Renal Biopsy

Procedure for Handling Tissue for Light Microscopy (LM), Immunofluorescent Histology (IF), and Electron Microscopy (EM)

Biopsy specimens are typically obtained by percutaneous needle biopsy (rarely by "open" wedge biopsy).

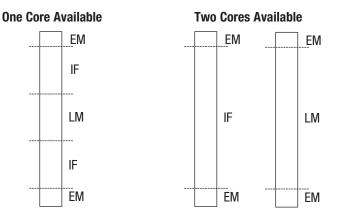
A. Use sharp razor blade or scalpel to avoid crushing tissue.

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B. Place portions of tissue in the appropriate solution, as directed below.

Ideally, a minimum of 3 biopsy cores are taken and should be assessed to ensure they contain cortex/glomeruli; 1 core is then submitted for LM, IF, and EM, respectively. The specimen should be placed into the respective containers of fixative/preservative as soon as possible to limit drying and fixation artifacts.

Only if limited cores/cortex available, divide/allocate as follows:



LM =	Light Microscopy
IF =	Immunofluorescent Histology
EM =	Electron Microscopy

Light Microscopy

Place the allocated core/portion for light microscopy into container of 10% neutral buffered formalin.

• Immunofluorescent Histology

Place the allocated core/portion of the biopsy for immunofluorescence into container of Michel's Transport/Zeus preservative.

• Electron Microscopy

Place the allocated core/portion for Electron Microscopy into container of 1% buffered glutaraldehyde/Trumps fixative. The length of the core does not matter, but thickness of the tissue should not exceed 2–3 mm. **Do not** dice into multiple small fragments.

Required Information and Shipping

- 1. The patient's full first and last name and a second unique identifier must be present on each of the containers.
 - a. The name on the containers must match the paperwork being sent with the specimens.
 - b. Second unique identifiers include: patient medical record, specimen/accession number or order number, and patient's birth date.
- 2. Complete all information on the "Renal Biopsy Patient Information" form. Make sure to include your MCL Client Account Number to avoid delays in processing.
 - a. The referring/contact nephrologist's name and telephone number are required.
- 3. Include a copy of the patient's medical history and current relevant lab results.
- 4. Ship biopsies as ambient. **Do not** place on ice, dry ice, or freeze the formalin, Zeus, or glutaraldehyde specimens.
 - Shipping address: Mayo Clinic Laboratories 3050 Superior Drive NW

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