**UCLA Lipidomics Lab**

**Tissue/Tumor Collection Protocol**

An ideal lipidomics experiment analyzing tissue or tumors will collect samples in a homogenizer tube. These samples will be homogenized at the core and immediately extracted for analysis. If you are an external client, we ask that you purchase one of the products below. If you are an internal client and performing a small tissue experiment, the core can provide you a small number of tubes (contact us for pickup). If an internal client is doing large experiments on a regular basis, we will ask you to purchase your own tubes.

Hard Tissue Homogenizing (2 mL Reinforced Tubes with beads)(50/pk)

Omni#: 19-628

**OR**

2 mL Reinforced Tubes with Screw Caps & Silicone O-Rings (1000/pk)

Omni#: 19-649

2.8 mm Ceramic Beads Bulk (roughly enough for 500 tubes, 6 beads needed per tube)

Omni#: 19-646

1. Clearly number homogenizer tubes with permanent, ethanol-resistant marker. These numbers should correspond to the numbering (column A) on the “Sample Submission Form”, which should be filled out with appropriate sample information.

2. Harvest representative section of tissue or tumor; try to avoid collecting excessively “bloody” material as this can contaminate tissue lipidomics and complicate interpretation.

3. Ideally samples will be collected fresh. A tissue sample will be sectioned and weighed to determine “wet weight” before tissue section is placed in a homogenizer tube. Homogenizer tubes should then be immediately frozen (-80C). Samples can be prepared on previously collected (frozen) tissues. In this case, the frozen tissue should be quickly removed from the freezer, sectioned, weighed and placed in a homogenizer tube while still frozen. Samples should immediately be returned to the freezer.

4. Weigh tissue on analytical balance. The ideal sample is 50-100mg, but a sample between 25-200mg is acceptable. If your experiment requires the homogenization of a sample larger than 200mg (i.e. an entire mouse liver), please contact us to make special arrangements.

5. Record weight of samples on “Sample Submission Form”

6. Homogenizer tubes should be stored in a -80 cardboard tube box and stored in a -80 freezer until shipping/core delivery.

7. External clients should overnight ship samples by FedEx. Pack sample box with dry ice in a Styrofoam shipping box. Tape up and label box with FedEx Overnight shipping tag. Use Shipping address below. Email lipidomics@mednet.ucla.edu with “Sample Submission Form” and FedEx tracking information.

8. Internal clients should contact the core to deliver samples according to the COVID-19 “Contact-Free” Drop Off Protocol.

Ship Samples To:

Kevin Williams

UCLA Lipidomics/Bensinger Lab

615 Charles E. Young Dr. South

BSRB 257

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