

1. PRINCIPLE

This method outlines a simple protocol to pellet cells in preparation for metabolomics/lipidomics analysis.

2. SAMPLE (Collection, Type, Processing, Transport, Storage, Rejection Criteria)

2.1. Specimen Type Receivable by Emory Integrated Metabolomics and Lipidomics Core:

2.1.1. Cell Pellet

2.1.2. Biological Fluid Samples

2.1.2.1. Serum

2.1.2.2. Plasma

2.1.2.3. Urine

2.1.2.4. Cerebral Spinal Fluid

2.1.3. Biological Solid Tissues

2.1.3.1. Brain

2.1.3.2. Liver

2.1.3.3. Muscle Tissues

2.1.3.4. Feces

2.2. Specimen Stability

2.2.1. Freeze Immediately

2.2.2. Stable frozen @ -80°C

2.3. Shipment

2.3.1. Shipment must be made to ensure sample will remain frozen

2.3.1.1. Shipment on Dry Ice

2.4. Rejection Criteria

2.4.1. Specimen received thawed

2.4.1.1. If the Specimen is received thawed, sender will be notified and next course of action will be discussed prior to initiating the testing

2.5. Required Sample Demographics:

2.5.1. See Appendix A

2.6. Cell Pellet Preparation

- 2.6.1. Grow cells to confluency on culture plate.
- 2.6.2. Wash cells in PBS.
- 2.6.3. Add 2 ml 1X Trypsin/EDTA.
- 2.6.4. Digest for 5 minutes at 37°C.
- 2.6.5. Stop digestion by adding 8 ml media (DMEM/F12).
- 2.6.6. Gently wash cells off plate and transfer by pipette to a 15 ml conical tube.
- 2.6.7. Spin cells at 1000- 12000 rpm at 4°C or room temperature for 5 minutes.
- 2.6.8. Decant supernatant.
- 2.6.9. Gently tap tube to loosen cell pellet.
- 2.6.10. Add 5 ml PBS to resuspend the pellet.
- 2.6.11. Flash freeze in liquid nitrogen.
- 2.6.12. Complete Appendix A and send a copy with Shipment

2.7. Serum / Plasma / Urine / Cerebral Spinal Fluid

- 2.7.1. Specify which container was used for collection
 - 2.7.1.1. EDTA / Sodium Heparin / Lithium Heparin / Serum Separator
- 2.7.2. Minimum acceptable volume is indicated per test
- 2.7.3. Freeze @ -80°C until shipment
 - 2.7.3.1. If sample is stored @ -20°C, please indicate on the sheet
- 2.7.4. Complete Appendix A and send a copy with Shipment

2.8. Muscle Tissues / Organ Tissues / Feces

- 2.8.1. Minimum acceptable volume is indicated per test
- 2.8.2. Freeze @ -80°C until shipment
 - 2.8.2.1. If sample is stored @ -20°C, please indicate on the sheet
- 2.8.3. Complete Appendix A and send a copy with Shipment



Emory Integrated
Lipidomics Core
Emory Integrated Core Facilities

TEST REQUISITION FORM

Attn: Emory Integrated Metabolomics and
Lipidomics Core
1510 Clifton Rd. NE
4th Floor-Biochemistry
Atlanta, GA 30322

Appendix A

Sample Count	Sample Identification	Sample Weight Volume	Sample Prepared Date	Test Requested	Group Specification
1				Choose Test	Choose Group
2				Choose Test	Choose Group
3				Choose Test	Choose Group
4				Choose Test	Choose Group
5				Choose Test	Choose Group
6				Choose Test	Choose Group
7				Choose Test	Choose Group
8				Choose Test	Choose Group
9				Choose Test	Choose Group
10				Choose Test	Choose Group
11				Choose Test	Choose Group
12				Choose Test	Choose Group
13				Choose Test	Choose Group
14				Choose Test	Choose Group
15				Choose Test	Choose Group
16				Choose Test	Choose Group
17				Choose Test	Choose Group
18				Choose Test	Choose Group
19				Choose Test	Choose Group
20				Choose Test	Choose Group
21				Choose Test	Choose Group
22				Choose Test	Choose Group
23				Choose Test	Choose Group
24				Choose Test	Choose Group
25				Choose Test	Choose Group
26				Choose Test	Choose Group
27				Choose Test	Choose Group
28				Choose Test	Choose Group
29				Choose Test	Choose Group



Emory Integrated
Lipidomics Core
Emory Integrated Core Facilities

TEST REQUISITION FORM

**Attn: Emory Integrated Metabolomics and
Lipidomics Core**
1510 Clifton Rd. NE
4th Floor-Biochemistry
Atlanta, GA 30322

30				Choose Test	Choose Group
----	--	--	--	-------------	--------------