



Fixation of Renal Biopsies for Immunofluorescence (IF), Light Microscopy and Electron Microscopy (EM)

1. It is suggested that two adequate cores of renal tissue be obtained. The presence of glomeruli can easily be determined with assistance of a hand lens. It is suggested that tissue be cut on a firm surface with the aid of a sharp razor blade.
2. The solutions to be used for fixation of a renal biopsy are as follows:
 - a. 10% buffered formalin for light microscopy.
 - b. 4F1G or glutaraldehyde for EM (* see note).
 - c. Tissue for immunofluorescence (IF) studies transported on dry ice or place tissue in a vial with saline, place vial on WET ICE. Michele's Transport Media is also acceptable for immunofluorescence (also on WET ICE).

* **NOTE:** If glutaraldehyde is used, keep specimen in a refrigerator (**DO NOT FREEZE**) for 24 hours and then transfer it to a 0.1M solution of pH 7.4 PBS (phosphate buffered saline). If 4F1G is used, the specimen may be sent without refrigeration or transfer.

3. Take first core and cut 2mm off each end. Place these two 2mm pieces into 4F1G for EM. Place the remaining central piece into 10% buffered formalin for light microscopy.
4. Take second core and cut 2mm off each end. Place these two 2mm pieces into 4F1G for EM. Place the remaining central piece into a vial of saline for IF (or other method for transport, see 2c above).
5. **Please complete renal biopsy form with patient's name, date of birth or age, Soc Sec #, nephrologist, insurance information and all pertinent clinical history. ALL this information is needed, so please take a moment to fill out the form.**
6. If sending IF specimen on dry ice, please send immunofluorescent specimen on **dry ice** and LM and EM specimens in a SEPARATE container at **room temperature**.
7. Please **CALL** the Histology Laboratory (531-6832) if you schedule a renal biopsy. If you have already called about a scheduled renal biopsy and it has been canceled, please **NOTIFY** us. Renal specimens should be delivered to HMC **BEFORE 4PM** Monday through Friday to assure proper handling and timely processing.

DELIVER specimens to HISTOLOGY LAB, Milton S. Hershey Medical Center, Anatomic Pathology, Room C7611. If you have any questions you may contact the Histology Laboratory at (717) 531-6832.

If it is anticipated that a specimen will not arrive prior to 4pm please call the HMC Hospital Operator and have them page the Resident-on-call for Anatomic Pathology for instructions for the courier. Do not allow the courier to leave your institution without these instructions.