

Fixed/Fresh Muscle or Nerve Biopsies COLLECTION INSTRUCTIONS

Manufacturer

ARUP Laboratories

Kit/Reagent Purpose

To submit fresh muscle for light microscopy, frozen special studies and/or electron microscopy; AND/OR to submit fixed nerve for light microscopy and electron microscopy.

Kit/Reagent Contents

- Shipping Container
- ArcticFoil™ Gel Pack (**REFRIGERATE UPON ARRIVAL**)
- 2 ARUP Specimen Bags – Ambient (green) and Refrigerated (Grey)
- 10% Buffered FORMALIN 10% Specimen Container (Light Microscopy)
- 2.5% GLUTARALDEHYDE (Karnovsky's) Specimen Container (Electron Microscopy)
- Specimen Transport Container 90mL (for FRESH specimen)
- ARUP Specimen Processing Label (purple)
- FedEx Prepaid Priority OVERNIGHT Shipping Label
- Muscle/Nerve Fax Sheet

Other Supplies Needed

Thin cardboard or wooden tongue depressor and packing tape.

Anatomic Pathology test request forms. If needed, order via eSupply using ARUP Connect™ or by contacting ARUP Client Services at (800) 522-2787

If **BOTH** Muscle **AND** Nerve specimens are submitted concurrently on the same patient, 2 kits are required for collection.

Specimen Requirements

Muscle Biopsy: 1.5 – 2.5 cm length 1.0 – 1.5 cm width by 0.5 cm depth minimum. Please maintain direction of muscle fibers.

Nerve Biopsy: 1.5 – 2.0 cm length

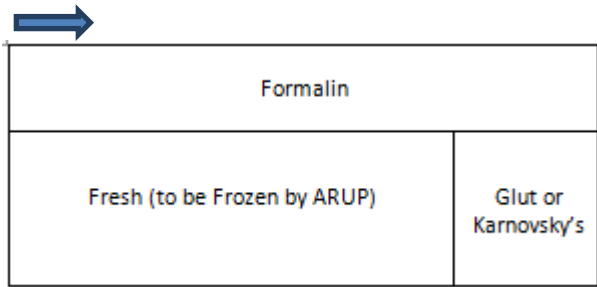
Specimen Collection

Procure the specimens in a surgically approved manner. Do NOT use laser or cautery to obtain the specimen. Doing so can destroy muscle enzymes.

Preparation Instructions

Muscle Biopsy Specimen:

1. Divide a skeletal **MUSCLE** biopsy into 3 portions. (See the following illustration).
Maintain direction of fibers



Overall Dimensions:

Length = 1.5 - 2.5 cm

Width = 1.0 - 1.5 cm

Depth ≤ 0.5 cm

*Once you have the biopsy, again, maintain the direction of muscle fibers. First cut off about 1/3 of the **width** of the biopsy and place in formalin. Then take one end of the remaining muscle, (about 1/4) for Glutaraldehyde (EM). The final fresh piece will be shipped on cold packs.*

2. Place the long narrow portion in the **FORMALIN** specimen container.
3. Place the smallest piece in the **GLUTARALDEHYDE** specimen container.
4. Place the **FORMALIN AND GLUTARALDEHYDE** specimen containers into the ARUP Ambient (GREEN) Specimen bag.
5. The remaining portion will be shipped fresh (See **Muscle/Nerve Fresh Biopsy Specimen** instructions below).

Nerve (Fixed) Biopsy Specimen:

1. Divide the peripheral **NERVE** biopsy into two portions, roughly 1/3, 2/3
2. Place the longer piece in the buffered **FORMALIN** specimen container.
3. Place the shorter length in the **GLUTARALDEHYDE** specimen container.
4. Place the **FORMALIN AND GLUTARALDEHYDE** specimen containers into the ARUP Ambient (GREEN) Specimen bag.
5. If there is any remaining portion, it should be shipped fresh (See **Muscle/Nerve Fresh Biopsy Specimen** instructions below).

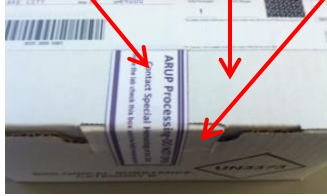
Muscle/Nerve (Fresh) Biopsy Specimen:

The specimen will need to be shipped FedEx overnight and **ARRIVE** at ARUP prior to 4 p.m. MT Monday through Friday.

1. Place the **FRESH** tissue on a strip of thin cardboard or wooden tongue depressor.
2. Wrap the tissue and tongue depressor in a piece of gauze that has been lightly moistened (not saturated) with saline. The objective is to keep the tissue from drying out; too much saline will be absorbed by the muscle and create artifact when frozen. Wrap firmly but not so tightly that it mashes the muscle.
3. Place the wrapped tissue in the 90mL Specimen Transport Container and tighten the cap.
4. Place the Specimen Transport Container into the ARUP Refrigerated (GREY) Specimen bag.
5. Place the ARUP Refrigerated (GREY) Specimen bag into the **PREVIOUSLY REFRIGERATED** ArcticFoil™ Gel Pack and seal shut.

Specimen Storage/Transport

1. Make sure all vials/transport containers are labeled with the patient's full name and unique identifier.
2. Place the sealed Arctic Foil™ Gel Pack in the bottom of the shipping container.
3. Place the Ambient Specimen Bag on top of the Arctic Foil™ Gel Pack.
4. Close the foam lid of the shipping container.
5. Complete the Muscle/Nerve Fax Sheet and FAX to (801) 584-5244.
6. Complete an ARUP Anatomic Pathology test request form.
7. Place the Muscle/Nerve Fax Sheet, ARUP Anatomic Pathology test request form on top of the foam lid.
8. Close the lid of the shipping container and insert the side "flap" into the slot of the lid.
9. Place the PURPLE "ARUP Specimen Processing" label over the lid **AND** flap.



10. Seal the shipping box with packing tape.
11. Complete any missing information on the FedEx priority OVERNIGHT shipping label and place on the box, flush with the top of the lid keeping the PURPLE "ARUP Specimen Processing" label **VISIBLE**.



12. **Contact** your local FedEx representative at (800) 463-3339 for an immediate priority pickup.
13. If you've not already FAX'd the shipping information to ARUP, please call Histology at (801) 583-2787 x3497 to alert the lab of specimen shipment. You may leave a voice mail at this extension and we will call back if necessary.

Safety Data Sheet (SDS) if applicable

[CI-40923A](#): Muscle/Nerve Fax sheet

[SDS-40923](#): Safety Data sheet for Formalin and Glutaraldehyde

Note: Applicable SDS can be found in the eSupply Catalog located on ARUP Connect™