



# Renal Pathology Test Requests

The Department of Pathology and Microbiology at The University of Nebraska Medical Center (UNMC) provides a complete range of services in the evaluation and consultation of native and transplant renal biopsies. Services Include: Light Microscopy (LM), Immunofluorescence (IF), and Electron Microscopy (EM). The Preliminary diagnosis called to nephrologist within 24 hours of specimen receipt. Final report within five business days of specimen receipt. Renal biopsy kits will be provided that contain fixatives for LM, IF and EM. Also included will be a laboratory requisition form/ specimen triage instructions, a pre-paid overnight mailing label, mailing box, refrigerant cool packs, and a biohazard zip-loc transport bag. Kits have a 3 month shelf life. Keep kits refrigerated upon receipt.

## Instructions for referral of a Renal Biopsy Specimen

### Specimen Preparation and Transport

1. Examine the specimen under a stereo/microscope to determine if biopsy is renal cortex and count the number of glomeruli.
  - a. Place the cores of tissue in the shallow half of a clean Petri dish and moisten with normal saline solution (to prevent drying during evaluation and division). If manipulation of the cores is necessary, use small forceps and be careful not to crush the tissue.
  - b. After evaluation, divide the biopsy using a new sharp scalpel blade. Make sure that there are glomeruli in each portion (if visible).
2. An adequate biopsy specimen contains the following number of glomeruli:
  - At least 10 (minimum number) for LM
  - At least 4-5 (minimum number) for IF
  - At least 2 (minimum number) for EM
3. Place specimens in appropriate media as soon as possible and transport refrigerated.
4. All specimen containers must be labeled with patient last and first name, date of birth and tissue source.
5. Make sure the patient name on the containers exactly matches the patient name on the laboratory requisition form.
6. Complete the laboratory requisition. Include patient full name, date of birth, date of biopsy, treating Nephrologist full name and contact phone number, and patient insurance billing information. Mark "Renal Biopsy" and state the source on the requisition form. Retain the back copy for submitter records. Complete patient history form. Indicate if renal biopsy is native or transplant. Include/attach pertinent information such as clinic notes, laboratory data, history, physicals, imaging reports, etc.

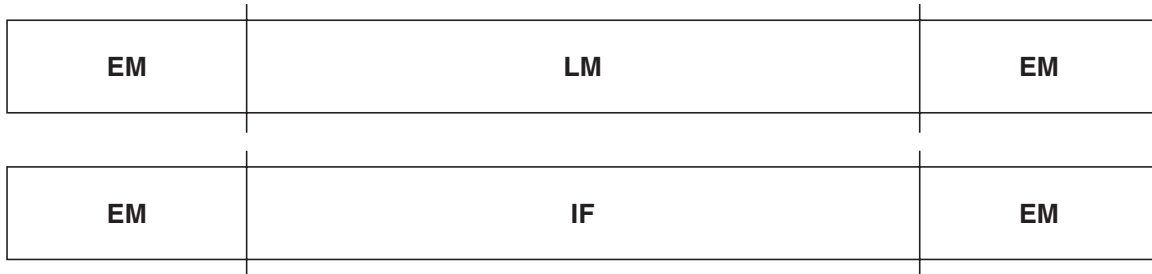
Assuming glomeruli are easily visible:

Light microscopy: Submit majority of renal tissue plus all adipose and muscle (at least 10 glomeruli).

Immunofluorescence: Submit at least 4-5 glomeruli.

Electron microscopy: Submit at least 2 glomeruli if visible.

When glomeruli are not visible (and no additional cores have been submitted) divide the biopsy as shown in the diagram below:



- A. Light Microscopy (LM)**  
Place the tissue in 10% Neutral Buffered formalin.
- B. Immunofluorescence (IF)**  
Place the tissue in Zeus media.
- C. Electron Microscopy (EM)**  
Place tissue in 2.5% gluteraldehyde solution.

Supplies are ordered online at [reglab.org/customer-service/supply-orders/](http://reglab.org/customer-service/supply-orders/) testing supplies and log-on information may be obtained by calling client services  
Toll Free 800-334-0459  
Phone 402-559-6420