

NERVE BIOPSY TISSUE SUBMISSION PROTOCOL



Please notify the Michigan Medicine Laboratories (MLabs) Client Services prior to sending a nerve biopsy specimen. Nerve biopsy collection kits are available from MLabs and will be required in advance of the procedure. MLabs Client Services can be reached at **800.862.7284** or **734.936.2598** (local).

Preparation Instructions

Peripheral nerve biopsies are processed for light microscopy with special stains, plastic embedding/electron microscopy and fiber teasing when needed.

1. In the majority of cases, a sural nerve biopsy is sufficient for the diagnosis. However, in the case of pure motor neuropathy, a radial nerve or a branch of peroneal nerve may yield better results.
2. Advise the surgeon to cut out the **entire thickness** of the nerve, not a single fascicle and to avoid traumatizing the nerve.
3. The specimen should be **4 cm or longer**.

Specimen Handling

DELIVERY TO MLABS WITHIN 2 HOURS:

1. Place the specimen on a Telfa pad soaked in saline in a covered container.
2. Wrap the container in paper towels and place on wet ice in a Styrofoam container.
3. **Mark the specimen "STAT" and send to MLabs immediately.**

DELIVERY TIME GREATER THAN 2 HOURS:

1. Carefully stretch the entire nerve across a piece of dry cardboard or an index card. The nerve will adhere to the dry surface immediately.
2. If glutaraldehyde is available, divide the nerve adhered to the cardboard into halves with a sharp blade (avoid teasing!). Cut off the excess of the cardboard and place one piece of the nerve with the cardboard into glutaraldehyde for plastic embedding and teasing and the other piece into 10% formalin to be embedded in paraffin.



3. If no glutaraldehyde (or other EM fixative) is available, cut off the cardboard around the attached nerve and place the entire nerve with the cardboard in 10% formalin.

Required Information and Shipping

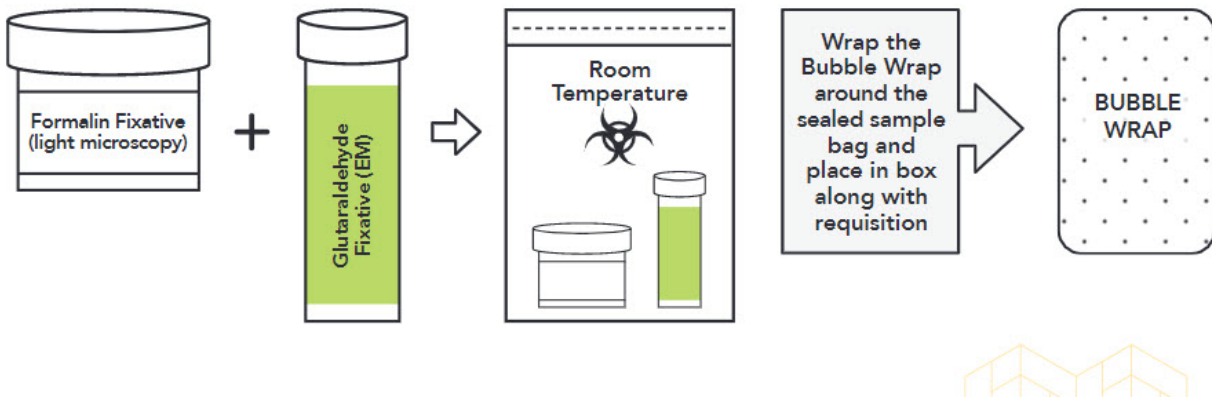
1. Label the containers with the patient's name and a 2nd patient identifier such as a date of birth or a medical record number.
2. Complete the [MLabs Muscle/Nerve/Renal Biopsy Requisition](#) to accompany the specimens.
3. Once the biopsies have been placed in their liquid containers and the tops secured, place inside the ziploc specimen biohazard bag with the absorbent sheet and seal. Wrap the bag with bubble wrap and place inside transport box.

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Please be careful to not contaminate the outside of the transport bags, paperwork or box when handling. Transport at room temperature.

NERVE BIOPSY KIT SHIP ROOM TEMPERATURE



If shipping with UPS, call 800.742.5877 to schedule pick up. Specimens should be sent Monday – Thursday (preferred); if sending on Friday is necessary, clearly indicate Saturday delivery required.

Questions

Call 800.862.7284 or mlabs.umich.edu