

# 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

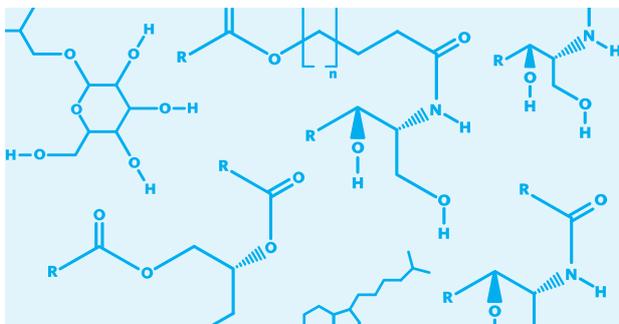
Depending on your sample and research needs, we recommend you the ideal Lipotype Lipidomics platform and sample preparation protocol, and perform lipid extraction for you in the Lipotype laboratories.

### 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  $\mu$ 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
BCFA	Branched-Chain Fatty Acids
SCFA	Short Chain Fatty Acids
MCFA	Medium Chain Fatty Acids
LCFA	Long Chain Fatty Acids
VLCFA	Very Long Chain Fatty Acids
oxiFAL	Oxidized Fatty Aldehydes
WE	Wax Esters
CAR	Acylcarnitines
NAE	Endocannabinoids
oxiHTre	Oxidized Heptadecatrienoic Acids
oxiOME	Oxidized Octadecaenoic Acids
oxiODE	Oxidized Octadecadienoic Acids
oxiOTre	Oxidized Octadecatrienoic Acids
Pgd	Prostaglandins
LT	Leukotrienes
TX	Thromboxanes
LX	Lipoxins
IsoP	Isoprostanes
RvE	Resolvin Es
oxiEDE	Oxidized Eicosadienoic Acids
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 Phosphatidyl-ethanolamines
LPC O-	Ether-linked Lyso-Phosphatidyl-cholines
LPE O-	Ether-linked Lyso-Phosphatidyl-ethanolamines
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
oxiChol	Oxidized Cholesterol
Lano	Lanosterol
Desm	Desmosterol
Lath	Lathosterol
Erg	Ergosterol
EE	Ergosteryl Esters
C10T	Monoterpenes
C15T	Sesquiterpenes
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 GxP compliant. 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

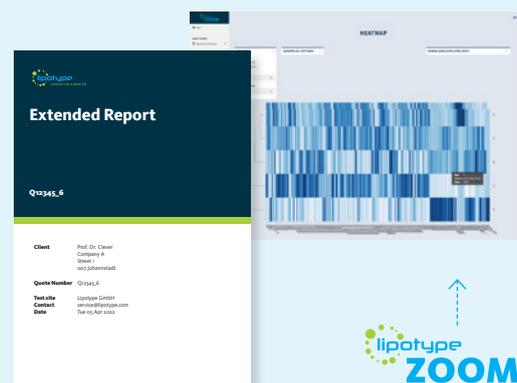
The standard report contains your **quantitative analysis data** (pmol and mol% data for every sample), graphs about the analysis quality, a lipid class profile, and a standard principal component analysis.



## 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.



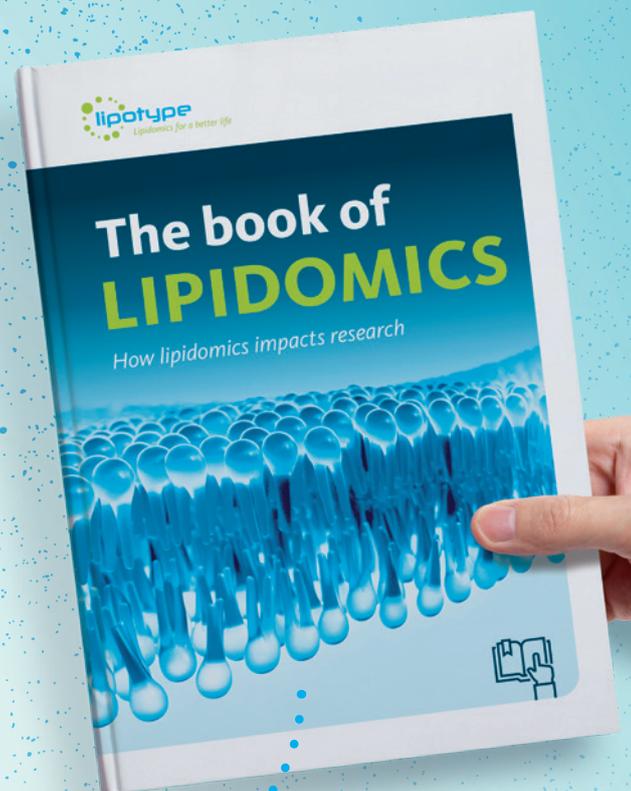
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### Eureka!

You receive your reports and your lipidomics data.

# The book of LIPIDOMICS

Find out more about  
how lipidomics impacts  
other research fields



Download NOW:

[lipotype.com/ebook](https://lipotype.com/ebook)

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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.