ARCHIVED FFPE CORE NEEDLE BIOPSIES (CNB) FOR GENOMIC AND PROTEOMIC ANALYSIS

Lab: CLIA-CAP Targeted Proteomics Laboratory, Paulovich Lab at Fred Hutch

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PURPOSE

The purpose of this procedure is to identify and ship core needle biopsies (CNB) embedded in FFPE of sufficient quality and quantity for (1) genomic analysis including WGS/WES and RNA-Seq, and (2) global proteomic analysis including TMT labeling and 24 basic reverse phase fractions per sample.

SAMPLE REQUIREMENTS

1. The number of CNB embedded in FFPE for genomic and proteomic analysis depends on needle size:
    a. 16 G x 1 cm long CNB – 1 core required
    b. 18 G x 1 cm long CNB – 2 cores required
    c. Smaller than 18 G – Not recommended; please consult with the Paulovich Lab.
    d. For CNB with length < 1 cm – The number of cores must be scaled accordingly to produce an equivalent tumor volume for analysis. Please consult with the Paulovich Lab.
2. To assure data quality, all samples should have ≥ 25% tumor cellularity, and ≤ 25% necrosis.
    a. If the sample does not meet these requirements, we can perform macrodissection if possible. Please consult with the Paulovich Lab.
3. Please record fixation time or provide a note if fixation time is not known. For all samples, fixation time in neutral buffered formalin should be a minimum of 6 hours and a maximum of 72 hours. Fixation time begins when the specimen is placed in formalin (not when sectioned during gross examination) and ends when the cassettes are no longer in formalin.
4. Please label all samples with a combination of two forms of identification for tracking (e.g., a de-identified coded sample identification number, site ID, study ID, date collected).

INSTRUCTIONS FOR SHIPPING FFPE CNB

1. Package FFPE CNB into a box where each sample is delineated by a barrier (or wrapped) to protect the integrity of the block (**Figure A**).

Figure A. Example packaging for shipment

2. Transport or ship the box at room temperature in a leak-proof container or outer package.
    a. Please use ice packs if extreme hot weather is expected.
3. Please label the outer package clearly and durably with the words “Diagnostic Specimen”, and the name, address, and phone number of both the sender and the recipient.
4. Please email the Paulovich Lab before sending samples to coordinate shipping and ensure safe receipt (see Main Contact and Backup Contact info below).
    a. Please do not ship samples on Fridays for delivery on Saturdays. If samples must be shipped for weekend delivery, please call and/or email the lab ahead of time and include the tracking number to ensure proper receipt.
5. Please ship by **Fed Ex** priority overnight or next day delivery (Fed Ex account information will be provided by email) to the following address:

    Fred Hutchinson Cancer Center
    ATTN: Rose Pletcher
    1100 Fairview Avenue North
    Paulovich Lab E2-420
    Seattle, WA 98109-1024, USA

    Main Contact: Rose Pletcher
    Email: rpletche@fredhutch.org
    Phone: +1 (206) 667-2613

    Backup Contact: Travis Lorentzen
    Backup Email: tlorentz@fredhutch.org
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