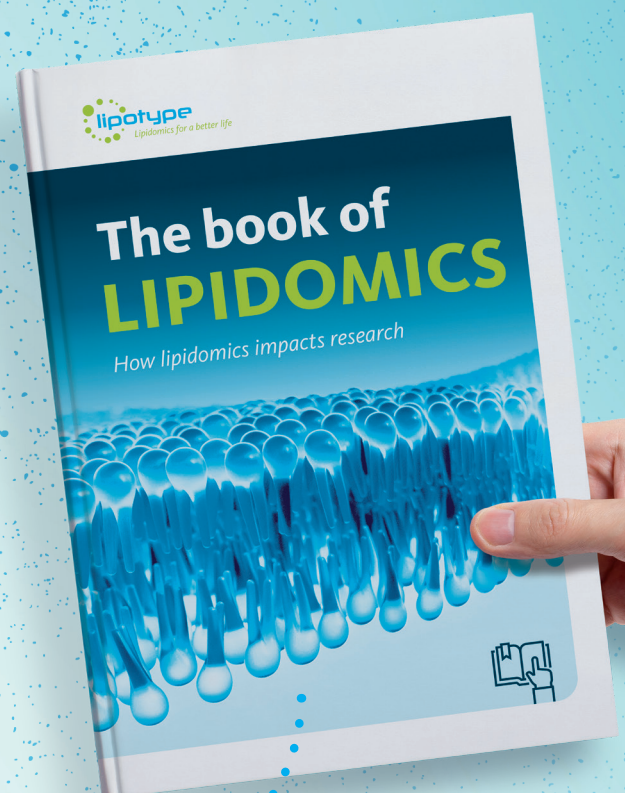
The book of LIPIDOMICS

Find out more about
how lipidomics impacts
other research fields



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About Lipotype

Lipotype is the leading lipidomics provider and your access to lipids and lipid metabolism data. Our mass spectrometry-based platform can be applied to all biological samples and covers more than 4200 lipids – the broadest lipidomics coverage. It is robust and reproducible, and combines reliable data quality control with state-of-the-art data visualization and statistical analyses. Contact us, order your lipidomics, send in your samples, and understand your results in as little as two weeks.