

Procedure for Handling and Shipping Muscle and/or Nerve Tissue to Vanderbilt Surgical Pathology

Vanderbilt Medical Laboratories (Account and Shipping Info)
615-936-0510 or 1-800-551-5227, x6

Division of Neuropathology: (technical)
615-322-3998

Fax: 615-343-7089

www.vanderbiltmedicallabs.com

Please notify Neuropathology that you are sending a sample:

Division of Neuropathology: 615-322-3998 or 1-800-551-5227, x8

****The Surgical Pathology Lab receives biopsies, Monday – Friday, 7 am - 3:30 PM.
The lab is closed on weekends and holidays (including Christmas Eve).**

Do not send specimens via FedEx on Fridays for Saturday delivery.

Use FedEx Overnight

(We can provide shipping labels and shipping supplies.)

Vanderbilt Medical Labs – Surgical Pathology
445 Great Circle Road
Nashville, TN 37228
615-322-3998

Muscle Biopsies

Muscle samples should be fresh and consist of two 1 cm tissue cubes (1.0cm in length, 1.0cm in width, and 1.0cm in depth). The surgeon should place the specimen on a telfa pad lightly moistened with saline. Do NOT immerse in saline. No cautery, muscle clamps, or sutures should be used to obtain the sample. Please see Surgical Technique on page 4 below.

Specimens must be accompanied by a completed requisition and clinical information.

Method 1A

FRESH samples for local courier delivery with a cold pack, Monday- Friday by 3:30 pm

- Place the muscle biopsy on a saline-moistened telfa-pad (moistened, not soaked or floating in saline).
- Place the wrapped sample in a properly labeled plastic container and place the container in a biohazard bag.
- Put all required paperwork (requisition, pt. history, and insurance) in the outside portion of the bag.
- Include a frozen cold pack (or a large bag with wet ice) with the sample to preserve specimen integrity.
- Please get in touch with our courier service at 615-936-0510, x2. Tell the courier that the sample is going to Vanderbilt Surgical Pathology Gross Room.

Method 1B

FRESH samples for FedEx Overnight transport with a cold pack

- Place the muscle biopsy on a saline-moistened telfa-pad (moistened, not soaked or floating in saline).
- Place the wrapped sample in a properly labeled plastic container and place the container in a biohazard bag.
- Place a frozen cold pack (or a large bag with wet ice) in the styrofoam box with the sample. Close the styrofoam box.
- Put all required paperwork (requisition, pt. history, and insurance) in a clear bag and place it on top of the Styrofoam box, inside the cardboard box, and seal with packing tape.

Shipping: Mark FedEx Overnight. Use the provided label or address above.

Method 2

FROZEN & FIXED specimens for overnight FedEx transport if the sending facility has the following:

- Liquid Nitrogen
- OCT Freezing Media
- Plastic disposable molds, cork, or non-corrugated cardboard
- 10% NB Formalin
- 2% Glutaraldehyde

The sample should be divided into 3 portions. (Tools should be clean and not contaminated with fixative.)

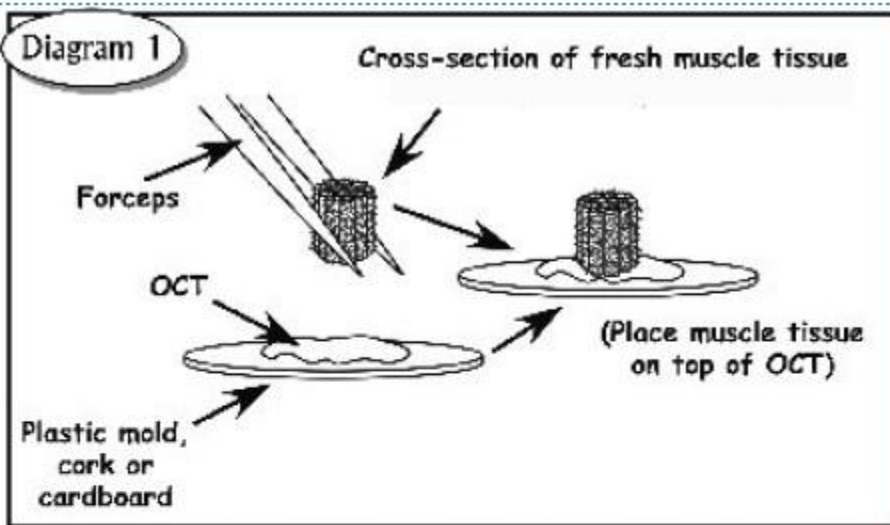
Part 1

- Approximately 2/3 of the sample is to be frozen with OCT.
- Place the sample in the mold, orienting it so the muscle cross-section is facing up. (*See diagram 1*).
- With long forceps, submerge the specimen into liquid nitrogen. (*See diagram 2*). Keep it submerged for 10-15 seconds.
- Place the specimen in a small, properly labeled vial and place the vial on dry ice or at -80°C until ready to ship. Do not allow the specimen to thaw.



