

Preparation of Human Tissues Embedded in Optimal Cutting Temperature Compound for Mass Spectrometry Analysis

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Citation

 Boyd, A.E., Allegood, J., Lima, S. Preparation of Human Tissues Embedded in Optimal Cutting Temperature Compound for Mass Spectrometry Analysis. *J. Vis. Exp.* (170), e62552, doi:10.3791/62552 (2021).

Date Published

April 27, 2021

DOI

10.3791/62552

URL

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Materials

Name	Company	Catalog Number	Comments
1 mL polypropylene pipette tips	NA	NA	Used to retrieve specimens
1.5 mL polypropylene centrifuge tubes	NA	NA	
10 mL Erlenmeyer flask	VWR	89091-116	Used for tube and tissue weighing
AB Sciex Analyst 1.6.2	Sciex	NA	Software to analyze and integrate MS data
Ammonium formate	Fisher Scientific	A11550	For LC mobile phases
Analytical scale	NA	NA	Scale that is accurate to 0.1 mg
Bottle top dispenser	Sartorius	LH-723071	Used for dispensing solvents
C12-Ceramide (d18:1/C12:0); N-(dodecanoyl)-sphing-4-enine	Avanti Polar Lipids	LM2212	Internal standard
C12-glucosylceramide (d18:1/12:0); N-(dodecanoyl)-1-β-glucosyl-sphing-4-eine	Avanti Polar Lipids	LM2511	Internal standard
C12-lactosylceramide (d18:1/12:0); N-(dodecanoyl)-1-β-lactosyl-sphing-4-ene	Avanti Polar Lipids	LM2512	Internal standard
C12-Sphingomyelin (d18:1/C12:0), N-(dodecanoyl)-sphing-4-enine-1-phosphocholine	Avanti Polar Lipids	LM2312	Internal standard
CHLOROFORM OMNISOLV 4L	VWR	EM-CX1054-1	
ClickSeal Biocontainment Lids	Thermo Scientific	75007309	To prevent biohazard aerosols during centrifugation
Conflikt	Decon Labs	4101	Decontaminant
CTO-20A/20AC Column Oven	Shimadzu	NA	For LC
d17:1-Sphingosine; (2S,3R,4E)-2-aminoheptadec-4-ene-1,3-diol	Avanti Polar Lipids	LM2000	Internal standard

d17:1-Sphingosine-1-phosphate; heptadecaspheing-4-ene-1-phosphate	Avanti Polar Lipids	LM2144	Internal standard
DGU20A5R degasser	Shimadzu	NA	
Disposable Culture Tubes 13x100mm	VWR	53283-800	13x100 mm screw top tubes
Heated water bath	NA	NA	For overnight lipid extraction
Homogenizer 150	Fisher Scientific	15-340-167	triturate tissues
Homogenizer Plastic Disposable Generator Probe	Fisher Scientific	15-340-177	for homogenization
Kimwipes	Kimtech	34120	Laboratory grade tissue used to make wicks
Methanol LC-MS Grade 4L	VWR	EM-MX0486-1	
Nexera LC-30 AD binary pump system	Shimadzu	NA	For LC-MS
Permanent marker	VWR	52877-310	
Phenolic Screw Thread Closure, Kimble Chase (caps for disposable culture tubes)	VWR	89001-502	13x100 mm screw top tube caps
Phosphate buffered saline	Thermo Scientific	10010023	To retrieve specimens from tubes after washing
Repeater pipette	Eppendorf	4987000118	To dispense LC-MS internal standards
Screw Caps, Blue, Red PTFE/White Silicone	VWR	89239-020	Autoinjector vial caps
Screw Thread Glass Vials with ID Patch	VWR	46610-724	Autoinjector vials
SIL-30AC autoinjector	Shimadzu	NA	
SpeedVac	Thermo Scientific	SPD2030P1220	For drying solvents
Supelco 2.1 (i.d.) x 50 mm Ascentis Express C18 column	Sigma Aldrich	581300-U	For LC-MS
Triple Quad 5500+ LC-MS/MS System	Sciex	NA	For LC-ESI-MS/MS
Ultrasonic water bath	Branson	Model 2800	for homogenization and resuspension of extracted and dried lipids
Vortexer	NA	NA	For sOCTrP and resuspending dried lipids
VWR Culture Tubes Disposable Borosilicate Glass	VWR	47729572	13x100 glass culture tubes
Water Hipsolve Chromanorm LC-MS	VWR	BDH83645.400	