



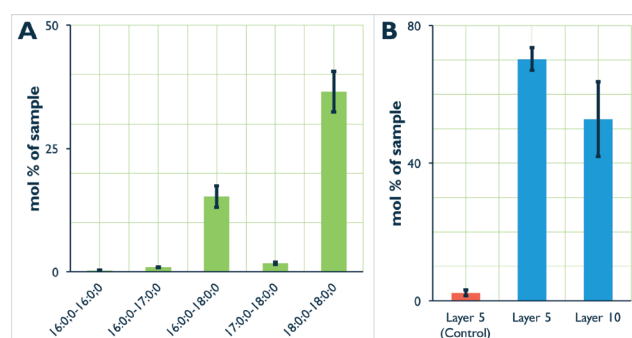
CUSTOMER REFERENCE

Cosmetics and Dermatology: claim support, drug development and validation, personalized cosmetics

Lipid analysis for skin penetration properties of saturated phospholipids



Lipoid was the first to offer a wide variety of phospholipids for use in the production of drug products. Phospholipids are widespread functional ingredients, not only in pharmaceutical formulations, but in cosmetic and dietetic products as well. Lipoid conducted this novel study to investigate skin penetration properties of dermal formulations based on hydrogenated phospholipids (PLs). Common to all topically used PLs is their ability to interact with skin structures and the similarity to epidermal lipids. For the first time, the quantitative analysis of both exogenous PLs and endogenous skin lipids within a single measurement was demonstrated. The results confirm the properties of hydrogenated PLs to penetrate and accumulate in upper epidermal layers. Lipotype performed lipid analysis of PLs of an applied formulation, especially focusing on phosphatidylcholine (PC). Further investigations will be conducted to improve delivery and fixation of an active pharmaceutical ingredient.



Shotgun lipidomics PC analysis results of skin strips from subjects who were treated with a PL based formulation. A: Fatty acid composition distribution. B: Penetration depth of PC. Untreated skin samples (Control) are compared with treated samples.

PUBLICATION:

The effect of saturated phospholipids on human skin assessed with shotgun lipidomic analysis – Phospholipid Research Center, 2018

D Gutekunst, C Klose, C Heidecke, P van Hoogevest (This study was kindly supported by Lipoid GmbH.)

About Lipotype

LIPOTYPE is a spin-off company from the Kai Simons and Andrej Shevchenko labs of the world-renowned Max-Planck-Institute of Molecular Cell Biology and Genetics in Dresden, Germany. Drawing on many years of cutting edge research experience, Lipotype delivers comprehensive, absolutely quantitative lipid analysis services for clinical and biological samples on a high-throughput scale. Lipotype offers high quality lipid analysis services for a wide range of customers and applications including biomarker identification for clinical researchers, pharma and biotech companies, functional food development for the food industry, claim support for the cosmetics industry, as well as for the small-scale profiling needs of academic researchers.

For enquiries, please contact:

Lipotype GmbH
Dr. Oliver Uecke, Business Development
Tatzberg 47 | 01307 Dresden | Germany
T: +49 (0) 351 79653-45 | sales@lipotype.com
www.lipotype.com

Lipoid GmbH
Scientific Department & Development
Frigenstrasse 4 | 67065 Ludwigshafen | Germany
T: +49 (0)621 53819-360 | d.gutekunst@lipoid.com
www.lipoid.com

We offer high quality lipid analysis services for a wide range of customers and applications:



Biotech and pharma industry, clinical research

Drug discovery (mode-of-action, target validation, effect on lipid metabolism), biomarker identification (pharmacodynamic, pharmacokinetic, CDx), clinical screening, diagnostics



Food industry

Development of functional food/nutraceuticals, intervention studies, lipid composition of food products



Cosmetics and Dermatology

Claim support, drug development and validation, personalized cosmetics



Academic research

Lipid analysis of cells, tissues and body fluids from various model organisms in a plethora of experimental setups

