

Materials List for:

# A Simple Fractionated Extraction Method for the Comprehensive Analysis of Metabolites, Lipids, and Proteins from a Single Sample

Mohamed Salem<sup>1,2</sup>, Michal Bernach<sup>1</sup>, Krzysztof Bajdzienko<sup>1</sup>, Patrick Giavalisco<sup>1</sup>

<sup>1</sup>Max Planck Institute of Molecular Plant Physiology, Golm, Germany

<sup>2</sup>Department of Pharmacognosy, Faculty of Pharmacy, Cairo University

Correspondence to: Patrick Giavalisco at [giavalisco@mpimp-golm.mpg.de](mailto:giavalisco@mpimp-golm.mpg.de)

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## Materials

Name	Company	Catalog Number	Comments
<b>Reagents and standards</b>			
Ampicillin	Sigma Aldrich	A9393-5G	Internal standard for metabolites
Corticosterone	Sigma Aldrich	27840-500MG	Internal standard for metabolites, HPLC grade
13C Sorbitol	Sigma Aldrich	605514	Internal standard for metabolites, ISOTECH® Stable Isotopes
1,2-diheptadecanoyl-sn-glycero-3-phosphocholine (17:0 PC)	Avanti Polar Lipids	850360P	Internal standard for lipids
Methanol (MeOH)	Biosolve Chemicals	13684102	ULC-MS grade
Water	Biosolve Chemicals	23214102	ULC-MS grade
Methyl tert-butyl ether (MTBE)	Biosolve Chemicals	13890602	HPLC grade
Trypsin/Lys-C mix	Promega	V5072	Enzymatic digestion of proteins
<b>Equipment</b>			
Balance	Sartorius Corporation	14 557 572	
Tissue grinding mixer mill	Retsch, Mixer Mill MM 300	20.746.0001	
Mortar and pestle	Sigma Aldrich	Z247464-1EA	
Vortex mixer	Vortex-Genie 2, Model G560	SI-0236	
Vacuum concentrator	Scan Speed Maxi Vac Alpha Evaporators	7.008.500.002	
2 mL Safe-lock microcentrifuge tubes	Eppendorf	30120094	Used for sample extraction
1.5 mL Safe-lock microcentrifuge tubes	Eppendorf	30120086	Used for fractions
Shaker	Eppendorf Thermomixer 5436	2050-100-05	
Sonicator	USC 300 TH	142-0084	
Refrigerated microcentrifuge	Eppendorf, model 5427R	22620701	
UPLC system	Waters Acquity UPLC system (Waters, Manchester, UK)		
MS system	Exactive, Orbitrap-type, MS (Exactive, Thermo-Fisher, Bremen, Germany).		
Reversed Phase (RP) Bridged Ethyl Hybrid (BEH) C8 column (100 mm × 2.1 mm containing 1.7 µm diameter particles)	Waters, Manchester, UK	186002878	Analysis of lipids
RP High Strength Silica (HSS) T3 column (100 mm × 2.1 mm)	Waters, Manchester, UK	186003539	Analysis of metabolites

containing 1.8 $\mu\text{m}$ diameter particles)			
Q ExactivePlus high resolution mass spectrometer connected to an EASY-nLC 1000 system	Thermo-Fisher, Bremen, Germany		Analysis of peptides