NOTE: The process must address steps to prevent cross-contamination during the various phases of tissue handling including: processing, embedding, microtomy, and slide preparation. Problems with cross-contamination must be addressed in the surgical pathology quality management system.

Instruments must be clean and well-maintained (eg, tissue processors, embedding centers, dispensers, floatation baths, staining and coverslipping equipment).

At the embedding station, cleaning or wiping of forceps between cases is required. Only one cassette should be handled at a time.

For microtomy, there must be a clear process for handling of blocks and labeling of slides to prevent specimen mix-ups. Floatation baths require periodic water changes or blotting of the water surface so that sections from one patient block are not inadvertently carried over to another case or block (so-called "floaters" or "extraneous tissue").

REFERENCES
1) Lott R, Tunnicliffe J, Sheppard E, et al. *Practical Guide to Specimen Handling in Surgical Pathology.* Northfield, IL: College of American Pathologists; 2023. 11.0. https://documents.cap.org/documents/practical-guide-specimen-handling.pdf. Published September 2023. Accessed December 21, 2023.
2) Gephardt GN, Zarbo RJ. Extraneous tissue in surgical pathology: A College of American Pathologists study of 275 laboratories. *Arch Pathol Lab Med.* 1996;120:1009-14

IMMUNOFLUORESCENCE MICROSCOPY

Inspector Instructions:

- IF QC policy or procedure
- Sampling of IF QC records

ANP.21850 QC - Immunofluorescence **Phase II**

For immunofluorescence microscopy, appropriate positive and negative controls are performed.

NOTE: Internal antigens serve as positive controls (eg, IgA in tubular casts, IgG in protein droplets and C3 in blood vessels). When internal positive controls are absent, daily external positive controls are required. Non-reactive elements in the patient specimen may serve as a negative tissue control. A negative reagent control in which the patient tissue is processed in an identical manner to the test specimen, but with the primary antibody omitted, should be performed for each patient test specimen at the discretion of the laboratory director.

Evidence of Compliance:

✓ Records of immunofluorescence QC

REFERENCES
1) Walker PD, *et al.* Practice guidelines for the renal biopsy. *Mod. Pathol.* 2004;17:1555-1563
2) Department of Health and Human Services, Centers for Medicare and Medicaid Services. Clinical laboratory improvement amendments of 1988; final rule. *Fed Register.* 2023(Dec 28): [42CFR493.1273(a)].

IMMUNOHISTOCHEMISTRY

This section must be used to inspect immunochemistry staining performed on histology specimens. It should also be used to inspect immunostaining of cytology specimens (eg, air-dried touch imprints, air-dried and/ or alcohol fixed smears, cytocentrifuge or other liquid-based preparations, and cellular materials fixed in alcohol blends or other fixatives). However, if the laboratory has a separate section for performing cytologic