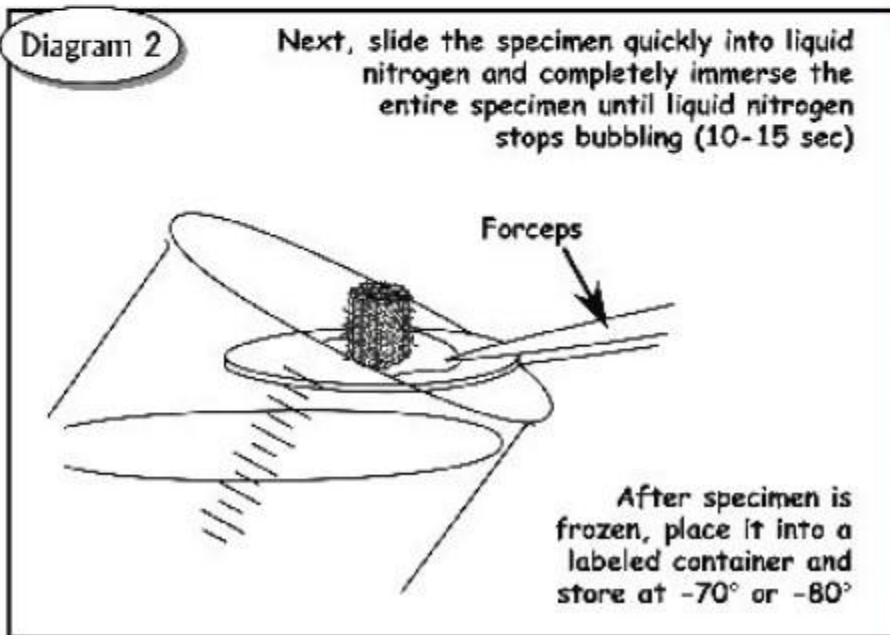
NOTES:

1. Orient specimen in mold using OCT with cross section facing up



2. Immerse specimen quickly for freezing. After freezing, do not allow specimen to thaw.

Store the specimen immediately at -80°C or ship immediately in dry ice.



Part 2

A smaller piece measuring approximately 0.5 cm x 0.5 cm should be placed in a properly labeled container of 10% NBF.

Part 3

Place a very small piece measuring approximately 0.1 cm x 0.1 cm in a properly labeled container of 2% glutaraldehyde.

Shipping for Method 2:

- Frozen Samples: Place the frozen sample(s) in a Styrofoam box filled with approximately 4 lbs. of dry ice and close the box.
 - Place the lid on the Styrofoam box and place it into a cardboard box.
 - Place all required paperwork (requisition, pt. history, and insurance) in a clear bag and place it on top of the Styrofoam box, inside the cardboard box, and seal it with packing tape.
 - For shipments with dry ice, federal regulations dictate that the following be visible on the outside of the container: ORM-A-UN1845 DRY ICE FOR MEDICAL USE
- Fixed Samples: Formalin and glutaraldehyde-fixed samples are to be shipped separately from the frozen sample so they do not freeze.

Mark FedEx Overnight on each package. Use the provided label or address above

Surgical Technique for Muscle Biopsy

- Local infiltration with lidocaine without epinephrine. Do not infiltrate the muscle.
- Avoid muscle that has had EMG manipulation or is severely wasted.
- Avoid electrocautery completely in opening the muscle and all aspects of the biopsy until after removing the specimen.
- Take the biopsies from the belly of the muscle, avoiding subfascial and myotendonous areas.
 - *Note: Isometric muscle biopsy clamps are not necessary to remove the biopsies and should be specifically avoided in infant or young pediatric biopsies.*
- Please obtain two 1cm cubes of muscle. Small fragments or multiply incised biopsies are often inadequate for diagnosis.
- Wrap the specimens in gauze that has been lightly dampened with saline. Never immerse a specimen in saline or fixative of any kind before submitting it to the pathologist.

Nerve Biopsies

At least a 2-centimeter length of peripheral nerve (usually sural nerve) should be sent.

Method 1: Fixed samples

- Lay the nerve straight on a wooden tongue depressor or similar item. There is no need to attach the nerve since a fresh nerve will stick to the wood.
- Place in a properly labeled container of glutaraldehyde (*4% or 2.5% glutaraldehyde is acceptable*) and place in a biohazard bag.
- Place all required paperwork (requisition, pt. history, and insurance) in the outside portion of the bag.

Method 2: Fresh samples

- The nerve should be placed in a saline-moistened (not soaked or watery-wet) telfa-pad and placed in a properly labeled container. The container should then be placed in a biohazard bag.
- Place 2 pre-frozen ice packs or a large bag with wet ice in the Styrofoam box with the sample. Close the Styrofoam box. Note: with wet ice, it helps to add a few paper towels to absorb excess moisture.
- Place all required paperwork (requisition, pt. history, and insurance) in a clear bag, place on top of the Styrofoam box, inside the cardboard box, and seal with packing tape.

Shipping

1. Specimens that can be transported to Vanderbilt Medical Laboratories Surgical Pathology Monday-Friday by 3:30 PM:
 - Please get in touch with our courier service at 615-936-0510, x2. Tell the courier that the sample is going to Vanderbilt Medical Laboratories.
2. FedEx Overnight
 - Place samples in an appropriate shipping bag/box and use provided label or address on page one.